AVR 2700

Audio/Video Receiver

CONTENTS

Released 2012
Discontinued XXXX

harman/kardon
8500 Balboa Blvd.
Northridge, CA. 91329

Rev0 12/2012

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge build-up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical change sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material.)
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together or your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES devices.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing.

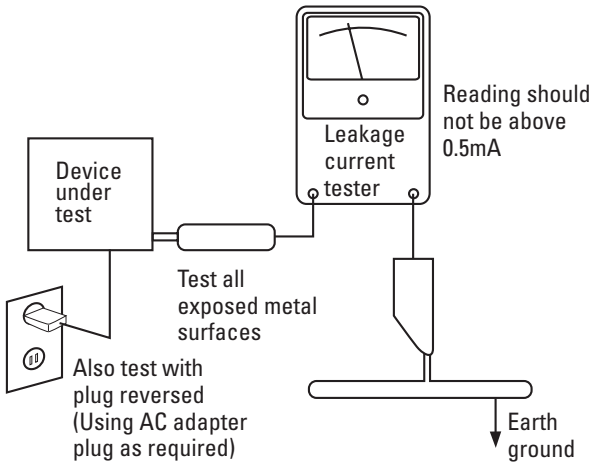
Components identified with the IEC symbol ⚠ in the parts list are special significance to safety. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before retuming the product to the customer.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed o.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

Specifications

Audio Section

Stereo power:	AVR 3700/AVR 370: 125W per channel, two channels driven @ 6/8 ohms, 20Hz – 20kHz, <0.07% THD AVR 2700/AVR 270: 105W per channel, two channels driven @ 6/8 ohms, 20Hz – 20kHz, <0.07% THD
Multichannel power:	AVR 3700/AVR 370: 125W per channel, two channels driven @ 6/8 ohms, 20Hz – 20kHz, <0.07% THD AVR 2700/AVR 270: 105W per channel, two channels driven @ 6/8 ohms, 20Hz – 20kHz, <0.07% THD
Input sensitivity/impedance:	250mV/27k ohms
Signal-to-noise ratio (IHF-A):	100dB
Surround system adjacent channel separation:	Dolby Pro Logic/DPLII: 40dB Dolby Digital: 55dB DTS: 55dB
Frequency response (@ 1W):	10Hz – 130kHz (+0dB/–3dB)
High instantaneous current capability (HCC):	±42 amps (AVR 3700/AVR 370); ±39 amps (AVR 2700/AVR 270)
Transient intermodulation distortion (TIM):	Unmeasurable
Slew rate:	40V/µsec

FM Tuner Section

Frequency range:	87.5 – 108.0MHz
Usable sensitivity IHF:	1.3µV/13.2dBf
Signal-to-noise ratio (mono/stereo):	70dB/68dB
Distortion (mono/stereo):	0.2%/0.3%
Stereo separation:	40dB @ 1kHz
Selectivity (±400kHz):	70dB
Image rejection:	80dB
IF rejection:	80dB

AM Tuner Section

Frequency range:	520 – 1710kHz (AVR 3700/AVR 2700) 522 – 1620kHz ((AVR 370/AVR 270)
Signal-to-noise ratio:	38dB
Usable sensitivity (loop):	500µV
Distortion (1kHz, 50% mod):	1.0%
Selectivity (±10kHz):	30dB

Video Section

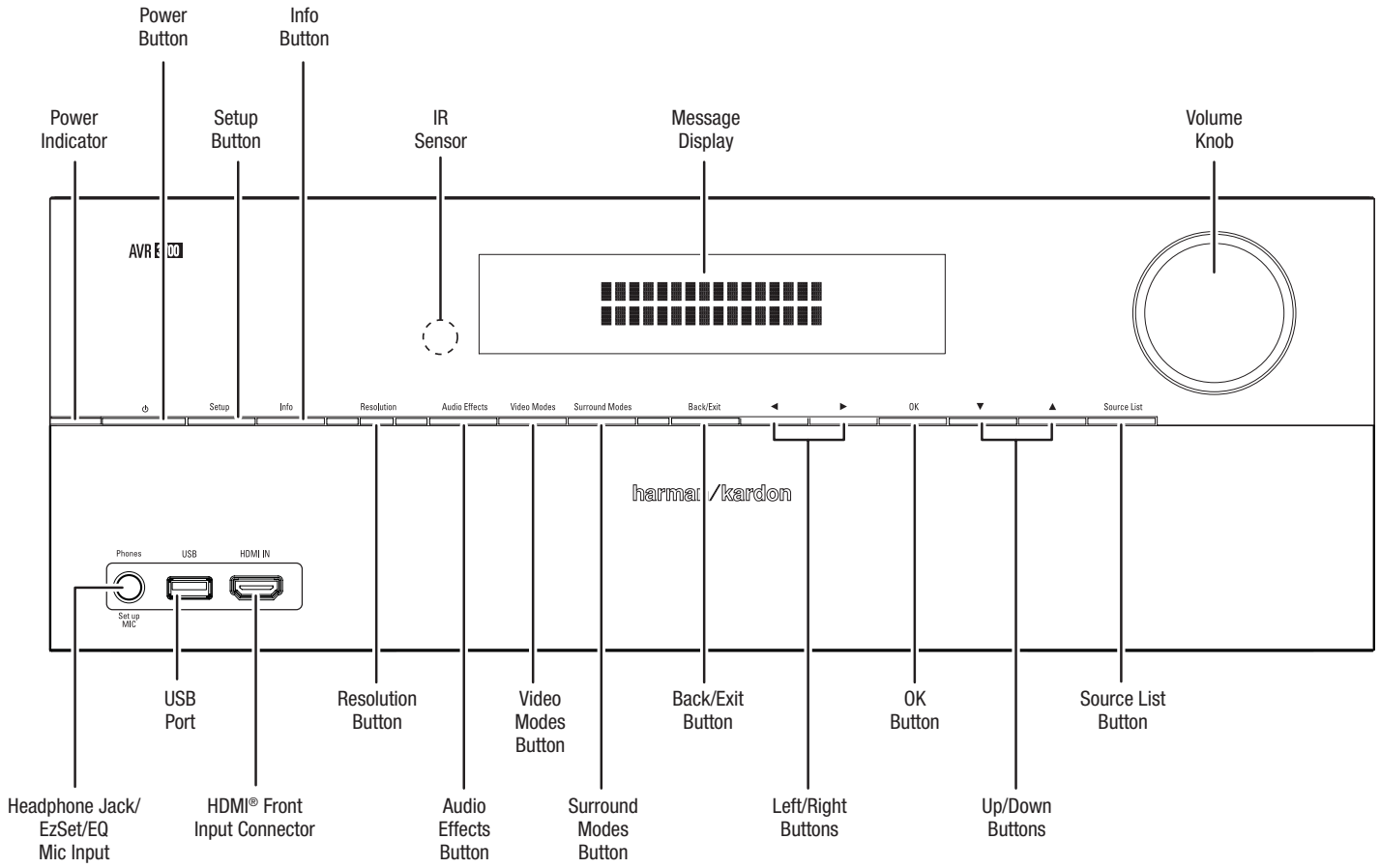
Television format:	NTSC (AVR 3700/AVR 2700); PAL (AVR 370/AVR 270)
Input level/impedance:	1Vp-p/75 ohms
Output level/impedance:	1Vp-p/75 ohms
Video frequency response (composite video):	10Hz – 8MHz (–3dB)
HDMI:	Support up to 4k x 2k

General Specifications

Power requirement:	120V AC/60Hz (AVR 3700/AVR 2700); 220V – 240V AC/50Hz – 60Hz (AVR 370/AVR 270)
Power consumption:	<0.5W (standby); 440W maximum (AVR 3700/AVR 370); 370W maximum (AVR 2700/AVR 270)
Dimensions (W x H x D):	17-5/16" x 6-1/2" x 17-1/8" (440mm x 165mm x 435mm)
Weight	(AVR 3700/AVR 370): 17.6 lb (8kg) (AVR 2700/AVR 270): 16.9 lb (7.7kg)

Depth measurement includes knobs, buttons and terminal connections.
Height measurement includes feet and chassis.

Front-Panel Controls



Front-Panel Controls, continued

Power indicator/Power button: The AVR has four different power modes:

- **Off** (Power indicator not illuminated): When the rear-panel Main Power switch is in the Off position or the power cord is unplugged the AVR is off and will not respond to any commands. Plugging the power cord into a live AC outlet and setting the Main Power switch in the On position will put the AVR into the Eco Standby mode.
- **Eco Standby** (Power indicator glows solid amber): The Eco Standby mode minimizes energy consumption when you're not using the AVR. When the AVR is in Eco Standby, it will not automatically turn on or play audio in response to an AirPlay signal from a networked device. When the AVR is in Eco Standby, pressing the Power button turns it on. To put the AVR into Eco Standby when it is on, press the Power button for more than three seconds. NOTE: The AVR will not automatically enter the Eco Standby mode.
- **Standby** (Power indicator glows solid amber): The Standby mode mutes the AVR and shuts off its front-panel display, but allows the AVR to automatically turn on and play audio in response to an AirPlay signal from a networked device. When the AVR is in Standby, pressing the Power button turns it on. To put the AVR into Standby when it is on, press the Power button for less than three seconds. NOTE: The AVR will automatically enter the Standby mode whenever no control buttons have been pressed and no audio signal has been present for 30 minutes.
- **On** (Power indicator glows solid white): When the AVR is on it is fully operational.

IMPORTANT NOTE: If the PROTECT message ever appears on the AVR's front-panel message display, turn off the AVR and unplug it from the AC outlet. Check all speaker wires for a possible short-circuit (the "+" and "–" conductors touching each other or both touching the same piece of metal). If a short-circuit is not found, bring the unit to an authorized Harman Kardon service center for inspection and repair before using it again.

Setup button: Press this button to access the AVR's main menu.

Info button: Press this button to access the AVR's Source submenu, which contains the settings for the source currently playing. Use the Up/Down buttons to scroll through the different settings.

Message display: Various messages appear in this two-line display in response to commands and changes in the incoming signal. In normal operation, the current source name appears on the upper line, while the surround mode is displayed on the lower line. When the on-screen display menu system (OSD) is in use, the current menu settings appear.

IR sensor: This sensor receives infrared (IR) commands from the remote control. It is important to ensure that the sensor is not blocked. If covering the IR sensor is unavoidable (such as when the receiver is installed inside of a cabinet), connect an optional infrared receiver to the Remote IR In connector on the AVR's rear panel.

Volume knob: Turn this knob to raise or lower the volume.

Headphone jack/EzSet/EQ Mic input: Connect a 1/4" stereo headphone plug to this jack for private listening. This jack is also used to connect the supplied microphone for the EzSet/EQ procedure described in *Configure the AVR For Your Speakers,* on page 26.

USB port: You can use this port to play audio files from a connected Apple iOS device and play MP3 and WMA audio files from a USB device inserted into the USB port. You can also use this port to perform software upgrades that may be offered in the future. Do not connect a storage device, peripheral product or a PC here, unless you are instructed to do so as part of an upgrade procedure.

HDMI (High-Definition Multimedia Interface®) Front Input connector: Connect an HDMI-capable source component that will be used only temporarily, such as a camcorder or game console, here.

Resolution button: Press this button to access the AVR's video output resolution setting: 480p (AVR 3700/AVR 2700), 576p (AVR 370/AVR 270), 720p, 1080i, 1080p or 1080p/24Hz. Use the Up/Down and OK buttons to change the setting.

IMPORTANT NOTE: If you set the AVR's video output resolution higher than the capabilities of the actual connection between the AVR and your TV or video display, you will not see a picture. If you are using the composite video connection from the AVR to your TV (see *Connect Your TV or Video Display*, on page 17), the resolution will automatically be set to 480i.

Audio Effects button: Press this button to access the Audio Effects submenu, which allows you to adjust the AVR's tone controls and other audio controls. See *Set Up Your Sources*, on page 26, for more information.

Video Modes button: Press this button for direct access to the Video Modes submenu, which contains settings you can use to improve the video picture. Use the OK button to scroll through the different modes, and use the Up/Down and Left/Right buttons to make adjustments within each mode. See *Set Up Your Sources*, on page 26, for more information.

Surround Modes button: Press this button to select a listening mode. The Surround Modes menu will appear on screen, and the menu line will appear in the front-panel display. Use the Up/Down buttons to change the surround-mode category and the Left/Right buttons to change the surround mode for that category. See *Set Up Your Sources*, on page 26, for more information.

Back/Exit button: Press this button to return to the previous menu or to exit the menu system.

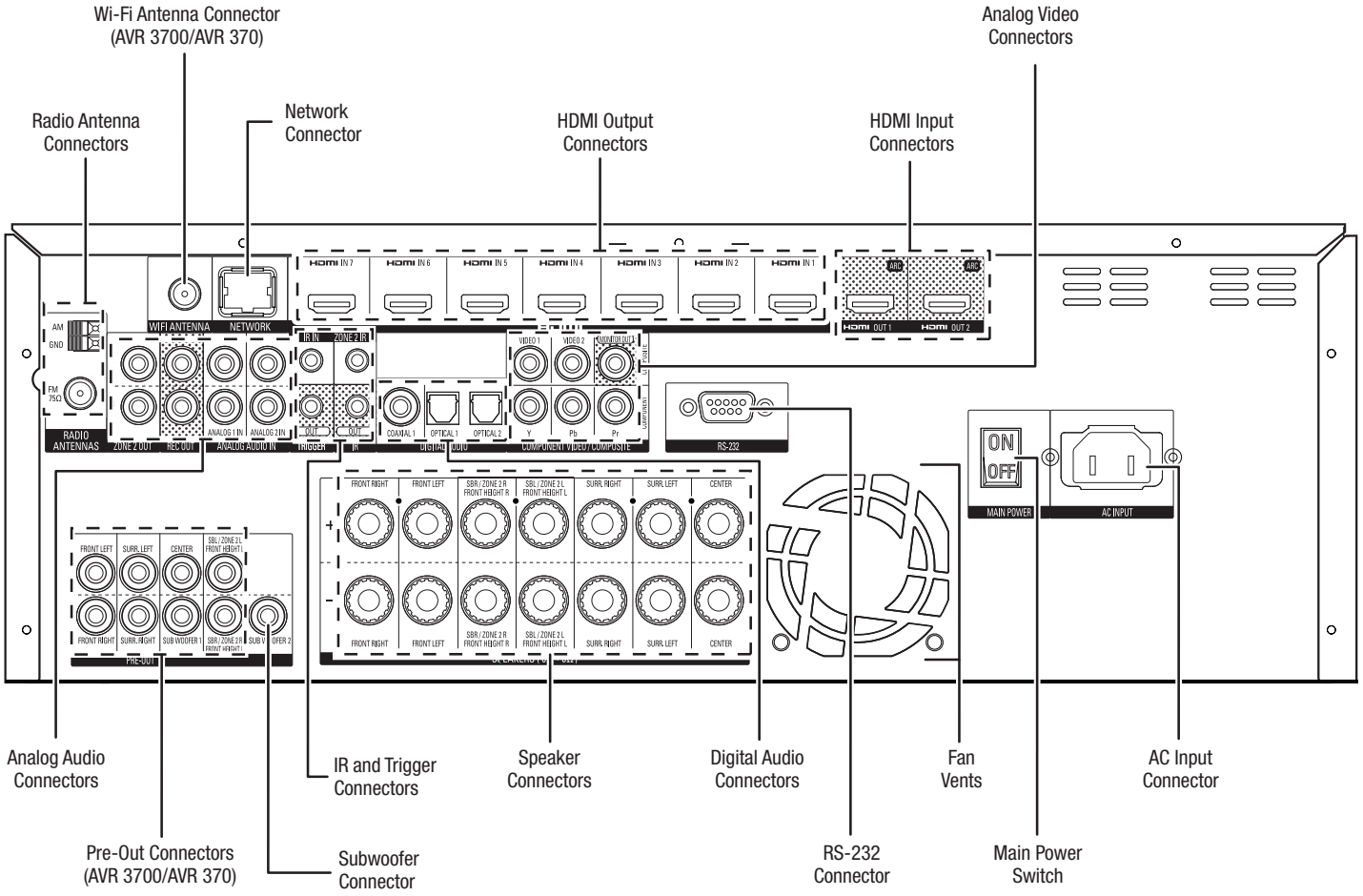
Left/Right buttons: Use these buttons to navigate the AVR's menus.

OK button: Press this button to select the currently highlighted item.

Up/Down buttons: Use these buttons to navigate the AVR's menus.

Source List button: Press this button to select a source device to watch/listen to. Use the Up/Down buttons to scroll through the source-device list, and press the OK button to select the source being displayed.

Rear-Panel Connectors



Rear-Panel Connectors (AVR 3700 shown)

Rear-Panel Connectors, continued

Radio Antenna connectors: Connect the supplied AM and FM antennas to their respective terminals for radio reception.

Wi-Fi® Antenna connector (AVR 3700/AVR 370): If your home network is Wi-Fi, connect the supplied Wi-Fi antenna here to enjoy Internet radio and content from DLNA®-compatible devices that are connected to the network. You do not need to make a wired network connection.

Network connector: If your home network is wired, use a Cat. 5 or Cat. 5E Ethernet cable (not supplied) to connect the AVR's Network connector to your home network to enjoy Internet radio and content from DLNA-compatible devices that are connected to the network. See *Connect to Your Home Network,* on page 20, for more information.

HDMI® Input connectors: An HDMI connection transmits digital audio and video signals between devices. If your source devices have HDMI connectors, using them will provide the best possible video and audio performance quality. Since the HDMI cable carries both digital video and digital audio signals, you do not have to make any additional audio connections for devices you connect via the HDMI connection. See *Connect Your Audio and Video Source Devices,* on page 18, for more information.

HDMI Output connectors: If your TV has an HDMI connector, use an HDMI cable (not included) to connect it to the AVR's HDMI Out connector. The AVR will automatically transcode component and composite video input signals to the HDMI format (upscaling to as high as 1080p), so you do not need to make any other connections to your TV from the AVR or from any video source devices you connect to the AVR. **NOTE:** The AVR 3700 and AVR 370 have two HDMI Out connectors.

Notes on using the HDMI Output connector:

- When connecting a DVI-equipped display to the HDMI Out connector, use an HDMI-to-DVI adapter and make a separate audio connection.
- Make sure the HDMI-equipped display is HDCP (High-bandwidth Digital Content Protection)-compliant. If it isn't, do not connect it via an HDMI connection; use an analog video connection instead and make a separate audio connection.

Analog Video connectors: The following Analog Video connectors are provided:

- **Composite Video Input connectors:** Use composite video connectors for video source devices that don't have HDMI or component video connectors. You will also need to make an audio connection from the source device to the AVR. See *Connect Your Audio and Video Source Devices,* on page 18, for more information.
- **Component Video Input connectors:** If any of your video source devices have component video connectors (and do not have HDMI connectors), using the component video connectors will provide superior video performance. You will also need to make an audio connection from the device to the receiver. See *Connect Your Audio and Video Source Devices,* on page 18, for more information.
- **Composite Video Monitor Out connector:** If your TV or video display does not have an HDMI connector, use a composite video cable (not included) to connect the AVR's Composite Video Monitor Out connector to your TV 's composite video input. **NOTE:** The HDMI connection to your TV is preferred. If you use the composite video connection to your TV, you will not be able to view the AVR's on-screen menus.

Analog Audio connectors: The following analog audio connectors are provided:

- **Analog Audio Input connectors:** Use the AVR's Analog Audio Input connectors for source devices that don't have HDMI or digital audio connectors. See *Connect Your Audio and Video Source Devices,* on page 18, for more information.
- **Analog Rec[ord] Out connectors:** Connect this analog audio output to the analog audio input of a recording device. A signal is available at this output whenever an analog audio source is playing.
- **Zone 2 Out connectors:** Connect these jacks to an external amplifier to power the speakers in the remote zone of a multizone system.

Pre-Out connectors (AVR 3700/AVR 370): Connect these jacks to external amplifiers if more power is desired. The function of the Surround Back/Front Height/Zone 2 connectors is determined by the setting you make for the Assigned Amp. See *Manual Speaker Setup: Number of Speakers,* on page 38, for more information.

Subwoofer connector: Connect this jack to a powered subwoofer with a line-level input. See *Connect Your Subwoofer,* on page 17, for more information. NOTE: The AVR 3700 and AVR 370 have two subwoofer connectors.

IR and Trigger connectors: The following IR and trigger connectors are provided:

- **IR Remote In/Out connectors:** When the IR sensor on the front panel is blocked (such as when the AVR is installed inside a cabinet), connect an optional IR receiver to the IR Remote In jack. The IR Remote Out jack may be connected to the IR input of a compatible product to enable remote control through the AVR.
- **Zone 2 IR Input connector:** Connect a remote IR receiver located in Zone 2 of a multizone system to this jack to control the AVR (and any source devices connected to the Remote IR Output connector) from the remote zone.
- **12V Trigger connector:** This connector provides 12V DC whenever the AVR is on. It can be used to turn on and off other devices such as a powered subwoofer.

Speaker connectors: Use two-conductor speaker wire to connect each set of terminals to the correct speaker. See *Connect Your Speakers,* on page 17, for more information.

NOTE: The Assigned Amp speaker connectors are used for the surround back channels in a 7.1- channel home theater, or you can reassign them to a remote room for multizone operation or to front height channels for Dolby® Pro Logic IIz operation. See *Place Your Speakers*, on page XX, for more information.

Digital Audio connectors: If your non-HDMI source devices have digital outputs, connect them to the AVR's digital audio connectors. NOTE: Make only one type of digital connection (HDMI, optical or coaxial) from each device. See *Connect Your Audio and Video Source Devices,* on page 18, for more information.

RS-232 connector: This connector is used to connect to external control hardware. Consult a certified professional installer for more information.

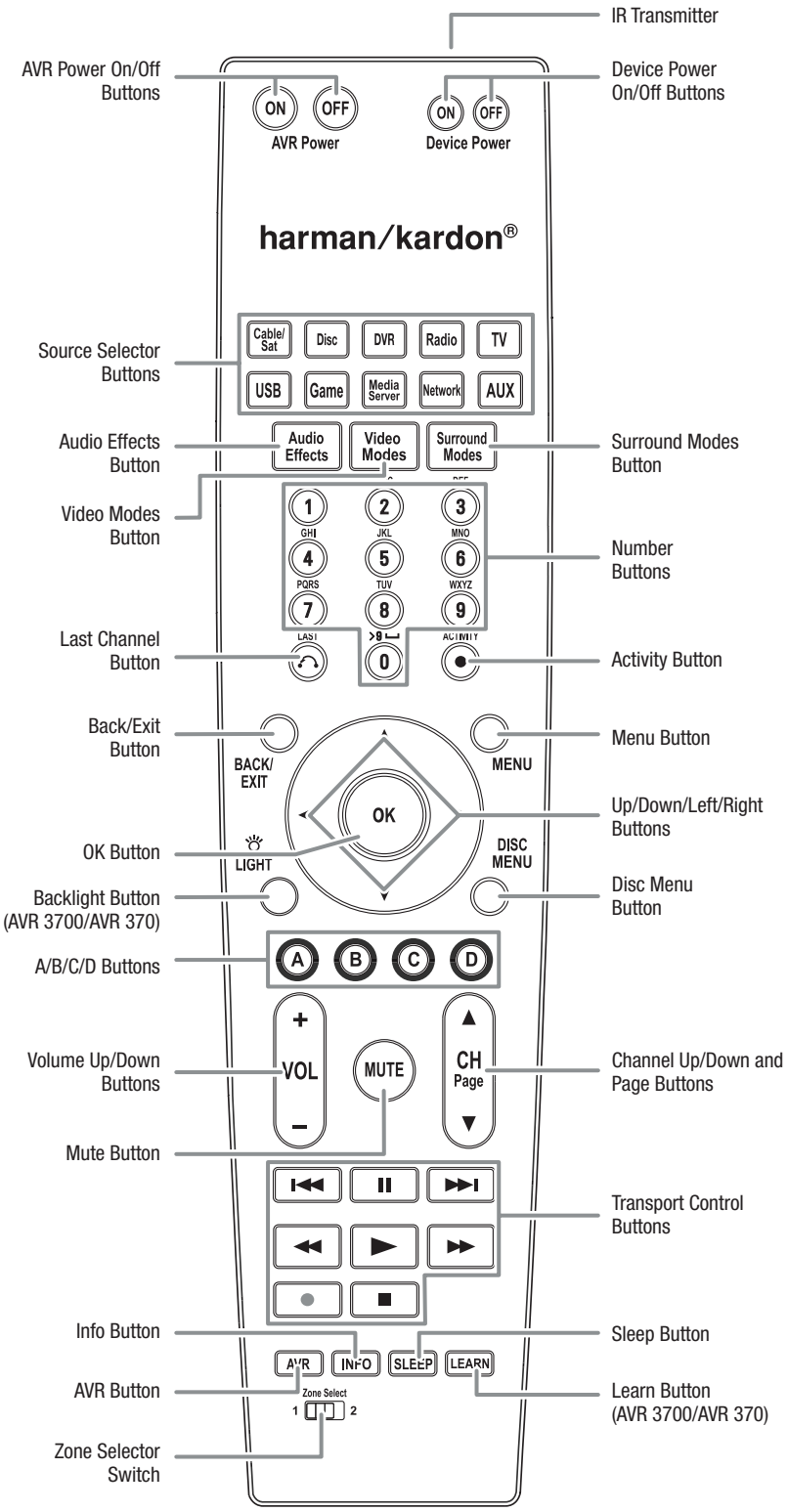
Fan Vents: These vents are used by the AVR's fan to cool the system. Maintain a clearance of at least three inches (75mm) from the nearest surface to avoid overheating the unit. It is normal for the fan to remain off at most normal volume levels. An automatic temperature sensor turns the fan on only when it is needed.

IMPORTANT NOTE: Never block the fan vents. Doing so could allow the AVR to overheat to dangerous levels.

Main Power switch: This mechanical switch turns the AVR's power supply on or off. It is usually left on, and it cannot be turned on or off using the remote control.

AC Input connector: After you have made and verified all other connections, plug the supplied AC power cord into this receptacle and into an *unswitched* wall outlet.

System Remote Control Functions



System Remote Control Functions, continued

In addition to controlling the AVR, the AVR remote is capable of controlling eight other devices, including an iPod/iPhone device connected to the AVR's front-panel USB port. During the installation process, you may program the codes for each of your source components into the remote. (See *Program the Remote to Control Your Source Devices and TV*, on page 23, for programming information.) To operate a component, press its Source Selector button to change the remote's control mode.

A button's function depends on which component is being controlled. See Table A13 in the Appendix for listings of the functions for each type of component. Most of the buttons on the remote have dedicated functions, although the precise codes transmitted vary depending on the specific device being controlled. Due to the wide variety of functions for various source devices, we have included only a few of the most-often used functions on the remote: alphanumeric keys, transport controls, television-channel control, menu access and power on and off. Buttons dedicated to the AVR – AVR Power On/Off, Audio Effects, Video Modes, Surround Modes, Volume, Mute and Sleep Settings – are available at any time, even when the remote is controlling another device.

AVR Power On/Off buttons: Press these buttons to turn the AVR on and off. The Main Power switch on the AVR's rear panel must be on for this button to work.

IR Transmitter: As buttons are pressed on the remote, infrared codes are emitted through this opening.

Device Power On/Off buttons: Press a device's Source Selector button, then press these buttons to turn the device on and off.

Source Selector buttons: Press one of these buttons to select a source device, e.g., Disc, Cable/Sat, Radio, etc. This action will also turn on the AVR and switch the remote's control mode to operate the selected source device.

- The first press of the Radio button switches the AVR to the last-used tuner band (AM or FM). Each successive press changes the band.
- The first press of the USB button switches the AVR to the last-used source (USB or iPod). Each successive press cycles between the two sources.
- The first press of the Network button switches the AVR to the last-used source (Network or vTuner). Each successive press cycles between the two sources.

Audio Effects button: Press this button to access the Audio Effects submenu, which allows adjustment of the AVR's tone and other audio controls. See the *Set Up Your Sources* section, on page 26, for more information.

Video Modes button: Press this button for direct access to the Video Modes submenu, which contains picture adjustments you can use after you have adjusted the picture settings on your TV or video display. See the *Advanced Functions* section, on page 33, for more information.

Surround Modes button: Press this button to access the Surround Modes submenu. Select a surround-mode category: Auto Select, Virtual Surround, Stereo, Movie, Music or Game. When you select the category, it is highlighted and the surround mode changes.

To change the surround mode for the selected category, press the OK button when the menu line is highlighted and use the Up/Down buttons to select one of the available surround-mode options. Press the OK button; or press the Back/Exit button to exit the Surround Modes menu and display the next higher menu in the hierarchy. See the *Advanced Functions* section, on page 33, for more information.

Number buttons: Use these buttons to enter numbers for radio-station frequencies or to select station presets.

Last Channel button: When controlling a cable, satellite or HDTV set-top box or a TV, press this button to return to the previous television channel.

Activity button: With this button you can program the remote to store up to 11 different Macros (Activities). (A Macro is a series of commands that are transmitted by a single button press.) Execute a Macro by pressing this button, followed by the Number button (or the AVR Power On button) into which you programmed the Macro. See *Programming Macro (Activity) Commands*, on page 41, for more information.

Back/Exit button: Press this button to return to the previous menu or to exit the menu system.

Menu button: This button is used within the tuner menus and an iPod connected to the AVR's front-panel USB port, and is also used to display the main menu on some source devices. To display the AVR's menu system, press the AVR button.

Up/Down/Left/Right buttons: These buttons are used to navigate the menu system and to operate the tuner.

OK button: This button is used to select items from the menu system.

Backlight button (AVR 3700/AVR 370): Press this button to illuminate the buttons on the remote. Press it again to turn the backlight off, or wait 5 seconds after the last button press for the light to turn off on its own.

Disc Menu button: To display the disc's menu while a DVD or Blu-ray Disc is playing, press the Disc Source Selector button, then press this button.

A/B/C/D buttons: These buttons can be used as additional source buttons and can also operate certain functions when used with some source devices. See Table A13 in the Appendix for details. These buttons are also used with a Teletext®-capable television if your broadcast, cable or satellite provider offers Teletext service.

Volume Up/Down buttons: Press these buttons to raise or lower the volume.

Channel Up/Down and Page buttons: When the tuner has been selected, press these buttons to select a preset radio station. While operating a cable, satellite or HDTV set-top box or a television, press these buttons to change channels.

Mute button: Press this button to mute the AVR's speaker-output connectors and headphone jack. To restore the sound, press this button or adjust the volume.

Transport Control buttons: These buttons are used to control source devices.

Info button: Press to display the AVR's Info Menu, which contains the settings for the current source.

AVR button: Press to display the AVR's Main Menu.

Sleep button: Press this button to activate the sleep timer, which turns off the receiver after a programmed period of time. Each press increases the time by 10 minutes, up to 90 minutes – ending with the "Sleep Off" message.

Learn button (AVR 3700/AVR 370): The AVR 3700/AVR 370 remote is capable of "learning" individual IR codes from the original remote that came with a source device. See *Program the Remote to Control Your Source Devices and TV*, on page 23, for more information.

Zone Selector switch: Use this switch to select whether the AVR commands will affect the main listening area (Zone 1) or the remote zone of a multizone system (Zone 2). For normal operation, leave the switch in the Zone 1 position.

Advanced Remote Control Programming

Remote Channel-Control Punch-Through

The punch-through feature allows you to operate one component while setting certain groups of controls to operate another component. For example, while using the AVR controls for surround modes and other audio functions, you may also use the remote to operate the transport controls of your Blu-ray Disc player. Or while using the remote to control video functions on your TV, you may also use the remote to change channels on your cable box.

To program punch-through control while operating any device:

1. For three seconds press and hold the Source Selector button for the main device the remote will be operating. The Source Selector will light up, go dark and then light up again, indicating the remote is in Program mode and that you may release the button.
2. Select the type of punch-through programming.
   a) For channel-control punch-through, press the Channel Up button.
   b) To program transport-control punch-through, press the Play transport-control button.
3. Press the Source Selector button for the device whose channel or transport controls you will use while operating the device selected in the first step. The Source Selector button will flash to confirm.

For example, to watch the TV while changing channels using the cable box, press and hold the TV button until it lights. Then press the Channel Up button, followed by the Cable/SAT button.

To undo punch-through programming, follow the same steps as above, but press the same Source Selector button in Steps 1 and 3.

NOTE: The Volume and Mute controls are always dedicated to the AVR.

Programming Macro (Activity) Commands

In addition to their normal functions, you can also use the 0 – 9 Number buttons and AVR Power On button to store Macro (Activity) commands – up to 11 of them. Each Macro can send out up to 19 commands at one time from a single button push. Any AVR remote control button's function from any mode (except the Back/Exit button, the Light button, and the Activity button) can be programmed into a Macro.

NOTE: Use caution when programming complicated Macros. It isn't possible to program a pause or delay before sending additional commands after a "Power On" command, and the component may not be ready to respond to commands immediately after powering on.

To program a Macro:

1. To enter the Programming mode, simultaneously press and hold the Activity button and the Number button or AVR Power On button to which you want to assign the Macro.
2. Press in up to 19 commands that you want stored in that Macro button. During each successive button selection, the Source Selector button LED will blink once. Press the Source Selector button for each device (or Setup button for the AVR itself) before you enter individual commands. This step counts as one of the 19 commands allowed for each Macro.
   - You can select functions from another mode by first pressing the corresponding Source Selector button and then the buttons where those functions are located within that mode. Pressing a Source Selector button also counts as one command.
   - For power on, press the AVR or Device Power On button.
   - For power off, press the AVR or Device Power Off button.
3. Press the Activity button to end the programming process. The last Source Selector button (or the Setup button) will flash three times.

It isn't possible to "edit" a command within a Macro. To erase the Macro:

1. Press and hold the Activity Button and the button into which you programmed the Macro until the Source Selector or Setup button lights up.
2. Press the Activity button to erase the Macro.

To execute a Macro:

Press the Activity button, then press the button into which you programmed the Macro.

IMPORTANT: Keep the remote aimed at the components until all of the Macro commands have been executed. The remote can take up to 10 seconds to send out 19 Macro commands.

Recording

Two-channel analog audio signals, as well as composite video signals, are normally available at the appropriate recording outputs. To make a recording, connect your audio or video recorder to the appropriate AVR output connectors as described in the *Making Connections* section, insert blank media in the recorder and make sure the recorder is turned on and recording while the source is playing. Refer to the recording device's instructions for complete information about making recordings.

NOTES:

1. The AVR only records analog audio signals. It does not convert digital audio signals to analog.
2. HDMI and component video sources are not available for recording.
3. Please make certain that you are aware of any copyright restrictions on any material you record. Unauthorized duplication of copyrighted materials is prohibited by law.

Sleep Timer

The sleep timer sets the AVR to play for up to 90 minutes and then turn off automatically.

Press the Sleep button on the remote, and the time until turn-off will be displayed. Each additional press of the Sleep button increases the play time by 10 minutes, with a maximum of 90 minutes. The SLEEP OFF setting disables the sleep timer.

When the sleep timer has been set, the front-panel display will automatically dim to half brightness.

If you press the Sleep button after the timer has been set, the remaining play time will be displayed. Press the Sleep button again to change the play time.

Resetting the Remote

To reset the remote to its factory default condition, simultaneously press and hold the TV Source Selector button and the "0" Number button. When the TV Source button relights, enter the code "333." When the TV button goes out, and all of the Source Selector buttons flash, the remote control will be reset.

Processor Reset

If the AVR behaves erratically after a power surge, first turn off the rear-panel Main Power switch and unplug the AC power cord for at least 3 minutes. Plug the cord back in and turn the receiver on. If this procedure doesn't help, reset the AVR's processor as described below.

NOTE: A processor reset erases all user configurations, including video resolution, speaker and level settings, and tuner presets. After a reset, reenter all of these settings from your notes in the Appendix worksheets.

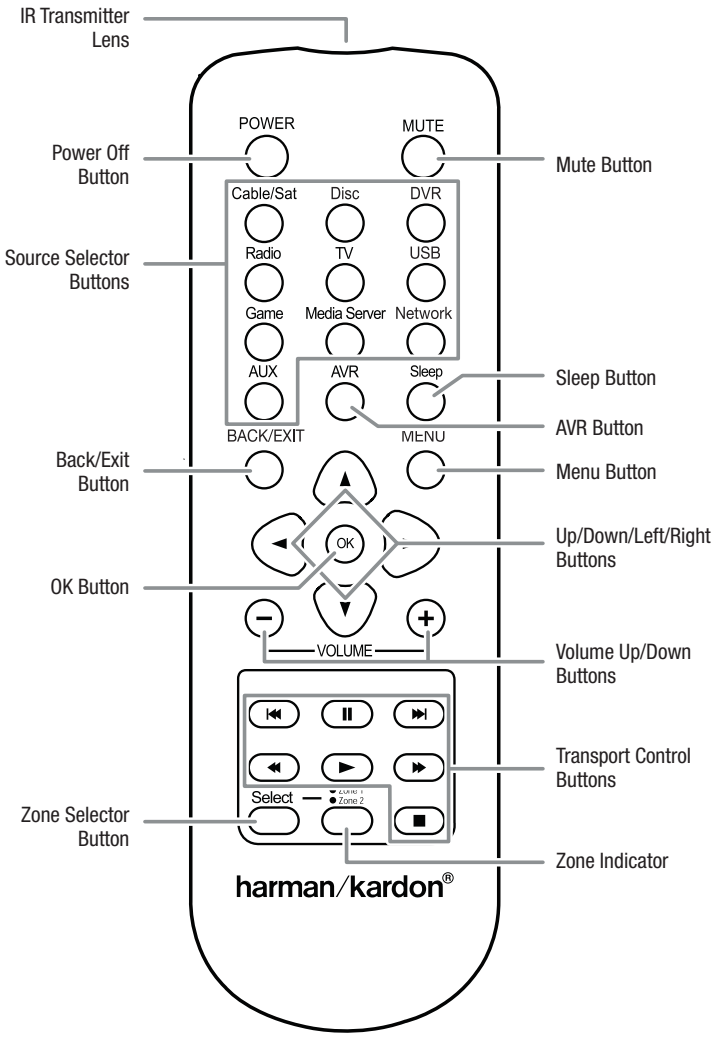
To reset the AVR's processor:

1. Press the front-panel Standby/On switch to place the unit in the Standby mode (the Power Indicator will turn amber).
2. Press and hold the front-panel Surround Modes button for at least 5 seconds until the RESET message appears on the front-panel Message Display.

NOTE: After performing a processor reset, wait at least 1 minute before pressing any Source Selector buttons.

If the receiver does not function correctly after a processor reset, contact an authorized Harman Kardon service center for assistance. Authorized service centers may be located by visiting our Web site at www.harmankardon.com.

Zone 2 Remote Control Functions (AVR 3700/AVR 370 only)



Zone 2 Remote Control Functions (AVR 3700/AVR 370 only), continued

By installing an IR receiver in the remote zone of a multizone system and connecting it to the AVR's Zone 2 IR Input connector, you can use the Zone 2 remote to control the sound in the remote zone from within the remote zone. You can use it to control the AVR's power, volume and mute functions or to select a source input for the remote zone, and to control a Harman Kardon source device connected to one of the AVR's Remote IR Out connectors. See *Connect IR Equipment*, on page 22, for more information.

You can also use the Zone 2 remote in the main listening room to control the AVR and Harman Kardon Blu-ray Disc™, DVD, CD or tape players. When the Zone 2 remote is in the Zone 1 control mode (the remote's Zone Indicator light will turn green), its power, volume and mute controls will affect only the main listening area. To restore operation to the remote zone, press the remote's Zone Selector button so that its Zone Indicator light turns red.

IR Transmitter lens: As buttons are pressed on the remote, infrared codes are emitted through this lens.

Power Off button: Press this button to turn the AVR off.

Mute button: Press to mute the AVR's remote-zone speakers. To restore the sound, press this button, adjust the volume or turn off the multizone system. Make sure to switch the remote to Zone 2 mode so that only the remote zone will be affected.

Source Selector buttons: With the remote in Zone 2 mode, press one of these buttons to select a source device for the remote zone. Pressing the button will also turn on the multizone system and switch the remote to the selected source device's control mode. You may select a different external source device than that for the main room, but not different tuner bands. If you select the same source as that for the main room, any commands sent to the source device will affect both zones.

- The first press of the Radio button switches the AVR to the last-used tuner band (AM or FM). Each successive press changes the band.
- The first press of the USB button switches the AVR to the last-used source (USB or iPod). Each successive press cycles between the two sources.
- The first press of the Network button switches the AVR to the last-used source (Network or vTuner). Each successive press cycles between the two sources.

Sleep button: Press this button to activate the sleep timer, which turns off the receiver after a programmed period of time. Each press increases the time by 10 minutes, up to 90 minutes – ending with the "Sleep Off" message.

AVR button: Press this button to turn on the AVR and select the last-used source. This button is also used to switch the remote control to AVR control mode.

Back/Exit button: Press this button to return to the previous menu or to exit the menu system.

Menu button: This button is used within the tuner menus and is also used to display the main menu on some source devices. To display the AVR's menu system, press the AVR button.

Up/Down/Left/Right buttons: These buttons are used to navigate the menu system and to operate the tuner.

OK button: This button is used to select items from the menu system.

Volume Up/Down buttons: Press to raise or lower the volume level in the remote zone.

Transport Control buttons: These buttons are used to control source devices.

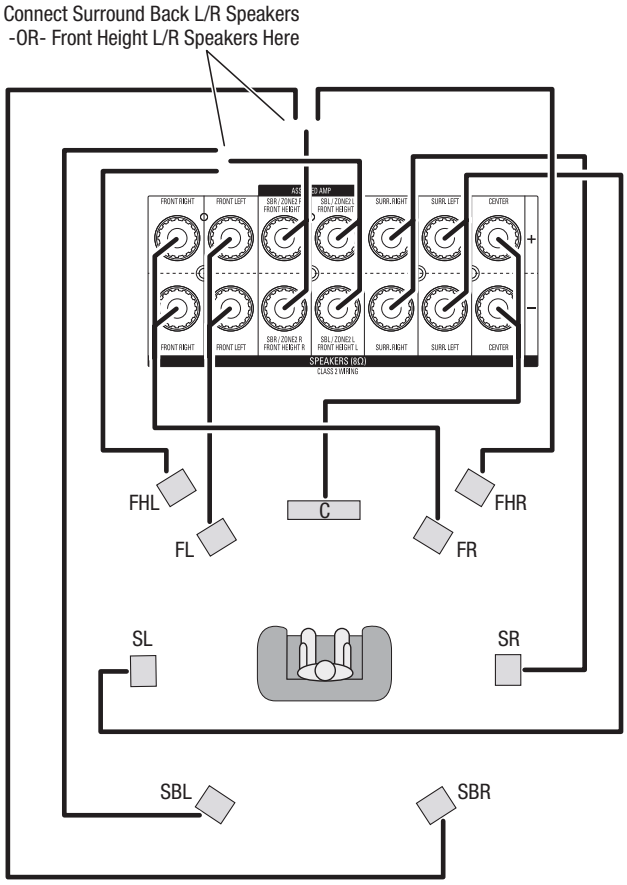
Zone Selector button and Zone Indicator light: Each press of the Zone Selector button determines whether the AVR commands will affect the main listening area (Zone 1) or the remote zone (Zone 2). The Zone Indicator light will turn green when Zone 1 has been selected, and red when Zone 2 has been selected. The Zone Indicator light will also light up briefly when any button is pressed.

Making Connections

CAUTION: Before making any connections to the audio/video receiver, ensure that the AVR's AC cord is unplugged from the receiver and the AC outlet. Making connections with the receiver plugged in and turned on could damage the speakers.

Connect Your Speakers

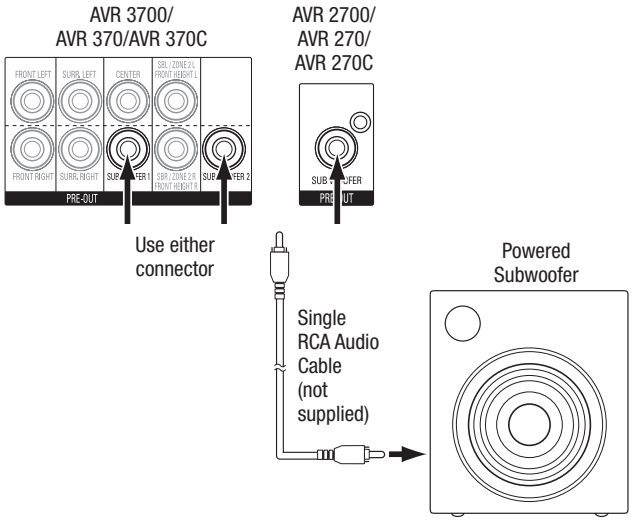
After you have placed your loudspeakers in the room as explained in *Place Your Speakers*, on page 13, connect each speaker to its color-coded terminal on the AVR as explained in *Speaker Connections*, on page 14. Connect the speakers as shown in the illustration.



NOTE: If you installed front height speakers, connect them as shown for the SBL and SBR speakers.

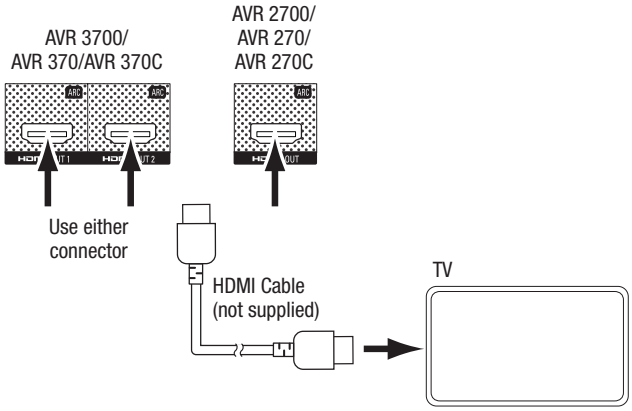
Connect Your Subwoofer

Use a single RCA audio cable to connect the AVR's Subwoofer connector to your subwoofer as explained in *Subwoofer Connections*, on page 14. NOTE: The AVR 3700 and AVR 370 provide connections for two subwoofers. See *Manual Speaker Setup: Number of Speakers,* on page XX, for information about activating the two subwoofer outputs. Consult your subwoofer's user manual for specific information about making connections to it.

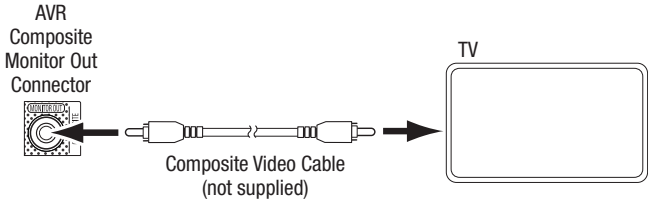


Connect Your TV or Video Display

If your TV has an HDMI connector: Use an HDMI cable (not included) to connect it to the AVR's HDMI Monitor Out connector. The AVR 3700 and AVR 370 provide HDMI connections for two TVs. You do not need to make any other connections to your TV from the receiver or from any of your video source components.



If your TV does not have an HDMI connector: Use a composite video cable (not included) to connect the AVR's Composite Monitor Out connector to your TV's composite video connector.



NOTE: The HDMI connection to your TV is preferred. If you use the composite video connection to your TV, you will not be able to view the AVR's on-screen menus.

Connect Your Audio and Video Source Devices

Source devices are components where a playback signal originates, e.g. a Blu-ray Disc™ or DVD player; a cable, satellite or HDTV tuner; etc. Your AVR has several different types of input connectors for your audio and video source devices: HDMI, component video, composite video, optical digital audio, coaxial digital audio and analog audio. The connectors are not labeled for specific types of source devices; they are labeled numerically, so you can connect your devices according to your individual system's make-up.

Your AVR's various source buttons have default assignments to different input connectors (listed in the "Default Connector(s)" column of the table below). For ease of setup, you should connect each source device to the connector where the corresponding default source button is assigned (e.g., connect your Blu-ray Disc player to HDMI 1).

However, you can connect your source devices as you wish and re-assign any of the input connections to any of the Source Buttons listed in the table according to where you actually connect each of your source devices.

As you connect your various source devices, fill out the "Connected Component" column in the table – it will make it easier for you to assign the various source buttons after you have completed making all of the connections. (You will make any changes to the source-button assignments and fill in the "Assigned Connector(s)" column later in the setup process.)

Note: You cannot assign connectors to the Network, Radio and USB source buttons.

Source Button	Default Connector(s)	Assigned Connector(s)	Connected Device
Disc	HDMI 1		
Cable/Sat	HDMI 2		
Game	HDMI 3		
Media Server	HDMI 4		
DVR	HDMI 5		
TV	None/Optical Digital Audio 1		
Aux	HDMI Front		
A (red)	HDMI 6		
B (green)	HDMI 7		
C (yellow)	Composite Video 1/Analog Audio 1		
D (blue)	Composite Video 2/Analog Audio 2		

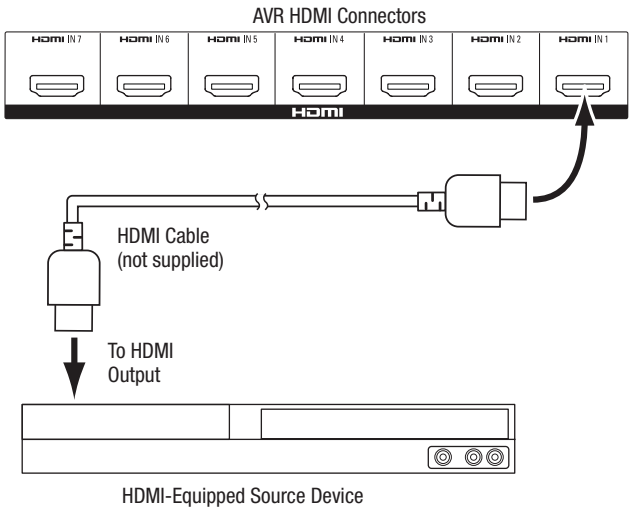
Monitor Output Connector	_____	_____	Connected Device
HDMI Out 1	_____	_____	
HDMI Out 2 (AVR 3700/AVR 370 only)	_____	_____	
Composite Video Monitor Out	_____	_____	

Record Output Connector	_____	_____	Connected Device
Analog Audio Rec Out	_____	_____	

Source Buttons and Assigned Connectors

Connect Your HDMI Devices

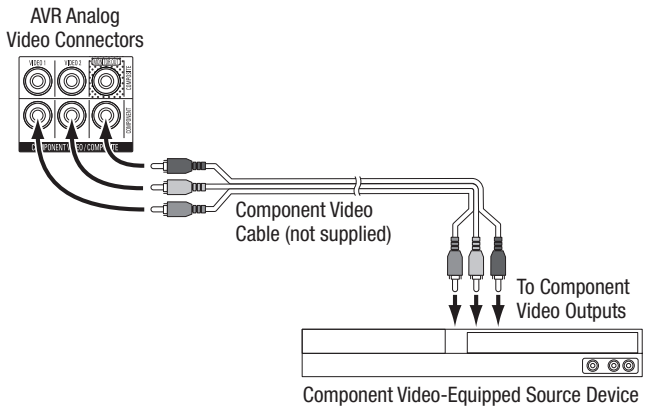
If any of your source devices have HDMI connectors, using them will provide the best possible video and audio performance quality. Since the HDMI cable carries both digital video and digital audio signals, you do not have to make any additional audio connections for devices you connect via an HDMI cable.



NOTE: If you have HDMI devices (such as an Internet connection) already connected directly to your TV, you can feed their sound to the AVR via the HDMI Out connector's Audio Return Channel, and they will not require additional connections to the AVR.

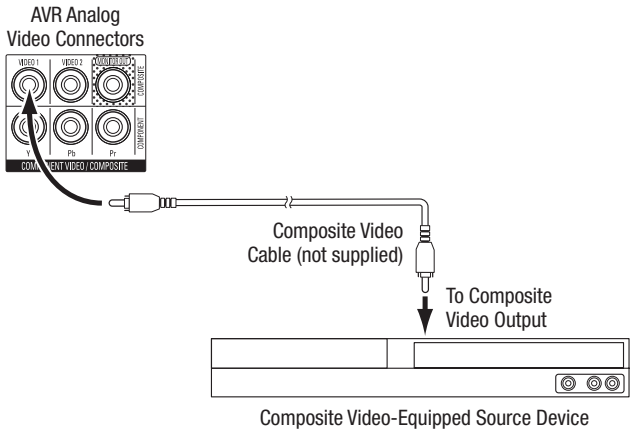
Connect Your Component Video Devices

If any of your video source devices have component video connectors (and do not have HDMI connectors), using the component video connectors will provide superior video performance. You will also need to make an audio connection from the device to the receiver.



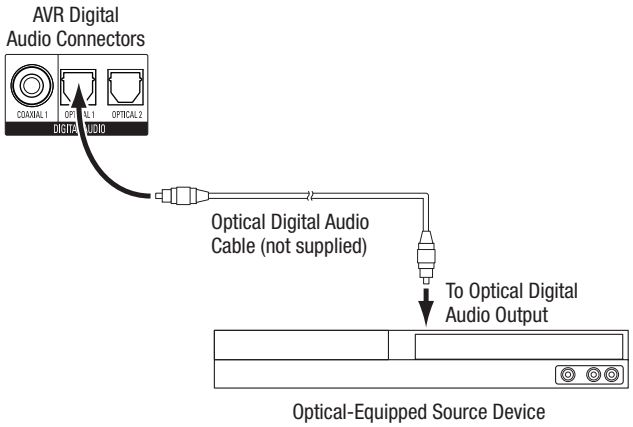
Connect Your Composite Video Devices

Use composite video connectors for video source devices that don't have HDMI or component video connectors. You will also need to make an audio connection from the source device to the receiver.



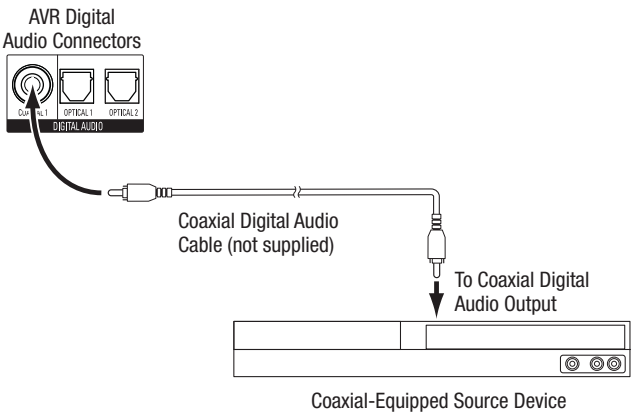
Connect Your Optical Digital Audio Devices

If your non-HDMI source devices have optical digital outputs, connect them to the AVR's optical digital audio connectors. **NOTE:** Make only one type of digital connection (HDMI, optical or coaxial) from each device.



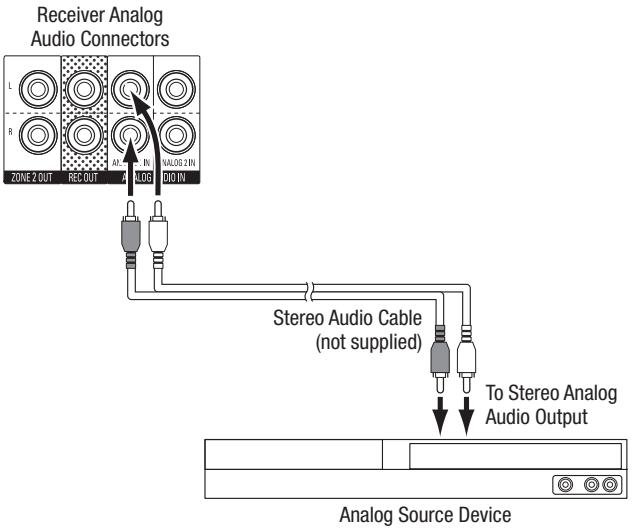
Connect Your Coaxial Digital Audio Devices

If your non-HDMI source device has a coaxial digital output, connect it to the AVR's coaxial digital audio connector. **NOTE:** Make only one type of digital connection (HDMI, optical or coaxial) from each device.



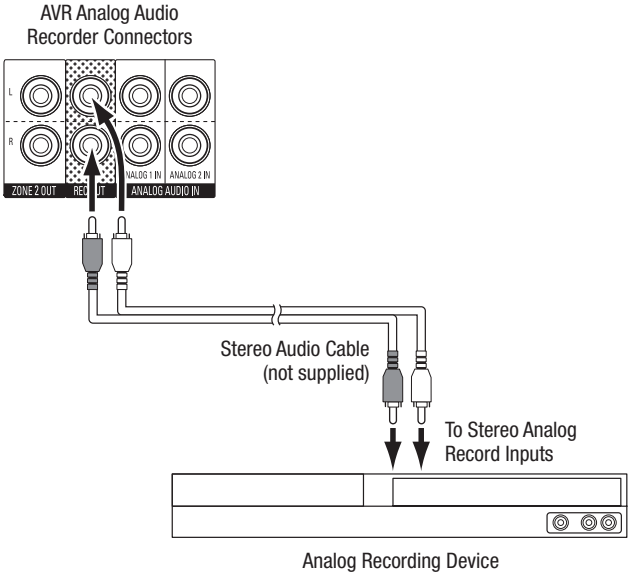
Connect Your Analog Audio Devices

Use the AVR's analog audio connectors for source devices that don't have HDMI or digital audio connectors. **NOTE:** If you're installing a multizone system, make analog audio connections for any source devices you want to be able to listen to in Zone 2. Only analog sources are available in Zone 2.



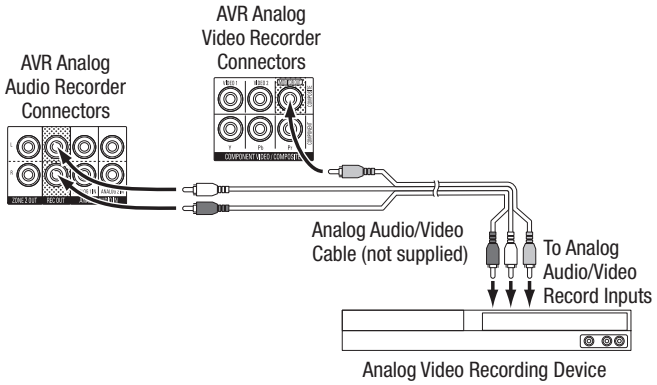
Connect Your Audio Recorders

Connect an analog audio recorder's inputs to the AVR's analog audio Rec Out connectors. You can record any analog audio input signal.



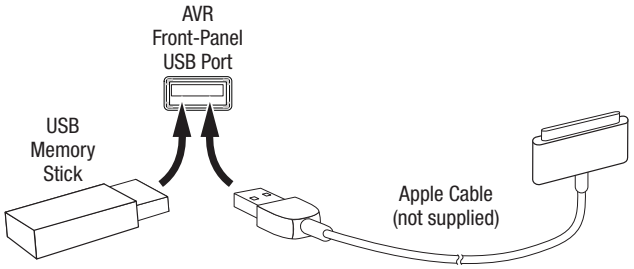
Connect Your Video Recorder

Connect an analog video recorder's video input connector to the AVR's Composite Monitor Out connector. You can record any composite video signal. To record the audio from the source device, connect the AVR's Analog Rec Out connectors to the analog video recorder's audio inputs. **NOTE:** If you have connected the AVR's Composite Monitor Out video connector to your TV you cannot connect a VCR to the AVR for recording.



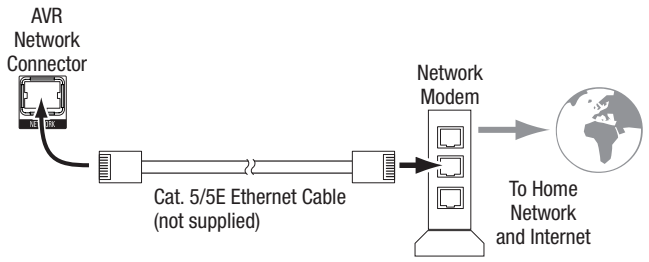
USB and iOS Devices

Use the AVR's front-panel USB port to connect an iPod, iPhone or iPad using an Apple cable (not supplied) or to directly connect a USB memory stick. You can play audio files from the device or memory stick and use the AVR's remote to control playback.



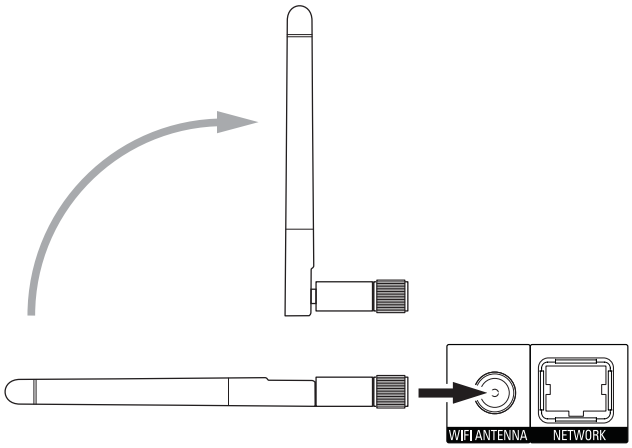
Connect to Your Home Network

Use a Cat. 5 or Cat. 5E cable (not supplied) to connect the AVR's Network connector to your home network to enjoy Internet radio and content from DLNA-compatible devices that are connected to the network.



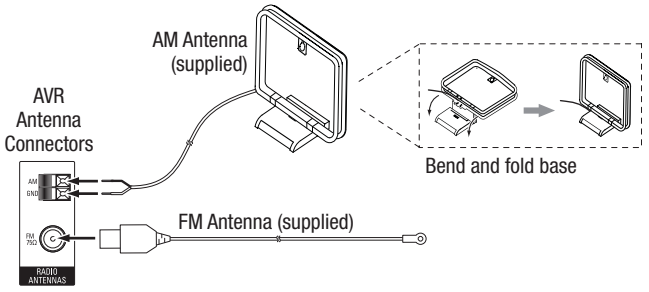
AVR 3700/AVR 370 only:

If your home network is Wi-Fi®, attach the supplied Wi-Fi antenna to the AVR. You do not need to make a wired network connection.



Connect the Radio Antennas

- Connect the supplied FM antenna to the AVR's FM 75Ω antenna connector. For the best reception, extend the FM antenna as far as possible.
- Bend and fold the base of the supplied AM antenna as shown and connect the antenna wires to the AVR's AM and Gnd connectors. (You can connect either wire to either connector.) Rotate the antenna as necessary to minimize background noise.



Install a Multizone System

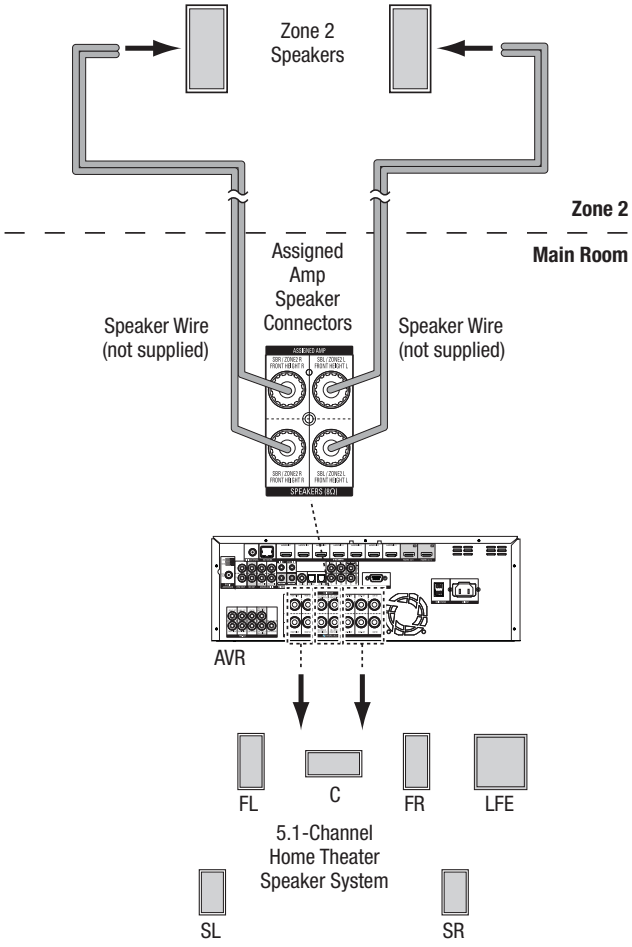
IMPORTANT SAFETY NOTE: Installing a multizone system typically requires running cables inside walls. Always comply with the appropriate safety codes when installing concealed wiring, particularly all applicable building codes. Failure to do so may present a safety hazard. If you have any doubt about your ability to work with electrical wiring, hire a licensed electrician or custom installer to install the multizone system.

NOTE: Only the following analog audio sources are available to Zone 2: the internal radio, an iPod/iPhone device or a USB memory device inserted in the AVR's USB port and up to two source devices connected to the rear-panel Analog Audio In 1 and 2 connectors.

Your AVR offers two different methods of distributing audio to other areas in your home. Each requires different connections:

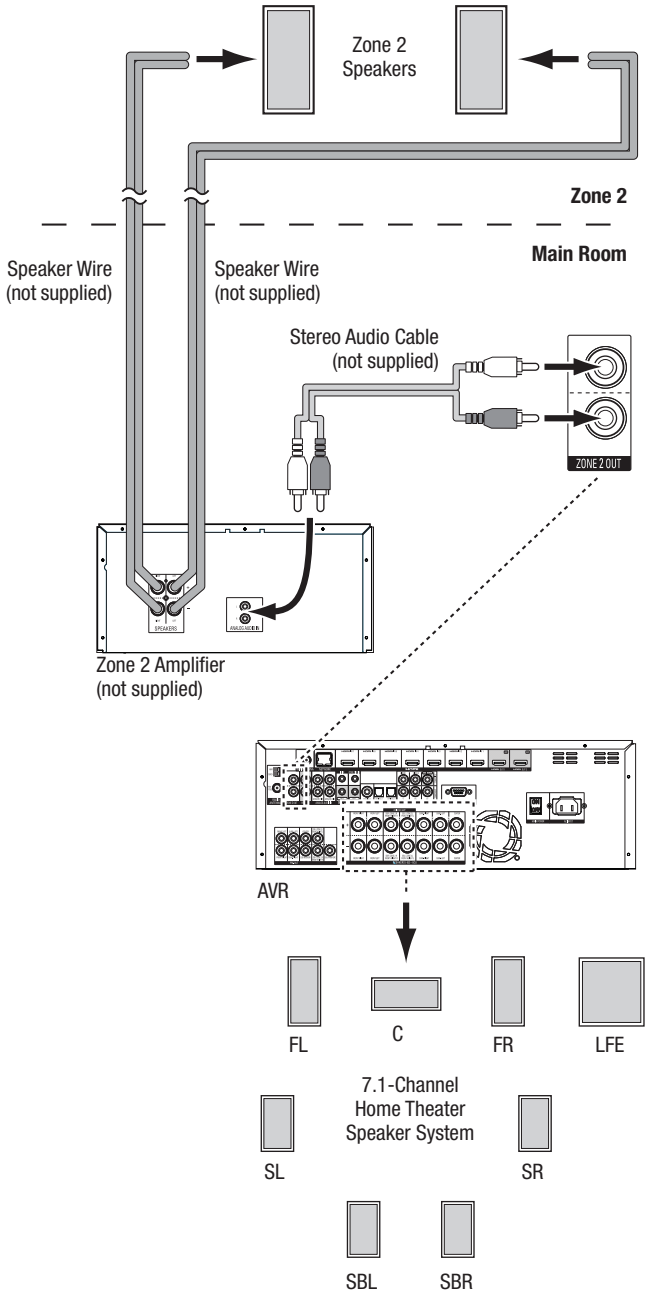
A. Connect the Zone 2 speakers directly to the Assigned Amp Speaker Output connectors. Assign the Assigned Amp channels to power the Zone 2 speakers (see *Manual Speaker Setup*, on page 36). This method allows you to power a single pair of speakers for Zone 2.

This method offers the benefit of reduced cost and complexity, but your home theater system will be limited to 5.1 channels – the AVR will automatically downmix the playback of programs recorded in 6.1 or 7.1 channels to 5.1 channels.



B. Connect an external amplifier to the AVR's Zone 2 Out connectors. This method offers the benefit of retaining a 7.1-channel home theater in the main room simultaneously with multizone operation, although it does require an additional amplifier for Zone 2.

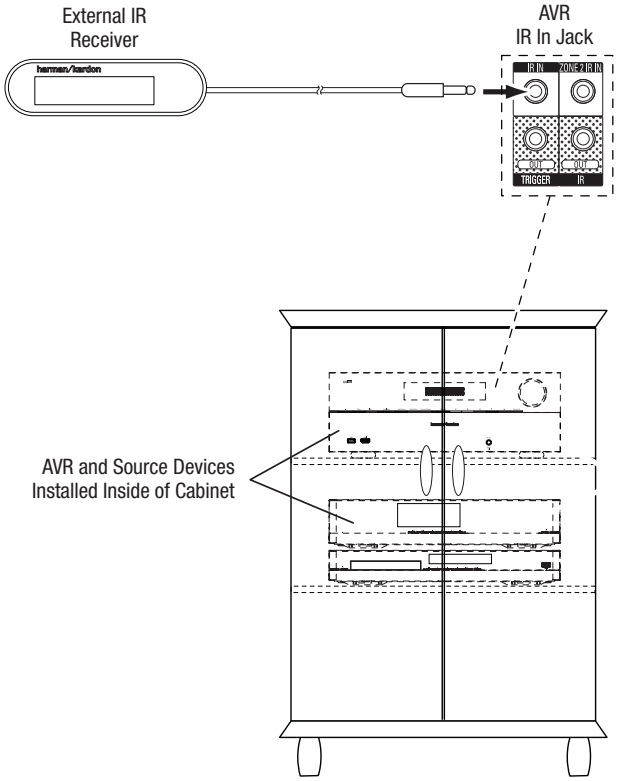
We recommend that you place the Zone 2 amplifier in the same room as the AVR so that you can use a short length of stereo audio cable along with a long run of speaker wire to the remote room. A long run of stereo audio cable would increase the chance of signal degradation. Depending on your Zone 2 amplifier you can distribute the audio signal to a single pair of speakers or to several pairs placed in different rooms.



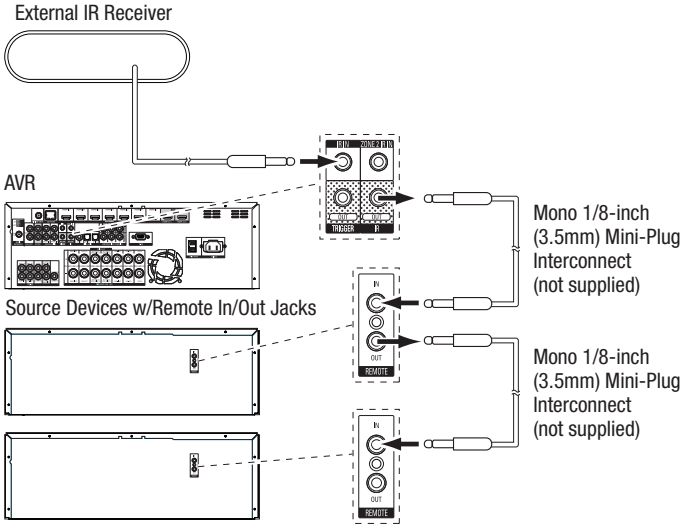
Connect IR Equipment

The AVR is equipped with Remote IR Input and Output connectors and a Zone 2 IR Input connector that let you remotely control the AVR in a variety of situations:

- When you place the AVR inside a cabinet or facing away from the listener, connect an external IR receiver, such as the optional Harman Kardon HE 1000, to the AVR's IR In jack.

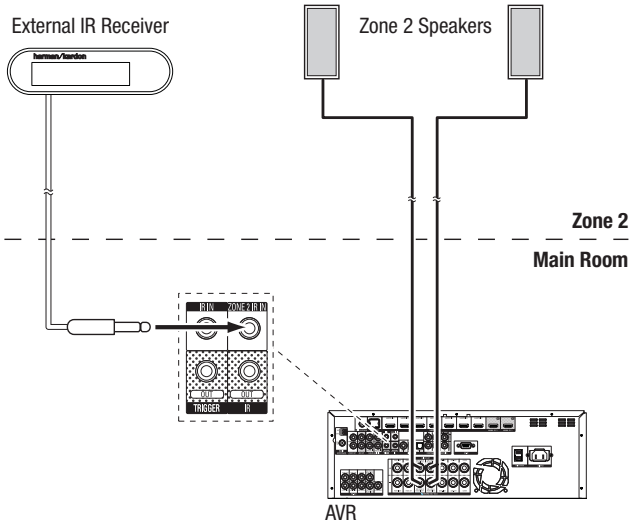


- If any source devices are equipped with a compatible IR input, use a 1/8-inch (3.5mm) mini-plug interconnect cable (not included) to connect the AVR's IR Out jack to the source device's IR input.



To control more than one source device through the AVR's IR Remote Out connector, connect all sources in "daisy chain" fashion, connecting each device's IR output to the next device's IR input, starting with the AVR.

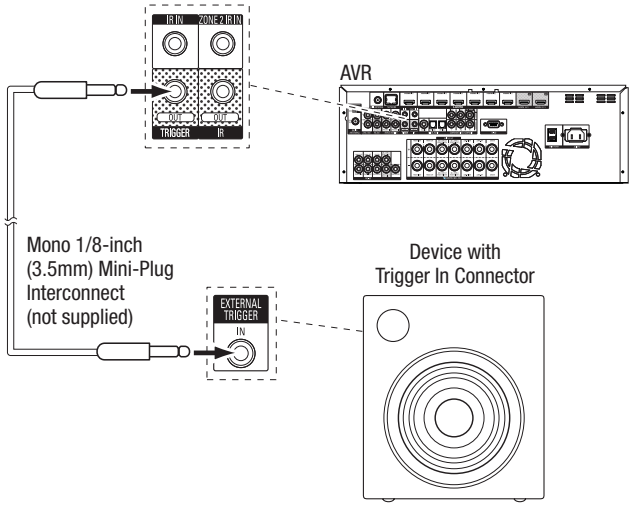
- If you install a multizone system, connect an IR control device to the Zone 2 IR In connector for remote-room control of the multizone system, source devices and volume in the remote zone.



If a source device is shared with the main listening area, any control commands issued to that source will also affect the main room.

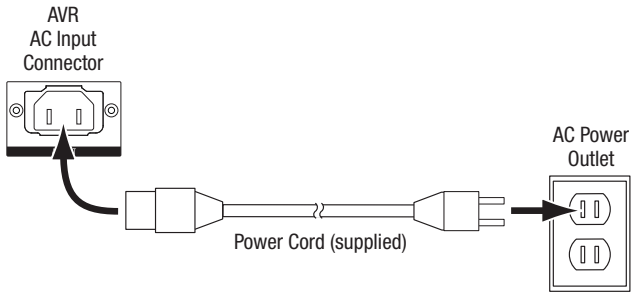
Connect the Trigger Output

If your system has equipment that can be controlled by a DC trigger signal, connect it to the AVR's Trigger Out connector with a mono 1/8-inch (3.5mm) mini-plug interconnect cable. The AVR will supply a 12V DC (100mA) trigger signal at this connection whenever it is powered on.



Connect to AC Power

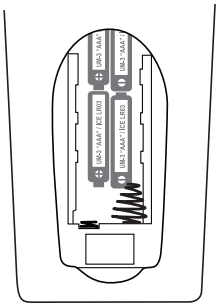
Connect the supplied AC power cord to the AVR's AC Input connector and then to a working AC power outlet.



Set Up the Remote Control

Install the Batteries in the Remote Control

Remove the remote control's battery cover, insert the four supplied AAA batteries as shown in the illustration, and replace the battery cover.



NOTE: Remove the protective plastic from the AVR's front panel so it doesn't reduce the remote control's effectiveness.

Program the Remote to Control Your Source Devices and TV

You can program your AVR remote to control many brands and models of audio/video source devices and TVs. The remote is also ready to operate your iPod or iPhone when it is connected to the AVR's front-panel USB port.

Each of the remote's Source Selector buttons has been preprogrammed to control certain types of source devices:

Cable/Sat: Controls cable TV and satellite TV tuner boxes

Disc: Controls Blu-ray Disc and DVD players

Radio: Controls the AVR's built-in FM/AM tuner

TV: Controls TVs and video displays

USB: Browses compatible media on an Apple iOS device that is connected to, or a USB device that is inserted in the AVR's USB port Note: Does not require programming.

DVR: Controls TiVo® recorders

Game: Controls video-game consoles

Media Server: Controls media servers

Network: Browses compatible media on DLNA-compatible devices connected to your home network and on vTuner (Internet Radio). Note: Does not require programming.

AUX: Controls HDTV tuner boxes, CD players, VCRs and PVDs.

Although the Source Selector buttons are preprogrammed for the device types listed above, you can reassign a Source Selector button to a different device type. See *Reassigning a Source Selector Button for a Different Device Type*, on page 24.

Once you have programmed the remote, you can switch the remote's control mode to access the functions for a particular device by pressing the remote's Source Selector button for that device.

Follow these steps to program the Source Selector buttons for your source devices:

1. Turn on the source device you want to program the remote to control.
2. Look up the code numbers for the device in Tables A14 – A24 in the Appendix. Write all the applicable code numbers in a convenient place.
3. Press the Source Selector button for the device and hold it as it glows red, goes dark and glows red again. Then release it. The remote is now in the Programming mode.

NOTE: The remote will remain in the Programming mode for 20 seconds. If you do not complete Step 4 within 20 seconds, the remote will exit the Programming mode, and you will need to repeat Step 3.

4. Aim the remote at the source device and use the remote's Number buttons to enter a code number from Step 1, above.
   a) If the device turns off, press the Source Selector button again to save the code. The Source Selector button will flash, and the remote will exit the Programming mode.
   b) If the device does not turn off, enter another code number.
   c) If you run out of code numbers for a device, you can search through all of the codes in the remote's library for dervices of its type by pressing the remote's Up button repeatedly until the device turns off. When it does, press the Source Selector button to save the code.
5. Check that other functions control the device correctly. Sometimes manufacturers use the same Power code for several models, while other function codes vary. Repeat this process until you've programmed a satisfactory code set that operates most of the device's functions.
6. If you searched through the remote's code library to find the code, you can find out which code number you have programmed by pressing and holding the Source Selector button to re-enter the Programming Mode. Then press the remote's OK Button, and the Source Selector button will flash in the code sequence. One flash represents "1," two flashes for "2," and so forth. A series of quick flashes represents "0." Record the code number programmed for each device in Table A9 in the Appendix.

Repeat Steps 3 – 6 for each source device you want to control with the AVR remote.

Reassigning a Source Selector Button for a Different Device Type

You can reassign a Source Button to control a different device type (for example, you can program the Media Server button to control a DVD player).

1. Turn on the source device you want the remote to control.
2. Look up the code numbers for the device in Tables A14 – A24 in the Appendix. Write all the applicable code numbers in a convenient place.
3. Press the Source Selector button you want to override and hold it for three seconds as it glows red, goes dark and glows red again. Then release it. The remote is now in the Programming mode.
4. Press the Source Selector button that corresponds to the source device's type (i.e., for a DVD player, press the Blu-ray button). The Source Selector button you pressed in Step 3 will flash once.
5. Aim the remote at the source device and use the remote's Number buttons to enter a code number from Step 2, above.
   a) If the device turns off, press the Source Selector button from Step 3 again to save the code. The Source Selector button will flash, and the remote will exit the Programming mode.
   b) If the device does not turn off, enter another code number.
   c) If you run out of code numbers for a device, you can search through all of the codes in the remote's library for devices of its type by pressing the remote's Up button repeatedly until the device turns off. When it does, press the Source Selector button from Step 3 to save the code.

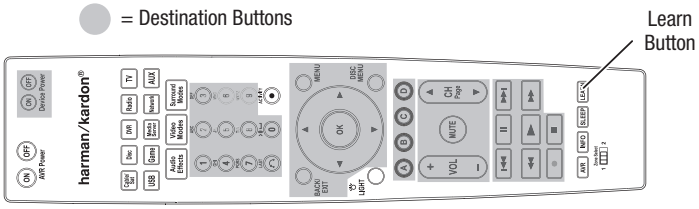
Most of the button labels on the AVR remote describe each button's function when the remote is used to control the AVR. However, the button may perform a different function when used to control another device. Refer to the Remote Control Function List, Table A13 in the Appendix.

You can also program the remote to perform Macros (preprogrammed code sequences that execute many code commands with a single button press), and for "punch-through" programming (allowing the remote to operate a device's channel or transport controls when the remote is in another device's mode). See *Advanced Remote Control Programming*, on page 41, for instructions on these functions.

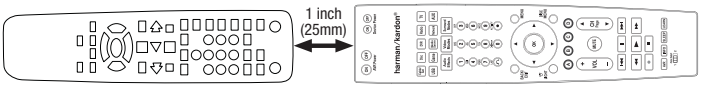
Learning (AVR 3700/AVR 370 only)

If you have the device's original remote control, you may "teach" its individual button codes into the following "destination" buttons on the AVR 3700/AVR 370 remote:

Device Power On/Off buttons, Number buttons, Last button, Back/Exit button, Menu button, Up/Down/Left/Right buttons, OK button, Disc Menu button, A/B/C/D buttons, Channel Up/Down buttons, Volume Up/Down buttons, Mute button, Transport Control buttons.



1. Place the two remotes with their IR transmitters facing each other, about 1 inch (25mm) apart.



2. Press the AVR remote's Source Selector button for the source device, then press and hold the Learn button until the Source Selector button glows red. The remote is now in the Learning mode.
3. On the AVR remote, choose a destination button that will learn the source device remote's function. Press the destination button, and the Source Selector will flash once.
4. On the source device's remote, press and hold the button with the function that you want to teach to the AVR remote until the Source Selector button flashes three times. The source device remote's button has now taught the AVR remote's destination button to perform its function on that source.
5. You can program additional buttons for this source by repeating Steps 3 – 4. You can program buttons for other sources by repeating Steps 1 – 4.

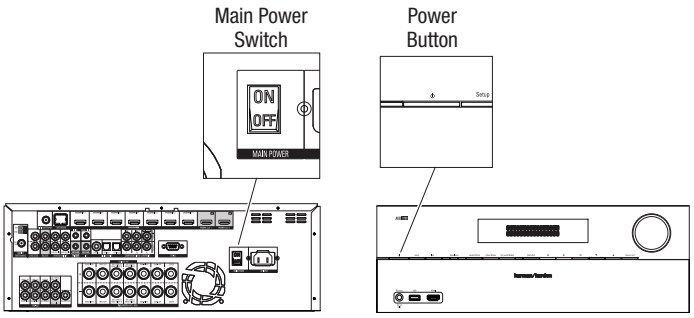
When you're finished, press the Learn button once to exit the Learning mode, or wait for the remote to exit the Learning mode on its own after about 30 seconds.

Set Up the AVR

In this section, you will configure the AVR to match your actual system's makeup. Although it's possible to configure the AVR using only the remote and the messages on the AVR's front-panel display, it is easier if you use the full-screen menu system.

Turn On the AVR

1. Set the rear-panel Main Power switch to "On." (The front-panel Power indicator will glow amber.)
2. Press the front-panel Power button.

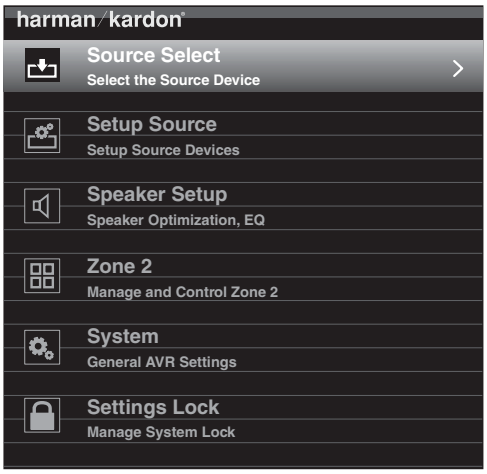


Unless you will not be using the receiver for an extended period of time, leave the Main Power switch set to "On." When the Main Power switch is turned off, any settings you have programmed will be preserved for up to four weeks.

IMPORTANT NOTE: If the PROTECT message ever appears in the Message Display, turn off the AVR and unplug it. Check all speaker wires for a short-circuit ("+" and "–" wires touching). If none is found, bring the unit to an authorized Harman Kardon service center for inspection and repair before using it again.

Using the On-Screen Menu System

To access the menu system, press the AVR button on the remote or the Setup button on the front panel. The Main Menu will appear, and if a video source is playing, it will be visible behind the menu.



NOTE: When you are using the AVR's on-screen menu system, we recommend a video output resolution of 720p or higher for easiest viewing and for graphics that simplify some configuration options. Depending on the resolution selected, the menus shown by your system may vary in appearance from the illustrations.

The Main Menu system consists of six submenus: Source Select, Setup Source, Speaker Setup, Zone 2, System and Settings Lock. Use the Up/Down/Left/Right buttons on the remote or the front panel to navigate the menu system, and press the OK button to select a menu or setting line, or to enter a new setting.

The current menu, setting line or new setting will appear in the front-panel Message Display, as well as on screen.

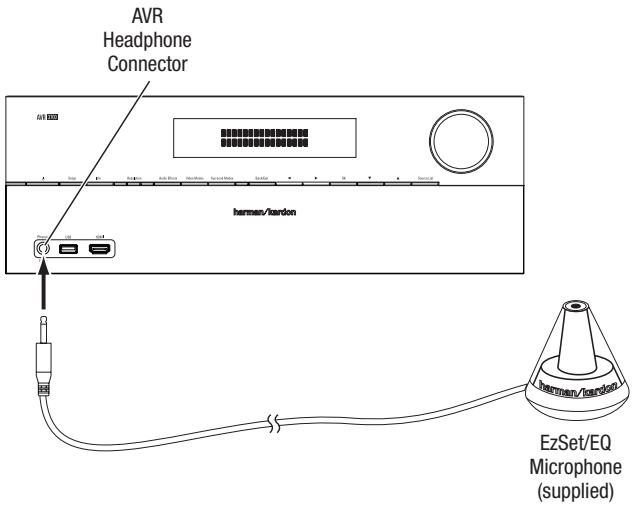
To return to the previous menu or exit the menu system, press the Back/Exit button. Be certain all settings are correct, as any changes you have made will be retained.

Most users should follow the instructions in this *Set Up the AVR* section to configure a basic home theater system. You may return to these menus at any time to make additional adjustments, such as those described in the *Advanced Functions* section, on page 33.

Before beginning the following setup steps, all loudspeakers, a video display and all source devices should be connected. You should be able to turn on the AVR and view the main menu when you press the AVR button. If necessary, reread the *Making Connections* and *Set Up the Remote* sections before continuing.

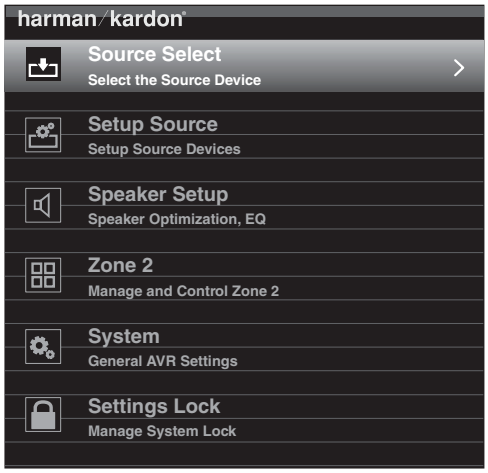
Configure the AVR for Your Speakers

1. Plug the supplied EzSet/EQ microphone into the AVR's Headphone connector.

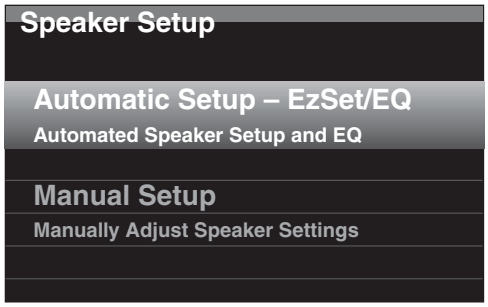


2. Place the microphone at ear height in your listening position. The microphone features a threaded insert on the bottom for mounting on a camera tripod.
3. Set the volume control on your subwoofer to approximately the halfway point.
4. Turn on your TV and select the TV input where you connected the AVR in *Connect Your TV or Video Display*, on page 17.

5. Press the remote control's AVR button. The AVR's on-screen display (OSD) Main Menu screen will appear on the TV.



6. Use the remote's Up/Down/Left/Right and OK buttons to select "Speaker Setup."



7. Select "Automatic Setup – EzSet/EQ" and then select "Continue."
8. Select the number of speakers in your system. Select "5.1" if no surround back or front height speakers are present or if you will be using the Assigned Amp channels for multizone operation.
9. The test will begin. Make sure that the room is quiet while the test noise is playing through the speakers.
10. When the test finishes, select "Continue," then select "View Settings" to see the results of the EzSet/EQ process, or select "Done" to exit.

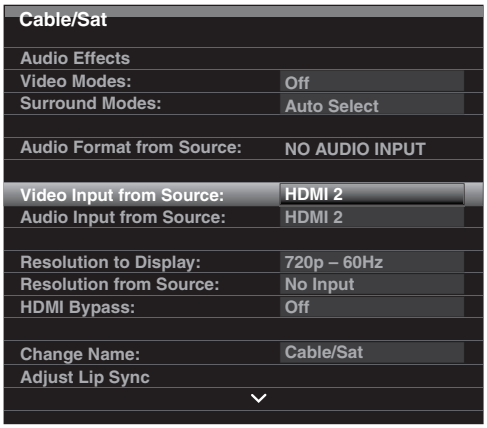
NOTES:

- If there are fewer than five main speakers in your system, do not use the EzSet/EQ process. Instead, proceed as described in *Manual Speaker Setup*, on page 36.
- If you are using a 6.1-channel configuration with a single surround back speaker, use EzSet/EQ automatic configuration for 5.1 speakers, connect the single surround back speaker to the left Assigned Amp Speaker Output connector, then configure the surround back speaker manually, as described in *Manual Speaker Setup,* on page 36.

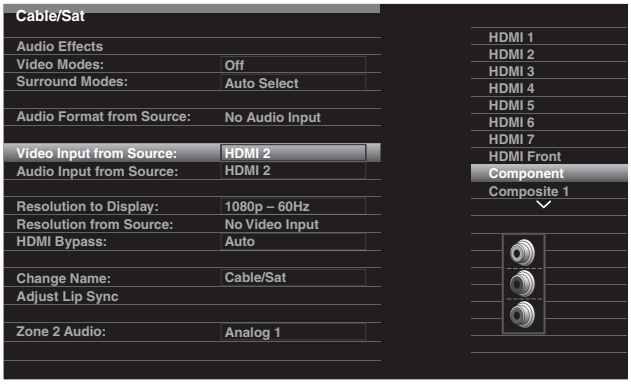
Set Up Your Sources

The Setup Source menu lets you assign the correct physical audio and video connections to each source and lets you set many audio and video playback features for each source. **IMPORTANT: The "Video Input from Source," "Audio Input from Source" and "Resolution to Display" settings are not optional and must be adjusted *before* you use your AVR to enable playback of each source.** You can adjust the other settings later. See *System Settings*, on page 39, for complete information about adjusting all of the Settings menu options.

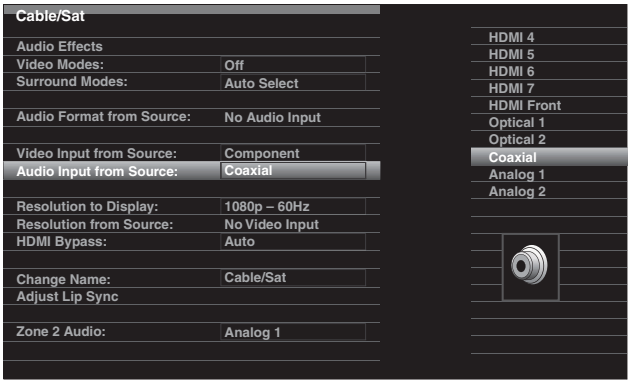
1. Review the assigned connectors you listed on the *Source Buttons and Assigned Connectors* table, on page 18. Note what changes (if any) you want to make from the default source-button connector assignments that appear on the list. (If there are no changes, you can skip this section.)
2. To display the Source Settings menu for the active source, press the Info button on the front panel or remote. Or, from the Main Menu screen, select "Setup Source" and select a source from the slide-in menu. The Settings menu for that source will appear.



3. Select "Video Input From Source" and select the video input connector you want to assign to the source button. Press the OK button. NOTE: If you select an HDMI connector as the Video Input from Source, the Audio Input from Source will automatically change to the same HDMI connector. If you want to use a different audio connection, proceed to step 4.



4. Select “Audio Input from Source” and select the audio input connector you want to assign to the source button. Press the OK button.



Resolution to Display: This setting reflects the video output resolution, which is dependent upon the capabilities of your TV or video display.

- If you connected your TV to the AVR’s HDMI Monitor Out connector, the two devices will communicate with each other, and the AVR will automatically select the best available video output resolution. In almost all cases, you should leave the resolution set to the AVR’s automatic selection. (You can override this automatic selection if your video display’s native resolution is different from the AVR’s automatic selection.)
- If you connected your TV to the AVR’s Composite Video Monitor Out connector, you *must* set the resolution to “480i” (AVR 3700/AVR 2700) or to “576p” (AVR 370/AVR 270) to view any content.

NOTE: If your connected TV is 4K video capable, the AVR will automatically pass 4K video sources through to the TV in their native resolution and will upscale non-4K video sources up to 4K.

Audio Effects: This submenu allows you to adjust the Dolby Volume and Dolby PLII/IIx/IIz settings, the bass and treble tone controls, the LFE trim and the Equalization On/Off setting for each source independently. We suggest leaving this submenu at its default settings and returning to it later if your system requires fine-tuning. See *Audio Effects Button*, on page 34, for more information.

Video Modes: This submenu allows you to make picture adjustments for each source independently. We suggest leaving the settings at their factory defaults. You should make picture adjustments to your video display first and use this menu only for fine-tuning. See *Video Processing*, on page 34, for more information.

Surround Modes: This submenu lets you program surround modes for movies, music and games for each source independently. Digital surround signals, such as Dolby Digital and DTS bitstreams, are automatically played in their native formats, although you may change the surround mode. See *Audio Processing and Surround Sound*, on page 33, for more information.

Audio Format from Source: This line is informational only. When a digital program is playing, its format will be identified here. When analog audio programs are playing, this line displays ANALOG.

Resolution from Source: This line is informational only. It indicates the resolution of the video output by the source device.

HDMI Bypass: This setting allows you to bypass the AVR’s internal video processing for proper display of 3D video content and of source devices (such as some game consoles) where the AVR's video processing can create delays that can cause synchronization errors between the sound and picture. There are two available settings:

• On: Always bypasses the AVR's internal video processing.

• Auto: Automatically bypasses the AVR's internal video processing when 3D content is detected.

IMPORTANT: Once the AVR automatically switches into the bypass mode upon detecting 3D video content, it will not automatically switch out of the bypass mode when it detects conventional 2D video content. To turn the HDMI Bypass off you must cycle the AVR into the Standby mode and then turn it on again.

We suggest that you create an additional source configuration for each of your 3D video source devices by assigning each an unused Source Selector button on the AVR’s remote control. For example, you can assign the AVR’s “Media Server” source as the 3D source for a 3D-capable disc player or game, and you can assign one of the AVR’s “A/B/C/D” source buttons as the 3D source for your cable or satellite tuner’s 3D programming.

Creating “HDMI Bypass” Inputs

In this example, we will program the Media Server source as an HDMI Bypass source for 3D programming:

1. Select “Setup Source.” The source list will appear.
2. Select “Media Server.” The Media Server setup screen will appear.
3. Select “HDMI Bypass.” A confirmation screen will appear.
4. Select “OK.” The AVR will exit the menu mode.

Repeat Steps 1 – 4, assigning a new 3D source for each of your 3D-capable source devices.

Notes:

- When using your AVR with these new settings, be sure to press the correct source selectors for your 2D and 3D sources.
- If you are viewing 3D sources when an HDMI Bypass input is active, the on-screen indications for volume level will not appear. This is normal, since all video processing is removed in the HDMI Bypass mode.
- If your video sources are always operating at 720p or higher resolution, you may find the HDMI Bypass mode acceptable for normal 2D viewing as well as for 3D viewing. In this case, you may find it more convenient to use the 3D sources at all times.
- If you see side-by-side or top-and-bottom images while watching a 3D program, manually switch to the HDMI Bypass mode.

Change Name: This selection lets you change the display name for the source, which is useful if your source’s device type is different from the source’s preprogrammed name. Select this line and use the Up/Down buttons to scroll forward or reverse through the alphanumeric characters. When the desired character appears, use the Left/Right buttons to move the cursor to the next or previous position. Move the cursor again to leave a blank space. When you have finished, press the OK Button. The name will appear on the AVR’s front panel and throughout the on-screen menu system.

Adjust Lip Sync: This selection lets you resynchronize the audio and video signals from a source to eliminate a “lip sync” problem. Lip-sync issues can occur when the video portion of a signal undergoes additional processing in either the source device or the video display. When you make a Lip Sync adjustment, the Lip Sync menu appears by itself, enabling you to view the video while listening to the audio. Use the Left/Right buttons to delay the audio by up to 180ms.

Zone 2 Audio: This setting determines the audio source for Zone 2 of a multizone system. Select the analog audio input the source is connected to. Digital audio is not available to the multizone system.

To configure the next source, press the Back/Exit button, then return to the Setup Source line of the Main Menu. When you have finished configuring all sources, press the Back/Exit button to clear the menus from view.

Set Up the Network

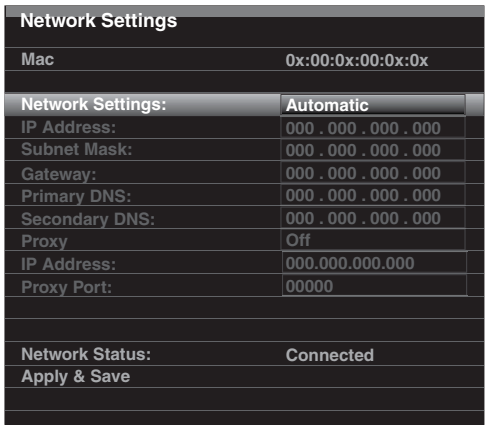
To play MP3 or WMA media located on DLNA-compatible devices connected to the network, use the AVR’s internal Internet radio tuner or listen to sources via AirPlay, the AVR must be connected to your home network and you must join them with the network. (If your home network is Wi-Fi, the AVR 3700 and AVR 370 can connect to it wirelessly.)

Wired Network Setup

If your network uses an automatic IP address, you should not have to perform any network setup procedures for a wired network connection. Once you connect the AVR to your home network, the network should automatically assign the AVR an IP address, and the AVR should automatically connect to your network.

If your AVR does not automatically connect to your network (in which case the AVR will display a "Not Connected" message when you press the Network source button):

1. Press the AVR button, select System, then select Network Settings. The Wired/Wireless selection screen will appear.
2. Select Wired. The Wired Network Settings menu will appear.



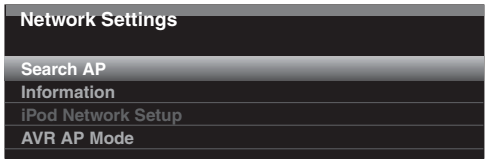
3. Select Network Settings, the press the OK button twice to cycle the setting from "Automatic" to "Manual" and back to "Automatic."
4. Select Apply & Save. The AVR will attempt to connect to the network.
5. If the AVR again fails to connect to the network, you may need to enter your network's settings manually. See *Network Settings* (under *General AVR Settings*), on page 40, for complete instructions. You may need to obtain your network's settings from your ISP or network administrator.

NOTE: We recommend that you directly connect the AVR to a home-network router so that it can directly access the Internet for Internet radio, or access a PC on the network for playback of content stored on the PC (see *Listening to Media via Your Home Network*, on page 32, for more information).

Wireless Network Setup (AVR 3700/AVR 370)

If you want to join the AVR to your Wi-Fi network you will need to perform the following setup procedure.

1. Press the AVR button, select System, then select Network Settings. The Wired/Wireless/ Network Upgrade selection screen will appear.
2. Select Wireless. The Wireless Network Settings menu will appear.



The following options appear in the Wireless Setup menu:

- Search AP: Select this option to display and select the wireless network you wish to join.
- Information: Select this option to display the settings information for the active wireless network. This screen is informational only – you cannot make changes in the network settings from it.
- iPod Network Setup: Selecting this option lets you use your portable device with iOS 5 or later to automatically have the AVR join the same wireless network to which the device is already connected. See *Using your iOS 5 device to join the wireless network,* below, for details.
- AVR AP Mode: This option provides an alternate method for connecting to a wireless network without using the AVR's on-screen display.

NOTE: If you have already made a connection to a wired network you will not be able to select the Wireless setting. Disconnect the AVR from the wired network and begin again at Step 1.

3. Select Search AP and select the network you wish to join from the ones displayed. The Enter Password screen will appear.
4. Use the remote's up and down arrow buttons to select each character in your Wi-Fi network's password. (The characters will appear on the AVR's front-panel display and the OSD screen.) When you have selected the correct character, use the right arrow button to move to the next one. If you make a mistake, use the left arrow button to change a previous character.
5. Once the correct password is displayed on the AVR's front-panel display and the OSD screen, press the OK button. The AVR will attempt to join the network.
6. When the AVR has successfully joined the network it will display "Connection Success" on its front-panel display and OSD.
   - If the AVR is not able to join the network it will display "Connection Failure." If this happens, confirm that you entered the correct password, attempt to connect to another wireless network or make a wired network connection.

Using your iOS 5 device to join the wireless network:

1. Make sure that your iOS 5 device is joined with the wireless network you want the AVR to join.
2. Connect your iOS 5 device to the AVR's front-panel USB port.
3. The iPod Network Setup option described in Step 2, above, will become available. Select it.
4. The AVR will automatically join the network without requiring further input from you.

Manual Speaker Setup

Your AVR is flexible and may be configured to work with most speakers and to compensate for the acoustic characteristics of your room.

The EzSet/EQ process automatically detects the capabilities of each connected speaker and optimizes the AVR's performance with your speakers. If you are unable to run EzSet/EQ calibration, or if you wish to set up your AVR for your speakers manually, use the Manual Speaker Setup on-screen menus.

Before beginning, place your loudspeakers as explained in the *Place Your Speakers* section, on page 13, and connect them to the AVR. Consult the owner's guide for the speakers or the manufacturer's Web site for their frequency-range specification. Although you may set the AVR's individual channel levels "by ear," an SPL (sound-pressure level) meter purchased at a local electronics store will provide greater accuracy.

Record your configuration settings in Tables A3 through A12 in the Appendix for easy re-entry after a system reset or after the AVR's Master Power switch has been turned off or the unit has been unplugged for more than four weeks.

NOTE: When using the AVR's Manual Speaker Setup menus, select a video output resolution of 720p or higher to view graphics that simplify configuration.

Step One – Determine Your Speakers' Crossover Frequencies

Without using the EzSet/EQ process, the AVR can't detect how many speakers you've connected to it; nor can it determine their capabilities. Consult the technical specifications for all of your speakers and locate the frequency response, usually given as a range, e.g., 100Hz – 20kHz (±3dB). Write down the lowest frequency that each of your speakers is capable of playing (100Hz in the above example) as the crossover in Table A3 in the Appendix. NOTE: This is not the same as the crossover frequency listed in the speaker's specifications.

For the subwoofer, write down the transducer size. The AVR's bass management determines which speakers will be used to play back the low-frequency (bass) portion of the source program. Sending the lowest notes to small satellite speakers will result in bad sound and may even damage the speakers. The highest notes may not be heard at all through the subwoofer.

With proper bass management, the AVR divides the source signal at a crossover point. All information above that crossover point is played through your system's speakers, and all information below the crossover point is played through the subwoofer. This way, each loudspeaker in your system will perform at its best, delivering a more powerful and enjoyable sound experience.

Step Two – Measure the Speaker Distances

Ideally, all of your speakers would be placed in a circle, with the listening position at the center. However, you may have had to place some speakers a little farther away from the listening position than others. Sounds that are supposed to arrive simultaneously from different speakers may blur, due to different arrival times.

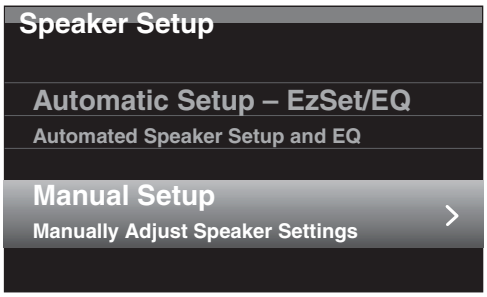
Your AVR provides a Distance adjustment that compensates for these real-world speaker placement differences.

Measure the distance from each speaker to the listening position, and write it down in Table A4 in the Appendix. Even if all of your speakers are the same distance from the listening position, enter your speaker distances as described in *Set the Speaker Distances*, on page 38.

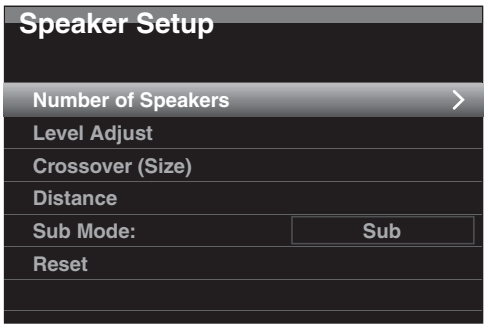
Step Three – Manual Speaker Setup Menu

Now you are ready to program the receiver. Sit in your usual listening position, and make the room as quiet as possible.

With the receiver and video display turned on, press the AVR button to display the menu system. Select the Speaker Setup menu, and then select Manual Setup.



If you have already run the EzSet/EQ process as explained in *Configure the AVR for Your Speakers*, on page 25, the AVR saved the results. To fine-tune the EzSet/EQ results, or to configure the AVR from scratch, select Manual Setup. A screen similar to the one shown below will appear.



NOTE: All of the speaker setup submenus include the Back option. To save the current settings, select the Back option.

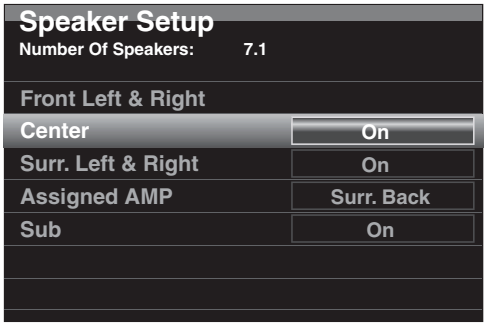
To reconfigure the speakers from scratch, select the Reset option.

For best results, adjust the submenus in this order: Number of Speakers, Crossover (Size), Sub Mode, Distance and Level Adjust.

Number of Speakers

This selection lets you program the correct setting for each speaker group. The settings in this menu affect the remainder of the speaker setup process and the availability of various surround modes at any time.

Select ON when the speakers are present in the system; select OFF for positions where no speakers are installed. The Front Left & Right setting is always ON and may not be disabled.



Any changes will be reflected in the total Number Of Speakers displayed at the top of the screen.

The Assigned AMP setting includes four options:

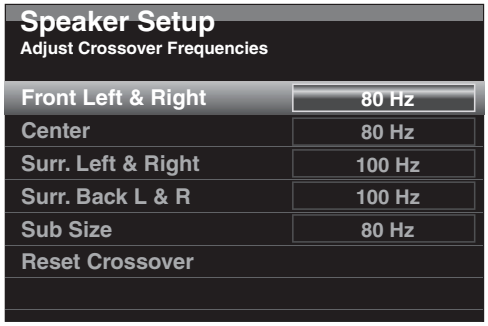
- **Surround Back:** Select the Surr. Back option if your main system is a 7.1-channel system and you are using surround back left and surround back right speakers.
- **Zone 2:** Select the Zone 2 option if your main system is a 5.1-channel system and you want to use the Assigned Amp speaker outputs to power speakers in Zone 2. See *Install a Multizone System*, on page 21, for more information.
- **Front Height:** Select the Front Height option if your main system is a 7.1-channel system and you are using Front Height speakers with Dolby Pro Logic IIz.
- **Off:** Select Off if you have not connected speakers to the Assigned Amp speaker outputs.

NOTE: When you set Assigned AMP to "Zone 2," the speakers connected to the Assigned Amp outputs will not be configured during the EzSet/EQ process. Configure the speakers manually, as explained below.

When you have finished, select the Back option or use the Back/Exit button.

Crossover (Size)

After you return to the Speaker Setup menu, navigate to the Crossover (Size) line and press the OK button to display the Adjust Crossover Frequencies menu.



The AVR will display only those speaker groups you set to On in the Number of Speakers menu.

Refer to Table A3 to see the crossover frequencies that you wrote down for your speakers.

For each speaker group, select one of these eight crossover frequencies: Large, 40Hz, 60Hz, 80Hz, 100Hz, 120Hz, 150Hz or 200Hz. If the speaker's crossover frequency is below 40Hz, select the first option, "Large." This setting doesn't refer to the speaker's physical size but to its frequency response, which is also called "full range."

We recommend that you set the Subwoofer Crossover Frequency to the same frequency you used for the Front Left & Right speaker setting. If you set the Front Left & Right speakers to "Large", we recommend that you experiment with different Subwoofer Crossover Frequency settings to find the one that produces the best blend between the subwoofer and Front Left & Right speakers with your system in your room.

Write down the settings in Table A6 in the Appendix.

When you have finished entering the settings, select Back or press the Back/Exit button.

Sub Mode

Move the cursor to the Sub Mode line. This setting depends upon the Crossover setting you selected for the front left and right speakers.

- If you set the front speakers to a numeric crossover frequency, the subwoofer setting will always be SUB. All low-frequency information will always be sent to the subwoofer. If you don't have a subwoofer, either upgrade to full-range front left and right speakers or add a subwoofer at the earliest opportunity.
- If you set the front speakers to LARGE, select one of the three following settings for the subwoofer:

  L/R+LFE: This setting sends all low-frequency information to the subwoofer, including a) information that would normally be played through the front left and right speakers and b) the special low-frequency effects (LFE) channel information.

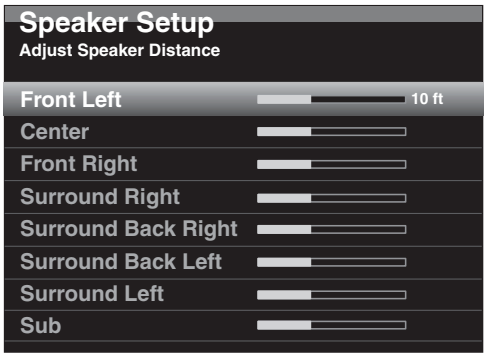
  OFF: Select this setting when no subwoofer is in use. All low-frequency information will be sent to the front left and right speakers.

  LFE: This setting plays low-frequency information contained in the left and right program channels through the front left and right speakers, and directs only the LFE-channel information to the subwoofer.

Set the Speaker Distances

As described above in Step Two, when you measured the distances from each of your speakers to the listening position, your AVR provides an adjustment that compensates for the different distances so that the sound from each speaker will reach the listening position at the proper time. This process will improve the clarity and detail of the sound.

On the Speaker Setup menu, move the cursor to the Distance line and press the OK button to display the Adjust Speaker Distance menu.



Enter the distance from each speaker to the listening position that you measured in Step Two and recorded in Table A4 in the Appendix (see page 46). Select a speaker, then use the Left/Right buttons to change the measurement. You can enter distances between 0 and 30 feet (9.1m). The default distance for all speakers is 10 feet (3m).

The default unit of measurement is feet. To change the unit to meters, return to the main AVR menu. Select the System Settings menu, then scroll down to the General Setup section and select the Unit of Measure line. Press the OK button to change the setting.

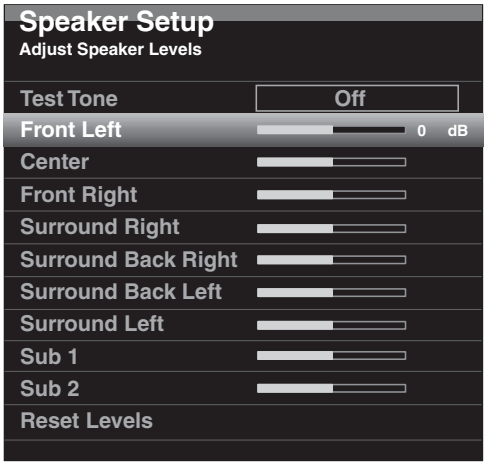
NOTE: If you set the Assigned AMP channels to Zone 2, you will not be able to adjust their delay settings.

Step Four – Setting Channel Output Levels Manually

For a conventional stereo receiver, a simple balance control adjusts the stereo imaging by varying the relative loudness of the left and right channels. In a home theater system with up to seven main channels plus up to two subwoofers, achieving proper imaging becomes both more critical and more complex. The goal is to ensure that each channel is heard at the listening position with equal loudness (when signals of equal loudness are played through them).

Your AVR's EzSet/EQ calibration can handle this critical task for you simply and automatically. However, the AVR's Adjust Speaker Levels menu allows you to calibrate the levels manually, either using the system's built-in test tone or while playing source material.

Press the AVR button to display the menu system, and then navigate to the Speaker Setup line. Press the OK button to display the Speaker Setup menu. Select Manual Setup, press the OK button, and then navigate to the Level Adjust line. Press the OK button to display the Adjust Speaker Levels menu.



All of the system's speakers will appear with their current level settings. You can adjust each speaker's level between –10dB and +10dB in 1dB increments.

While making adjustments, you can measure the channel levels in one of these ways:

- Preferably, use a handheld SPL meter set to the C-weighting, slow scale. Adjust each speaker so that the meter reads 75dB when the AVR's built-in test noise is playing.
- By ear. Adjust the levels so that the test tone sounds equally loud to you when it plays through each speaker.

To set your levels using the AVR's internal test tone, select the menu's Test Tone line and use the OK button to select between Auto and Manual:

Auto: The test tone will automatically circulate to all speakers, as indicated by the highlight bar. Use the Left/Right buttons to adjust the level for any speaker when the test tone is paused there. Use the Up/Down buttons to move the cursor to another line, and the test tone will follow the cursor. To stop the test tone, use the Up/Down buttons to move the cursor out of the screen's speaker listings area.

Manual: The test tone will stay on the current speaker until you use the Up/Down buttons to move it to another speaker. Use the Left/Right buttons to adjust the level for the speaker through which the test tone is playing.

If you are using an external source to set your output levels, set Test Tone to Off, use the Up/Down buttons to navigate to each speaker, and use the Left/Right buttons to adjust the speaker's level while the source plays. **NOTE:** If you are using a handheld SPL meter with external source material, such as a test disc or an audio selection, play it and adjust the AVR's master volume control until the meter measures 75dB. Then adjust the individual speaker levels.

Reset Levels: To reset all levels to their factory defaults of 0dB, scroll down to this line at the bottom of the menu and press the OK button.

When you have finished adjusting the speaker levels, record the settings in Table A3 in the Appendix. Then select the Back option or press the Back/Exit Button.

Notes on Setting Speaker Volumes in Home Theater Systems:

While setting your system's individual speaker volume levels is ultimately up to your personal taste, here are some ideas you may find helpful:

- For films and video-music programs, your overall goal should be to create an enveloping, realistic sound field that draws you into the film or music program without drawing your attention away from the action on the screen.
- For multichannel music recordings, some music producers will create a sound field that places the musicians all around you; others will create a sound field that places the musicians in front of you, with more subtle ambience in the surround speakers (as you would experience in a concert hall).
- In most 5.1-channel and 7.1-channel film soundtracks, the surround speakers are not intended to be as loud or as active as the front speakers. Adjusting the surround speakers so they are always as loud as the front speakers could make dialogue difficult to understand and will make some sound effects sound unrealistically loud.

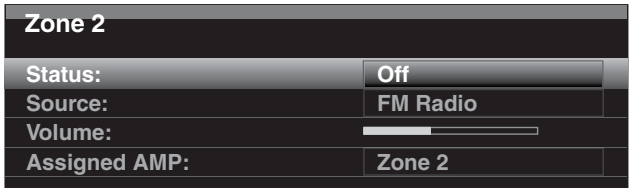
Notes on Setting Subwoofer Volume:

- Sometimes the ideal subwoofer volume setting for music is too loud for films, while the ideal setting for films is too quiet for music. When setting the subwoofer volume, listen to both music and films with strong bass content and find a "middle ground" volume level that works for both.
- If your subwoofer always seems too loud or too quiet, you may want to place it in a different location. Placing the subwoofer in a corner will always tend to increase its bass output, while placing it away from any walls or corners will always tend to lessen its bass output.

Listening in Zone 2

With the multizone system in use, you may enjoy an exciting 5.1-channel home theater presentation in the main listening area, while others listen to the same program or an entirely different source in another room. See *Install a Multizone System*, on page 21, for installation information.

You control the AVR's multizone system from the on-screen Zone 2 menu. Press the AVR button, and use the Up/Down buttons to navigate to the Zone 2 line. Press the OK button to display the Zone 2 menu.



Status: This line lets you turn Zone 2 on or off.

Source: This line lets you select the source input for Zone 2. You may select a different source from the one currently operating in the main listening area. However, if the same source has been selected for both the main listening area and Zone 2, listeners in both areas will hear the same content.

Only analog audio sources are available to the multizone system. To hear digital devices such as a CD player in Zone 2, follow these steps:

1. In addition to making a digital audio connection, connect the source device's analog audio outputs to the AVR. Make a note in Table A5 on page 47 to record which set of analog inputs you used.
2. In the Info menu, scroll down to the Zone 2 Audio setting and select the analog audio input. (Leave the Audio Input From Source set to the digital input.)

Notes about listening in Zone 2:

- Although you can listen to iPod as a source in Zone 2, you cannot begin iPod playback from within Zone 2. You must initially select iPod as a source in Zone 1 and begin playback of a track or playlist from there. Then you can select iPod as the Zone 2 source and control playback from within Zone 2 even if you switch Zone 1 to a different source.
- Only one (1) internal source (iPod, USB, FM/AM radio, vTuner, Network) can be active at a time across both zones. For example, if you are listening to iPod as the source in Zone 1 and switch the source in Zone 2 to FM radio, it will switch the source in Zone 1 to FM (and vice versa). To listen to different sources in Zone 1 and Zone 2 at the same time, at least one source must be one of the AVR's configurable external sources (Cable/Sat, Disc, DVR, TV, Game, Media Server, Aux, Buttons A/B/C/D) that is connected to one of the AVR's analog audio inputs.

Volume: Highlight this line, and use the Left/Right buttons to control the volume in Zone 2.

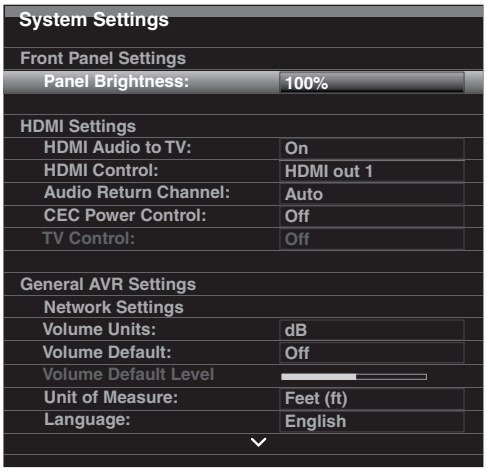
Assigned AMP: This line lets you assign the Assigned AMP channels to "Zone 2" for multizone operation (see *Number of Speakers*, on page 37). When this line is set to Zone 2, you may configure the main listening room for only up to 5.1 channels.

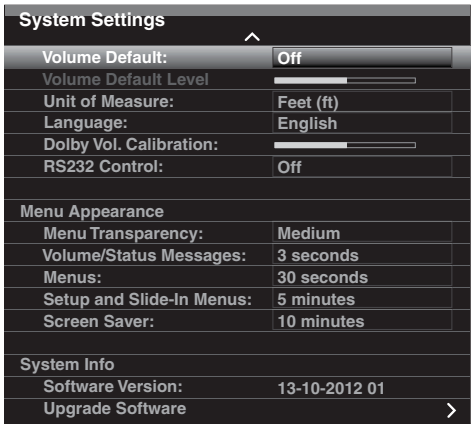
To operate the multizone system using the main remote, slide the Zone Select Switch at the bottom of the remote to the "2" position.

AVR 3700/AVR 370 only: To select a zone using the Zone 2 remote, press the Zone Selector, and the Zone Indicator light will turn green when the remote is set to operate Zone 1 or red to operate Zone 2.

System Settings

The AVR's System Settings menu lets you customize in what way many of the AVR's features operate. Press the AVR button and navigate to the System line. Press the OK button to display the System Settings menu.





Front-Panel Dimmer: This control sets the brightness of the AVR's front-panel message display. Select from 100%, 50%, 25% or Off. The light inside the Volume Control will go out when the display is partly or fully dimmed, but the Power Indicator will always remain lit to remind you that the AVR is powered on.

HDMI Settings

HDMI Audio to TV: This setting determines whether HDMI audio signals are passed through the HDMI Monitor Out connector to the video display. In normal operation, leave this setting at Off, as audio will be played through the AVR. To use the TV by itself, without the home theater system, turn this setting to On. In this case you will need to mute the TV's speakers (or switch the setting to Off) when using the AVR for audio.

HDMI Control: This setting allows the communication of control information among the HDMI devices in your system. Turn this setting to On to allow control communication between the HDMI devices; turn the setting to Off to forbid control communication. (For AVR 3700/AVR 370 select HDMI Out 1, HDMI Out 2 or Off.)

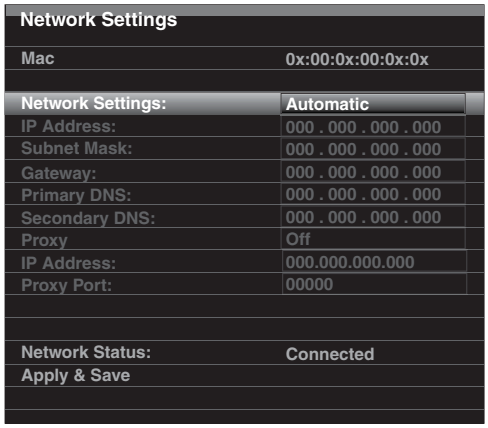
Audio Return Channel: Selecting "Auto" will send audio from the TV to the AVR via the HDMI Audio Return Channel (ARC) connection (which is in the HDMI cable connecting the AVR to the TV). The TV source's "Audio Input from Source" will be automatically reassigned to the HDMI ARC connector. This way, whenever you're watching a source that is connected directly to your TV (such as an Internet connection), you can listen to the sound through the AVR.

CEC Power Control: This setting links the power on/off functions of the AVR to those of a TV connected to its HDMI Monitor Out connector. When Power Control is set to On, turning the TV's power off will automatically put the AVR into the Standby mode; turning the TV's power on will automatically turn the AVR on. **NOTE:** The connected TV must support the HDMI System Standby CEC (Consumer Electronics Control).

TV Control: This setting extends some audio-control functions between the AVR and a TV connected to its HDMI Monitor Out connector. When TV Control is set to On, if the TV is set to use external speakers, the TV's internal speakers will mute, and you can use the TV's remote to control the AVR's volume up/down and mute functions. If the TV is set to use its internal speakers, the AVR's output will automatically mute. **NOTE:** The connected TV must support the HDMI Remote Control/System Audio Control CEC (Consumer Electronics Control).

General AVR Settings

Network Settings: Select this to set up your AVR for connection to your wired home network. Note: The AVR 3700 and AVR 370 will first present a Wired/Wireless/Network Upgrade screen. For information about the Wired Network connection screen, see *Set Up the Network,* on page 27.



- Mac: This line is informational only and identifies the AVR to other devices on your home network and the Internet for www.radioharmankardon.com.
- Network Settings: Since most networks use automatic IP address settings, in most cases you can set Network Settings to Automatic. If you are required to use a static IP address and network settings, you must obtain these settings from your ISP or network administrator. Use the OK button to set this line to "Manual." The following settings will become active: IP Address, Subnet Mask, Gateway, Primary DNS, Secondary DNS. If your network is a proxy network, enter those settings for Proxy, the second IP Address and Proxy Port.

Use the Number buttons to make the entries for all of these settings. When you have finished, select Apply & Save, and press the OK button. The AVR will enter the Standby mode. When you turn the AVR back on, it will attempt to connect to the network using the settings you entered. If the AVR cannot connect to the network using the manual settings, contact your ISP or network administrator for assistance.

- Network Status: This line indicates the AVR's current network-connection status (Connected/Not Connected).
- Apply & Save: Any time you make a change in any of the Network settings, the Apply & Save line will become available. Select this line and press the OK button. The AVR will go into the Standby mode. After you turn the AVR back on, the new network settings will be in effect. **IMPORTANT: You must select Apply & Save for your network settings to take effect.**

NOTE: If you have trouble connecting to the network at any time, cycle the AVR into the Standby mode, and then turn it back on.

Volume Units: This setting lets you select whether the AVR displays the volume level in the conventional decibel scale or on a numeric scale from 0 to 100. When the decibel scale is used, 0dB is the maximum recommended volume, with lower volumes displayed as negative values. (-90dB – +10dB). The decibel scale is the default setting.

Volume Default and Volume Default Level: These two settings are used together to program the volume level when you turn on the AVR. Set Volume Default to On, and then set the Volume Default Level to the desired turn-on volume. When Volume Default is set to Off, the AVR will turn on at the last-used volume setting from the previous listening session.

Unit of Measure: Adjusts the speaker-distance settings for Manual Speaker Setup. Select between meters and feet.

Language: Select the preferred language for the AVR's on-screen menus and displays: English, French, Spanish, German, Italian or Russian.

Dolby Volume Calibration: This setting determines the Dolby Volume calibration, as described in *Dolby Volume Calibration*, on page 28. Refer to that section for details about setting the calibration.

RS232 Control: If you have connected the AVR to an external control system via its RS-232 port, set this line to On to enable the AVR to be controlled by the external control system. Refer to the control system's documentation for details.

Menu Appearance

Menu Transparency: This selection lets you determine whether video programs will be visible when the menu system is in use. Select Normal for a fully transparent background, Medium for partial transparency or Opaque to completely block video programs while menus are on screen.

Volume/Status Messages: When the AVR is turned on, the volume is adjusted, the source is changed or a change in the input signal is detected, a status message will be displayed on the TV screen. Select how long the message remains visible, from 2 to 10 seconds, with a default of 3 seconds. Select "Off" if you do not wish to see the status messages on the TV screen (they will still appear on the AVR's front-panel message display).

Menus: This setting governs how long the Surround Modes, Video Modes and Audio Effects menus remain visible after the last adjustment: 5 seconds, 10 seconds, 30 seconds, 1 minute or 5 minutes. Select "No Time-Out" to view the menus indefinitely, but this setting is not recommended, due to the danger of "burn-in" on some video displays.

Setup and Slide-In Menus: This setting determines how long the setup menus (Main Menu, Speaker Setup Menu, Zone 2 Menu, all slide-in menus) remain visible after the last adjustment. Select a time-out period of 5, 10 or 15 (the default) minutes, or no time-out, which leaves the menus on screen until manually cleared. A time-out period avoids the possibility of burn-in damage to plasma or CRT displays.

Screen Saver: Program a time-out period for no activity (with no menus displayed) before the AVR's built-in screen saver begins. Select a period of 5 minutes, 10 minutes, 20 minutes, 30 minutes or 1 hour, or turn off the screen saver. A time-out period avoids the possibility of burn-in damage to plasma or CRT displays.

System Info

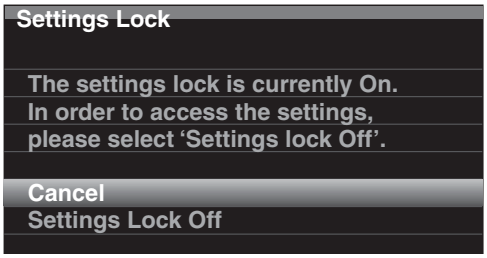
Software Version: This line is informational only. From time to time, Harman Kardon engineers may release software upgrades that improve your AVR's performance or add features. If you are experiencing difficulties with the AVR, a customer-service representative may ask for the software version of your AVR to determine whether a later upgrade is available.

Upgrade Software: If a software upgrade is released for your AVR, installation instructions will be available in the Product Support section of the Web site or from Harman Kardon customer service. At that time, you may access this submenu to install the upgrade software.

IMPORTANT: During a system upgrade, do not power off the AVR or use any of its controls. Doing so could permanently damage the AVR.

Settings Lock

Settings Lock prevents the Setup Source, Speaker Setup and System settings menus from being inadvertently changed. With Settings Lock set to On, the screen shown below will appear whenever someone attempts to access a setting in one of those menus.



Select "Settings Lock Off" to access the settings or "Cancel" if the setting was accessed inadvertently. NOTE: If you select "Settings Lock Off," you will need to turn the Settings Lock back on via the Settings Lock menu.

Operating Your AVR

Now that you have installed your components and completed a basic configuration, you are ready to begin enjoying your home theater system.

HARMAN AVR App

For easy control of your AVR with your hand-held device, download the free Harman Kardon AVR app from iTunes App Store for compatible Apple products, or from Google Play for compatible Android powered smartphones and tablets.

The Harman Kardon AVR App controls virtually all the functions of AVR 3700, AVR 370, AVR 2700 and AVR 270 receivers that are connected to the same network as the device that has the app installed. With this easy-to-use app you can turn the AVR on or off, select a source, control the volume and virtually any other function. You can also access and navigate all of the AVR's on-screen setup menus.

Controlling the Volume

Adjust the volume either by turning the front-panel Volume knob (clockwise to increase volume or counterclockwise to decrease volume) or by pressing the Volume Up/Down buttons on the remote. The volume is displayed as a negative number of decibels (dB) below the 0dB reference point (-90dB – +10dB).

0dB is the maximum recommended volume for your AVR. Although it's possible to turn the volume to a higher level, doing so may damage your hearing and your speakers. For certain more dynamic audio materials, even 0dB may be too high, allowing for damage to equipment. Use caution with regard to volume levels.

To change the volume level display from the default decibel scale to a 0-to-90 scale, adjust the Volume Units setting in the System Settings menu, as described in *System Settings*, on page 39.

Muting the Sound

To mute all speakers and the headphones, press the Mute button on the remote. Any recording in progress will not be affected. The MUTE message will appear in the display as a reminder. To restore the sound, press the Mute button again, or adjust the volume.

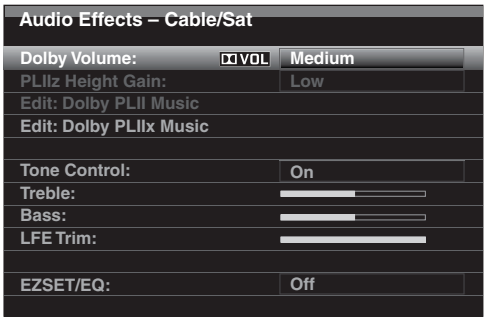
Dolby Volume

Your AVR implements Dolby Volume processing, which can improve the audio performance of the system by revealing subtle details in the sound, even at normal home-listening volumes.

One concern of the typical home theater listener is that volumes can vary widely for different programs played by a source (e.g., television commercial advertisements are often much louder than the main program). Another is that details heard in the recording studio at typically high reference volumes are lost at the lower volumes used by many listeners at home.

The AVR uses two Dolby Volume techniques to address these issues. The Leveler module maintains a consistent listening volume within a source (e.g., commercial television or different tracks on a USB drive or mix CD). The Modeler module endeavors to re-create the reference presentation that was heard in the recording studio without losing portions of the program at the typically lower volume levels often used in the home. When the Modeler module is active, you may notice details of the performance that were hidden when the program was played on other equipment.

To adjust the Dolby Volume setting, press the Audio Effects button. The Audio Effects submenu will appear.



After you highlight the Dolby Volume setting, each press of the OK button will switch to one of the options in the table below. The settings do not refer to the volume level, which is adjusted normally using the AVR's Volume Control, but rather to the amount of Dolby Volume processing desired.

Setting	Effect
Off	No Dolby Volume processing
Low	Only Dolby Volume Modeler module is active
Medium	Both Modeler and Leveler modules are active; Leveler module has a value of 3
Max	Both Modeler and Leveler modules are active; Leveler module has a value of 9

NOTE: Dolby Volume processing is compatible with sources recorded at a sampling rate of 48kHz. High-resolution sources, such as DTS 96/24 programs, will be decoded at 48kHz. DTS 96/24 programs will be played in DTS 5.1 mode. To hear DTS 96/24 materials in high resolution, turn off Dolby Volume processing.

Dolby Volume Calibration

Dolby Volume calibration allows you to adjust the operation of the Dolby Volume circuitry to match your particular speakers and listening environment. The Dolby Volume circuitry in your AVR is factory-calibrated with average speaker sensitivity in mind; however, different speakers may have different sensitivities, which will affect the overall performance of the Dolby Volume circuitry. Use Dolby Volume calibration to adjust the calibration of the circuitry according to the specific speakers you have.

The average home audio speaker sensitivity is 88dB SPL (1 watt/1 meter). Check the sensitivity specification for your loudspeakers, found in the owner's manual or on the manufacturer's Web site. If your speakers have a sensitivity rating greater than 88dB SPL, increase Dolby Volume calibration by the difference between your speakers' sensitivity and 88dB. If they have a sensitivity rating of less than 88dB SPL, decrease Dolby Volume calibration by the difference between your speakers' sensitivity and 88dB.

To adjust the Dolby Volume calibration, press the AVR button and select the "System" menu. Scroll to the Dolby Volume calibration line, which defaults to 0dB. Use the Left/Right buttons to adjust the setting within the range of –10dB to +10dB.

Listening Through Headphones

Plug the 1/4-inch stereo plug on a pair of headphones into the front-panel Phones jack for private listening. The default Headphone Bypass mode delivers a conventional two-channel signal to the headphones. Press the Surround Modes button on the front panel or the remote to switch to HARMAN headphone virtual surround processing, which emulates a 5.1-channel speaker system. No other surround modes are available for the headphones.

Selecting a Source

There are three different ways to select a source:

- Press the front-panel Source List button. Use the Up/Down buttons to scroll through the sources, and press the OK button to select the source being displayed.
- Using the on-screen menus, press the AVR button, highlight "Source Select" and press the OK button. Scroll to the desired source in the slide-in menu and press the OK button.
- You can directly select any source by pressing its Source Selector button on the remote.

The AVR selects the audio and video inputs assigned to the source, and any other settings you made during setup.

The source name, the audio and video inputs assigned to the source, and the surround mode will appear on the front panel. The source name and active surround mode will also briefly appear on the TV screen.

Video Troubleshooting Tips

If there is no picture:

- Check the source selection and video input assignment.
- Check all connections for a loose or incorrect connection.
- Check the video input selection on the TV/display device.
- Press the front-panel Resolution button and use the Up/Down buttons until the correct video output resolution is selected and a picture appears. The CANCEL message will also appear. Press the Down button to view the ACCEPT option, then press the OK button.

Additional Tips for Troubleshooting HDMI Connections

- Turn off all devices (including the TV, the AVR and any source components).
- Unplug the HDMI cables, starting with the cable between the AVR and the TV, and continuing with the cables between the AVR and each source device.
- Carefully reconnect the cables from the source devices to the AVR. Connect the cable from the AVR to the TV last.
- Turn on the devices in this order: TV, AVR, source devices.

NOTE: Depending upon the particular components involved, the complexity of the required communication between HDMI components may cause delays of up to a minute in the completion of some actions, such as input switching or switching between SD and HD channels.

Listening to FM and AM Radio

Select the Radio source. A screen similar to the one in the illustration below will appear.

Use the Up/Down buttons or the Remote's Channel buttons to tune a station as displayed on the front panel and on-screen display.

The AVR defaults to automatic tuning, meaning each press of the Up/Down buttons scans up or down the frequency band until a station with acceptable signal strength is found. To switch to manual tuning, in which each press of the Up/Down buttons steps through a single tuning frequency increment, press the remote's Menu button. A slide-in menu will appear. Select "Mode," and press the OK button to toggle between automatic and manual tuning modes.

Once you have tuned an FM station, toggling the Mode setting also switches the radio between stereo and monaural reception. (Mono reception may improve reception of weaker stations.)

Preset Stations

You can store a total of 30 stations (AM and FM combined) as presets. When you want to save the currently tuned station as a preset, press the OK button, and two dashes will flash. Use the Number buttons to enter the desired preset number.

To tune to a preset station:

- Press the Left/Right buttons.
- Press the skip forward/skip backward Transport Control buttons.
- Press the Menu button and scroll to the desired preset, then press the OK button.
- Enter the preset number using the Number buttons. For presets 10 through 30, press 0 before the preset number. For example, to enter preset 21, press 0-2-1.

Listening to Media on a USB Device

Your AVR is compatible with MP3 and WMA media.

MP3 compatibility: Mono or stereo, contstant bit rates (CBR) from 8kbps to 320kbps, variable bit rates (VBR) from lowest to highest quality, with sample rates from 8kHz – 48kHz.

WMA compatibility: Ver. 9.2, stereo CBR with 32kHz – 48kHz sampling rate and 40kbps – 192kbps bit rate, mono CBR with 8kHz – 16kHz sampling rate and 5kbps – 16kbps bit rate, VBR Pass Encoding and Quality Encoding 10 – 98, 44kHz and 48kHz sampling rate.

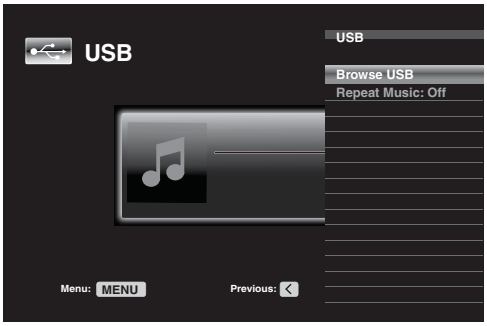
No other types of media can be played.

Playing files on a USB device

1. Insert the USB drive into the AVR's front-panel USB port.

IMPORTANT: Do not connect a personal computer or peripheral to the USB port. USB hubs and multi-card readers are not supported.

2. Select the USB Source Selector button on the remote. "USB" will appear on the front-panel display, and the USB screen and the slide-in menu will appear.



3. Select "Browse USB." The AVR will list the folders located on the drive.
4. Select a folder and press the OK button. The AVR will list all compatible audio files.
5. Select a file to begin playback. The USB play screen will appear. Any ID3 information and album art will be displayed, along with the track's elapsed/current time and icons indicating the current playback status.

NOTES:

- To skip to the next track, press the Right button; to return to the previous track, press the Left button once.
- You can use the Transport Control buttons to control playback (skipping to the previous or next track, searching at high speed forward or backward within a track, playing a file, pausing playback or stopping playback).
- To repeat a file or folder, press the Menu Button and select the Repeat option. Each press of the OK Button will change the setting from Off (no repeat) to Repeat One (file) to Repeat All (files at the current directory level of the drive). Repeat All will always be activated when Random Music playback is turned on.
- To play the audio tracks in random order, press the Menu button and select the Random Music setting. Each press of the OK button turns the setting on or off. The AVR will automatically repeat the tracks until playback is stopped manually.
- To collapse a folder or return to the previous menu level, press the Back/Exit button or the Left button.

Listening to an iPod/iPhone/iPad Device

When an iPod, iPhone or iPad device is connected to the AVR's front-panel USB port, you may play audio files through your high-quality audio system, operate the iPod, iPad or iPhone using the AVR remote or the AVR's front-panel controls, view navigation messages on the AVR's front panel or a connected video display and charge the iPod, iPad or iPhone. For the latest compatibility information, please see our Web site: www.harmankardon.com.

Press the USB source selector button on the remote until the front-panel display's "iPod" as the source. The iPod screen will appear and the slide-in menu will automatically appear.

The table below summarizes the controls available during normal playback via the USB port.

iPod or iPhone Function	Remote Control Key
Play	Play
Pause	Pause
Menu	Menu
Back/Exit	Back/Exit or Left Arrow
Select	OK or Right Arrow
Scroll Reverse	Up Arrow
Scroll Forward	Down Arrow
Forward Search	Forward Search
Reverse Search	Reverse Search
Next Track	Skip Forward or Right Arrow
Previous Track	Skip Backward or Left Arrow
Page Up/Down	Page Up/Down

While scrolling, hold the button to scroll faster. Use the Page Up/Down control on the remote to scroll a page at a time.

While a selection is playing, the album, artist, song title, track elapsed time, total track time and play mode icon will appear on the front-panel Message display.

If a video monitor is connected to the AVR and the system is not in iPod manual mode, an iPod screen will appear and display the play mode icon, song title, artist and album. A graphic bar indicates the current play position within the track. If random or repeat play has been programmed, an icon will appear in the upper right corner.

The screen may disappear from view, depending on the Setup and Slide-In Menus setting in the System Settings menu (described in *System Settings*, on page 39). You can restore the Now Playing screen to view by pressing either of the Left or Right buttons.

CAUTION: We strongly recommend that you use the screen saver built into your video display to avoid possible damage from "burn-in" that may occur with plasma and many CRT displays when a still image, such as a menu screen, remains on the display for an extended period of time.

Press the Menu button to view the slide-out menu:

Music: Select this to navigate the audio materials stored on the iPod, iPad or iPhone. Use the Page up/down buttons on the remote to scroll through the content a page at a time. NOTE: You can only play audio content via the USB port.

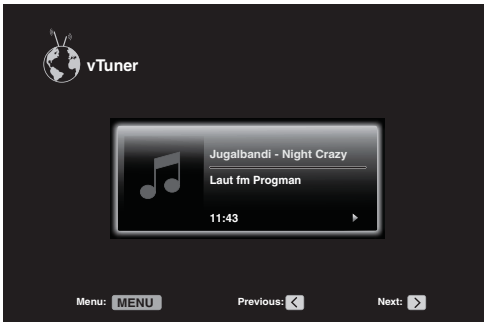
Repeat Music: Select this setting to repeat a track or all tracks in the current album or playlist. Each press of the OK button switches the setting: repeat Off, repeat One or repeat All.

Shuffle Music: Select this setting to play all the available songs in random order. Each press of the OK button switches the setting: shuffle by Song, shuffle by Album, or Off to end shuffle playback.

NOTE: The iTunes application allows you to exempt some tracks from Shuffle mode. The AVR cannot override this setting.

Listening to vTuner (Internet Radio)

Your AVR's Network connection brings you a world of MP3- and WMA-format streams via the Internet. After you have successfully connected to your home network as described in *Connect to Your Home Network*, on page 20, and set up the network as described in *Set Up the Network*, on page 27, press the Network Source Selector button on the remote. Each press toggles between the Network and vTuner screens.



With the vTuner screen (above) displayed, the AVR will automatically connect to the Internet via the www.radioharmankardon.com portal. To select a stream, press the Menu button, and use the Up/Down buttons to search by category: Presets, My Favourites, Added Stations, Location, Genre, Podcasts by Location, Podcasts by Genre, New Stations, Most Popular Stations, Recently Played and Search. **NOTE:** The categories displayed may vary by region.

To create a Favourites list, log onto www.radioharmankardon.com from your computer. Enter your AVR's Mac address as its ID # (the Mac address is on the Network Settings screen in the System Settings menu) and create an account. Favourites that you select on the Web site will be available on the AVR.

Navigation is similar to other slide-in menus. Scroll to the desired item and press the OK button to select it. To return to the previous menu level (or to clear the top-level menu from view), press the Back/Exit button or the Left button.

If you know the URL (Web address) of a specific audio stream, select the Direct Station option from the menu. A live stream is required. The AVR is not able to connect to streams that require site registration or other interaction prior to playing the stream. If the AVR cannot connect to the stream, a "Station Not Live" message will appear briefly, and the Internet Radio screen will remain essentially blank. Not all URLs will be accessible.

Listening to Media via Your Home Network

Your AVR is DLNA-compatible and can access MP3 and WMA audio media that is stored on other DLNA-compatible devices that are connected to the same network as your AVR.

DLNA is a file sharing protocol that creates a bridge between the AVR and other devices on the same network that contain audio media. DLNA is supported by PCs that have Windows Media Player, Windows Media Center or Intel Media Server file sharing. Apple computers can also share files via DLNA using HARMAN Music Manager software, which can be downloaded without charge from www.harmankardon.com. (Third-party software that enables DLNA file-sharing also is available.)

MP3 compatibility: Mono or stereo, contstant bit rates (CBR) from 8kbps to 320kbps, variable bit rates (VBR) from lowest to highest quality, with sample rates from 8kHz – 48kHz.

WMA compatibility: Ver. 9.2, stereo CBR with 32kHz – 48kHz sampling rate and 40kbps – 192kbps bit rate, mono CBR with 8kHz – 16kHz sampling rate and 5kbps – 16kbps bit rate, VBR Pass Encoding and Quality Encoding 10 – 98, 44kHz and 48kHz sampling rate.

Before you can access files located on other devices via the network, each device must first give permission to share files with the AVR:

To share media on PCs:

1. Open Windows Media Player.
2. Open the Library menu and select Media Sharing. The Media Sharing window will appear.
3. Check the "Share My Media" box. An icon for the AVR will appear in the window.
4. Select the AVR icon, select "Allow," then select "OK."

The computer's WMA and MP3 media should now be available to the AVR.

To share media on other types of computers, operating systems or media software: Check the instructions for the computer, operating system or media player.

To listen to shared media, press the Network Source Selector button. (If vTuner appears as the source, press the button a second time to switch from the Internet Radio source to the Network source.) The Network screen will appear.

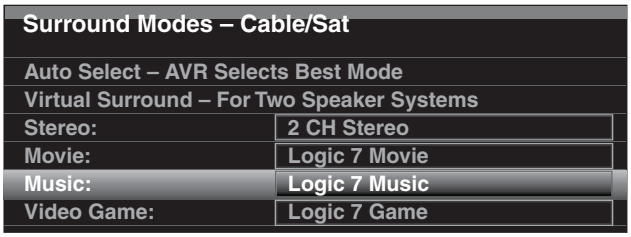
Press the Menu button, and the slide-in menu should list by name all devices that allow sharing. Use the slide-in menu to browse the content stored in the device's media player library. Scroll to the desired item and press the OK button to select it. To return to the previous menu level (or to clear the menu from view from the top level), press the Back/Exit button or the Left button.

NOTE: Although video content may appear in the menu, the AVR does not support video playback from the network connection.

Selecting a Surround Mode

Selecting a surround mode can be as simple or sophisticated as your individual system and tastes. Feel free to experiment, and you may find a few favorites for certain sources or program types. You can find more detailed information on surround modes in *Audio Processing and Surround Sound*, on page 33.

To select a surround mode, press the Surround Modes button (front panel or remote). The Surround Modes menu will appear.



Press the Up/Down buttons repeatedly until the desired surround-mode category appears: Auto Select, Virtual Surround, Stereo, Movie, Music or Video Game. Press the OK button to change the surround-mode category.

Auto Select: For digital programs, such as a movie recorded with a Dolby Digital or DTS soundtrack, the AVR will automatically use the soundtrack's native surround format. For two-channel analog and PCM programs, the AVR uses the Logic 7 Movie, Logic 7 Music or Logic 7 Game mode, depending on the source.

Virtual Surround: When only two main speakers are present in the system, you can use HARMAN Virtual Surround to create an enhanced soundfield that virtualizes the missing speakers. Select between Wide and Reference modes.

Stereo: When you want two-channel playback, select the number of speakers you want to use for playback:

- "2 CH Stereo" uses two speakers.
- "5 CH Stereo" plays the left-channel signal through the front left and surround left speakers, the right-channel signal through the front right and surround right speakers, and a summed mono signal through the center speaker.
- "7 CH Stereo" follows the same scheme as 5 CH Stereo but adds the surround back left and surround back right speakers. This mode is available only when the surround back speakers are present and have not been reassigned to multizone or front height operation. See *Audio Processing and Surround Sound*, on page 33, for more information.

Movie: Select from the following when you want a surround mode for movie playback: Logic 7 Movie, DTS Neo:6 Cinema or Dolby Pro Logic II (IIx or IIz when seven main speakers are present).

Music: Select from the following when you want a surround mode for music playback: Logic 7 Music, DTS Neo:6 Music or Dolby Pro Logic II (IIx or IIz when seven main speakers are present). The Dolby Pro Logic II/IIx/IIz Music mode allows access to a submenu with some additional settings. See A*udio Processing and Surround Sound*, on page 33, for more information.

Video Game: Select from the following when you want a surround mode for game playback: Logic 7 Game or Dolby Pro Logic II (IIx/IIz when seven main speakers are present) Game.

After you have made your selection, press the Back/Exit button.

See *Audio Processing and Surround Sound*, on page 33, for more information on surround modes.

Audio Effects

The Audio Effects buttons on the front panel and remote provide settings that let you adjust the Dolby Volume setting, tone controls, LFE trim or EZ Set, Equalization On/Off setting. We recommended that you leave these settings at their default values until you are more familiar with your system. See *Audio Effects Button*, on page 34, for complete information.

Video Modes

The Video Modes buttons on the front panel and remote provide settings that let you use the AVR's video processor to fine-tune the picture, if necessary, after making all adjustments on the video display. We recommend that you leave the settings at their defaults until you are completely familiar with the video performance of your system. See *Video Processing*, on page 34, for complete information.

Advanced Functions

Much of the adjusting and configuration your AVR requires is handled automatically, with little intervention required on your part. You can also customize your AVR to suit your system and your tastes. In this section we will describe some of the more advanced adjustments available to you.

Audio Processing and Surround Sound

Audio signals can be encoded in a variety of formats that can affect not only the quality of the sound but the number of speaker channels and the surround mode. You may also manually select a different surround mode, when available.

Analog Audio Signals

Analog audio signals usually consist of two channels – left and right. Your AVR is able to process two-channel audio signals to produce multichannel surround sound, even when no surround sound has been encoded in the recording. Among the available modes are the Dolby Pro Logic II/IIx/IIz, HARMAN Virtual Speaker, DTS Neo:6, Logic 7, 5 CH and 7 CH Stereo modes. To select one of these modes, press the Surround Modes button.

Digital Audio Signals

Digital audio signals offer greater flexibility and capacity than analog signals, and allow the encoding of discrete channel information directly into the signal. The result is improved sound quality and startling directionality, since each channel's information is transmitted discretely. High-resolution recordings sound extraordinarily distortion-free, especially in the high frequencies.

Surround Modes

Surround-mode selection depends upon the format of the incoming audio signal as well as your personal taste. Although there is never a time when all of the AVR's surround modes are available, there is usually a wide variety of modes available for a given input. Table A12 in the Appendix, on page 50, offers a brief description of each mode and indicates the types of incoming signals or digital bitstreams the mode may be used with. Additional information about the Dolby and DTS modes is available on the companies' Web sites: www.dolby.com and www.dtsonline.com.

When in doubt, check the jacket of your disc for more information on which surround modes are available. Usually, nonessential sections of the disc, such as trailers, extra materials or the disc menu, are available only in Dolby Digital 2.0 (two-channel) or PCM two-channel mode. If the main title is playing and the display shows one of these surround modes, look for an audio or language setup section in the disc's menu. Also, make sure your disc player's audio output is set to the original bitstream rather than two-channel PCM. Stop play and check the player's output setting.

Multichannel digital recordings are produced in five-channel, six-channel or seven-channel formats, with or without a ".1" channel. The channels included in a typical 5.1-channel recording are front left, front right, center, surround left, surround right and LFE (low-frequency effects). The LFE channel is denoted as ".1" to represent the fact that it is limited to the low frequencies. 6.1-channel recordings add a single surround back channel, and 7.1-channel recordings add surround back left and surround back right channels to the 5.1-channel configuration. New formats are available in 7.1-channel configurations. Your AVR is able to play the new audio formats, delivering a more exciting home theater experience.

NOTE: To use the 6.1- and 7.1-channel surround modes, the surround back channels must be enabled. See *Manual Speaker Setup*, on page 36 for more information.

Digital formats include Dolby Digital 2.0 (two channels only), Dolby Digital 5.1, Dolby Digital EX (6.1), Dolby Digital Plus (7.1), Dolby TrueHD (7.1), DTS-HD High-Resolution Audio (7.1), DTS-HD Master Audio (7.1), DTS 5.1, DTS-ES (6.1 Matrix and Discrete), DTS 96/24 (5.1), two-channel PCM modes in 32kHz, 44.1kHz, 48kHz or 96kHz, and 5.1 or 7.1 multichannel PCM.

When the AVR receives a digital signal, it detects the encoding method and the number of channels, which is displayed briefly as three numbers, separated by slashes (e.g., "3/2/.1").

The first number indicates the number of front channels in the signal: "1" represents a monophonic recording (usually an older program that has been digitally remastered or, more rarely, a modern program for which the director has chosen mono as a special effect). "2" indicates the presence of the left and right channels, but no center channel. "3" indicates that all three front channels (left, right and center) are present.

The second number indicates whether any surround channels are present: "0" indicates that no surround information is present. "1" indicates that a matrixed surround signal is present. "2" indicates discrete left and right surround channels. "3" is used with DTS-ES bitstreams to represent the presence of the discrete surround back channel, in addition to the side surround left and right channels. "4" is used with 7.1-channel digital formats to indicate the presence of two discrete side surround channels and two discrete back surround channels.

The third number is used for the LFE channel: "0" indicates no LFE channel. ".1" indicates that an LFE channel is present.

The 6.1-channel signals – Dolby Digital EX and DTS-ES Matrix and Discrete – each include a flag that signals the receiver to decode the surround back channel, indicated as 3/2/.1 EX-ON for Dolby Digital EX materials, and 3/3/.1 ES-ON for DTS-ES materials.

Dolby Digital 2.0 signals may include a Dolby Surround flag indicating DS-ON or DS-OFF, depending on whether the two-channel bitstream contains only stereo information or a downmix of a multichannel program that can be decoded by the AVR's Dolby Pro Logic decoder. By default, these signals are played in Dolby Pro Logic IIx Movie mode.

When a PCM signal is received, the PCM message and the sampling rate (32kHz, 44.1kHz, 48kHz or 96kHz) will appear.

When only two channels – left and right – are present, the analog surround modes may be used to decode the signal into multiple channels. If you would prefer a different surround format than the native signal's digital encoding, press the Surround Modes button to display the Surround Modes menu (see *Selecting a Surround Mode*, on page 32).

The Auto Select option sets the surround mode to the native signal's digital encoding, e.g., Dolby Digital, DTS, Dolby TrueHD or DTS-HD Master Audio. For two-channel materials, the AVR defaults to the Logic 7 Movie mode. If you prefer a different surround mode, select the surround-mode category: Virtual Surround, Stereo, Movie, Music or Video Game. Press the OK button to change the mode.

Each surround-mode category is set to a default surround mode:

- Virtual Surround: HARMAN virtual speaker.
- Stereo: 7-CH Stereo or 5-CH Stereo (depending on how many main speakers are present in the system).
- Movie: Logic 7 Movie.
- Music: Logic 7 Music.
- Video Game: Logic 7 Game.

You may select a different mode for each category. Below is a complete list of available surround modes. (The actual surround modes available will depend on the number of speakers in your system.)

- Virtual Surround: HARMAN virtual speaker.
- Stereo: 2-CH Stereo, 5-CH Stereo or 7-CH Stereo.
- Movie: Logic 7 Movie, DTS Neo:6 Cinema, Dolby Pro Logic II Movie, Dolby Pro Logic IIx Movie, Dolby Pro Logic IIz.
- Music: Logic 7 Music, DTS Neo:6 Music, Dolby Pro Logic II Music, Dolby Pro Logic IIx Music, Dolby Pro Logic IIz.
- Video Game: Logic 7 Game, Dolby Pro Logic II Game, Dolby Pro Logic IIx Game, Dolby Pro Logic IIz.

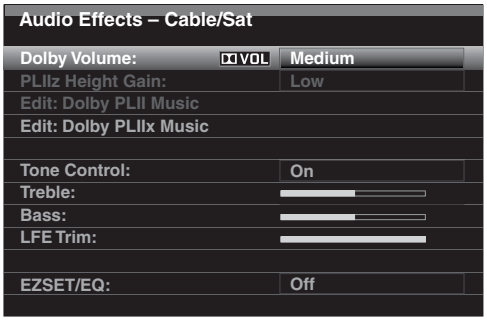
Once you have programmed the surround mode for each type of audio, select the line from the Surround Modes menu to override the AVR's automatic surround-mode selection. The AVR will use the same surround mode the next time the source is selected.

NOTE: Dolby Pro Logic IIx is available only if you have set up the AVR's Assigned Amp to Surround Back; Dolby Pro Logic IIz is available only if you have set up the AVR's Assigned Amp to Front Height. See *Manual Speaker Setup*, on page 36, for more information.

Please refer to Table A12 in the Appendix for more information on which surround modes are available with different bitstreams.

Audio Effects Button

To adjust other audio settings, such as the tone controls, press the Audio Effects button to display the Audio Effects menu. You can also access the menu by pressing the Info button and selecting Audio Effects.



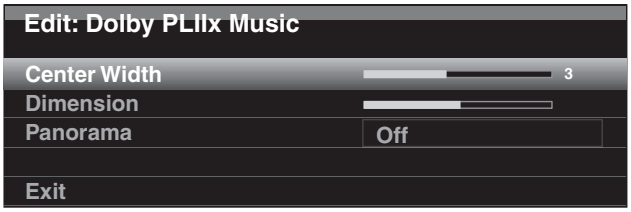
NOTE: Each source has its own independent Audio Effects settings.

Dolby Volume: See *Dolby Volume*, on page 28, for an explanation of Dolby Volume processing and its benefits. Refer to the table on that page for an explanation of each of the Dolby Volume settings.

PLIIz Height Gain: When you have set the Assigned Amp to Front Height (see *Manual Speaker Setup*, on page 36), the PLIIz Height Gain setting will become available. The front height channels can greatly improve the spatial experience of a surround-sound system. Some listeners may want the depth and dimension that height channels provide, but from a seemingly transparent experience. Other listeners may prefer to accentuate the front height channels by using a higher volume setting.

The PLIIz Height Gain control gives you the ability to change the volume of the front height channels to suit different programs. The control has three settings: Low (normal volume), Mid (moderate volume increase) and High (maximum volume increase). Note that you can also fine-tune the front height channel volume levels. See *Setting Channel Output Levels Manually*, on page 38, for details.

Edit Dolby PLII/Dolby PLIIx Music: Some additional settings are available for the Dolby Pro Logic II modes. When the Dolby Pro Logic II or IIx Music modes have been selected, choose the "Edit Dolby PLII/IIx Music" submenus to adjust the Center Width, Dimension and Panorama settings.



Center Width: This setting affects how vocals sound through the three front speakers. A lower number focuses the vocal information tightly on the center channel. Higher numbers (up to 7) broaden the vocal soundstage. Use the Left/Right buttons to adjust.

Dimension: This setting affects the depth of the surround presentation, allowing you to "move" the sound toward the front or rear of the room. The setting of "0" is a neutral default. Setting "F-3" moves the sound toward the front of the room, while setting "R-3" moves the sound toward the rear. Use the Left/Right buttons to adjust it.

Panorama: With the Panorama mode turned on, some of the sound from the front speakers is moved to the surround speakers, creating an enveloping "wraparound" effect. Each press of the OK button toggles the setting On or Off.

Tone Control: This setting determines whether the treble and bass controls are active. When it's set to Off, the tone controls are out of the circuit, with no changes to the sound. When it's set to On, the bass and treble controls are in the circuit.

Treble/Bass: These settings boost or cut the treble or bass frequencies by up to 10dB. Use the Left/Right buttons to change the setting. The default setting is 0dB, at the center of the bar.

LFE Trim: This setting attenuates the loudness of the LFE signal to the subwoofer. The setting defaults to the maximum of 0dB. Press the Left/Right buttons to reduce the level by up to 10dB; the setting will appear as a negative number. NOTE: This setting is effective only when a dedicated LFE-channel signal is present in the source material.

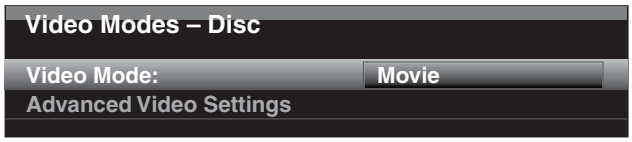
EZ Set/EQ: This setting activates or deactivates the equalization settings obtained when the EzSet/EQ II process was run. The settings are saved for reactivation at a later listening session.

When you have finished making adjustments, press the Audio Effects button or the Back/Exit button.

Video Processing

The AVR's video processor automatically provides the best picture based on the capabilities of your video display and the incoming source video. You may experiment with the Video Modes menu adjustments to try to improve the picture further.

Adjust your video display's picture settings before adjusting the AVR's Video Modes settings. Access the picture settings from the Video Modes menu. Press the Video Modes button, and the Video Modes screen will appear. You can also access the menu by pressing the Info button and selecting Video Modes.



NOTE: Each source has its own independent Video Modes settings.

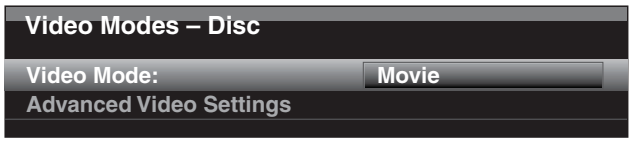
Video Mode: The default setting of Off passes the video signal through to the display with only basic video processing. (NOTE: Video scaling cannot be turned off, but selecting the HDMI Bypass mode in the Info menu for a source connected to one of the HDMI Input connectors passes the video signal directly from the HDMI input connector to the HDMI Monitor Out connector, bypassing all video processing.)

Select one of these processing options to optimize the picture for the current program by applying adjustments to the brightness, contrast, color and sharpness:

- Sports: For sporting events.
- Nature: For programs shot outdoors, in a natural setting.
- Movie: For movies and many television broadcasts.
- Custom: Lets you adjust the picture settings manually. The Brightness, Contrast, Color and Sharpness settings will appear as sliders with values ranging from 0 to 100. The default setting for each adjustment is 50. Use the Left/Right buttons to change each setting's value. See *How to Adjust the Custom Picture Settings*, on page 35, for detailed information about making these adjustments.

How to Adjust the Custom Picture Settings

Set the Video Mode to Custom to display the picture settings.



With a color-bar test pattern from a test disc or other source on the TV screen, you can make the following adjustments:

- The color intensity setting on your TV.
- Color adjustments using the color bars, which may be (left to right) black, white, yellow, cyan (turquoise), green, magenta, red, blue, black.
- The color transition, seen as sharp separation of the bars.
- The performance of the color circuits in your TV (with video signals); bar edges should show no vertical crawling dots.

Use the gray scale and the black/white fields in the test pattern to adjust the brightness and contrast.

Brightness Adjustment

1. Turn down the color control on your TV until the color bars appear in black and white.
2. Adjust the Contrast to the lowest level where you still can see all gray-scale bars separately and clearly.
3. Adjust the Brightness so that the bars in the gray scale are all visible. The bar farthest to the left has to be as black as possible rather than gray, but the next gradation must clearly be distinct from it. The bars in the gray scale should gradually and evenly change from black to white.

Contrast Adjustment

1. Adjust the contrast on your TV until you see a bright white bar in the lower right corner of the screen and a deep, dark, black bar to the left.
2. If the brightness of the white bar no longer increases when the Contrast is turned up or the borders of white letters bloom (overlight) into the black areas (drastically decreasing the sharpness of the letters), the contrast has been turned up too much. Reduce the Contrast until these effects disappear and the video still looks realistic.
3. If you are watching TV with ambient daylight, adjust the contrast so that a normal video picture looks the same as the surroundings in your room; that way the eye is relaxed when watching the TV picture. Reduce the setting when the surrounding light is dimmed to improve the sharpness of the picture.
4. The gray scale in the middle line should retain the same distinction between each bar as before the contrast adjustment. If not, repeat both Step 3 of the Brightness Adjustment and the Contrast Adjustment.

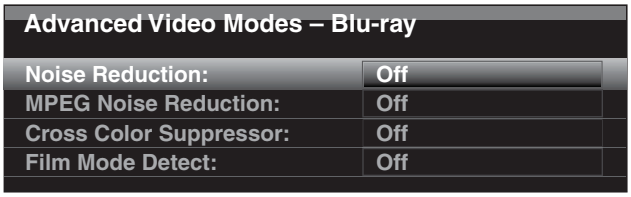
Color Adjustment

1. When the brightness and contrast are set optimally, adjust the Color control. Set the level so that the colors look strong but still natural, not overdone. If the color level is too high, depending on the TV, some of the bars will seem wider or the color intensity will not increase when the control is turned up. Test the color intensity with a video of pictures of faces, flowers, fruit and vegetables.
2. Refer to a large white bar in your test pattern to tweak the warmth of the picture using the Tint control on your TV.

Sharpness Adjustment

Contrary to intuition, the picture will appear sharper and clearer with the sharpness backed off from the maximum setting. Reduce the Sharpness setting on your television, and the setting on the AVR, if necessary, to minimize the appearance of any white lines between the bars in the gray-scale portion of the test screen.

Advanced Video Settings: When the video mode is set to Custom, you can select this to display the Advanced Video Modes submenu.



Noise Reduction: Adjust this setting to Low, Medium or High to filter out signal noise.

MPEG Noise Reduction: This setting is designed to address two specific types of video distortion: mosquito noise and blocking artifacts. If you see haziness or shimmering around the edges of objects or the scrolling credits in a film, or if the image appears to "pixelate" into blocks, change the MPEG Noise Reduction setting from Off to Low, Medium or High.

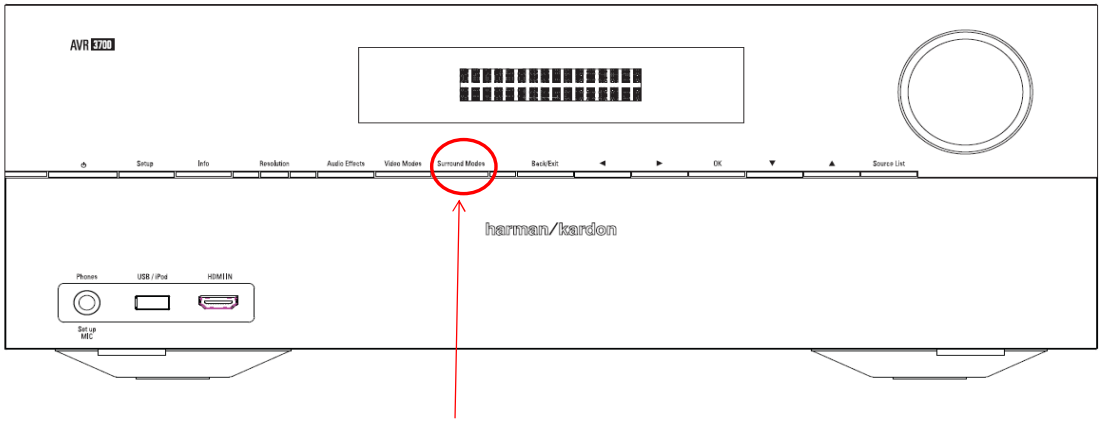
Cross Color Suppressor: Turn this setting on to remove cross color artifacts, which can occur when high-frequency luminance (brightness) signals are misinterpreted as chrominance (color) signals, causing unwanted flickering, flashing colors or rainbow patterns. This setting is not available when you are using HDMI sources or when no video signal is present.

Film Mode Detect: This setting is accessible only when the Deinterlacing setting is turned on. It compensates for the different frame rates in which film and video are shot. Film is shot at a rate of 24 frames per second (progressive scan), while video is shot at slightly less than 60 frames per second (interlaced). The AVR is able to detect whether the program was originally shot on film and transferred to video (e.g., to create a DVD), and will compensate appropriately for any authoring errors in the conversion. Select a setting of 3:2 (for NTSC materials), 2:2 (for PAL materials), Off or Auto.

Symptom	Cause	Solution
Unit does not function when Main Power switch is turned on	• No AC power	• Ensure that the power cord is plugged into a live AC power outlet • Check if the AC outlet is switch-controlled
Front-panel Message display lights, but there's no sound or picture	• Intermittent input connection • Mute is on • Volume control is turned down	• Secure all input and speaker connections • Press Mute button • Turn up Volume control
No sound from any speaker; PROTECT message appears on Message display	• Amplifier is in protection mode due to possible short circuit • Amplifier is in protection mode due to internal problems	• Check all speaker wires at speaker and AVR connections for crossed wires • Contact your local Harman Kardon service center
No sound from center or surround speakers	• Incorrect surround mode • Program material is monophonic • Incorrect speaker configuration • Program material is stereo	• Select a surround mode other than stereo • Mono programs contain no surround information • Check the speaker configuration in the setup menu • The surround decoder may not create center- or surround-channel information from nonencoded programs
Unit does not respond to remote control commands	• Weak batteries in remote • Remote sensor is obscured	• Change batteries in remote • Ensure that the AVR's front-panel remote sensor is in the line of sight of the remote
Intermittent buzzing in tuner	• Local interference	• Move the AVR or antenna away from computers, fluorescent lights, motors or other electrical appliances
(AVR 3700/AVR 370 only): Surround-back speaker settings cannot be accessed, and the test tone does not play through the surround back speakers	• Multi-zone operation has been selected/Assigned AMP channels have been assigned to Zone 2	• Use the Speaker Setup menu to reassign the Assigned AMP to the surround back left and right channels
Unable to activate remote control Programming mode	• Source Selector button is not held for at least 3 seconds	• Be sure to hold the Source Selector button for at least 3 seconds
Remote buttons light, but AVR does not respond	• Remote is in Zone 2 mode	• Slide Zone Selector switch to the Zone 1 position.
Unable to establish network connection	• AVR network programming requires rebooting	• Cycle the AVR into the Standby mode, and then turn it on again

Additional information on troubleshooting possible problems with your AVR and installation-related issues may be found in the list of "Frequently Asked Questions," which is located in the Product Support section of our Web site: www.harmankardon.com

Reset Proceedure



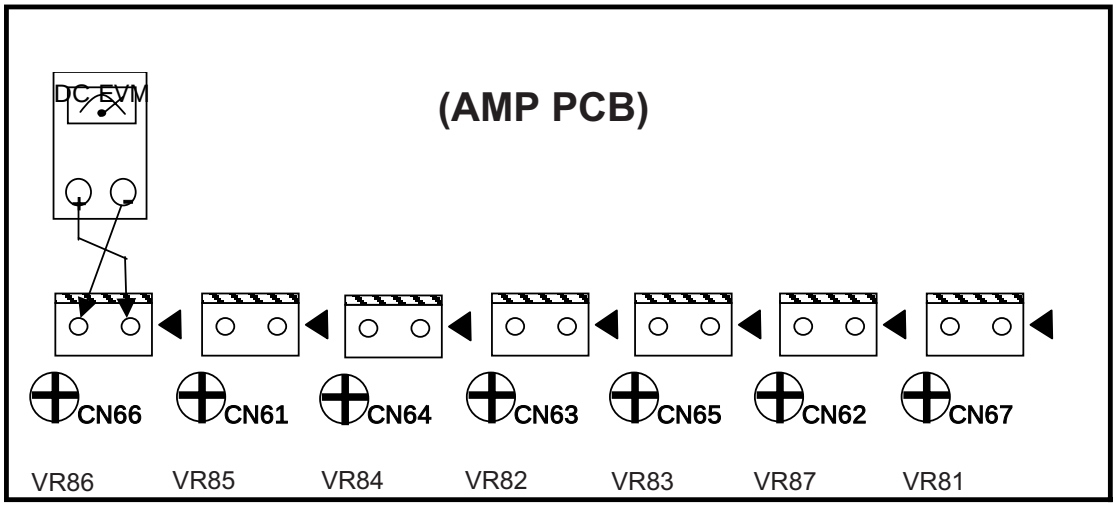
To restore the AVR to factory defaults (reset) press & hold Surround Mode Key about 5sec, when AVR's in eco stand-by.

!!Warning!! This will erase all of the user programmed settings and pre-sets.

AMPLIFIER SECTION BIAS ADJUSTMENT

Measurement condition
.No input signal or volume position is minimum.
.Do not adjust at FM AM.

Standard value
.Ideal current = 48mA (± 5%)
.Ideal DC Voltage = 22.5mV (± 5%)

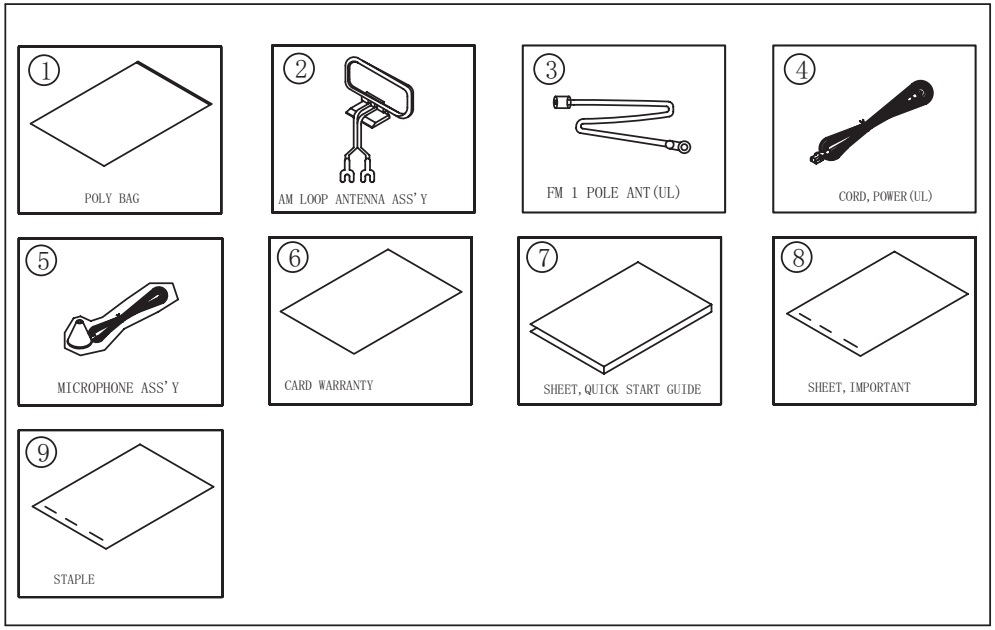


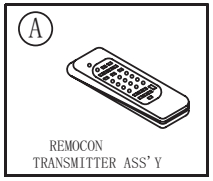
DC VOLTMETER ; Connect to
CN66(SL),CN61(CEN),CN64(SR),CN63(FL),CN65(SBL),CN62(FR),CN67(SBR)

NO.	Channel	Adjust for	Adjustment22.5
1	Front Left	22.5mV (± 5%)	CN63
2	Front Right	22.5mV (± 5%)	CN62
3	Center	22.5mV (± 5%)	CN61
4	Surround Left	22.5mV (± 5%)	CN66
5	Surround Right	22.5mV (± 5%)	CN64
6	Surround Back Left	22.5mV (± 5%)	CN65
7	Surround Back Right	22.5mV (± 5%)	CN67

AVR2700

1. Instruction manual ass'y - Accessories(CQXAVR2700)

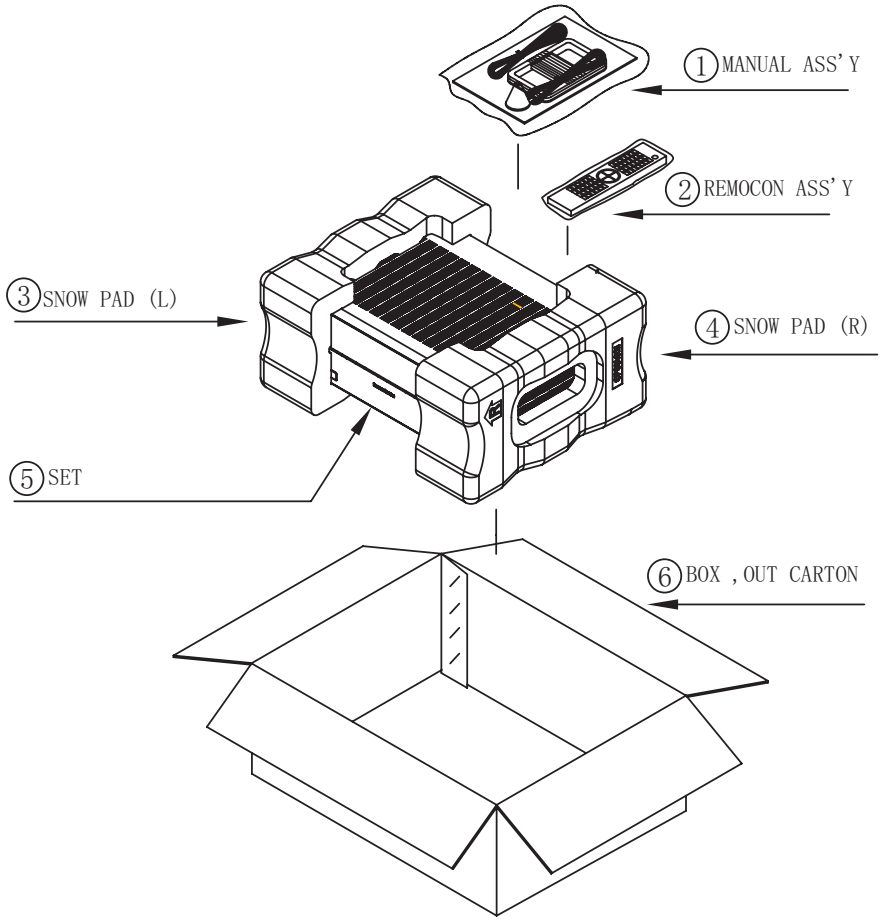




NO	DESCRIPTION	PARTS NO.	Q,ty
1	POLY BAG	CPB1A190Z	1
2	ANT, AM LOOP	CSA1A039Z	1
3	FM 1 POL ANT(UL)	CSA1A019Z	1
4	CORD, POWER(UL)	CJA2A119Z	1
5	MICROPHONE ASS'Y	CJXAVR365MICRO	1
6	SHEET, QUICK START GUIDE	CQE1A579Z	1
7	SHEET, IMPORTANT	CQE1A522Z	1
8	STAPLE	CPL0905	3

A	REMOCON ASS'Y	CARTAVR2700-HK	1

2. Package Drawing

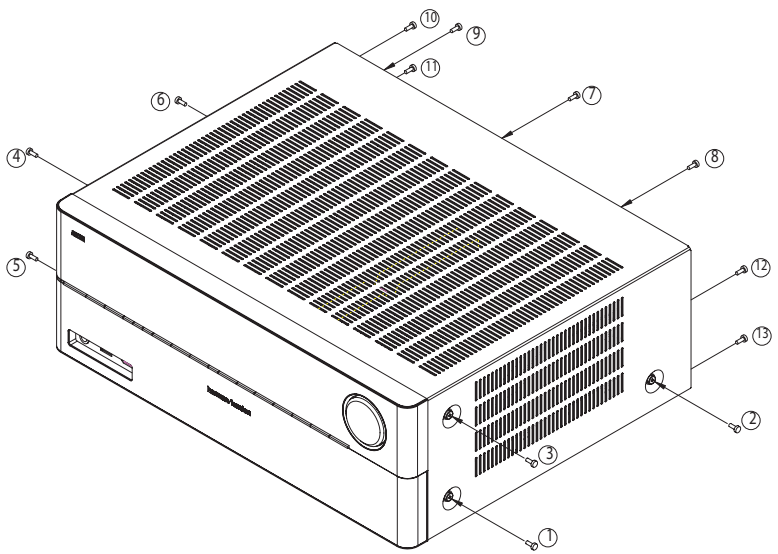


NO	DESCRIPTION	PARTS NO.	Q,ty
1	MANUAL ASS'Y	CQXAVR2700	1
2	REMOCON ASS'Y	CARTAVR2700-HK	1
3	PAD. LEFT	CPS1A920	1
4	PAD, RIGHT	CPS1A921	1
5	SET	AVR2700SET	1
6	BOX, OUT CARTON	CPG1A967V	1

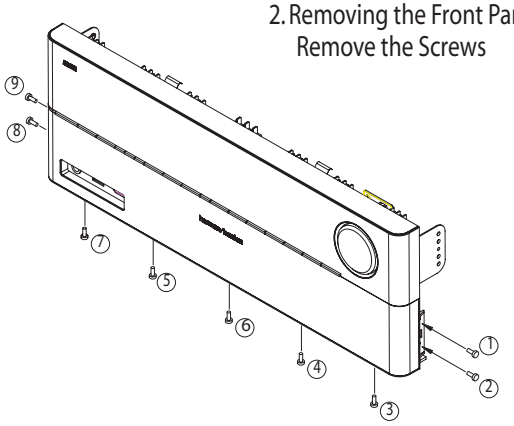
DISASSEMBLY

AVR2700

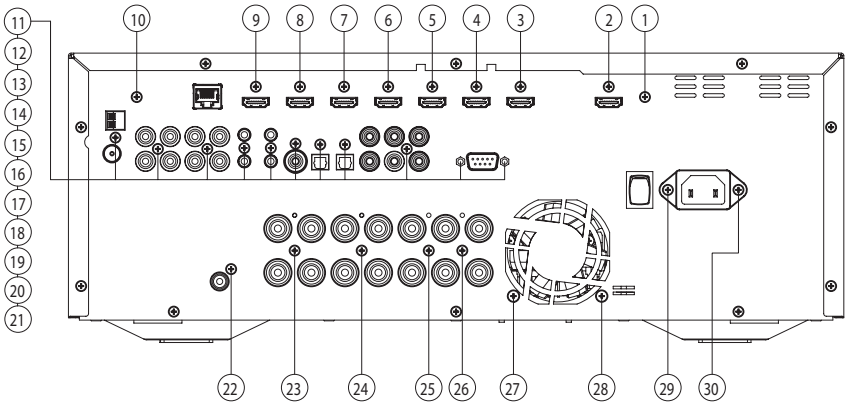
1. Removing the Top Cabinet
   Remove the Screws ① ~ ⑬



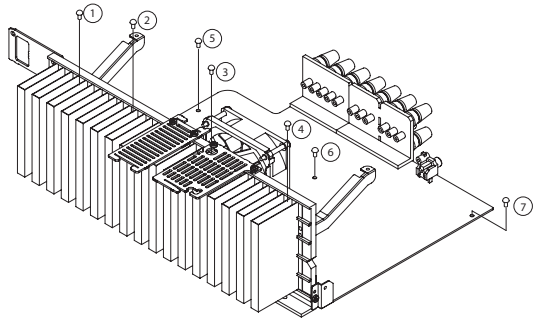
2. Removing the Front Panel
   Remove the Screws ① ~ ⑨



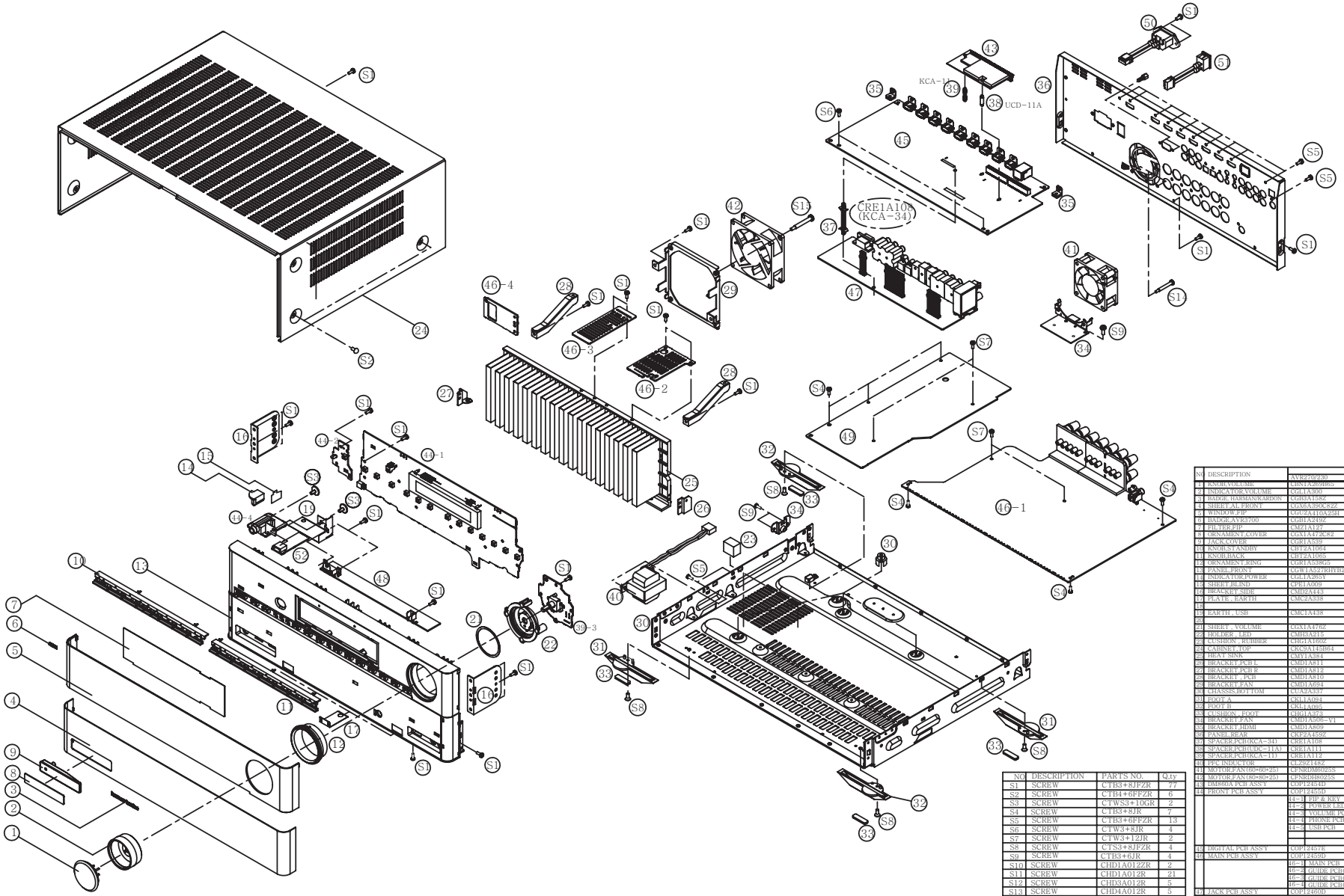
3. Removing the Rear Panel
   Remove the Screws ① ~ 31



4. Removing the Main PCB
   Remove the Screws ① ~ ⑦



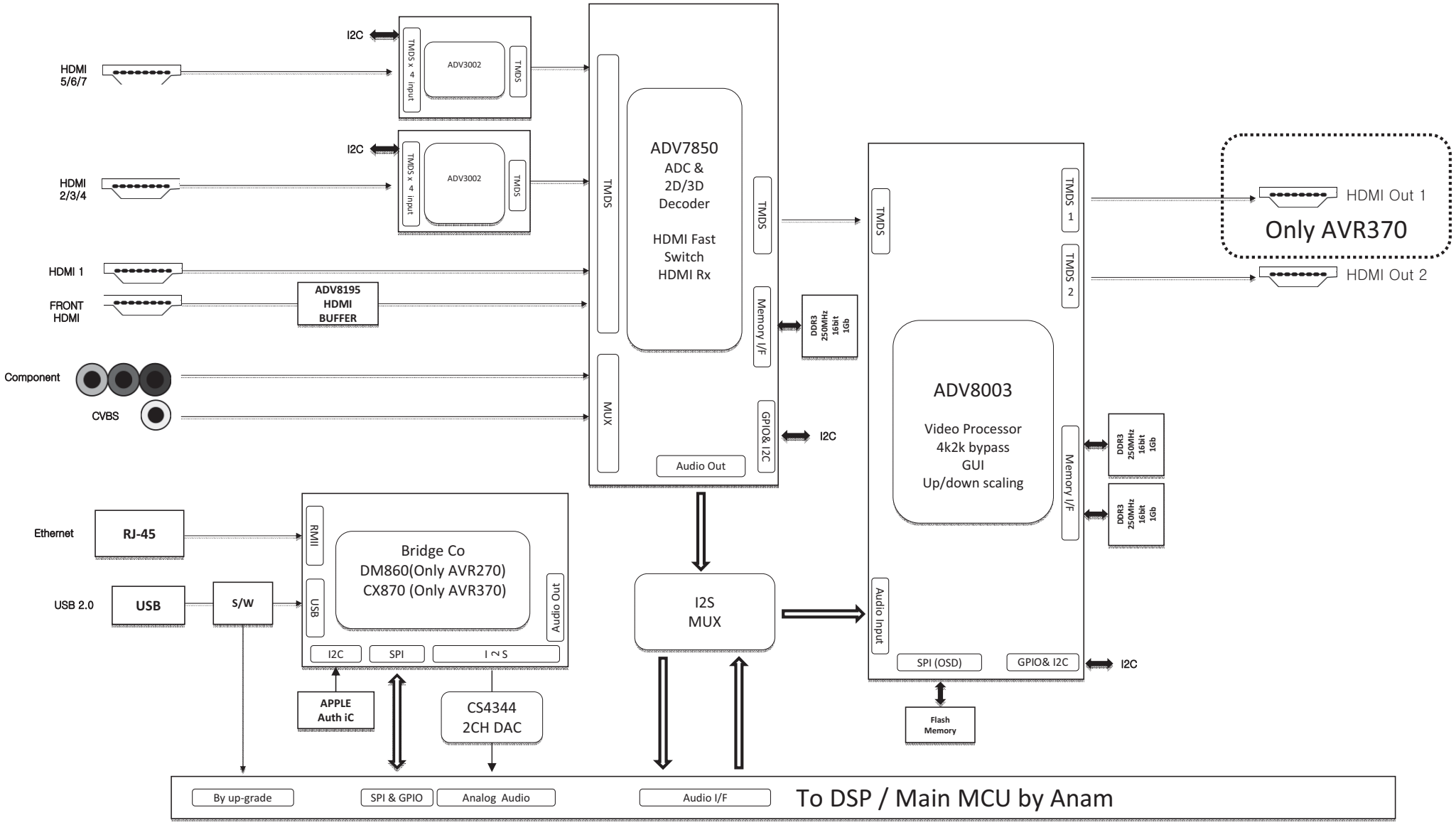
AVR270/230 EXPLODE VIEW
AVR2700



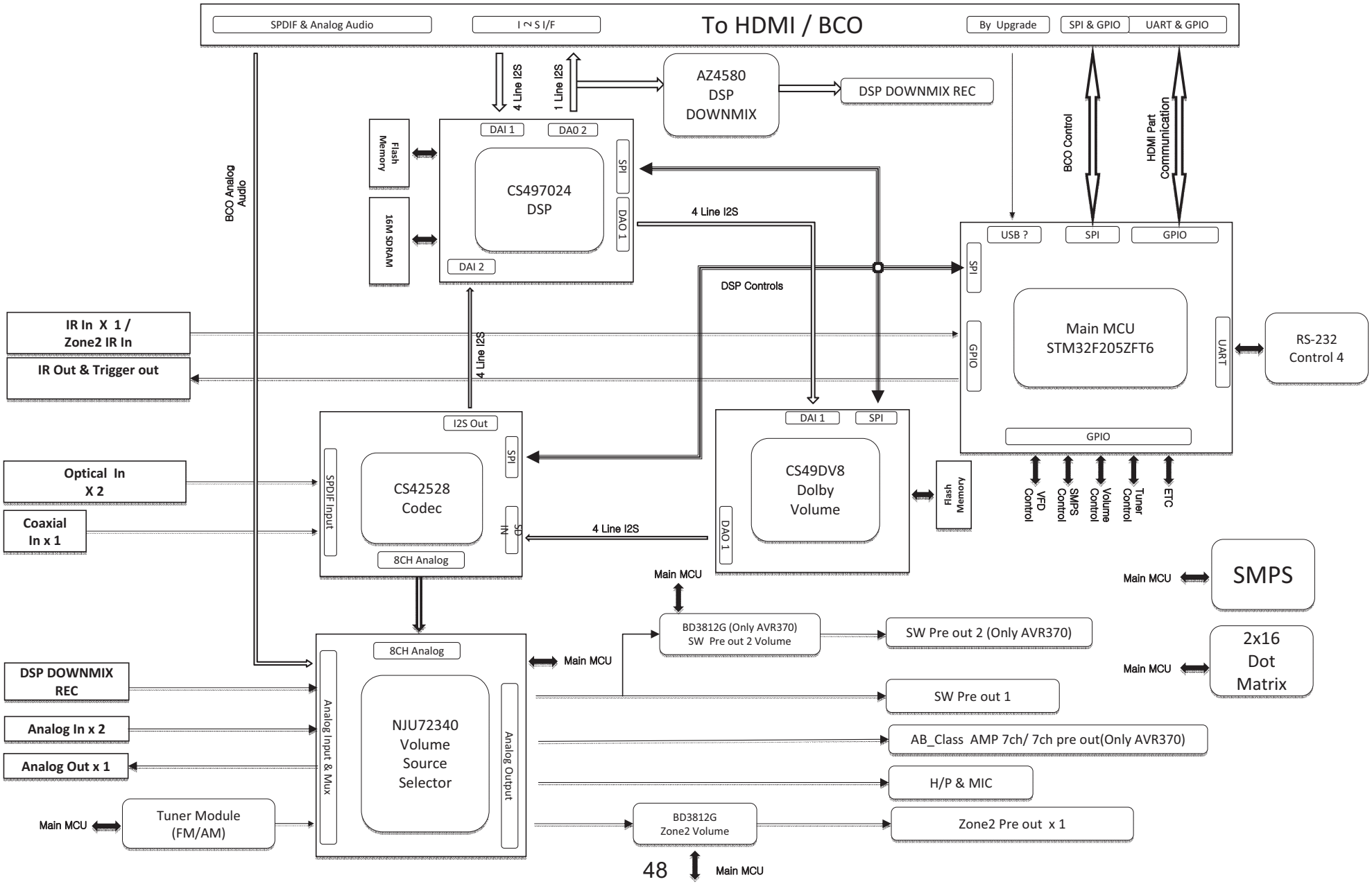
NO	DESCRIPTION	PARTS NO.	Q.ty
S1	SCREW	CTB3+8JFZR	77
S2	SCREW	CTB4+6FPZR	6
S3	SCREW	CTWS3+10GR	2
S4	SCREW	CTB3+8JR	7
S5	SCREW	CTB3+6FPZR	13
S6	SCREW	CTW3+8JR	4
S7	SCREW	CTW3+12JR	2
S8	SCREW	CTS3+8JFZR	4
S9	SCREW	CTB3+6JR	4
S10	SCREW	CHD1A012ZR	2
S11	SCREW	CHD1A012R	21
S12	SCREW	CHD3A012R	5
S13	SCREW	CHD4A012R	5
S14	SCREW, SPECIAL	CHD1A036FZR	2
S15	SCREW, SPECIAL	CHD1A036R	4
S16			
S17			

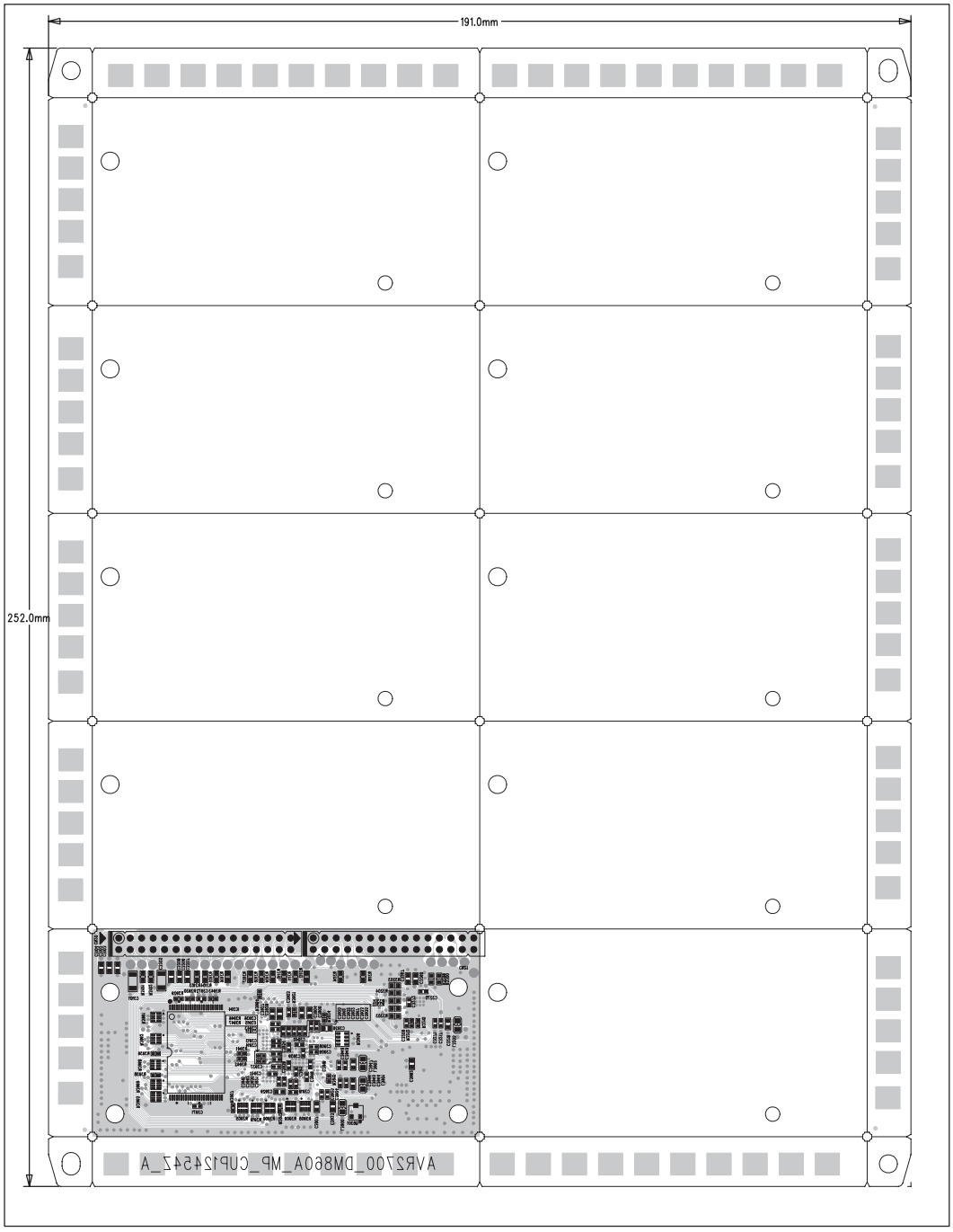
NO	DESCRIPTION	PARTS NO.		Q.ty	REMARK
		AVR270/230	AVR2700		
1	KNOB,VOLUME	CGN1A269BS		1	
2	INDICATOR,VOLUME	CGL1A309		1	
3	BADGE, HARMAN/KARDON	CGB5A158Z		1	
4	SHEET,AL FRONT	CGX6A390C82Z		1	
5	WINDOW,FIP	CGU2A410A25H		1	
6	BADGE,AVR3700	CGB1A249Z	CGB1A252Z	1	
7	FILTER,FIP	CMZ1A127		1	
8	ORNAMENT,COVER	CGX1A472L82		1	
9	JACK,COVER	CGR1A309		1	
10	KNOB,STANDBY	CBT2A1064		1	
11	KNOB,JACK	CBT2A1065		1	
12	ORNAMENT,RING	CGR1A308S5		1	
13	PANEL,FRONT	CgW1A527RHYB24		1	
14	INDICATOR,POWER	CGL1A265Y		1	
15	SHEET,BLIND	CPE1A009		1	
16	BRACKET,SIDE	CMD2A443		2	
17	PLATE , EARTH	CMC2A338		2	
18					
19	EARTH , USB	CMC1A438		1	
20					
21	SHEET , VOLUME	CGX1A476Z		1	
22	HOLDER , LED	CMB3A215		1	
23	CUSHION , RUBBER	CHG1A160Z		2	
24	CABINET,TOP	CKC9A145B64		1	
25	HEAT SINK	CMY1A384		1	
26	BRACKET,PCB L	CMD1A811		1	
27	BRACKET,PCB R	CMD1A812		1	
28	BRACKET , PCB	CMD1A859		2	
29	BRACKET,FAN	CMD1A894		1	
30	CHASSIS,BOTTOM	CUA2A537		1	
31	FOOT A	CKL1A091		2	
32	FOOT B	CKL1A095		2	
33	CUSHION , FOOT	CHG1A273		4	
34	BRACKET,FAN	CMD1A506-V1		1	
35	BRACKET,HDMI	CMD1A809		2	
36	PANEL,REAR	CKP2A459Z	CKP2A459Y	1	
37	SPACER,PCB(UCA-34)	CRE1A108		1	
38	SPACER,PCB(UDC-11A)	CRE1A111		1	
39	SPACER,PCB(KCA-11)	CRE1A112		1	
40	FPC INDICATOR	CLZ9Z148Z		1	
41	MOTOR,FAN(60*60*25)	CFNRDM6025S		1	
42	MOTOR,FAN(80*80*25)	CFNRDB8025S		1	
43	DM980A PCB ASS'Y	COP12434D		1	
44	FRONT PCB ASS'Y	COP12455D		1	
		44-1 FIP & KEY PCB		1	
		44-2 POWER LED PCB		1	
		44-3 VOLUME PCB		1	
		44-4 PHONE PCB		1	
		44-5 USB PCB		1	
45	DIGITAL PCB ASS'Y	COP12457E	COP12457D	1	
46	MAIN PCB ASS'Y	COP12459D		1	
		46-1 MAIN PCB		1	
		46-2 (GUIDE PCB(CARD CABLE)		1	
		46-3 (GUIDE PCB(HARD CABLE)		1	
		46-4 GUIDE PCB(WIRE)		1	
47	JACK PCB ASS'Y	COP12460D		1	
48	HDMI BUFFER PCB ASS'Y	COP12462D		1	
49	SMPS PCB ASS'Y	COP12475C	COP12475B	1	
50	INLET ASS'Y	CWZAVR2700CN50A		1	
51	MOMS S/W ASS'Y	CSHZ0809ZA		1	
52	MOMS S/W ASS'Y	COP12501D		1	

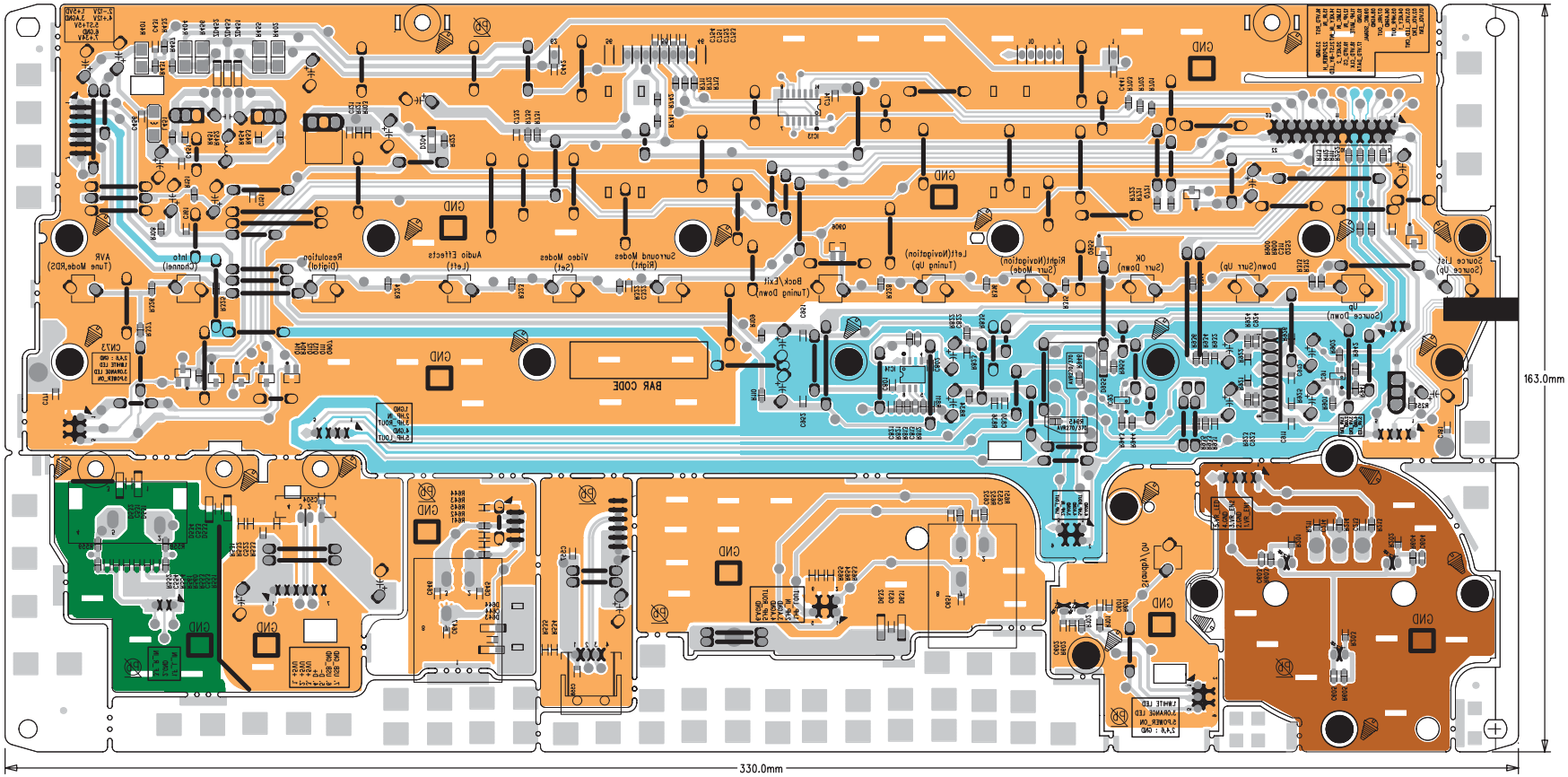
AVR2700/3700 Block Diagram

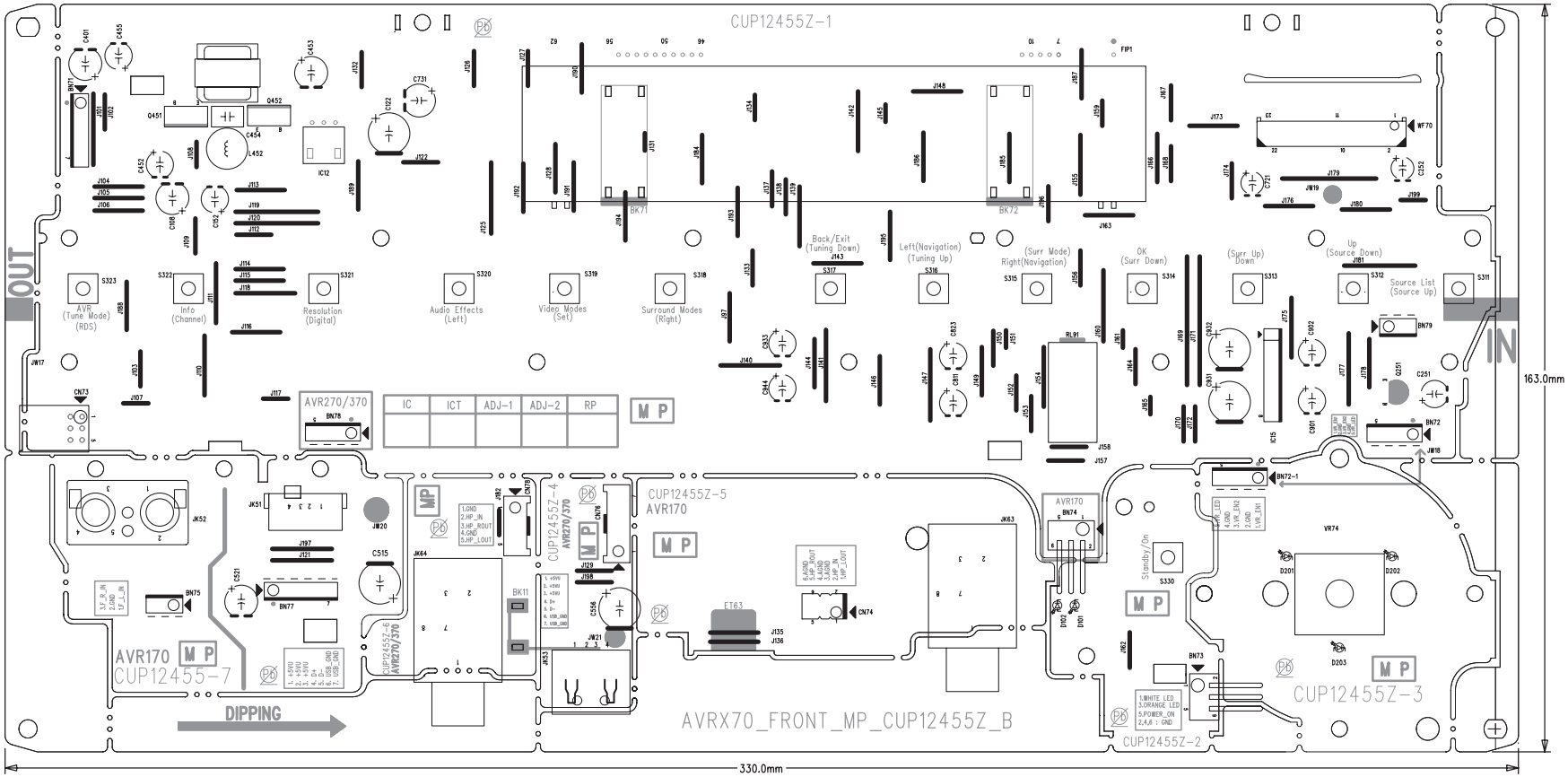


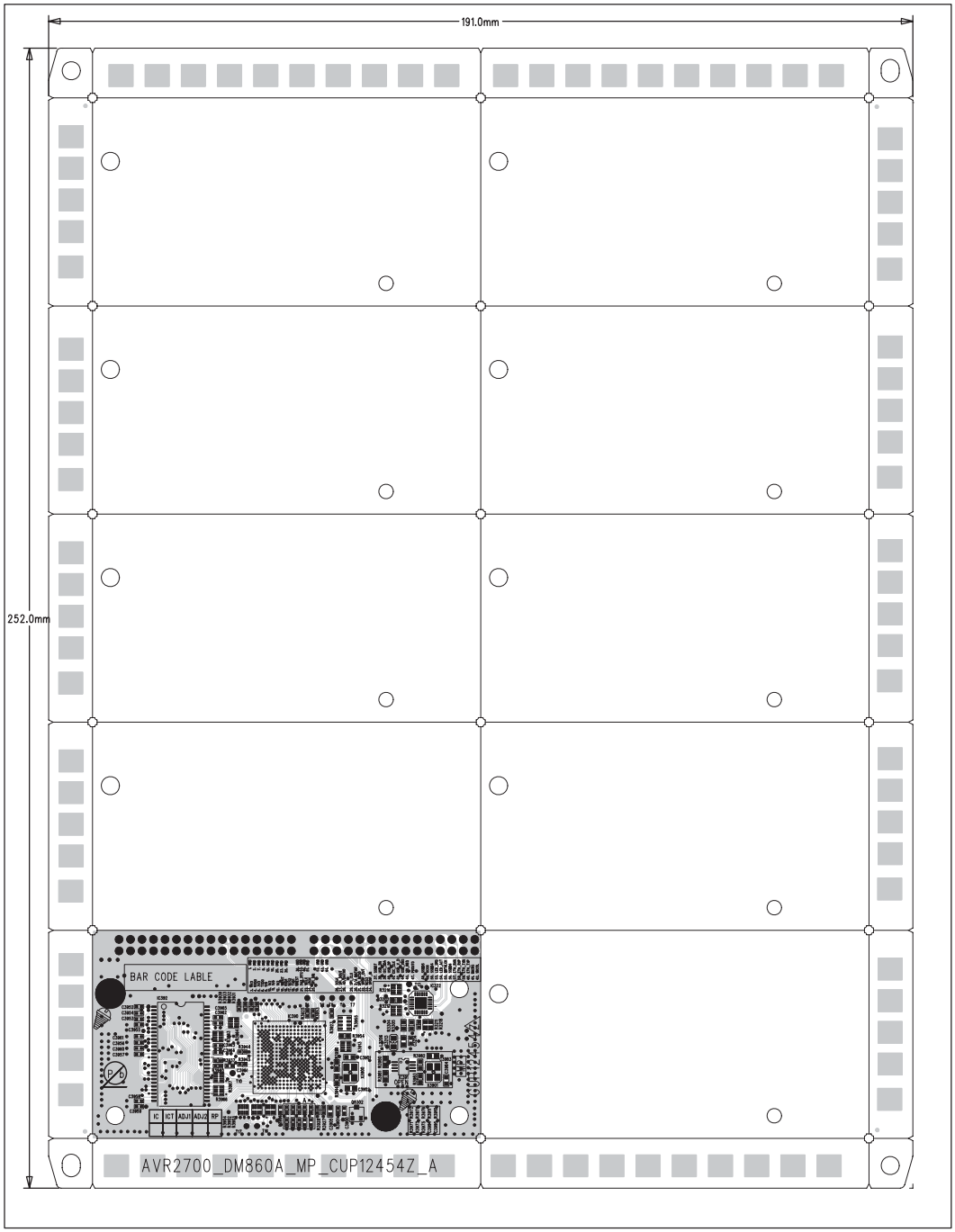
AVR2700/3700 Block Diagram (DSP Part)

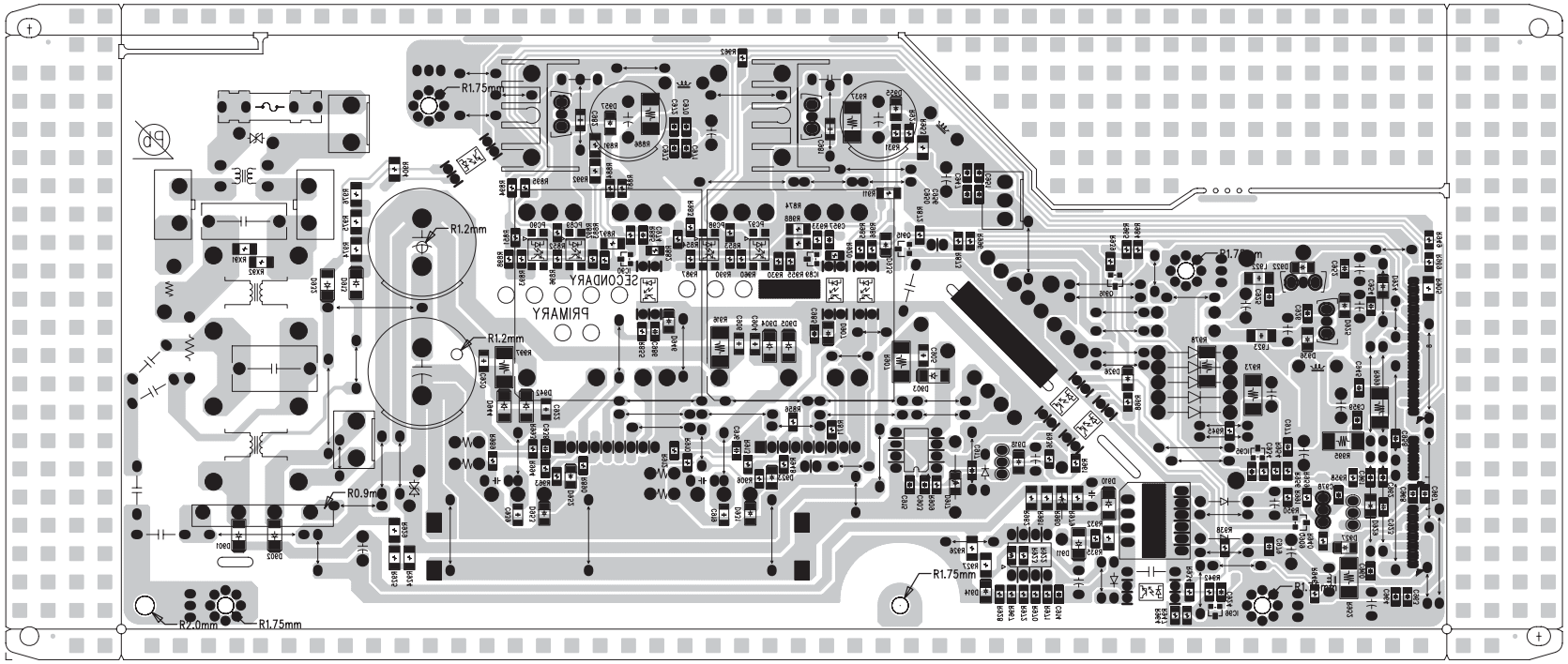


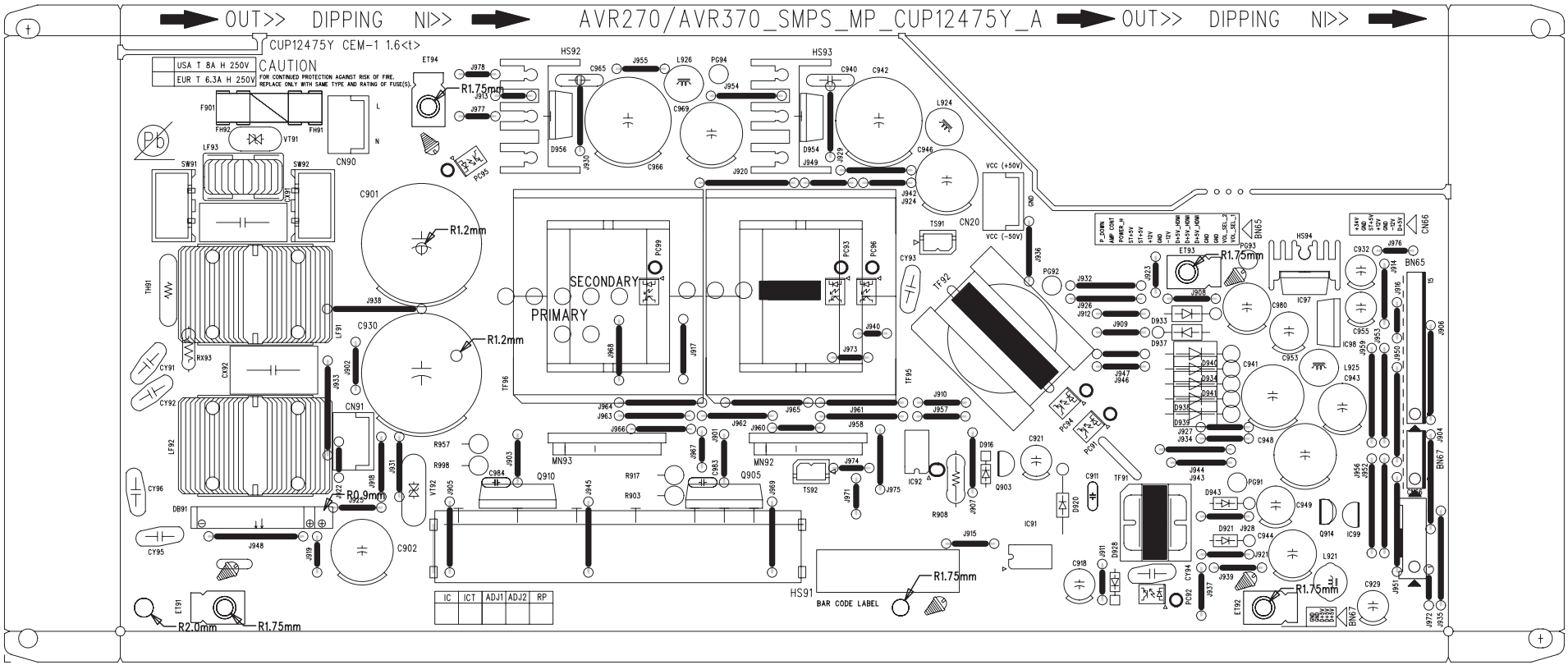

191.0mm
252.0mm

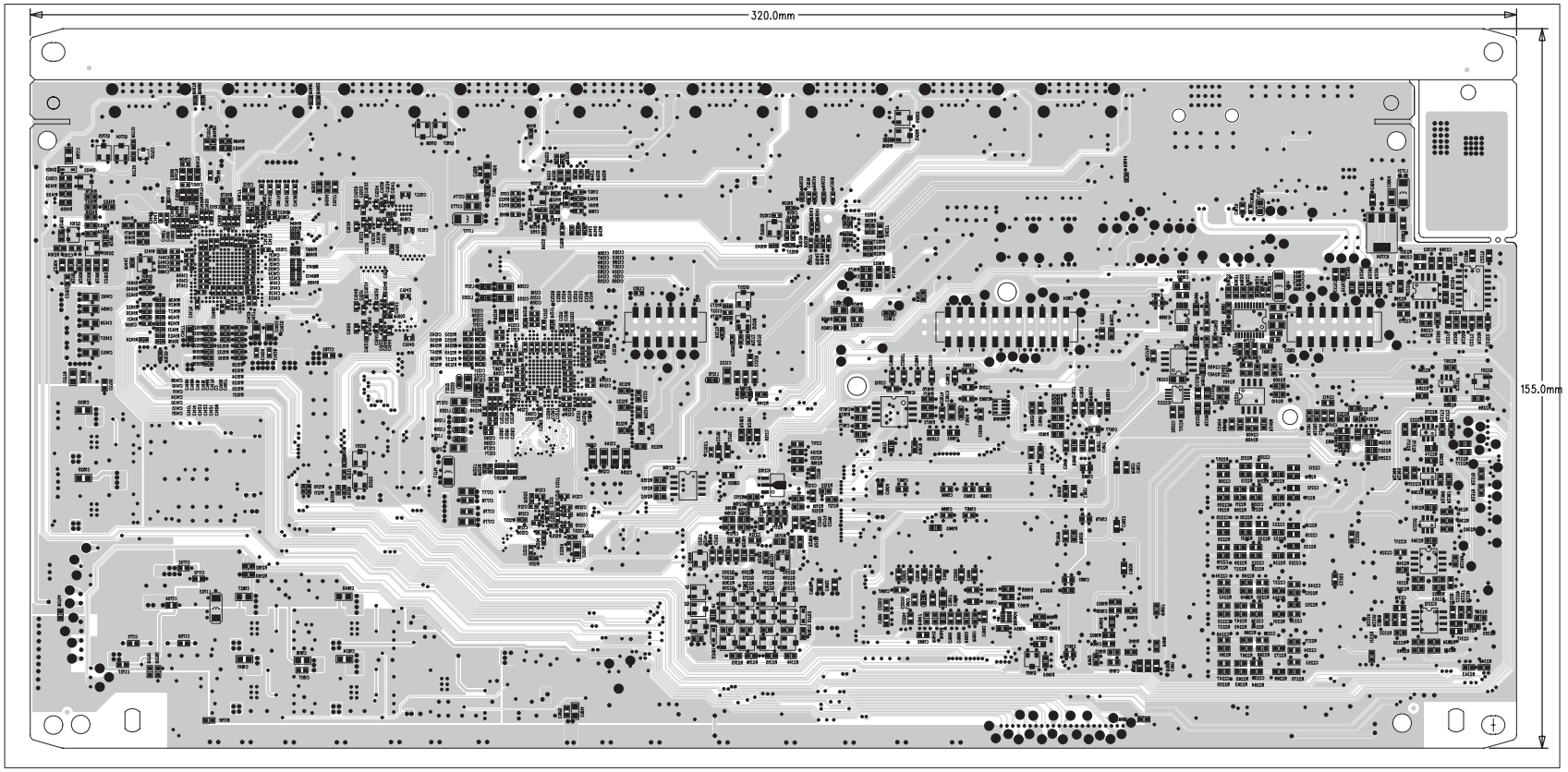

163.0mm
330.0mm

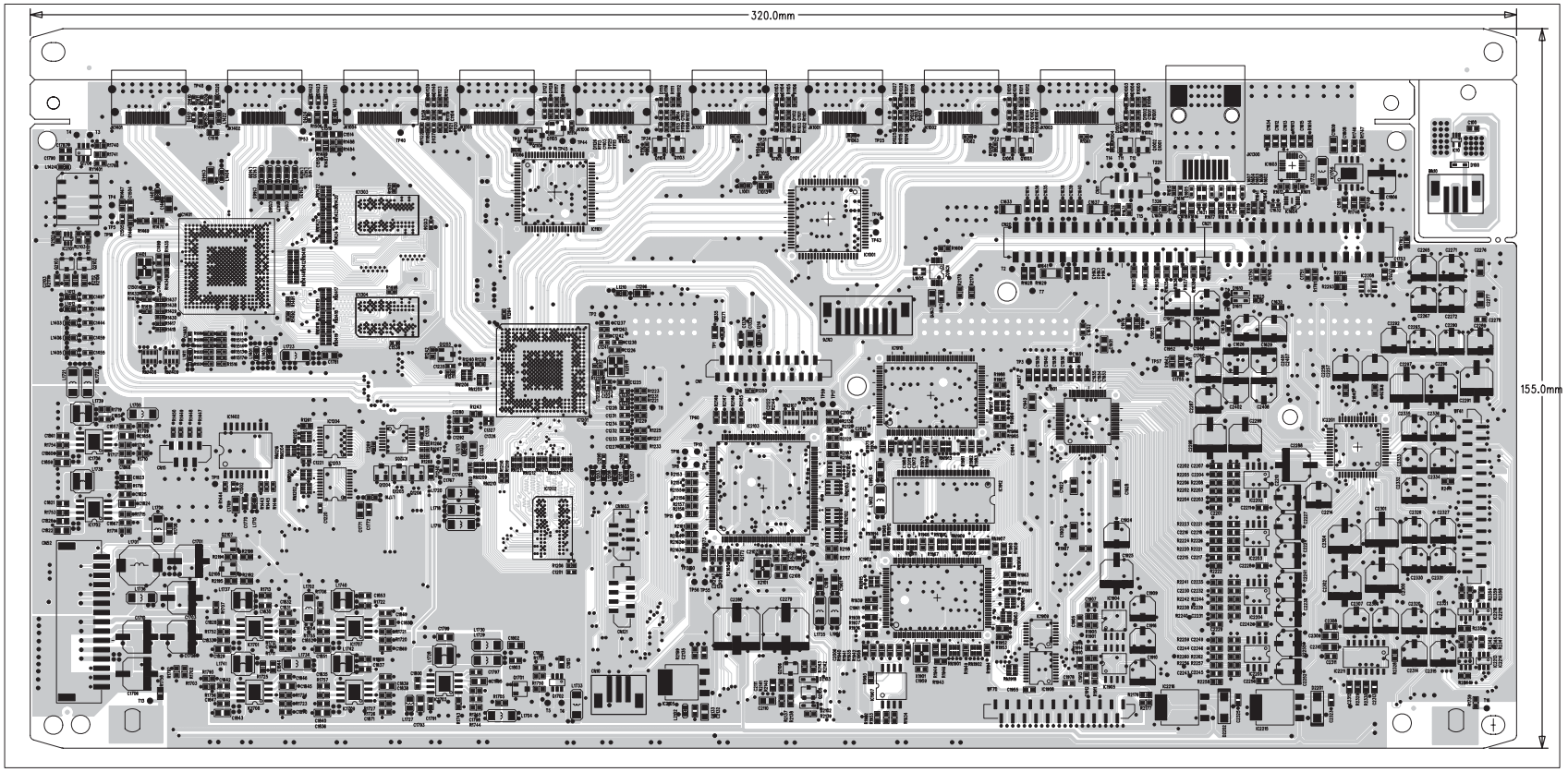

CUP12455Z-1
OUT
IN
163.0mm
330.0mm
AVR270/370
IC
ICT
ADJ-1
ADJ-2
RP
AVR170
CUP12455-7
DIPPING
CUP12455Z-5
AVR170
CUP12455Z-4
AVR270/370
AVRX70_FRONT_MP_CUP12455Z_B
CUP12455Z-3
CUP12455Z-2
Back/Exit (Tuning Down)
Left(Navigation) (Tuning Up)
(Surr Mode) Right(Navigation)
OK (Surr Down)
(Surr Up) Down
Up (Source Down)
Source List (Source Up)
AVR (Tune Mode) (RDS)
Info (Channel)
Resolution (Digital)
Audio Effects (Left)
Video Modes (Set)
Surround Modes (Right)
Standby/On

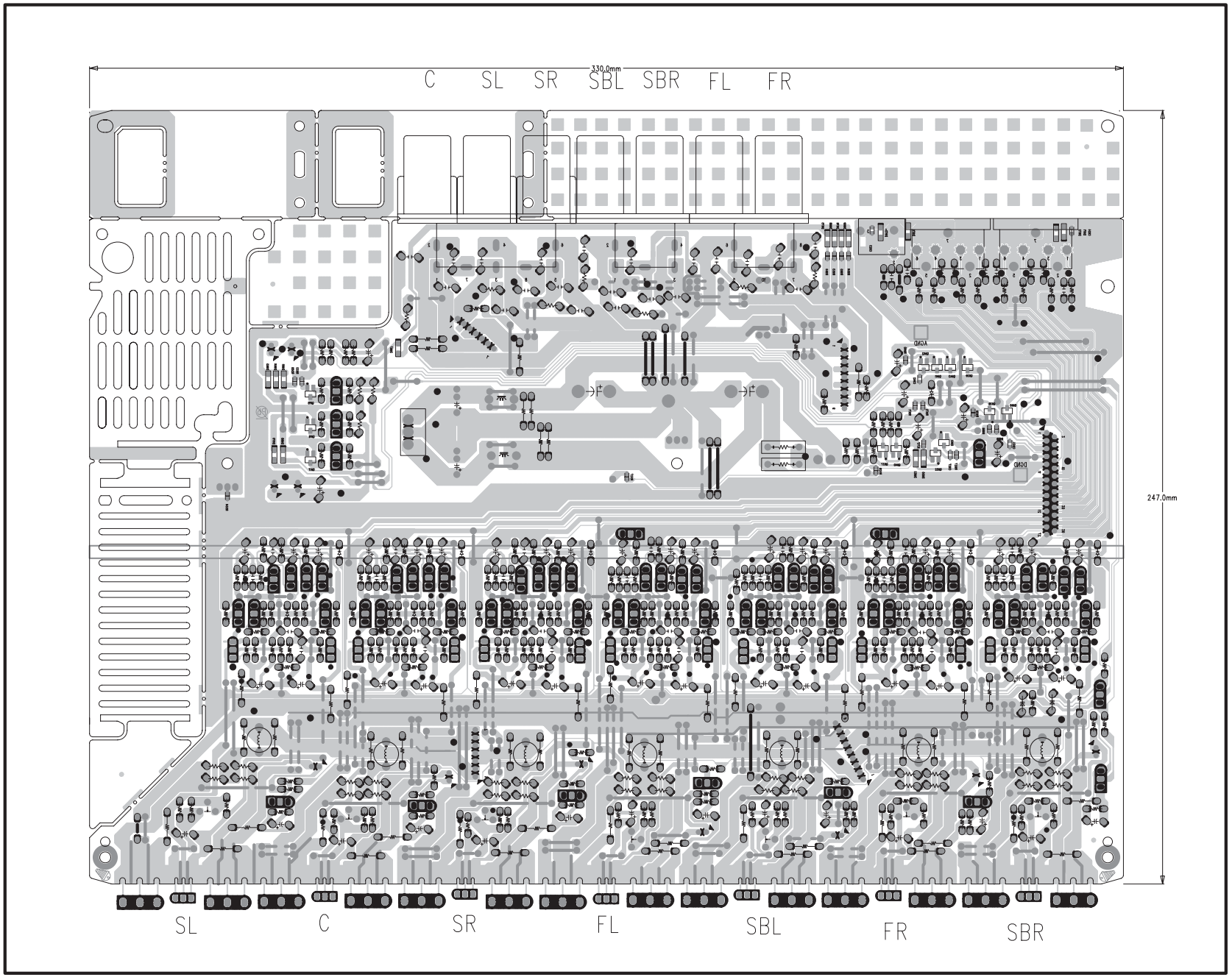

191.0mm
252.0mm
BAR CODE LABLE
AVR2700_DM860A_MP_CUP12454Z_A

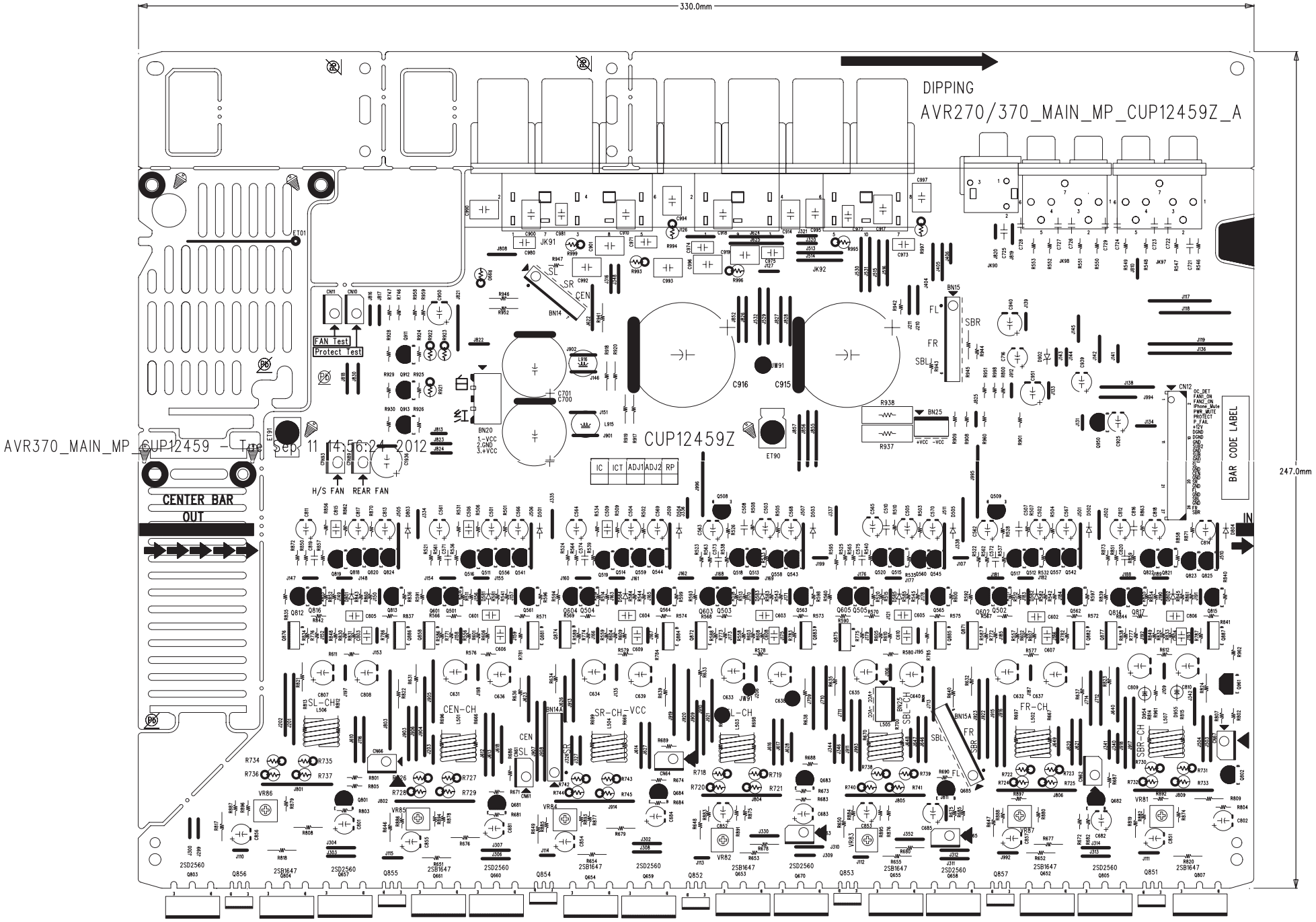

R1.75mm
R1.2mm
R1.2mm
R0.9mm
R2.0mm
R1.75mm
R1.75mm
SECONDARY
PRIMARY

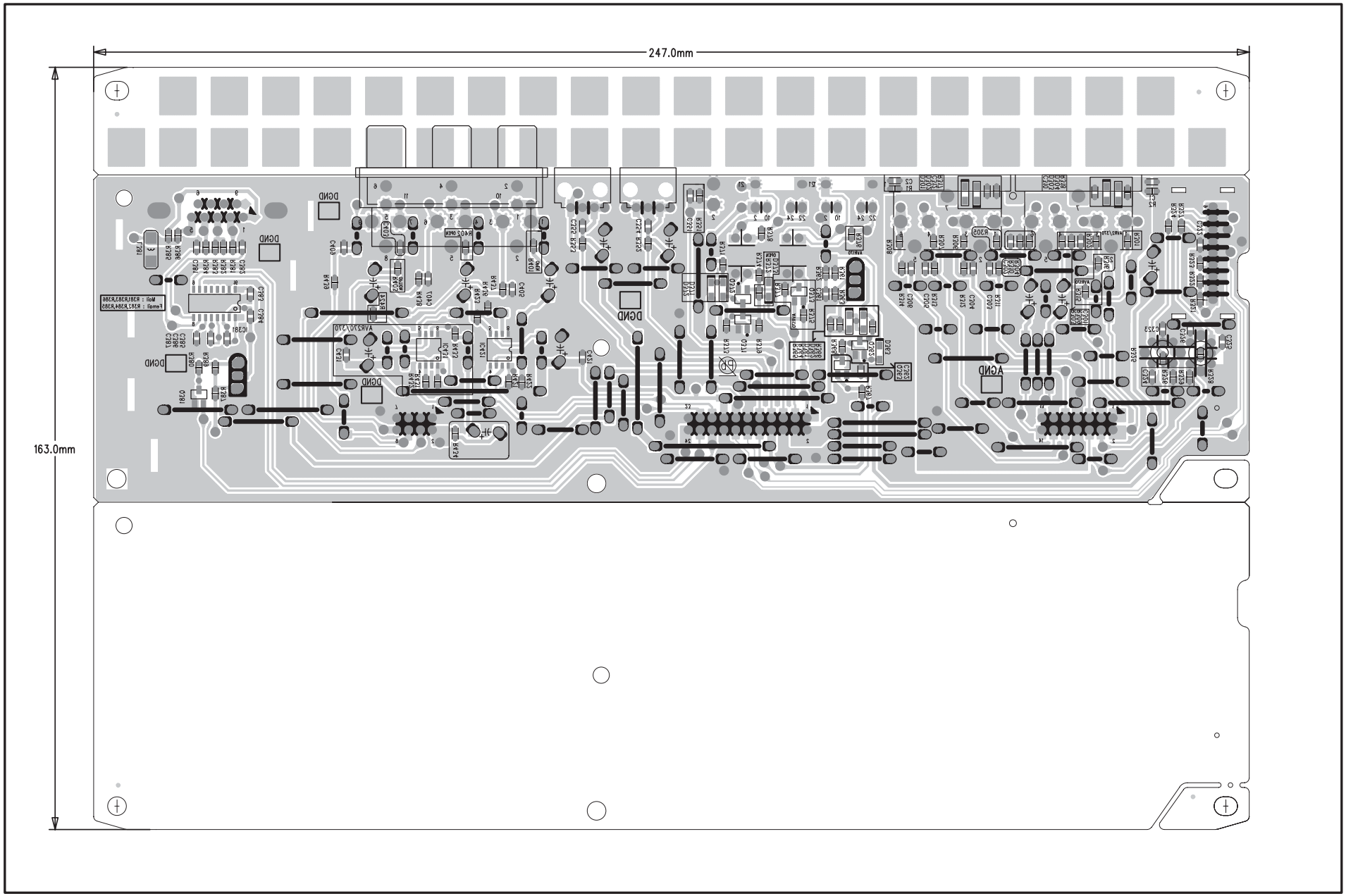

OUT>> DIPPING NI>>
AVR270/AVR370_SMPS_MP_CUP12475Y_A
OUT>> DIPPING NI>>
CUP12475Y CEM-1 1.6<t>
USA T 8A H 250V
EUR T 6.3A H 250V
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE(S).
SECONDARY
PRIMARY
R1.75mm
R1.2mm
R0.9mm
R2.0mm
BAR CODE LABEL
IC
ICT
ADJ1
ADJ2
RP

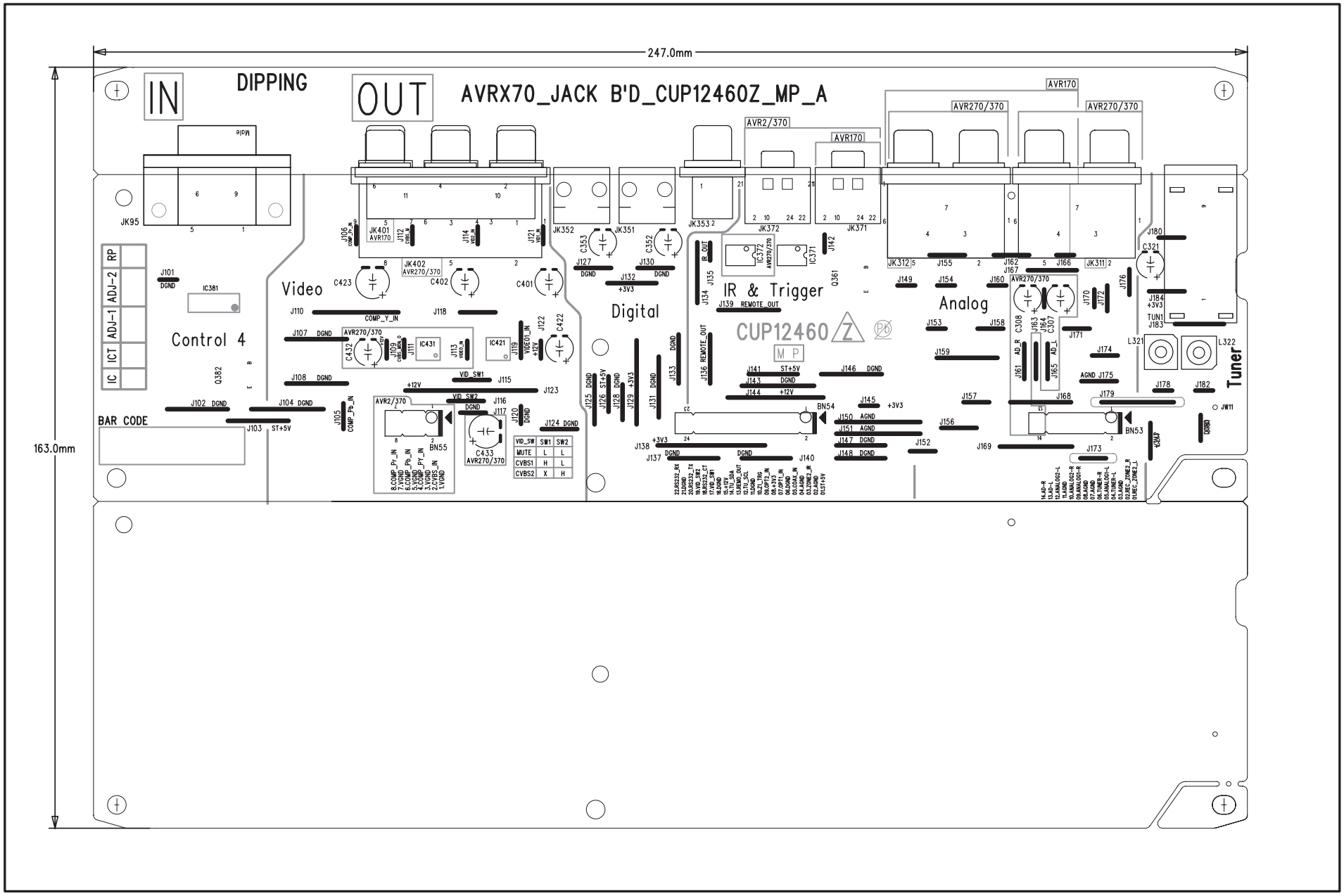

320.0mm
155.0mm


320.0mm
155.0mm


330.0mm
C
SL
SR
SBL
SBR
FL
FR
247.0mm
SL
C
SR
FL
SBL
FR
SBR


330.0mm
247.0mm
DIPPING
AVR270/370_MAIN_MP_CUP12459Z_A
AVR370_MAIN_MP_CUP12459 - Tue Sep 11 14:56:24 2012
CUP12459Z
BAR CODE LABEL
CENTER BAR OUT
IN
FAN Test
Protect Test
H/S FAN
REAR FAN
SL-CH
CEN-CH
SR-CH
VCC
SBL-CH
FR-CH
SBR-CH
FL
FR
SBL
SBR
CEN
SL
SR


247.0mm
163.0mm
DGND
AGND


247.0mm
163.0mm
IN
DIPPING
OUT
AVRX70_JACK B'D_CUP12460Z_MP_A
Video
Digital
IR & Trigger
Analog
Tuner
Control 4
BAR CODE
CUP12460Z
M P
AVR170
AVR270/370
AVR2/370
JK95
JK352
JK351
JK353
JK372
JK371
JK312
JK311
JK401
JK402
IC381
IC372
IC371
IC421
IC431
BN54
BN53
BN55
Q382
Q361
C423
C402
C401
C353
C352
C321
C432
C433
C422
C308
L321
L322
TUN1
RP
ADJ-2
ADJ-1
ICT
IC
J101
J102
J103
J104
J105
J106
J107
J108
J110
J111
J112
J113
J114
J115
J116
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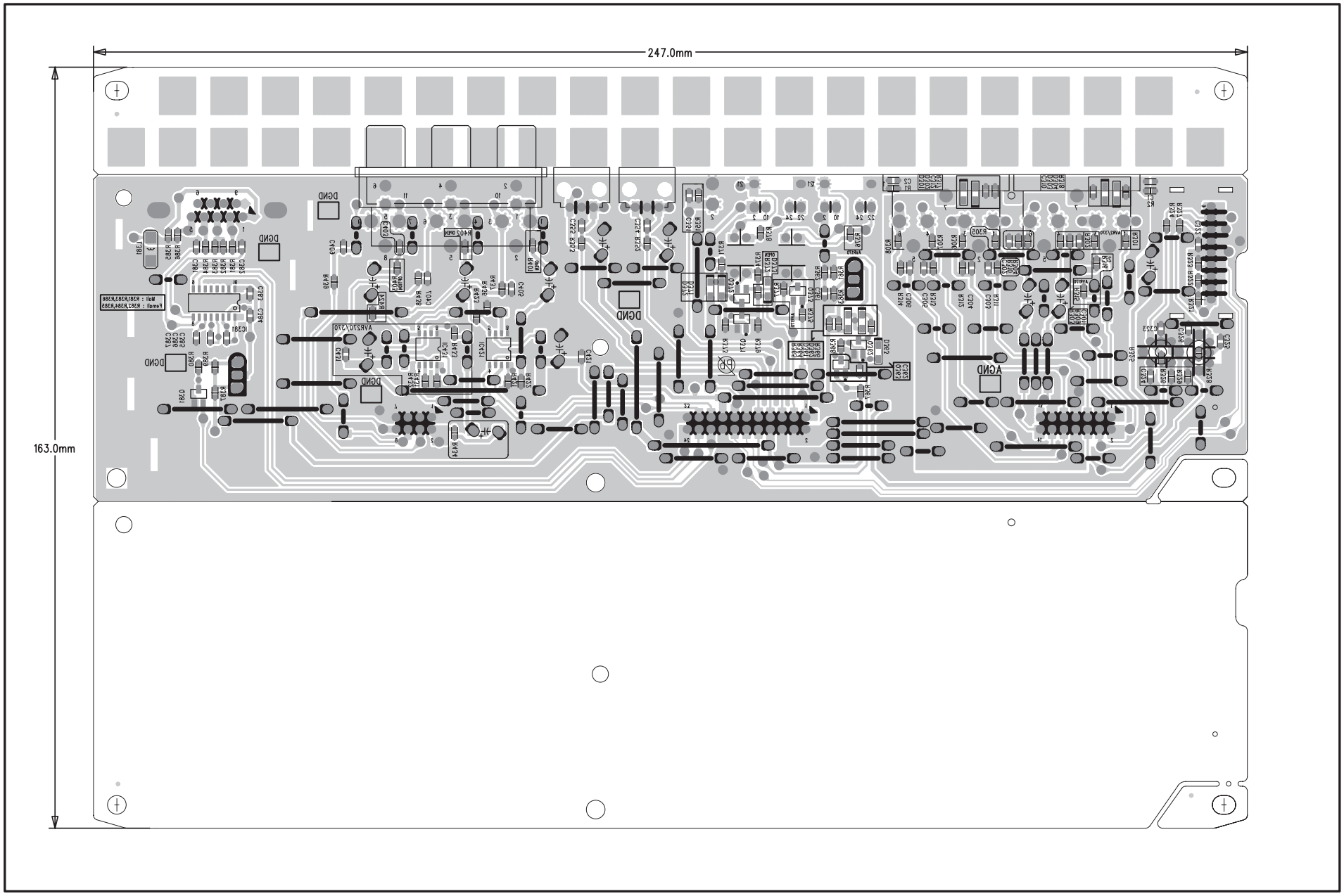
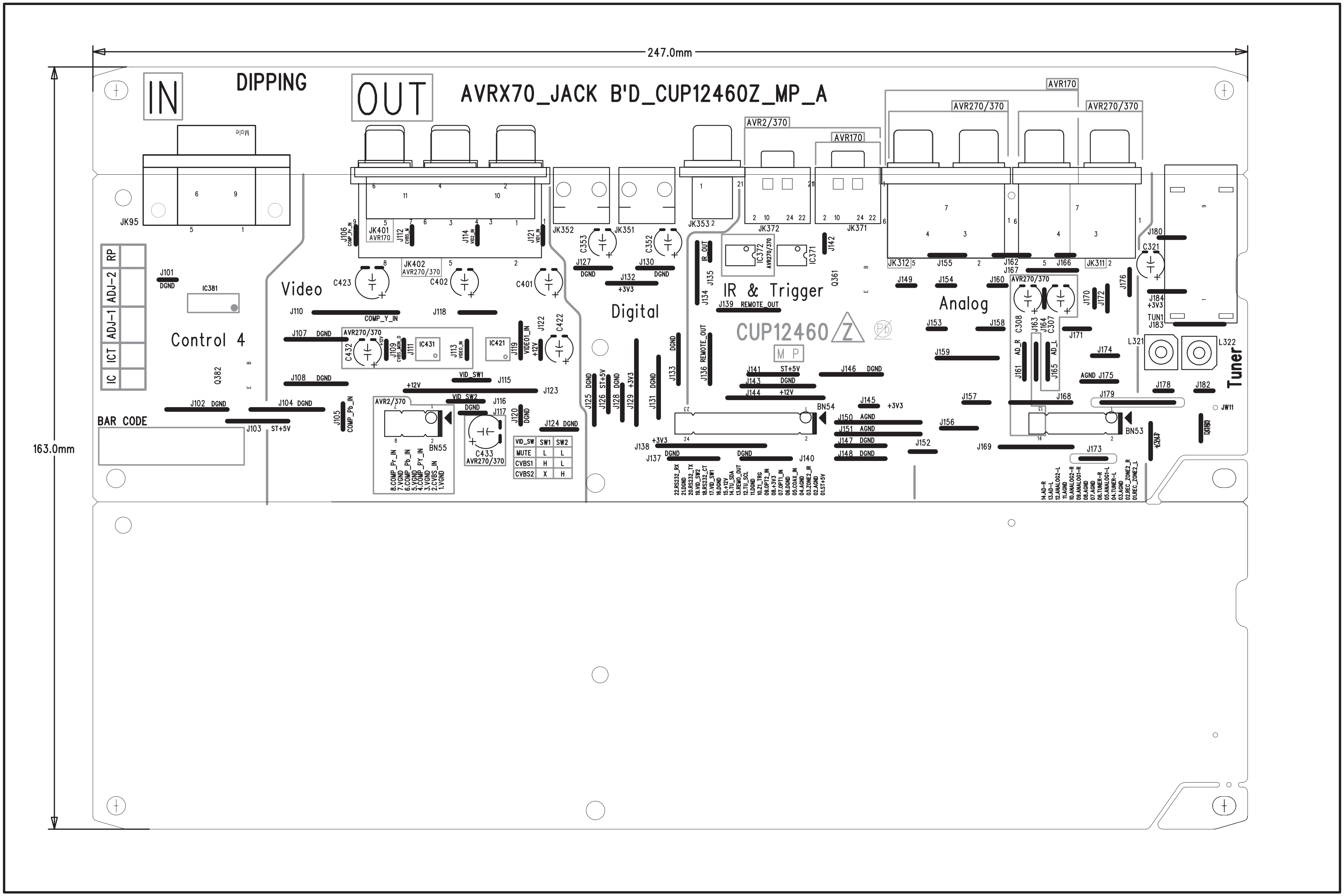
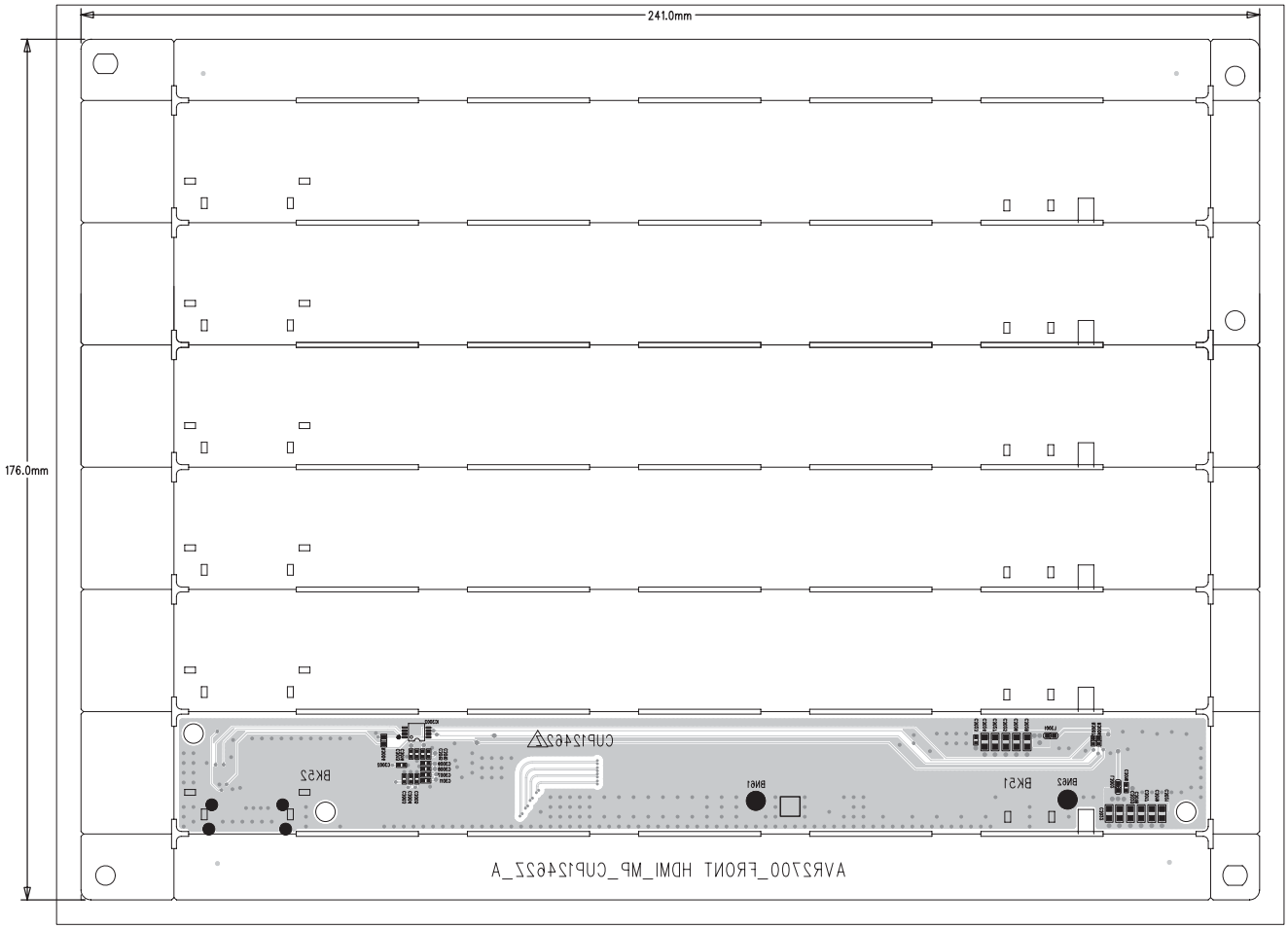
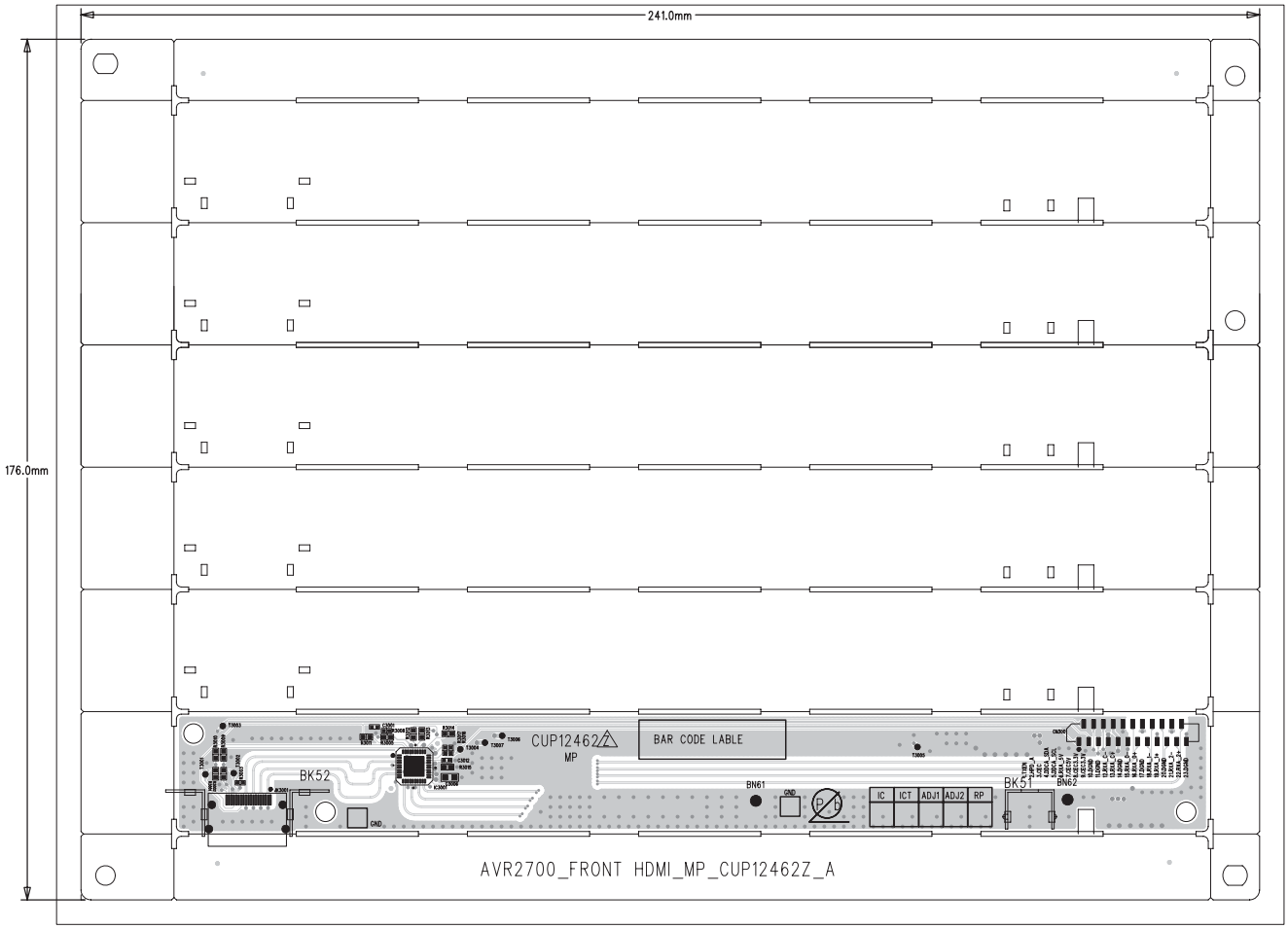
J168
J169
J170
J171
J172
J173
J174
J175
J176
J178
J179
J180
J182
J183
J184
DGND
AGND
+3V3
+12V
ST+5V
REMOTE_OUT
IR_OUT
VID_SW1
VID_SW2
VIDEO_IN
COMP_Y_IN
COMP_Pb_IN
COMP_Pr_IN
VID_SW
SW1
SW2
MUTE
CVBS1
CVBS2

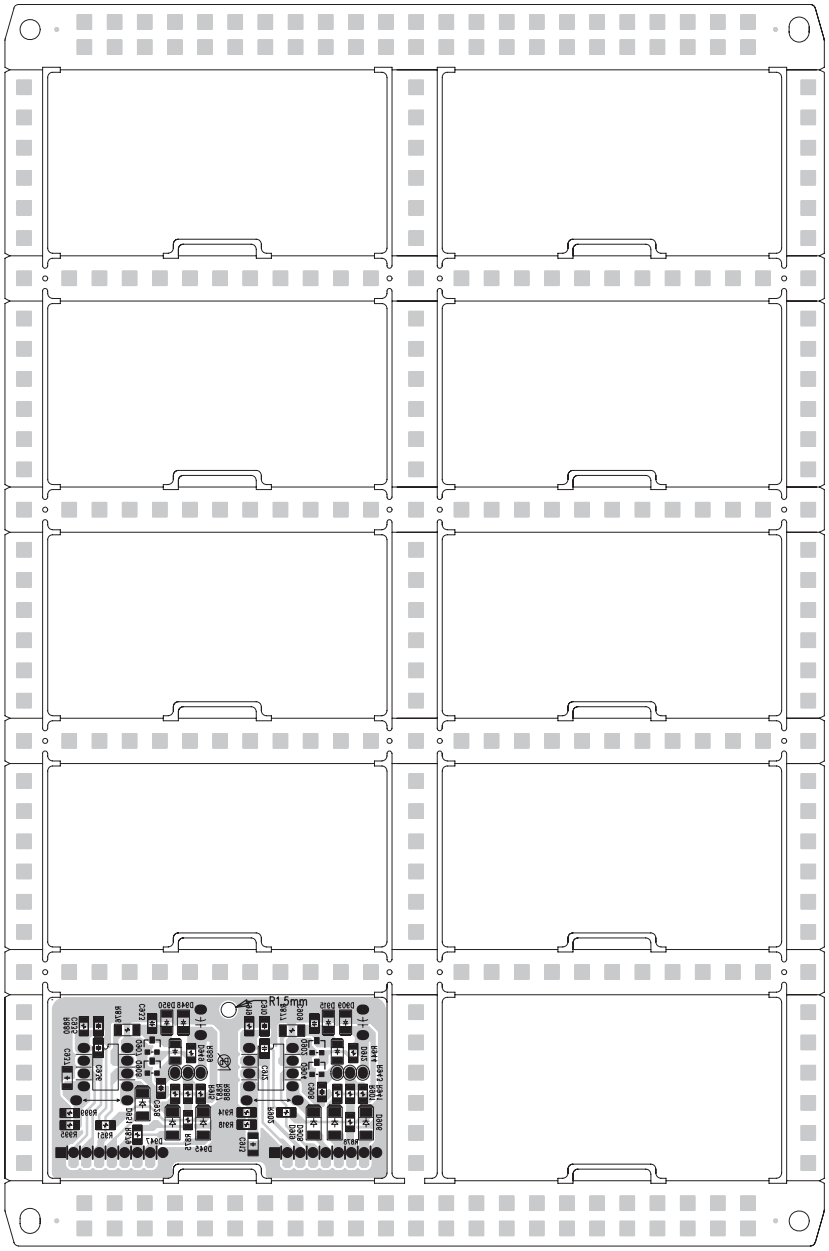

247.0mm
163.0mm
DGND
AGND

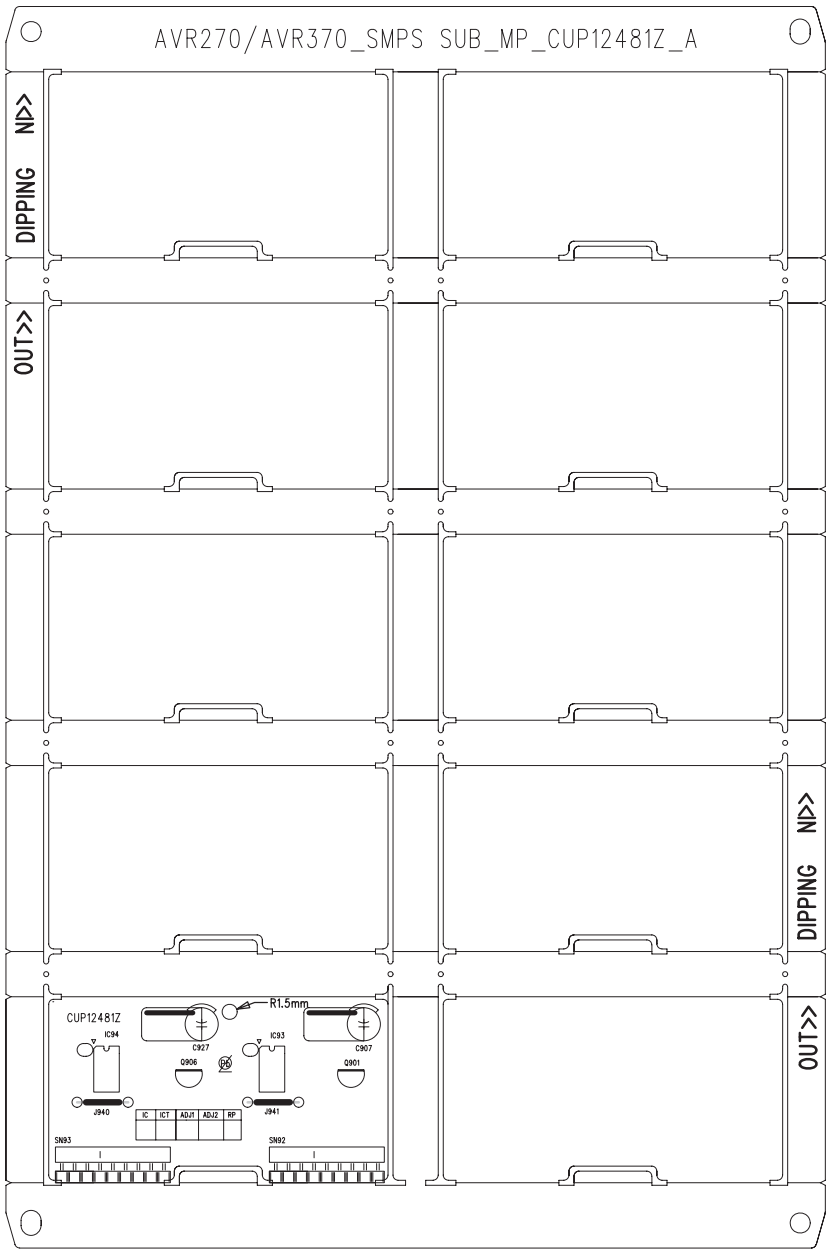


AVRx70_JACK BD_LPP_CUP1 - Fri Jul 13 17:13:50 2012

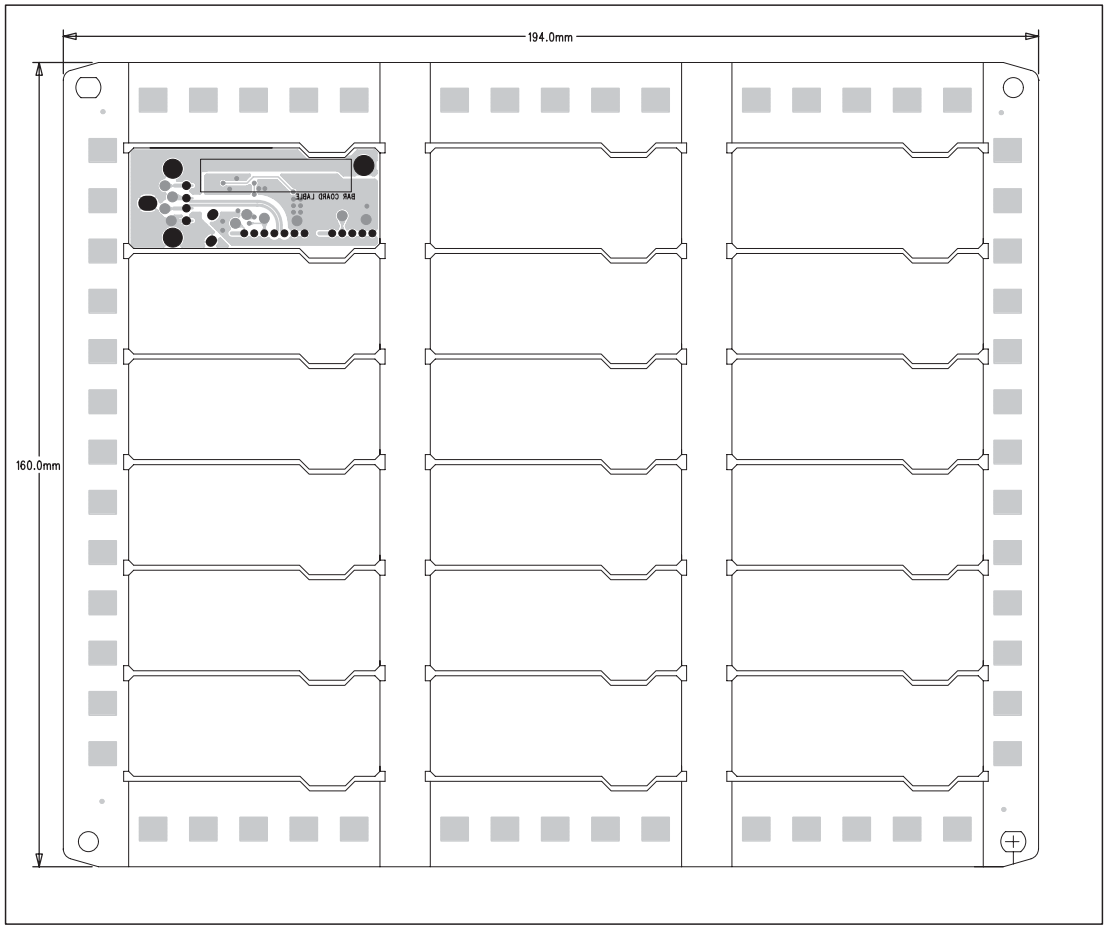

241.0mm
176.0mm
AVR2700_FRONT_HDMI_MP_CUP12462Z_A

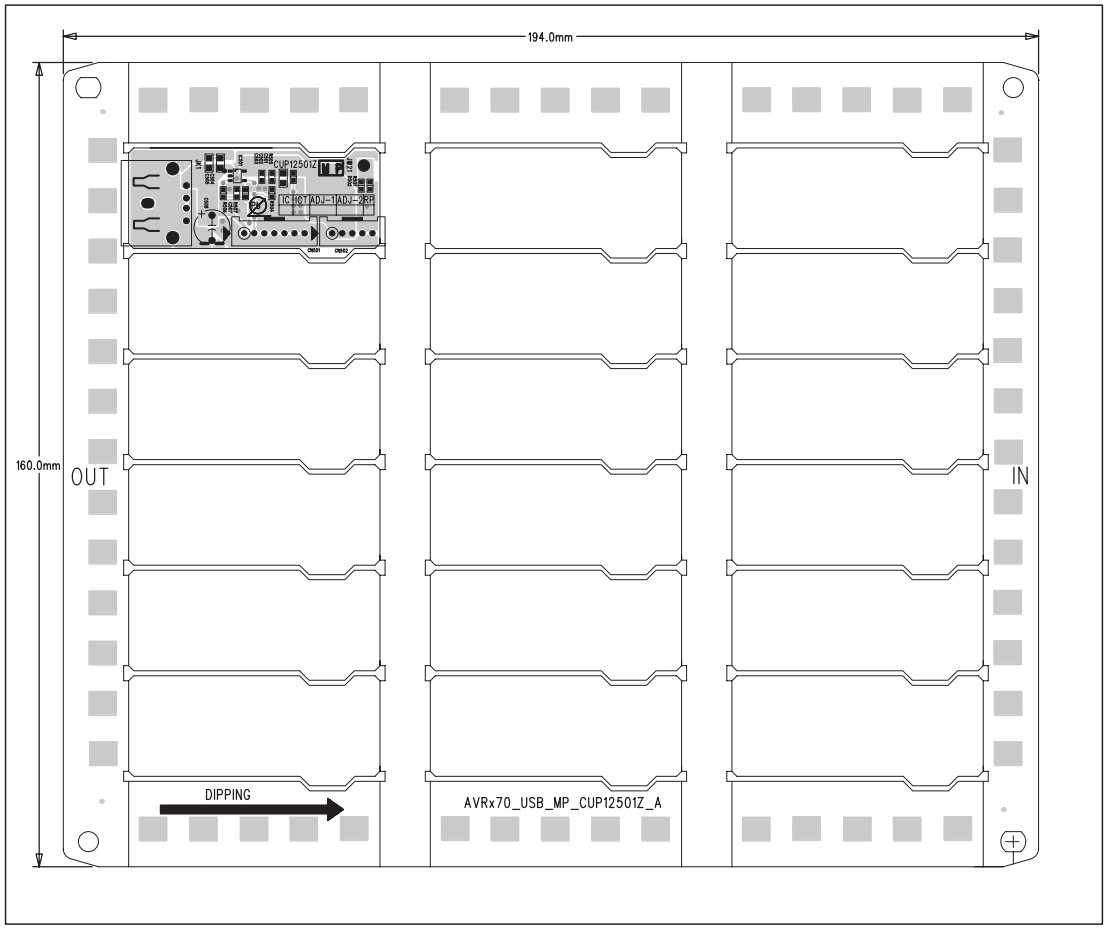

241.0mm
176.0mm
CUP12462Z
MP
BAR CODE LABLE
BK52
BK51
BN61
GND
IC
ICT
ADJ1
ADJ2
RP
AVR2700_FRONT HDMI_MP_CUP12462Z_A





AVR270_370_SMPS SUB_LPP – Tue Sep 11 14:37:23 2012


194.0mm
160.0mm


194.0mm
160.0mm
OUT
IN
DIPPING
AVRx70_USB_MP_CUP12501Z_A

Chassis/Misc Mechanical			
Ref	**Description**	**Parts No.**	**Qty**
	KNOB , VOLUME	CBN1A269B65	1
	INDICATOR , VOLUME	CGL1A300	1
	COVER , JACK	CGR1A539	1
	FRONT PANEL ASS'Y	CGWAVR2700	1
	KNOB , STANDBY	CBT2A1064	1
	KNOB , BACK	CBT2A1065	1
	BADGE , AVR2700	CGB1A252Z	1
	BADGE , HARMAN/KARDON (FRONT)	CGB3A158Z	1
	INDICATOR , POWER AVR155	CGL1A265Y	1
	ORNAMENT , RING	CGR1A538G5	1
	WINDOW , FIP	CGU2A410A25O	1
	PANEL , FRONT AVR270/230	CGW1A527RHYB24	1
	SHEET , VOLUME	CGX1A476Z	1
	SHEET , AL FRONT	CGX6A390C82Z	1
	TAPE , HEMELON	CHS1A032	1
	EARTH , USB	CMC1A438	1
	PLATE , EARTH	CMC3A338	2
	BRACKET , SIDE	CMD2A443	2
	HOLDER , LED	CMH3A215	1
	FILTER , FIP AVR255	CMZ1A127	1
	AVR270 FRONT PCB ASS'Y	COP12455D	1
	AVR270 USB PCB ASS'Y	COP12501D	1
	SHEET , BLIND	CPE1A009	1
	SCREW	CTB3+10JR	28
	SCREW	CTWS3+10GR	2
CN76	WIRE ASS'Y (7P,2.0mm,450mm,Shield)_USB	CWB1C2074504L001	1
WF3001	CARD CABLE , (23P, 350mm, 1mm PITCH, B-type)	CWC4F2A23A350B10	1
WF70	CARD , CABLE (23P,1.25mm,250mm,B,8mm)	CWC4C4A23B250B08	1
	MOTOR , FAN (60X60X25) 12V, 0.1A	CFNRDM6025S	1
	SCREW , SPECIAL	CHD1A036FZR	2
	SCREW , SPECIAL	CHD4A012R	5
	HOLDER , PCB	CHE170	4
	CUSHION , RUBBER	CHG1A160Z	2
	CUSHION	CHG1A236	1
	CUSHION , FOOT AVR350	CHG1A373	4
	CLAMPER	CHR1A305	1
	CLAMPER	CHR301-V1	2
	TAPE , HEMELON	CHS1A032	4
	PANEL , REAR AVR2700	CKF2A459Y	1
	FOOT , A AVR350	CKL1A094	2
	FOOT , B AVR350	CKL1A095	2
	BRACKET , FAN	CMD1A506-V1	1
	BRACKET , HDMI	CMD1A809	2
	COVER , SCREW	CMD1A815	1
	AVR270 DM860A PCB ASS'Y	COP12454D	1
	SPACER , PCB(KCA-34)	CRE1A108	1
	SPACER , B PCB(KCA-11)	CRE1A112	1
	SCREW	CTB3+10JFZR	12
	SCREW	CTB3+6FFZR	11
	SCREW	CTB3+6JR	4
	SCREW	CTB3+8JFZR	6
	SCREW	CTB3+8JR	2
	SCREW	CTS3+8JFZR	4
	SCREW	CTW3+12JR	4
	SCREW	CTW3+8JR	2

	CHASSIS , BOTTOM	CUA2A337	1
	INLET WIRE ASS'Y	CWZAVR2700CN90A	1
CN10	WIRE ASS'Y (3P, 150mm)	CWB1B003150LL	1
F901	FUSE(215Series, 250V/8A)	KBA2C8000TLHEY	1
SW91	SW , ROCKER ASS'Y	CSH2B026ZA	1
	AVR2700 DIGITAL PCB ASS'Y	COP12457D	1
	AVR270 MAIN PCB ASS'Y	COP12459D	1
	AVR2700/3700 JACK PCB ASS'Y	COP12460E	1
	AVR2700 HDMI BUFFER PCB ASS'Y	COP12462D	1
	AVR2700 SMPS PCB ASS'Y	COP12475B	1
	ORNAMENT , COVER	CGX1A472C82	1
	CABINET , TOP AVR170	CKC9A145B64	1
	LABEL , ATTENTION DVD48	CQB1A549Y	1
	LABEL , SERIAL NO	CQB1A622	1
WF61	CARD , CABLE (27p,1.25mm Pitch, 150mm)	CWC4C4A27B150B10	1
	SCREW	CTB3+8JFZR	15
	SCREW	CTB4+6FFZR	6
	INLET WIRE ASS''Y	CWZAVR2700CN90A	1
	SW , ROCKER ASS'Y	CSH2B026ZA	1

FRONT PCB ASS'Y (COP12455D)			
Ref	**Description**	**Parts No.**	**Qty**
	SOLDER , BAR SN PB FREE	C2K86002	5.9
	SOLDER , FLUX WIRE PB FREE(PIE 1.0)	C2K86102	0.6
	TAPE , BOTH SIDE	C4FM073	0.03
	FLUX	C8E534	7.1
BK11	EARTH , PHONE	CMC1A439	1
BK71	BRACKET , FIP	CMD1A572-V1	1
BK72	BRACKET , FIP	CMD1A572-V1	1
BN71	WIRE ASS'Y Locking (YH) (7P,2MM,150MM,#26)	CWB1B007150HC	1
BN72	WIRE ASS'Y (5PIN,2.0mm,120mm)	CWB1B00512077	1
BN73	PIN HEADER(6P, 2.54mm)	CJP06GB142ZB	1
BN78	WIRE ASS'Y Locking (YH) (5P,2MM,100MM,26#)	CWB1B005100HC	1
CN73	FEMALE HEADER(6P, 2.54mm)	CJP06GB143ZB	1
CN78	LOCKING TYPE , STRAIGHT WAFER , 2mm	CJP05GI236ZW	1
D101	L.E.D , WHITE	CVD1L0345W31BOCT201	1
D102	L.E.D , ORANGE	CVD30ASOGCAA-S7	1
D201	L.E.D , WHITE	CVD1L0345W31BOCT201	1
D202	L.E.D , WHITE	CVD1L0345W31BOCT201	1
D203	L.E.D , WHITE	CVD1L0345W31BOCT201	1
FIP1	V.F.D	CFL162BD01GINK	1
IC12	SENSOR , REMOCON	CRVKSM603TE5B	1
IC15	I.C , HEADPHONE (JRC)	HVINJM4556AL	1
JK64	JACK, PHONES(6.35mm,SILVER)	CJJ2E026Z	1
JW19	WIRE ASS'Y	CWE8202150RV	1
Q451	T.R (HFE 200-400, TO-126, EPITAXIAL NPN)	CVTKSD1691GSTU	1
Q452	T.R (HFE 200-400, TO-126, EPITAXIAL NPN)	CVTKSD1691GSTU	1
RL91	RELAY,BC3-12H,DC12V,2C2P	CSL4A016ZU	1
TF94	TRANS , DC-AC (AVR170/270/370)	CLT9Z079ZE	1
VR74	ENCODER	CSR2A037Z	1
WF70	WAFER,FPC 1.25mm,stright	CJP23GA285ZN	1
C108	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
C122	CAP, ELECT(10V/330uF)-S	CCEA1AKS331TC	1
C152	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C251	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C252	CAP, ELECT(50V/2.2uF)-S	CCEA1HKS2R2TC	1
C401	CAP , ELECT (50V/47uF)	CCEA1HH470TC	1

C452	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C453	CAP , ELECT(63V/47uF),105'C	CCEA1JH470TCS	1
C454	CAP , POLYESTER FILM(250V/0.027UF, 5%)	CCME2E273JX14T	1
C455	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C721	CAP, ELECT(50V/2.2uF)-S	CCEA1HKS2R2TC	1
C731	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
C811	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C823	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C901	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C902	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C931	CAP, ELECT(16V/330uF)	CCEA1CH331TC	1
C932	CAP, ELECT(16V/330uF)	CCEA1CH331TC	1
C933	CAP, ELECT(25V/47uF)	CCEA1EH470TC	1
C944	CAP, ELECT(25V/47uF)	CCEA1EH470TC	1
J101	WIRE, COPPER(D0.6)	C3A206	0.03
J102	WIRE, COPPER(D0.6)	C3A206	0.022
J103	WIRE, COPPER(D0.6)	C3A206	0.022
J104	WIRE, COPPER(D0.6)	C3A206	0.025
J105	WIRE, COPPER(D0.6)	C3A206	0.025
J106	WIRE, COPPER(D0.6)	C3A206	0.025
J107	WIRE, COPPER(D0.6)	C3A206	0.02
J108	WIRE, COPPER(D0.6)	C3A206	0.02
J109	WIRE, COPPER(D0.6)	C3A206	0.022
J110	WIRE, COPPER(D0.6)	C3A206	0.027
J111	WIRE, COPPER(D0.6)	C3A206	0.027
J112	WIRE, COPPER(D0.6)	C3A206	0.022
J113	WIRE, COPPER(D0.6)	C3A206	0.025
J114	WIRE, COPPER(D0.6)	C3A206	0.025
J115	WIRE, COPPER(D0.6)	C3A206	0.025
J116	WIRE, COPPER(D0.6)	C3A206	0.025
J117	WIRE, COPPER(D0.6)	C3A206	0.02
J118	WIRE, COPPER(D0.6)	C3A206	0.027
J119	WIRE, COPPER(D0.6)	C3A206	0.032
J120	WIRE, COPPER(D0.6)	C3A206	0.032
J122	WIRE, COPPER(D0.6)	C3A206	0.022
J125	WIRE, COPPER(D0.6)	C3A206	0.03
J126	WIRE, COPPER(D0.6)	C3A206	0.022
J127	WIRE, COPPER(D0.6)	C3A206	0.022
J128	WIRE, COPPER(D0.6)	C3A206	0.025
J131	WIRE, COPPER(D0.6)	C3A206	0.018
J132	WIRE, COPPER(D0.6)	C3A206	0.025
J133	WIRE, COPPER(D0.6)	C3A206	0.022
J134	WIRE, COPPER(D0.6)	C3A206	0.02
J137	WIRE, COPPER(D0.6)	C3A206	0.022
J138	WIRE, COPPER(D0.6)	C3A206	0.022
J139	WIRE, COPPER(D0.6)	C3A206	0.027
J140	WIRE, COPPER(D0.6)	C3A206	0.027
J141	WIRE, COPPER(D0.6)	C3A206	0.03
J142	WIRE, COPPER(D0.6)	C3A206	0.027
J143	WIRE, COPPER(D0.6)	C3A206	0.025
J144	WIRE, COPPER(D0.6)	C3A206	0.025
J145	WIRE, COPPER(D0.6)	C3A206	0.018
J146	WIRE, COPPER(D0.6)	C3A206	0.025
J147	WIRE, COPPER(D0.6)	C3A206	0.03
J148	WIRE, COPPER(D0.6)	C3A206	0.025
J149	WIRE, COPPER(D0.6)	C3A206	0.025
J150	WIRE, COPPER(D0.6)	C3A206	0.022

J151	WIRE, COPPER(D0.6)	C3A206	0.018
J152	WIRE, COPPER(D0.6)	C3A206	0.022
J153	WIRE, COPPER(D0.6)	C3A206	0.022
J154	WIRE, COPPER(D0.6)	C3A206	0.027
J155	WIRE, COPPER(D0.6)	C3A206	0.027
J156	WIRE, COPPER(D0.6)	C3A206	0.022
J157	WIRE, COPPER(D0.6)	C3A206	0.022
J158	WIRE, COPPER(D0.6)	C3A206	0.022
J159	WIRE, COPPER(D0.6)	C3A206	0.02
J160	WIRE, COPPER(D0.6)	C3A206	0.03
J161	WIRE, COPPER(D0.6)	C3A206	0.018
J162	WIRE, COPPER(D0.6)	C3A206	0.022
J163	WIRE, COPPER(D0.6)	C3A206	0.025
J164	WIRE, COPPER(D0.6)	C3A206	0.022
J165	WIRE, COPPER(D0.6)	C3A206	0.018
J166	WIRE, COPPER(D0.6)	C3A206	0.025
J167	WIRE, COPPER(D0.6)	C3A206	0.022
J168	WIRE, COPPER(D0.6)	C3A206	0.022
J169	WIRE, COPPER(D0.6)	C3A206	0.042
J170	WIRE, COPPER(D0.6)	C3A206	0.022
J171	WIRE, COPPER(D0.6)	C3A206	0.042
J172	WIRE, COPPER(D0.6)	C3A206	0.022
J173	WIRE, COPPER(D0.6)	C3A206	0.025
J174	WIRE, COPPER(D0.6)	C3A206	0.022
J175	WIRE, COPPER(D0.6)	C3A206	0.027
J176	WIRE, COPPER(D0.6)	C3A206	0.025
J177	WIRE, COPPER(D0.6)	C3A206	0.03
J178	WIRE, COPPER(D0.6)	C3A206	0.025
J179	WIRE, COPPER(D0.6)	C3A206	0.035
J180	WIRE, COPPER(D0.6)	C3A206	0.025
J181	WIRE, COPPER(D0.6)	C3A206	0.03
J182	WIRE, COPPER(D0.6)	C3A206	0.02
J184	WIRE, COPPER(D0.6)	C3A206	0.025
J185	WIRE, COPPER(D0.6)	C3A206	0.025
J186	WIRE, COPPER(D0.6)	C3A206	0.025
J187	WIRE, COPPER(D0.6)	C3A206	0.025
J188	WIRE, COPPER(D0.6)	C3A206	0.025
J189	WIRE, COPPER(D0.6)	C3A206	0.025
J190	WIRE, COPPER(D0.6)	C3A206	0.018
J191	WIRE, COPPER(D0.6)	C3A206	0.025
J192	WIRE, COPPER(D0.6)	C3A206	0.025
J193	WIRE, COPPER(D0.6)	C3A206	0.025
J194	WIRE, COPPER(D0.6)	C3A206	0.025
J195	WIRE, COPPER(D0.6)	C3A206	0.025
J196	WIRE, COPPER(D0.6)	C3A206	0.022
J197	WIRE, COPPER(D0.6)	C3A206	0.027
J199	WIRE, COPPER(D0.6)	C3A206	0.02
J97	WIRE, COPPER(D0.6)	C3A206	0.025
L452	COIL , CHOKE (220uH)	CLZ9Z112Z	1
Q251	T.R	HVTKTA1271YT	1
S311	SW , TACT	CST1A024ZT	1
S312	SW , TACT	CST1A024ZT	1
S313	SW , TACT	CST1A024ZT	1
S314	SW , TACT	CST1A024ZT	1
S315	SW , TACT	CST1A024ZT	1
S316	SW , TACT	CST1A024ZT	1
S317	SW , TACT	CST1A024ZT	1

S318	SW , TACT	CST1A024ZT	1
S319	SW , TACT	CST1A024ZT	1
S320	SW , TACT	CST1A024ZT	1
S321	SW , TACT	CST1A024ZT	1
S322	SW , TACT	CST1A024ZT	1
S323	SW , TACT	CST1A024ZT	1
S330	SW , TACT	CST1A024ZT	1
C121	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C151	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C161	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C213	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C214	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C311	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C322	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C431	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C441	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C442	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C451	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C456	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C601	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C602	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C603	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C604	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C605	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C644	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C645	CAP, CHIP(1608, 50V/470pF)	CCUS1H471JA	1
C646	CAP, CHIP(1608, 50V/470pF)	CCUS1H471JA	1
C647	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C714	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C732	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C751	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1
C752	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C753	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C754	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C801	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C802	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C813	CAP, CHIP(1608, 50V/47pF)	CCUS1H470JA	1
C821	CAP, CHIP(1608, 50V/470pF)	CCUS1H471JA	1
C822	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C830	CAP, CHIP(1608, 50V/0.047uF)	CCUS1H473KC	1
C911	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C912	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C923	CAP, CHIP(1608, 50V/680pF)	CCUS1H681JA	1
C924	CAP, CHIP(1608, 50V/680pF)	CCUS1H681JA	1
C951	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C952	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
D643	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D644	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D955	DIODE , CHIP , SWITCHING	CVD1SS355T	1
IC13	I.C , HEX INVERTERS(SOIC/D-14P)	CVISN74ACT04DR	1
IC14	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC91	T.R , CHIP(TS6)	HVTKTC812TB	1
IC92	T.R , CHIP(TS6)	HVTKTC812TB	1
L451	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
Q111	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q112	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q113	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1

Q114	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q252	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q721	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q906	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q907	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q955	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
R101	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R102	RES, CHIP(1608/5%/680ohm)	CRJ10DJ681T	1
R104	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R108	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R109	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R110	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R111	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R112	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R113	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R122	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R151	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R201	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R202	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R203	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R211	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R213	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R214	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R251	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1
R252	RES, CHIP(1608/5%/39Kohm)	CRJ10DJ393T	1
R312	RES, CHIP(1608/1%/1Kohm)	CRJ10DF1001T	1
R313	RES, CHIP(1608/1%/1.5Kohm)	CRJ10DF1501T	1
R314	RES, CHIP(1608/1%/1.8Kohm)	CRJ10DF1801T	1
R315	RES, CHIP(1608/1%/2.7Kohm)	CRJ10DF2701T	1
R316	RES, CHIP(1608/1%/3.3Kohm)	CRJ10DF3301T	1
R322	RES, CHIP(1608/1%/1Kohm)	CRJ10DF1001T	1
R323	RES, CHIP(1608/1%/1.5Kohm)	CRJ10DF1501T	1
R324	RES, CHIP(1608/1%/1.8Kohm)	CRJ10DF1801T	1
R325	RES, CHIP(1608/1%/2.7Kohm)	CRJ10DF2701T	1
R326	RES, CHIP(1608/1%/3.3Kohm)	CRJ10DF3301T	1
R327	RES, CHIP(1608/1%/5.6Kohm)	CRJ10DF5601T	1
R328	RES, CHIP(1608/1%/5.6Kohm)	CRJ10DF5601T	1
R401	RES, CHIP(3216/5%/3.3ohm)	CRJ14CJ3R3T	1
R402	RES, CHIP(3216/5%/1ohm)	CRJ14CJ1R0T	1
R404	RES, CHIP(3216/5%/2.2ohm)	CRJ14CJ2R2T	1
R431	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R432	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R451	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R452	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R453	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R454	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R455	RES, CHIP(3216/5%/100ohm)	CRJ14CJ101T	1
R456	RES, CHIP(3216/5%/100ohm)	CRJ14CJ101T	1
R457	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R601	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R602	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R603	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R604	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R605	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R641	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R642	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R643	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1

R644	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R645	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R701	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R702	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R703	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R711	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R712	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R713	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R721	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R722	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R731	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R735	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R741	RES, CHIP(1608/5%/12Kohm)	CRJ10DJ123T	1
R742	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R800	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R811	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R812	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R813	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R821	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R822	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R823	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R834	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1
R835	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R836	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R900	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R901	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R902	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R921	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R922	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R923	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R924	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R925	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R926	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R931	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R932	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R933	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R934	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R935	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R936	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R941	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R942	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R943	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R944	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R945	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R946	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R955	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
ZD451	DIODE , ZENER (CHIP,5.6V)	CVDUDZS5.6BSRH	1
ZD452	DIODE , ZENER (CHIP,5.6V)	CVDUDZS5.6BSRH	1
ZD453	DIODE , ZENER (CHIP,5.6V)	CVDUDZS5.6BSRH	1

USB PCB ASS'Y (COP12501D)

Ref	Description	Parts No.	Qty
CN501	LOCKING TYPE , STRAIGHT WAFER , 2MM	CJP07GI236ZW	1
CN502	LOCKING TYPE , STRAIGHT WAFER , 2mm	CJP05GI236ZW	1
C508	CAP, ELECT(6.3V/100uF)-S	CCEA0JKS101T	1
JK1	JACK , USB (ANGLE TYPE)	CJJ9X012Z	1
JW21	WIRE ASS'Y	CWE8202100RV	1

C501	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C502	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C503	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C504	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C505	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C507	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
IC501	IC, CURRENT LIMIT, 2A	CVISY6288CAAC	1
R504	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R505	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R506	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R507	RES, CHIP(1608/5%/39Kohm)	CRJ10DJ393T	1

DM860A PCB ASS'Y (COP12454D)			
Ref	**Description**	**Parts No.**	**Qty**
	SOLDER , BAR SN PB FREE	C2K86002	6
	SOLDER , FLUX WIRE PB FREE(PIE 1.0)	C2K86102	0.2
	FLUX	C8E534	5.21
CN20	PIN HEADER(2.54 , 32PIN)	CJP32GA239ZB	1
CN21	PIN HEADER (2.54 , 30PIN)	CJP30GA239ZB	1
C3101	CAP , CHIP (3216, 6.3V/22uF)	CCUYAP0J226KC	1
C3102	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C3103	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C3104	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C3205	CAP , CHIP (3216, 6.3V/22uF)	CCUYAP0J226KC	1
C3206	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C3207	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C3208	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C3209	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3218	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3267	CAP, CHIP(1608, 50V/470pF)	CCUS1H471JA	1
C3268	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C3270	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3271	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3272	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3904	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3906	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3907	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3908	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3909	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3910	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3911	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3912	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3913	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3914	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3915	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3916	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3917	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3918	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3923	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3926	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3927	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3928	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3929	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3930	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3931	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3932	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3933	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1

C3934	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3935	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3936	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3937	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3938	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3939	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3944	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3947	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3971	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3972	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
IC394	I.C, 1G NAND FLASH(48P-TSOP1)	CVIH27U1G8F2BTR-BC	1
L3205	FERRITE CHIP BEAD(2012/220R)	CLZ9R006Z	1
L3900	FERRITE CHIP BEAD(2012/220R)	CLZ9R006Z	1
L3901	FERRITE CHIP BEAD(2012/220R)	CLZ9R006Z	1
L3902	FERRITE CHIP BEAD(2012/220R)	CLZ9R006Z	1
Q8301	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
R3101	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3102	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3103	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3104	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R3105	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3106	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3107	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3108	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3109	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3110	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3111	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3112	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3114	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3116	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3203	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R3204	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R3212	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R3299	RES, CHIP(1608/1%/12Kohm)	CRJ10DF1202T	1
R3300	RES, CHIP(1608/1%/100ohm)	CRJ10DF1000T	1
R3303	RES, CHIP(1608/1%/1.5Kohm)	CRJ10DF1501T	1
R3905	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3906	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3907	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R3908	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3909	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3912	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3915	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R3919	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3921	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1
R3929	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3930	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3936	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3938	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3943	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R3946	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3947	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3956	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
R3961	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3962	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3965	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3968	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1

R3969	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3984	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
C3213	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3900	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3901	CAP, CHIP(1608, 50V/8pF)	CCUS1H080DA	1
C3902	CAP, CHIP(1608, 50V/8pF)	CCUS1H080DA	1
C3905	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C3952	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3953	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3954	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3955	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3956	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3957	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3958	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3959	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3960	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3961	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3962	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3963	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C3964	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3965	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
IC322	I.C , Ethernet Transceiver(QFN-24P)	CVILAN8720ACPTR	1
IC390	I.C , Network Media processor(LFBGA-320P)	CVIDM860A-AQE-HK	1
IC392	I.C , 256M SDRAM	CVIW9825G6JH-6	1
L3206	FERRITE CHIP BEAD(2012/220R)	CLZ9R006Z	1
Q8302	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
R3202	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R3211	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3216	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3217	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3218	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3305	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R3902	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3903	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3904	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3910	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3911	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3913	RES, CHIP(1005/5%/10Kohm*4)	CRJ064IJ103T	1
R3914	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R3920	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R3923	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3927	RES, CHIP(1005/5%/2.7Kohm)	CRJ06IJ272T	1
R3928	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1
R3931	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3937	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1
R3939	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3944	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3945	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3953	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R3954	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R3955	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
R3963	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3964	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3966	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3967	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
R3971	RES, CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	1
R3972	RES, CHIP(1005/5%/1.2Kohm)	CRJ06IJ122T	1

R3973	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R3974	RES, CHIP(1005/5%/1.5Kohm)	CRJ06IJ152T	1
R3975	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R3976	RES, CHIP(1005/5%/12Kohm)	CRJ06IJ123T	1
X3900	X-TAL, SMD 3.2X2.5, 24.000MHz, 8PF	COX24000I080ST	1

DIGITAL PCB ASS'Y (COP12457D)			
Ref	**Description**	**Parts No.**	**Qty**
CN53	PIN SOCKET,SMD(14PIN,2.54mm,8.5mm Height,STRAIGHT)	CJP14GA300ZB	1
CN54	PIN SOCKET,SMD(22PIN,2.54mm,8.5mm Height,STRAIGHT)	CJP22GA300ZB	1
CN6	PIN SOCKET,SMD(12PIN,2.54mm,8.5mm Height,STRAIGHT)	CJP12GA300ZB	1
C1	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1014	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1016	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1017	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1018	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1019	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1020	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1105	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1106	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1107	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1108	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1109	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1110	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1111	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1112	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1202	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1203	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1204	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1205	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1206	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1207	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1208	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1209	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1210	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1211	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1212	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1213	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1214	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1215	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1216	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1217	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1218	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1219	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1236	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C1239	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1240	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1243	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1244	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1245	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1246	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1247	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1248	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1249	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1250	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1251	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1252	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1

C1253	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1254	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1255	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1256	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1257	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1258	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1259	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1260	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1261	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1262	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1263	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1264	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1265	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1266	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1267	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1268	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1269	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1270	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1271	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1272	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1273	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1274	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1275	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1276	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1277	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1278	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1279	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1281	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1282	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1283	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1284	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1285	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1287	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1288	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1289	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1291	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1293	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1294	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1295	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1297	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1298	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1299	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1300	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1301	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1302	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1303	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1304	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1305	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1306	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1307	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1308	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1309	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1310	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1311	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1312	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1313	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1314	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1

C1315	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1316	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1317	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1318	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1319	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1320	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1321	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1322	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1323	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1324	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1330	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1331	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1332	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1333	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1334	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1337	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1403	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1404	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1405	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1406	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1407	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1408	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1409	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1410	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1411	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1412	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1413	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1414	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1415	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1416	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1417	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1418	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1419	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1420	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1421	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1422	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1423	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1424	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1425	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1426	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1427	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1428	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1429	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1430	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1431	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1432	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1433	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1434	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1436	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1437	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1438	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1439	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1440	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1441	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1442	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1443	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1446	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1

C1447	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1448	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1449	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1450	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1451	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1452	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1453	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1454	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1456	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1457	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1458	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1460	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1462	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1463	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1464	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1466	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1467	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1468	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1469	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1470	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1472	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1473	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1474	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1475	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1476	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1477	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1478	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1479	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1480	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1481	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1482	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1484	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1485	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1486	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1487	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1489	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1490	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1491	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1492	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1493	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1494	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1495	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1496	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1500	CAP, CHIP(1005, 50V/33pF)	CCUI1H330JA	1
C1506	CAP, CHIP(1608, 16V/0.15uF)	CCUS1C154KC	1
C1507	CAP, CHIP(1005, 25V/0.012uF)	CCUI1E123KC	1
C1508	CAP, CHIP(1608, 16V/0.15uF)	CCUS1C154KC	1
C1509	CAP, CHIP(1005, 25V/0.012uF)	CCUI1E123KC	1
C1517	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C1518	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1521	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1522	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1523	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1524	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1525	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1526	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1527	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1

C1528	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1529	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1530	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1531	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1532	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1533	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1534	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1535	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1536	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1537	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C1539	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1540	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1541	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1542	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1543	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1544	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1545	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1546	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1547	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1548	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1549	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1550	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1551	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1552	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1553	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1554	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1555	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1557	CAP, CHIP(1005, 50V/33pF)	CCUI1H330JA	1
C1562	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1563	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1605	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1607	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1619	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1620	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C1623	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1627	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1653	CAP, CHIP(1608, 10V/4.7uF)	CCUS1A475KC	1
C1661	CAP, CHIP(1608, 6.3V/2.2uF)	CCUS0J225KC	1
C1662	CAP, CHIP(1608, 6.3V/2.2uF)	CCUS0J225KC	1
C1663	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1664	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1665	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1666	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1667	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1702	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1704	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1705	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1707	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1709	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1711	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1712	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1754	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C1757	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1773	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1774	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1775	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1776	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1

C1777	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1778	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1779	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1780	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1782	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1789	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1804	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1805	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1807	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1814	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1815	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1816	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1817	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1819	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1820	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1827	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1834	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1841	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1848	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1855	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1902	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1904	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1906	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C1908	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C1911	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1915	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C1917	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1918	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1919	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1921	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1923	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1926	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1927	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1929	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1930	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1932	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C1937	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1941	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1943	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1945	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C1946	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C1949	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1950	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1954	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1956	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1957	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1960	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1963	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1964	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1965	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1966	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1967	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1968	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1970	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1971	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1973	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1974	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1

C1975	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1977	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1979	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1980	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1981	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1982	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1983	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1985	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1986	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1987	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1988	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1989	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1990	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1991	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1992	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1993	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1994	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1995	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1996	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1997	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1998	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1999	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C2000	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2001	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2002	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2003	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2004	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2005	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2007	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2008	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2009	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2010	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2012	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2014	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2102	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2104	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C2105	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2106	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2112	CAP, CHIP(1608, 6.3V/2.2uF)	CCUS0J225KC	1
C2113	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2114	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2115	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2116	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2117	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2118	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2119	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2120	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2121	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2124	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2125	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2126	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2134	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2205	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2206	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2208	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2209	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1

C2212	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2213	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2219	CAP, CHIP(1608, 50V/0.068uF)	CCUS1H683KC	1
C2220	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2222	CAP, CHIP(1608, 50V/8200pF)	CCUS1H822KC	1
C2223	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2225	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2226	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2233	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2234	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2236	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2237	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2239	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2240	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2247	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2248	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2250	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2251	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2253	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2254	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C2266	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2268	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2269	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2270	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2273	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2274	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2275	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2281	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C2282	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2283	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C2294	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C2295	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C2303	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2305	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2316	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C2317	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C2318	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2319	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2322	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2324	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2328	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C2329	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C2403	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2404	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2405	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2406	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2413	CAP, CHIP(1608, 50V/560pF)	CCUS1H561JA	1
C2414	CAP, CHIP(1608, 50V/560pF)	CCUS1H561JA	1
C2415	CAP, CHIP(1608, 50V/560pF)	CCUS1H561JA	1
C2416	CAP, CHIP(1608, 50V/560pF)	CCUS1H561JA	1
C3	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
D1037	DIODE, SCHOTTKY, 30V	CVDRB521S-30H	1
D1149	DIODE, SCHOTTKY, 30V	CVDRB521S-30H	1
D1703	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D2101	DIODE, SCHOTTKY	CVDBAR43C	1
D3181	DIODE , CHIP , SWITCHING	CVD1SS355T	1
IC1704	I.C, REGULATOR(1.0A, 1.2V, SOT-223)	CVILM1117S12	1

IC1711	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC1714	I.C , 2CH DAC(32BIT,384KHZ,TSSOP-20P)	CVIPCM5100PWR	1
IC1906	I.C , DAC(192kHz STEREO DAC /TSSOP 10)	CVICS4344CZZR	1
IC1911	I.C , SERIAL FLASH(8M)	CVIMX25L8006EM2I-12G	1
IC2102	I.C , RESET (2.8V , SOT-89)	CVIML61C282PR	1
IC2106	I.C , EEPROM (32 Kbit) ST	CVIM24C32WMN6TP	1
IC2207	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2209	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2210	I.C , VIDEO 2CH	CVIBD3812F	1
IC2212	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2217	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2220	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2221	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2222	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2223	IC , SIGNAL LEVEL SENSOR	CVINJU7181RB1	1
IC2224	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
L1101	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1202	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1204	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1205	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1206	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1209	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1211	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1212	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1215	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1603	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1610	FERRITE CHIP BEAD(2012/220R, CB05YTYH221)	CLZ9R018V	1
L1611	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1703	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1714	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1717	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1731	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1903	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1904	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
Q1	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q1005	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1006	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1201	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1202	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1606	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q1703	T.R,2SA1954	CVT2SA1954	1
Q1704	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1705	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1901	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q2	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2101	T.R , MUTE	CVTINC2001AC1	1
Q2104	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2201	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2202	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2203	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2204	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2205	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2206	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2207	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2208	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2209	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2210	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1

Q2211	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q2212	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2213	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q3	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
RN1207	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1208	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1411	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1413	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1904	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1916	RES, CHIP(1608/5%/10Kohm*4)	CRJ104DJ103T	1
R1	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1016	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1025	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1026	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1027	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1028	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1029	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1030	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1031	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1033	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1034	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1035	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1036	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1037	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1038	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1039	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1041	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1042	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1045	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1046	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1116	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1125	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1126	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1127	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1128	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1129	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1132	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1133	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1134	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1135	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1136	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1137	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1138	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1142	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1143	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1144	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1201	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1202	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1203	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1205	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1207	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1208	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1209	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1211	RES, CHIP(1005/5%/100Kohm)	CRJ06IJ104T	1
R1212	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1213	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1217	RES, CHIP(1005/5%/680ohm)	CRJ06IJ681T	1

R1218	RES, CHIP(1005/5%/680ohm)	CRJ06IJ681T	1
R1219	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1220	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1222	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1224	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1226	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1228	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1230	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1232	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1234	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1235	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1236	RES, CHIP(1005/5%/2.2Kohm)	CRJ06IJ222T	1
R1237	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1238	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1244	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1245	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1246	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1247	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1248	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1249	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1250	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1251	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1252	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1253	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1254	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1255	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1256	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1257	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1262	RES, CHIP(1005/5%/2Kohm)	CRJ06IJ202T	1
R1265	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1272	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1273	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1280	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1413	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1414	RES, CHIP(1608/1%/1Kohm)	CRJ10DF1001T	1
R1415	RES, CHIP(1608/1%/1Kohm)	CRJ10DF1001T	1
R1416	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1423	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1424	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1425	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1426	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1427	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1428	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1431	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1433	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1436	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1441	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1442	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1453	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1454	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1457	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1458	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1472	RES, CHIP(1608/1%/180ohm)	CRJ10DF1800T	1
R1473	RES, CHIP(1608/1%/2.7Kohm)	CRJ10DF2701T	1
R1474	RES, CHIP(1608/1%/180ohm)	CRJ10DF1800T	1
R1475	RES, CHIP(1608/1%/2.7Kohm)	CRJ10DF2701T	1
R1477	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1

R1478	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1
R1479	RES, CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	1
R1480	RES, CHIP(1005/5%/1.8Kohm)	CRJ06IJ182T	1
R1483	RES, CHIP(1608/5%/5.1ohm)	CRJ10DJ5R1T	1
R1485	RES, CHIP(1608/1%/51ohm)	CRJ10DF51R0T	1
R1486	RES, CHIP(1608/1%/51ohm)	CRJ10DF51R0T	1
R1493	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1494	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1495	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1496	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1497	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1502	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1503	RES, CHIP(1608/1%/2Kohm)	CRJ10DF2001T	1
R1504	RES, CHIP(1608/1%/2Kohm)	CRJ10DF2001T	1
R1510	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1515	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1518	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1519	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1520	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1521	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1522	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1523	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1524	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1525	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1526	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1527	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1528	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1529	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1530	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1532	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1535	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1605	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1608	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1610	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1620	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1621	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1622	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1623	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1624	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1626	RES, CHIP(1608/5%/470ohm)	CRJ10DJ471T	1
R1627	RES, CHIP(1608/5%/470ohm)	CRJ10DJ471T	1
R1675	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1681	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1682	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1683	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R1684	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R1701	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1704	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1730	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1731	RES, CHIP(1005/5%/3.3Kohm)	CRJ06IJ332T	1
R1763	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1790	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1791	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1817	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R1872	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R1902	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1903	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1

R1904	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1906	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R1907	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R1908	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1909	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R1912	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1913	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R1915	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R1916	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R1917	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1918	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1919	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1920	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1921	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1922	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1923	RES, CHIP(1608/1%/1.37Kohm)	CRJ10DF1371T	1
R1924	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1925	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1926	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R1928	RES, CHIP(1608/5%/56ohm)	CRJ10DJ560T	1
R1929	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R1930	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R1931	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1945	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1947	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R1948	RES, CHIP(1608/1%/5.1Kohm)	CRJ10DF5101T	1
R1950	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1951	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1954	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1955	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1956	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1957	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1958	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1965	RES, CHIP(1608/5%/82ohm)	CRJ10DJ820T	1
R1970	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1971	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1972	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1973	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1974	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1977	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1978	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1989	RES, CHIP(1608/5%/470ohm)	CRJ10DJ471T	1
R1990	RES, CHIP(1608/5%/470ohm)	CRJ10DJ471T	1
R1991	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1992	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1995	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R1996	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R1998	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2000	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2104	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2105	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2109	RES, CHIP(1608/5%/220Kohm)	CRJ10DJ224T	1
R2110	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2113	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2119	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2121	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1

R2122	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2131	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2134	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2135	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2149	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2150	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2151	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R2152	RES, CHIP(1608/5%/2.7Kohm)	CRJ10DJ272T	1
R2159	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1
R2160	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1
R2169	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2170	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2171	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2173	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2175	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2180	RES, CHIP(1608/5%/20Kohm)	CRJ10DJ203T	1
R2183	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2184	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2185	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2188	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2189	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2190	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2192	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2193	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2197	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2201	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2207	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2209	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2210	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2211	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2212	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2213	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2214	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2215	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2216	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2217	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2218	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2219	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2225	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2227	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2228	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2229	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2230	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2231	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2232	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2233	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2234	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2235	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2236	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2237	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2243	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2245	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2246	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2247	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2248	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2249	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2250	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1

R2251	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2252	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2253	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2254	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2255	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2261	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2263	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2264	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2265	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2266	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2267	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2268	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2269	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2270	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2271	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2272	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2284	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2286	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2287	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R2288	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R2289	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2290	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2291	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2292	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2295	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2296	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2297	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2298	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2299	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ562T	1
R2300	RES, CHIP(1608/5%/1.2Kohm)	CRJ10DJ122T	1
R2301	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ562T	1
R2302	RES, CHIP(1608/5%/1.2Kohm)	CRJ10DJ122T	1
R2303	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2304	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2305	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2306	RES, CHIP(1608/5%/1.8Kohm)	CRJ10DJ182T	1
R2307	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2308	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2309	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2310	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2311	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2312	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2313	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2314	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2315	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2316	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2317	RES, CHIP(1608/5%/220Kohm)	CRJ10DJ224T	1
R2319	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2320	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2321	RES, CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1
R2322	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2323	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2324	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2325	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R2326	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2327	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2332	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1

R2333	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2334	RES, CHIP(1608/5%/2.2Kohm)	CRJ10DJ222T	1
R2335	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2336	RES, CHIP(1608/5%/1.2Kohm)	CRJ10DJ122T	1
R2337	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ562T	1
R2338	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2339	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2340	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2341	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2343	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2346	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2348	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2349	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2350	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2351	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2352	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2353	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2355	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2357	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2360	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2361	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2362	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2363	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2364	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2365	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2366	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2367	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2368	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2369	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2370	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2371	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2372	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2373	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2374	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2375	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2377	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2379	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2380	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2381	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2382	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2401	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2402	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2403	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2404	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2405	RES, CHIP(1608/5%/1.2Kohm)	CRJ10DJ122T	1
R2406	RES, CHIP(1608/5%/1.2Kohm)	CRJ10DJ122T	1
R2407	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ562T	1
R2408	RES, CHIP(1608/5%/5.6Kohm)	CRJ10DJ562T	1
R2409	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2410	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
BN10	WAFER , SMD (2MM PITCH)-3P	CJP03GA208ZY	1
CN1	WAFER, FFC, SMD(23P-1mm, STRAIGHT)	CJP23GA193ZY	1
CN10	WAFER , SMD (2MM PITCH)-3P	CJP03GA208ZY	1
CN11	WAFER, FFC, SMD(07P-1mm, STRAIGHT)	CJP07GA193ZY	1
CN121	WAFER, FFC, SMD(09-1mm, STRAIGHT)	CJP09GA193ZY	1
CN15	WAFER, FFC, SMD(07P-1mm, STRAIGHT)	CJP07GA193ZY	1
CN1603	WAFER, FFC, SMD(07P-1mm, STRAIGHT)	CJP07GA193ZY	1

CN20	PIN SOCKET,SMD(32PIN,2.54mm,8.5mm Height,STRAIGHT)	CJP32GA300ZB	1
CN21	PIN SOCKET,SMD(30PIN,2.54mm,8.5mm Height,STRAIGHT)	CJP30GA300ZB	1
CN52	WAFER, 20037WR-NN Series, 2mm, SMD, ANGLE, 15P	CJP15GB276ZY	1
CN76	WAFER, 2mm, SMD, Vertical, 07p	CJP07GA208ZY	1
C100	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1001	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1002	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1003	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1013	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1015	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1101	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1102	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1103	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1104	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1201	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1220	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1221	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1222	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1225	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1226	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1227	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1228	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1229	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1230	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1231	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1232	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1233	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1234	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1235	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1237	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1280	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1286	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1290	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1292	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1296	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1325	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1326	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1327	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1328	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1329	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1335	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1336	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1435	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1444	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1445	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1455	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1459	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1461	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1465	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1471	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1483	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1488	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1497	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
C1498	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1499	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1501	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1502	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1

C1516	CAP, CHIP(1608, 10V/1uF)	CCUS1A105KC	1
C1520	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1538	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1556	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1560	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1561	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1610	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1611	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1616	CAP, CHIP(1005, 25V/0.022uF)	CCUI1E223KC	1
C1617	CAP, CHIP(1005, 50V/1000pF)	CCUI1H102KC	1
C1618	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C1621	CAP, CHIP(1005, 50V/15pF)	CCUI1H150JA	1
C1622	CAP, CHIP(1005, 50V/15pF)	CCUI1H150JA	1
C1626	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1629	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1630	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1
C1631	CAP, CHIP(1608, 50V/2200pF)	CCUS1H222KC	1
C1632	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C1633	CAP , CHIP (3216, 6.3V/22uF)	CCUYAP0J226KC	1
C1634	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1635	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1636	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1637	CAP , CHIP (3216, 6.3V/22uF)	CCUYAP0J226KC	1
C1638	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1639	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1640	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1641	CAP , CHIP (3216, 6.3V/22uF)	CCUYAP0J226KC	1
C1642	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1643	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1644	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C1651	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1652	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1701	CAP,ALUMINUM ELECTROLYTIC (6.3V/220uF)	CCEC0JMVG221T	1
C1703	CAP,ALUMINUM ELECTROLYTIC (6.3V/220uF)	CCEC0JMVG221T	1
C1706	CAP,ALUMINUM ELECTROLYTIC (6.3V/220uF)	CCEC0JMVG221T	1
C1708	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C1710	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C1750	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1751	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1752	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1753	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1755	CAP, CHIP(1608, 50V/0.022uF)	CCUS1H223KC	1
C1760	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1767	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1768	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1769	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1770	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1771	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1772	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1781	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1787	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1788	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1790	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1791	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1793	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1795	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1797	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1

C1798	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1799	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1800	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1802	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1803	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1806	CAP,ALUMINUM ELECTROLYTIC (6.3V/47uF)	CCEC0JMVG470T	1
C1812	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1813	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1818	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1821	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1822	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1823	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1824	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1825	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1826	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1828	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1829	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1830	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1831	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1832	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1833	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1835	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1836	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1837	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1838	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1839	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1840	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1842	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1843	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1844	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1845	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1846	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1847	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1849	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1850	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1851	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1852	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1853	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1854	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1856	CAP, CHIP(1608, 50V/0.015uF)	CCUS1H153KC	1
C1857	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1858	CAP, CHIP(2012, 10V/2.2uF)	CCUC1A225KC	1
C1859	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1860	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1861	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1866	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1867	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1868	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1869	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1870	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1871	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1901	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1903	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1905	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C1907	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1909	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1910	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1

C1912	CAP, CHIP(1608, 50V/100pF)	CCUS1H101JA	1
C1913	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C1914	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1916	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1920	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1922	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1924	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1925	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C1928	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1931	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1933	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1934	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1935	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1936	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1938	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1939	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1940	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C1942	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C1944	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C1947	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1948	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1951	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1952	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C1953	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1955	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1958	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1959	CAP, CHIP(1608, 50V/10pF)	CCUS1H100JA	1
C1961	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1972	CAP, CHIP(1608, 50V/15pF)	CCUS1H150JA	1
C1976	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1978	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C1984	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2006	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2011	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2013	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2103	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C2107	CAP, CHIP(1608, 50V/12pF)	CCUS1H120JA	1
C2108	CAP, CHIP(1608, 50V/12pF)	CCUS1H120JA	1
C2109	CAP, CHIP(1608, 6.3V/2.2uF)	CCUS0J225KC	1
C2110	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C2111	CAP, CHIP(1608, 50V/150pF)	CCUS1H151JA	1
C2122	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2123	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2128	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2132	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C2133	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2135	CAP, CHIP(1608, 6.3V/4.7uF, MURATA GRM18)	CCUS0J475KC	1
C2201	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2202	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2203	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2204	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2207	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2210	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2211	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2214	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2215	CAP, CHIP(1608, 50V/0.068uF)	CCUS1H683KC	1
C2216	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1

C2217	CAP, CHIP(1608, 50V/8200pF)	CCUS1H822KC	1
C2218	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2221	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2224	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2227	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2228	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2229	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2230	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2231	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2232	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2235	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2238	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2241	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2242	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2243	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2244	CAP, CHIP(1608, 50V/2700pF)	CCUS1H272KC	1
C2245	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2246	CAP, CHIP(1608, 50V/390pF)	CCUS1H391JA	1
C2249	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2252	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2255	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2256	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2257	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2258	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2265	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2267	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2271	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2272	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2276	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C2277	CAP, CHIP(2012, 10V/22uF)	CCUC1A226KC	1
C2278	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2279	CAP,ALUMINUM ELECTROLYTIC (16V/470uF)	CCEC1CMVG471T	1
C2280	CAP,ALUMINUM ELECTROLYTIC (16V/470uF)	CCEC1CMVG471T	1
C2287	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2288	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2289	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2290	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2291	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2292	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2293	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2296	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2297	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2298	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2299	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2300	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2301	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2302	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2304	CAP,ALUMINUM ELECTROLYTIC CAPACITORS(16V/100uF)	CCEC1CMVG101T	1
C2314	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2320	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2321	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2323	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2325	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2326	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2327	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2330	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2331	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1

C2332	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2333	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2334	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2335	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2336	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2401	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2402	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2407	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
C2408	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCEC1CMVG100T	1
D100	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D1240	DIODE, SCHOTTKY, 30V	CVDRB521S-30H	1
D1610	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D1611	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D2102	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D2103	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D2201	DIODE, SCHOTTKY	CVD1SR159-200H	1
D2202	DIODE, SCHOTTKY	CVD1SR159-200H	1
IC10	SENSOR , TEMPERATURE	CRTLM94022BIMG	1
IC1001	I.C , HDMI MUX	CVIADV3002BSTZ	1
IC1101	I.C , HDMI MUX	CVIADV3002BSTZ	1
IC1201	I.C , HDMI RX/Decoder (BGA-425P)	CVIADV7850KBCZ-5_A	1
IC1202	I.C, 512MB DDR2	CVIK4T51163QI-HCE7	1
IC1203	I,C , OCTAL BUS BUFFER (TOSHIBA)	CVITC74VCX541FT	1
IC1204	I,C , OCTAL BUS BUFFER (TOSHIBA)	CVITC74VCX541FT	1
IC1205	I.C , DE/MUX (8CH ANALOG,TSSOP-16P)	CVITC74VHC4051AFT	1
IC1303	I.C , DDR2 SDRAM(1G,800MHZ,FBGA)	CVIK4T1G164QF-BCF7	1
IC1304	I.C , DDR2 SDRAM(1G,800MHZ,FBGA)	CVIK4T1G164QF-BCF7	1
IC1401	I.C , VSP (WITH HDMI TX,FROM ADI)	CVIADV8003KBCZ8B_A	1
IC1402	I.C , SERIAL FLASH(128M,SOP-16)	CVIMX25L12845EMI-10G	1
IC1602	I.C , USB2.0 Multiplexer(TQFN-10P)	CVIISL54220IUZ-T	1
IC1604	IC, Apple iPod Authentication coprocessor 2.0c	CVIMFI337S3959-HK	1
IC1701	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1702	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1703	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1706	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1707	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1708	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1709	I.C , DC DC CONVERTER(3A,700KHZ,SOP-8P)	CVIDB1230HETR	1
IC1901	I.C , CODEC + DIR (CIRRUS LOGIC)	HVICS42528-CQ	1
IC1902	EOL item I.C , DSP (CIRRUS LOGIC)	CVICS497024CVZ	1
IC1904	IC, OP AMP	HVINJM2115MDTE1	1
IC1905	IC, OP AMP	HVINJM2115MDTE1	1
IC1907	I.C , SERIAL FLASH(8M)	CVIMX25L8006EM2I-12G	1
IC1908	I,C , OCTAL BUS BUFFER (TOSHIBA)	CVITC74VCX541FT	1
IC1909	I.C, QUAD 2-CHANNEL MUX(TSSOP-16)	HVITC74VHC157FT	1
IC1910	I.C , DSP (DOLBY VOLUME) CIRRUS LOGIC	CVICS49DV8CCVZ	1
IC1912	I.C, 16MB SDRAM(TSOP-50P)	CVIM12L16161A5TG2Q	1
IC2103	I.C , FLASH MCU (32 BIT, 1MB, LQFP 144)	CVISTM32F205ZGT6	1
IC2105	I.C, REGULATOR(1.0A,3.3V,TO252-(1))	CVIDB1510BT3TR33	1
IC2201	I.C , INPUT WITH 8CH VOLUME(52P LQFP)	CVINJU72340AFH3	1
IC2202	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2203	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2204	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2205	I.C , OPAMP(DUAL/LOW NOISE)_Copper	CVIAZ4580MTR-E1-CU	1
IC2208	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2213	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2214	T.R , CHIP(TS6)	HVTKTC812TB	1

IC2215	IC, REGULATOR(1A, 8V)	CVILM7808RTRL	1
IC2216	IC, REGULATOR(1A, -8V)	CVILM7908RTRL	1
IC2218	T.R , CHIP(TS6)	HVTKTC812TB	1
IC2219	T.R , CHIP(TS6)	HVTKTC812TB	1
JK1001	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1002	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1003	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1004	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1005	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1006	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1007	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
JK1300	Jack, RJ-45 With TR (SMT)	CJJ9L026Z	1
JK1401	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
L1001	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1201	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1203	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1207	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1208	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1210	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1213	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1214	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1401	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1402	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1403	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1404	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1405	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1406	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1407	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1408	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1409	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1410	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1411	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1412	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1413	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1420	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1421	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1422	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1605	COIL, CHOKE CHIP(2012/180R)	CLZ9Z127Z	1
L1607	COIL, CHOKE CHIP(2012/90R)	CLZ9Z128Z	1
L1608	COIL, CHOKE CHIP(2012/90R)	CLZ9Z128Z	1
L1609	FERRITE CHIP BEAD(2012/220R, CB05YTYH221)	CLZ9R018V	1
L1701	COIL , SMD POWER (10uH/3A)	CLQ12E100MRZ	1
L1702	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1704	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1705	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1706	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1715	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1716	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L1718	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1719	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1720	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1721	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1722	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1723	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1727	FERRITE , CHIP BEAD(60ohm, 2012)	CLZ9R001Z	1
L1728	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1729	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1

L1730	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1733	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1734	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1735	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1736	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1737	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1738	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1739	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1740	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1741	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1742	COIL,SMD POWER(1.5uH/2A)	CLQ18E1R5NRZ	1
L1901	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L1902	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L2102	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
Q1001	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1002	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1003	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1004	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1101	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1102	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1103	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1104	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1105	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q1106	T.R,RT1N241C(22K-22K)	CVTRT1N241C	1
Q1204	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1205	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1206	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1701	T.R,RT1N441C(47K-47K)	CVTRT1N441C	1
Q1702	MOSFET,TPC6111(P-CH,U-MOSV)	CVTTPC6111	1
Q1706	MOSFET,TPC6111(P-CH,U-MOSV)	CVTTPC6111	1
Q2102	T.R,2SC3052	CVT2SC3052	1
Q2103	T.R,2SC3052	CVT2SC3052	1
Q2105	T.R , CHIP , SOT-23	HVTKTA1504SYRTK	1
Q2106	T.R , CHIP , SOT-23	HVTKTC3875SYRTK	1
Q2107	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q2108	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
RN1201	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1202	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1203	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1204	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1205	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1206	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1209	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1210	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1211	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1212	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1213	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1214	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1215	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1216	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1408	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
RN1409	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
RN1410	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1412	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1414	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1415	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1416	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1

RN1417	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1418	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1419	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1420	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1421	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1422	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1423	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1424	RES, CHIP(1005/5%/47ohm*4)	CRJ064IJ470T	1
RN1901	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1902	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1903	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1905	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1906	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1907	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1908	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1909	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1910	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1911	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1912	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1913	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1914	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1915	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1917	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN1918	RES, CHIP(1005/5%/33ohm*4)	CRJ064IJ330T	1
RN2101	RES, CHIP(1608/5%/100ohm*4)	CRJ104DJ101T	1
RN2102	RES, CHIP(1608/5%/100ohm*4)	CRJ104DJ101T	1
RN2103	RES, CHIP(1608/5%/100ohm*4)	CRJ104DJ101T	1
RN2104	RES, CHIP(1608/5%/100ohm*4)	CRJ104DJ101T	1
RN2106	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
RN2107	RES, CHIP(1608/5%/33ohm*4)	CRJ104DJ330T	1
R1001	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1002	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1003	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1004	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1005	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1006	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1007	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1008	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1009	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1010	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1011	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1012	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1013	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1014	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1015	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1017	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1018	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1061	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1062	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1063	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1064	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1065	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1066	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1101	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1102	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1103	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1104	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1

R1105	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1106	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1
R1107	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1108	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1109	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1110	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1111	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1112	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1
R1113	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1114	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1115	RES, CHIP(1005/5%/22Kohm)	CRJ06IJ223T	1
R1117	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1118	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1
R1119	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1123	RES, CHIP(1005/5%/47Kohm)	CRJ06IJ473T	1
R1124	RES, CHIP(1005/5%/100ohm)	CRJ06IJ101T	1
R1180	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1206	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1214	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1215	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R1221	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1223	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1225	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1227	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1229	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1231	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1233	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1239	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1241	RES, CHIP(1005/5%/1Kohm)	CRJ06IJ102T	1
R1243	RES, CHIP(1608/1%/470ohm)	CRJ10DF4700T	1
R1258	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1259	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1260	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1261	RES, CHIP(1608/5%/24ohm)	CRJ10DJ240T	1
R1263	RES, CHIP(1005/5%/680ohm)	CRJ06IJ681T	1
R1264	RES, CHIP(1005/5%/680ohm)	CRJ06IJ681T	1
R1266	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1267	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1268	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1269	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1350	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1417	RES, CHIP(1005/5%/56ohm)	CRJ06IJ560T	1
R1418	RES, CHIP(1005/5%/56ohm)	CRJ06IJ560T	1
R1419	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1429	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1430	RES, CHIP(1005/5%/39ohm)	CRJ06IJ390T	1
R1434	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1435	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R1437	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1438	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1439	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1443	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1444	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1445	RES, CHIP(1005/5%/33ohm)	CRJ06IJ330T	1
R1446	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1447	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1448	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1

R1449	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1450	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R1466	RES, CHIP(1608/1%/1.37Kohm)	CRJ10DF1371T	1
R1467	RES, CHIP(1608/1%/2.2Kohm)	CRJ10DF2201T	1
R1489	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1490	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1491	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1492	RES, CHIP(1005/5%/47ohm)	CRJ06IJ470T	1
R1501	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1505	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1507	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1508	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1509	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1511	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1512	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1513	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1514	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1516	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1517	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1531	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1533	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1534	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1
R1609	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1611	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1612	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1615	RES, CHIP(1005/5%/10ohm)	CRJ06IJ100T	1
R1616	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1617	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1618	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1619	RES, CHIP(1608/5%/51ohm)	CRJ10DJ510T	1
R1625	RES, CHIP(1005/5%/10Kohm)	CRJ06IJ103T	1
R1628	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1629	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1630	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1631	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1632	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1633	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1634	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1635	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1636	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1637	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1638	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1639	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1641	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1643	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1702	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1703	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1705	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1706	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1707	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1708	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1709	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1710	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1711	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1712	RES, CHIP(1608/1%/15Kohm)	CRJ10DF1502T	1
R1713	RES, CHIP(1608/1%/47Kohm)	CRJ10DF4702T	1
R1714	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1

R1715	RES, CHIP(1608/1%/14.3Kohm)	CRJ10DF1432T	1
R1716	RES, CHIP(1608/1%/18Kohm)	CRJ10DF1802T	1
R1717	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1718	RES, CHIP(1608/1%/14.3Kohm)	CRJ10DF1432T	1
R1719	RES, CHIP(1608/1%/18Kohm)	CRJ10DF1802T	1
R1720	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1721	RES, CHIP(1608/1%/14.3Kohm)	CRJ10DF1432T	1
R1722	RES, CHIP(1608/1%/18Kohm)	CRJ10DF1802T	1
R1723	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1724	RES, CHIP(1608/1%/14.3Kohm)	CRJ10DF1432T	1
R1725	RES, CHIP(1608/1%/18Kohm)	CRJ10DF1802T	1
R1726	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1727	RES, CHIP(1608/1%/15Kohm)	CRJ10DF1502T	1
R1728	RES, CHIP(1608/1%/47Kohm)	CRJ10DF4702T	1
R1740	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1741	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1743	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1744	RES, CHIP(1608/1%/15Kohm)	CRJ10DF1502T	1
R1745	RES, CHIP(1608/1%/47Kohm)	CRJ10DF4702T	1
R1750	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1751	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1752	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1753	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1754	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1755	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1756	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1757	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1758	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1760	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1761	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1762	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1792	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1793	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1839	RES, CHIP(1608/5%/39Kohm)	CRJ10DJ393T	1
R1840	RES, CHIP(1608/5%/39Kohm)	CRJ10DJ393T	1
R1841	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1901	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1905	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1910	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1911	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R1914	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1927	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1932	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1933	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1934	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1935	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1936	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1937	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1938	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1939	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R1940	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1941	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1942	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1943	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1944	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R1946	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1949	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1

R1952	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1953	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1959	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1960	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1961	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1962	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1963	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1967	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1968	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1969	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1975	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1976	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1979	RES, CHIP(1608/5%/75ohm)	CRJ10DJ750T	1
R1980	RES, CHIP(1608/1%/5.1Kohm)	CRJ10DF5101T	1
R1981	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1982	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R1984	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1985	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1986	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1987	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1988	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1993	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R1994	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R1997	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R1999	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2101	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2103	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2106	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R2111	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2112	RES, CHIP(1608/5%/2.2Mohm)	CRJ10DJ225T	1
R2114	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2115	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R2116	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2117	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2118	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2125	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2126	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2137	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R2138	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2139	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2140	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2141	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2142	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2143	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2144	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2145	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2146	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2147	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R2148	RES, CHIP(1608/5%/10ohm)	CRJ10DJ100T	1
R2153	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2154	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2155	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2156	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2158	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2161	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2162	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1
R2163	RES, CHIP(1608/5%/33ohm)	CRJ10DJ330T	1

R2164	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2165	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R2167	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2168	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2172	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2176	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2177	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2178	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2179	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2182	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2186	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2187	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2198	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2199	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2202	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2203	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2204	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2205	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2206	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2208	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2220	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2221	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2222	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R2223	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2224	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2226	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2238	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2239	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2240	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2241	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2242	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2244	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2256	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2257	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2258	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2259	RES, CHIP(1608/5%/6.8Kohm)	CRJ10DJ682T	1
R2260	RES, CHIP(1608/5%/3.3Kohm)	CRJ10DJ332T	1
R2262	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R2293	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R2294	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R2328	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R2342	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2344	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2345	RES, CHIP(1608/5%/560ohm)	CRJ10DJ561T	1
R2347	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2354	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2356	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2358	RES, CHIP(1608/5%/3.9Kohm)	CRJ10DJ392T	1
R2359	RES, CHIP(1608/5%/270ohm)	CRJ10DJ271T	1
R2411	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
WF61	WAFER, FFC, SMD(27P-1.25mm, STRAIGHT)	CJP27GA299ZN	1
WF70	WAFER, FFC, SMD(23P-1.25mm, STRAIGHT)	CJP23GA299ZN	1
X1201	X-TAL, SMD 3.2X2.5, 27.000MHz, 10PF	COX27000I100ST	1
X1401	X-TAL, SMD 3.2X2.5, 27.000MHz, 10PF	COX27000I100ST	1
X1901	X-TAL, SMD 3.2X2.5, 24.576MHz, 12PF	COX24576I120ST	1
X2101	X-TAL, SMD 3.2X2.5, 25.000MHz, 12PF	COX25000I120ST	1

MAIN PCB ASS'Y (COP12459D)			
Ref	**Description**	**Parts No.**	**Qty**
BN14	WIRE ASS'Y (2.5MM, 180MM, 7PIN, DUAL-DIPPING TYPE)	CWB1D00718088	1
BN15	WIRE ASS'Y (2.5mm, 150mm, 9pin, Dual-dipping type)	CWB1D00915088	1
BN20	WIRE ASS'Y	CWB3FE03200UZ	1
BN25	WIRE ASS'Y(#18,2P,120mm, 3.96mm Dual-dipping type)	CWB1F002120ZZ	1
CN10	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN11	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN12	WAFER, FFC(27P-1.25mm, STRAIGHT)	CJP27GA115ZY	1
CN61	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN62	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN63	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN64	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN65	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN66	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN67	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN89	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
CN93	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
C915	CAP , ELECT (3300uF/63V, 85'C)	CCET63VLP332NC	1
C916	CAP , ELECT (3300uF/63V, 85'C)	CCET63VLP332NC	1
ET01	WIRE ASS'Y (1P, 80MM,BLK,#22)	CWE5202080A	1
JK90	JACK , BOARD (SW)	CJJ4M040Z	1
JK91	TERMINAL , SPEAKER	CJJ5R006Z	1
JK92	TERMINAL , SPEAKER	CJJ5Q012Z	1
L501	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L502	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L503	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L504	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L505	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L506	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
L507	COIL , SPEAKER(0.5uH)	CLEY0R5KAK	1
Q858	T.R , PRE DRIVE	HVTKTA1360Y	1
Q871	T.R , PRE DRIVE	HVTKTA1360Y	1
Q872	T.R , PRE DRIVE	HVTKTA1360Y	1
Q874	T.R , PRE DRIVE	HVTKTA1360Y	1
Q875	T.R , PRE DRIVE	HVTKTA1360Y	1
Q876	T.R , PRE DRIVE	HVTKTA1360Y	1
Q877	T.R , PRE DRIVE	HVTKTA1360Y	1
Q881	T.R , PRE DRIVE	HVTKTC3423Y	1
Q882	T.R , PRE DRIVE	HVTKTC3423Y	1
Q883	T.R , PRE DRIVE	HVTKTC3423Y	1
Q884	T.R , PRE DRIVE	HVTKTC3423Y	1
Q885	T.R , PRE DRIVE	HVTKTC3423Y	1
Q886	T.R , PRE DRIVE	HVTKTC3423Y	1
Q887	T.R , PRE DRIVE	HVTKTC3423Y	1
R937	RES , CEMENT (SMALL SIZE)	CRF5EKR10HS	1
R938	RES , CEMENT (SMALL SIZE)	CRF5EKR10HS	1
C501	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C502	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C503	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C504	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C505	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C506	CAP, CERAMIC(50V/330pF/K)	CCKT1H331KB	1
C507	CAP , CERAMIC(330PF/50V)	CCBS1H331KBT	1
C508	CAP , CERAMIC(330PF/50V)	CCBS1H331KBT	1
C509	CAP, CERAMIC(50V/330pF/K)	CCKT1H331KB	1
C510	CAP , CERAMIC(330PF/50V)	CCBS1H331KBT	1

C561	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C562	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C563	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C564	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C565	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C566	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C567	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C568	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C569	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C570	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C571	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C572	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C573	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C574	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C575	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C601	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C602	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C603	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C604	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C605	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C606	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C607	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C608	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C609	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C610	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C631	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C632	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C633	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C634	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C635	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C636	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C637	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C638	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C639	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C640	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C681	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C682	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C683	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C684	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C685	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C716	CAP, ELECT(16V/22uF)	CCEA1CH220TC	1
C725	CAP , CERAMIC(220PF/50V)	CCBS1H221KBT	1
C801	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C802	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C803	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C804	CAP, CERAMIC(50V/33pF/J)	CCCT1H330JC	1
C805	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C806	CAP, CERAMIC(50V/12pF/J)	CCCT1H120JC	1
C807	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C808	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C809	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C810	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C811	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C812	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C813	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C814	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C815	CAP, CERAMIC(50V/330pF/K)	CCKT1H331KB	1

C816	CAP , CERAMIC(330PF/50V)	CCBS1H331KBT	1
C817	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C818	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C819	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C820	CAP , CERAMIC(270PF/50V)	CCBS1H271KBT	1
C851	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C852	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C853	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C854	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C855	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C856	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C857	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C900	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C901	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C910	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C914	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C917	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C918	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C919	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C923	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C924	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C925	CAP, ELECT(50V/2.2uF)	CCEA1HH2R2TC	1
C927	CAP, CHIP(1608, 50V/1000pF)	CCUS1H102KC	1
C936	CAP, ELECT(25V/220uF)	CCEA1EH221TC	1
C939	CAP, ELECT(50V/4.7uF)	CCEA1HH4R7TC	1
C940	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
C950	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
C951	CAP , ELECT(63V/47uF)	CCEA1JH470TC	1
C971	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C972	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C973	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C974	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C975	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C980	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C981	CAP, MYLAR(50V/5600pF/J)	HCQI1H562JZT	1
C990	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C992	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C993	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C994	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C995	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C996	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
C997	CAP, MYLAR(50V/0.047uF/J)	HCQI1H473JZT	1
D501	DIODE , SWITCHING	CVD1SS133MT	1
D502	DIODE , SWITCHING	CVD1SS133MT	1
D503	DIODE , SWITCHING	CVD1SS133MT	1
D504	DIODE , SWITCHING	CVD1SS133MT	1
D505	DIODE , SWITCHING	CVD1SS133MT	1
D581	DIODE , SWITCHING	CVD1SS133MT	1
D582	DIODE , SWITCHING	CVD1SS133MT	1
D583	DIODE , SWITCHING	CVD1SS133MT	1
D584	DIODE , SWITCHING	CVD1SS133MT	1
D585	DIODE , SWITCHING	CVD1SS133MT	1
D801	DIODE , SWITCHING	CVD1SS133MT	1
D802	DIODE , SWITCHING	CVD1SS133MT	1
D803	DIODE , SWITCHING	CVD1SS133MT	1
D804	DIODE , SWITCHING	CVD1SS133MT	1
D902	DIODE , ZENER	HVDMTZJ3.3BT	1

D954	DIODE , RECT	CVD1N4003SRT	1
D955	DIODE , RECT	CVD1N4003SRT	1
ET90	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
ET91	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
J106	WIRE, COPPER(D0.6)	C3A206	0.018
J107	WIRE, COPPER(D0.6)	C3A206	0.018
J109	WIRE, COPPER(D0.6)	C3A206	0.018
J110	WIRE, COPPER(D0.6)	C3A206	0.018
J111	WIRE, COPPER(D0.6)	C3A206	0.018
J112	WIRE, COPPER(D0.6)	C3A206	0.018
J113	WIRE, COPPER(D0.6)	C3A206	0.018
J114	WIRE, COPPER(D0.6)	C3A206	0.018
J115	WIRE, COPPER(D0.6)	C3A206	0.018
J116	WIRE, COPPER(D0.6)	C3A206	0.027
J117	WIRE, COPPER(D0.6)	C3A206	0.032
J118	WIRE, COPPER(D0.6)	C3A206	0.035
J119	WIRE, COPPER(D0.6)	C3A206	0.037
J121	WIRE, COPPER(D0.6)	C3A206	0.018
J126	WIRE, COPPER(D0.6)	C3A206	0.022
J127	WIRE, COPPER(D0.6)	C3A206	0.02
J131	WIRE, COPPER(D0.6)	C3A206	0.018
J133	WIRE, COPPER(D0.6)	C3A206	0.02
J134	WIRE, COPPER(D0.6)	C3A206	0.02
J135	WIRE, COPPER(D0.6)	C3A206	0.018
J136	WIRE, COPPER(D0.6)	C3A206	0.037
J138	WIRE, COPPER(D0.6)	C3A206	0.03
J139	WIRE, COPPER(D0.6)	C3A206	0.018
J141	WIRE, COPPER(D0.6)	C3A206	0.02
J142	WIRE, COPPER(D0.6)	C3A206	0.022
J143	WIRE, COPPER(D0.6)	C3A206	0.018
J144	WIRE, COPPER(D0.6)	C3A206	0.018
J145	WIRE, COPPER(D0.6)	C3A206	0.022
J146	WIRE, COPPER(D0.6)	C3A206	0.02
J147	WIRE, COPPER(D0.6)	C3A206	0.018
J148	WIRE, COPPER(D0.6)	C3A206	0.018
J149	WIRE, COPPER(D0.6)	C3A206	0.018
J150	WIRE, COPPER(D0.6)	C3A206	0.018
J151	WIRE, COPPER(D0.6)	C3A206	0.02
J152	WIRE, COPPER(D0.6)	C3A206	0.018
J153	WIRE, COPPER(D0.6)	C3A206	0.018
J154	WIRE, COPPER(D0.6)	C3A206	0.018
J155	WIRE, COPPER(D0.6)	C3A206	0.018
J156	WIRE, COPPER(D0.6)	C3A206	0.018
J157	WIRE, COPPER(D0.6)	C3A206	0.018
J158	WIRE, COPPER(D0.6)	C3A206	0.018
J159	WIRE, COPPER(D0.6)	C3A206	0.018
J160	WIRE, COPPER(D0.6)	C3A206	0.018
J161	WIRE, COPPER(D0.6)	C3A206	0.018
J162	WIRE, COPPER(D0.6)	C3A206	0.018
J163	WIRE, COPPER(D0.6)	C3A206	0.018
J165	WIRE, COPPER(D0.6)	C3A206	0.018
J166	WIRE, COPPER(D0.6)	C3A206	0.018
J167	WIRE, COPPER(D0.6)	C3A206	0.018
J168	WIRE, COPPER(D0.6)	C3A206	0.018
J169	WIRE, COPPER(D0.6)	C3A206	0.018
J170	WIRE, COPPER(D0.6)	C3A206	0.018
J171	WIRE, COPPER(D0.6)	C3A206	0.018

J173	WIRE, COPPER(D0.6)	C3A206	0.018
J175	WIRE, COPPER(D0.6)	C3A206	0.018
J176	WIRE, COPPER(D0.6)	C3A206	0.018
J177	WIRE, COPPER(D0.6)	C3A206	0.018
J178	WIRE, COPPER(D0.6)	C3A206	0.018
J179	WIRE, COPPER(D0.6)	C3A206	0.018
J181	WIRE, COPPER(D0.6)	C3A206	0.018
J182	WIRE, COPPER(D0.6)	C3A206	0.018
J183	WIRE, COPPER(D0.6)	C3A206	0.018
J184	WIRE, COPPER(D0.6)	C3A206	0.018
J185	WIRE, COPPER(D0.6)	C3A206	0.018
J186	WIRE, COPPER(D0.6)	C3A206	0.018
J187	WIRE, COPPER(D0.6)	C3A206	0.018
J188	WIRE, COPPER(D0.6)	C3A206	0.018
J189	WIRE, COPPER(D0.6)	C3A206	0.018
J190	WIRE, COPPER(D0.6)	C3A206	0.018
J191	WIRE, COPPER(D0.6)	C3A206	0.018
J192	WIRE, COPPER(D0.6)	C3A206	0.018
J193	WIRE, COPPER(D0.6)	C3A206	0.018
J195	WIRE, COPPER(D0.6)	C3A206	0.018
J197	WIRE, COPPER(D0.6)	C3A206	0.018
J198	WIRE, COPPER(D0.6)	C3A206	0.018
J199	WIRE, COPPER(D0.6)	C3A206	0.018
J201	WIRE, COPPER(D0.6)	C3A206	0.035
J202	WIRE, COPPER(D0.6)	C3A206	0.032
J203	WIRE, COPPER(D0.6)	C3A206	0.022
J206	WIRE, COPPER(D0.6)	C3A206	0.018
J210	WIRE, COPPER(D0.6)	C3A206	0.022
J211	WIRE, COPPER(D0.6)	C3A206	0.022
J299	WIRE, COPPER(D0.6)	C3A206	0.02
J300	WIRE, COPPER(D0.6)	C3A206	0.02
J302	WIRE, COPPER(D0.6)	C3A206	0.022
J303	WIRE, COPPER(D0.6)	C3A206	0.022
J304	WIRE, COPPER(D0.6)	C3A206	0.022
J306	WIRE, COPPER(D0.6)	C3A206	0.022
J307	WIRE, COPPER(D0.6)	C3A206	0.022
J308	WIRE, COPPER(D0.6)	C3A206	0.022
J309	WIRE, COPPER(D0.6)	C3A206	0.02
J310	WIRE, COPPER(D0.6)	C3A206	0.022
J311	WIRE, COPPER(D0.6)	C3A206	0.022
J312	WIRE, COPPER(D0.6)	C3A206	0.022
J313	WIRE, COPPER(D0.6)	C3A206	0.022
J314	WIRE, COPPER(D0.6)	C3A206	0.022
J316	WIRE, COPPER(D0.6)	C3A206	0.022
J320	WIRE, COPPER(D0.6)	C3A206	0.02
J321	WIRE, COPPER(D0.6)	C3A206	0.02
J326	WIRE, COPPER(D0.6)	C3A206	0.022
J327	WIRE, COPPER(D0.6)	C3A206	0.022
J330	WIRE, COPPER(D0.6)	C3A206	0.022
J334	WIRE, COPPER(D0.6)	C3A206	0.022
J335	WIRE, COPPER(D0.6)	C3A206	0.022
J336	WIRE, COPPER(D0.6)	C3A206	0.022
J337	WIRE, COPPER(D0.6)	C3A206	0.022
J338	WIRE, COPPER(D0.6)	C3A206	0.022
J340	WIRE, COPPER(D0.6)	C3A206	0.022
J341	WIRE, COPPER(D0.6)	C3A206	0.022
J342	WIRE, COPPER(D0.6)	C3A206	0.025

J344	WIRE, COPPER(D0.6)	C3A206	0.022
J346	WIRE, COPPER(D0.6)	C3A206	0.022
J348	WIRE, COPPER(D0.6)	C3A206	0.022
J352	WIRE, COPPER(D0.6)	C3A206	0.022
J404	WIRE, COPPER(D0.6)	C3A206	0.025
J405	WIRE, COPPER(D0.6)	C3A206	0.025
J406	WIRE, COPPER(D0.6)	C3A206	0.02
J501	WIRE, COPPER(D0.6)	C3A206	0.027
J502	WIRE, COPPER(D0.6)	C3A206	0.022
J503	WIRE, COPPER(D0.6)	C3A206	0.027
J504	WIRE, COPPER(D0.6)	C3A206	0.027
J505	WIRE, COPPER(D0.6)	C3A206	0.027
J506	WIRE, COPPER(D0.6)	C3A206	0.027
J507	WIRE, COPPER(D0.6)	C3A206	0.027
J509	WIRE, COPPER(D0.6)	C3A206	0.027
J510	WIRE, COPPER(D0.6)	C3A206	0.027
J511	WIRE, COPPER(D0.6)	C3A206	0.027
J513	WIRE, COPPER(D0.6)	C3A206	0.027
J514	WIRE, COPPER(D0.6)	C3A206	0.027
J515	WIRE, COPPER(D0.6)	C3A206	0.027
J516	WIRE, COPPER(D0.6)	C3A206	0.027
J529	WIRE, COPPER(D0.6)	C3A206	0.03
J530	WIRE, COPPER(D0.6)	C3A206	0.03
J531	WIRE, COPPER(D0.6)	C3A206	0.03
J532	WIRE, COPPER(D0.6)	C3A206	0.03
J610	WIRE, COPPER(D0.6)	C3A206	0.027
J612	WIRE, COPPER(D0.6)	C3A206	0.032
J613	WIRE, COPPER(D0.6)	C3A206	0.032
J614	WIRE, COPPER(D0.6)	C3A206	0.027
J616	WIRE, COPPER(D0.6)	C3A206	0.027
J617	WIRE, COPPER(D0.6)	C3A206	0.027
J618	WIRE, COPPER(D0.6)	C3A206	0.025
J620	WIRE, COPPER(D0.6)	C3A206	0.027
J621	WIRE, COPPER(D0.6)	C3A206	0.027
J622	WIRE, COPPER(D0.6)	C3A206	0.027
J623	WIRE, COPPER(D0.6)	C3A206	0.027
J624	WIRE, COPPER(D0.6)	C3A206	0.03
J625	WIRE, COPPER(D0.6)	C3A206	0.03
J626	WIRE, COPPER(D0.6)	C3A206	0.027
J627	WIRE, COPPER(D0.6)	C3A206	0.027
J628	WIRE, COPPER(D0.6)	C3A206	0.022
J640	WIRE, COPPER(D0.6)	C3A206	0.03
J646	WIRE, COPPER(D0.6)	C3A206	0.027
J647	WIRE, COPPER(D0.6)	C3A206	0.027
J648	WIRE, COPPER(D0.6)	C3A206	0.022
J649	WIRE, COPPER(D0.6)	C3A206	0.022
J709	WIRE, COPPER(D0.6)	C3A206	0.032
J710	WIRE, COPPER(D0.6)	C3A206	0.032
J711	WIRE, COPPER(D0.6)	C3A206	0.03
J712	WIRE, COPPER(D0.6)	C3A206	0.03
J713	WIRE, COPPER(D0.6)	C3A206	0.03
J714	WIRE, COPPER(D0.6)	C3A206	0.03
J801	WIRE, COPPER(D0.6)	C3A206	0.035
J802	WIRE, COPPER(D0.6)	C3A206	0.037
J803	WIRE, COPPER(D0.6)	C3A206	0.037
J804	WIRE, COPPER(D0.6)	C3A206	0.037
J805	WIRE, COPPER(D0.6)	C3A206	0.037

J806	WIRE, COPPER(D0.6)	C3A206	0.037
J808	WIRE, COPPER(D0.6)	C3A206	0.022
J809	WIRE, COPPER(D0.6)	C3A206	0.037
J810	WIRE, COPPER(D0.6)	C3A206	0.02
J811	WIRE, COPPER(D0.6)	C3A206	0.018
J813	WIRE, COPPER(D0.6)	C3A206	0.018
J816	WIRE, COPPER(D0.6)	C3A206	0.02
J817	WIRE, COPPER(D0.6)	C3A206	0.02
J818	WIRE, COPPER(D0.6)	C3A206	0.022
J819	WIRE, COPPER(D0.6)	C3A206	0.02
J821	WIRE, COPPER(D0.6)	C3A206	0.027
J822	WIRE, COPPER(D0.6)	C3A206	0.02
J823	WIRE, COPPER(D0.6)	C3A206	0.02
J824	WIRE, COPPER(D0.6)	C3A206	0.02
J825	WIRE, COPPER(D0.6)	C3A206	0.018
J826	WIRE, COPPER(D0.6)	C3A206	0.027
J827	WIRE, COPPER(D0.6)	C3A206	0.027
J828	WIRE, COPPER(D0.6)	C3A206	0.027
J830	WIRE, COPPER(D0.6)	C3A206	0.022
J852	WIRE, COPPER(D0.6)	C3A206	0.027
J855	WIRE, COPPER(D0.6)	C3A206	0.03
J856	WIRE, COPPER(D0.6)	C3A206	0.03
J857	WIRE, COPPER(D0.6)	C3A206	0.03
J901	WIRE, COPPER(D0.6)	C3A206	0.02
J902	WIRE, COPPER(D0.6)	C3A206	0.02
J903	WIRE, COPPER(D0.6)	C3A206	0.03
J904	WIRE, COPPER(D0.6)	C3A206	0.037
J905	WIRE, COPPER(D0.6)	C3A206	0.032
J906	WIRE, COPPER(D0.6)	C3A206	0.03
J907	WIRE, COPPER(D0.6)	C3A206	0.037
J908	WIRE, COPPER(D0.6)	C3A206	0.037
J909	WIRE, COPPER(D0.6)	C3A206	0.032
J910	WIRE, COPPER(D0.6)	C3A206	0.03
J911	WIRE, COPPER(D0.6)	C3A206	0.035
J912	WIRE, COPPER(D0.6)	C3A206	0.018
J913	WIRE, COPPER(D0.6)	C3A206	0.032
J914	WIRE, COPPER(D0.6)	C3A206	0.037
J915	WIRE, COPPER(D0.6)	C3A206	0.035
J916	WIRE, COPPER(D0.6)	C3A206	0.035
J917	WIRE, COPPER(D0.6)	C3A206	0.035
J918	WIRE, COPPER(D0.6)	C3A206	0.035
J919	WIRE, COPPER(D0.6)	C3A206	0.035
J920	WIRE, COPPER(D0.6)	C3A206	0.035
J921	WIRE, COPPER(D0.6)	C3A206	0.032
J922	WIRE, COPPER(D0.6)	C3A206	0.037
J923	WIRE, COPPER(D0.6)	C3A206	0.037
J992	WIRE, COPPER(D0.6)	C3A206	0.018
J993	WIRE, COPPER(D0.6)	C3A206	0.035
J994	WIRE, COPPER(D0.6)	C3A206	0.025
J995	WIRE, COPPER(D0.6)	C3A206	0.035
J996	WIRE, COPPER(D0.6)	C3A206	0.032
L915	WIRE, COPPER(D0.6)	C3A206	0.02
L916	WIRE, COPPER(D0.6)	C3A206	0.02
Q501	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q502	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q503	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q504	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1

Q505	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q508	T.R , MUTE	HVTKTC2874BT	1
Q509	T.R , MUTE	HVTKTC2874BT	1
Q511	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q512	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q513	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q514	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q515	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q516	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q517	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q518	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q519	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q520	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q541	T.R	HVTKTC3198YT	1
Q542	T.R	HVTKTC3198YT	1
Q543	T.R	HVTKTC3198YT	1
Q544	T.R	HVTKTC3198YT	1
Q545	T.R	HVTKTC3198YT	1
Q556	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q557	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q558	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q559	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q560	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q561	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q562	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q563	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q564	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q565	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q601	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q602	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q603	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q604	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q605	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q681	T.R	HVTKTC3198YT	1
Q682	T.R	HVTKTC3198YT	1
Q683	T.R	HVTKTC3198YT	1
Q684	T.R	HVTKTC3198YT	1
Q685	T.R	HVTKTC3198YT	1
Q801	T.R	HVTKTC3198YT	1
Q802	T.R	HVTKTC3198YT	1
Q812	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q813	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q814	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q815	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q816	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q817	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSA992FTA	1
Q818	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q819	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q820	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q821	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q822	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q823	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD	CVTKSC1845FTA	1
Q824	T.R	HVTKTC3198YT	1
Q825	T.R	HVTKTC3198YT	1
Q911	T.R	HVTKTA1271YT	1
Q912	T.R	HVTKTA1271YT	1
Q913	T.R	HVTKTA1271YT	1

Q950	T.R	HVTKTA1266YT	1
Q961	T.R	HVTKTA1024YT	1
R501	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R502	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R503	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R504	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R505	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R506	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R507	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R508	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R509	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R510	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R511	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R512	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R513	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R514	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R515	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R516	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R517	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R518	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R519	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R520	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R521	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R522	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R523	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R524	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R525	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R526	RES, CARBON(1/5W,100Kohm,J)	CRD20TJ104T	1
R527	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R528	RES, CARBON(1/5W,100Kohm,J)	CRD20TJ104T	1
R529	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R531	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R532	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R533	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R534	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R535	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R536	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R537	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R538	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R539	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R540	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R541	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R542	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R543	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R544	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R545	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R556	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R557	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R558	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R559	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R560	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R561	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R562	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R563	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R564	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R565	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R566	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1

R567	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R568	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R569	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R570	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R571	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R572	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R573	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R574	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R575	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R576	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R577	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R578	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R579	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R580	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R581	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R582	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R583	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R584	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R585	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R586	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R587	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R588	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R589	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R590	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R591	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R592	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R593	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R594	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R595	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R596	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R597	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R598	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R599	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R600	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R601	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R602	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R603	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R604	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R605	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R606	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R607	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R608	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R609	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R610	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R611	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R612	RES, CARBON(1/5W,10ohm,J)	CRD20TJ100T	1
R631	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R632	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R633	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R634	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R635	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R636	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R637	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R638	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R639	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R640	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R646	RES , CARBON	CRD25FJ3R3T	1

R647	RES , CARBON	CRD25FJ3R3T	1
R648	RES , CARBON	CRD25FJ3R3T	1
R649	RES , CARBON	CRD25FJ3R3T	1
R650	RES , CARBON	CRD25FJ3R3T	1
R651	RES , CARBON	CRD25FJ3R3T	1
R652	RES , CARBON	CRD25FJ3R3T	1
R653	RES , CARBON	CRD25FJ3R3T	1
R654	RES , CARBON	CRD25FJ3R3T	1
R655	RES , CARBON	CRD25FJ3R3T	1
R666	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R667	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R668	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R669	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R670	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R671	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R672	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R673	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R674	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R675	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R676	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R677	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R678	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R679	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R680	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R681	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R682	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R683	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R684	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R685	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R686	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R687	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R688	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R689	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R690	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R696	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R697	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R698	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R699	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R700	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R718	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R719	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R720	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R721	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R722	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R723	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R724	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R725	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R726	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R727	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R728	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R729	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R730	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R731	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R732	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R733	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R734	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R735	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1

R736	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R737	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R738	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R739	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R740	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R741	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R742	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R743	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R744	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R745	RES, M-OXIDE FILM(2W/0.47ohm)	CRG2SANJR47RT	1
R746	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R747	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R771	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R772	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R773	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R774	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R775	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R776	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R777	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R781	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R782	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R783	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R784	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R785	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R786	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R787	RES, CARBON(1/5W,75ohm,J)	CRD20TJ750T	1
R800	RES, CARBON(1/5W,1Kohm,J)	CRD20TJ102T	1
R801	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R802	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R803	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R804	RES, CARBON(1/5W,5.6Kohm,J)	CRD20TJ562T	1
R805	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R807	RES, CARBON(1/5W,4.7Kohm,J)	CRD20TJ472T	1
R808	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R809	RES, CARBON(1/4W,1.8Kohm,J)	CRD25TJ182T	1
R812	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R813	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R814	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R815	RES, CARBON(1/4W,47ohm,J)	CRD25TJ470T	1
R817	RES , CARBON	CRD25FJ3R3T	1
R818	RES , CARBON	CRD25FJ3R3T	1
R819	RES , CARBON	CRD25FJ3R3T	1
R820	RES , CARBON	CRD25FJ3R3T	1
R821	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R822	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R823	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R824	RES , CARBON (18 OHM) NONFLAMMABLE	CRD25FJ180T	1
R830	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R831	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R832	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R833	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R834	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R835	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R836	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R837	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R838	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R839	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1

R840	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R841	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R842	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R843	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R844	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R845	RES, CARBON(1/5W,560ohm,J)	CRD20TJ561T	1
R848	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R849	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R850	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R851	RES, CARBON(1/5W,1.8Kohm,J)	CRD20TJ182T	1
R852	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R853	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R854	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R855	RES, CARBON(1/5W,1.5Kohm,J)	CRD20TJ152T	1
R856	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R857	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R858	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R859	RES, CARBON(1/5W,100ohm,J)	CRD20TJ101T	1
R860	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R861	RES, CARBON(1/5W,270ohm,J)	CRD20TJ271T	1
R862	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R863	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R870	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R871	RES, CARBON(1/5W,43Kohm,J)	CRD20TJ433T	1
R872	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R873	RES, CARBON(1/5W,470ohm,J)	CRD20TJ471T	1
R874	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R875	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R876	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R877	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R878	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R879	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R880	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R882	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R883	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R884	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R885	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R886	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R887	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R888	RES, CARBON(1/5W,1.2Kohm,J)	CRD20TJ122T	1
R891	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R892	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R893	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R894	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R895	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R896	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R897	RES, CARBON(1/5W,390ohm,J)	CRD20TJ391T	1
R901	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R908	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1
R909	RES, CARBON(1/5W,33Kohm,J)	CRD20TJ333T	1
R917	RES, CARBON(1/4W,39Kohm,J)	CRD25TJ393T	1
R918	RES, CARBON(1/4W,39Kohm,J)	CRD25TJ393T	1
R919	RES, CARBON(1/4W,39Kohm,J)	CRD25TJ393T	1
R920	RES, CARBON(1/4W,39Kohm,J)	CRD25TJ393T	1
R921	RES, M-OXIDE FILM(1W/22ohm)	CRG1SANJ220RT	1
R922	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R923	RES, M-OXIDE FILM(1W/1ohm)	CRG1SANJ1R0RT	1

R924	RES, CARBON(1/5W,47Kohm,J)	CRD20TJ473T	1
R925	RES, CARBON(1/5W,47Kohm,J)	CRD20TJ473T	1
R926	RES, CARBON(1/5W,47Kohm,J)	CRD20TJ473T	1
R928	RES, CARBON(1/5W,2.2Kohm,J)	CRD20TJ222T	1
R929	RES, CARBON(1/5W,2.2Kohm,J)	CRD20TJ222T	1
R930	RES, CARBON(1/5W,2.2Kohm,J)	CRD20TJ222T	1
R941	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R942	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R943	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R944	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R945	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R946	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R947	RES, CARBON(1/5W,10Kohm,J)	CRD20TJ103T	1
R951	RES, CARBON(1/5W,1ohm,J)	CRD20TJ1R0T	1
R952	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R958	RES, CARBON(1/5W,56Kohm,J)	CRD20TJ563T	1
R959	RES, CARBON(1/5W,100Kohm,J)	CRD20TJ104T	1
R960	RES, CARBON(1/5W,22Kohm,J)	CRD20TJ223T	1
R961	RES, CARBON(1/5W,330ohm,J)	CRD20TJ331T	1
R962	RES, CARBON(1/5W,27Kohm,J)	CRD20TJ273T	1
R990	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R993	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R994	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R995	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R996	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R997	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
R998	RES, CARBON(1/5W,560Kohm,J)	CRD20TJ564T	1
R999	RES, M-OXIDE FILM(1W/10ohm)	CRG1SANJ100RT	1
VR81	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR82	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR83	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR84	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR85	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR86	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
VR87	RES , SEMI FIXED (220 OHM)	CVN12A221B03T	1
D903	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D950	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D964	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D965	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D967	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D968	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D969	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D970	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D971	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D972	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D973	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D974	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D975	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D976	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D980	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D981	DIODE , CHIP , SWITCHING	CVD1SS355T	1
Q915	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q916	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q917	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
Q937	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1
Q938	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q939	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1

Q940	High Voltage PNP Transistors(SOT-23)	CVTMMBT5401	1
Q941	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q942	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q943	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q951	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q952	High Voltage NPN Transistors(SOT-23)	CVTMMBT5551	1
Q960	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
R500	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R554	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R717	RES, CHIP(1608/5%/33Kohm)	CRJ10DJ333T	1
R927	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R933	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R939	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R940	RES, CHIP(1608/5%/1.5Kohm)	CRJ10DJ152T	1
R953	RES, CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1
R954	RES, CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1
R964	RES, CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1
R965	RES, CHIP(1608/5%/22Kohm)	CRJ10DJ223T	1
R971	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R972	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R986	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R989	RES, CHIP(1608/5%/3Kohm)	CRJ10DJ302T	1
	MOTOR , FAN (80X80X25) 12V, 0.17A	CFNRDH8025S	1
	SCREW , SPECIAL	CHD1A012R	21
	SCREW , SPECIAL	CHD1A036R	4
	SCREW , SPECIAL	CHD4A012R	1
	BRACKET , FAN	CMD1A694	1
	BRACKET , PAC	CMD1A810	2
	BRACKET , PCB L	CMD1A811	1
	BRACKET , PCB R	CMD1A812	1
	HEAT SINK	CMY1A384-V1	1
	SCREW	CTB3+8JR	12
Q652	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q653	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q654	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q655	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q657	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q658	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q659	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q660	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q661	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q670	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q803	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q804	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q805	TR , POWER (MICA 43 TYPE)	CVT2SD2560P43M	1
Q807	TR , POWER (MICA 43 TYPE)	CVT2SB1647P43M	1
Q851	T.R , BIAS	HVTKTD600KGR	1
Q852	T.R , BIAS	HVTKTD600KGR	1
Q853	T.R , BIAS	HVTKTD600KGR	1
Q854	T.R , BIAS	HVTKTD600KGR	1
Q855	T.R , BIAS	HVTKTD600KGR	1
Q856	T.R , BIAS	HVTKTD600KGR	1
Q857	T.R , BIAS	HVTKTD600KGR	1

JACK PCB ASS'Y (COP12460E)			
Ref	**Description**	**Parts No.**	**Qty**
	SOLDER , BAR SN PB FREE	C2K86002	3

	SOLDER , FLUX WIRE PB FREE(PIE 1.0)	C2K86102	0.3
	TAPE , BOTH SIDE	C4FM073	0.02
	FLUX	C8E534	4.1
BN53	PIN HEADER, DIP(14P, 2.54mm, H :36.9mm, STRAIGHT)	CJP14GA301ZB	1
BN54	PIN HEADER, DIP(22P, 2.54mm, H :36.9mm, STRAIGHT)	CJP22GA301ZB	1
BN55	PIN HEADER, DIP(8P, 2.54mm, H :36.9mm, STRAIGHT)	CJP08GA301ZB	1
IC371	IC, PHOTO COUPLER (COSMO)	BVIKP1010B	1
IC372	IC, PHOTO COUPLER (COSMO)	BVIKP1010B	1
JK311	JACK , IN/OUT	CJJ4P014W	1
JK312	JACK , IN/OUT	CJJ4P014W	1
JK351	MODULE , OPTICAL(RX 25MHz)	CJSJSR2124-00-BBBN	1
JK352	MODULE , OPTICAL(RX 25MHz)	CJSJSR2124-00-BBBN	1
JK353	JACK , RCA (1P,RCA-115A-04)	CJJ4M044X	1
JK371	JACK , STEREO(2P 3.5PIE)	HJJ1D002Z	1
JK372	JACK , STEREO(2P 3.5PIE)	HJJ1D002Z	1
JK402	JACK, 6P(Y/G,Y/B,Y/R), SILVER	CJJ4R059Z	1
JK95	JACK, 9P D-SUB FEMALE(RS-232C)	CJJ9W001Z	1
JW11	WIRE ASS'Y (1P, 80MM,BLK,#22)	CWE5202080A	1
TUN1	MODULE , TUNER (AM/FM WITH RDS , SCREW TYPE)	CNVMW104MV1R78S	1
C307	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C308	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C321	CAP, ELECT(16V/100uF)	CCEA1CH101TC	1
C401	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C402	CAP, ELECT(50V/10uF)	CCEA1HH100TC	1
C423	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
C433	CAP, ELECT(10V/470uF)	CCEA1AH471TC	1
J101	WIRE, COPPER(D0.6)	C3A206	0.018
J102	WIRE, COPPER(D0.6)	C3A206	0.027
J103	WIRE, COPPER(D0.6)	C3A206	0.027
J104	WIRE, COPPER(D0.6)	C3A206	0.03
J105	WIRE, COPPER(D0.6)	C3A206	0.03
J106	WIRE, COPPER(D0.6)	C3A206	0.018
J107	WIRE, COPPER(D0.6)	C3A206	0.027
J108	WIRE, COPPER(D0.6)	C3A206	0.027
J109	WIRE, COPPER(D0.6)	C3A206	0.018
J110	WIRE, COPPER(D0.6)	C3A206	0.032
J111	WIRE, COPPER(D0.6)	C3A206	0.018
J112	WIRE, COPPER(D0.6)	C3A206	0.018
J113	WIRE, COPPER(D0.6)	C3A206	0.018
J114	WIRE, COPPER(D0.6)	C3A206	0.018
J115	WIRE, COPPER(D0.6)	C3A206	0.022
J116	WIRE, COPPER(D0.6)	C3A206	0.022
J117	WIRE, COPPER(D0.6)	C3A206	0.02
J118	WIRE, COPPER(D0.6)	C3A206	0.022
J119	WIRE, COPPER(D0.6)	C3A206	0.022
J120	WIRE, COPPER(D0.6)	C3A206	0.018
J121	WIRE, COPPER(D0.6)	C3A206	0.018
J122	WIRE, COPPER(D0.6)	C3A206	0.018
J123	WIRE, COPPER(D0.6)	C3A206	0.042
J124	WIRE, COPPER(D0.6)	C3A206	0.022
J125	WIRE, COPPER(D0.6)	C3A206	0.025
J126	WIRE, COPPER(D0.6)	C3A206	0.022
J127	WIRE, COPPER(D0.6)	C3A206	0.022
J128	WIRE, COPPER(D0.6)	C3A206	0.022
J129	WIRE, COPPER(D0.6)	C3A206	0.032
J130	WIRE, COPPER(D0.6)	C3A206	0.025
J131	WIRE, COPPER(D0.6)	C3A206	0.027

J132	WIRE, COPPER(D0.6)	C3A206	0.022
J133	WIRE, COPPER(D0.6)	C3A206	0.025
J134	WIRE, COPPER(D0.6)	C3A206	0.027
J135	WIRE, COPPER(D0.6)	C3A206	0.018
J136	WIRE, COPPER(D0.6)	C3A206	0.025
J137	WIRE, COPPER(D0.6)	C3A206	0.025
J138	WIRE, COPPER(D0.6)	C3A206	0.037
J139	WIRE, COPPER(D0.6)	C3A206	0.027
J140	WIRE, COPPER(D0.6)	C3A206	0.025
J141	WIRE, COPPER(D0.6)	C3A206	0.025
J142	WIRE, COPPER(D0.6)	C3A206	0.018
J143	WIRE, COPPER(D0.6)	C3A206	0.03
J144	WIRE, COPPER(D0.6)	C3A206	0.035
J145	WIRE, COPPER(D0.6)	C3A206	0.018
J146	WIRE, COPPER(D0.6)	C3A206	0.027
J147	WIRE, COPPER(D0.6)	C3A206	0.025
J148	WIRE, COPPER(D0.6)	C3A206	0.025
J149	WIRE, COPPER(D0.6)	C3A206	0.018
J150	WIRE, COPPER(D0.6)	C3A206	0.032
J151	WIRE, COPPER(D0.6)	C3A206	0.032
J153	WIRE, COPPER(D0.6)	C3A206	0.018
J154	WIRE, COPPER(D0.6)	C3A206	0.018
J155	WIRE, COPPER(D0.6)	C3A206	0.022
J156	WIRE, COPPER(D0.6)	C3A206	0.025
J157	WIRE, COPPER(D0.6)	C3A206	0.02
J158	WIRE, COPPER(D0.6)	C3A206	0.02
J159	WIRE, COPPER(D0.6)	C3A206	0.027
J160	WIRE, COPPER(D0.6)	C3A206	0.018
J161	WIRE, COPPER(D0.6)	C3A206	0.022
J162	WIRE, COPPER(D0.6)	C3A206	0.022
J163	WIRE, COPPER(D0.6)	C3A206	0.022
J164	WIRE, COPPER(D0.6)	C3A206	0.018
J165	WIRE, COPPER(D0.6)	C3A206	0.022
J166	WIRE, COPPER(D0.6)	C3A206	0.018
J167	WIRE, COPPER(D0.6)	C3A206	0.025
J168	WIRE, COPPER(D0.6)	C3A206	0.027
J169	WIRE, COPPER(D0.6)	C3A206	0.03
J170	WIRE, COPPER(D0.6)	C3A206	0.018
J171	WIRE, COPPER(D0.6)	C3A206	0.02
J172	WIRE, COPPER(D0.6)	C3A206	0.02
J173	WIRE, COPPER(D0.6)	C3A206	0.02
J174	WIRE, COPPER(D0.6)	C3A206	0.02
J175	WIRE, COPPER(D0.6)	C3A206	0.022
J176	WIRE, COPPER(D0.6)	C3A206	0.02
J177	WIRE, COPPER(D0.6)	C3A206	0.022
J178	WIRE, COPPER(D0.6)	C3A206	0.018
J179	WIRE, COPPER(D0.6)	C3A206	0.03
J180	WIRE, COPPER(D0.6)	C3A206	0.02
J181	WIRE, COPPER(D0.6)	C3A206	0.02
J182	WIRE, COPPER(D0.6)	C3A206	0.018
J183	WIRE, COPPER(D0.6)	C3A206	0.025
J184	WIRE, COPPER(D0.6)	C3A206	0.022
Q361	T.R	HVTKTA1266YT	1
Q382	T.R	HVTKTA1266YT	1
C1	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C2	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C301	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1

C302	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C303	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C304	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C305	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C306	CAP, CHIP(1608, 50V/220pF)	CCUS1H221JA	1
C310	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C312	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C322	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C351	CAP, CHIP(1608, 50V/180pF)	CCUS1H181JA	1
C354	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C355	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C361	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C362	CAP, CHIP(1608, 50V/0.01uF)	CCUS1H103KC	1
C381	CAP, CHIP(1608, 50V/22pF)	CCUS1H220JA	1
C382	CAP, CHIP(1608, 50V/22pF)	CCUS1H220JA	1
C383	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C384	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C385	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C386	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C387	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C403	CAP, CHIP(1608, 50V/68pF)	CCUS1H680JA	1
C405	CAP, CHIP(1608, 50V/2pF)	CCUS1H020CA	1
C407	CAP, CHIP(1608, 50V/2pF)	CCUS1H020CA	1
C409	CAP, CHIP(1608, 50V/2pF)	CCUS1H020CA	1
C421	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
C431	CAP, CHIP(1608, 50V/0.1uF)	CCUS1H104KC	1
D301	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D302	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D303	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D304	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D361	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D362	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D363	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D371	DIODE , CHIP , SWITCHING	CVD1SS355T	1
D372	DIODE , CHIP , SWITCHING	CVD1SS355T	1
IC381	I.C, RS232 (3.3V)	CVIILX3232DT	1
IC421	I.C , VIDEO SWITCH	HVINJM2244MTE1	1
IC431	I.C , VIDEO SWITCH	HVINJM2244MTE1	1
L381	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
Q362	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q363	T.R,RT1P141C(10K-10K)	CVTRT1P141C	1
Q371	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q372	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q373	T.R,RT1P144C(10K-47K)	CVTRT1P144C	1
Q381	T.R,RT1N144C(10K-47K)	CVTRT1N144C	1
R1	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R2	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R301	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R302	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R303	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R304	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R305	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R306	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R307	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R308	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R309	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R310	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1

R311	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R312	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R313	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R314	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R321	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R322	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R323	RES, CHIP(1608/5%/4.7Kohm)	CRJ10DJ472T	1
R324	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R325	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R326	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R327	RES, CHIP(1608/5%/100ohm)	CRJ10DJ101T	1
R328	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R329	RES, CHIP(1608/5%/100Kohm)	CRJ10DJ104T	1
R351	RES, CHIP(1608/5%/75ohm)	CRJ10DJ750T	1
R352	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R353	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R361	RES, CHIP(1608/5%/1ohm)	CRJ10DJ1R0T	1
R362	RES, CHIP(1608/5%/1ohm)	CRJ10DJ1R0T	1
R363	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R364	RES, CHIP(1608/5%/4.7ohm)	CRJ10DJ4R7T	1
R365	RES, CHIP(1608/5%/4.7ohm)	CRJ10DJ4R7T	1
R366	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R367	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R368	RES, CHIP(1608/5%/1Kohm)	CRJ10DJ102T	1
R371	RES, CHIP(1608/5%/47ohm)	CRJ10DJ470T	1
R372	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R373	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R374	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R375	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R376	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R377	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R378	RES, CHIP(1608/5%/220ohm)	CRJ10DJ221T	1
R380	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R382	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R384	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R385	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R387	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R389	RES, CHIP(1608/5%/10Kohm)	CRJ10DJ103T	1
R401	RES, CHIP(1608/5%/120ohm)	CRJ10DJ121T	1
R402	RES, CHIP(1608/5%/120ohm)	CRJ10DJ121T	1
R403	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R421	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R422	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R423	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R424	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R431	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R432	RES, CHIP(1608/5%/1Mohm)	CRJ10DJ105T	1
R433	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R434	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R436	CAP, CHIP(1608, 50V/680pF)	CCUS1H681JA	1
R437	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R438	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R439	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1

HDMI BUFFER PCB ASS'Y (COP12462D)			
Ref	**Description**	**Parts No.**	**Qty**
BK51	BRACKET , PCB	CMD1A629	1

BK52	BRACKET , HDMI	CMD1A787	1
C3002	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3003	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3004	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3005	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3007	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3008	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3009	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3010	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3011	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3013	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3014	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3015	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3016	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3017	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3018	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3019	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3020	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3021	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3022	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3023	CAP, CHIP(1005, 16V/0.1uF)	CCUI1C104KC	1
C3024	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3025	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3026	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3027	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3028	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
L3001	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
L3002	FERRITE CHIP BEAD(1608/60R, CB03YTYH600)	CLZ9R005V	1
R3006	RES, CHIP(1005/5%/2Kohm)	CRJ06IJ202T	1
R3007	RES, CHIP(1005/5%/2Kohm)	CRJ06IJ202T	1
CN3001	WAFER, FFC, SMD(23P-1mm, STRAIGHT)	CJP23GA193ZY	1
C3006	CAP, CHIP(2012, 6.3V/10uF, X7R)	CCUC0J106KC	1
C3012	CAP, CHIP(1005, 25V/0.01uF)	CCUI1E103KC	1
IC3001	I.C, HDMI BUFFER	CVIAD8195ACPZ	1
JK3001	JACK, HDMI(TYPE-A, SMT-19P)	CJJ9H008Y	1
R3002	RES, CHIP(1608/5%/47Kohm)	CRJ10DJ473T	1
R3003	RES, CHIP(1005/5%/2Kohm)	CRJ06IJ202T	1
R3008	RES, CHIP(1005/5%/0ohm)	CRJ06IJ0R0T	1
R3009	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R3010	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R3012	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R3013	RES, CHIP(1608/5%/0ohm)	CRJ10DJ0R0T	1
R3016	RES, CHIP(1005/5%/4.7Kohm)	CRJ06IJ472T	1

SMPS PCB ASS'Y (COP12475B)			
Ref	**Description**	**Parts No.**	**Qty**
	TUBE , UL	C4B120122	0.02
BN65	WIRE ASSY (LOCK, 15P, 250mm, 2.0mm)	CWB1C01525047	1
BN67	WIRE ASS'Y Locking (YH) (5P,2MM,100MM,26#)	CWB1B005100HC	1
CN20	WAFER,YW396-03B(3.96mm)	CJP03GA90ZY	1
CN66	LOCKING TYPE , STRAIGHT WAFER , 2MM	CJP07GI236ZW	1
CN90	WAFER, 2P, 3.96mm	CJP02KA060ZY	1
CX91	CAP , X2(275VAC, 0.33uF, 15mm, 18X14.5X8, SMALL)	CCQF2E334KXES	1
CX92	CAP , X2(275VAC, 0.68uF, 15mm, SEORYONG)	CCQF2E684KZES	1
CY91	CAP , CERAMIC (400V Y-CAP)	CCKDHS102ME	1
CY92	CAP , CERAMIC (400V Y-CAP)	CCKDHS102ME	1

CY93	CAP , CERAMIC (400V Y-CAP)	CCKDHS102ME	1
CY94	CAP , CERAMIC (400V Y-CAP)	CCKDHS471ME	1
CY95	CAP , CERAMIC (400V Y-CAP)	CCKDHS102ME	1
CY96	CAP , CERAMIC (400V Y-CAP)	CCKDHS222ME	1
C901	CAP , ELECT (470uF/250V, 105'C, 25.4X35)	CCET250VTDA471NWS	1
C902	CAP, ELECT(450V/22uF),105'C,13X20	CCET450VKM220NCS	1
C930	CAP , ELECT (470uF/250V, 105'C, 25.4X35)	CCET250VTDA471NWS	1
C941	CAP, ELECT(6.3V/5600uF/105'C), 13X30	CCEA0JGF562ECS	1
C942	CAP, ELECT(63V/2200uF, 105'C, 18X40, LOW ESR)	CCET63VNXA222EWS	1
C946	CAP , ELECT(63V/470uF),105'C	CCEA1JH471ECS	1
C948	CAP, ELECT(6.3V/5600uF/105'C), 13X30	CCEA0JGF562ECS	1
C966	CAP, ELECT(63V/2200uF, 105'C, 18X40, LOW ESR)	CCET63VNXA222EWS	1
C969	CAP , ELECT(63V/470uF),105'C	CCEA1JH471ECS	1
C980	CAP, ELECT(25V/470uF),105'C	CCEA1EH471ECS	1
DB91	DIODE , BRIDGE (600V/10A,RS-10M)	CVDRS1005M	1
D934	DIODE , SB (60V, 3A, DO-201)	CVD31DQ06FC6	1
D938	DIODE , SB (60V, 3A, DO-201)	CVD31DQ06FC6	1
D939	DIODE	HVD31DQ06H	1
D940	DIODE	HVD31DQ06H	1
D941	DIODE	HVD31DQ06H	1
HS91	FET HEAT SINK ASS'Y (AVR270/AVR370, CMY2A327ZA)	CVTSPW11N80C3ZA	1
	BRACKET , THERMAL SENSOR	CMD1A720	1
	INSULATOR , SILICON	CMX1A164	2
	HEAT SINK	CMY2A327ZA-V1	1
	PROTECTOR , THERMAL ASS'Y	CRTST22110150WZA	1
	PROTECTOR , THERMAL (110'C, 150mm)	CRTST22110150W	1
	PROTECTOR , THERMAL ASS'Y (110'C, 150mm)	CRTST22110150WA	1
	SCREW	CTB3+10JR	2
	F.E.T , SPW11N80C3 (800V/11A, PG-TO247-3)	CVTSPW11N80C3	2
HS92	DIODE HEAT SINK ASS'Y (CMY3A222)	CVDFCU20A40VA	1
	BRACKET , THERMAL SENSOR	CMD1A720	1
	HEAT SINK	CMY3A222-V1	1
	PROTECTOR , THERMAL ASS'Y	CRTST22120120WZA	1
	PROTECTOR , THERMAL (120'C, 120mm)	CRTST22120120W	1
	PROTECTOR , THERMAL ASS'Y (120'C, 120mm)	CRTST22120120WA	1
	SCREW	CTB3+10JR	2
	DIODE , FAST RECOVERY (400V/20A,TO-220)	CVDFCU20A40	1
	COMPOUND , SILICONE	K8AYG6260	0.2
HS93	DIODE HEAT SINK ASS'Y (CMY3A222)	CVDFCU20A40XA	1
	HEAT SINK	CMY3A222-V1	1
	SCREW	CTB3+10JR	1
	DIODE , FAST RECOVERY (400V/20A,TO-220)	CVDFCU20A40	1
	COMPOUND , SILICONE	K8AYG6260	0.2
HS94	HEAT SINK ASS'Y(HVINJM7812FA+CMY2A223)	CVINJM7812FAXA	1
	HEAT SINK	CMY2A223-V1	1
	SCREW	CTB3+8JR	1
	I.C , REGULATOR	HVINJM7812FA	1
	COMPOUND , SILICONE	K8AYG6260	0.2
IC91	I.C , PWM	CVIOB2358LAP	1
IC92	I.C , CooLSET-F2(PG-DIP-8-6)	CVIICE2B365	1
IC98	I.C , REGULATOR	HVINJM7912FA	1
LF91	FILTER , LINE (7A, 10mH, CV507100BS)	CLZ9Z145Z	1
LF92	FILTER , LINE (7A, 10mH, CV507100BS)	CLZ9Z145Z	1
LF93	LINE, FILTER (150uH, RING-616)	CLZ9Z121Z	1
L924	COIL , CHOKE(7UH)	CLZ9Z090Z	1
L925	COIL , CHOKE(7UH)	CLZ9Z090Z	1
L926	COIL , CHOKE(7UH)	CLZ9Z090Z	1

PC91	I.C , PHOTO COUPLER	CVIEL817B	1
PC92	I.C , PHOTO COUPLER	CVIEL817B	1
PC93	I.C , PHOTO COUPLER	CVIEL817B	1
PC94	I.C , PHOTO COUPLER	CVIEL817B	1
PC95	I.C , PHOTO COUPLER	CVIEL817B	1
PC96	I.C , PHOTO COUPLER	CVIEL817B	1
PC99	I.C , PHOTO COUPLER	CVIEL817B	1
R903	RES,WIRE WOUND	CRW1PJR15V	1
R908	RES , WIRE WOUND (1W/0.4OHM)	CRW1PJ0R4V	1
R917	RES,WIRE WOUND	CRW1PJR15V	1
R957	RES,WIRE WOUND	CRW1PJR15V	1
R998	RES,WIRE WOUND	CRW1PJR15V	1
SW91	WAFER, 2P, 7.92mm	CJP02GA89ZY	1
SW92	WAFER, 2P, 7.92mm	CJP02GA89ZY	1
TF91	TRANS , STBY (AVR170/270/370)	CLT9Z076ZE	1
TF92	TRANS , SUB (AVR170/270/370)	CLT9Z077ZE	1
TF95	TRANS , MAIN (AVR270/AVR370)	CLT9Z080ZE	1
TF96	TRANS , MAIN (AVR270/AVR370)	CLT9Z080ZE	1
TH91	NTC , THERMISTOR (10MM PITCH, 2.5D-20)	CRT2R5D20MSFC	1
TS91	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
TS92	WAFER/STRAIGHT/2.5mm/2P	CJP02GA01ZY	1
VT91	VARISTOR(560V, 14mm)	CRVSVC561D14A	1
VT92	VARISTOR(560V, 14mm)	CRVSVC561D14A	1
C911	CAP, CERAMIC(1kV/1000pF/K)	CCKT3A102KBL	1
C918	CAP, ELECT(50V/10uF),105'C	CCEA1HH100TCS	1
C921	CAP, ELECT(50V/22uF),105'C	CCEA1HH220TCS	1
C929	CAP, ELECT(6.3V/470uF),105'C	CCEA0JH471TCS	1
C932	CAP, ELECT(50V/47uF),105'C	CCEA1HH470TCS	1
C943	CAP, ELECT(6.3V/1000uF),105'C	CCEA0JH102TCS	1
C944	CAP, ELECT(6.3V/1000uF),105'C	CCEA0JH102TCS	1
C949	CAP , ELECT(63V/47uF),105'C	CCEA1JH470TCS	1
C953	CAP, ELECT(25V/100uF),105'C	CCEA1EH101TCS	1
C955	CAP, ELECT(50V/22uF),105'C	CCEA1HH220TCS	1
C983	CAP, CERAMIC(1kV/470pF/K)	CCKT3A471KB	1
C984	CAP, CERAMIC(1kV/470pF/K)	CCKT3A471KB	1
D916	DIODE , ZENER ,1/2W, 20V	CVDZJ20BT	1
D920	DIODE , SCHOTTKY	HVDUF4004T	1
D921	DIODE , SCHOTTKY (60V/1A)	HVD11EQ06T	1
D928	DIODE , ZENER ,1/2W, 20V	CVDZJ20BT	1
D933	DIODE , SUPER FAST RECTIFIER	CVDSF26	1
D937	DIODE , SUPER FAST RECTIFIER	CVDSF26	1
D943	DIODE , SCHOTTKY	HVDUF4004T	1
ET91	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
ET92	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
ET93	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
ET94	PLATE , EARTH(TRONIC ELECTRONICS)	CJT1A026	1
FH91	HOLDER , FUSE	KJCFC5S	1
FH92	HOLDER , FUSE	KJCFC5S	1
IC99	IC, REGULATOR (24V, TO-92L)	CVIL78L24AB	1
J901	WIRE, COPPER(D0.6)	C3A206	0.022
J902	WIRE, COPPER(D0.6)	C3A206	0.022
J903	WIRE, COPPER(D0.6)	C3A206	0.022
J904	WIRE, COPPER(D0.6)	C3A206	0.032
J905	WIRE, COPPER(D0.6)	C3A206	0.027
J906	WIRE, COPPER(D0.6)	C3A206	0.032
J907	WIRE, COPPER(D0.6)	C3A206	0.025
J908	WIRE, COPPER(D0.6)	C3A206	0.022

J909	WIRE, COPPER(D0.6)	C3A206	0.022
J910	WIRE, COPPER(D0.6)	C3A206	0.022
J911	WIRE, COPPER(D0.6)	C3A206	0.02
J912	WIRE, COPPER(D0.6)	C3A206	0.022
J913	WIRE, COPPER(D0.6)	C3A206	0.02
J914	WIRE, COPPER(D0.6)	C3A206	0.025
J915	WIRE, COPPER(D0.6)	C3A206	0.022
J916	WIRE, COPPER(D0.6)	C3A206	0.02
J917	WIRE, COPPER(D0.6)	C3A206	0.025
J918	WIRE, COPPER(D0.6)	C3A206	0.025
J919	WIRE, COPPER(D0.6)	C3A206	0.02
J920	WIRE, COPPER(D0.6)	C3A206	0.032
J921	WIRE, COPPER(D0.6)	C3A206	0.022
J923	WIRE, COPPER(D0.6)	C3A206	0.02
J924	WIRE, COPPER(D0.6)	C3A206	0.022
J925	WIRE, COPPER(D0.6)	C3A206	0.022
J926	WIRE, COPPER(D0.6)	C3A206	0.027
J927	WIRE, COPPER(D0.6)	C3A206	0.022
J928	WIRE, COPPER(D0.6)	C3A206	0.022
J929	WIRE, COPPER(D0.6)	C3A206	0.027
J930	WIRE, COPPER(D0.6)	C3A206	0.027
J931	WIRE, COPPER(D0.6)	C3A206	0.025
J932	WIRE, COPPER(D0.6)	C3A206	0.027
J933	WIRE, COPPER(D0.6)	C3A206	0.032
J934	WIRE, COPPER(D0.6)	C3A206	0.022
J935	WIRE, COPPER(D0.6)	C3A206	0.032
J936	WIRE, COPPER(D0.6)	C3A206	0.025
J937	WIRE, COPPER(D0.6)	C3A206	0.022
J938	WIRE, COPPER(D0.6)	C3A206	0.032
J939	WIRE, COPPER(D0.6)	C3A206	0.022
J940	WIRE, COPPER(D0.6)	C3A206	0.018
J942	WIRE, COPPER(D0.6)	C3A206	0.027
J943	WIRE, COPPER(D0.6)	C3A206	0.025
J944	WIRE, COPPER(D0.6)	C3A206	0.027
J945	WIRE, COPPER(D0.6)	C3A206	0.027
J946	WIRE, COPPER(D0.6)	C3A206	0.022
J947	WIRE, COPPER(D0.6)	C3A206	0.022
J948	WIRE, COPPER(D0.6)	C3A206	0.032
J949	WIRE, COPPER(D0.6)	C3A206	0.022
J950	WIRE, COPPER(D0.6)	C3A206	0.032
J951	WIRE, COPPER(D0.6)	C3A206	0.032
J952	WIRE, COPPER(D0.6)	C3A206	0.032
J953	WIRE, COPPER(D0.6)	C3A206	0.032
J954	WIRE, COPPER(D0.6)	C3A206	0.027
J955	WIRE, COPPER(D0.6)	C3A206	0.022
J956	WIRE, COPPER(D0.6)	C3A206	0.032
J957	WIRE, COPPER(D0.6)	C3A206	0.022
J958	WIRE, COPPER(D0.6)	C3A206	0.03
J959	WIRE, COPPER(D0.6)	C3A206	0.032
J960	WIRE, COPPER(D0.6)	C3A206	0.022
J961	WIRE, COPPER(D0.6)	C3A206	0.03
J962	WIRE, COPPER(D0.6)	C3A206	0.027
J963	WIRE, COPPER(D0.6)	C3A206	0.027
J964	WIRE, COPPER(D0.6)	C3A206	0.03
J965	WIRE, COPPER(D0.6)	C3A206	0.03
J966	WIRE, COPPER(D0.6)	C3A206	0.025
J967	WIRE, COPPER(D0.6)	C3A206	0.02

J968	WIRE, COPPER(D0.6)	C3A206	0.025
J969	WIRE, COPPER(D0.6)	C3A206	0.027
J971	WIRE, COPPER(D0.6)	C3A206	0.02
J972	WIRE, COPPER(D0.6)	C3A206	0.02
J973	WIRE, COPPER(D0.6)	C3A206	0.02
J974	WIRE, COPPER(D0.6)	C3A206	0.02
J975	WIRE, COPPER(D0.6)	C3A206	0.025
J976	WIRE, COPPER(D0.6)	C3A206	0.02
J977	WIRE, COPPER(D0.6)	C3A206	0.02
J978	WIRE, COPPER(D0.6)	C3A206	0.02
L921	WIRE, COPPER(D0.6)	C3A206	0.018
Q903	T.R	HVTKSA708YT	1
Q914	T.R , KSA1281Y (PNP, TO-92L, AUDIO, FAIRCHILD)	CVTKSA1281YTA	1
RX93	RES , SURGE ,(1.5M OHM, 5%, 1/2W, PRC TYPE)	CRO50TJ155T	1
C903	CAP, CHIP(2012, 50V/0.47uF)	CCUC1H474KC	1
C905	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C906	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C914	CAP, CHIP(2012, 50V/4700pF)	CCUC1H472KC	1
C915	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C916	CAP, CHIP(2012, 50V/820pF, NPO)	CCUC1H821JA	1
C917	CAP, CHIP(2012, 50V/4700pF)	CCUC1H472KC	1
C920	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C923	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C924	CAP, CHIP(2012, 50V/2200pF)	CCUC1H222KC	1
C925	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C926	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C934	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C938	CAP, CHIP(2012, 50V/820pF, NPO)	CCUC1H821JA	1
C945	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C947	CAP, CHIP(2012, 50V/0.22uF)	CCUC1H224KC	1
C950	CAP, CHIP(2012, 50V/0.22uF)	CCUC1H224KC	1
C951	CAP, CHIP(2012, 50V/0.022uF, X7R)	CCUC1H223KC	1
C952	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C954	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C956	CAP, CHIP(2012, 50V/0.022uF, X7R)	CCUC1H223KC	1
C957	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C958	CAP, CHIP(2012, 50V/0.01uF)	CCUC1H103KC	1
C959	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C960	CAP, CHIP(2012, 50V/0.01uF)	CCUC1H103KC	1
C961	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C962	CAP, CHIP(2012, 50V/0.01uF)	CCUC1H103KC	1
C963	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C964	CAP, CHIP(2012, 50V/0.01uF)	CCUC1H103KC	1
C967	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C968	CAP, CHIP(2012, 50V/0.01uF)	CCUC1H103KC	1
C970	CAP, CHIP(2012, 50V/0.22uF)	CCUC1H224KC	1
C971	CAP, CHIP(2012, 50V/0.22uF)	CCUC1H224KC	1
C972	CAP, CHIP(2012, 50V/0.022uF, X7R)	CCUC1H223KC	1
C973	CAP, CHIP(2012, 50V/0.022uF, X7R)	CCUC1H223KC	1
C974	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C977	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C978	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C979	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C981	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C982	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C985	CAP, CHIP(2012, 50V/4700pF)	CCUC1H472KC	1
C986	CAP, CHIP(2012, 50V/4700pF)	CCUC1H472KC	1

D901	DIODE, SURFACE MOUNT RECTIFIER(1000V/1A)	CVDS1M	1
D902	DIODE, SURFACE MOUNT RECTIFIER(1000V/1A)	CVDS1M	1
D903	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D904	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D905	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D907	DIODE , ZENER(20V/0.5W, SOD-123)	CVDMM1Z20H	1
D910	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D911	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D913	DIODE, SURFACE MOUNT RECTIFIER(1000V/1A)	CVDS1M	1
D914	DIODE , ZENER(18V/0.5W, SOD-123)	CVDMM1Z18H	1
D917	DIODE , ZENER(16V/0.5W, SOD-123)	CVDMM1Z16H	1
D918	DIODE , ZENER(16V/0.5W, SOD-123)	CVDMM1Z16H	1
D922	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D923	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D924	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D925	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D926	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D927	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D929	DIODE , ZENER(10V/0.5W, SOD-123)	CVDMM1Z10H	1
D931	DIODE , ZENER(27V/0.5W, SOD-123)	CVDMM1Z27H	1
D932	DIODE, SURFACE MOUNT RECTIFIER(1000V/1A)	CVDS1M	1
D935	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D936	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D942	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D944	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D946	DIODE , ZENER(20V/0.5W, SOD-123)	CVDMM1Z20H	1
D952	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D953	DIODE , ZENER(27V/0.5W, SOD-123)	CVDMM1Z27H	1
D955	DIODE , ZENER(20V/0.5W, SOD-123)	CVDMM1Z20H	1
D957	DIODE , ZENER(20V/0.5W, SOD-123)	CVDMM1Z20H	1
IC89	I.C , SHUNT REGULATOR(SOT-23F)	CVIKA431SAMF2	1
IC90	I.C , SHUNT REGULATOR(SOT-23F)	CVIKA431SAMF2	1
IC95	I.C , SHUNT REGULATOR(SOT-23F)	CVIKA431SAMF2	1
IC96	I.C , SHUNT REGULATOR(SOT-23F)	CVIKA431SAMF2	1
L922	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
L923	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	1
PC89	I.C , PHOTO COUPLER (4P, SMD)	CVIEL357NB	1
PC90	I.C , PHOTO COUPLER (4P, SMD)	CVIEL357NB	1
PC97	I.C , PHOTO COUPLER (4P, SMD)	CVIEL357NB	1
PC98	I.C , PHOTO COUPLER (4P, SMD)	CVIEL357NB	1
Q909	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q915	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q916	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
R851	RES, CHIP(2012/5%/1.8Kohm)	CRJ18AJ182T	1
R852	RES, CHIP(2012/5%/1.8Kohm)	CRJ18AJ182T	1
R853	RES, CHIP(2012/5%/1.8Kohm)	CRJ18AJ182T	1
R854	RES, CHIP(2012/5%/1.8Kohm)	CRJ18AJ182T	1
R855	RES, CHIP(2012/5%/100ohm)	CRJ18AJ101T	1
R856	RES, CHIP(2012/5%/100ohm)	CRJ18AJ101T	1
R874	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R881	RES, CHIP(2012/5%/6.2Kohm)	CRJ18AJ622T	1
R882	RES, CHIP(2012/5%/4.7Kohm)	CRJ18AJ472T	1
R883	RES, CHIP(2012/1%/13Kohm)	CRJ18AF1302T	1
R884	RES, CHIP(2012/5%/6.2Kohm)	CRJ18AJ622T	1
R885	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R886	RES, CHIP(6432/5%/7.5Kohm)	CRJ01HJ752T	1
R890	RES, CHIP(2012/5%/22ohm)	CRJ18AJ220T	1

R891	RES, CHIP(3216/1%/56Kohm)	CRJ14CF5602T	1
R892	RES, CHIP(2012/1%/270Kohm)	CRJ18AF2703T	1
R893	RES, CHIP(2012/1%/56Kohm)	CRJ18AF5602T	1
R894	RES, CHIP(2012/5%/180ohm)	CRJ18AJ181T	1
R895	RES, CHIP(2012/5%/180ohm)	CRJ18AJ181T	1
R896	RES, CHIP(2012/1%/15Kohm)	CRJ18AF1502T	1
R897	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R904	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R906	RES, CHIP(2012/5%/33ohm)	CRJ18AJ330T	1
R907	RES, CHIP(6432/5%/68Kohm)	CRJ01HJ683T	1
R910	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R911	RES, CHIP(3216/1%/56Kohm)	CRJ14CF5602T	1
R912	RES, CHIP(2012/5%/1.2Kohm)	CRJ18AJ122T	1
R913	RES, CHIP(2012/5%/15Kohm)	CRJ18AJ153T	1
R916	RES, CHIP(6432/5%/68Kohm)	CRJ01HJ683T	1
R920	RES, CHIP(2012/5%/4.7Kohm)	CRJ18AJ472T	1
R921	RES, CHIP(2012/5%/6.2Kohm)	CRJ18AJ622T	1
R922	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R923	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R924	RES, CHIP(3216/5%/1.2Mohm)	CRJ14CJ125T	1
R925	RES, CHIP(3216/5%/1.2Mohm)	CRJ14CJ125T	1
R926	RES, CHIP(3216/5%/1.2Mohm)	CRJ14CJ125T	1
R927	RES, CHIP(3216/5%/1.2Mohm)	CRJ14CJ125T	1
R928	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R929	RES, CHIP(3216/5%/1.2Mohm)	CRJ14CJ125T	1
R930	RES, CHIP(2012/1%/13Kohm)	CRJ18AF1302T	1
R931	RES, CHIP(2012/5%/6.2Kohm)	CRJ18AJ622T	1
R932	RES, CHIP(3216/5%/4.7ohm)	CRJ14CJ4R7T	1
R933	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R934	RES, CHIP(2012/5%/560ohm)	CRJ18AJ561T	1
R935	RES, CHIP(2012/5%/22ohm)	CRJ18AJ220T	1
R936	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R937	RES, CHIP(6432/5%/7.5Kohm)	CRJ01HJ752T	1
R938	RES, CHIP(2012/5%/560ohm)	CRJ18AJ561T	1
R939	RES, CHIP(2012/5%/47ohm)	CRJ18AJ470T	1
R940	RES, CHIP(2012/5%/15Kohm)	CRJ18AJ153T	1
R942	RES, CHIP(2012/5%/2.2Kohm)	CRJ18AJ222T	1
R945	RES, CHIP(2012/5%/560ohm)	CRJ18AJ561T	1
R946	RES, CHIP(2012/1%/10Kohm)	CRJ18AF1002T	1
R947	RES, CHIP(2012/1%/10Kohm)	CRJ18AF1002T	1
R948	RES, CHIP(2012/5%/22ohm)	CRJ18AJ220T	1
R949	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R950	RES, CHIP(2012/5%/220Kohm)	CRJ18AJ224T	1
R952	RES, CHIP(6432/5%/100ohm)	CRJ01HJ101T	1
R953	RES, CHIP(3216/1%/56Kohm)	CRJ14CF5602T	1
R954	RES, CHIP(2012/5%/4.7Kohm)	CRJ18AJ472T	1
R955	RES, CHIP(2012/1%/270Kohm)	CRJ18AF2703T	1
R956	RES, CHIP(2012/5%/62Kohm)	CRJ18AJ623T	1
R958	RES, CHIP(2012/1%/5.6Kohm)	CRJ18AF5601T	1
R959	RES, CHIP(2012/1%/5.6Kohm)	CRJ18AF5601T	1
R960	RES, CHIP(2012/1%/56Kohm)	CRJ18AF5602T	1
R961	RES, CHIP(2012/5%/10Kohm)	CRJ18AJ103T	1
R962	RES, CHIP(2012/5%/180ohm)	CRJ18AJ181T	1
R963	RES, CHIP(2012/5%/33ohm)	CRJ18AJ330T	1
R965	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R967	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R968	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1

R969	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R970	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R971	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R972	RES, CHIP(2012/5%/10ohm)	CRJ18AJ100T	1
R973	RES, CHIP(6432/5%/100ohm)	CRJ01HJ101T	1
R974	RES, CHIP(3216/5%/75Kohm)	CRJ14CJ753T	1
R975	RES, CHIP(3216/5%/75Kohm)	CRJ14CJ753T	1
R976	RES, CHIP(3216/5%/75Kohm)	CRJ14CJ753T	1
R978	RES, CHIP(6432/5%/100ohm)	CRJ01HJ101T	1
R979	RES, CHIP(3216/5%/470Kohm)	CRJ14CJ474T	1
R980	RES, CHIP(3216/5%/470Kohm)	CRJ14CJ474T	1
R981	RES, CHIP(3216/5%/470Kohm)	CRJ14CJ474T	1
R982	RES, CHIP(3216/5%/470Kohm)	CRJ14CJ474T	1
R983	RES, CHIP(2012/5%/180ohm)	CRJ18AJ181T	1
R984	RES, CHIP(2012/5%/47ohm)	CRJ18AJ470T	1
R985	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R986	RES, CHIP(2012/5%/560ohm)	CRJ18AJ561T	1
R987	RES, CHIP(2012/1%/15Kohm)	CRJ18AF1502T	1
R988	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R989	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R991	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R992	RES, CHIP(3216/1%/56Kohm)	CRJ14CF5602T	1
R993	RES, CHIP(2012/5%/1.2Kohm)	CRJ18AJ122T	1
R994	RES, CHIP(2012/5%/15Kohm)	CRJ18AJ153T	1
R995	RES, CHIP(6432/5%/360ohm)	CRJ01HJ361T	1
R996	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R997	RES, CHIP(6432/5%/68Kohm)	CRJ01HJ683T	1
R999	RES, CHIP(6432/5%/360ohm)	CRJ01HJ361T	1

SMPS SUB PCB ASS'Y (COP12481B)			
Ref	**Description**	**Parts No.**	**Qty**
IC93	I.C , PWM CONTROLLER(PG-DIP-8)	CVIICE2QS01	1
IC94	I.C , PWM CONTROLLER(PG-DIP-8)	CVIICE2QS01	1
SN92	PIN HEADER , 9P ANGLE(P/H2.54mm, L=6.0mm)	CJP09GF302ZB	1
SN93	PIN HEADER , 9P ANGLE(P/H2.54mm, L=6.0mm)	CJP09GF302ZB	1
C907	CAP, ELECT(35V/47uF),105'C	CCEA1VH470TCS	1
C927	CAP, ELECT(35V/47uF),105'C	CCEA1VH470TCS	1
J940	WIRE, COPPER(D0.6)	C3A206	0.022
J941	WIRE, COPPER(D0.6)	C3A206	0.022
Q901	T.R	HVTKSA708YT	1
Q906	T.R	HVTKSA708YT	1
C908	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C909	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C910	CAP, CHIP(2012, 50V/100pF)	CCUC1H101JA	1
C912	CAP, CHIP(2012, 50V/1200pF, X7R)	CCUC1H122KC	1
C913	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
C928	CAP, CHIP(2012, 50V/1uF)	CCUC1H105KC	1
C933	CAP, CHIP(2012, 50V/0.1uF)	CCUC1H104KC	1
C935	CAP, CHIP(2012, 50V/100pF)	CCUC1H101JA	1
C936	CAP, CHIP(2012, 50V/1200pF, X7R)	CCUC1H122KC	1
C937	CAP, CHIP(3216, 1KV/2200pF, X7R)	CCUP3A222KC	1
D906	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D908	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D909	DIODE , ZENER(24V/0.5W, SOD-123)	CVDMM1Z24H	1
D912	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D919	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D945	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1

D947	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
D948	DIODE , ZENER(24V/0.5W, SOD-123)	CVDMM1Z24H	1
D949	DIODE , FAST SWITCHING(0.5W, SOD-123)	CVD1N4448W	1
D951	DIODE , ULTRA FAST RECTIFIER	CVDUS1M	1
Q902	T.R (NPN, SOT-23, ISAHAYA)	CVT2SC6046T1121W	1
Q904	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
Q907	T.R (NPN, SOT-23, ISAHAYA)	CVT2SC6046T1121W	1
Q908	T.R,RT1N141C(10K-10K)	CVTRT1N141C	1
R875	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R876	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R877	RES, CHIP(3216/5%/0ohm)	CRJ14CJ0R0T	1
R878	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R879	RES, CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	1
R880	RES, CHIP(2012/5%/4.3Kohm)	CRJ18AJ432T	1
R887	RES, CHIP(2012/5%/10Kohm)	CRJ18AJ103T	1
R888	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R889	RES, CHIP(2012/5%/15Kohm)	CRJ18AJ153T	1
R901	RES, CHIP(2012/5%/39ohm)	CRJ18AJ390T	1
R902	RES, CHIP(2012/5%/36Kohm)	CRJ18AJ363T	1
R914	RES, CHIP(2012/5%/100Kohm)	CRJ18AJ104T	1
R915	RES, CHIP(2012/5%/39ohm)	CRJ18AJ390T	1
R918	RES, CHIP(2012/5%/100Kohm)	CRJ18AJ104T	1
R919	RES, CHIP(2012/5%/4.3Kohm)	CRJ18AJ432T	1
R941	RES, CHIP(2012/5%/10Kohm)	CRJ18AJ103T	1
R943	RES, CHIP(2012/5%/1Kohm)	CRJ18AJ102T	1
R944	RES, CHIP(2012/5%/15Kohm)	CRJ18AJ153T	1
R951	RES, CHIP(2012/5%/36Kohm)	CRJ18AJ363T	1
R995	RES, CHIP(2012/5%/100Kohm)	CRJ18AJ104T	1
R999	RES, CHIP(2012/5%/100Kohm)	CRJ18AJ104T	1

Packaging

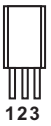
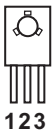
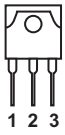
Ref	Description	Parts No.	Qty
	CLAMPER , ARM	CHE154	0.12
	BOX , OUT CARTON AVR2700	CPG1A967V	1
	STAPLE	CPL18A5M	8
	BAG,POLY SET	CPP1A081Z	1
	PAD , LEFT	CPS1A920	1
	PAD , RIGHT	CPS1A921	1
	LABEL , BAR CODE AVR154	CQB1A907Z	1
	LABEL , BAR CODE(MANUAL)	CQB1A971	1
	LABEL , BAR CODE(SET)	CQB1A978	1
	RIBON , BAR CODE	CQS1A001	0.12
	TAPE , P.P(24mm*50mm)	C4FC240CL	0.2
	TAPE , OPP	C4FC500CL	4.6
	BAG , POLY(MANUAL260X365)	CPB1A190Z	1
	STAPLE	CPL0905	3
	LABEL , BAR CODE(MANUAL)	CQB1A971	1

Accessories

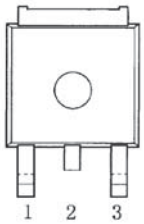
Ref	Description	Parts No.	Qty
	CORD , POWER (PLUG+SOCKET) UL	CJA2A119Z	1
	REMOTE CONTROLLER(AVR2700)	CARTAVR2700-HK	1
	INSTRUCTION MANUAL ASS'Y	CQXAVR2700	1
	MICRO PHONE ASS'Y	CJXAVR365MICRO	1
	CARD , WARRANTY	CQE1A172X	1
	SHEET , IMPORTANT SAFETY	CQE1A522Z	1
	SHEET , QUICK START GUIDE	CQE1A579Y	1

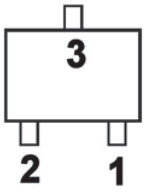
	FM 1 POLE ANT(UL)	CSA1A019Z	1
	ANT, AM LOOP(9.5uH/5T)	CSA1A039Z	1

TRANSISTOR, REGULATOR IC BLOCK DIAGRAM

TO-92M  123 1. Emitter 2. Collector 3. Base KTC2874B KSC2785Y KRA107M KRC107M KRA104MT KRC104M KTA1267 KTC 1027	TO-92  123 1. Emitter 2. Collector 3. Base KTD1302T KSA992FTA KSC1845FTA KTC3198Y KTA1271Y KSA1175YT KTC 3199 KTA1266YT 2SC2240BL KRC102M	TO-220  123 1. GND 2. INPUT 3. OUTPUT MCNJM7905 MC7915C NJM7908 L7905 KIA 7908 L7915 KIA 7905 KIA7915	TO-92L  123 1. Emitter 2. Collector 3. Base KTA1024Y KSC2316Y
TO-126  123 1. Emitter 2. Collector 3. Base KTD600KG KTA 1360 KTC 3423	TO-92  123 1. Emitter 2. Base 3. Collector KSA733CYT	TO-220  123 1. INPUT 2. GND 3. OUTPUT KIA 7809 KIA7815 MC7815C MC7805C MC7809 L7805 NJM7824 L7815 L7812 KIA 7808 L7808 KIA7812	TO-3P  1 2 3 1. Base 2. Collector 3. Emitter 2SB1560 2SC3423O 2SD2390 2SB1559 2SA1360 2SD2389 2SB1647 2SD2560

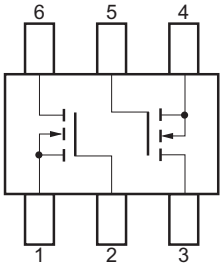
NJM2391DL1-25 NJM2391DL1-33
LOW DROPOUT VOLTAGE REGULATOR





KRA 107S
KRC102S
KRA102S
KRC103S
KRC107S
KRC111S
KRC1114S

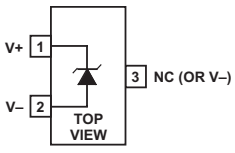
N-CHANNEL MOS FET ARRAY
μPA672T



1. Source 1 (S1)
2. Gate 1 (G1)
3. Drain 2 (D2)
4. Source 2 (S2)
5. Gate 2 (G2)
6. Drain 1 (D1)

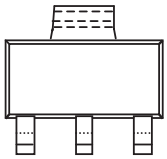
Marking: MA

PIN CONFIGURATION
SOT-23 Package
AD1580



NC = NO CONNECT

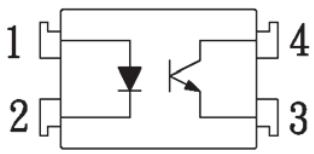
SOT–223 PKG (FRONT VIEW)



LM1117
REGULATOR

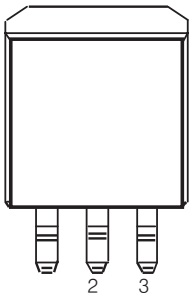
PIN FUNCTION
. Adj/Gnd
2. Vout
3. Vin

KP1010 photocoupler

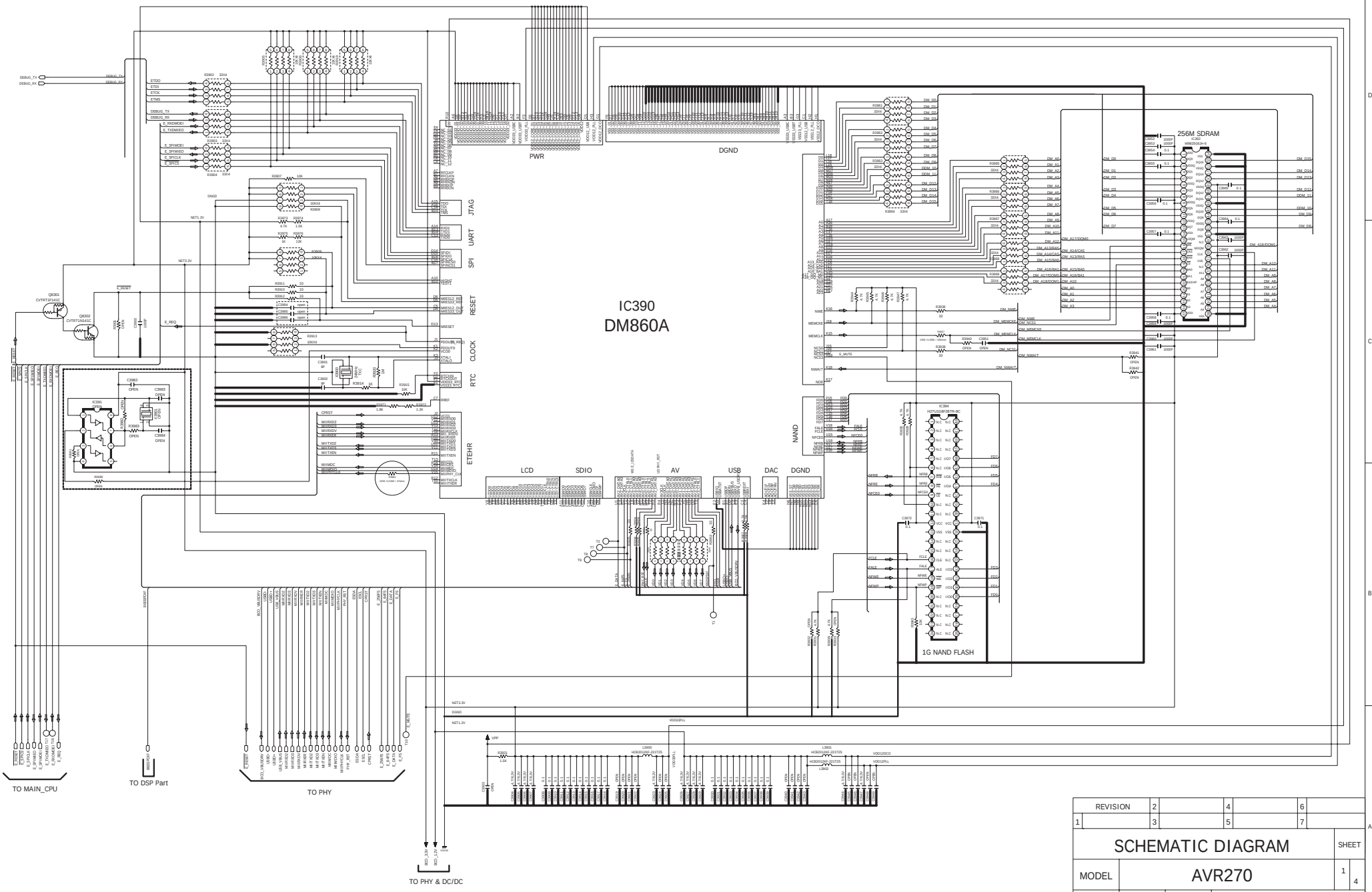


1. Anode
2. Cathode
3. Emitter
4. Collector

TO–263 (D2 PKG, FRONT VIEW)

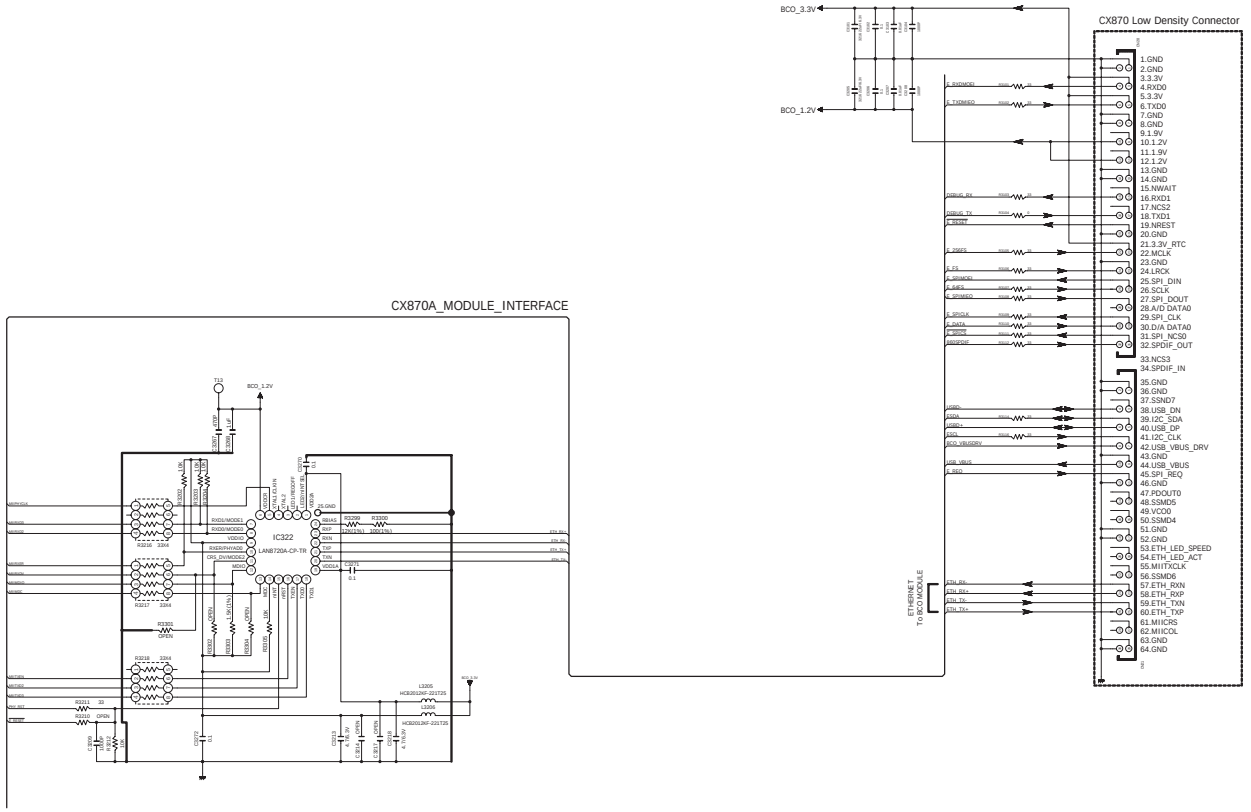


PIN FUNCTION
. Adj/Gnd
2. Vout
3. Vin



REVISION	2		4		6	
1		3		5		7	

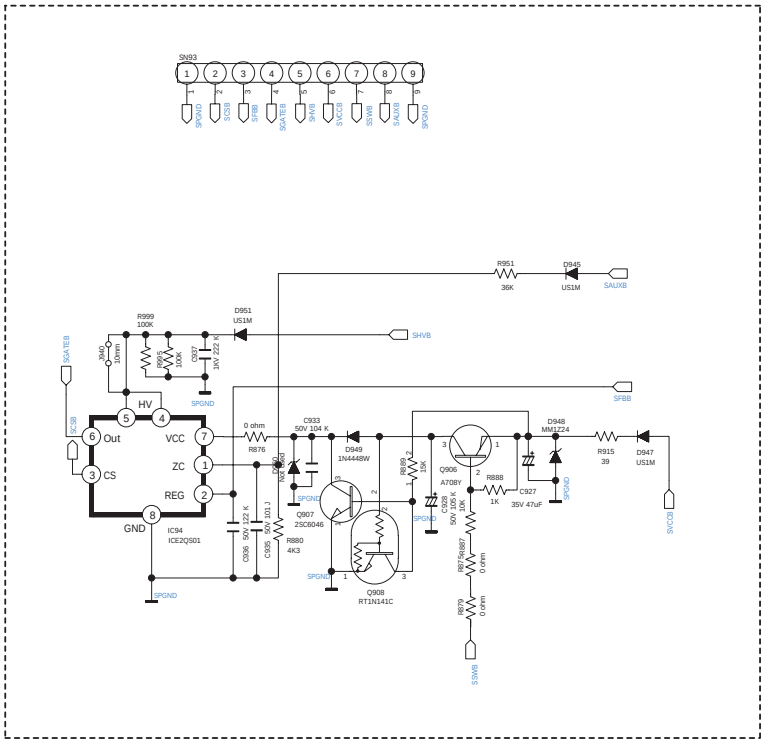
SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270		1 / 4
DESIGN	CHECK	APPROVE	DRAWING NO
Y.K.Y	Y.K.Y	Y.K.Y	1437SCPZ
05.00.00	05.00.00	05.00.00	(Network DM860A) 1 / 1

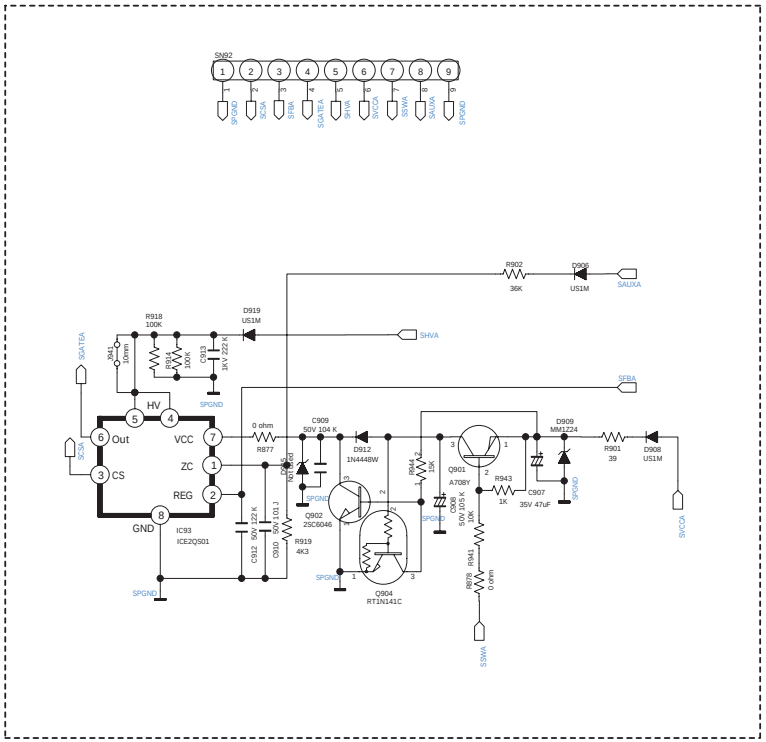


REVISION	2		4		6	
1		3		5		7	

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270		1 / 4
DESIGN	CHECK	APPROVE	DRAWING NO
Y.K.Y	Y.K.Y	Y.K.Y	1437SCPZ
05.00.00	05.00.00	05.00.00	(DM860A_Connector) 1 / 1

AVR270/AVR370 SMPS SUB SCHEMATIC DIAGRAM





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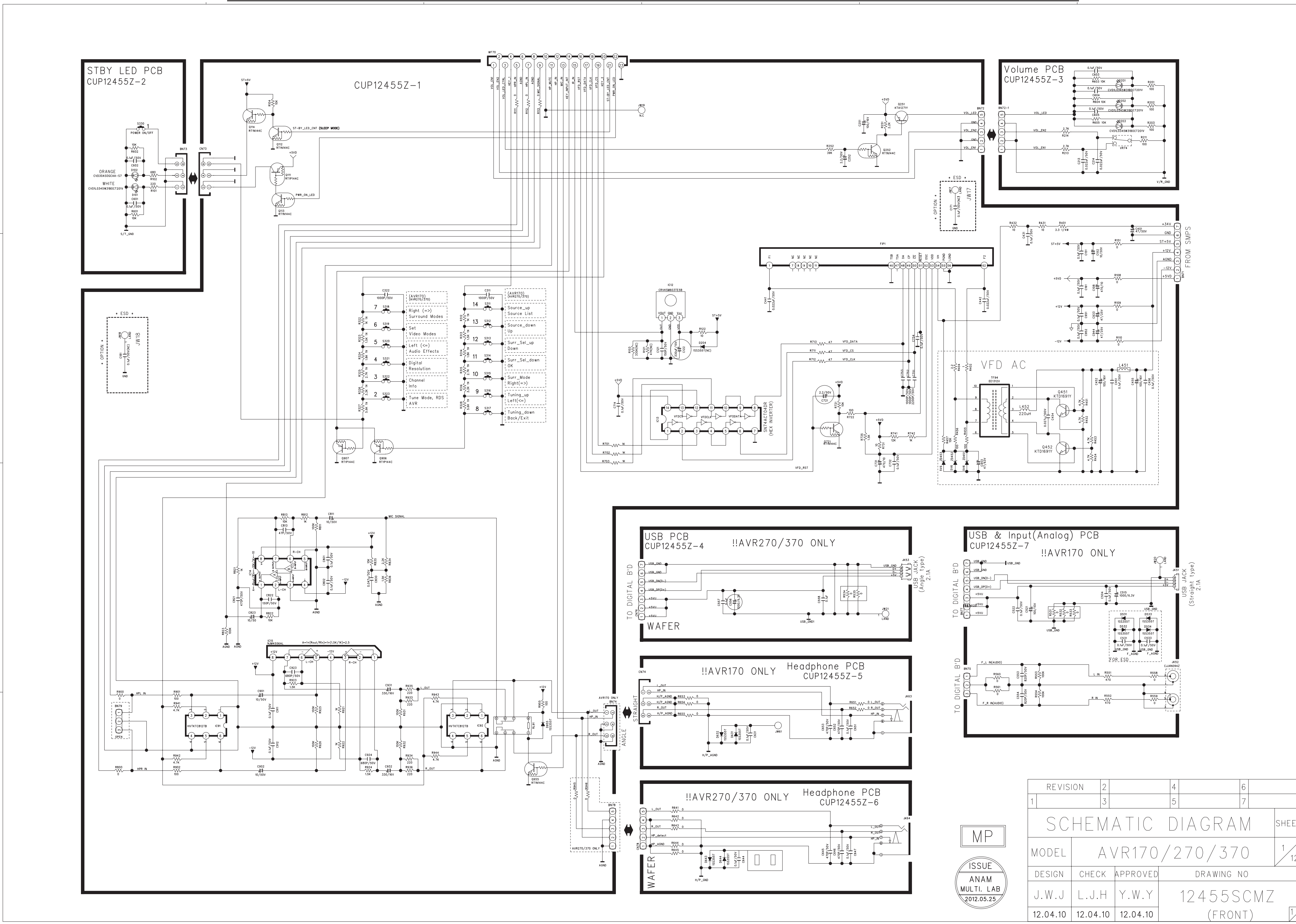
REVISION	2		4		6	
1		3		5		7	

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270/AVR370		1/1
DESIGN	CHECK	APPROVE	DRAWING NO
C.S.K	L.J.H	Y.W.Y	12481SCMZ (SMPS SUB)
12.07.26	12.07.26	12.07.26	1/1


STBY LED PCB
CUP12455Z-2
CUP12455Z-1
Volume PCB
CUP12455Z-3
FROM SMPS
VFD AC
USB PCB
CUP12455Z-4
!!AVR270/370 ONLY
WAFER
TO DIGITAL B'D
USB & Input(Analog) PCB
CUP12455Z-7
!!AVR170 ONLY
USB JACK (Angle type) 2.1A
USB JACK (Straight type) 2.1A
!!AVR170 ONLY
Headphone PCB
CUP12455Z-5
STRAIGHT
ANGLE
!!AVR270/370 ONLY
Headphone PCB
CUP12455Z-6
REVISION
SCHEMATIC DIAGRAM
SHEET
MODEL
AVR170/270/370
1/12
DESIGN
CHECK
APPROVED
DRAWING NO
J.W.J
L.J.H
Y.W.Y
12455SCMZ
(FRONT)
12.04.10
12.04.10
12.04.10
MP
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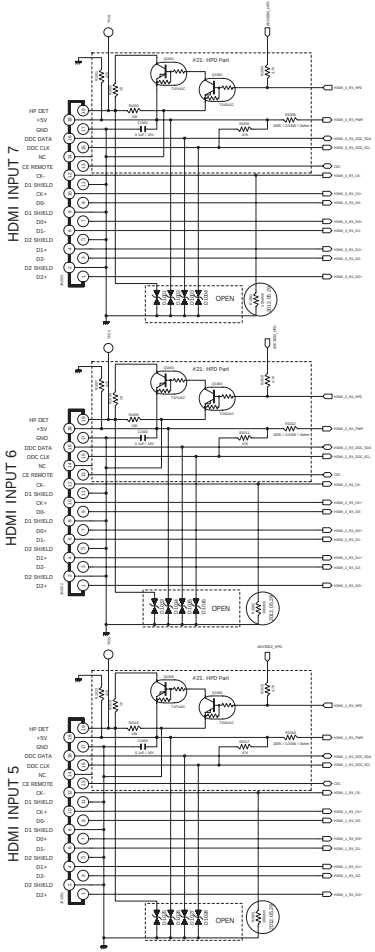
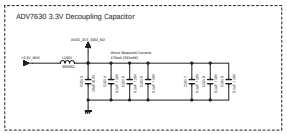
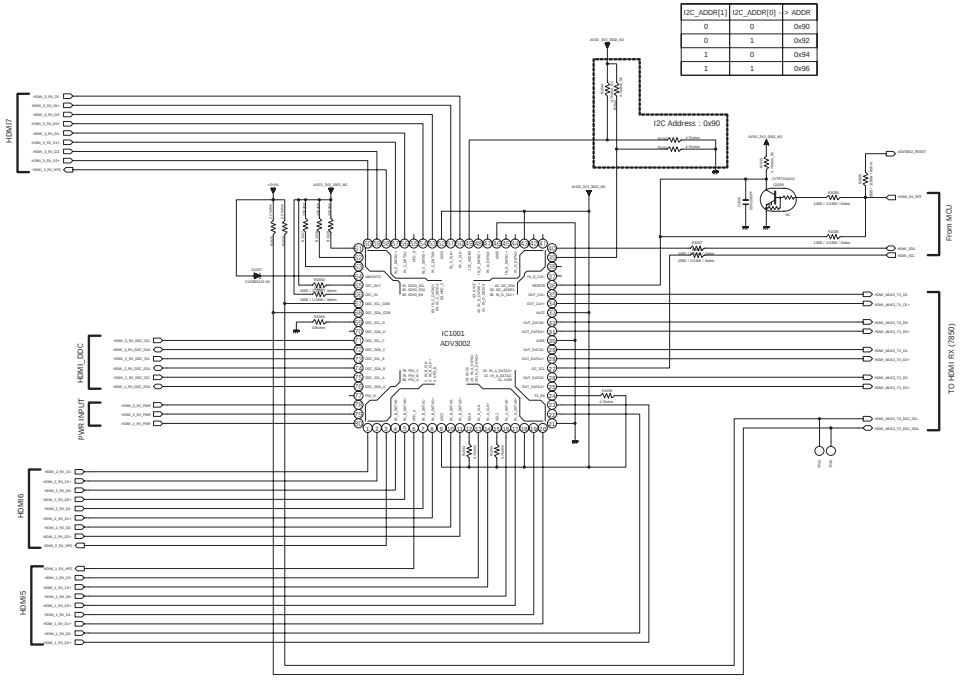
2012.05.25





CUP12457Z

I2C_ADDR[1]	I2C_ADDR[0]	-> ADDR
0	0	0x90
0	1	0x92
1	0	0x94
1	1	0x96



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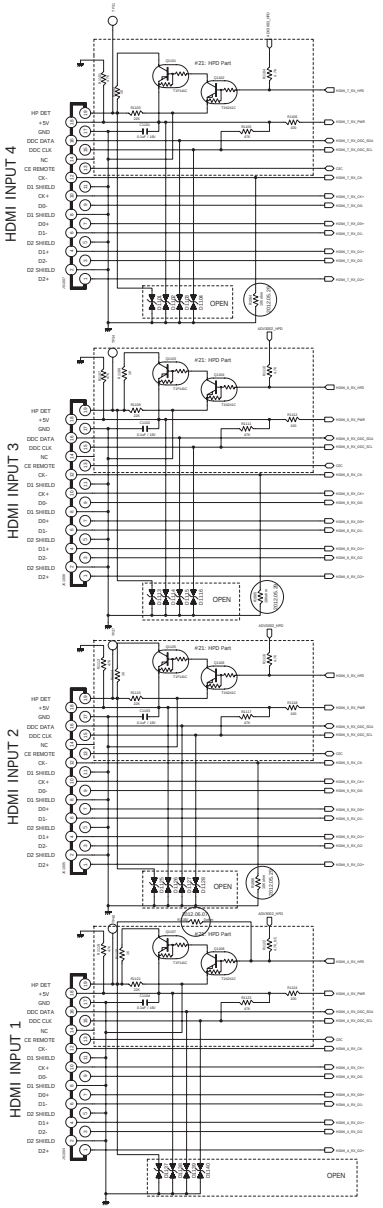
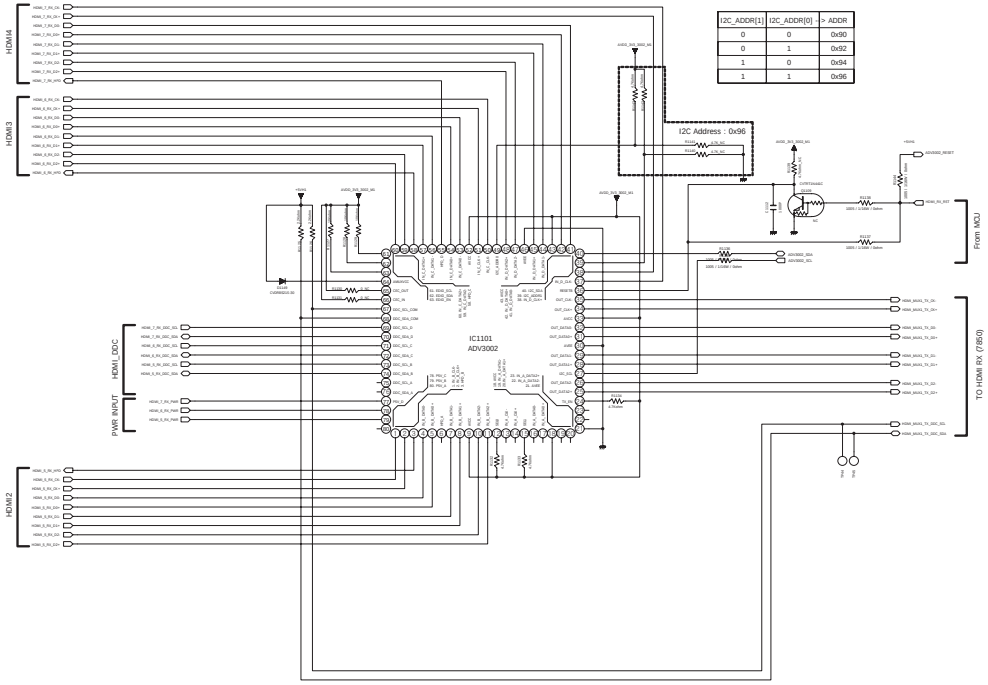
REVISION	2		4		6	
1		3		5		7

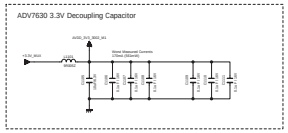
SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
S.K.S	L.J.H	W.Y.Y	CUP12457Z (HDMI INPUT 3:1 MUX)
12.08.02	11.12.27	11.12.27	1 9

CUP12457Z





I2C_ADDR[1]	I2C_ADDR[0]	-> ADDR
0	0	0x90
0	1	0x92
1	0	0x94
1	1	0x96



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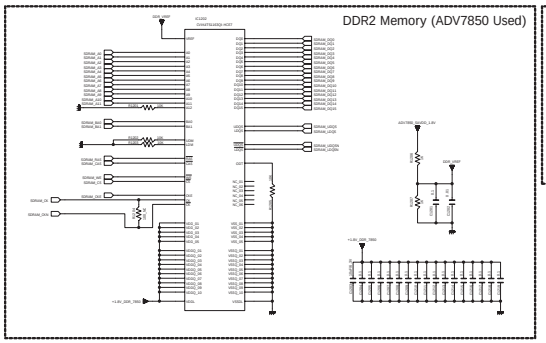
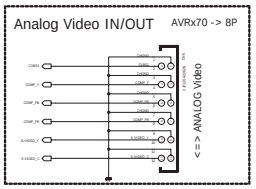
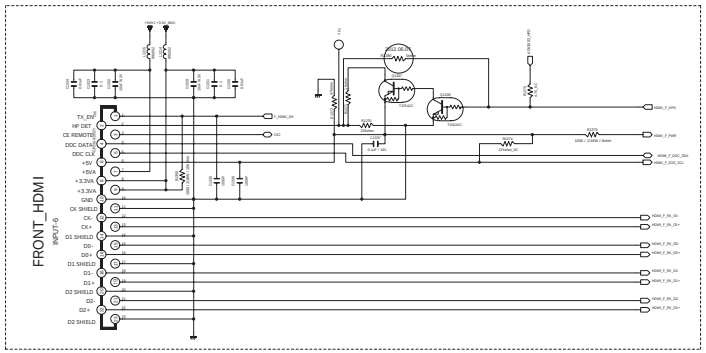
REVISION	2		4		6	
1		3		5		7

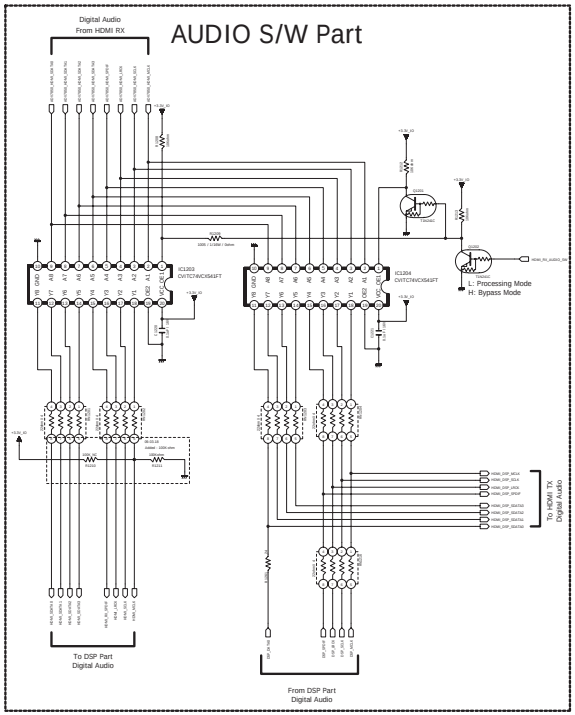
SCHEMATIC DIAGRAM			SHEET
MODEL	ARV270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
S.K.S	L.J.H	W.Y.Y	CUPxxxxxZ
12.08.02	11.12.27	11.12.27	(HDMI INPUT 3:1 MUX) 2 9

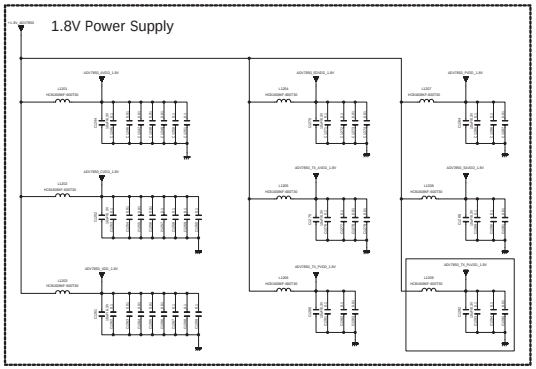


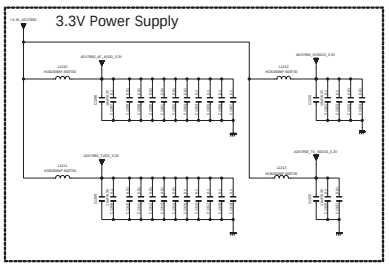


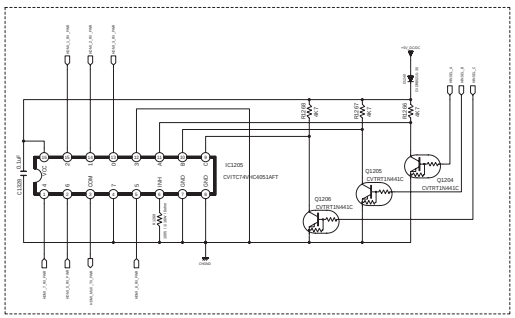
CUP12457Z











REVISION	2	4	6
1	3	5	7

SCHEMATIC DIAGRAM — SHEET

MODEL	AVR270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
S.K.S	L.J.H	W.Y.Y	CUPxxxxxZ
12.08.02	11.12.27	11.12.27	(HDMI RX / Decoder) 3 9

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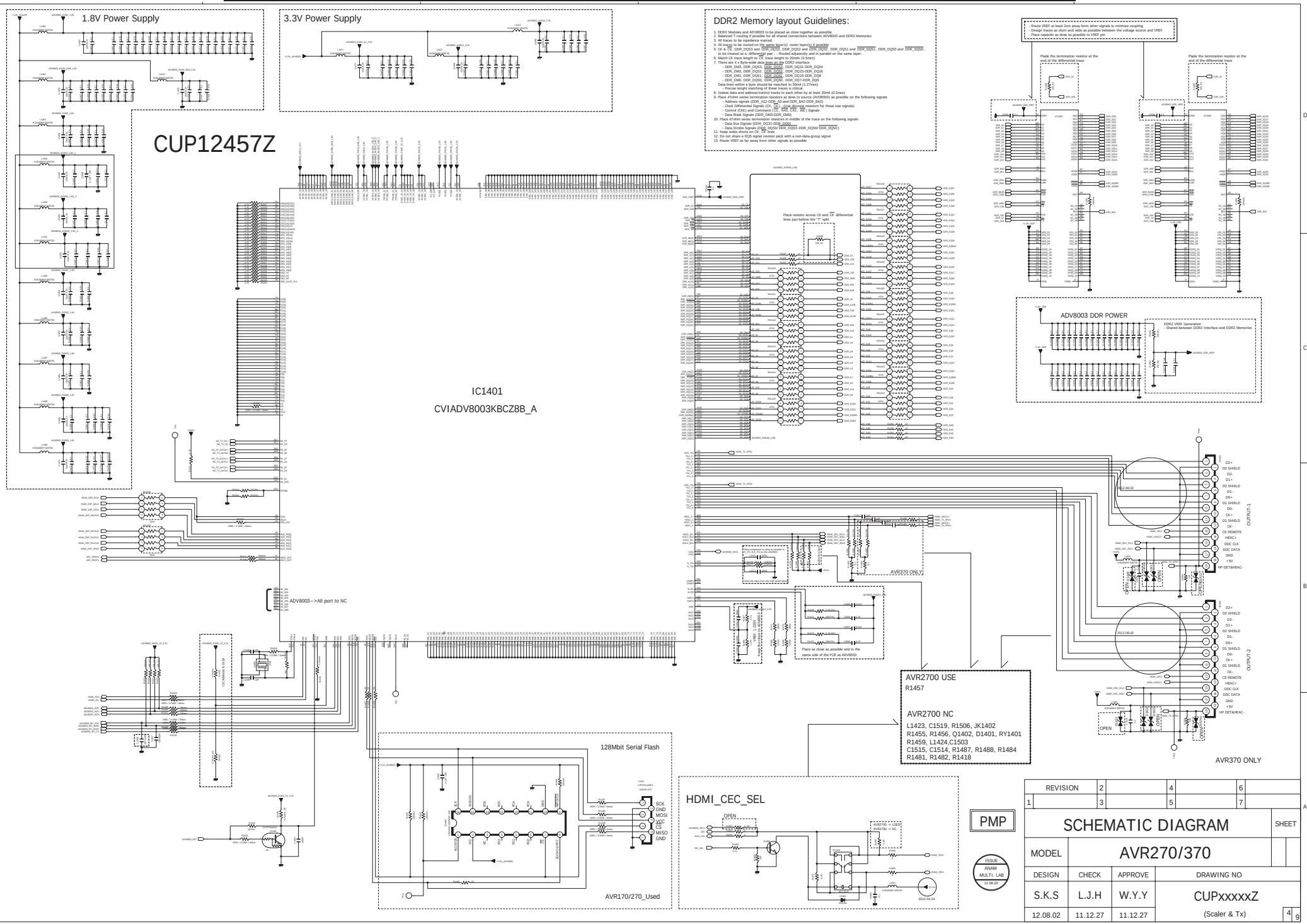

REVISION	2	4	6
1	3	5	7

SCHEMATIC DIAGRAM — SHEET

MODEL	AVR270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
S.K.S	L.J.H	W.Y.Y	CUPxxxxxZ
12.08.02	11.12.27	11.12.27	(Scaler & Tx) 4 9

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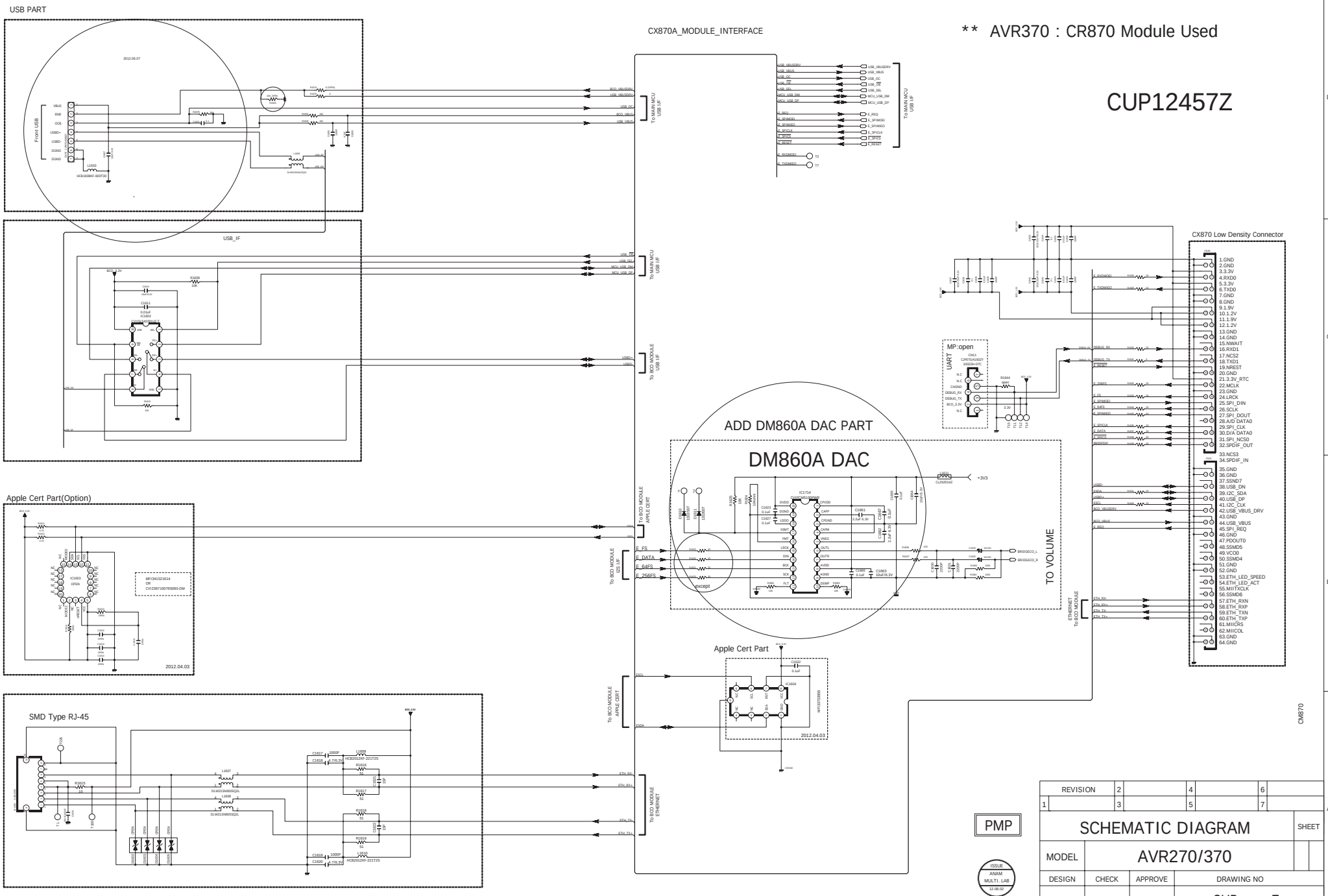
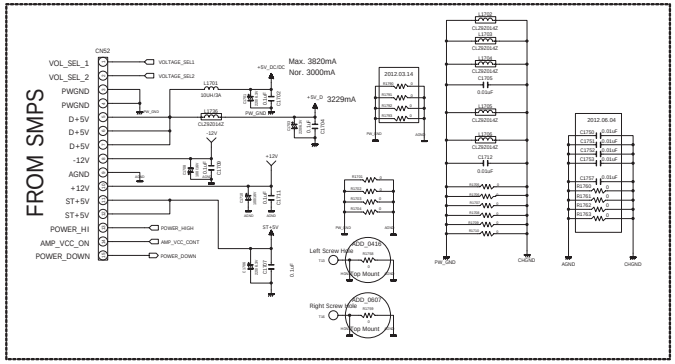
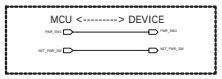

USB PART
CX870A_MODULE_INTERFACE
** AVR370 : CR870 Module Used
CUP12457Z
USB_IF
ADD DM860A DAC PART
DM860A DAC
TO VOLUME
Apple Cert Part(Option)
Apple Cert Part
SMD Type RJ-45
CX870 Low Density Connector
1.GND
2.GND
3.3.3V
4.RXD0
5.3.3V
6.TXD0
7.GND
8.GND
9.1.9V
10.1.2V
11.1.9V
12.1.2V
13.GND
14.GND
15.NWAIT
16.RXD1
17.NCS2
18.TXD1
19.NRESET
20.GND
21.3.3V_RTC
22.MCLK
23.GND
24.LRCK
25.SPI_DIN
26.SCLK
27.SPI_DOUT
28.A/D DATA0
29.SPI_CLK
30.D/A DATA0
31.SPI_NCS0
32.SPDIF_OUT
33.NCS3
34.SPDIF_IN
35.GND
36.GND
37.SSND7
38.USB_DN
39.I2C_SDA
40.USB_DP
41.I2C_CLK
42.USB_VBUS_DRV
43.GND
44.USB_VBUS
45.SPI_REQ
46.GND
47.PDOUT0
48.SSND5
49.VCO0
50.SSND4
51.GND
52.GND
53.ETH_LED_SPEED
54.ETH_LED_ACT
55.MIITXCLK
56.SSND6
57.ETH_RXN
58.ETH_RXP
59.ETH_TXN
60.ETH_TXP
61.MIIICRS
62.MIIICOL
63.GND
64.GND
CM870
PMP
ISSUE
ANAM
MULTI. LAB
12.08.02
REVISION
SCHEMATIC DIAGRAM
SHEET
MODEL
AVR270/370
DESIGN
CHECK
APPROVE
DRAWING NO
K.M.S
L.J.H
W.Y.Y
CUPxxxxxZ
12.08.02
11.12.27
11.12.27
(PHY&USB&CONN)
5
9

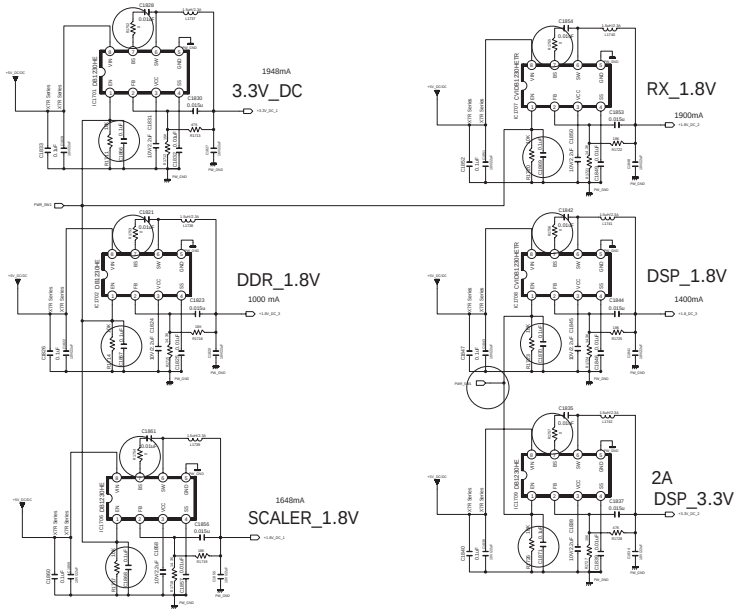


CUP12457Z

POWER Part (DC/DC)



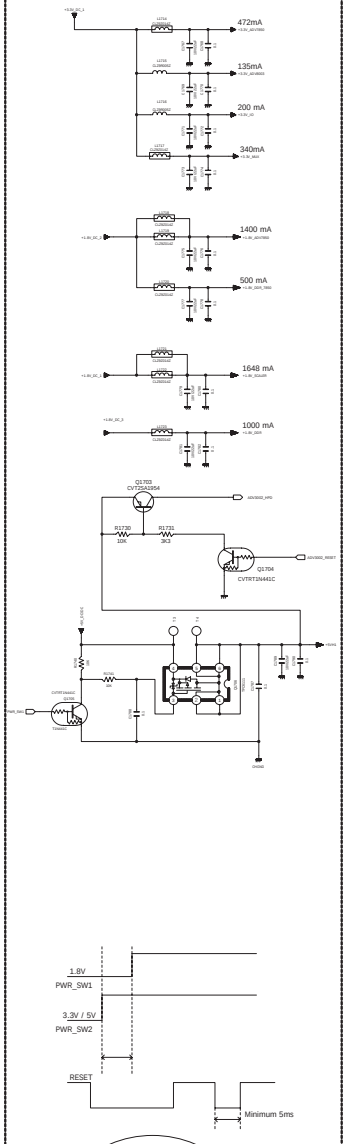
DC_DC_Power Supply



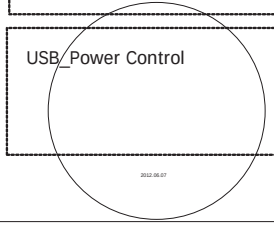
1.8V -> R1=18K, R2=14.3K

3.3V -> R1=47K, R2=15K

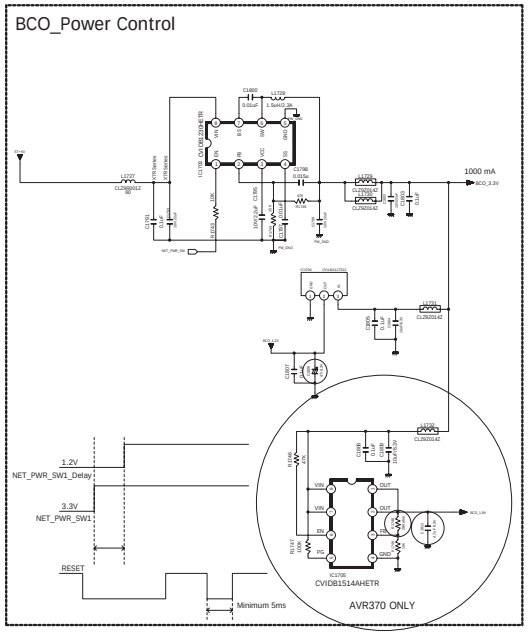
HDMI_Power Control



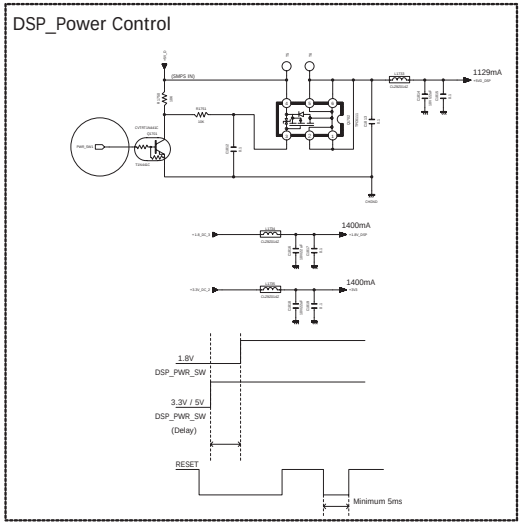
USB_Power Control



BCO_Power Control



DSP_Power Control



REVISION	2		4		6	
1		3		5		7

PMP

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
S.K.S	L.J.H	W.Y.Y	CUPxxxxxZ
12.08.02	11.12.27	11.12.27	(DC_DC_POWER) 6 9

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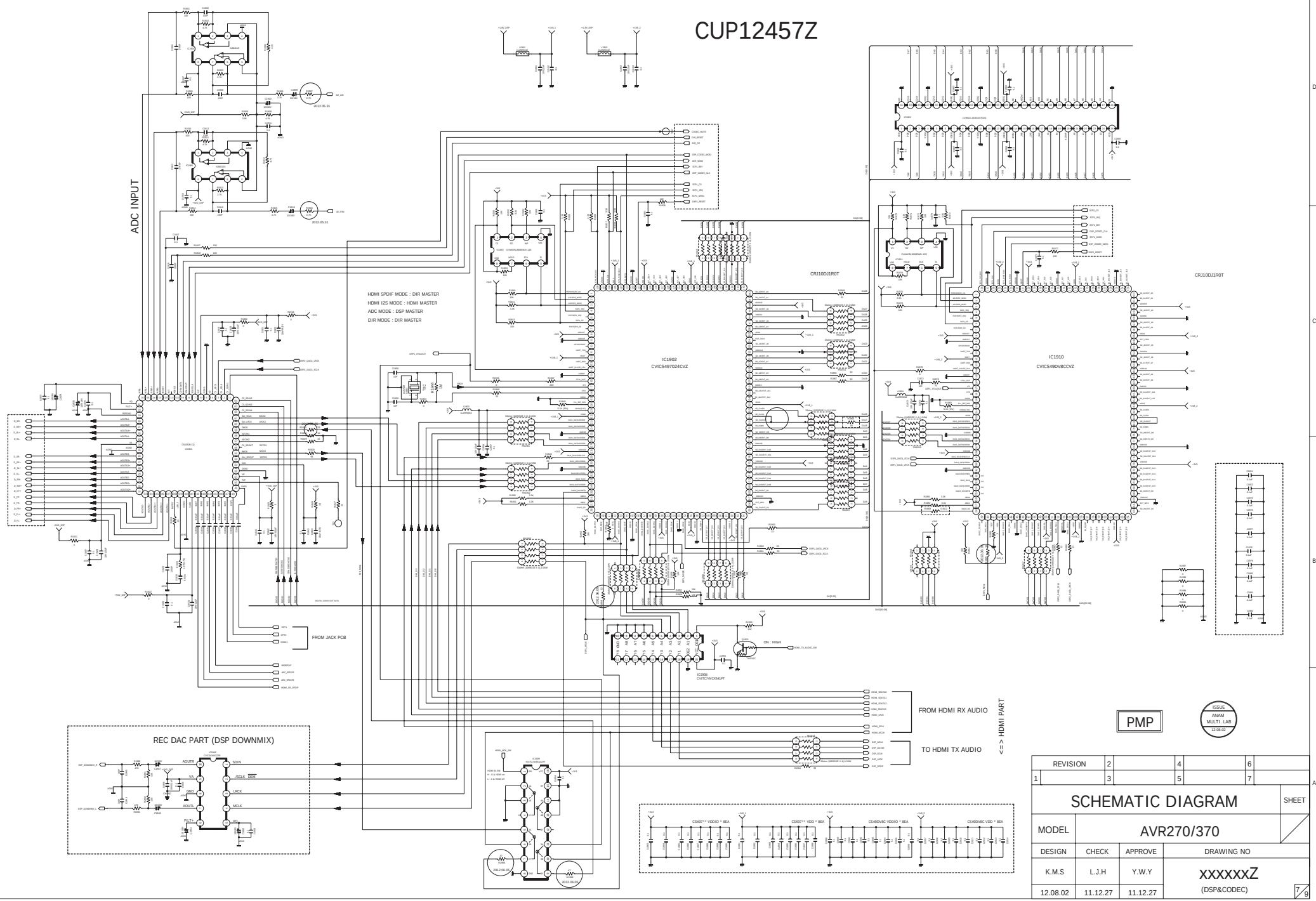
12.08.06



REVISION	2		4		6	
1		3		5		7

SCHEMATIC DIAGRAM — SHEET

MODEL	AVR270/370		
DESIGN	CHECK	APPROVE	DRAWING NO
K.M.S	L.J.H	Y.W.Y	XXXXXXZ (DSP&CODEC) 7/9
12.08.02	11.12.27	11.12.27	

CUP12457Z

HDMI CEC_PART

* MODEL OPTION *

Model	R2131	R2130	Vin (V)
AVR2700	0	OPEN	0
AVR3700	10K	10K	1.65
AVR270	22K	10K	2.27
AVR370	OPEN	0	3.3

* MODEL Option

TEMP. SENSING

<=> FRONT PCB

<=> DSP/CODEC

<=> SMPS PCB

<=> TUNER CONTROL (JACK B'D)

<=> JTAG

TO JACK PCB

<=> DIGITAL AUDIO/POWER/MCU CONT.

* DEBUG & UPDATE

MCU_JTEG

<=> BridgeCo

MUTE CONTROL

<=> FRONT PCB

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SCALER Part (ADV8003)

HDMI_RX Part (ADV7850)

HDMI_MUX Part (ADV3002)

PHY&USB Part

CEC Part

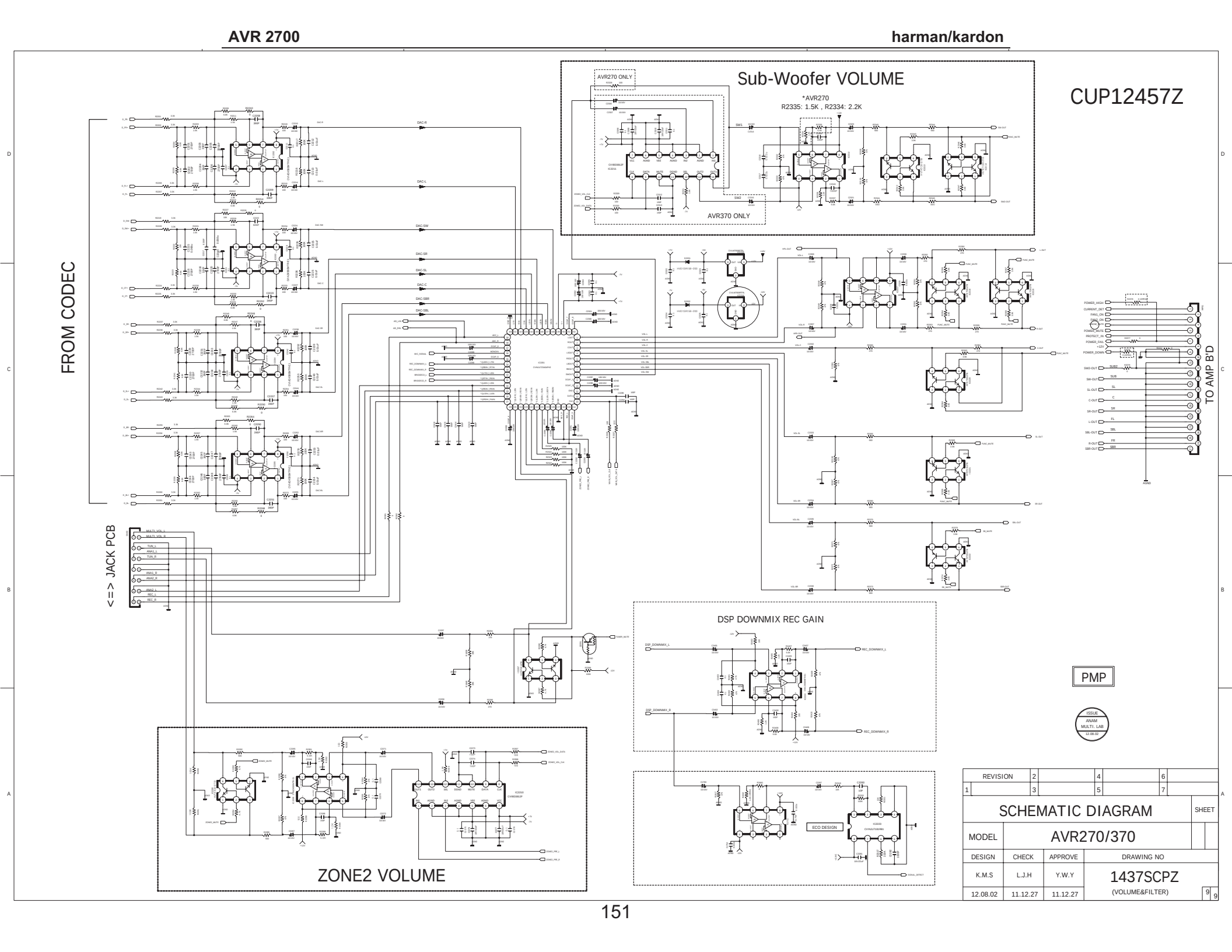
BCO Part (DM860A)

REVISION	2		4		6	
1		3		5		7

SCHEMATIC DIAGRAM — SHEET

MODEL: AVR270/370

DESIGN	CHECK	APPROVE	DRAWING NO
K.M.S	L.J.H	Y.W.Y	1437SCPZ
12.08.02	11.12.27	11.12.27	(ST_MCU) 8 9


CUP12457Z
FROM CODEC
TO AMP B'D
<=> JACK PCB
Sub-Woofer VOLUME
AVR270 ONLY
*AVR270
R2335: 1.5K , R2334: 2.2K
AVR370 ONLY
DSP DOWNMIX REC GAIN
ZONE2 VOLUME
ECO DESIGN
PMP
ISSUE
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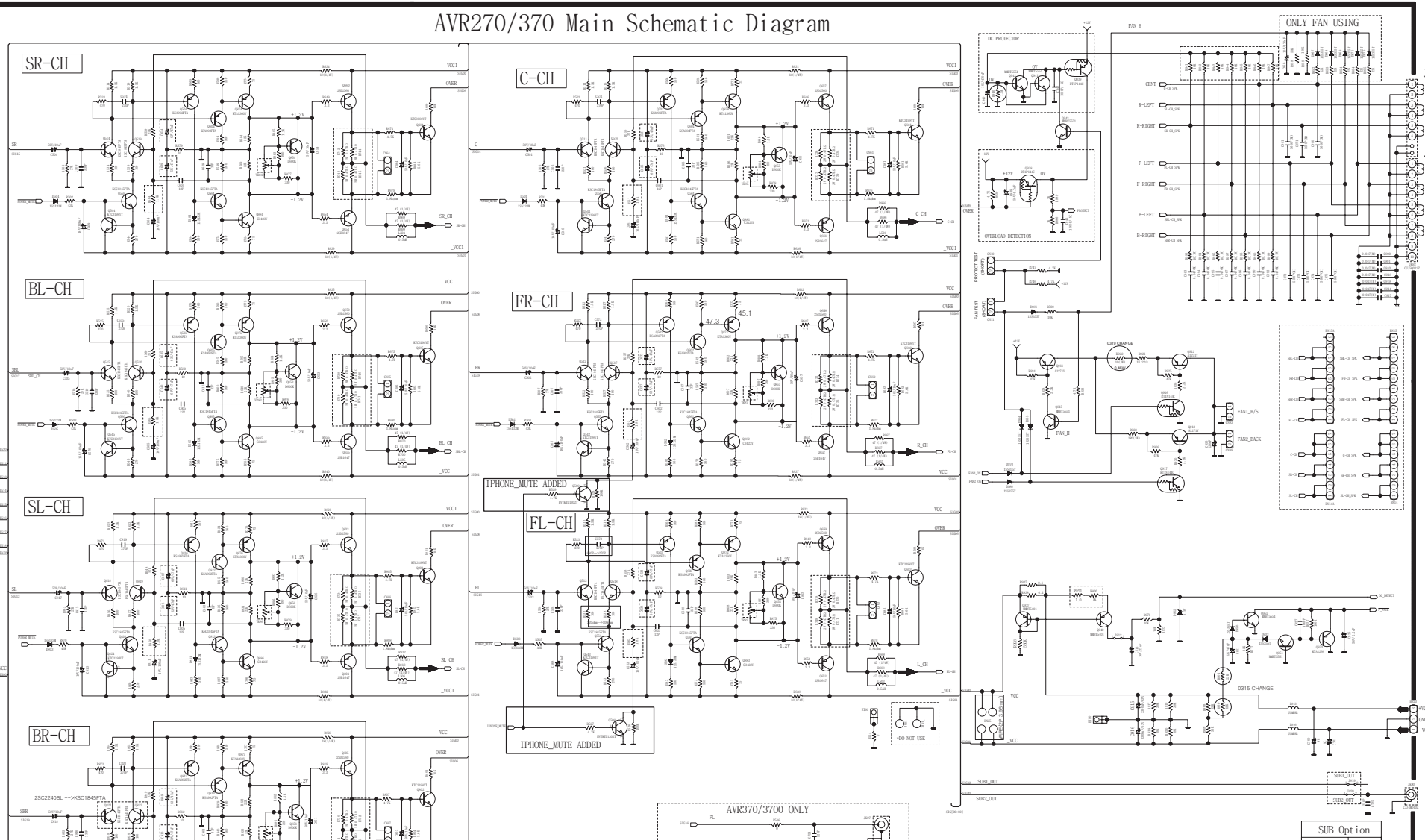
MULTI. LAB
12.08.02
REVISION
SCHEMATIC DIAGRAM
SHEET
MODEL
AVR270/370
DESIGN
CHECK
APPROVE
DRAWING NO
K.M.S
L.J.H
Y.W.Y
1437SCPZ
(VOLUME&FILTER)
12.08.02
11.12.27
11.12.27
9
9

AVR270/370 Main Schematic Diagram



GAIN	R561, R562, R563, R564, R565, R850, R851
AVR270/2700	1.8K
AVR370/3700	1.6K

SUB Option	
AVR270/2700	J819
AVR370/3700	J820

※ IMPORTANT SAFETY NOTICE.
IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY MANUFACTURER'S SPECIFIED PARTS.
※ THE UNIT OF RESISTANCE IS OHM.
K=1000 OHM, M=1000 KOHM.
※ THE UNIT OF CAPACITANCE IS MICROFARAD (uF)
pF = 10 ^ uF
※ THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WIHE THE IMPROVEMENT OF PERFORMANCE.

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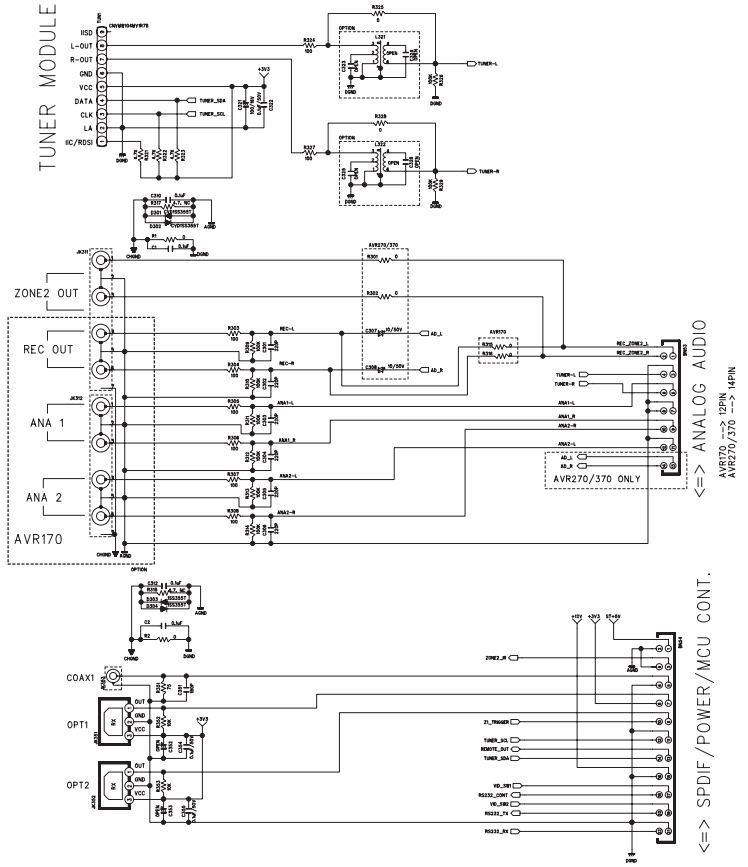
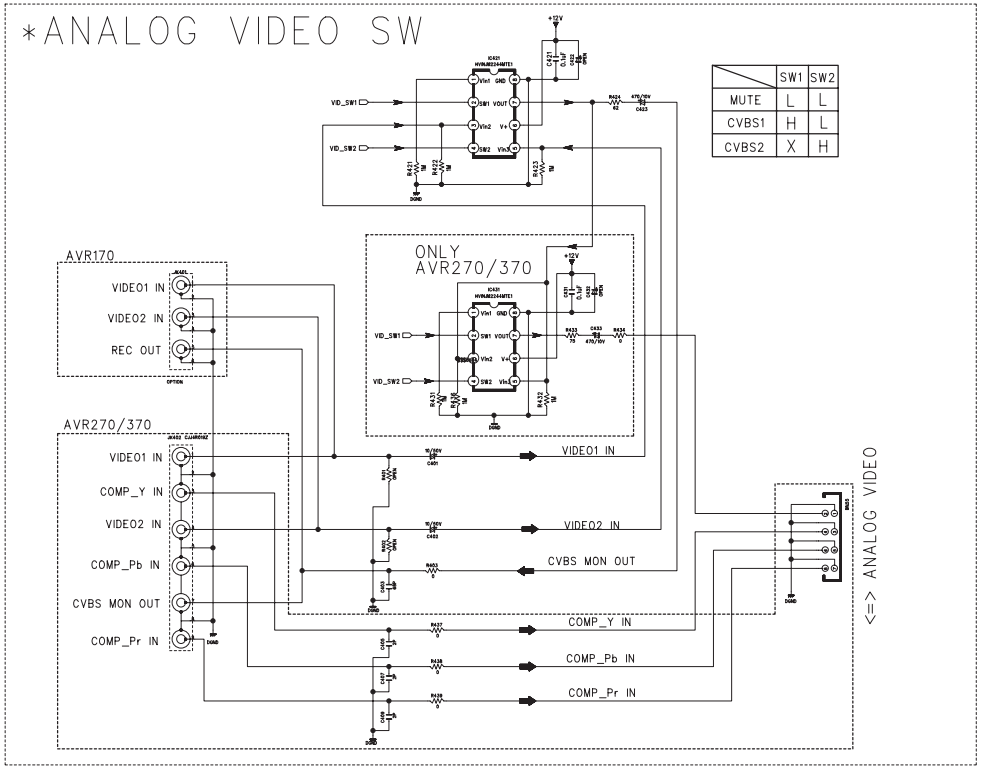
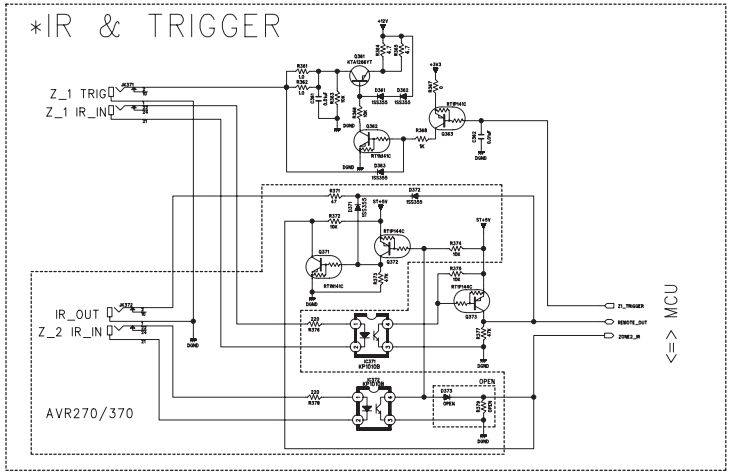
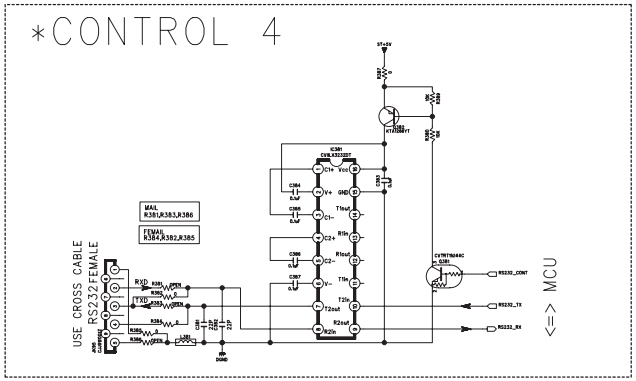
2012.07.31

REVISION	1	2	3	
SCHEMATIC DIAGRAM				SHEET
MODEL	AVR270/370			10 / 12
DESIGN	CHECK	APPROVE	DRAWING NO	
W.J.JUNG	J.H.LEE	W.Y.YANG	12459SCMZ (MAIN)	1/1
2012.07.31	2012.07.31	2012.07.31		









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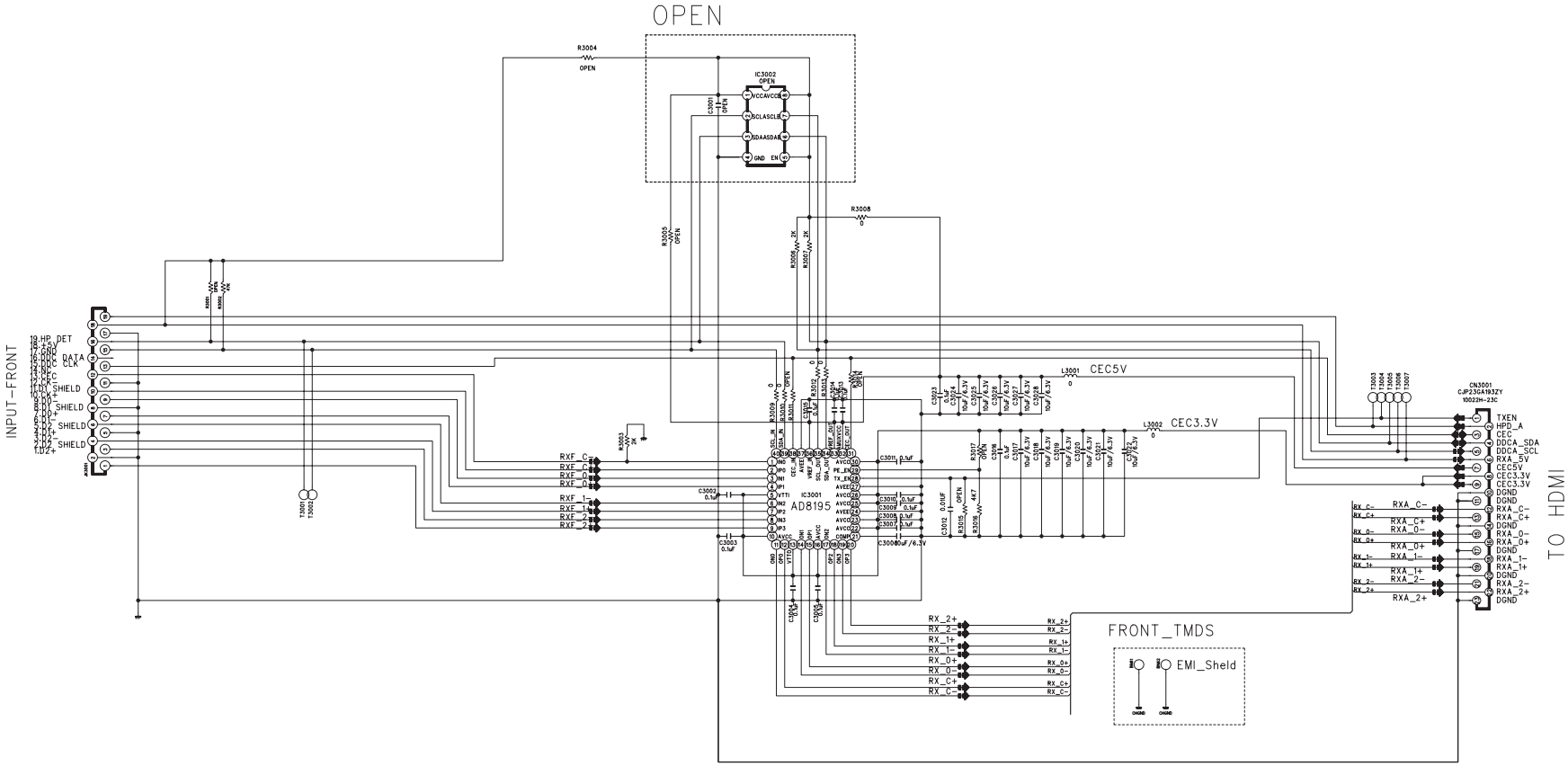
2012.05.25

REVISION	2	4	6
1	3	5	7

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR170/270/370		1 1
DESIGN	CHECK	APPROVE	DRAWING NO
C.B.LEE	J.H.LEE	H.S.SEOL	12460SCMZ (JACK B'D) 1 1



REVISION	2		4		6	
1		3		5		7

SCHEMATIC DIAGRAM				SHEET
MODEL	AVR270_Front HDMI			1 / 1
DESIGN	CHECK	APPROVE	DRAWING NO	
D.W.CHO	K.S.SONG		HDMI	1 / 1
12.07.25	12.07.25			

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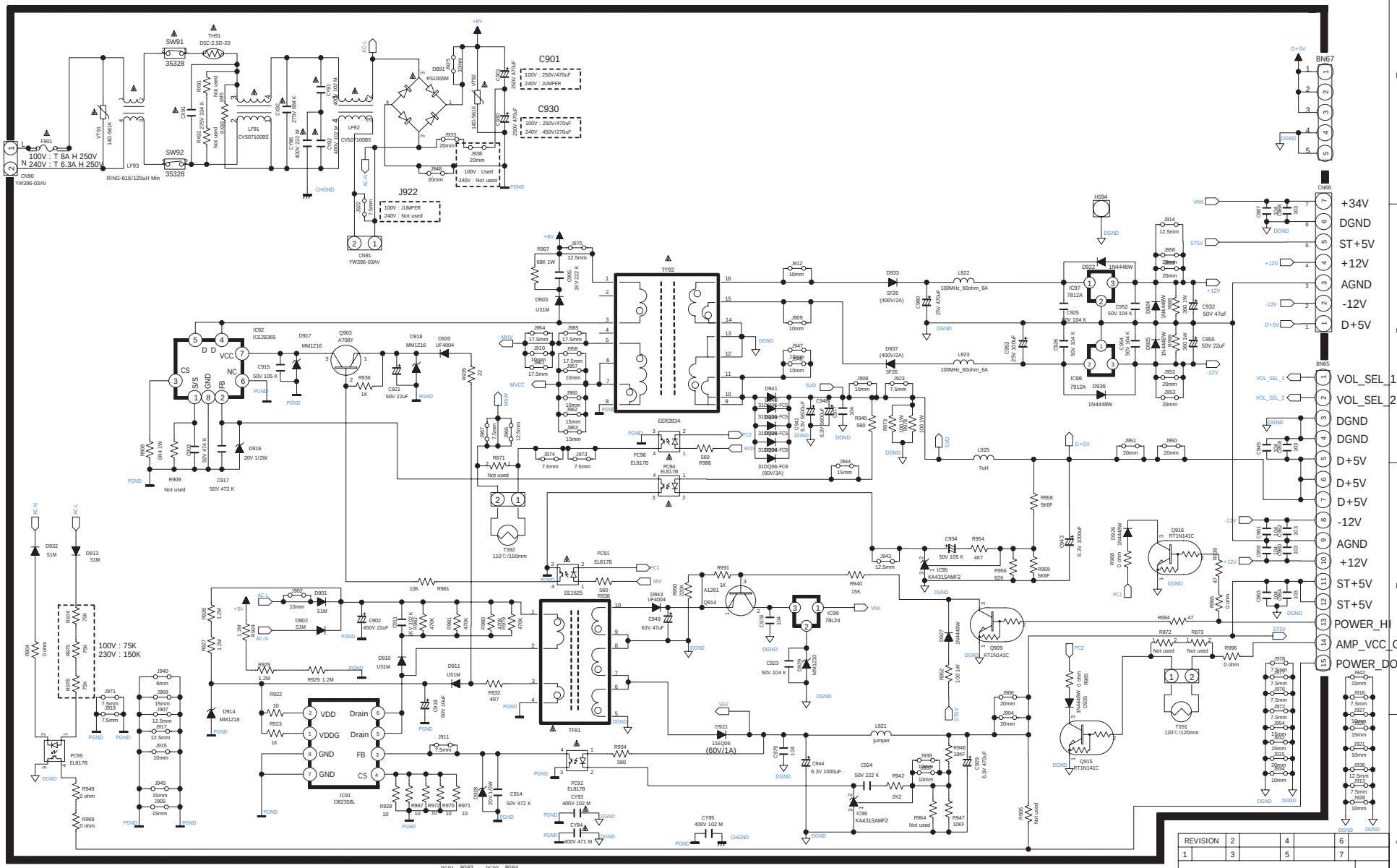
COMPONENTS IDENTIFIED BY▲ MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS.
USE ONLY MANUFACTURER'S SPECIFIED PARTS.
※THE UNIT OF RESISTANCE IS OHM.
K=1000 OHM, M=1000 KOHM
※THE UNIT OF CAPACITANCE IS MICROFARAD (uF)
pF=X0* uF
※THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE

AVR270/AVR370 SMPS SCHEMATIC DIAGRAM



**IMPORTANT SAFETY NOTICE.
COMPONENTS IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISTICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS.
USE ONLY MANUFACTURER'S SPECIFIED PARTS.
**THE UNIT OF RESISTANCE IS OHM. K=1000 OHM, M=1000 KOHM
**THE UNIT OF CAPACITANCE IS MICROFARAD (uF)pF=10^{6}uF
**THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE

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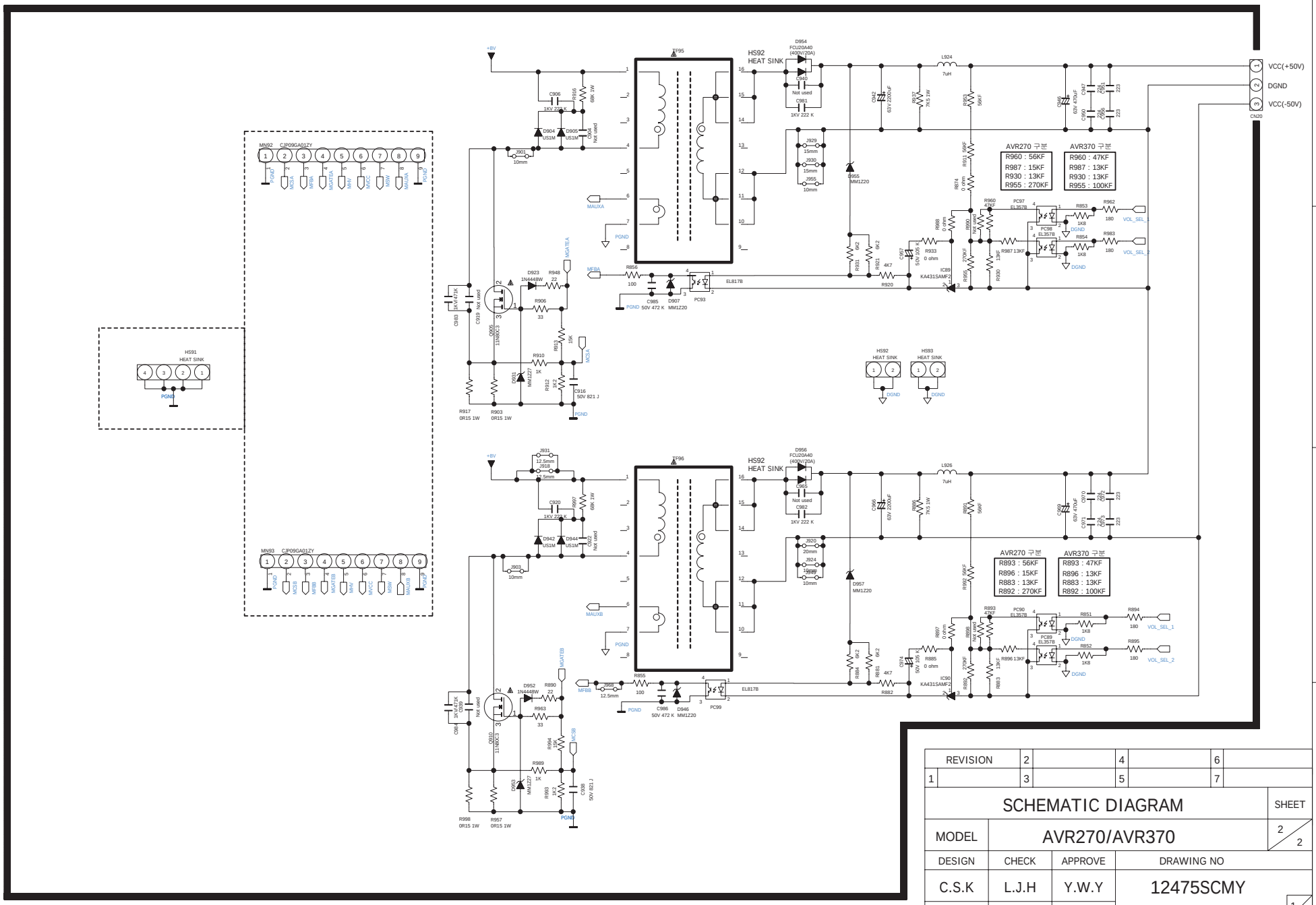
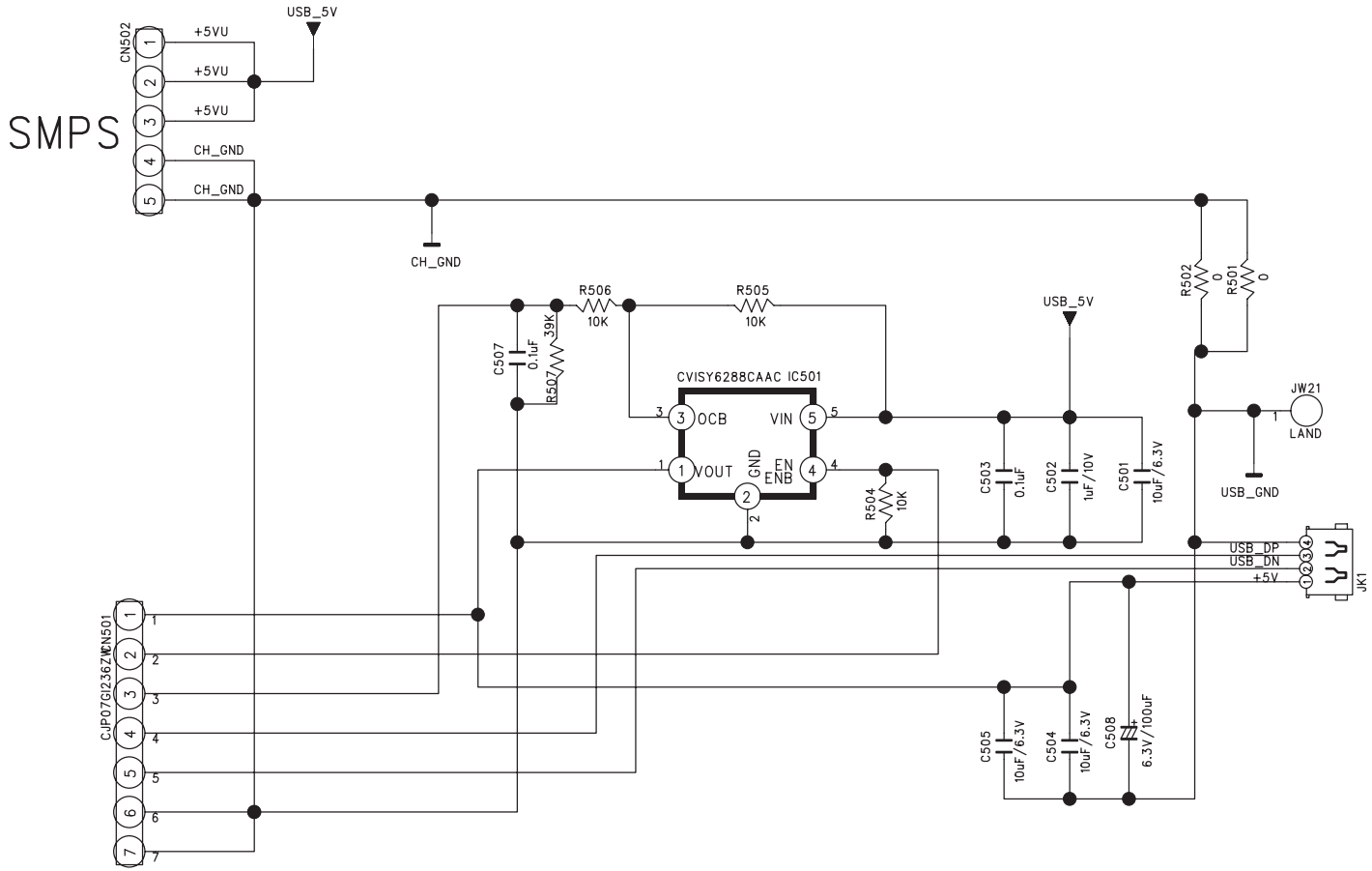
REVISION	2		4		6	
1		3		5		7

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270/AVR370		1/1
DESIGN	CHECK	APPROVE	DRAWING NO
C.S.K	L.J.H	Y.W.Y	12475SCMY (SMPS) 1/1
12.08.20	12.08.20	12.08.20	



REVISION	2		4		6	
1		3		5		7	

SCHEMATIC DIAGRAM			SHEET
MODEL	AVR270/AVR370		2/2
DESIGN	CHECK	APPROVE	DRAWING NO
C.S.K	L.J.H	Y.W.Y	12475SCMY
12.08.20	12.08.20	12.08.20	(SMPS) 1/1



M/P

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2012.07.23

REVISION	2	4	6	
1	3	5	7	

SCHEMATIC DIAGRAM				SHEET
DESIGN	ARVx70			1/8
DESIGN	CHECK	APPROVE		
D.S.C	L.J.H	Y.W.Y	12501SCMZ (USB)	1/1
12.07.23	05.00.00	05.00.00		

AVR2700/3700 Wiring Diagram