



Technical Manual

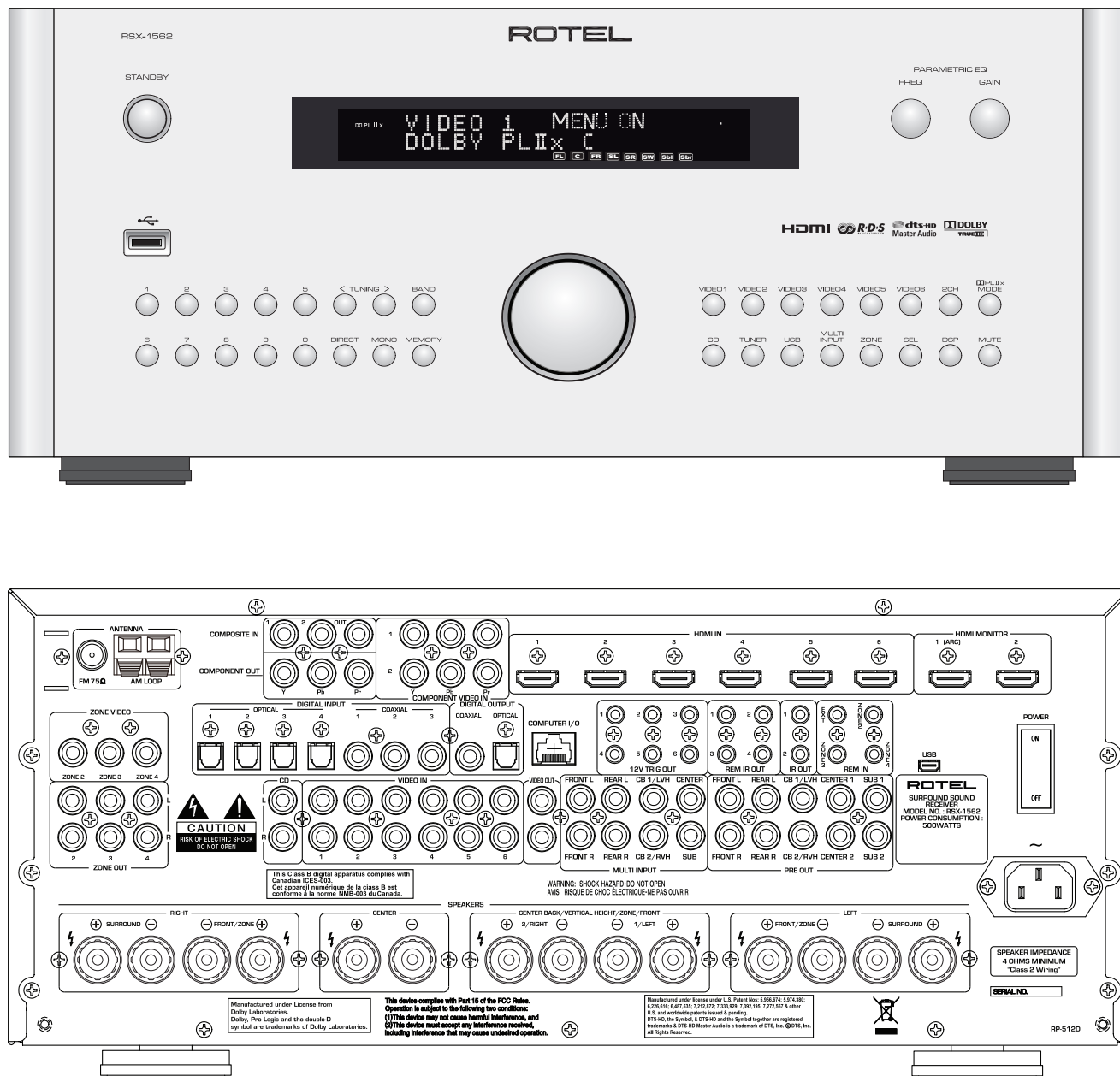
SURROUND SOUND RECEIVER RSX-1562

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Specifications

Audio Continuous Amplifier Power (seven channels driver) 100 watts/ch (20-20k Hz, <0.05% THD, 8 ohms) Continuous Amplifier Power 200 watts (1 kHz, <1.0% THD, 4 ohms, DIN) Total Harmonic Distortion <0.008% Intermodulation Distortion (60Hz:7kHz) <0.008% Frequency Response 10Hz - 120kHz, $\pm 3\text{dB}$ (analog bypass) 10Hz - 95kHz, $\pm 0.3\text{dB}$ (digital input) Signal to Noise Ratio (IHF A-weighted) 95dB (analog bypass) 92dB (Dolby Digital, DTS) 0 dBfs Input Sensitivity/Impedance Line Level: 200 mV/100k ohms Preamp Output Level/Output Impedance 1.0V/1k ohms Decodable Digital Input Signals Dolby Digital, Dolby Digital EX, DTS, DTS-ES, DTS 96/24, DTS-ES 96/24, LPCM (up to 192k). Lossless audio formats (using HDMI 1.3): Dolby TrueHD and DTS HD Master Audio. Decodable USB/iPod Digital Input Signals AAC(m4a), WAV, MP3, WMA	Video Input Resolutions 480i/576i, 480p/576p, 720p, 1080i 1080p, 1080p 24Hz, 3D (HDMI only) Output Resolution 480i/576i (Composite only), 480p/576p, 720p, 1080i 1080p, 1080p 24Hz, 3D (HDMI only) Signal to Noise Ratio 45dB Input Impedance 75 ohms Output Impedance 75 ohms Output Level 1.0 volt HDMI Inputs/Outputs Version 1.3, supporting Deep Color passthrough and Broad Color Space passthrough. Version 1.4, supporting 3D passthrough and Audio Return Channel FM Tuner Usable Sensitivity 14.2dBf Signal to Noise Ratio (at 65dBf) 70dB Harmonic Distortion (at 65dBf) 0.03% Stereo Separation (1 kHz) 45dB Output level 1V Antenna Input (unbalanced) 75 ohms	AM Tuner Sensitivity 50 μ V/m Signal to Noise Ratio 40dB Output Level 500 mV Antenna Input Loop Antenna General Power Consumption 500 watts 0.5 watt (standby) Power Requirements (AC) 120 volts, 60Hz (USA version) 230 volts, 50Hz (EC version) Weight 15.5kg/34.17 lbs Dimension (W x H x D) 431 x 188 x 422 mm 17 x 7 1/2 x 16 5/8 in Front Panel Height (feet removed/for rack mount) 4U/176.8mm/7 in
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<MEMO>

1. Light-up ALL FL segments to check:
Press "PLIIX" and "MUTE" of front panel.
When release the lighting, press STANDBY switch or master power switch.
2. Video Calibration (ADC) check:
Press "2CH" and "DSP" of front panel.
3. Forced Video 480p/576p screen:
Press "2CH" and "MUTE" of front panel.

SYMBOL	PARTS NO.	DESCRIPTION
016 E-1517B00 PCB ASSY		
	501 E-1517B-3	PCB ASSY (CONNECTION)
IC503-513	031 IC0009200	IC SMD (OPE AMP) NJM2068M
IC501,502	031 IC0016602	IC SMD (SWITCH ARRAY) TC9163CFG
Q502,504	032 KRA107S	TRANSISTOR CHIP KRA107S-RTK/P
Q501,503,509,510	032 KRC107S	TRANSISTOR CHIP KRC107S-RTK/P
Q505-508	032 KRC231S	TRANSISTOR CHIP KRC231S-RTK/P
D501,502	034 DD0000500	DIODE CHIP KDS184RTK
DZ501	034 DZ0105R11	ZENER DIODE HZS5.1NB2
C568,572,574	041 25ZA47MEFCTZ	ELECTROLYTIC CAPACITOR 25V47UF
C538,541,544,567,571,573	041 35ZA10MEFCTZ	ELECTROLYTIC CAPACITOR 35V10UF
C545-548,551,552,555,556,561-564	041 EEUFC1E221B	ELECTROLYTIC CAPACITOR 25V220UF
C534-537,549,550,553,554,557-560	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C565,566,570,576,578,580	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C539,540,542,543,569,575,577,579	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C505,506,509-513	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C501-504,507,508,514-533	047 GRM219F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
R501-504,531,532,547,548,553,554	055 ERJ6ENF1000V	RESISTOR CHIP 100
R559,560,579-592	055 ERJ6ENF1000V	RESISTOR CHIP 100
R505-510,512,514,545,549,551,555	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R557,561,563,565,567,569,571,573	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R575,577,595	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R593,594	055 ERJ6ENF1002V	RESISTOR CHIP 10K
R511,513,516,517,522,523,526,527	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R530,546,550,552,556,558,562,564	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R519,520,533-537	055 ERJ6ENF2002V	RESISTOR CHIP 20K
R515,518,521,524,525,528,529	055 ERJ6ENF2702V	RESISTOR CHIP 27K
CP702	068 B12B-PH-KS	CONNECTOR POST 12P
CP301	068 B14B-PH-KS	CONNECTOR POST 14P
CP531-533	068 B2B-EH	CONNECTOR POST 2P
CP534,536,538	068 B3B-EH	CONNECTOR POST 3P
CP522-525	068 B3B-EH	CONNECTOR POST 3P
CP703	068 B3B-PH-KS	CONNECTOR POST 3P
CP518-521	068 B6B-EH	CONNECTOR POST 6P
CP535,537,539	068 B8B-EH	CONNECTOR POST 8P
016 E-1564A00 PCB ASSY		
	501 E-1564A-7	PCB ASSY (TELECHIPS)
XT302	023 CY0900100	CRYSTAL SMD 12MHZ
L301,302	025 BK2125HS601	BEAD COIL CHIP BK2125HS601-T
L303	025 CIL10J2R2K	COIL CHIP 1608 2.2UH-CIL10J2R2K
IC305	031 IC0002703	IC SMD (REGULATOR) ABF AME1117CCGTZ
IC304	031 IC0002704	IC SMD (REGULATOR) AME1117ECGTZ AXH
IC303	031 IC0024101	IC SMD (MEMORY) K4S641632K-UC60
IC301	031 IC0030400	IC SMD MFI341S2164 I-POD 2.0 CP Authentication
IC302	031 IC0030500	IC SMD TCC8600 32-bit RISC for Host Player
IC306	531 IC0032603	IC SMD EN29LV160BT WRITING
C307,308	047 GRM1882C1H220JA01D	CERAMIC CAPACITOR CHIP 50V22PF
C319-320	047 GRM1882C1H270JA01D	CERAMIC CAPACITOR CHIP 50V27PF
C305	047 GRM1882C1H391JA01D	CERAMIC CAPACITOR CHIP 50V390PF
C306	047 GRM188B11H122KA01D	CERAMIC CAPACITOR CHIP 50V1200PF
C309	047 GRM188F11C105ZA01D	CERAMIC CAPACITOR CHIP 16V1UF
C324	047 GRM188F11C105ZA01D	CERAMIC CAPACITOR CHIP 16V1UF
C310-313	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C314-318,321-323,325-329,331-340	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C301-304	047 TCSCS1A226M	TANTAL CAPACITOR CHIP 10V22UF
R318	055 ERJ3EKF1001V	RESISTOR CHIP 1K
R327,328,333,336,337,340	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R305	055 ERJ3EKF1004V	RESISTOR CHIP 1M
R322-325	055 ERJ3EKF1502V	RESISTOR CHIP 15K
R301-304	055 ERJ3EKF22R1V	RESISTOR CHIP 22.1
R317	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R319,320,330,331,334	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R332	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R335	055 ERJ3EKF56R0V	RESISTOR CHIP 56
R306-316	055 EXB28V470JX	RESISTOR CHIP ALLEY
J301	068 C-5130A20	PIN HEADER
016 E-1574A01PCB ASSY		
	501 E-1574A-2	PCB ASSY (AC INLET)
LF001	021 2698200001	LINE FILTER
CX101	044 ECQU2A105KL	SPARK KILLER 275V1UF
J101	068 C-4422A01	PCB TERMINAL 2P P10
016 E-1595E00 PCB ASSY		
	501 E-1595E-1	PCB ASSY (HDMI)
L401-432	021 ACM2012H	EMC FILTER COIL ACM2012H-900-2P
IC421	023 CY0600300	OSCILATOR 18.432MHz ISXO-3E

SYMBOL	PARTS NO.	DESCRIPTION
XT403	023 CY0700300	CRYSTAL SRXA-S1-18-5.000MHZ
XT404	023 CY0700600	CRYSTAL 19.6608MHZ SRXA-SI-18
XT401-402	023 CY0700800	CRYSTAL 28.6363MHZ SRXA-SI-18
L442-443	025 BK2125HS101	BEAD COIL CHIP BK2125HS101-T
L437-439	025 BK2125HS101	BEAD COIL CHIP BK2125HS101-T
L440-441,447,450-452,464-468	025 BK2125HS102	BEAD COIL CHIP BK2125HS102-T
L435	025 BK2125HS102	BEAD COIL CHIP BK2125HS102-T
L444-446,448-449,453-463	025 BK2125HS601	BEAD COIL CHIP BK2125HS601-T
L433-434	025 BK2125HS601	BEAD COIL CHIP BK2125HS601-T
L436	025 CIL10J2R2K	CHIP COIL 1608 2.2UH-CIL10J2R2K
IC428	031 IC0002703	IC SMD (REGULATOR) ABF AME1117CCGTZ
IC439	031 IC0002704	IC SMD (REGULATOR) AXH AME1117ECGTZ
IC420,441	031 IC0019300	IC SMD (BUS SWITCH) SN74CB3Q3305PER
IC450-451	031 IC0020501	IC SMD (SDRAM MEMORY) K4H561638J-LCCC
IC401-402	031 IC0021400	IC SMD (TRISTATE BUFFER) NC7SZ125M5-NL
IC442	031 IC0023700	IC SMD (EEPROM) BR24L08F-W
IC443	031 IC0025300	IC SMD (TEXAS SINGLE) SN74LVC1G3157DBVRQ1
IC446-447	031 IC0025400	IC SMD (TEXAS QUAD) SN74LVC257APWR
IC419	031 IC0025600	IC SMD (VIDEO BUFFER) THS7353PWR
IC406,408,410,412,414,416	031 IC0025600	IC SMD (ANALOG SWITCH) TS5A23157DGSR
Q421	031 IC0025800	IC SMD (DUAL FET) NDC7002N
Q401-408	031 IC0026000	IC SMD (DUAL FET) UPA672T
IC430	031 IC0026100	IC SMD (OCTAL BUFFER) DM74ALS541SJ
IC438	031 IC0026700	IC SMD (CPU SOFT WRITING) UPD70F3717GC-X560
IC435	531 IC0026803	IC SMD (TRANSMITTER) SI9134CTU
D401-408,410-411,413-414,416-417	031 IC0027300	SMD DIODE EMC CLAMP RCLAMP0524P
D419-420,422-423	031 IC0027300	SMD DIODE EMC CLAMP RCLAMP0524P
IC423	531 IC0027902	IC SMD MEMORY FLASH SST39VF3201-70-4C-EKE WRITING
IC444-445	031 IC0028100	IC SMD (DC-DC CONVERTER) EN5335QI-T 3A PWM
IC436	031 IC0028500	IC SMD FLI30336-AC DIGITAL VIDEO PROCESSOR
IC424	031 IC0028700	IC SMD SN74CB3Q3253PWR Dual 1-OF-4 MUX/DEMUX
IC403-404	031 IC0029100	IC SMD TPS2553DBVR Adjustable current limite S/W
IC405,418	031 IC0029400	IC SMD FMS6502MTC24X VIDEO MATRIX SW 8-IN 6-OUT
IC425	031 IC0030100	IC SMD (MEMORY SERIAL EEPROM) AT24C32N-10SC-2.5
IC422	031 IC0035100	IC SMD (HDMI MATRIX) EP9432
IC426-427	031 IC0035200	IC SMD (HDMI TRANSCEIVER) ADV7623
IC433	031 IC0035300	IC SMD (SERIAL INTERFACE EEPROM) R1EX24016A
IC449	031 IC0035400	IC SMD (LOW VOLTAGE REGULATOR) 2A KIA278R025FP
Q422-423	032 KRC107S	TRANSISTOR CHIP KRC107S
Q409-420	032 KRC231S	TRANSISTOR CHIP KRC231S
D427	034 DD0000500	DIODE CHIP KDS184RTK/P
D409,412,415,418,421,424-426	034 DD0000600	DIODE CHIP KDS226RTK/P
CV401,432,434	034 DV0000100	SMD VARISTOR DV0000100
C552,557-559,564,567,569-575,579	047 CL05B104K05NNNC	CERAMIC CAPACITOR CHIP
C580,584,587-592,598,601-603,619	047 CL05B104K05NNNC	CERAMIC CAPACITOR CHIP
C620,625-628,630-631,637-638,641	047 CL05B104K05NNNC	CERAMIC CAPACITOR CHIP
C642,643,645-653,660-671,673	047 CL05B104K05NNNC	CERAMIC CAPACITOR CHIP
C675-676	047 CL05B104K05NNNC	CERAMIC CAPACITOR CHIP
C425	047 CL10C8R2CB8NNNC	CERAMIC CAPACITOR CHIP 50V8.2PF±0.25PF
CB401-404,412-414,422,425,438-439	047 ECFS1A221M	ELECTROLYTIC CAPACITOR SMD 10V220UF
CB436	047 ECFS1A471M	ELECTROLYTIC CAPACITOR SMD 10V470UF
CB407-409,415	047 ECFS1C101M	ELECTROLYTIC CAPACITOR SMD 16V100UF
CB421,424	047 ECFS1E4R7M	ELECTROLYTIC CAPACITOR SMD 25V4.7UF
C696-703	047 FCFS1C100M	SMD ELECTROLYTIC CAPACITOR 16V10uF
C457,464-466	047 GRM1882C1H220JA01D	CERAMIC CAPACITOR CHIP 50V22PF
C424,426	047 GRM1882C1H331JA01D	CERAMIC CAPACITOR CHIP 50V330PF
C633-636	047 GRM1882C1H470JA01D	CERAMIC CAPACITOR CHIP 50V47PF
C704	047 GRM1882C1H470JA01D	CERAMIC CAPACITOR CHIP 50V47PF
C455	047 GRM1885C2A5R6CZ01D	CERAMIC CAPACITOR CHIP 100V5.6PF±0.25PF
C496,678,680,682-684,688,691,693	047 GRM188B11H103KA01D	CERAMIC CAPACITOR CHIP 50V0.01UF
C417-422,427-432,472,475,479,482	047 GRM188B11H103KA01D	CERAMIC CAPACITOR CHIP 50V0.01UF
C485,695	047 GRM188B11H103KA01D	CERAMIC CAPACITOR CHIP 50V0.01UF
CB440	047 GRM188B11H473KA01D	CERAMIC CAPACITOR CHIP 50V0.047UF
C547,550	047 GRM188F11C105ZA01D	CERAMIC CAPACITOR CHIP 16V1UF
C433-435	047 GRM188F11C105ZA01D	CERAMIC CAPACITOR CHIP 16V1UF
C409-416,486-494,497-546,548-549	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C551,553-556,560-563,565-566,568	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C576-578,581-583,585-586,593-597	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C599-600,604-618,622-624,629,632	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C639-640,644,654-659,672,674,677	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C679,681,685-687,689-690,692	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C423,437-438,440-454,456,458-463	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C467-471,474,477-478,480,481	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C483-484,694	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C473,476	047 GRM188R11H153KA01D	CERAMIC CAPACITOR CHIP 50V0.015UF
C495	047 GRM188R71H102KA01D	CERAMIC CAPACITOR CHIP 50V1000PF
C436,439	047 GRM188R71H102KA01D	CERAMIC CAPACITOR CHIP 50V1000PF
CB426-435	047 GRM32ND70J226KE19L	CERAMIC CAPACITOR CHIP 6.3V22UF

SYMBOL	PARTS NO.	DESCRIPTION
CB405-406,411,416-420,423,437	047 TCSCS1A226M	TANTAL CAPACITOR CHIP 10V22UF
C467,473	047 TCSCS1A226M	TANTAL CAPACITOR CHIP 10V22UF
CB441-466,468-472,474-478	047 TCSCS1A226M	TANTAL CAPACITOR CHIP 10V22UF
CB410	047 TCSCS1D225MAAR	TANTAL CAPACITOR CHIP 20V2.2uF
R840	054 12WS39JF	MOF RESISTOR 39
R729-730	055 ERJ3EKF1000V	RESISTOR CHIP 100
R554,559-560,562,594,597,604,608	055 ERJ3EKF1000V	RESISTOR CHIP 100
R610-611,615,618,626,631,642,658	055 ERJ3EKF1000V	RESISTOR CHIP 100
R413,417,421,425,429,433	055 ERJ3EKF1001V	RESISTOR CHIP 1K
R756,760,769,771,773-778,798-799	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R475-480,484,486-487,489,491,493	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R494,496-499,508-509,511-512	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R537-538,557,668,802,830,831	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R727-728	055 ERJ3EKF1003V	RESISTOR CHIP 100K
R792-793	055 ERJ3EKF2001V	RESISTOR CHIP 2K
R435-436,438-439,634,637	055 ERJ3EKF2001V	RESISTOR CHIP 2K
R703,707,711,715,719,723	055 ERJ3EKF2002V	RESISTOR CHIP 20K
R671	055 ERJ3EKF2200V	RESISTOR CHIP 220
R748	055 ERJ3EKF2201V	RESISTOR CHIP 2.2K
R449,451,533-536,548-549,564,567	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R570,572,577,581-584,586-587,598	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R601,605,609,612,616,665,682-683	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R685-688,690,692,694,696-697	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R810-813	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R699,702,708,712,716,720,724,745	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R747,751,755,759,772,796,704	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R750	055 ERJ3EKF2700V	RESISTOR CHIP 270
R550	055 ERJ3EKF2700V	RESISTOR CHIP 270
R797,800	055 ERJ3EKF2800V	RESISTOR CHIP 280
R539,551-552,556,575,590,674	055 ERJ3EKF33R0V	RESISTOR CHIP 33
R754	055 ERJ3EKF4700V	RESISTOR CHIP 470
R744,746,749,763,766,768,770,791	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R804-809	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R450,526,529,530,555,558,574,579	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R585,600,607,613-614,621,627-629	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R632,639-640,643-646,648,650,653	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R659-664,684,689,691,693,695	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R705-706,709-710,713-714,717-718	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R721-722,725-726,743,764,767	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R412,414,416,418,420,422,424,426	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R428,430,432,434	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R781,784	055 ERJ3EKF4990V	RESISTOR CHIP 499
R515,518,520-523	055 ERJ3EKF49R9V	RESISTOR CHIP 49.9
R700-701	055 ERJ3EKF5602V	RESISTOR CHIP 56K
R409-410	055 ERJ3EKF6802V	RESISTOR CHIP 68K
R761	055 ERJ3EKF6980V	RESISTOR CHIP 698
R698,440-447	055 ERJ3EKF75R0V	RESISTOR CHIP 75
R452-456,466-469,471,473	055 ERJ3EKF75R0V	RESISTOR CHIP 75
R514,516-517,519	055 ERJ3EKF86R6V	RESISTOR CHIP 86.6
R524-525	055 ERJ3EKF8870V	RESISTOR CHIP 887
R411,415,419,423,427,431,458,	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R460-465,482-483,527-528,531-532	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R540-541,543-547,553,561,563,565	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R566,568-569,571,573,576,578,588	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R589,592-593,595-596,599,602-603	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R606,617,619-620,622-625,630,635	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R636,638,641,647,649,652,654,657	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R666,669,672-673,676-678,680-681	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R731-742,779,783,785,794-795	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R752-753,757-758	055 ERJ6RQF1R0V	RESISTOR CHIP 1
RN433	055 EXB24V330JX	RESISTOR CHIP 33
RN416,419,422,425	055 EXB24V330JX	RESISTOR CHIP 33
RN429-432,434	055 EXB24V330JX	RESISTOR CHIP 33
RN401-415,417-418,420-421,423-424	055 EXB24V330JX	RESISTOR CHIP 33
RN426-428	055 EXB24V330JX	RESISTOR CHIP 33
R814-829	055 RCT023R3FLF	RESISTOR CHIP 3.3
JK409	066 C-4833A01	6P PIN JACK
JK401-408	066 C-4963A01	CNT HDMI SOCKET
JK410	066 C-5186A00	PIN JACK
CP404	068 B14B-PH-KS	CONNECTOR POST 14P
CNT401	068 B2P-VH	CONNECTOR POST 2P
CP403,702	068 B6B-PH-KS	CONNECTOR POST 6P
CP402	068 B9B-PH-KS	CONNECTOR POST 9P
016 E-1596D00 PCB ASSY		
	501 E-1596D-1	PCB ASSY (DIGITAL)
IC351	017 C-4401A01	SUB HEAT SINKER
L303	021 2888100012	DIGITAL COIL

SYMBOL	PARTS NO.	DESCRIPTION
XT301	023 CY0300500	CRYSTAL SMD HC49US 6MHz
XT302	023 CY0300600	CRYSTAL SMD HC49US 8MHz
XT304-305	023 CY0700400	CRYSTAL SMD SRXA-S1-18-4MHZ
XT303	023 CY0700700	CRYSTAL SMD SRXA-S1-18-24.576MHZ
L307-308	025 BK2125HS101	BEAD COIL CHIP BK2125HS101-T
L310-323	025 BK2125HS102	BEAD COIL CHIP BK2125HS102-T
L301-302,304-306,309	025 BK2125HS102	BEAD COIL CHIP BK2125HS102-T
IC314	031 IC0001900	IC SMD (D/A TRANSCEIVER) AK4114VQP
IC338	031 IC0002910	IC SMD (EPROM) AT24C16AN
IC316	031 IC0004900	IC SMD (SHIFT REGISTER) HEF4094BT
IC307-310	031 IC0007700	IC (PHOTO COUPLER) LTV817
IC320,322,323,324,340-343	031 IC0009200	IC SMD (OPE AMP) NJM2068M
IC351	031 IC0009900	IC DIP JRC (TO220F) NJM317F
IC332-335	031 IC0023800	IC SMD (DAC) DSD1791DB
IC325-326	031 IC0024101	IC SMD (MEMORY) K4S641632K-UC60
IC321	031 IC0024700	IC SMD (ADC) PCM1804DBG4
IC318	031 IC0025300	IC SMD (TEXAS SINGLE) SN74LVC1G3157DBV
IC345-350	031 IC0025400	IC SMD (TEXAS QUAD) SN74LVC257APWR
IC353,354	531 IC0027103	IC SMD FLASH ROM(SOFT WRITING)SST25VF080-50-4C-52AF WRITING
IC336-337	031 IC0027800	IC SMD (AUDIO DECODER DSP) CS497024-CVZ
IC328	531 IC0028202	IC SMD (CPU SOFT WRITING) UPD70F3746GJ WRITING
IC306	031 IC0028600	IC SMD SN65220DBVR USB port Transient Suppressor
IC319,352	031 IC0028900	IC SMD SN74LVC541APWR OCTAL BUFFER/LINE DRIVE 3-STAGE
IC311	031 IC0029000	IC SMD SN75C3232PWR RS232 Line driver/receiver 3~5V
IC315	031 IC0032800	IC SMD 74VHC04M HEX SIGNALE STAGE INVERTER
IC331	031 IC0032900	IC SMD CDCS502PW CLOCK GENERATOR SSC
IC330	531 IC0033002	IC SMD STM32F101C8-P572 SOFT WRITING
IC339	031 IC0033300	IC SMD SN74LVC1G08DBV SINGLE 2-INPUT AND GATE
IC312	031 IC0035000	IC SMD USB DRIVER MA101
IC344	031 IC0035500	IC SMD STEREO DAC 24BIT AK4345
IC313	031 IC0035600	IC SMD QUAD AND GATE 74HC08D
IC327	031 IC0035700	IC SMD MASK ROM 128K BIT MN101E31G
IC329	031 IC0035800	IC SMD EEPROM AT24C512BN
Q321	032 KRA107S	TRANSISTOR CHIP KRA107S-RTK/P
Q311-320,324-328	032 KRC107S	TRANSISTOR CHIP KRC107S-RTK/P
Q301-304,322-323	032 KRC231S	TRANSISTOR CHIP KRC231S-RTK/P
Q305-310	032 TA1450-ST	TRANSISTOR 2SA1450AA-ST
D313	034 DD0000500	DIODE CHIP KDS184RTK
D308	034 DD0000500	DIODE CHIP KDS184RTK
D309-311	034 DD0000600	DIODE CHIP KDS226RTK
D312	034 DS0000300	DIODE CHIP SCHOTTKY BAT54C
D301-306	034 DS0000300	DIODE CHIP SCHOTTKY BAT54C
C376-383	041 16SH47M+F	ELECTROLYTIC CAPACITOR 16V47UF
C362-365,370-373	041 20SH22M+T	ELECTROLYTIC CAPACITOR 20V22UF
C397-404	041 EEUFC1E221B	ELECTROLYTIC CAPACITOR 25V220UF
C410-411,413-418	041 EEUFC1E470B	ELECTROLYTIC CAPACITOR 25V47UF
C301,306,310,335,353,357,360,385	041 TUTES1A101-7TF	ELECTROLYTIC CAPACITOR 10V100UF
C425	041 TUTES1A101-7TF	ELECTROLYTIC CAPACITOR 10V100UF
C345	041 TUTES1C101-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C329-331,337,338,342,344,348,352	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C354-356	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C395	041 TUTES1H010-7TF	ELECTROLYTIC CAPACITOR 50V1UF
C303,309,321,324,340,341,343,346	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C349,350,368-369,386,388,393-394	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C396,420,422-423,574	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C367,424	041 TUTES1H4R7-7TF	ELECTROLYTIC CAPACITOR 50V4.7UF
C323	041 TUTES1HR47-7TF	ELECTROLYTIC CAPACITOR 50V0.47UF
C428-434	047 GRM1882C1H100JA01D	CERAMIC CAPACITOR CHIP 50V10PF
C458-459,472-473,572-573	047 GRM1882C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C339,351	047 GRM1882C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C498,505	047 GRM1882C1H150JA01D	CERAMIC CAPACITOR CHIP 50V15PF
C387	047 GRM1882C1H150JA01D	CERAMIC CAPACITOR CHIP 50V15PF
C490,525,544-545	047 GRM1882C1H220JA01D	CERAMIC CAPACITOR CHIP 50V22PF
C307,316,358-359	047 GRM1882C1H220JA01D	CERAMIC CAPACITOR CHIP 50V22PF
C374-375	047 GRM1882C1H270JA01D	CERAMIC CAPACITOR CHIP 50V27PF
C555-570	047 GRM1882C1H561JA01D	CERAMIC CAPACITOR CHIP 50V560PF
C327-328	047 GRM188B11H153KA01D	CERAMIC CAPACITOR CHIP 50V0.015UF
C547-554	047 GRM188B11H182KA01D	CERAMIC CAPACITOR CHIP 50V1800PF
C456,461,475-476	047 GRM188B11H222KA01D	CERAMIC CAPACITOR CHIP 50V2200PF
C336,347	047 GRM188B11H223KA01D	CERAMIC CAPACITOR CHIP 50V0.022UF
C409,412,419	047 GRM188B11H562KA01D	CERAMIC CAPACITOR CHIP 50V5600PF
C448,485	047 GRM188F11C105ZA01D	CERAMIC CAPACITOR CHIP 16V1UF
C435-441,444-447,449-455,457	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C460,462-471,474,477-484,486-489	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C491-497,499-504,506-524,526-543	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C546,571	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C302,304-305,308,311-312,317-320	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C322,325-326,332-334,361,366	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF

SYMBOL	PARTS NO.	DESCRIPTION
C384,389-392,405-408,421,426,427	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
R300	054 TMF1000	METAL RESISTOR
R611-612,630,633,657,662-665	055 ERJ3EKF1000V	RESISTOR CHIP 100
R669,682,687	055 ERJ3EKF1000V	RESISTOR CHIP 100
R301-304,339,347,351,354,365,368	055 ERJ3EKF1000V	RESISTOR CHIP 100
R370,374,377,414,429,480	055 ERJ3EKF1000V	RESISTOR CHIP 100
R515-521,541	055 ERJ3EKF1000V	RESISTOR CHIP 100
R685-686,690	055 ERJ3EKF1001V	RESISTOR CHIP 1K
R430,446,514	055 ERJ3EKF1001V	RESISTOR CHIP 1K
R596-599,609-610,618,628,632,642	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R645,657-660,669-672,682	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R332,336-337,367,379,381,385,421	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R426-428,432-435,437,440,443,534	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R536-537,543-550	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R581,583,585,587,591-594,	055 ERJ3EKF1003V	RESISTOR CHIP 100K
R599-605,666,674-681,684	055 ERJ3EKF1003V	RESISTOR CHIP 100K
R360,362	055 ERJ3EKF1003V	RESISTOR CHIP 100K
R621,635	055 ERJ3EKF1004V	RESISTOR CHIP 1M
R384	055 ERJ3EKF1004V	RESISTOR CHIP 1M
R570-573	055 ERJ3EKF10R0V	RESISTOR CHIP 10
R305-306,319	055 ERJ3EKF10R0V	RESISTOR CHIP 10
R688	055 ERJ3EKF1200V	RESISTOR CHIP 120
R318	055 ERJ3EKF1500V	RESISTOR CHIP 150
R345,358,363,372	055 ERJ3EKF1501V	RESISTOR CHIP 1.5K
R449-450,453-454,457-458,461-462	055 ERJ3EKF1801V	RESISTOR CHIP 1.8K
R465-466,469-470,473-474,477-478	055 ERJ3EKF1801V	RESISTOR CHIP 1.8K
R590	055 ERJ3EKF1802V	RESISTOR CHIP 18K
R562,565-566,569	055 ERJ3EKF2200V	RESISTOR CHIP 220
R559-560	055 ERJ3EKF2200V	RESISTOR CHIP 220
R667-668	055 ERJ3EKF2202V	RESISTOR CHIP 22K
R320-321,553-559	055 ERJ3EKF22R0V	RESISTOR CHIP 22
R308	055 ERJ3EKF2400V	RESISTOR CHIP 240R
R642-643,645-646,649-656	055 ERJ3EKF3301V	RESISTOR CHIP 3.3K
R340-343,346,373,375,482-483,	055 ERJ3EKF3301V	RESISTOR CHIP 3.3K
R485-486,492-493,498-499,504-505	055 ERJ3EKF3301V	RESISTOR CHIP 3.3K
R510-511,533,535,538-539	055 ERJ3EKF3301V	RESISTOR CHIP 3.3K
R312-317	055 ERJ3EKF3902V	RESISTOR CHIP 39K
R580,582,584,586,588-589,606-607	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R610,613-614,618-620,624-627,631	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R634,636-637,648	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R324-329,348,352,353,359,364,371	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R376,378,412-413,415,417,442,444	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R488-489,525-532,551	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R330,333,335	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R350,356,366,369,387,391,393	055 ERJ3EKF47R0V	RESISTOR CHIP 47
R398,400,404,406,411,431,439	055 ERJ3EKF47R0V	RESISTOR CHIP 47
R445,447,540,542	055 ERJ3EKF47R0V	RESISTOR CHIP 47
R638,640	055 ERJ3EKF5111V	RESISTOR CHIP 5.11K
R689	055 ERJ3EKF56R0V	RESISTOR CHIP 56
R490-491,494-497,500-503,506-509	055 ERJ3EKF6800V	RESISTOR CHIP 680
R512-513	055 ERJ3EKF6800V	RESISTOR CHIP 680
R622-623	055 ERJ3EKF75R0V	RESISTOR CHIP 75
R307,309-311,319,484	055 ERJ3EKF75R0V	RESISTOR CHIP 75
R639,641	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R322,382-383,392,405,418,522	055 ERJ3GEY0R00V	RESISTOR CHIP 0
R574-579	055 ERJ3RQF2R2V	RESISTOR CHIP 2.2
R422-425	055 EXB28V220JX	RESISTOR CHIP NETWORK 22
R334,338,386,388-390,399,401-403	055 EXB28V470JX	RESISTOR CHIP NETWORK 47
R436,487,523-524	055 EXB28V470JX	RESISTOR CHIP NETWORK 47
R394-397,407-410	055 EXB28V560JX	RESISTOR CHIP NETWORK 56
SW301	061 C-4679A03	TACT SWITCH 5MM GRY HV061050GS
JAK301-308	065 HSJ1002-016020	3.5F MINI JACK
JAK311-312	066 C-4859A01	2P PIN JACK
MOD301	066 C-5133A20	CNT SOCKET 20P
JAK310	066 C-5167A00	JACK
JAK309	066 SY010-8P/K	RJ45 TERMINAL (8P)
IC302-305	066 TORX147L	JACK
IC301	066 TOTX147L	JACK
CP603	068 B11B-PH-KS	CONNECTOR POST 11P
CP14	068 B14B-PH-KS	CONNECTOR POST 14P
CP604	068 B15B-PH-KS	CONNECTOR POST 15P
CP18	068 B3B-PH-KS	CONNECTOR POST 3P
CP19,704	068 B4B-PH-KS	CONNECTOR POST 4P
CP10	068 B5B-PH-KS	CONNECTOR POST 5P
CP501,605	068 B8B-PH-KS	CONNECTOR POST 8P
CNT700	068 C-4867A01	FPC CONNECTOR 17P
MOD302	501 E-1564A-6	TELE MODULE

SYMBOL	PARTS NO.	DESCRIPTION
016 E-1597A00 PCB ASSY		
	501 E-1597A-1	PCB ASSY (AUDIO)
IC542	031 IC0005600	IC SMD (REG. +9VDC) KIA7809AF
IC501-507,509-517,519-521,525-529	031 IC0009200	IC SMD (OPE DUAL) NJM2068M
IC532-537,539-540	031 IC0009200	IC SMD (OPE DUAL) NJM2068M
IC541	031 IC0016501	IC SMD (SWITCH ALLEY) TC9162CFG
IC522	031 IC0016602	IC SMD (SWITCH ALLEY) TC9163CFG
IC523-524,530,538	031 IC0017401	IC SMD (VOLUME) TC9482BFG
IC518,531	031 IC0022100	IC SMD (AUDIO SWITCH) MM1631XJBE
Q502,507	032 KRA107S	TRANSISTOR CHIP KRA107S-RTK/P
Q501,506	032 KRC107S	TRANSISTOR CHIP KRC107S-RTK/P
Q503-505,508-515	032 KRC231S	TRANSISTOR CHIP KRC231S-RTK/P
D501-503	034 DD0000500	DIODE CHIP KDS184RTK
C607-614,662-669,672,681-688,695	041 35ZA10MEFCTZ	ELECTROLYTIC CAPACITOR 35V10UF
C698-699,702-703,706-707,710,741	041 35ZA10MEFCTZ	ELECTROLYTIC CAPACITOR 35V10UF
C744-745,748,759-766,771,774-775	041 35ZA10MEFCTZ	ELECTROLYTIC CAPACITOR 35V10UF
C778,802-805	041 35ZA10MEFCTZ	ELECTROLYTIC CAPACITOR 35V10UF
C551,673-680,711-712,717,726-736	041 EEUFC1E221B	ELECTROLYTIC CAPACITOR 25V220UF
C779-783,806-814	041 EEUFC1E221B	ELECTROLYTIC CAPACITOR 25V220UF
C694,797	041 TUTES1C101-7TF	ELECTROLYTIC CAPACITOR 16V100UF
C629-630,647-658,660-661,690-691	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C749-752,785-786,817	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C552-577,597-598,615-628,631-638	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C659,689,692,737-740,784,787,800	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C801,815-816	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C693,796	041 TUTES1H220-7TF	ELECTROLYTIC CAPACITOR 50V22UF
C588-595,640-646,713-716,718-721	047 GRM2162C1H220JZ01D	CERAMIC CAPACITOR CHIP 50V22PF
C753-756,789-791,793-795	047 GRM2162C1H220JZ01D	CERAMIC CAPACITOR CHIP 50V22PF
C511-524,535-548,600-606,696-697	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C700-701,704-705,708-709,722-725	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C742-743,746-747,768-770,773,776	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C777,798-799	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C819,821-825,827-828	047 GRM2165C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C501-510,527-534,578-585,587,599	047 GRM2165C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C639,767,772,788,792	047 GRM2165C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C671,757-758	047 GRM2165C1H222JA01D	CERAMIC CAPACITOR CHIP 50V0.0022UF
C586	047 GRM219B11H333KA01D	CERAMIC CAPACITOR CHIP 50V0.033UF
C818,820,826,829-916	047 GRM219F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C596,670	047 GRM21BF11H224ZA01L	CERAMIC CAPACITOR CHIP 50V0.22UF
R540,543-544,547-548,551-552,555-556	055 ERJ6ENF1000V	RESISTOR CHIP 100
R559-560,563-564,567-568,571,606,609	055 ERJ6ENF1000V	RESISTOR CHIP 100
R610,613-614,617-618,621-622,625-626	055 ERJ6ENF1000V	RESISTOR CHIP 100
R629-630,633-634,637,666-667,684-693	055 ERJ6ENF1000V	RESISTOR CHIP 100
R702-714,721-728,733-734,736-737,740	055 ERJ6ENF1000V	RESISTOR CHIP 100
R741,745-746,749-750,752-754,763,768	055 ERJ6ENF1000V	RESISTOR CHIP 100
R771,794,798-799,802-804,806,807,810	055 ERJ6ENF1000V	RESISTOR CHIP 100
R811,817-818,824-825,827-828,833-834	055 ERJ6ENF1000V	RESISTOR CHIP 100
R837-838,841-842,845-846,865,877-878	055 ERJ6ENF1000V	RESISTOR CHIP 100
R881-882,903-905,918,921-922,925-931	055 ERJ6ENF1000V	RESISTOR CHIP 100
R503,511-519,523-539,588-589,591,593	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R595,597,599,601,603,605,694-701,743	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R766-767,769-770,772-773,795-797,800	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R801,813,816,829-831,860,866-867,876	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R879-880,883,885,887-888,906,909,911	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R912,915-916,919,920,923-924,932-937	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R502,504-510,658-665	055 ERJ6ENF1002V	RESISTOR CHIP 10K
R501,520-522,541-542,545-546,549-550	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R553-554,557-558,561-562,565-566,569	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R570,572,575-576,579-580,583-584,587	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R590,592,594,596,598,600,602,604,607	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R608,611-612,615-616,619-620,623-624	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R627-628,631-632,635-636,638-645	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R668-675,717-718,735,738-739,742,744	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R747-748,751,755-762,764-765,790,793	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R819-823,826,832,835-836,839-840,843	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R844,847,861-864,868-871,873-874,884	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R886	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R889-890	055 ERJ6ENF10R0V	RESISTOR CHIP 10
R646,648	055 ERJ6ENF1202V	RESISTOR CHIP 12K
R649	055 ERJ6ENF1801V	RESISTOR CHIP 1.8K
R849-850,853-854,856,859,895,897,900	055 ERJ6ENF2001V	RESISTOR CHIP 2K
R901	055 ERJ6ENF2001V	RESISTOR CHIP 2K
R774,777-778,781,910,913-914,917	055 ERJ6ENF2201V	RESISTOR CHIP 2.2K
R573,577,581,585,647,651,653,655,657	055 ERJ6ENF2702V	RESISTOR CHIP 27K
R872,875	055 ERJ6ENF3300V	RESISTOR CHIP 330
R676-683,716,720,729-732,805,808-809	055 ERJ6ENF3301V	RESISTOR CHIP 3.3K
R812	055 ERJ6ENF3301V	RESISTOR CHIP 3.3K

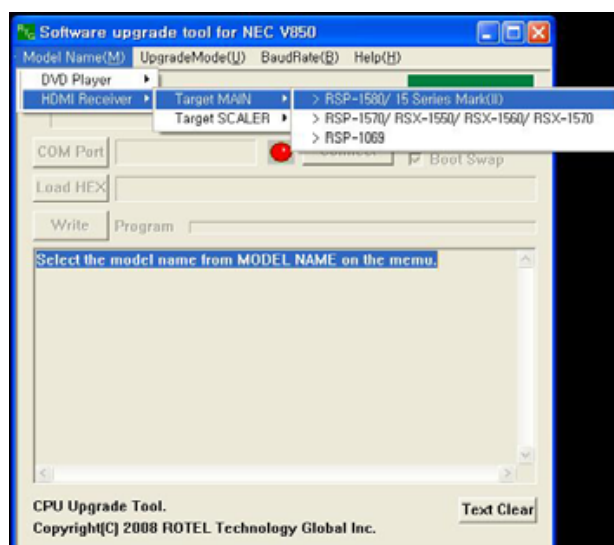
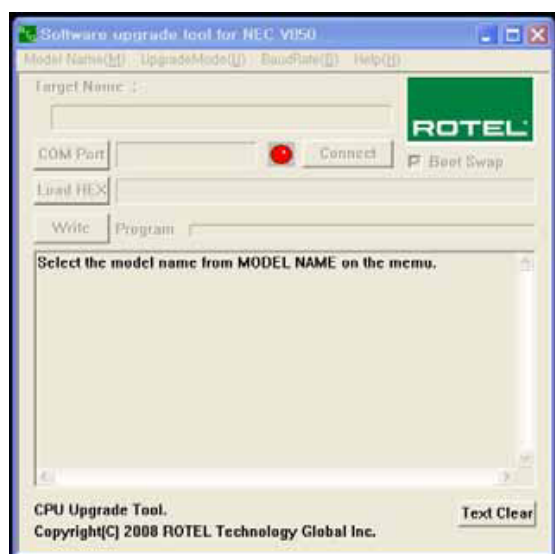
SYMBOL	PARTS NO.	DESCRIPTION
R574,578,582,586,650,652,654,656,715	055 ERJ6ENF4701V	RESISTOR CHIP 4.7K
R719,782-789,791-792,848,851-852,855	055 ERJ6ENF4701V	RESISTOR CHIP 4.7K
R898-899,902	055 ERJ6ENF4701V	RESISTOR CHIP 4.7K
R814-815,907-908	055 ERJ6ENF4703V	RESISTOR CHIP 470K
R775-776,779-780,891-894	055 ERJ6ENF5601V	RESISTOR CHIP 5.6K
R857-858,896	055 ERJ6ENF7501V	RESISTOR CHIP 7.5K
JAK506-507	066 C-4784A01	4P PIN JACK
JAK501	066 C-4784A02	4P PIN JACK
JAK502,504-505	066 C-4792A01	6P PIN JACK
JAK503	066 C-4832A01	4P PIN JACK
CP201	068 B5B-PH-KS	CONNECTOR POST 5P
016 X-1598A01-02 PCB ASSY		
	501 X-1598A-1	PCB ASSY (ZONE/VIDEO)
IC701-703,705-707	031 IC0009200	IC SMD (OPE AMP) NJM2068M
IC704	031 IC0017401	IC SMD (VOLUME) TC9482BFG
Q701	032 KRA107S	TRANSISTOR CHIP KRA107S-RTK/P
Q702	032 KRC107S	TRANSISTOR CHIP KRC107S-RTK/P
Q703-708	032 KRC231S	TRANSISTOR CHIP KRC231S-RTK/P
C713-714,727-732	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR 25V47UF
C701-712,715-720,739-744	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C748,751,754	047 GRM2162C1H100JZ01D	CERAMIC CAPACITOR CHIP 50V10PF
C768-773,782-787	047 GRM2162C1H470JZ01D	CERAMIC CAPACITOR CHIP 50V47PF
C756-767	047 GRM2165C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C733-738	047 GRM2165C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C745,755,774-781	047 GRM219F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
C721-726	047 GRM219F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
R790-801	055 ERJ6ENF1000V	RESISTOR CHIP 100
R749,753	055 ERJ6ENF1000V	RESISTOR CHIP 100
R711-716,741-746,748,750-752	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R754,757-758,761-762,765,784-789	055 ERJ6ENF1001V	RESISTOR CHIP 1K
R717-722,730-731,734-735,738-739	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R747,755-756,759-760,763-764	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R778-783	055 ERJ6ENF1003V	RESISTOR CHIP 100K
R701	055 ERJ6ENF10R0V	RESISTOR CHIP 10
R729,732-733,736-737,740	055 ERJ6ENF1202V	RESISTOR CHIP 12K
R766,769,770,773-774,777	055 ERJ6ENF1501V	RESISTOR CHIP 1.5K
R704,707,710	055 ERJ6ENF2002V	RESISTOR CHIP 20K
R723-728,767-768,771-772,775-776	055 ERJ6ENF4701V	RESISTOR CHIP 4.7K
JAK702	066 C-4792A01	PIN JACK RCA6P
JAK701	066 C-4TR-2964#10	PIN JACK RCA3P GBR
CP602	068 B15B-PH-KS	CONNECTOR POST 15P
016 E-1599B00 PCB ASSY		
	501 E-1599B-1	PCB ASSY (SPEAKER TERMINAL)
JAK751-752,JAK754	067C-4761A01	4P SPEAKER TERMINAL
JAK753	067C-4762A01	2P SPEAKER TERMINAL
016 E-1601C00 PCB ASSY		
	501 E-1601C-1	PCB ASSY (SEC-POWER)
Q201	032 TC3708-ST	TRANSISTOR 2SC3708AA-ST
D201,206-207	034 DB0001000	POWER DIODE KBP206
D202-205	034 DD0000200	DIODE 1N4004
ZD201	034 DZ0100121	ZENER DIODE HZS12NB
ZD202	034 DZ0100241	ZENER DIODE HZS24NB
ZD203	034 DZ0105R11	ZENER DIODE HZS5.1NB
ZD204	034 DZ0107R51	ZENER DIODE HZS7.5NB
F201,202	036 5T4L-250V	FUSE 250VT4AL
F203,204	036 5T5L-250V	FUSE 250VT5AL
C201-202	041 TUTES1E102-0	ELECTROLYTIC CAPACITOR 25V1000UF
C206,214,218	041 TUTES1E472-0	ELECTROLYTIC CAPACITOR 25V4700UF
C207,210,219,223,229,234	041 TUTES1H010-7TF	ELECTROLYTIC CAPACITOR 50V1UF
C204-205,226	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C237	041 TUTES1H220-7TF	ELECTROLYTIC CAPACITOR 50V22UF
C203	041 TUTES1J471-7TS	ELECTROLYTIC CAPACITOR 63V470UF
C233,225,228	041 UTES1C103-0	ELECTROLYTIC CAPACITOR 16V1000UF
C208-209,211,220,224,227,230	043 TC50V104	CERAMIC CAPACITOR 50V0.1UF
C235	043 TC50V104	CERAMIC CAPACITOR 50V0.1UF
C212-213,215-217,221-222,231	044 SC103J2A05	M.P CAPACITOR 100V0.01UF
C232,236	044 SC103J2A05	M.P CAPACITOR 100V0.01UF
R204	054 TMF1000	METAL RESISTOR 100
R208	054 TMF1001	METAL RESISTOR 1K
R207,210-212	054 TMF1002	METAL RESISTOR 10K
R213	054 TMF10R0	METAL RESISTOR 10
R201-202	054 TMF2200	METAL RESISTOR 220
R203	054 TMF2201	METAL RESISTOR 2.2K
R205-206,209	054 TMF4R70	METAL RESISTOR 4.7
CP304	068 B13B-PH-KS	CONNECTOR POST 13P
CP17	068 B2B-EH	CONNECTOR POST 2P

SYMBOL	PARTS NO.	DESCRIPTION
CP18,19	068 B2B-PH-KS	CONNECTOR POST 2P
CP6,401	068 B2P-VH	CONNECTOR POST 2P
CP13	068 B6B-PH-KS	CONNECTOR POST 6P
CP5	068 B8B-EH	CONNECTOR POST 8P
016 X-1602C01-02 PCB ASSY		
	501 X-1602C-1	PCB ASSY (PRIMARY POWER)
L2	021 2698200001	LINE CHOKE COIL
L1	021 TRL-356	LINE CHOKE COIL
T1	022 T-1118N01-V01	STBY TRANS SB-0236 5V-100mA
IC1	031 IC0031400	IC BA33BC0T 3V3 LDO.TO220FP-3
Q1	032 TC3708-ST	TRANSISTOR 2SC3708AA-ST
D4	034 DB0001000	POWER DIODE KBP206(2A 600V)
D1-3	034 DD0000200	DIODE 1N4004-F(AMMO) RECTRON
ZD1	034 DZ0103R31	DIODE ZENER HZS3.3NB2-TD-E
F2	036 5T250ML-250V	FUSE 250VT250mAL
(F1)	036 5T6.3L-250V	FUSE 250VT6.3AL
(F1)	036 5T8L-250V	FUSE 250VT8AL
C7	041 TUTES1A101-7TF	ELECTROLYTIC CAPACITOR 10V100UF
C10	041 TUTES1C222-7TS	ELECTROLYTIC CAPACITOR 6.3V2200UF
C6	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C5,C8	043 TC50V104	CERAMIC CAPACITOR 0.1UYF-F
C2,C4,C9	044 3549472109	AC CAPACITOR 400V0.0047UF
R1	054 MSR1/2W4M7J	METAL SURGE RESISTOR 4.7M
R2,R5	054 TMF1001	METAL RESISTOR 1/4W 1K
R4	054 TMF1002	METAL RESISTOR 1/4W 10K
R3	054 TMF4R70	METAL RESISTOR 1/4W 4.7
RY1	063 DG1U-5-025W	RELAY DG5D1-O(M)110.25W TV-5
CP2,CP4	068 4428503746	CONNECTOR POST P=7.92
CP1,CP3,CP5-8,CP14-15	068 B2P3-VH	CONNECTOR POST VH P=7.92
016 X-1603C01-05 PCB ASSY		
	501 X-1603C-1	PCB ASSY (FRONT)
XT10	023 CR0300202	RESONATOR CST16M0
IC14	031 IC0004104	IC CXP81120-127Q
IC10	031 IC0028600	IC SN65220DBVR USB port Transient Suppressor
IC11	031 IC0029100	IC TPS2553DBVR Adjustable current limite S/W
D10	031 IC0034900	IC PIN PHOTO DIODE MID-85A1C
IC12-13,15	031 IC0035900	IC SMD FL DISPLAY DRIVER 40BIT ML9272
RMC10	031 IC0036000	IC REMOCON SENSER RPM7238-H8
Q10,13	032 KRC107S	TRANSISTOR CHIP KRC107S-RTK/P
Q12	032 KTA1504S	TRANSISTOR CHIP KTA1504S-RTK/P
Q11	032 KTC3875S-Y	TRANSISTOR CHIP KTC3875S-Y-RTK/P
D11-12	034 DD0000500	DIODE CHIP KDS184RTK/P
FL10	035 HNA22ML04	FL DISPLAY HNA-22ML04
C13	041 TUTES1A101-7TF	ELECTROLYTIC CAPACITOR 10V100UF
C10	041 TUTES1A221-7TF	ELECTROLYTIC CAPACITOR 10V220UF
C12	041 TUTES1H010-7TF	ELECTROLYTIC CAPACITOR 50V1UF
C11	041 TUTES1H100-7TF	ELECTROLYTIC CAPACITOR 50V10UF
C24-25,30-33	047 GRM1882C1H101JA01D	CERAMIC CAPACITOR CHIP 50V100PF
C17	047 GRM1882C1H471JA01D	CERAMIC CAPACITOR CHIP 50V470PF
C14-16,18-23,26-29	047 GRM188F11H104ZA01D	CERAMIC CAPACITOR CHIP 50V0.1UF
R12,25	055 ERJ3EKF1001V	RESISTOR CHIP 1K
R22,29-30,33-35,37,39,41	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R43-47	055 ERJ3EKF1002V	RESISTOR CHIP 10K
R16,17,18	055 ERJ3EKF1200V	RESISTOR CHIP 120
R58,59	055 ERJ3EKF1201V	RESISTOR CHIP 1.2K
R21,60,61	055 ERJ3EKF1801V	RESISTOR CHIP 1.8K
R26,28	055 ERJ3EKF2201V	RESISTOR CHIP 2.2K
R13	055 ERJ3EKF2202V	RESISTOR CHIP 22K
R62,64	055 ERJ3EKF2701V	RESISTOR CHIP 2.7K
R23	055 ERJ3EKF2702V	RESISTOR CHIP 27K
R24	055 ERJ3EKF3301V	RESISTOR CHIP 3.3K
R63	055 ERJ3EKF4301V	RESISTOR CHIP 4.3K
R50,51	055 ERJ3EKF4700V	RESISTOR CHIP 470
R48,49	055 ERJ3EKF4701V	RESISTOR CHIP 4.7K
R10-11,14,15,19-20,27,31-32	055 ERJ3EKF4702V	RESISTOR CHIP 47K
R52,53	055 ERJ3EKF5600V	RESISTOR CHIP 560
R54,55	055 ERJ3EKF7500V	RESISTOR CHIP 750
R56,57	055 ERJ3EKF9100V	RESISTOR CHIP 910
SW27	056 C-4678A01	VR MAIN ENCODER EC16B24304
SW38,SW43	056 C-5136A00	ROTARY ENCODER
SW10-13,15-26,28-37,39-42	061 4TR-3118	TACT SWICH H=7
SW44-45	061 4TR-3118	TACT SWICH H=7
SW14	061 C-4172A13	PUSH SWITCH
JK10	066 C-5131A00	USB JACK
CP11	068 B2B-PH-KS	CONNECTOR POST 2P
CP16	068 S3B-PH-KS	CONNECTOR POST 3P

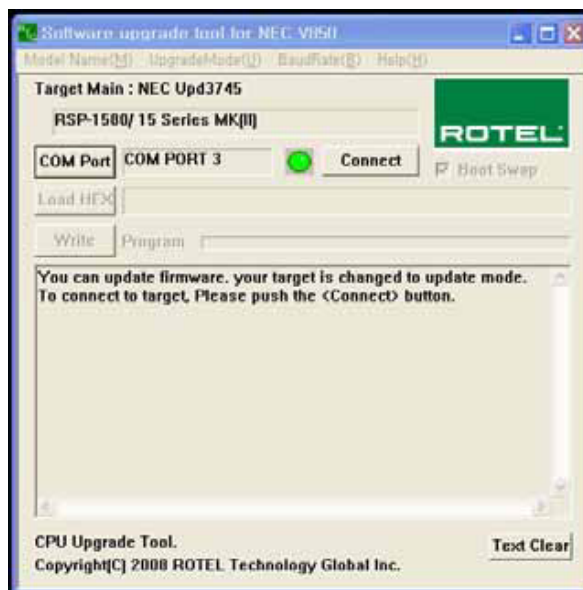
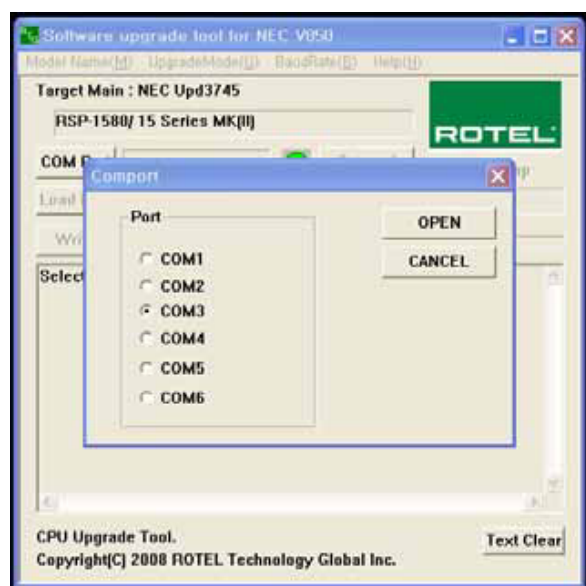
SYMBOL	PARTS NO.	DESCRIPTION
CP15	068 S6B-PH-KS	CONNECTOR POST 6P
	HEAT SINK ASSEMBLY (POWER)	
	505 HSRSX-1562	HEAT SINKER ASSY (with 501 E-1601C-1)
	017AAE-06A00	HEAT SINK BOARD
IC204	031IC0010600	IC NJM7805FA(KIA7805API-U/P) (REG. +5VDC)
IC201	031IC0010900	IC NJM7812FA(KIA7812API-U/P) (REG. +12VDC)
IC202	031IC0011001	IC NJM7815FA (REG.+15VDC) 1.5A
IC203	031IC0011601	IC NJM7915FA (REG.-15VDC) 1.5A
IC207	031IC0029200	IC REG KIA378R033PI 3A WITH S/W
IC205, IC206	031IC0029300	IC REG KIA378R05PI 3A WITH S/W
D208,D209	034 DB0001100	DIODE BRIDGE POWER KBJ4J 4A 600V
	OTHERS	
	011 FP-674-B	BLACK PANEL ASSY
	011 FP-674-S	SILVER PANEL ASSY
	012 C-5009B00	TACT BUTTON 8.3F (BLACK)
	012 C-5009B01	TACT BUTTON 8.3F (SILVER)
	012 C-5018B01	KNOB 43Φ NO MARK (BLACK)
	012 C-5018B01S	KNOB 43Φ NO MARK (SILVER)
	012 RV4-09A00	PUSH BUTTON 14Φ (BLACK)
	012 RV4-09A01	PUSH BUTTON 14Φ (SILVER)
	014 C-5007C01	UPPER COVER (BLACK)
	014 C-5007C01S	UPPER COVER (SILVER)
	014 YR3-05A00	SIDE CAP 4U (177H) (BLACK)
	014 YR3-05A01	SIDE CAP 4U (177H) (SILVER)
	015 RP-512D	REAR CHASSIS
	019 4TSH-19#2	PLASTIC FOOT 50Φ (BLACK)
	019 C-5016A00	KNOB RING 46F (BLUE)
	021 RLA172A00	AM LOOP ANT
	022 T-1111N01	POWER TRANSFORMER
	061 C-4838A00	ROCKER SWITCH SR1N6BB
	069 18-24	F CONNECTOR (for US only)
	069 C-4637A00	AC INLET 3P (0707-1-CW1)
	071 MFH4X8BK	MACHINE FLAT HEAD SCREW (BLACK)
	071 MFH4X8NI	MACHINE FLAT HEAD SCREW (SILVER)
	072 4TR-3228	T TYPE ANTENNA
	072 C-4392A04	AC CORD SET for U.S.A (3-Prong)
	072 C-4393A04	AC CORD SET for EUROPE (3-Prong)
	072 C-4423A04	AC CORD SET for AUSTRALIA (3-Prong)
	072 C-4639A02	AC CORD SET for UK (3-Prong)
	072 C-4786A00	COMPUTER I/O CABLE (4-P)
(CNT700)	072 C-4863A03	FLAT CABLE L=70MM 17PIN 1.25PITCH
	081 AAE-10A00	INSIDE CARTON
	081 AAE-11A00	SHIPPING CARTON
	081 ZE-221 (T/B)	ETHAFOAM MOULDING
	082 OMRSX-1562	OWNER'S MANUAL
	092 I-BTD-04C3-1	USB BLUETOOTH DONGLE
SL,SR,CB1,CB2	092 ICEPOWER200AC	DIGITAL AMP PCB ASSY
FL,FR,C	092 ICEPOWER200ASC	DIGITAL AMP PCB ASSY
	092 MB114MA1-1B	TUNER PACK
	092 RR-CX94	REMOTE CONTROL UNIT

1. Main Software Upgrade Method

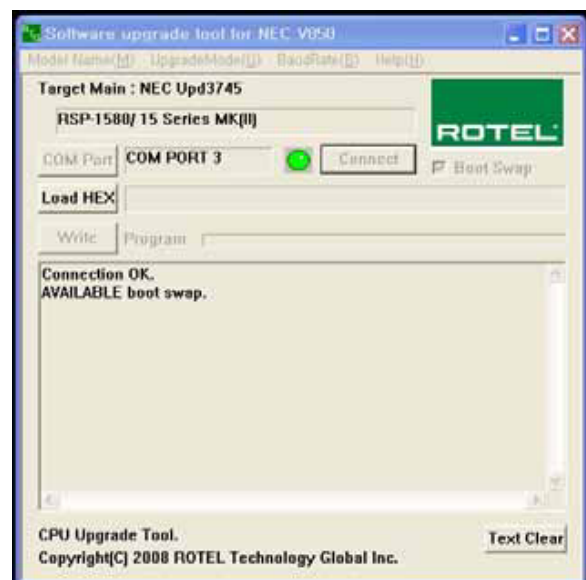
1. Connect RS232 Cable between RSP-1580 and PC.
And then RSP-1580 Power On.
2. Active "C:\Program Files\nec upgrade 2.8\ nec_flash2.8.exe"
3. Select Model Name : "HDMI Receiver -> **Target MAIN**
-> RSP-1580/15 Series Mark(II)"



4. Select COM Port (COM1 ~ COM6) and then "OPEN"



5. Click the "Connect" button

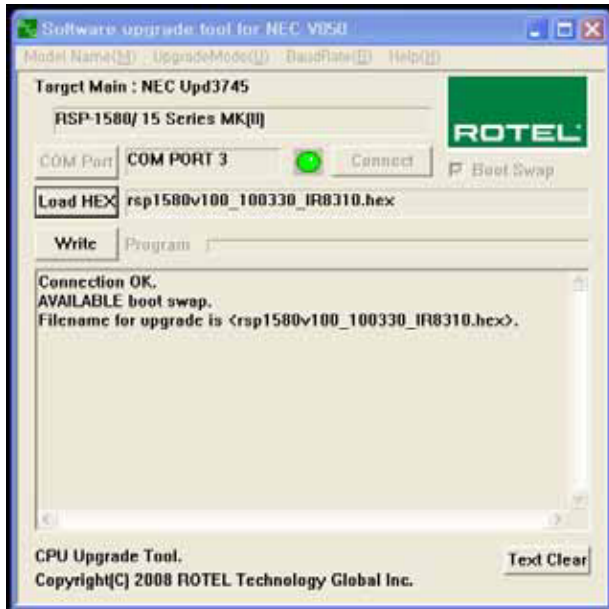


6. Click the "Load HEX" button and then select Hex file

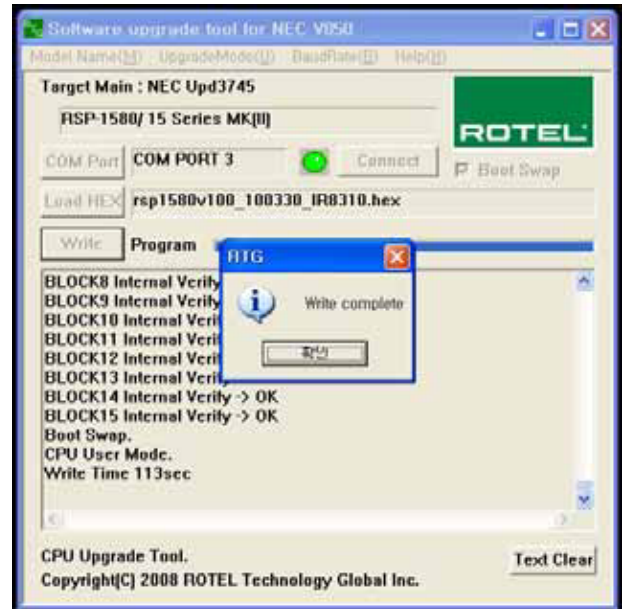


* Main Software File : p1572x1562-Main-V1xx.hex

7. Click the "Write" button. and then "YES" click.



8. Upgrade Complete.



9. RSP-1580 Power off. And then Power On.

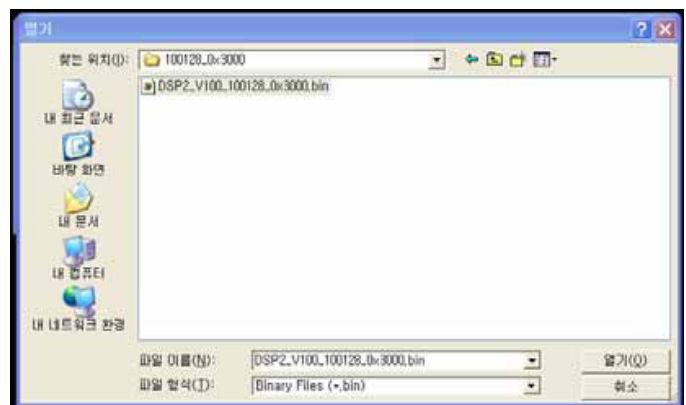
2. Audio DSP Upgrade Method

1. Connect RS232 Cable between RSP-1580 and PC.
And then RSP-1580 Power On.

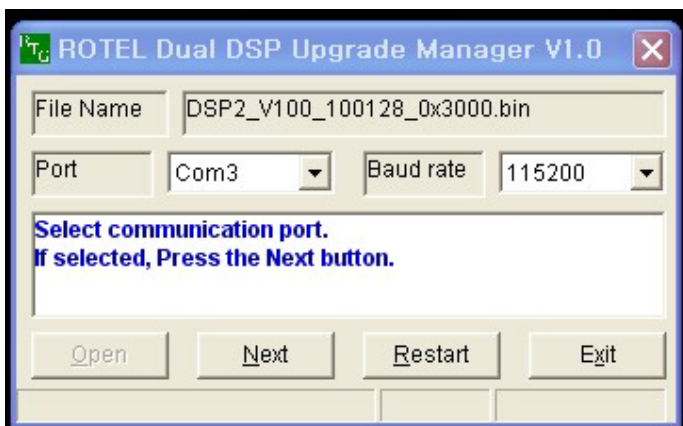
2. Active "C:\Program Files\ROTEL DSP Upgrade Manager\AudioDspDualUp.exe"

3. Click the "Open" button and then select Bin file.

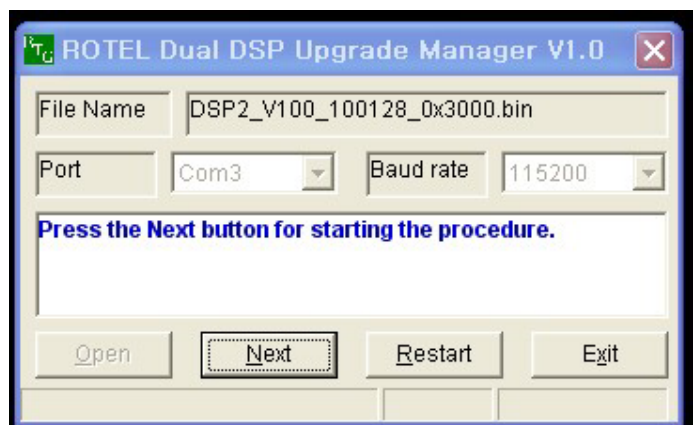
(Audio Software File : p1572x1562x1552_Audio_V1xx.bin)



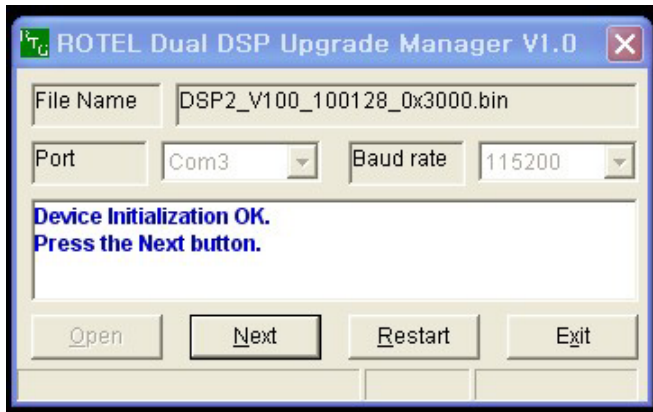
4. Select COM port and Baud rate. (RSP-1580 Baud rate : 115200)



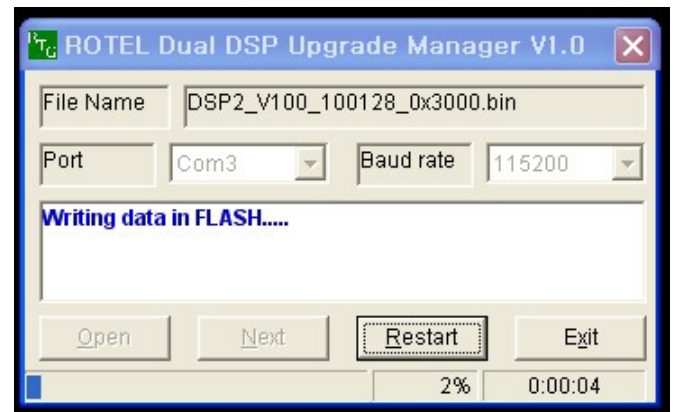
5. Click "Next" button for Com Port setting.



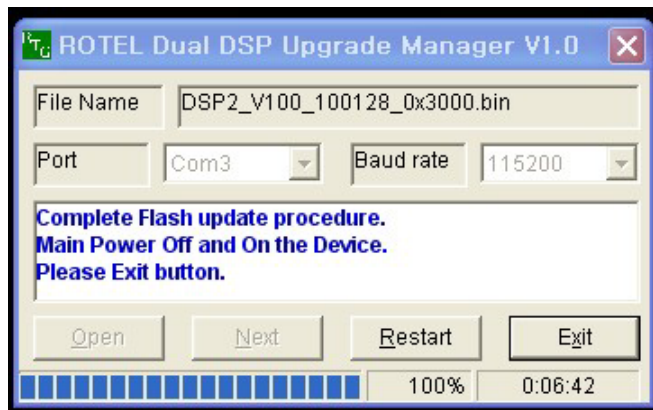
6. Click "Next" button for Audio DSP status checking.



7. Click "Next" button for Audio DSP Upgrading.



8. Upgrade Complete.

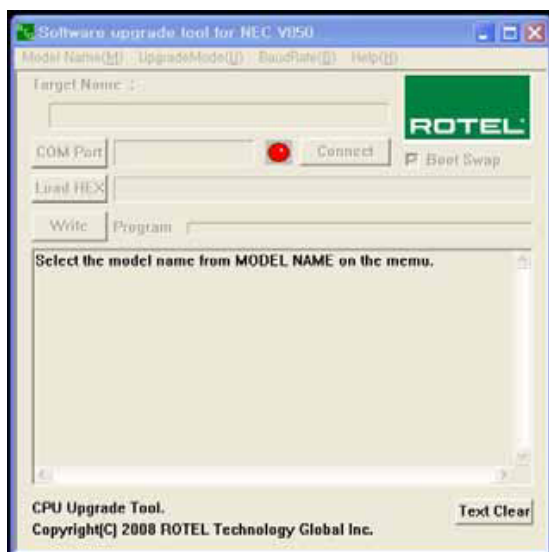


9. RSP-1580 Power off. And then Power On.

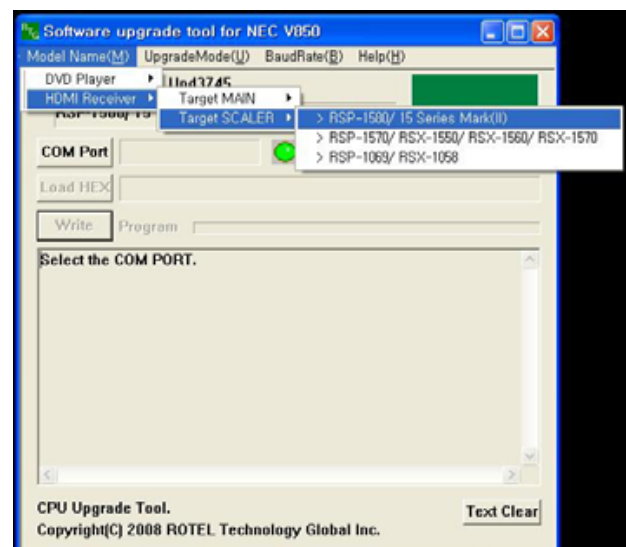
3. Video Software Upgrade Method

1. Connect RS232 Cable between RSP-1580 and PC.
And then RSP-1580 Power On.

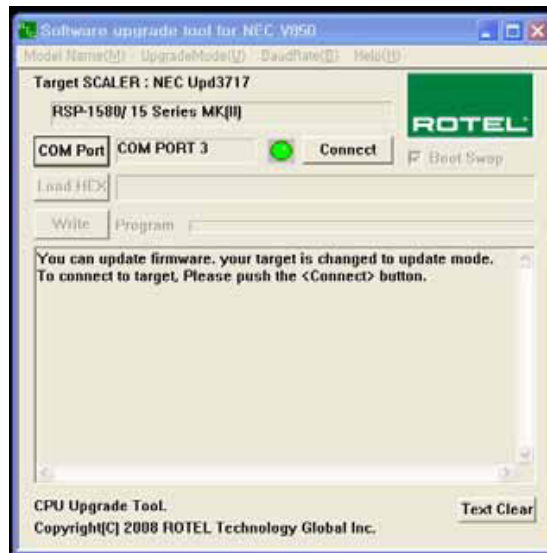
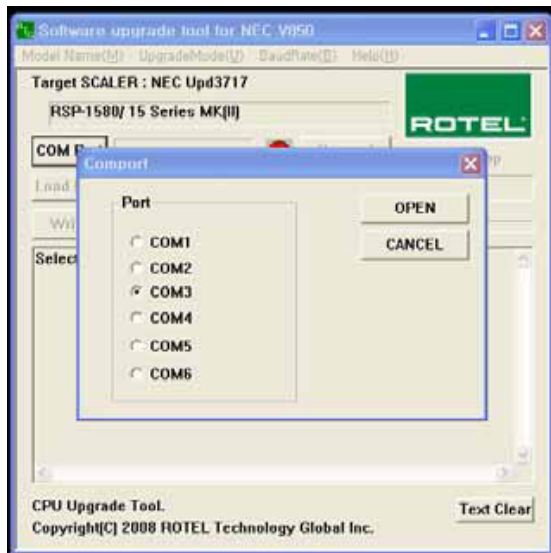
2. Active "C:\Program Files\nec upgrade 2.8\
nec_flash2.8.exe"



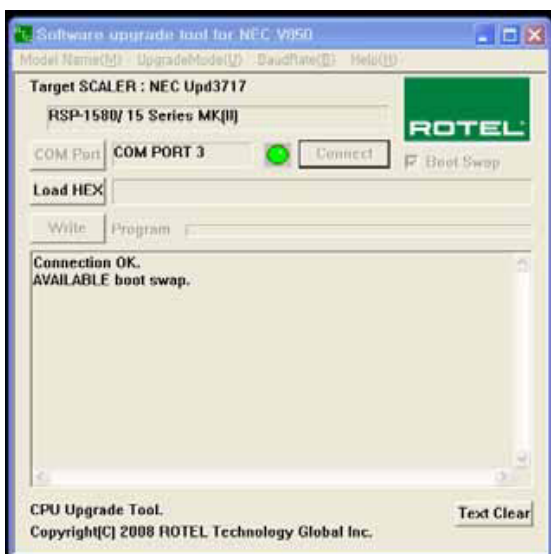
3. Select Model Name : "HDMI Receiver -> Target SCALER
-> RSP-1580/15 Series Mark(II)"



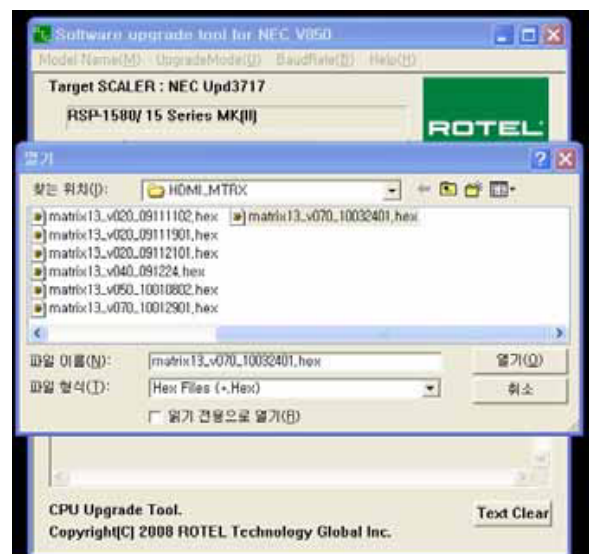
4. Select COM Port (COM1 ~ COM6) and then "OPEN"



5. Click the "Connect" button

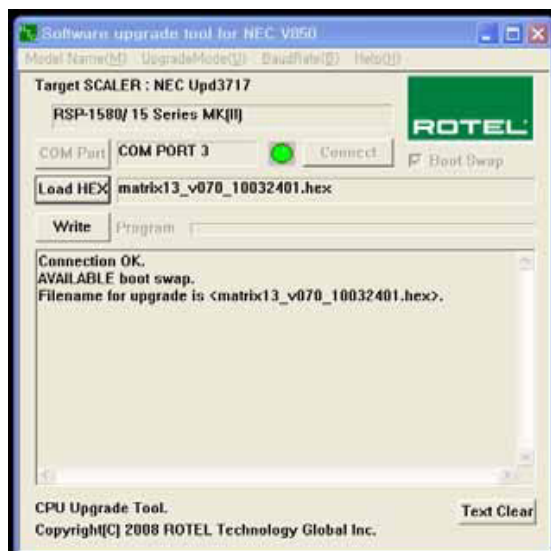


6. Click the "Load HEX" button and then select Hex file

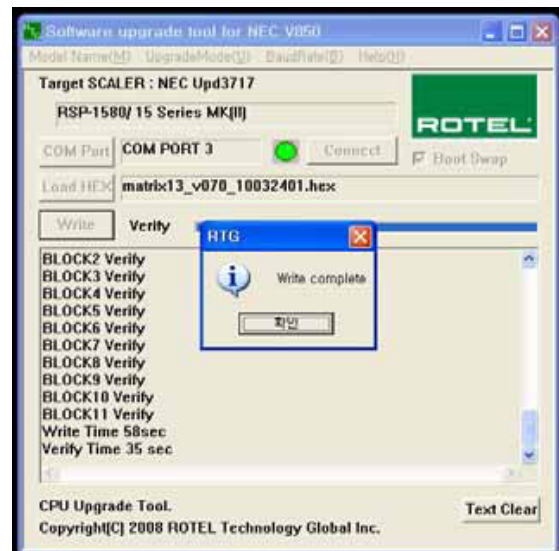


* Video Software File : p1572x1552-VIDEO-V1xx.hex

7. Click the "Write" button. and then "YES" click.

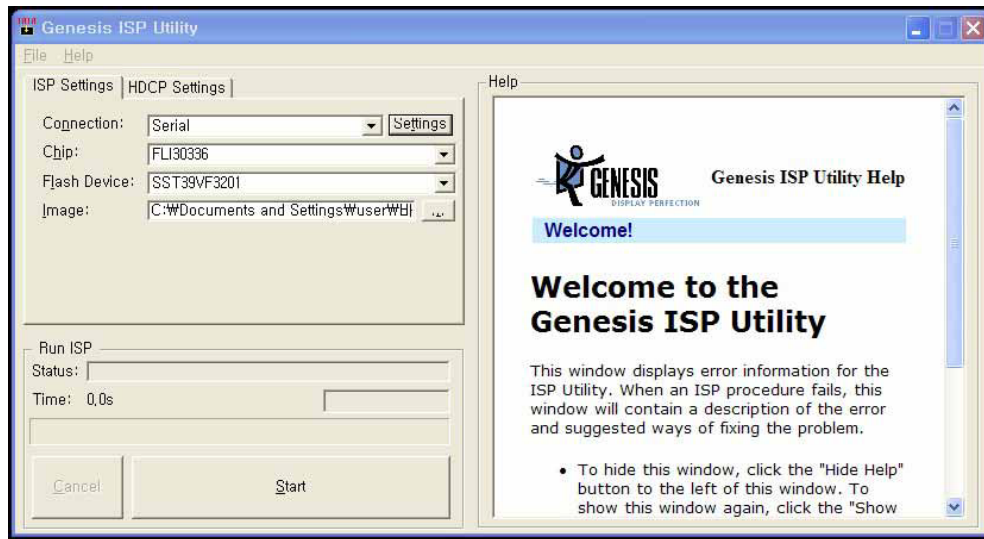


8. Upgrade Complete.

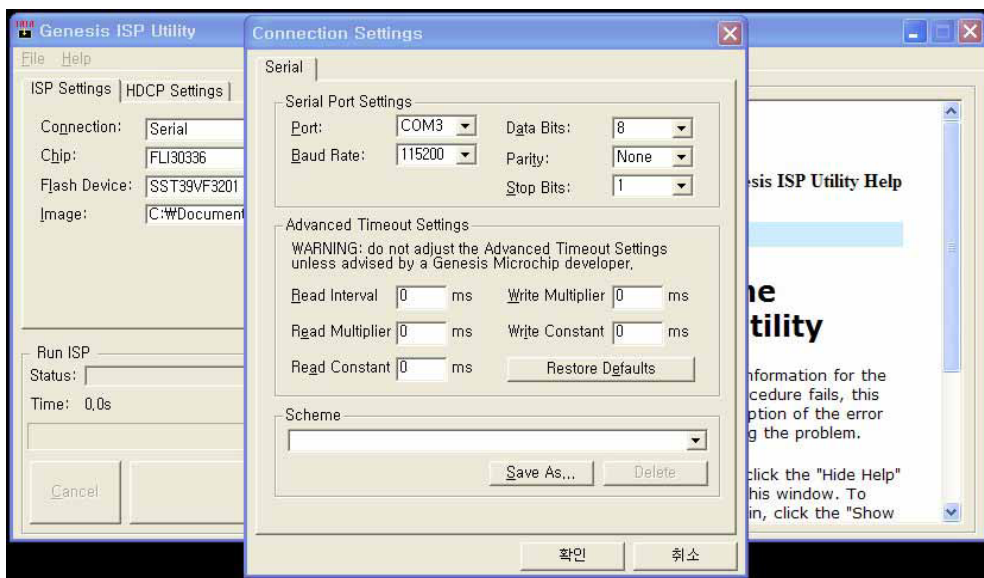


9. RSP-1580 Power off. And then Power On.

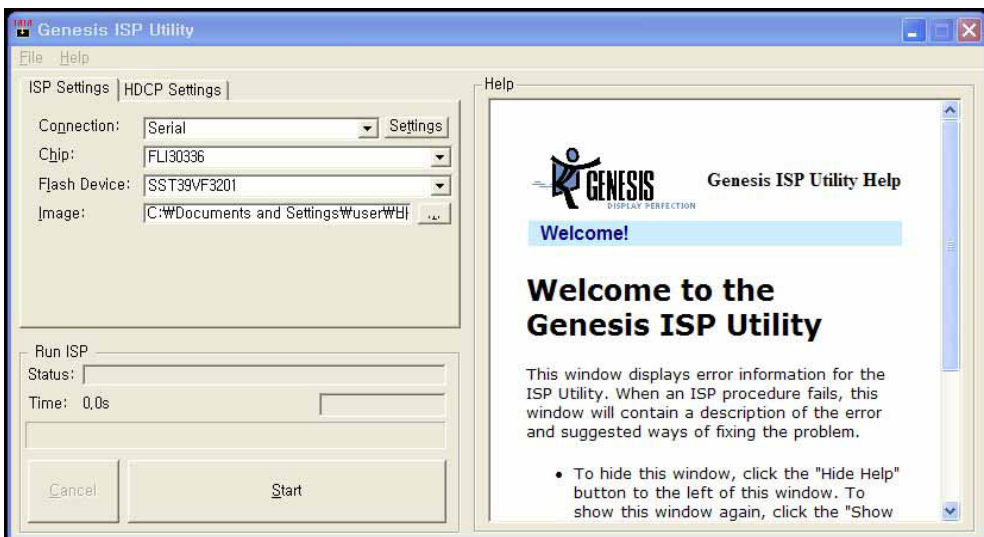
1. Connect RS232 Cable between RSX-1562 and PC. And then RSX-1562 Power On.
2. RSX-1562 OSD Menu Select
: "OTHER" -> "SW UPGRADE : ENTER" -> "SCALER UPGRADE : YES" -> Enter
3. Active "C:\Program Files\Genesis Microchip\ISP Utility\ISPUtilityUI.exe"



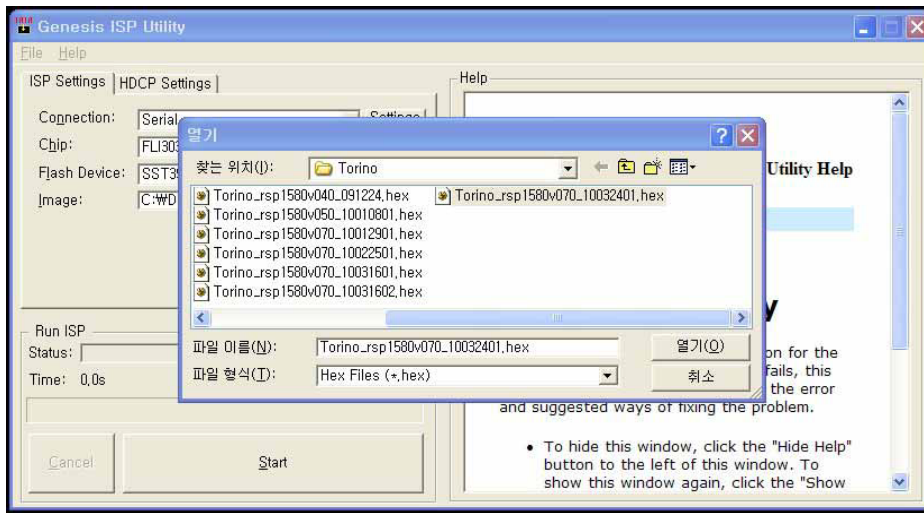
4. Select "Connection : Serial"
5. Click the "Settings" button and then Select COM port and Baud rate. (RSP-1580 Baud rate : 115200)



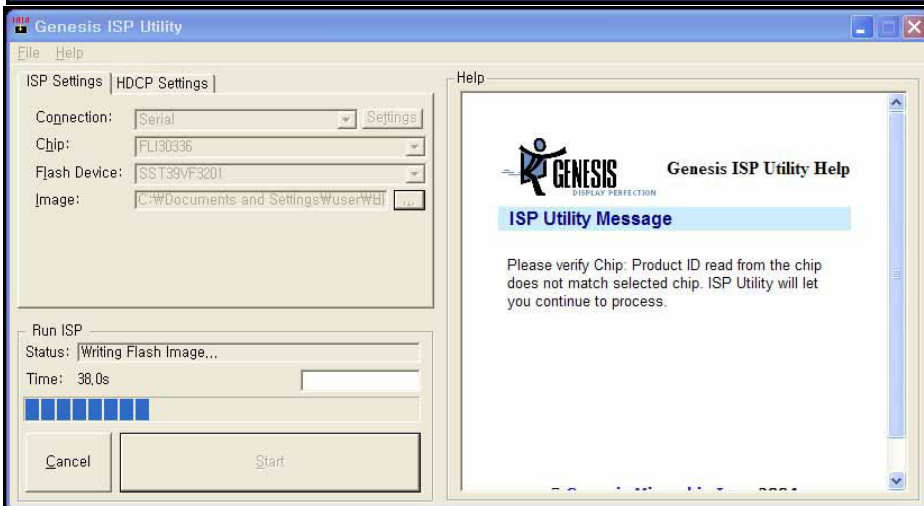
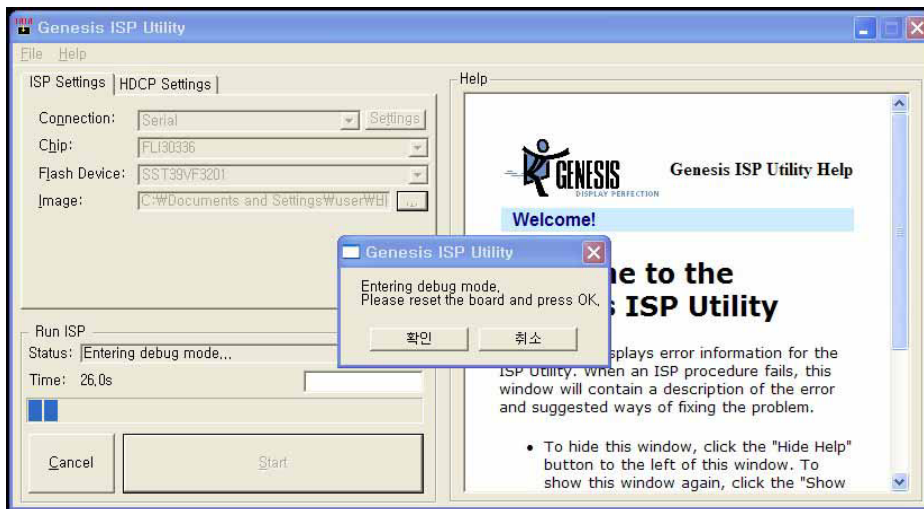
6. Select "Chip : FLI30336" and "Flash Device : SST39VF3201"



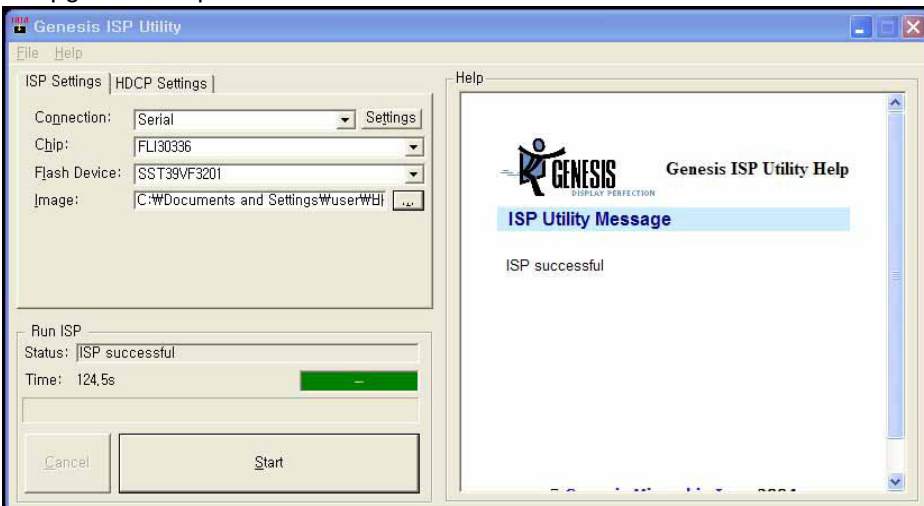
7. Select "Image" for Upgrade (Video Scaler Software File : p1580p1572x1562x1552-SCALER-V1xx.hex).



8. Click "Start". If Pop-Up message, "OK" click.



9. Upgrade Complete.



10. RSX-1562 Power off. And then Power On.

5. iPod Software Upgrade Method

1. Rename "FUSB-V1xxBT.rom" to "rotel.rom"
2. Copy "rotel.rom" to Root folder of USB Memory stick.
3. RSX-1562 Power On
4. Select Main Listen Function to "LISTEN : iPod/USB"
5. Insert USB Memory stick to RSP1580

iPod/USB UPGRADE	
ARE YOU SURE?	
No	Yes

6. Select "Yes" and then Enter.

iPod/USB UPGRADE
Upgrading...
0Min 14Sec

7. If Upgrade is completed, RSP1580 is loading again the USB memory stick.

7. Standby MCU Software Upgrade Method

1. Active Hyper Terminal
2. Type Name and then OK

Connection Description

New Connection

Enter a name and choose an icon for the connection:

Name:
TFT and RDG upgrade

Icon:

OK Cancel

3. Select Com Port at "Connect to". And then OK

Connect To

TFT and RDG upgrade

Enter details for the phone number that you want to dial:

Country/region: Korea (82)

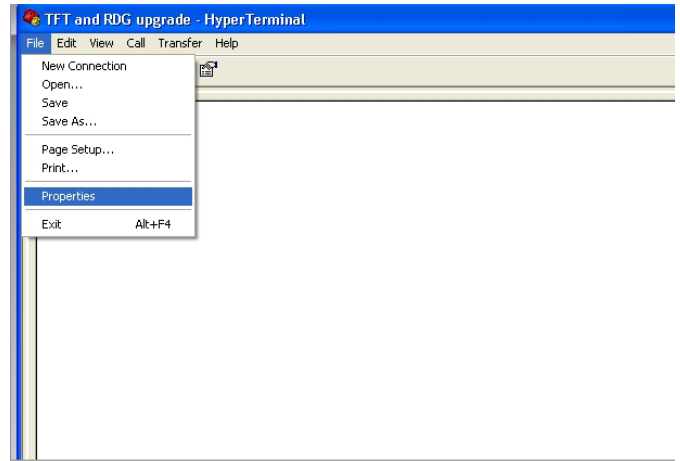
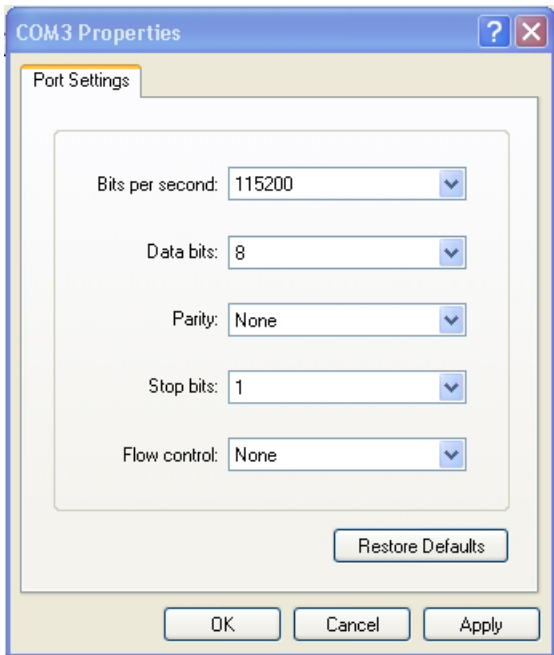
Area code: 02

Phone number:

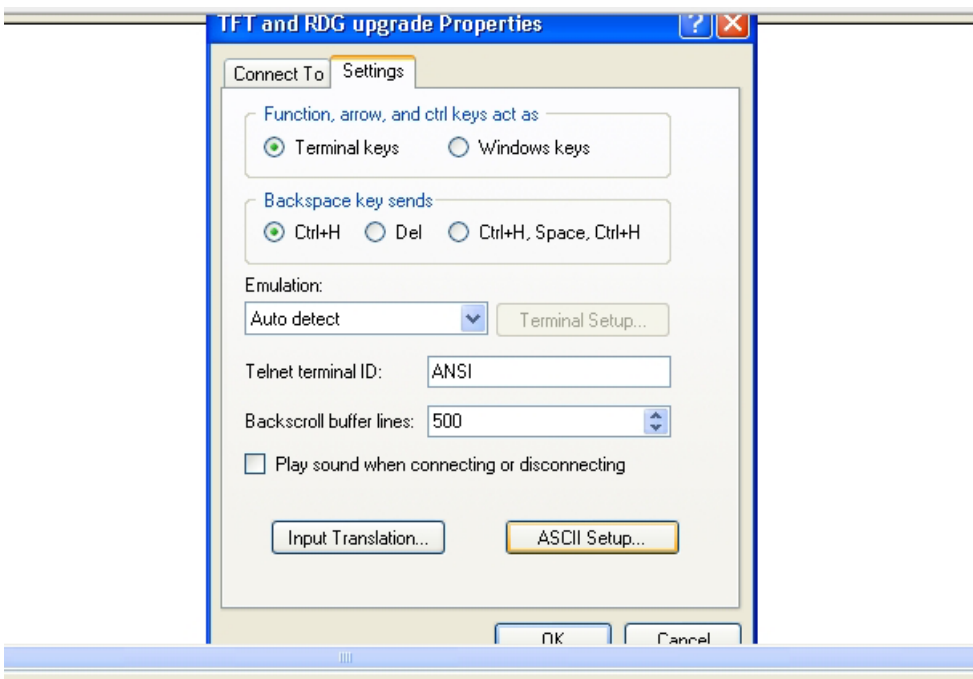
Connect using: COM3

OK Cancel

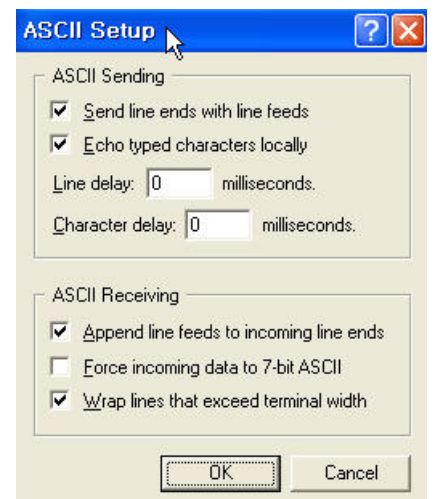
4. Select "115200, 8, None, 1, None" at "Com Port Properties". And then OK
5. Select "File" -> "Properties" menu.



6. Select "Settings" Tab. And then Select "ASCII Setup..."

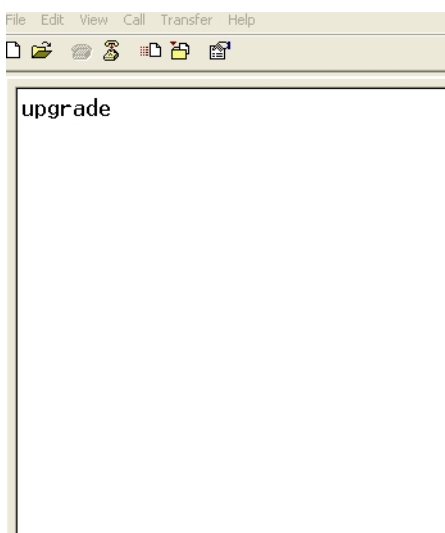


7. Check as bellow.

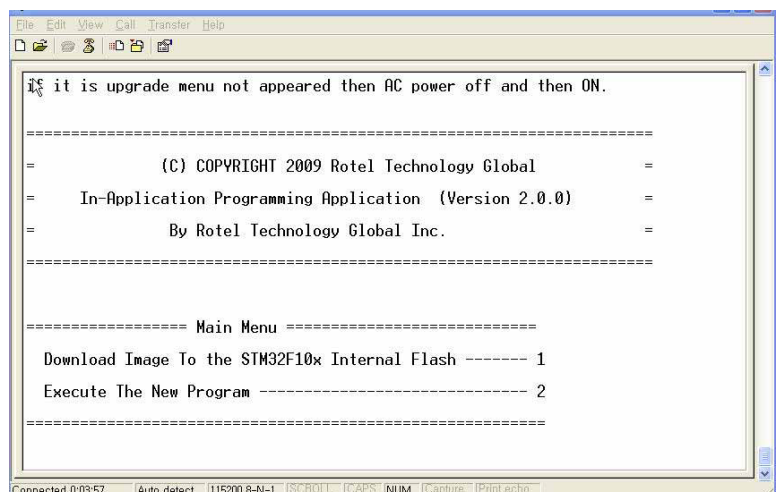


8. Connect RS232 Cable between RSP-1580 and PC. And then RSP-1580 Power On.
RSX-1562 have to Standby mode.

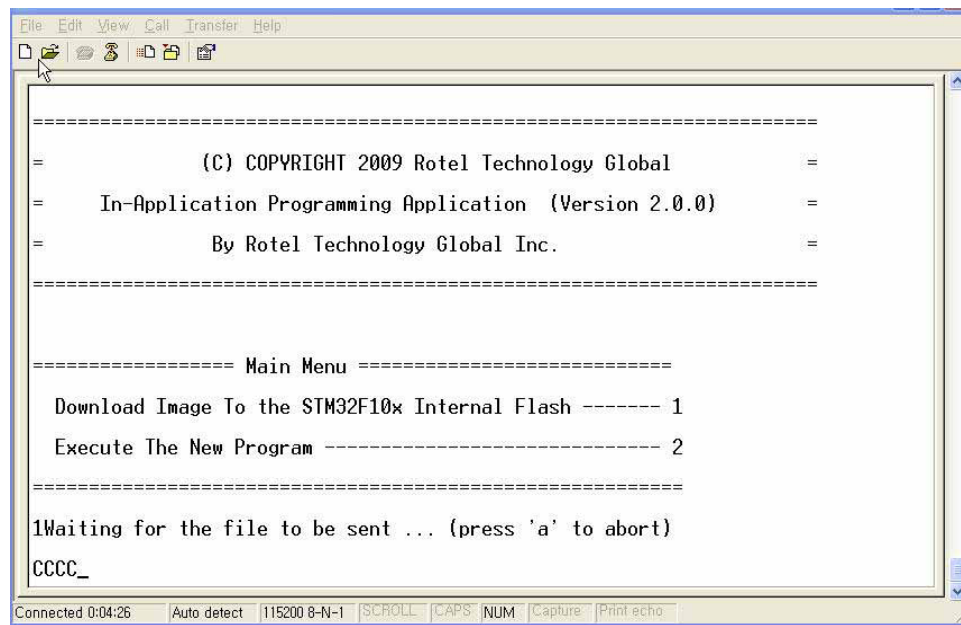
9. At Hyper Terminal Screen, Type "upgrade" and then Enter



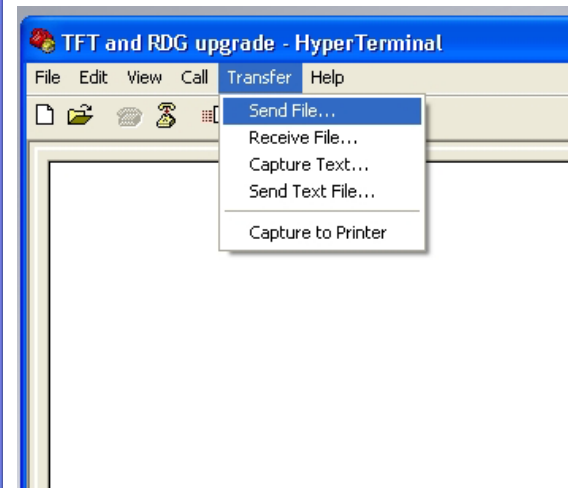
10. Displayed as bellow. Type "1"



11. Ready for sending file.

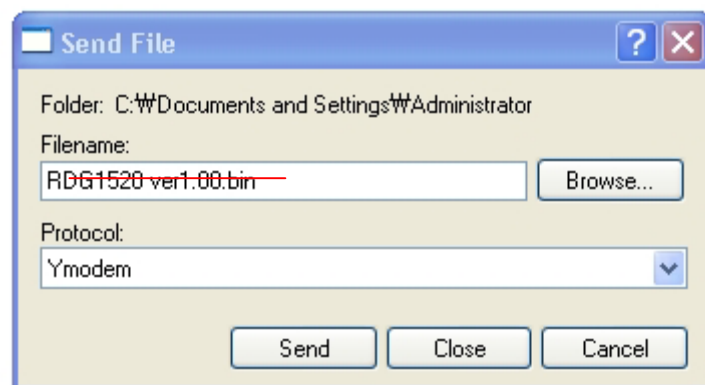


12. Select "Transfer" -> "Send File..."

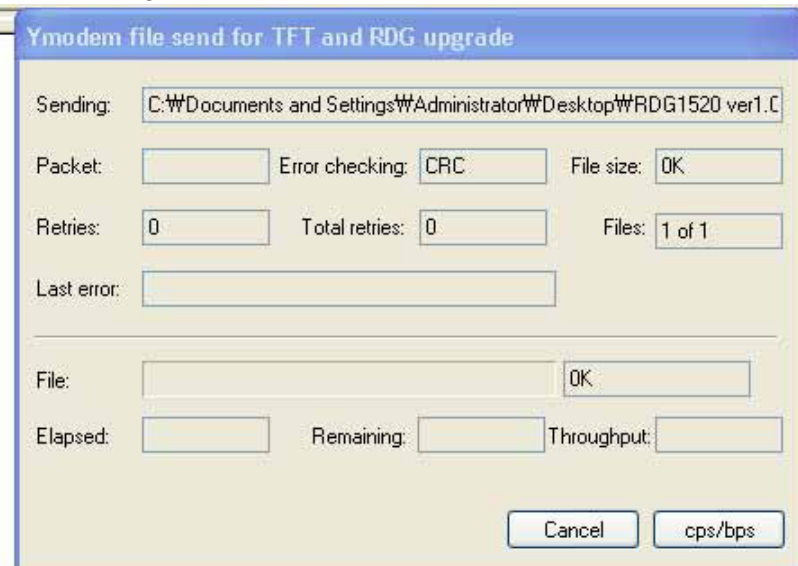


13. Select the Upgrade File(~~p1572x1562x1552-STBY-V1xx-for_upgrade.bin~~)

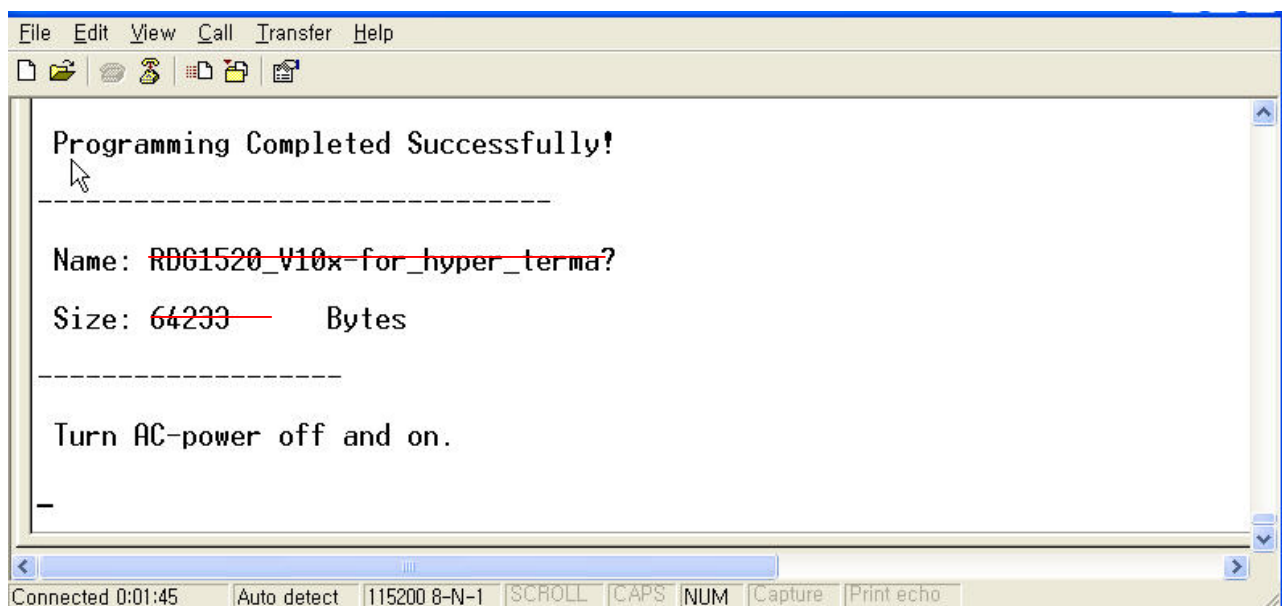
14. Select "Protocol : **Ymodem**". And then "Send"



15. Sending



16. Upgrade Complete.



17. RSP-1580 Power off. And then Power On.

ADC Calibration for RSP1580/RSP1572/RSX1562

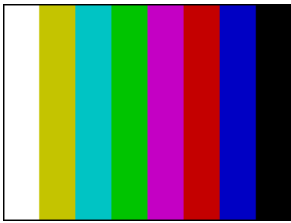
(Basically, it will be not required as it made in Factory.)

If you play 8 Full Color Bar pattern in ~~Referenz DVD Test Pattern Commented Test Pattern 16:9 (colour)~~, you will see the below picture. **JVC VT502/501 or equivalent disc 100% Color Bar pattern.**

After put the below picture to VIDEO-3(RSP1580)/VIDEO-5(RSP1572) as component input), if you press **Input key and DISPLAY key(RSP1580)/ 2CH key and DSP key(RSP1572/RSP1562)** same time , you can see "ADC calibration" in blue box of middle of the TV screen.

It will be completed after 3~4 seconds changing brightness.

Then, off AC power and ON of our set.

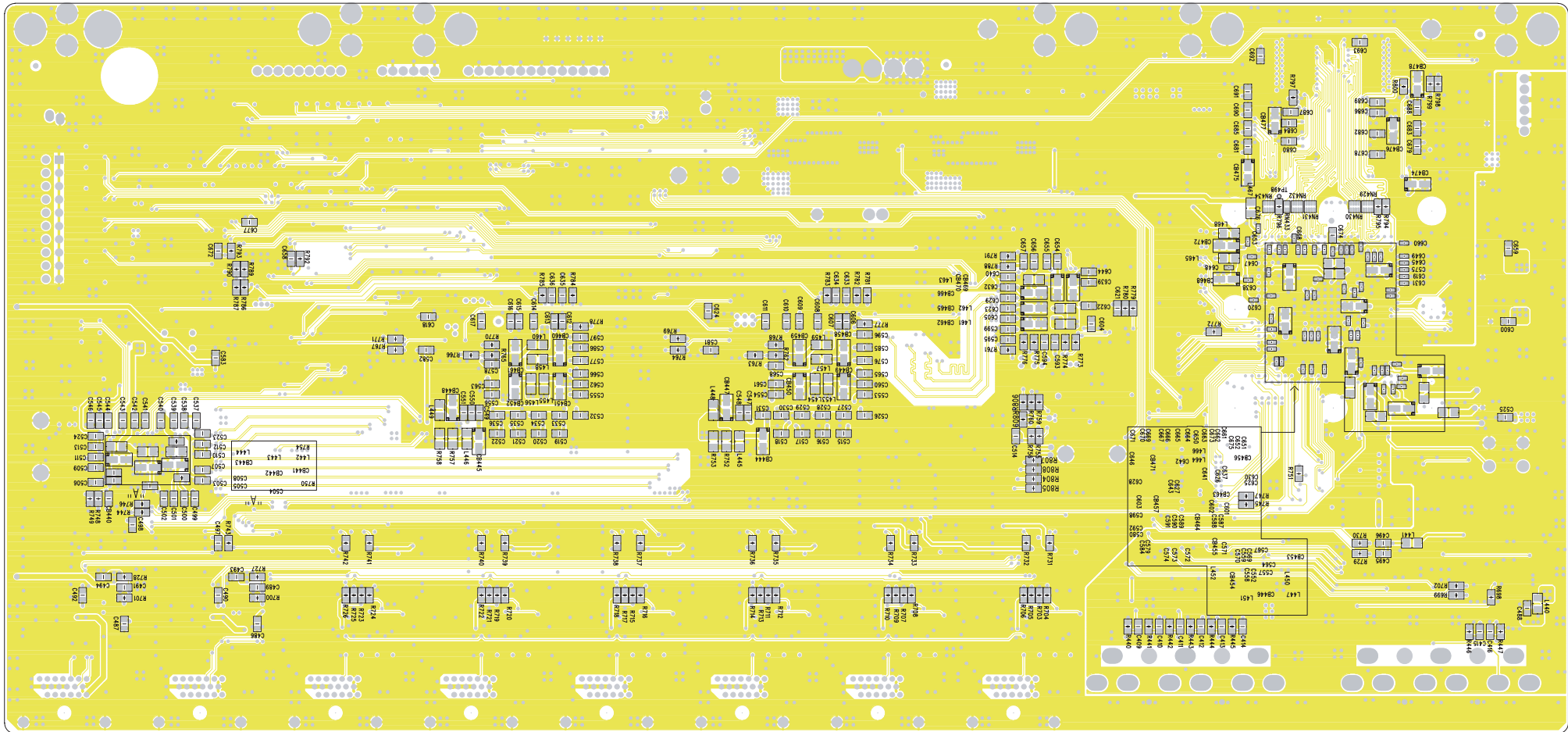
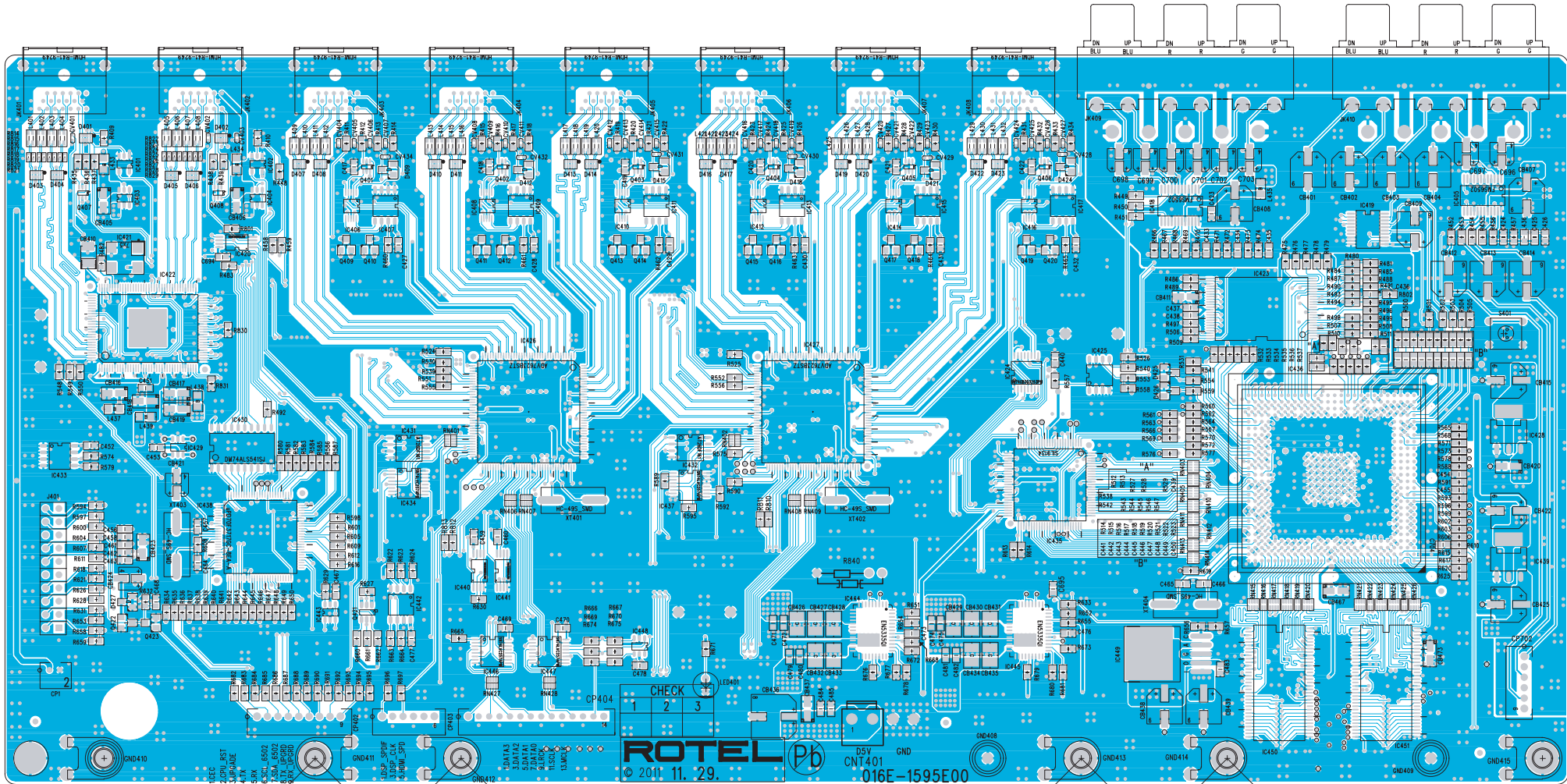


It is required for each Component and Composite (or S-Video) video signal calibrations when updated Scalar (Torino) software.

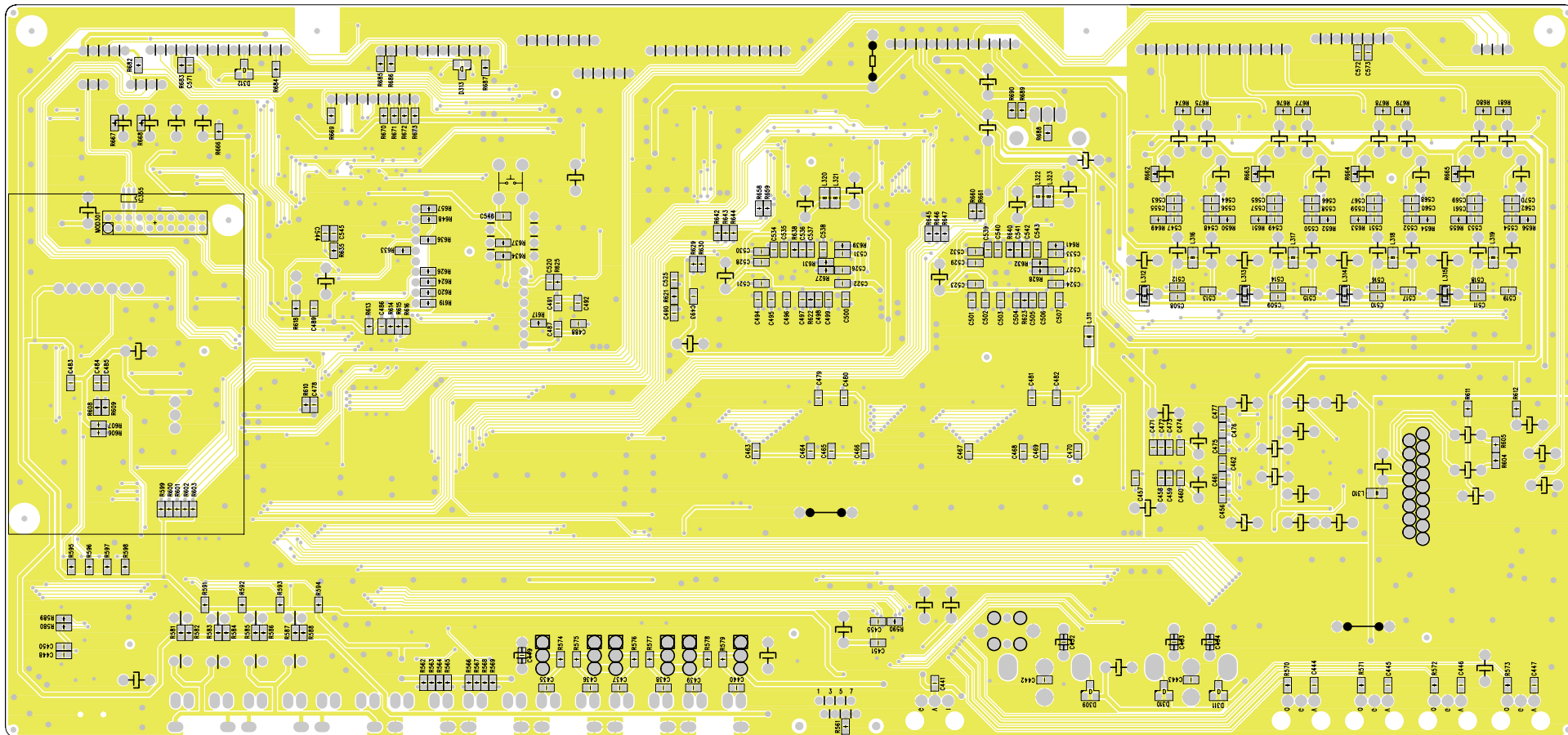
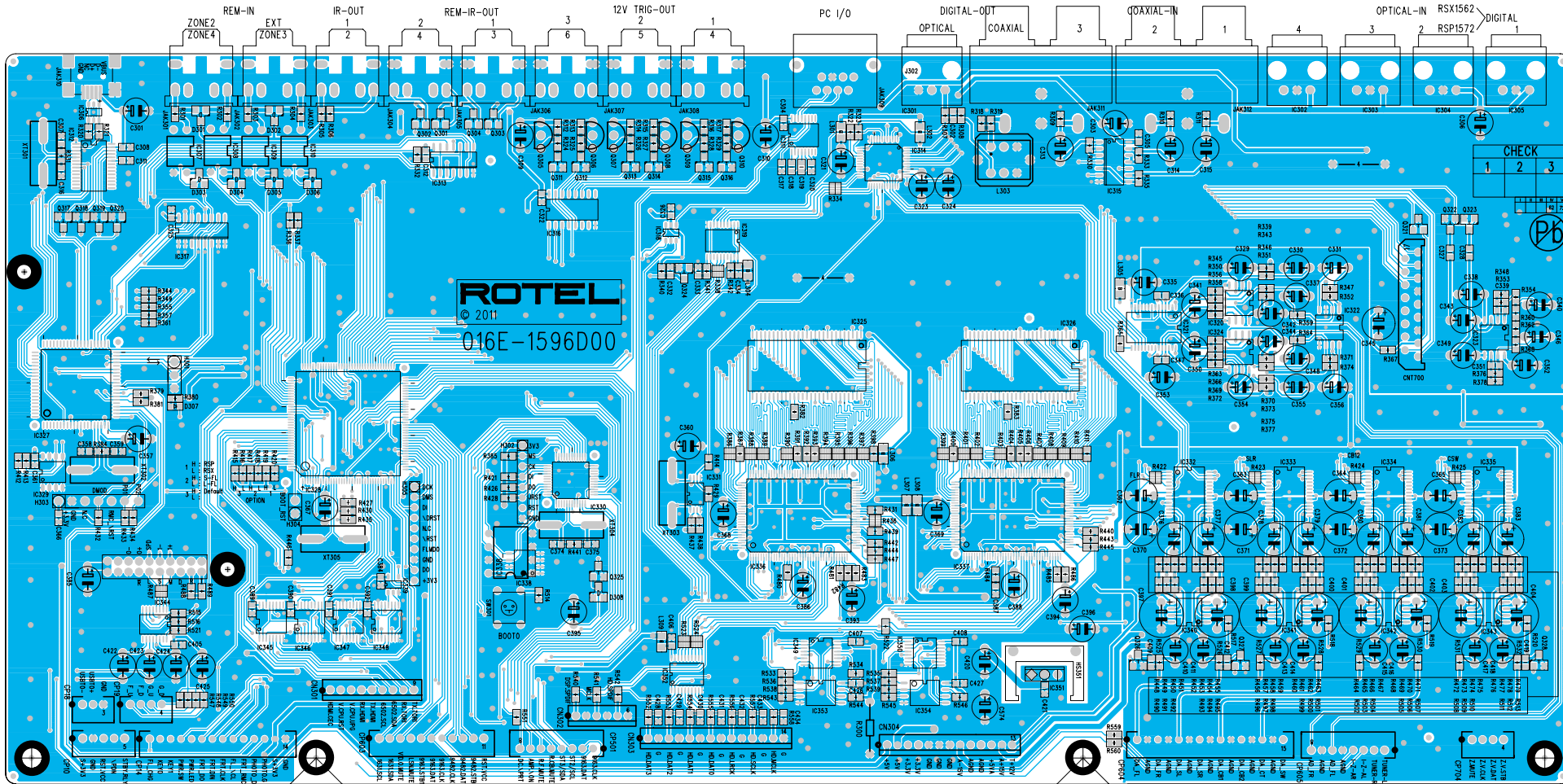
Best regards.

<Memo>

HDMI PCB 016 E-1595E00

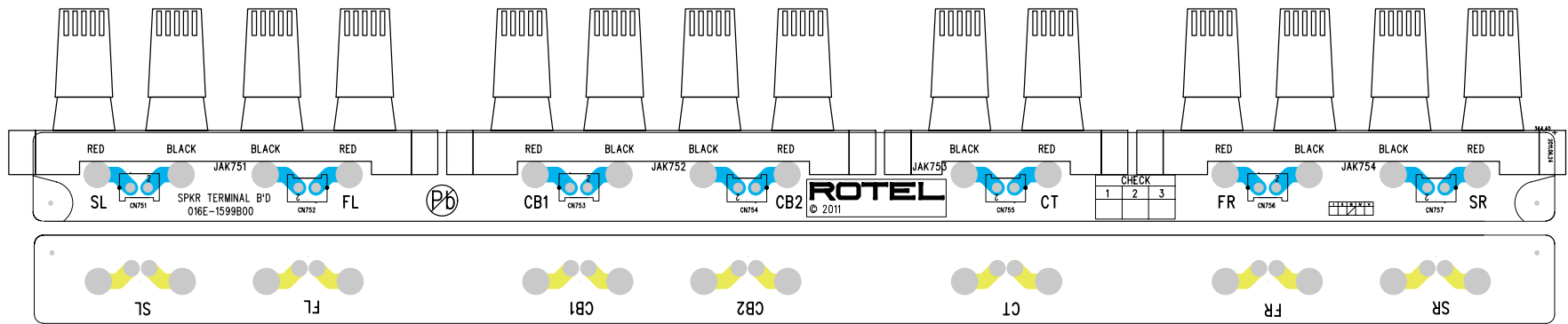


016 E-1596D00



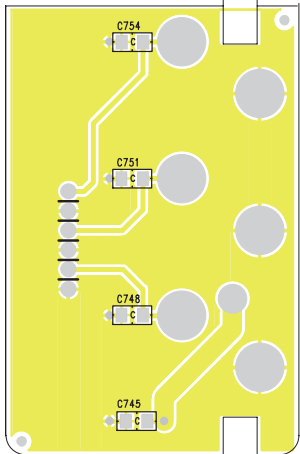
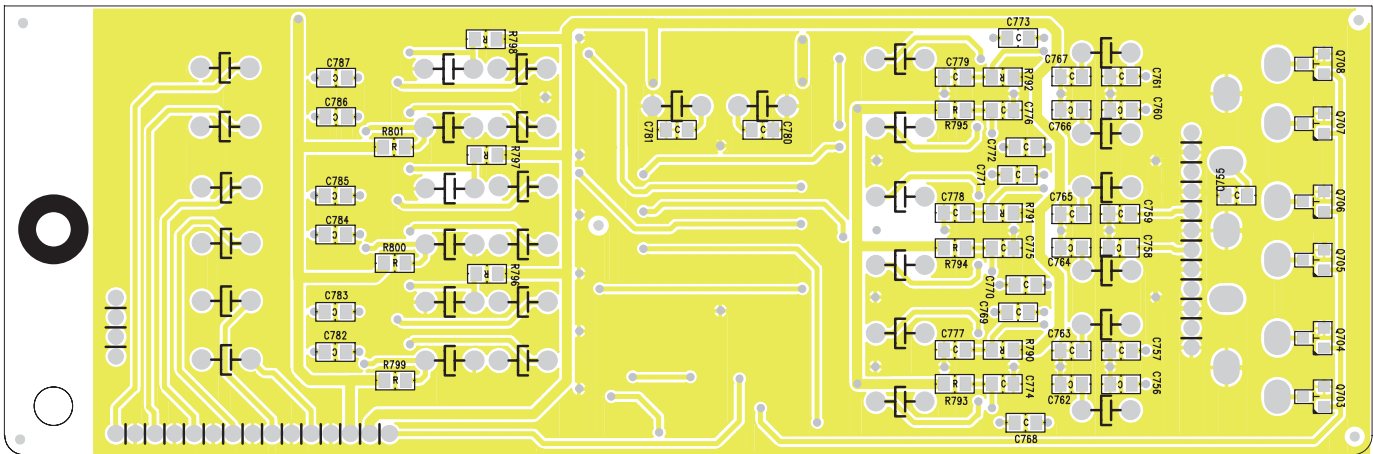
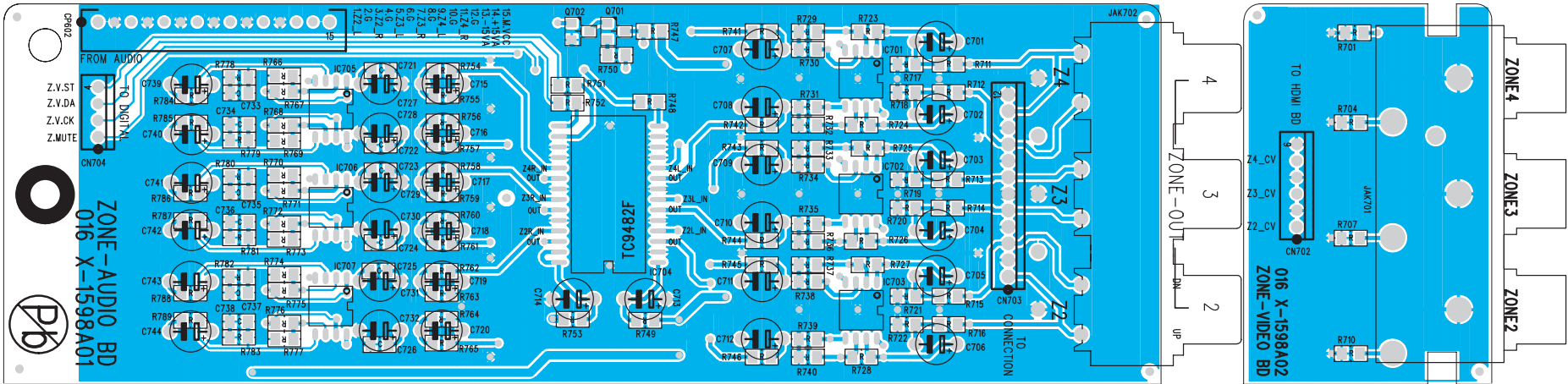
SPEAKER TERMINAL PCB

016 E-1599B00



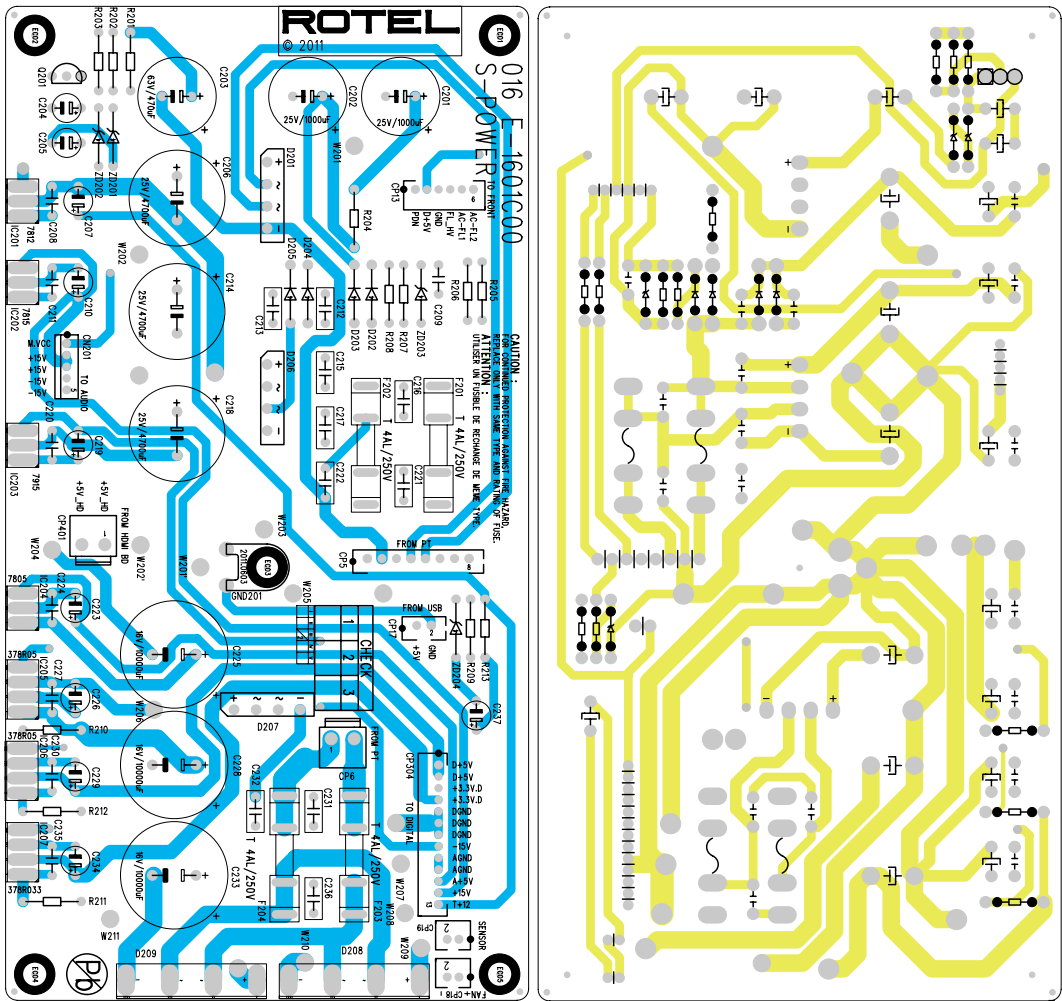
ZONE PCB

016 X-1598A01~02



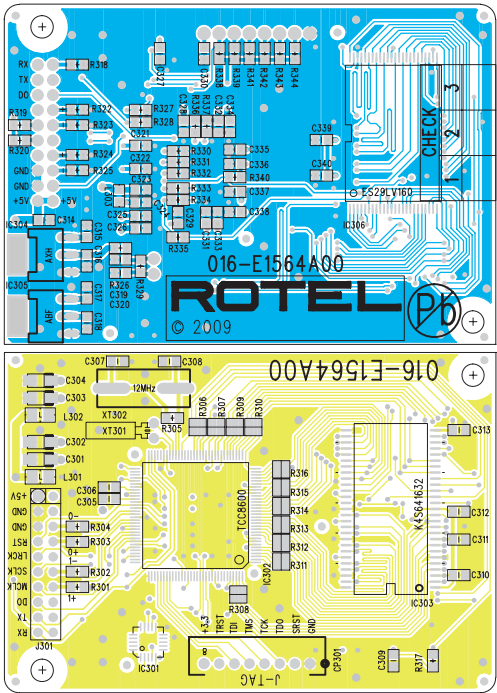
S-POWER PCB

016 E-1601C00

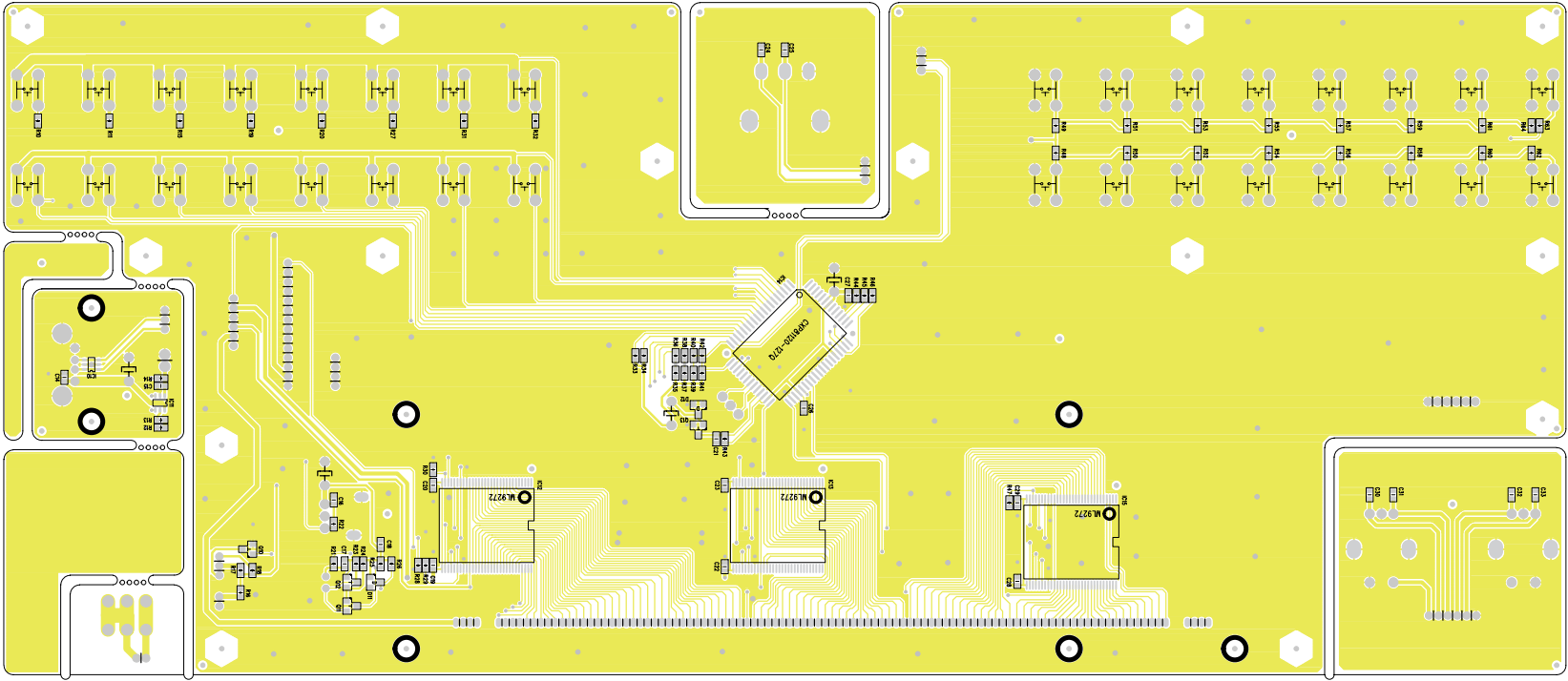
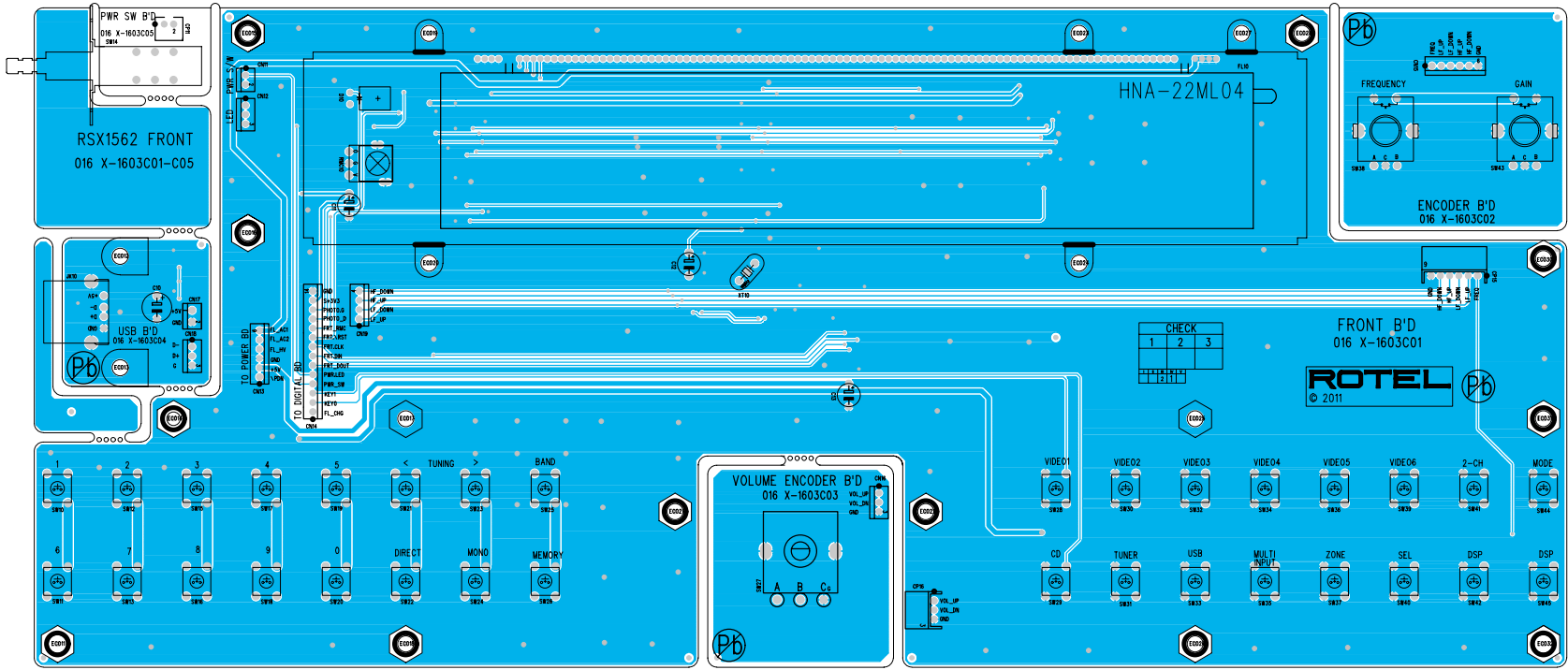


TELECHIPS PCB

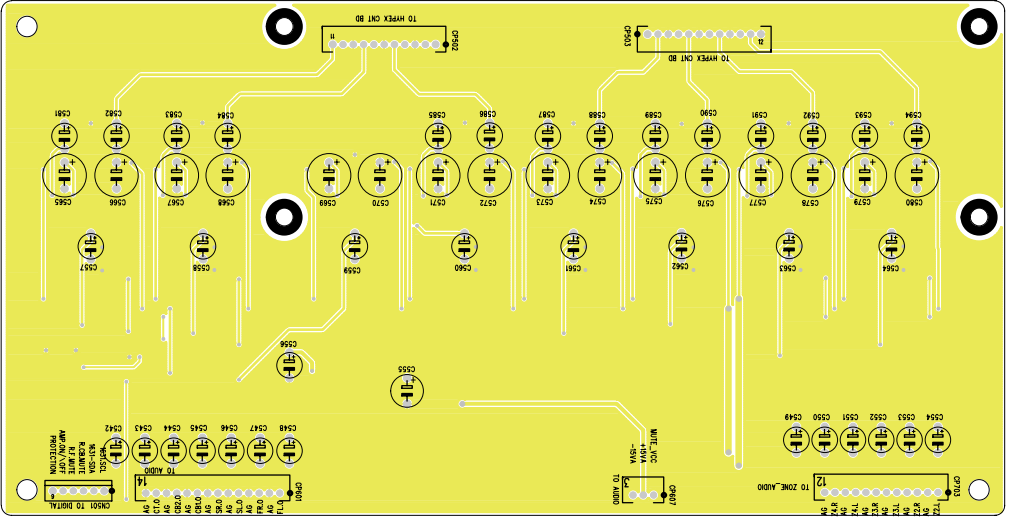
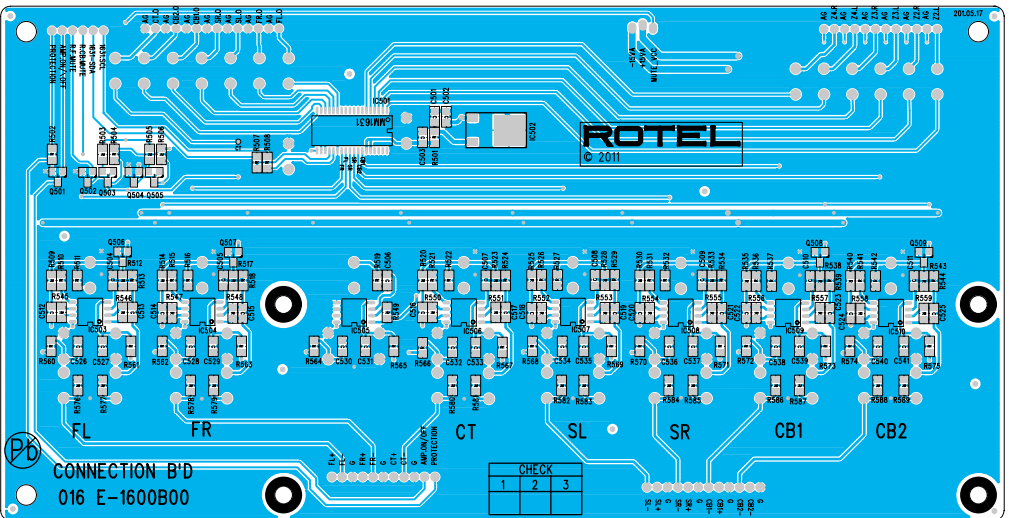
016 E-1564A00



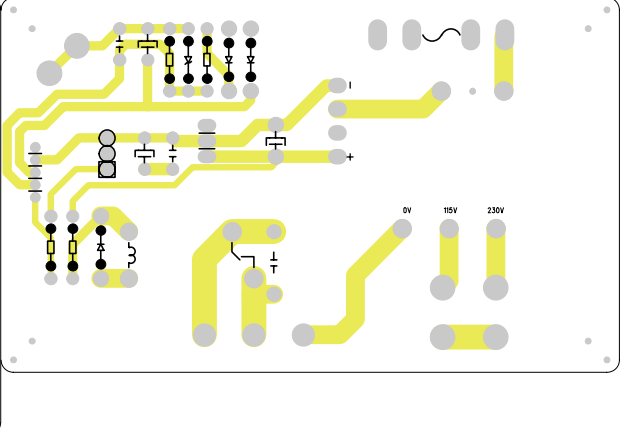
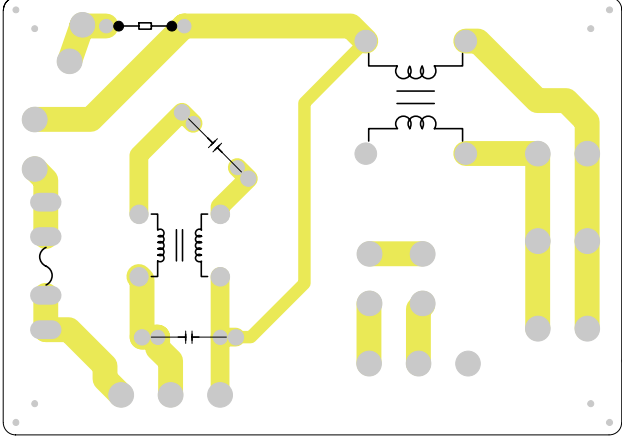
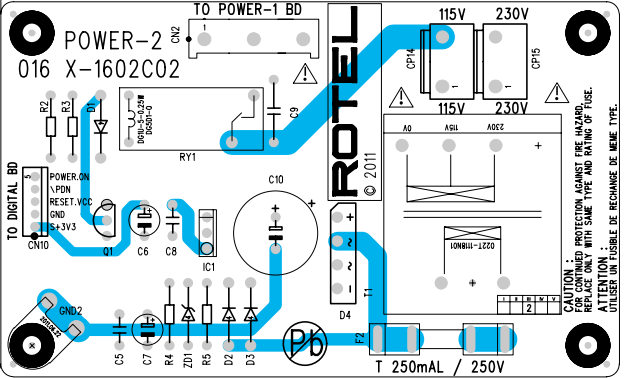
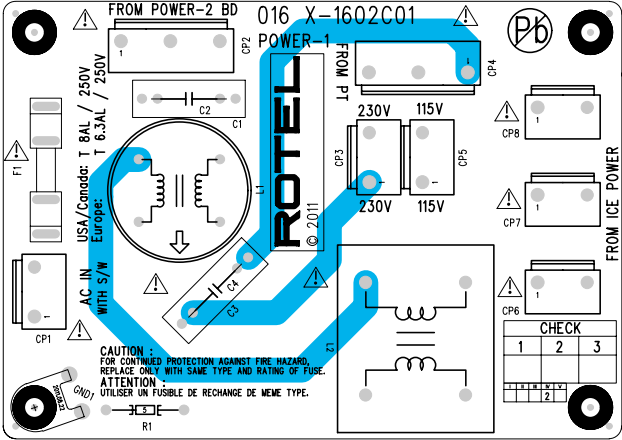
FRONT PCB 016 X-1603C01~05



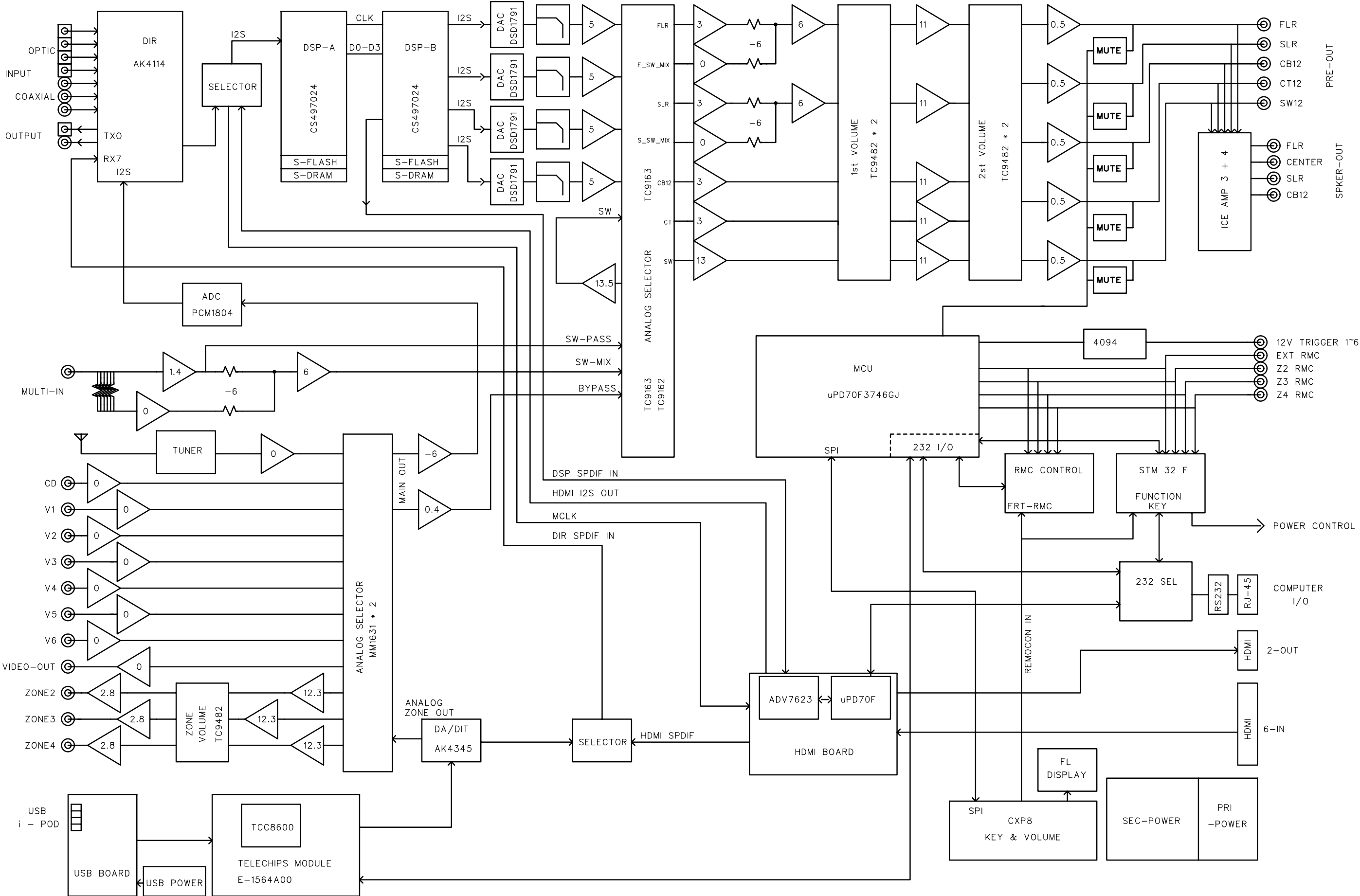
CONNECTION PCB 016 E-1600B00



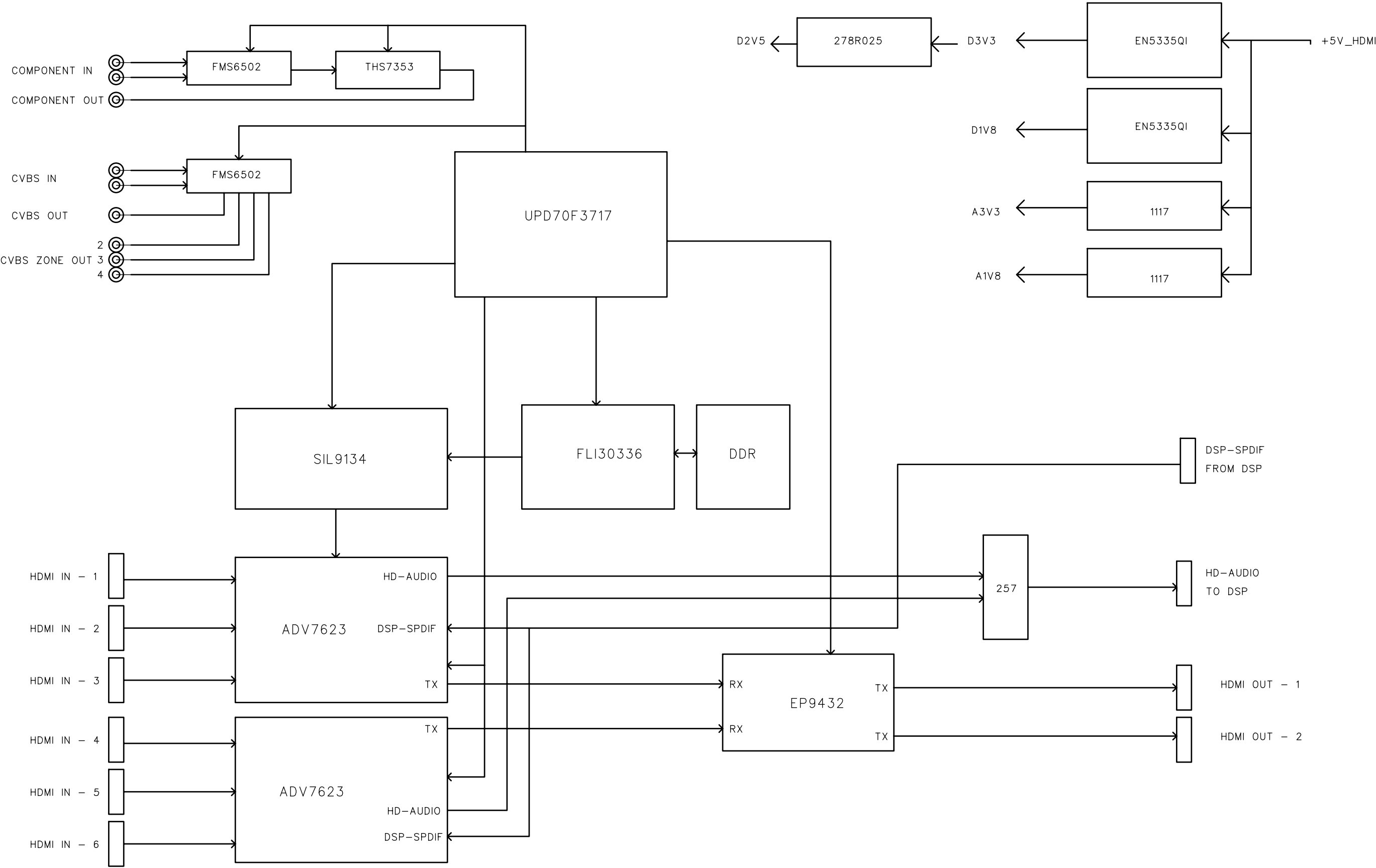
P-POWER PCB 016 X-1602C01~02



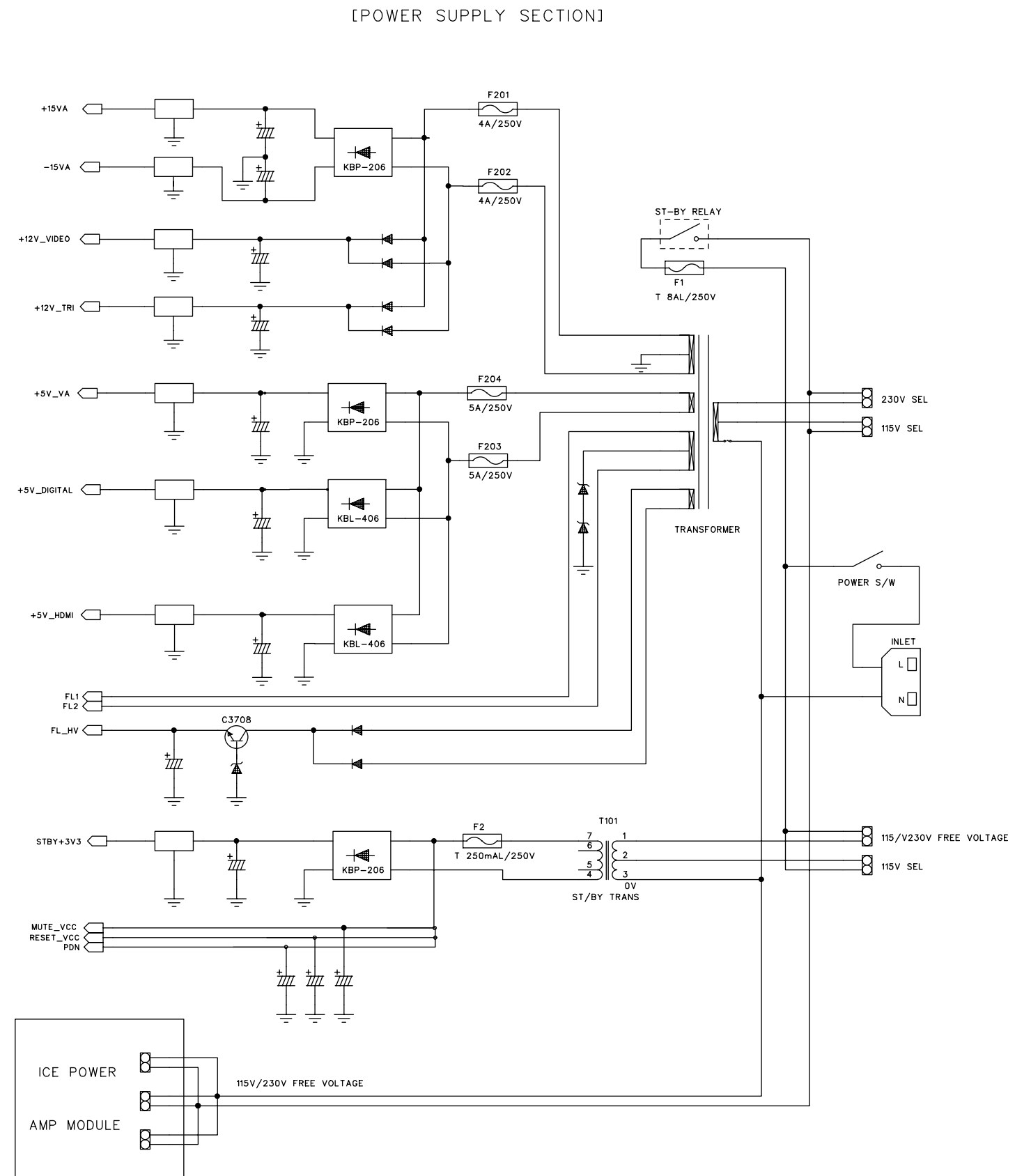
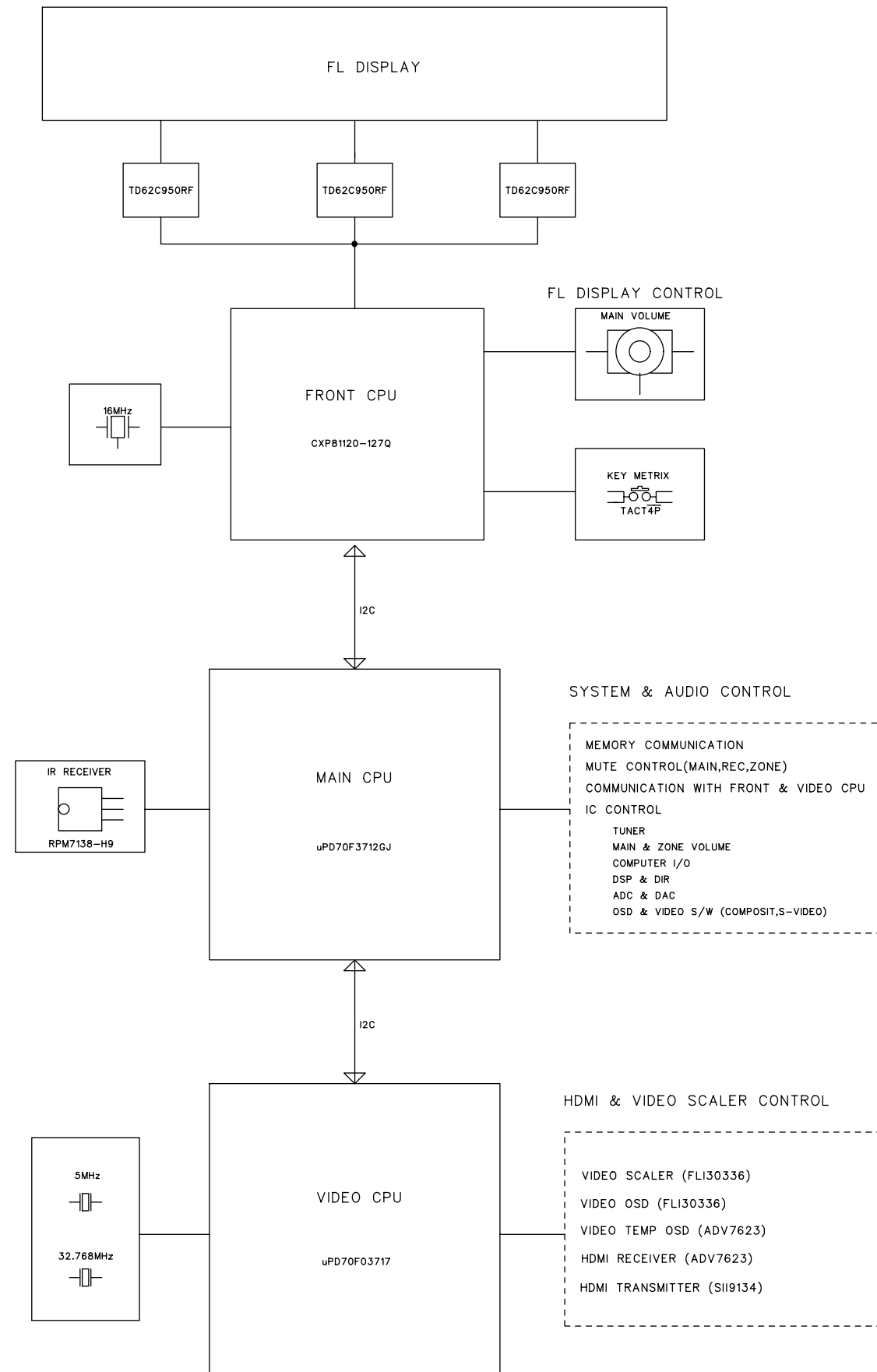
DSP & ANALOG IN



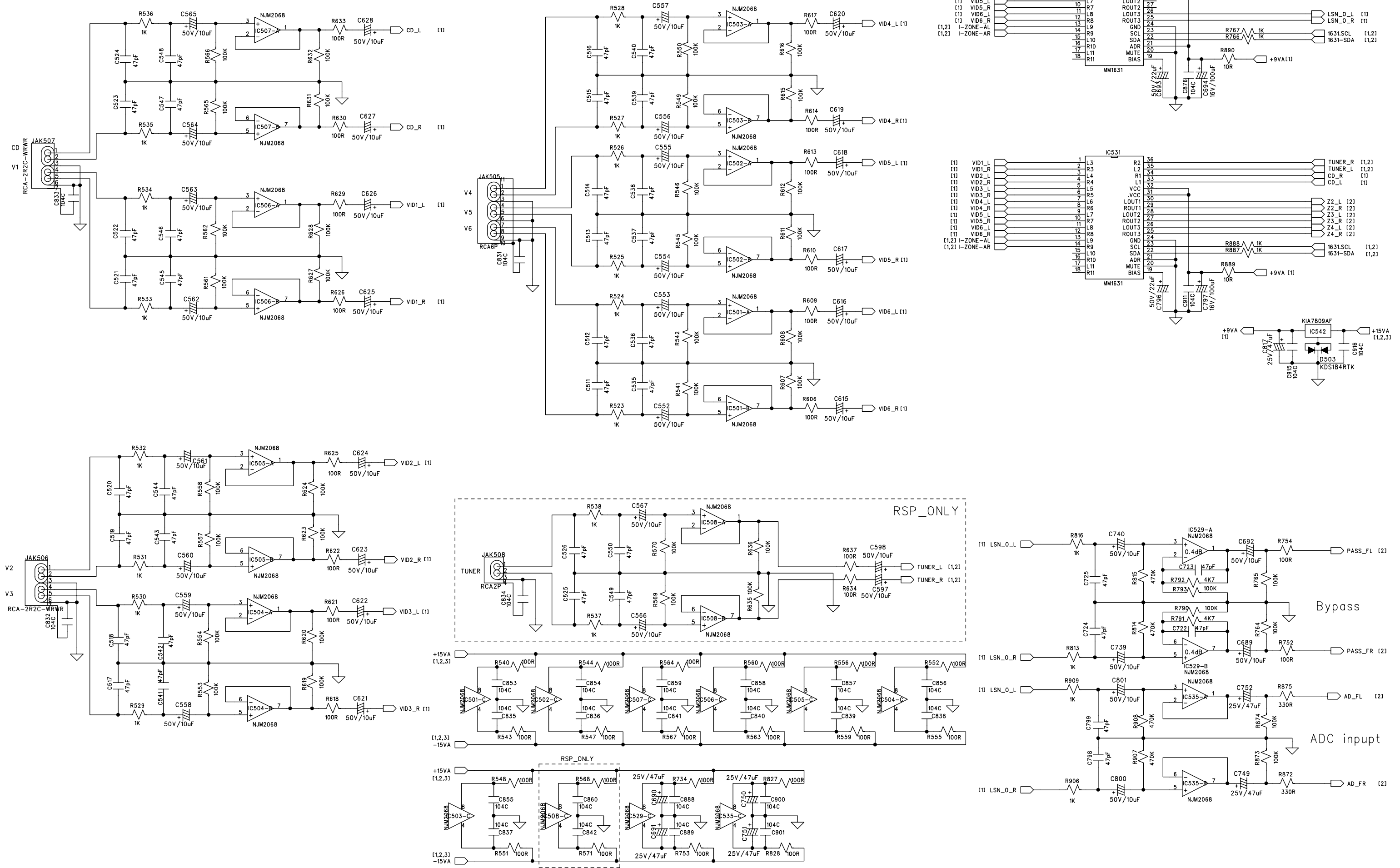
VIDEO & HDMI



POWER & CONTROL PART

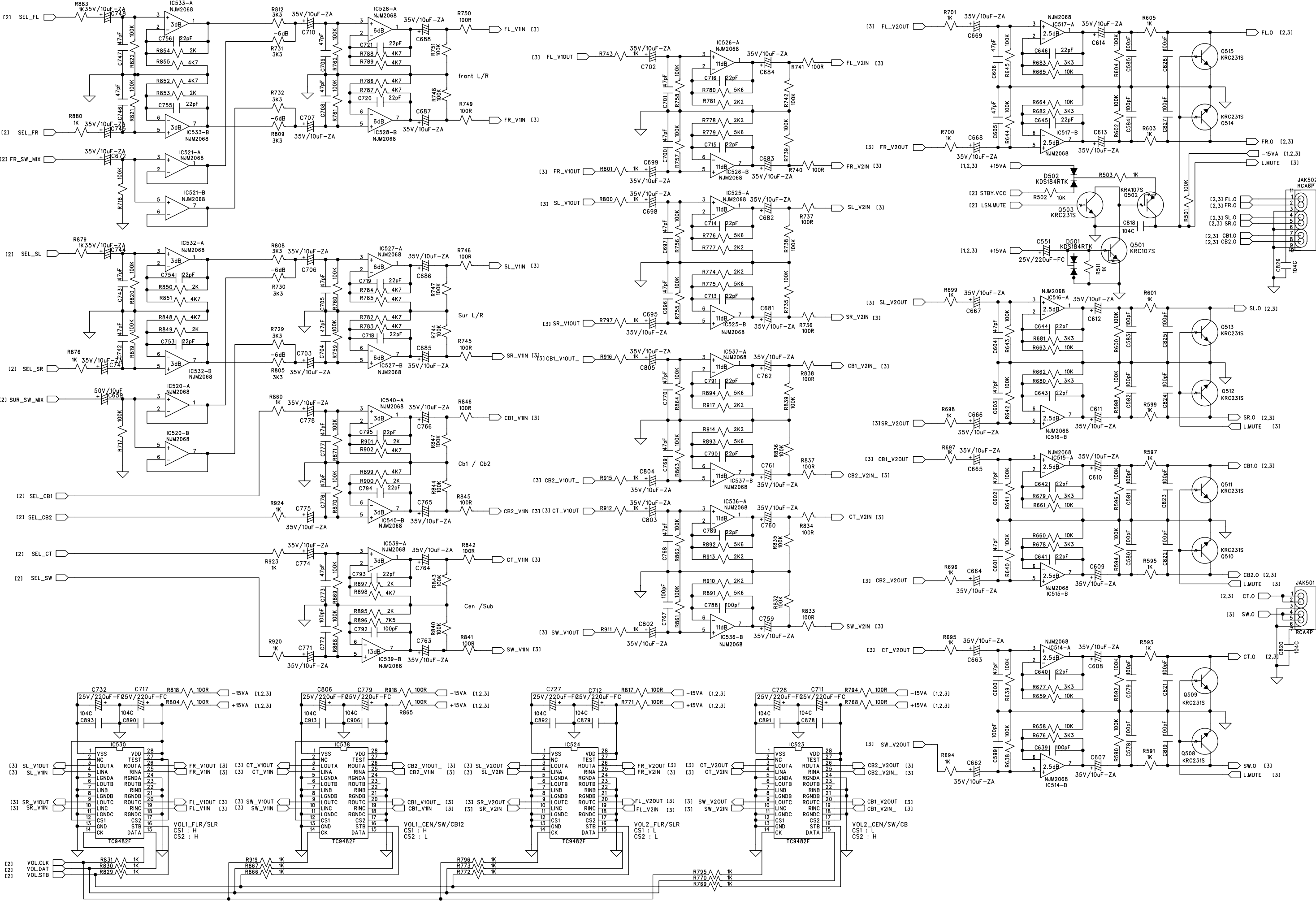


AUDIO PCB (1/3) 016 E-1597A00

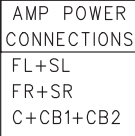


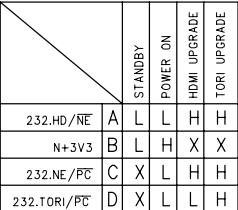
016 E-1597A00



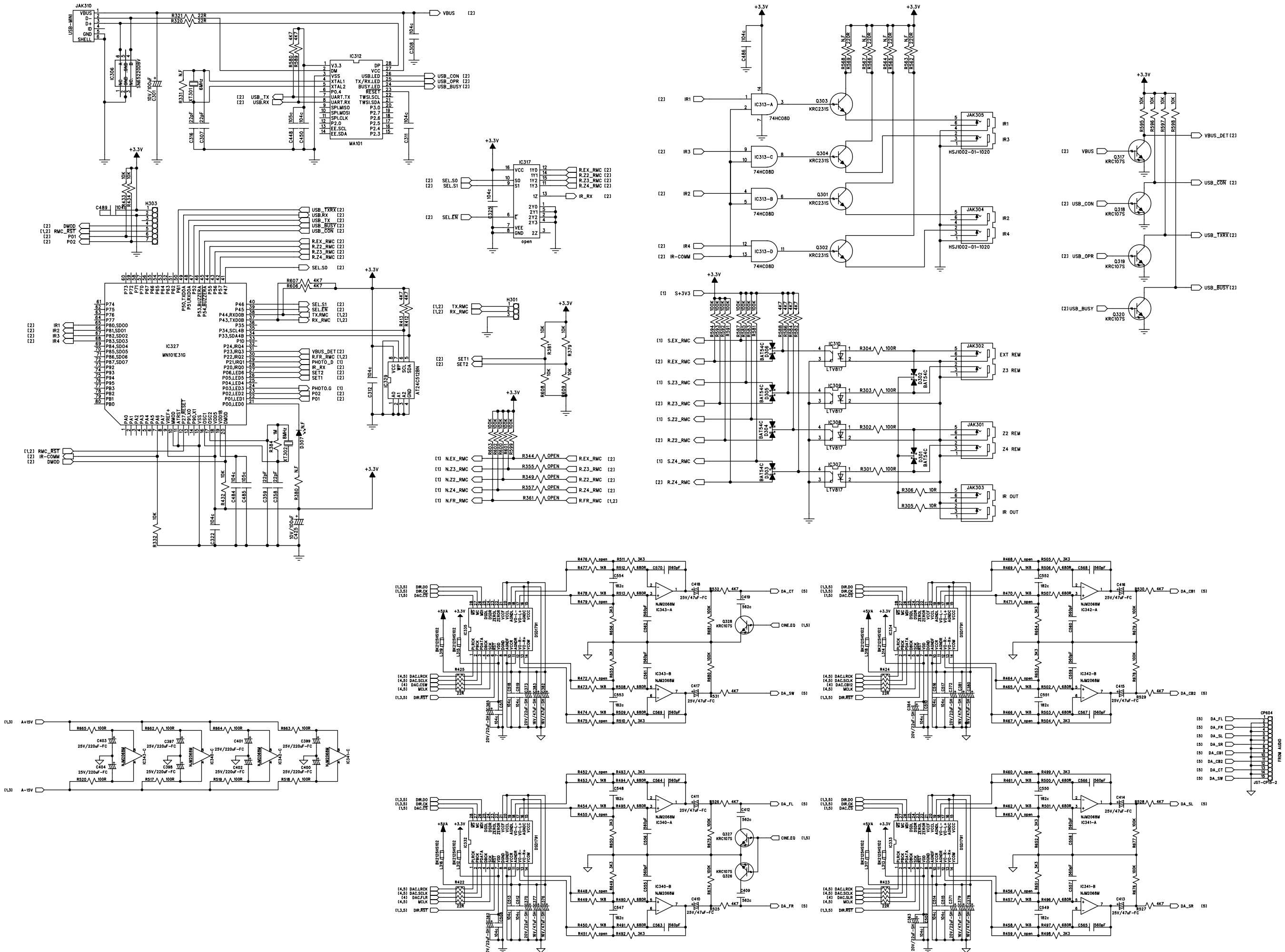


016 E-1517B00



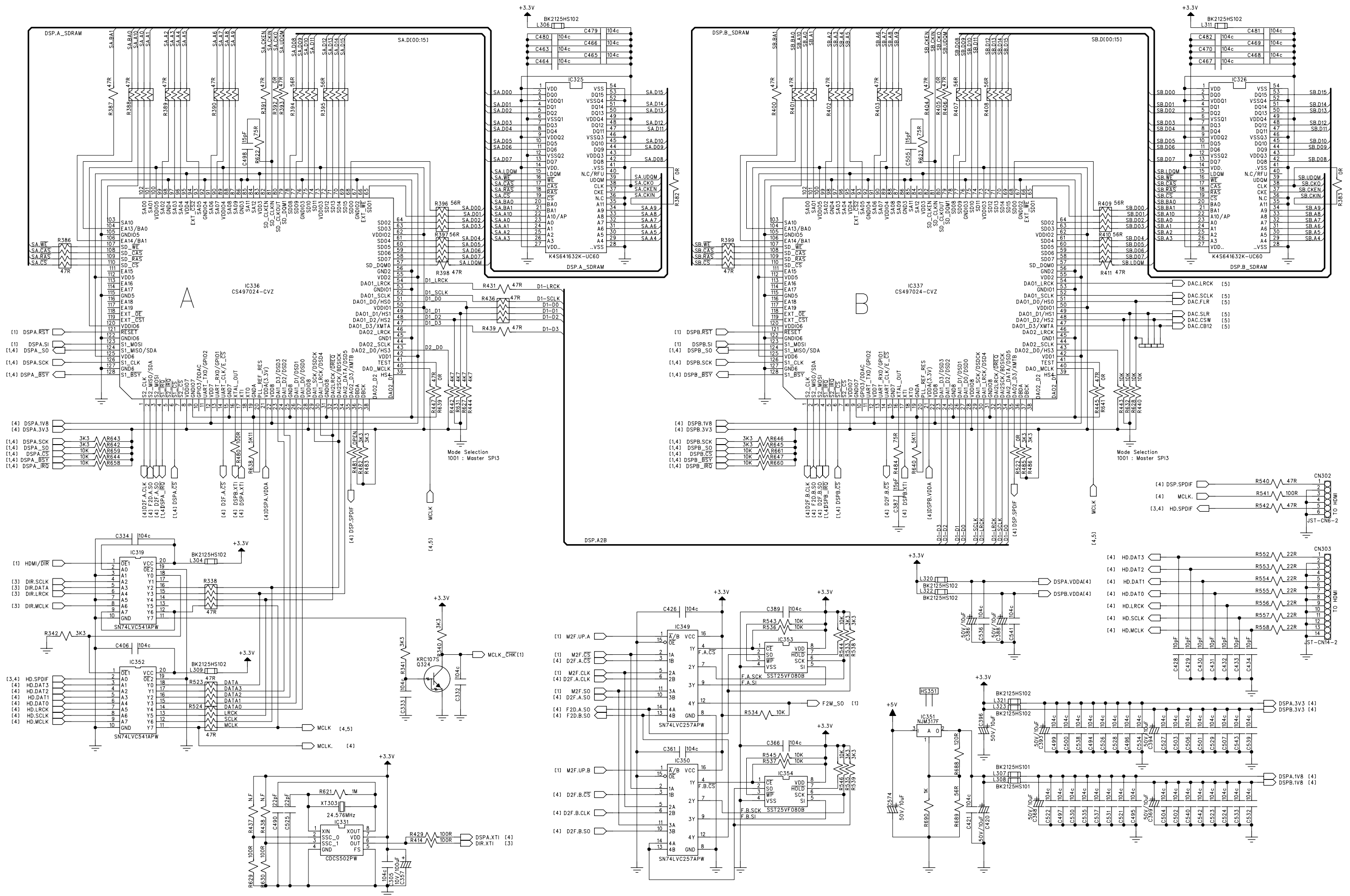


DIGITAL PCB (2/4) 016 E-1596D00

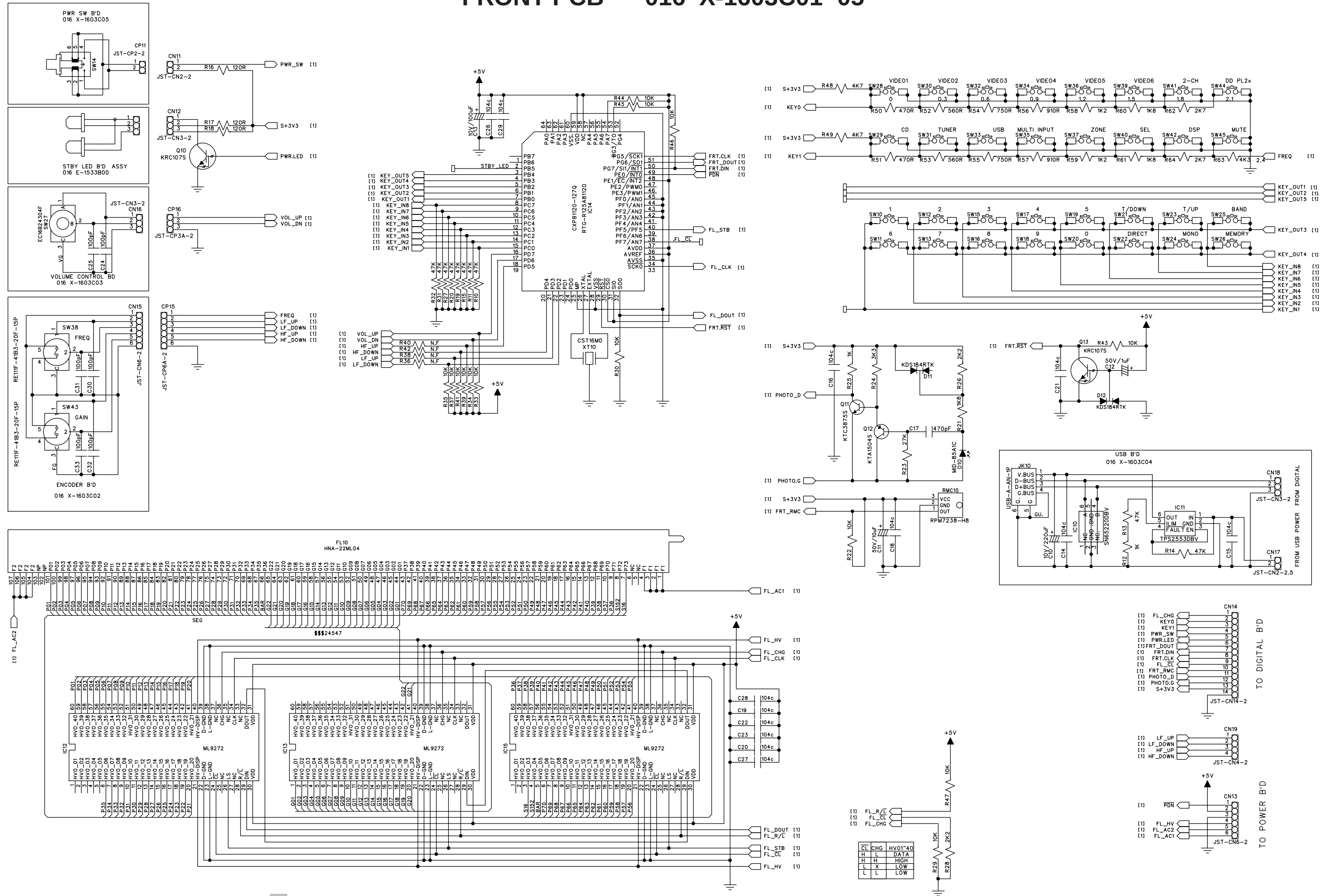




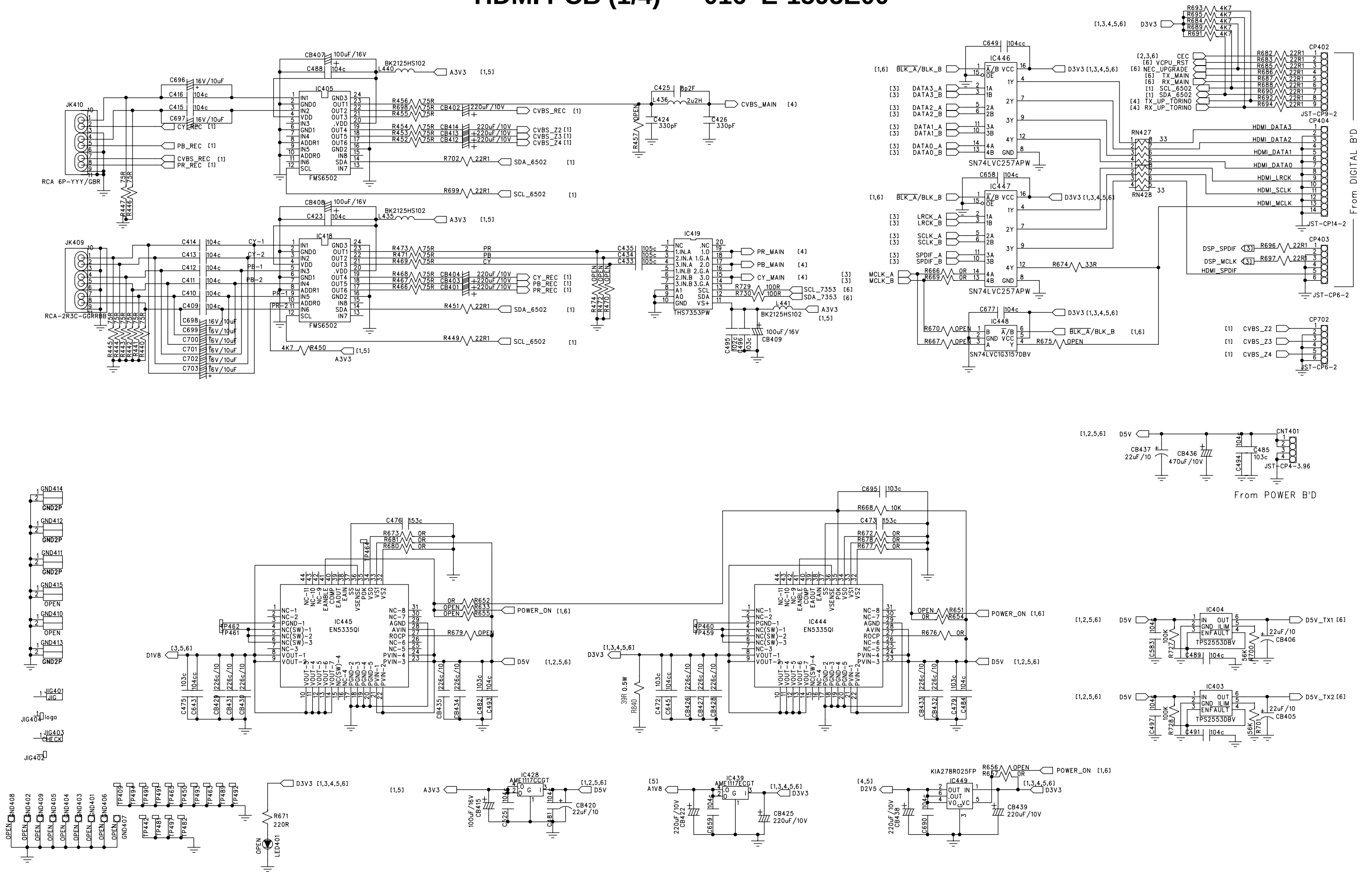
016 E-1596D00

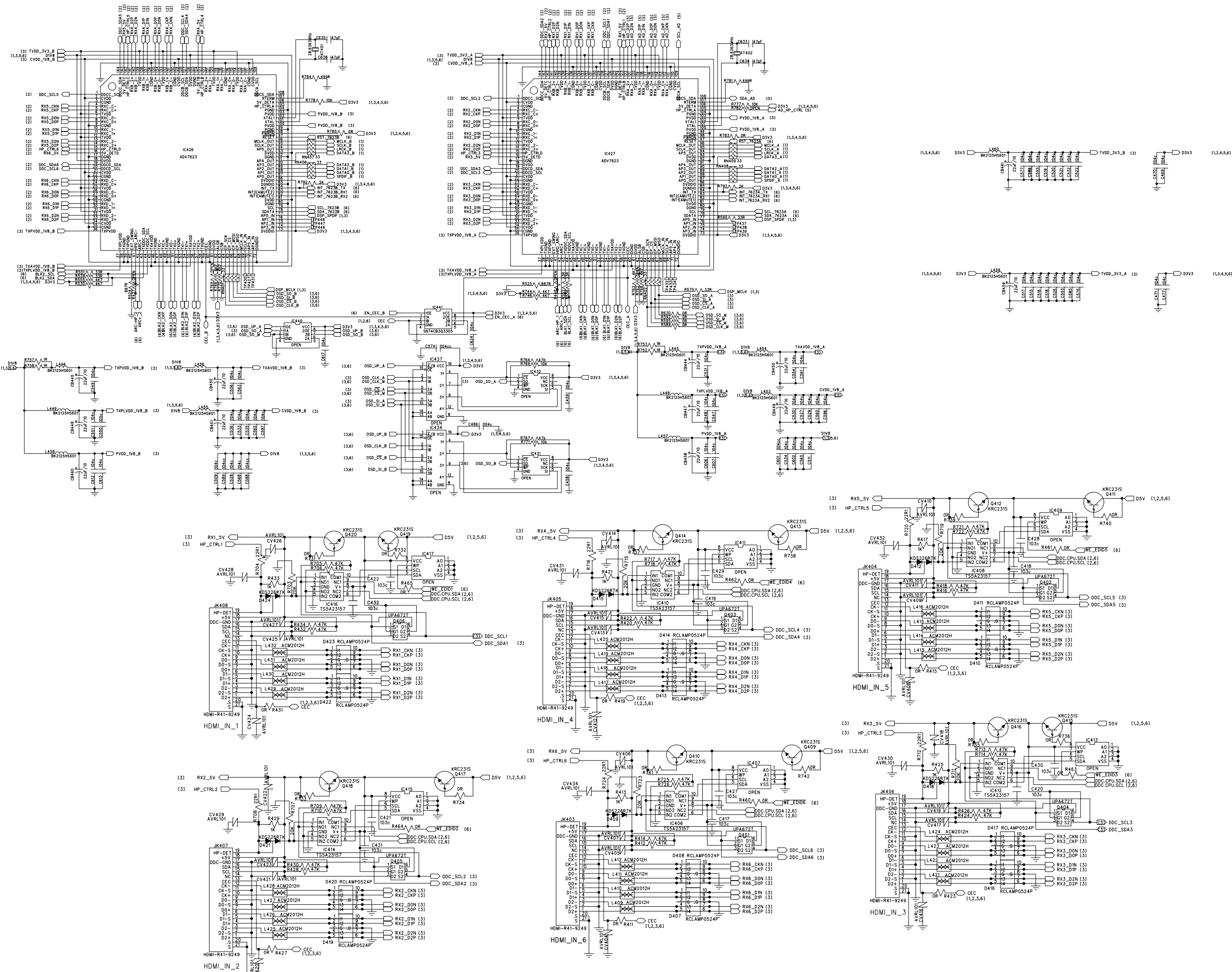


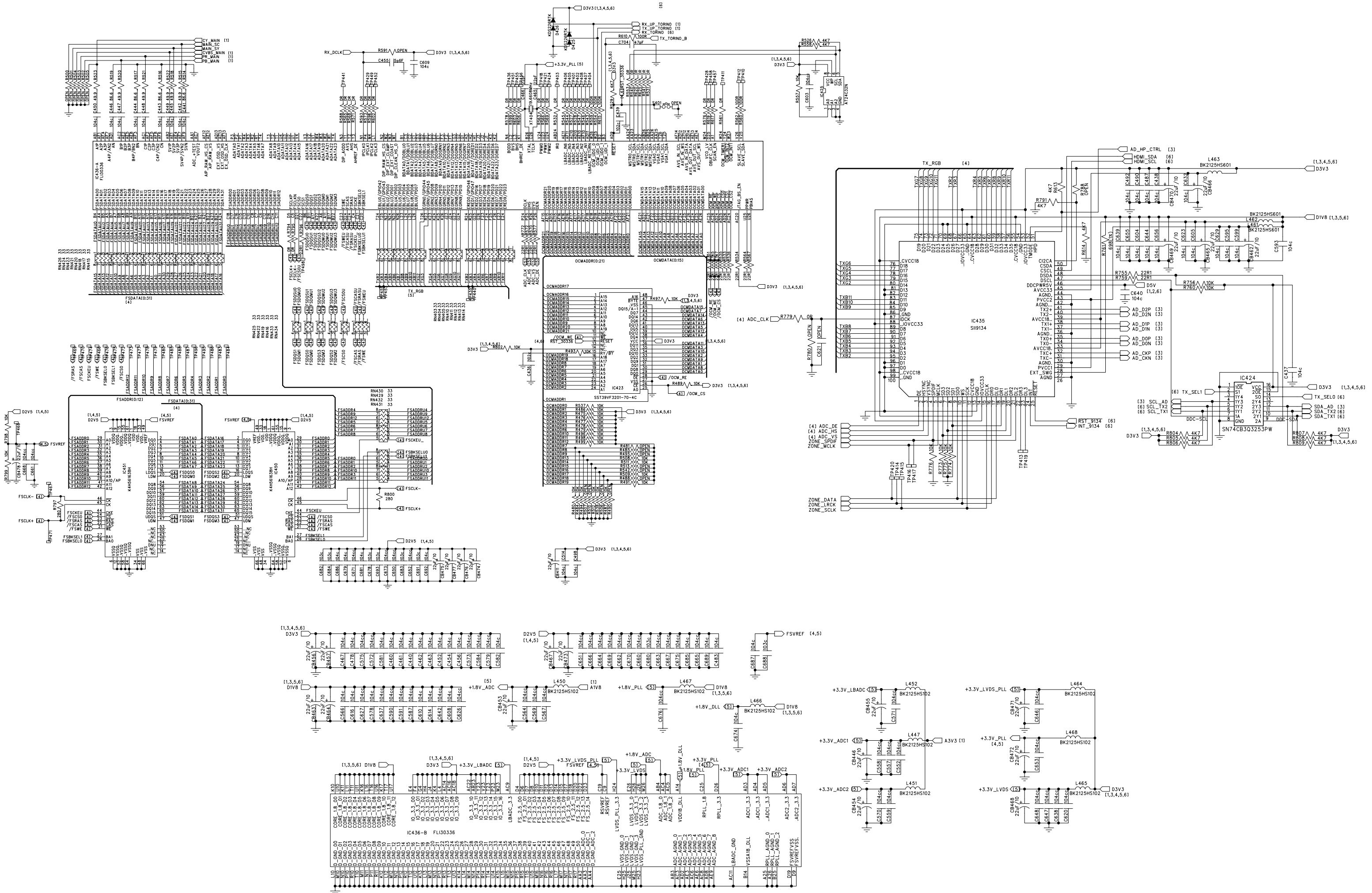
FRONT PCB 016 X-1603C01~05

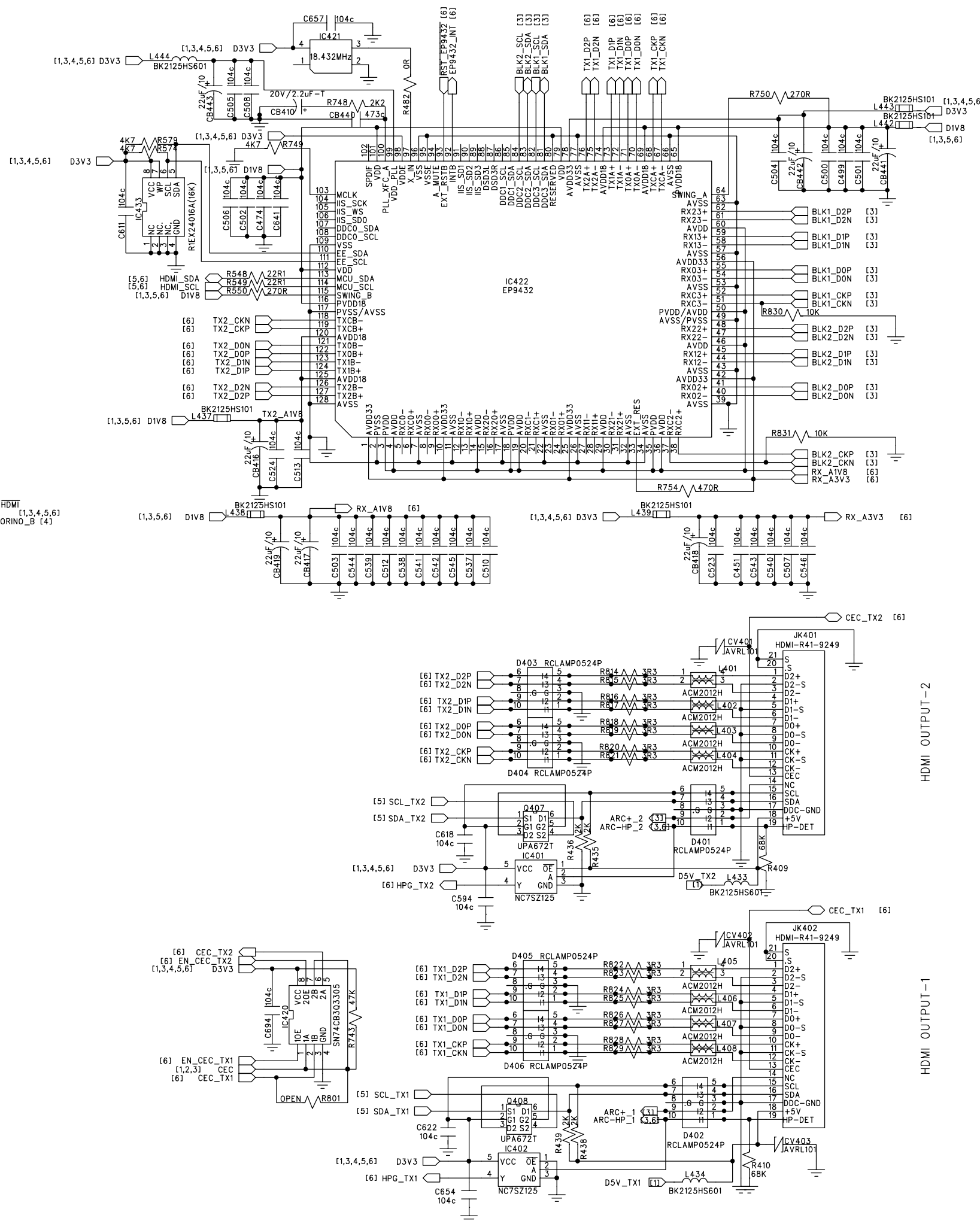


HDMI PCB (1/4) 016 E-1595E00

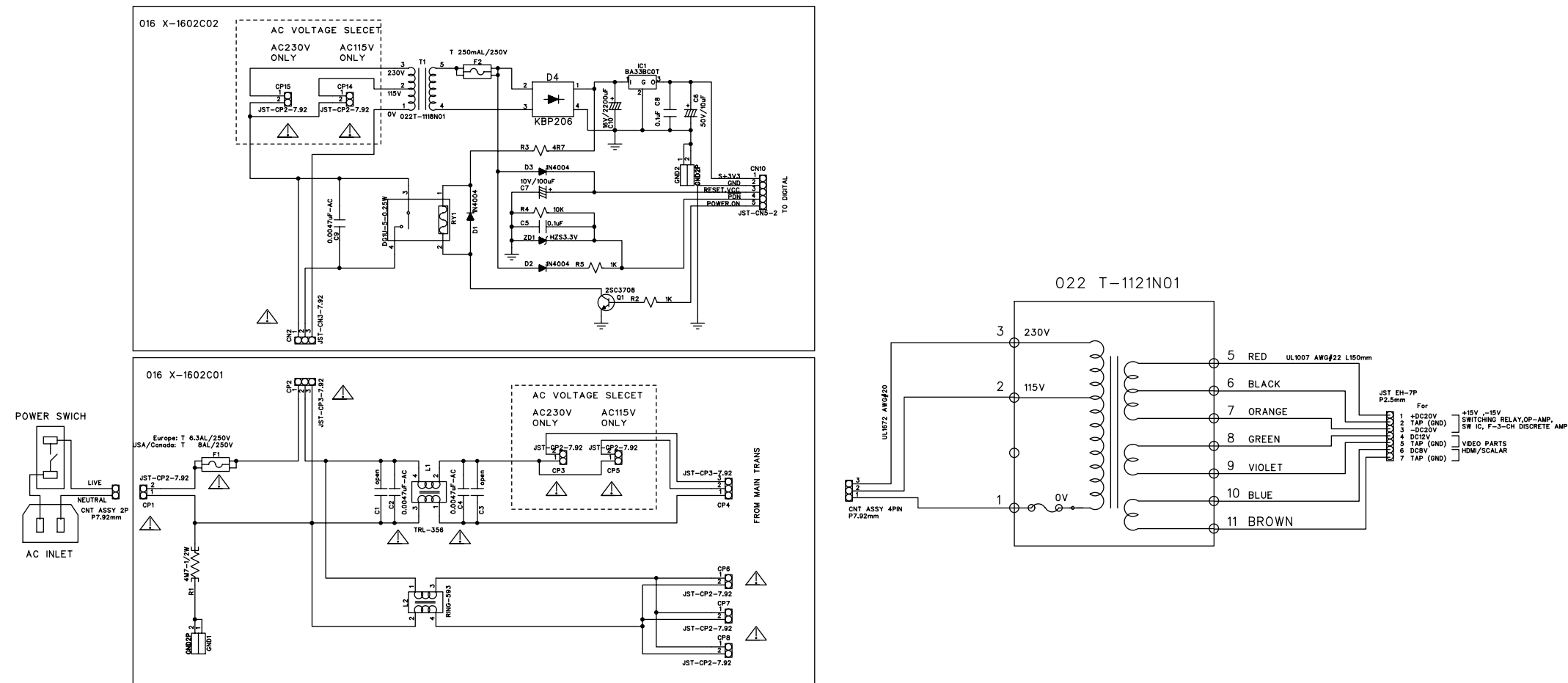




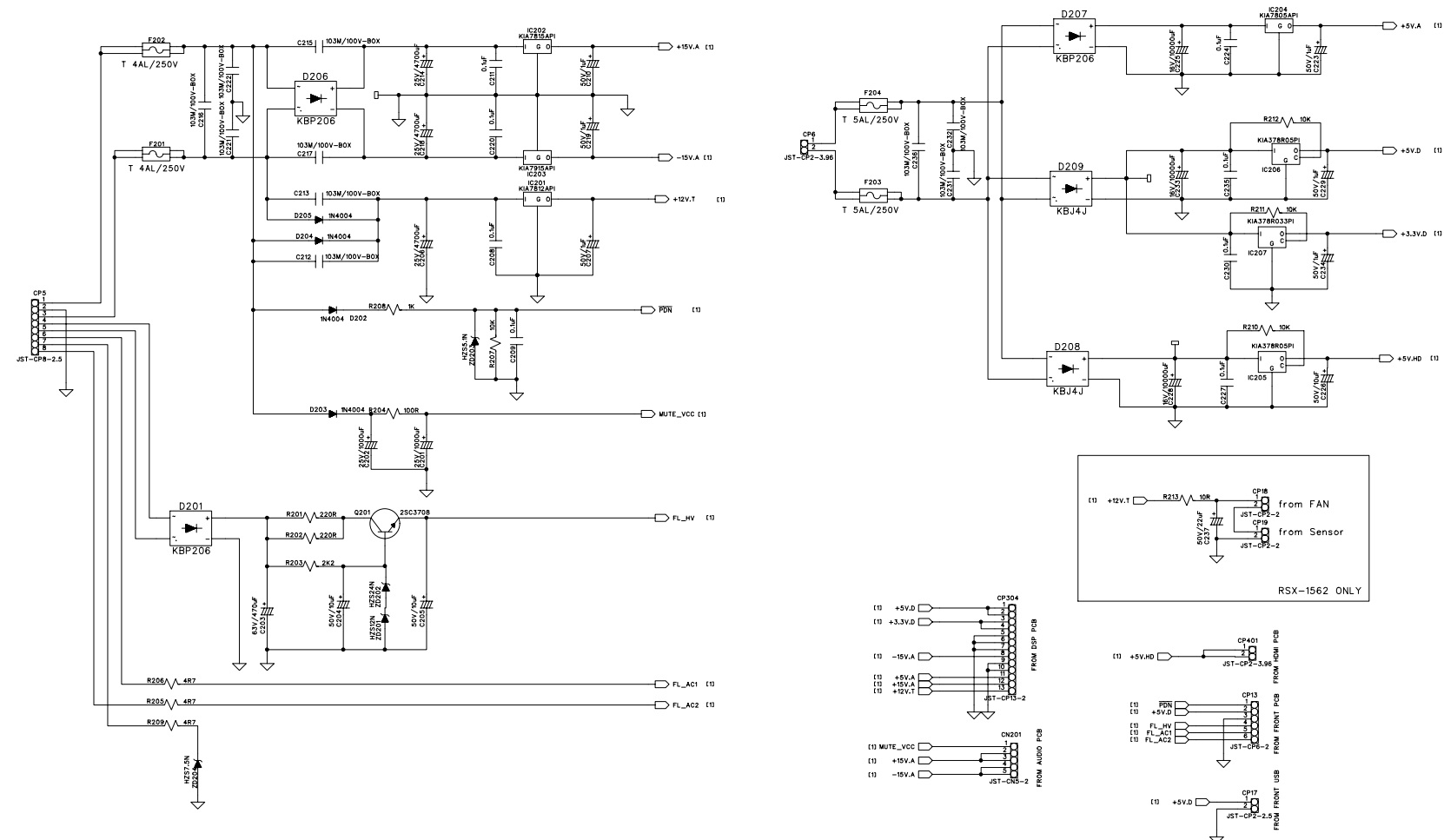




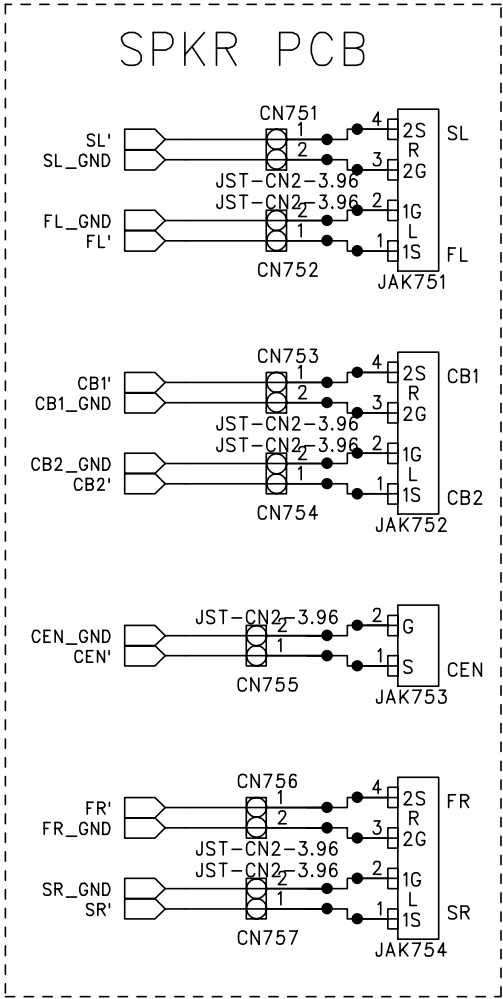
PRI-POWER PCB 016 X-1602C01~02



S-POWER PCB 016 E-1601C00



SPEAKER TERMINAL PCB 016 E-1599B00



ZONE PCB 016 X-1598A01~02

