

Quality Uncompromised

ROTEL®

# Technical Manual

## SURROUND SOUND PROCESSOR RSP-1069-1

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### Specifications

#### Audio

**Total Harmonic Distortion**

<0.008%

**Intermodulation Distortion (60 Hz:7 kHz)**

<0.008%

**Frequency Response**

10 Hz – 120 kHz,  $\pm 3$ dB (analog bypass)

10 Hz – 95 kHz,  $\pm 3$ dB (digital input)

**Signal to Noise Ratio (IHF A-weighted)**

95dB (analog bypass)

92dB (Dolby Digital, dts) 0dBfs

**Input Sensitivity/Impedance**

Line Level: 200 mV/100K ohms

**Preamp Output Level/Output Impedance**

1.0 V / 1K ohms

**Contour (LF/HF)**

$\pm 6$ dB at 50 Hz/15 kHz

**Decodable Digital Input Signals**

Dolby Digital, Dolby Digital EX, DTS, DTS-ES,

DTS 96/24, DTS ES 96/24, LPCM (up to 192K),

HDCD, DVD-A (HDMI HD ONLY)

#### Video

**Input Resolutions**

480i/576i

480p/576p

720p

1080i

1080p (HDMI only)

**Output Resolutions**

480i/576i (Composite, S-Video only)

480p/576p

720p

1080i

1080p (HDMI only)

**HDMI Input/Output:**

Version 1.1

**Signal to Noise Ratio**

45dB

**Input Impedance**

75 ohms

**Output Impedance**

75 ohms

**Output Level**

1.0 volt

#### General

**Power Consumption:**

80 watts

4.7 watts (standby)

**Power Requirements (AC)**

120 volts, 60Hz (USA version)

230 volts, 50Hz (CE version)

**Weight**

9.0 Kg/19.8 lb.

**Dimensions (W x H x D)**

432 x 122 x 341 mm

17.01" x 4.8" x 13.43"

**Front Panel Height**

(feet removed for rack mount)

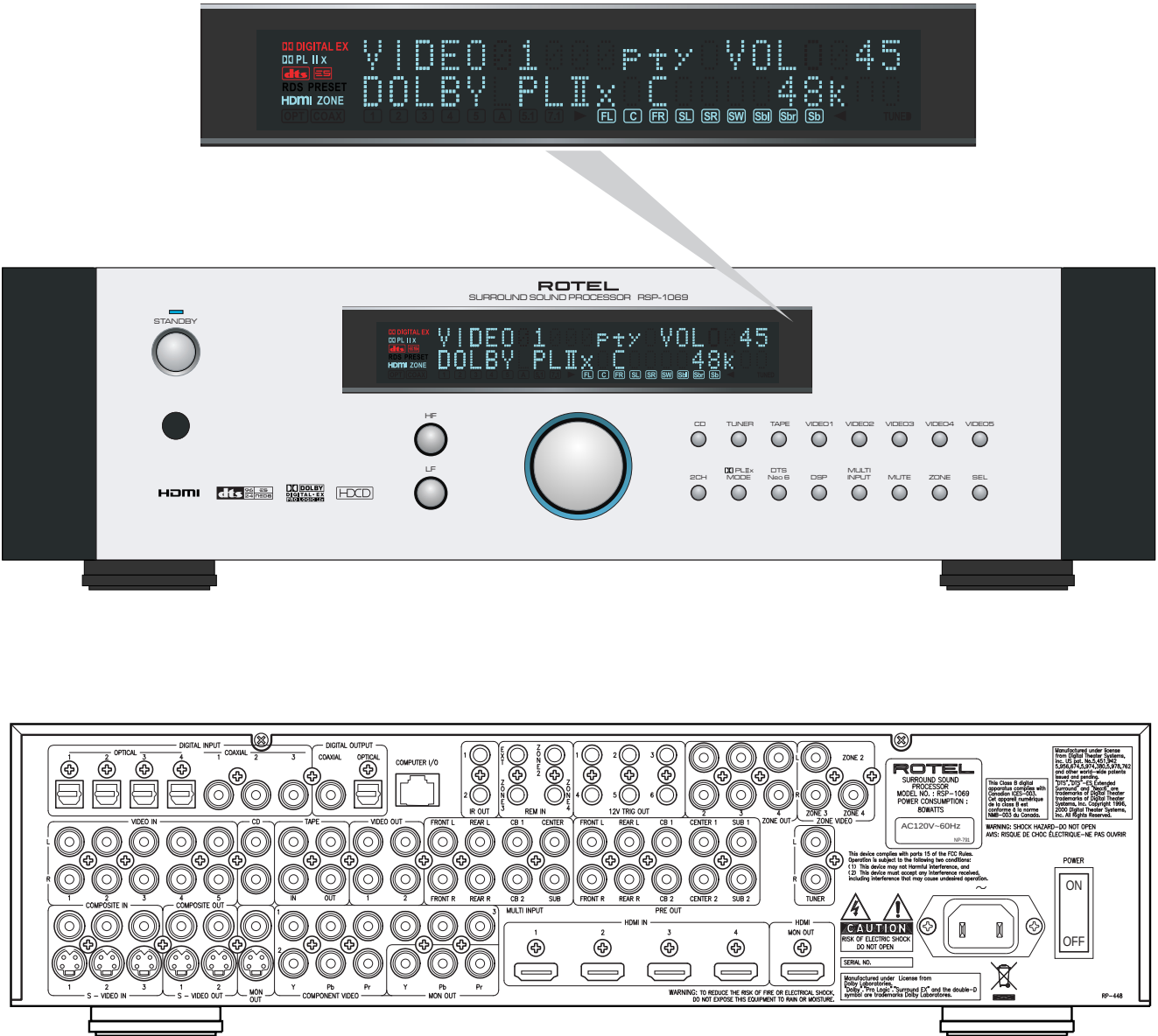
109 mm / 4.29"

### THE ROTEL CO., LTD.

SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,  
TOKYO 150-0045, JAPAN

Serial. NO.  
Beginning

Y-407B-0712/pdf



| SYMBOL                                   | PARTS NO.           | DESCRIPTION                                |
|------------------------------------------|---------------------|--------------------------------------------|
| <b>016 X-1396A01-03 PCB ASSY</b>         |                     |                                            |
|                                          | 501 X-1396-B        | PCB ASSY (ENCODER)                         |
| C131,132                                 | 043 TC50V101-A      | CERAMIC CAPACITOR 100pF                    |
| C133-136                                 | 043 TC50V821-A      | CERAMIC CAPACITOR 820pF                    |
| R131-136                                 | 053 CR14-103J-A     | CARBON RESISTOR 1/4W 10K                   |
| E131                                     | 056 C-4678A01       | ROTARY ENCODER EC16B243040F (D25) (VOLUME) |
| E132,133                                 | 056 C-4678A03       | ROTARY ENCODER EC16B242040A (D20) (TONE)   |
| SW131                                    | 061 C-4172A13       | PUSH SWITCH SPUN12XT131                    |
| CP105                                    | 068 B2B-PH-KS       | CONNECTOR WAFER 2P                         |
| <b>016 E-1486C00 PCB ASSY</b>            |                     |                                            |
|                                          | 501 E-1486-B        | PCB ASSY (AUDIO)                           |
| IC301                                    | 031 KIA7809AF-RTF/P | IC SMD (REG.+9VDC)                         |
| IC312,325                                | 031 MM1631XJBE      | IC SMD (AUDIO SWITCH)                      |
| IC304-311,316-320,322-324,326-344        | 031 NJM2068M        | IC SMD (OPE DUAL)                          |
| IC302                                    | 031 TC9162CFG       | IC SMD (SWITCH ALLEY)                      |
| IC321                                    | 031 TC9163CFG       | IC SMD (SWITCH ALLEY)                      |
| IC303,313-315                            | 031 TC9482BFG       | IC SMD (VOLUME)                            |
| Q309,311,313,322                         | 032 KRA107S         | TRANSISTOR CHIP KRA107S                    |
| Q310,312,314                             | 032 KRC107S         | TRANSISTOR CHIP KRC107S                    |
| Q301-308,315-321                         | 032 KRC231S         | TRANSISTOR CHIP KRC231S                    |
| C353,422                                 | 041 TUTES1C101-7TF  | ELECTROLYTIC CAPACITOR 16V100uF            |
| C331,423                                 | 041 TUTES1E220-7TF  | ELECTROLYTIC CAPACITOR 25V22uF             |
| C301-305,307,308,311,312,314,333,334,337 | 041 TUTES1E470-7TF  | ELECTROLYTIC CAPACITOR 25V47uF             |
| C338,341,342,348,372-375,383,384,387,388 | 041 TUTES1E470-7TF  | ELECTROLYTIC CAPACITOR 25V47uF             |
| C390,392,393,396,397,399,400,415,420,421 | 041 TUTES1E470-7TF  | ELECTROLYTIC CAPACITOR 25V47uF             |
| C425,426,437-444,456,457,459-470,489,490 | 041 TUTES1E470-7TF  | ELECTROLYTIC CAPACITOR 25V47uF             |
| C306,309,310,313,315,316,317,318,321,322 | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C332,335,336,339,340,343,360-367         | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C377,378,380-382,385,386,389,391,394,395 | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C398,424,427-435,445,446,448-455,458     | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C479-488,491-504,511,512,515,516,519,520 | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C523,524,544-571,728,729,732,733         | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF             |
| C535                                     | 047 ECJ2VB1H333K    | CERAMIC CAPACITOR CHIP 0.033uF             |
| C622-707,716-723,730,731                 | 047 ECJ2VF1H104Z    | CERAMIC CAPACITOR CHIP 0.1uF               |
| C447,509                                 | 047 ECJ2VF1H224Z    | CERAMIC CAPACITOR CHIP 0.22uF              |
| C708-715                                 | 047 ECJ2VG1H101J    | CERAMIC CAPACITOR CHIP 100pF               |
| C326,330,347,352,478,525,534,536-543     | 047 ECJ2VG1H101J    | CERAMIC CAPACITOR CHIP 100pF               |
| C586-593,608-621                         | 047 ECJ2VG1H101J    | CERAMIC CAPACITOR CHIP 100pF               |
| C323-325,327-329,356-359                 | 047 ECJ2VG1H220J    | CERAMIC CAPACITOR CHIP 22pF                |
| C403-410,471-477,526-533                 | 047 ECJ2VG1H220J    | CERAMIC CAPACITOR CHIP 22pF                |
| C354,355,436                             | 047 ECJ2VG1H222J    | CERAMIC CAPACITOR CHIP 0.0022uF            |
| C319,320,344-346,349-351,368-371,376,379 | 047 ECJ2VG1H470J    | CERAMIC CAPACITOR CHIP 47pF                |
| C401,402,411-414,416-419,505-508,510     | 047 ECJ2VG1H470J    | CERAMIC CAPACITOR CHIP 47pF                |
| C513,514,517,518,521,522,572-585,594-607 | 047 ECJ2VG1H470J    | CERAMIC CAPACITOR CHIP 47pF                |
| C724,725,726,727                         | 047 ECJ2VG1H470J    | CERAMIC CAPACITOR CHIP 47pF                |
| R307-311,313,314,317,318,321,336-338,355 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R356,359,360,372,392,393,396,397         | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R400,401,404,405,414-416,418,419,425,431 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R432,435,436,439,440,443,444,448,473,478 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R487-490,492,493,496,497,499,501,502,505 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R506,508,509,512-519,524-536,545-554,563 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R566-568,577,578,611,614,615,618,619,622 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R623,626,627,630,631,634,635,638,677,680 | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R681,684,685,688,689,692,693,696,697     | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R700,701,704,754-757                     | 055 ERJ6ENF1000V    | RESISTOR CHIP 100                          |
| R301-306,312,315,316,319,320,323,324,327 | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                           |

| SYMBOL                                   | PARTS NO.           | DESCRIPTION                         |
|------------------------------------------|---------------------|-------------------------------------|
| R328,330-332,335,352,354,357,358,361,370 | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                    |
| R371,411-413,426,429,438,441,442,445-447 | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                    |
| R469-472,474,475,537-544,587-590,639,641 | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                    |
| R643,645,647,649,651,653,655-660         | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                    |
| R705-721,731-738,746,748,749             | 055 ERJ6ENF1001V    | RESISTOR CHIP 1K                    |
| R739-745                                 | 055 ERJ6ENF1002V    | RESISTOR CHIP 10K                   |
| R351,353,363,364,366-369,373-376,391,394 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R395,398,399,402,403,406-410,417,420,449 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R452,476,477,479-486,491,494,495,498,500 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R503,504,507,520,521,564,565,569-576     | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R603-610,612,613,616,617,620,621,624,625 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R628,629,632,633,636,637,640,642,644,646 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R648,650,652,654,661,664,665,668,669,672 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R673,676,678,679,682,683,686,687,690,691 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R694,695,698,699,702,703,722-730,747     | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R750-753                                 | 055 ERJ6ENF1003V    | RESISTOR CHIP 100K                  |
| R377,378                                 | 055 ERJ6ENF10R0V    | RESISTOR CHIP 10                    |
| R600,602                                 | 055 ERJ6ENF1202V    | RESISTOR CHIP 12K                   |
| R599                                     | 055 ERJ6ENF1801V    | RESISTOR CHIP 1.8K                  |
| R340,341,344,346,379,382,384,385,388,389 | 055 ERJ6ENF2001V    | RESISTOR CHIP 2K                    |
| R322,325,326,329,461,464,465,468         | 055 ERJ6ENF2201V    | RESISTOR CHIP 2.2K                  |
| R591,593,595,597,601,663,667,671,675     | 055 ERJ6ENF2702V    | RESISTOR CHIP 27K                   |
| R362,365                                 | 055 ERJ6ENF3300V    | RESISTOR CHIP 330                   |
| R421-424,430,433,434,437,510,522,555-562 | 055 ERJ6ENF3301V    | RESISTOR CHIP 3.3K                  |
| R339,342,343,383,386,387,390             | 055 ERJ6ENF4701     | RESISTOR CHIP 4.7K                  |
| R450,451,453-460,511,523,592,594,596     | 055 ERJ6ENF4701     | RESISTOR CHIP 4.7K                  |
| R598,662,666,670,674                     | 055 ERJ6ENF4701     | RESISTOR CHIP 4.7K                  |
| R333,334,427,428                         | 055 ERJ6ENF4703V    | RESISTOR CHIP 470K                  |
| R347-350,462,463,466,467                 | 055 ERJ6ENF5601V    | RESISTOR CHIP 5.6K                  |
| R579-586                                 | 055 ERJ6ENF5602V    | RESISTOR CHIP 56K                   |
| R345,380,381                             | 055 ERJ6ENF7501V    | RESISTOR CHIP 7.5K                  |
| JAK308                                   | 066 C-4764A01       | 2P PIN JACK (W/R)                   |
| JAK307                                   | 066 C-4784A02       | 4P PIN JACK (B)                     |
| JAK301-304,306                           | 066 C-4792A01       | 6P PIN JACK (W/R)                   |
| JAK305                                   | 066 C-4832A01       | 4P PIN JACK (W/R/B)                 |
| CN303                                    | 068 B12B-PH-KS      | CONNECTOR WAFER 12P                 |
| CP402                                    | 068 B3B-PH-KS       | CONNECTOR WAFER 3P                  |
| CP306                                    | 068 B4B-PH-KS       | CONNECTOR WAFER 4P                  |
| <b>016 E-1488E00 PCB ASSY</b>            |                     |                                     |
|                                          | 501 E-1488-B        | PCB ASSY (HDMI SWITCH)              |
| L601-616                                 | 021 ACM2012D        | EMC FILTER COIL ACM2012D-900-2P     |
| L617-620                                 | 021 ACM2012H        | EMC FILTER COIL ACM2012H-900-2P     |
| IC631                                    | 023 CXOSMD-004      | CRYSTAL SMD 27.000MHZ               |
| XT605                                    | 023 HC49USMD-013    | CRYSTAL SMD 13.500MHZ               |
| XT601                                    | 023 HC49USMD-014    | CRYSTAL SMD 28.322MHZ               |
| XT604                                    | 023 HC49USMD-015    | CRYSTAL SMD 5.000MHZ                |
| L652                                     | 025 BK2125HS102     | BEAD COIL CHIP BK2125HS102-T        |
| L623,624,626,628,640-642,645-648,667-669 | 025 BK2125HS102     | BEAD COIL CHIP BK2125HS102-T        |
| L661-665                                 | 025 BK2125HS601     | BEAD COIL CHIP BK2125HS601-T        |
| L621,622,625,627,629,633-636,638,639     | 025 BK2125HS601     | BEAD COIL CHIP BK2125HS601-T        |
| L643,644,649-651,666                     | 025 BK2125HS601     | BEAD COIL CHIP BK2125HS601-T        |
| L630-632                                 | 025 CM2012F100K     | INDUCTOR CHIP 10uH                  |
| ZD601                                    | 031 AD1580BRTZ      | IC (VOLTAGE REFERENCE)              |
| IC629                                    | 031 ADV7322KSTZ     | IC SMD (VIDEO ENCODER)              |
| IC623                                    | 031 ADV7401BSTZ-110 | IC SMD (VIDEO DECODER)              |
| IC610,617                                | 031 AME1117ACGT     | IC SMD (REGULATOR) ABE AME1117ACGTZ |



| SYMBOL                                   | PARTS NO.             | DESCRIPTION                                |
|------------------------------------------|-----------------------|--------------------------------------------|
| IC640                                    | 031 AME1117BCGT       | IC SMD (REGULATOR) AKE AME1117BCGTZ        |
| IC621,624,638                            | 031 AME1117CCGT       | IC SMD (REGULATOR) ABF AME1117CCGTZ        |
| IC625,641                                | 031 AME1117ECGT       | IC SMD (REGULATOR) AXH AME1117ECGTZ        |
| IC611                                    | 031 AME8801SEEV       | IC SMD (REGULATOR) AME8801SEEVZ            |
| IC602,604,606,608,642                    | 031 BR24L08F-W        | IC SMD (EEPROM)                            |
| IC628                                    | 031 FLI2300-LF-CF     | IC SMD (CONVERTER)                         |
| IC620                                    | 031 K4S643232H-UC60   | IC SMD (SDRAM)                             |
| IC615,650                                | 031 NC7SZ08M5-NL      | IC SMD (AND GATE)                          |
| IC633,634,637,648                        | 031 NC7SZ125M5-NL     | IC SMD (TRISTATE BUFFER)                   |
| IC614                                    | 031 NJW1320FP1        | IC SMD (VIDEO SWITCH)                      |
| IC644-646                                | 031 PI6CV304LE        | IC SMD (CLOCK BUFFER)                      |
| IC616                                    | 031 SII9030CTU-7      | IC SMD (TRANSMITTER)                       |
| IC622                                    | 031 SII9031CTU-7      | IC SMD (RECEIVER)                          |
| IC635,643                                | 031 SN74ALVC244PWR    | IC SMD (BUFFEDRIVER)                       |
| IC647                                    | 031 SN74ALVCH162827GR | IC SMD (BUFFEDRIVER)                       |
| IC630                                    | 031 SN74ALVCH162827GR | IC SMD (BUFFEDRIVER)                       |
| IC649                                    | 031 SN74CB3Q3305      | IC SMD (BUS SWITCH) SN74CB3Q3305PER        |
| IC636                                    | 031 SN74LVC257APWR    | IC SMD (MULTIPLEXER)                       |
| IC613,618                                | 031 THS7353PW         | IC SMD (VIDEO BUFFER)                      |
| IC612                                    | 031 TMDS341           | IC SMD (SWITCH)                            |
| IC601,603,605,607                        | 031 TS5A23157DGSR     | IC SMD (ANALOG SWITCH)                     |
| IC639                                    | 031 UPD70F03701GB-X58 | IC SMD (SOFT WRITING) Scalar CPU and Flash |
| Q613-615,617,621-624                     | 032 KRC107S           | TRANSISTOR CHIP KRC107S                    |
| Q608-610,625,639,640                     | 032 KRC107S           | TRANSISTOR CHIP KRC107S                    |
| Q632,634,636,638                         | 032 KRC231S           | TRANSISTOR CHIP KTA1504S                   |
| Q631,633,635,637                         | 032 KRC231S           | TRANSISTORANSISTOR CHIP                    |
| Q616,618-620                             | 032 KTA1504S          | TRANSISTOR CHIP UPA672T                    |
| Q611,612,641                             | 032 NDC7002N          | DUAL FET SMD                               |
| Q626-630                                 | 032 UPA672T           | DUAL FET SMD                               |
| CV601-610                                | 034 AVRL101           | VARISTOR DIODE                             |
| ZD602,603,608-611                        | 034 KDZ6.2V           | ZENER DIODE KDZ6.2V                        |
| D605-614                                 | 034 RCLAMP0514M       | DIODE RCLAMP0514M.TBT                      |
| D616                                     | 034 T1N4004-TB        | DIODE 1N4004-F (AMMO)                      |
| D621                                     | 037 KDS184RTK         | DIODE CHIP KDS184RTK                       |
| ZD604-607                                | 037 KDS226RTK         | DIODE CHIP KDS226RTK                       |
| D615                                     | 037 KDS226RTK         | DIODE CHIP KDS226RTK                       |
| C635,643,673,686,721,736,741             | 047 ECFS1A221M        | ELECTROLYTIC CAPACITOR SMD 10V220uF        |
| C617-619,735,737                         | 047 ECFS1A471M        | ELECTROLYTIC CAPACITOR SMD 10V470uF        |
| C608-616,622,626,628,630,632-634,637     | 047 ECFS1C100M        | ELECTROLYTIC CAPACITOR SMD 16V10uF         |
| C641,646-648,664,671,683,691             | 047 ECFS1C100M        | ELECTROLYTIC CAPACITOR SMD 16V10uF         |
| C705,716,717,719,720                     | 047 ECFS1C100M        | ELECTROLYTIC CAPACITOR SMD 16V10uF         |
| C623,667,672,678,680,687,690             | 047 ECFS1C101M        | ELECTROLYTIC CAPACITOR SMD 16V100uF        |
| C715,722,728,730,743,749                 | 047 ECFS1C101M        | ELECTROLYTIC CAPACITOR SMD 16V100uF        |
| C621,624,642,644,645,665,676,677,694     | 047 ECFS1C470M        | ELECTROLYTIC CAPACITOR SMD 16V47uF         |
| C701-703,718                             | 047 ECFS1C470M        | ELECTROLYTIC CAPACITOR SMD 16V47uF         |
| C620,625,627,629                         | 047 ECFS1E470M        | ELECTROLYTIC CAPACITOR SMD 25V47uF         |
| C711,724,943,944,955                     | 047 ECFS1E4R7M        | ELECTROLYTIC CAPACITOR SMD 25V4.7uF        |
| C631                                     | 047 ECFS1H010M        | ELECTROLYTIC CAPACITOR SMD 50V1uF          |
| C689,750,791,810,821,884,885,895,898,899 | 047 ECJ1VB1H103K      | CERAMIC CAPACITOR CHIP 0.01uF              |
| C904,905,908,909,911,912,916,922-925     | 047 ECJ1VB1H103K      | CERAMIC CAPACITOR CHIP 0.01uF              |
| C929,930,936-940,942,948-950,962         | 047 ECJ1VB1H103K      | CERAMIC CAPACITOR CHIP 0.01uF              |
| C606,607,675,679,692,695,696,699         | 047 ECJ1VB1H103K      | CERAMIC CAPACITOR CHIP 0.01uF              |
| C700,704,708,709,739,748,956,963-969     | 047 ECJ1VB1H103K      | CERAMIC CAPACITOR CHIP 0.01uF              |
| C682                                     | 047 ECJ1VB1H392K      | CERAMIC CAPACITOR CHIP 3900pF              |
| C809                                     | 047 ECJ1VB1H822K      | CERAMIC CAPACITOR CHIP 8200pF              |
| C808                                     | 047 ECJ1VB1H823K      | CERAMIC CAPACITOR CHIP 0.082pF             |
| C945-947                                 | 047 ECJ1VC1H020C      | CERAMIC CAPACITOR CHIP 2pF                 |

| SYMBOL                                   | PARTS NO.        | DESCRIPTION                   |
|------------------------------------------|------------------|-------------------------------|
| C830,831,840,970                         | 047 ECJ1VC1H050C | CERAMIC CAPACITOR CHIP 5pF    |
| C933-935                                 | 047 ECJ1VC1H100D | CERAMIC CAPACITOR CHIP 10pF   |
| C957                                     | 047 ECJ1VC1H100D | CERAMIC CAPACITOR CHIP 10pF   |
| C807,822                                 | 047 ECJ1VC1H180J | CERAMIC CAPACITOR CHIP 18pF   |
| C755,756,841-843                         | 047 ECJ1VC1H220J | CERAMIC CAPACITOR CHIP 22pF   |
| C753,754                                 | 047 ECJ1VC1H330J | CERAMIC CAPACITOR CHIP 33pF   |
| C681                                     | 047 ECJ1VC1H821J | CERAMIC CAPACITOR CHIP 820pF  |
| C824,880,881                             | 047 ECJ1VF1C105Z | CERAMIC CAPACITOR CHIP 16V1uF |
| C650,655-660,668-670                     | 047 ECJ1VF1C105Z | CERAMIC CAPACITOR CHIP 16V1uF |
| C601,604,605,697,707                     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C688,751,752,757-783,785-790,792,793     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C795-805,811-820,823,826,829,833-836     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C839,844,847-879,882,883,887-892,897     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C900-903,910,913-915,917-921,926-928,932 | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C602,603,636,639,649,651,661-663         | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C666,684,685,693,698                     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C706,710,714,725-727,729,731-734         | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C738,740,742,744-747,941,961             | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF  |
| C806,825,832,906,931                     | 047 ECJ1VG1H102J | CERAMIC CAPACITOR CHIP 1000pF |
| C674,886                                 | 047 ECJ1VG1H102J | CERAMIC CAPACITOR CHIP 1000pF |
| R713,727                                 | 054 1WS4.7JF     | MOF RESISTOR 1W 4.7           |
| R976                                     | 054 1WS6.8JF     | MOF RESISTOR 1W 6.8           |
| R623,624,640,647,652,655-658,664,666     | 055 CN43-220     | NETWORK RESISTOR CHIP 22      |
| R668,670,679,682,686-690,706,707         | 055 CN43-220     | NETWORK RESISTOR CHIP 22      |
| R748-751,756,780,815,820,830,940,941,975 | 055 ERJ3EKF1000V | RESISTOR CHIP 100             |
| R626,628,631,680,703,704,716,717         | 055 ERJ3EKF1000V | RESISTOR CHIP 100             |
| R720-725,732,734,735,737,739,741,743,745 | 055 ERJ3EKF1000V | RESISTOR CHIP 100             |
| R938,939,942,948,949                     | 055 ERJ3EKF1000V | RESISTOR CHIP 100             |
| R757,821,828,918-921                     | 055 ERJ3EKF1001V | RESISTOR CHIP 1K              |
| R777                                     | 055 ERJ3EKF1001V | RESISTOR CHIP 1K              |
| R619,810,827,834-837,852,864,865         | 055 ERJ3EKF1002V | RESISTOR CHIP 10K             |
| R868,871,880,904,952                     | 055 ERJ3EKF1002V | RESISTOR CHIP 10K             |
| R683,685,691,693,695,698,700,701         | 055 ERJ3EKF1002V | RESISTOR CHIP 10K             |
| R925,982-984                             | 055 ERJ3EKF1002V | RESISTOR CHIP 10K             |
| R784                                     | 055 ERJ3EKF1004V | RESISTOR CHIP 1M              |
| R603-605,764                             | 055 ERJ3EKF10R0V | RESISTOR CHIP 10              |
| R601,602                                 | 055 ERJ3EKF10R0V | RESISTOR CHIP 10              |
| R822,909                                 | 055 ERJ3EKF1200V | RESISTOR CHIP 120             |
| R798-800                                 | 055 ERJ3EKF1500V | RESISTOR CHIP 150             |
| R824,831-833,842,862                     | 055 ERJ3EKF1501V | RESISTOR CHIP 1.5K            |
| R781                                     | 055 ERJ3EKF1691V | RESISTOR CHIP 1.69K           |
| R761                                     | 055 ERJ3EKF1820V | RESISTOR CHIP 182             |
| R786                                     | 055 ERJ3EKF2000V | RESISTOR CHIP 200             |
| R845,872,874,875                         | 055 ERJ3EKF2001V | RESISTOR CHIP 2K              |
| R907,912                                 | 055 ERJ3EKF2001V | RESISTOR CHIP 2K              |
| R606,917                                 | 055 ERJ3EKF2002V | RESISTOR CHIP 20K             |
| R607,608                                 | 055 ERJ3EKF2002V | RESISTOR CHIP 20K             |
| R891-893                                 | 055 ERJ3EKF2202V | RESISTOR CHIP 22K             |
| R654,767-769,774,776                     | 055 ERJ3EKF22R1V | RESISTOR CHIP 22.1            |
| R620,625,630,634,641,650,651,653         | 055 ERJ3EKF22R1V | RESISTOR CHIP 22.1            |
| R659-663,671-677,684,696,697,699,702,779 | 055 ERJ3EKF22R1V | RESISTOR CHIP 22.1            |
| R927,936,950,951,953                     | 055 ERJ3EKF22R1V | RESISTOR CHIP 22.1            |
| R789,790                                 | 055 ERJ3EKF2701V | RESISTOR CHIP 2.7K            |
| R635-637                                 | 055 ERJ3EKF3000V | RESISTOR CHIP 300             |
| R638,642                                 | 055 ERJ3EKF3001V | RESISTOR CHIP 3K              |
| R846,873                                 | 055 ERJ3EKF3301V | RESISTOR CHIP 3.3K            |
| R669                                     | 055 ERJ3EKF3303V | RESISTOR CHIP 330K            |

| SYMBOL                               | PARTS NO.           | DESCRIPTION                     |
|--------------------------------------|---------------------|---------------------------------|
| R840                                 | 055 ERJ3EKF4641V    | RESISTOR CHIP 4.64K             |
| R807                                 | 055 ERJ3EKF4700V    | RESISTOR CHIP 470               |
| R752-755,763,782,783,787,829,847     | 055 ERJ3EKF4701V    | RESISTOR CHIP 4.7K              |
| R853-855,857,863,869,958,978,979     | 055 ERJ3EKF4701V    | RESISTOR CHIP 4.7K              |
| R648,649,708-712,715,718,719,729-731 | 055 ERJ3EKF4701V    | RESISTOR CHIP 4.7K              |
| R733,736,738,740,742,744,908,911,926 | 055 ERJ3EKF4701V    | RESISTOR CHIP 4.7K              |
| R946,947,955-957,980,981             | 055 ERJ3EKF4701V    | RESISTOR CHIP 4.7K              |
| R895,896,898,899,901,902,905,906     | 055 ERJ3EKF4702V    | RESISTOR CHIP 47K               |
| R616,617,928-935                     | 055 ERJ3EKF4702V    | RESISTOR CHIP 47K               |
| R758                                 | 055 ERJ3EKF4703V    | RESISTOR CHIP 470K              |
| R856                                 | 055 ERJ3EKF4750V    | RESISTOR CHIP 475               |
| R646,778                             | 055 ERJ3EKF47R0V    | RESISTOR CHIP 47                |
| R794-797,801,805                     | 055 ERJ3EKF6040V    | RESISTOR CHIP 604               |
| R639                                 | 055 ERJ3EKF6800V    | RESISTOR CHIP 680               |
| R841                                 | 055 ERJ3EKF6802V    | RESISTOR CHIP 68K               |
| R823,910,922-924                     | 055 ERJ3EKF7500V    | RESISTOR CHIP 750               |
| R759,760,762,882-890                 | 055 ERJ3EKF75R0V    | RESISTOR CHIP 75                |
| R610,870,876                         | 055 ERJ3EKF75R0V    | RESISTOR CHIP 75                |
| R765,766,775,785,788,791-793         | 055 ERJ3GEY0R00V    | RESISTOR CHIP 0                 |
| R806,808,894,897,900,903,943-945     | 055 ERJ3GEY0R00V    | RESISTOR CHIP 0                 |
| R962,966,970,974                     | 055 ERJ3GEY0R00V    | RESISTOR CHIP 0                 |
| R618,627,629,633,643-645,678,681     | 055 ERJ3GEY0R00V    | RESISTOR CHIP 0                 |
| R714,726,728,746,937,959,963,967,971 | 055 ERJ3GEY0R00V    | RESISTOR CHIP 0                 |
| R632                                 | 055 ERJ3RQF2R2V     | RESISTOR CHIP 2.2               |
| L658-660                             | 055 ERJ6GEYJ2R2V    | RESISTOR CHIP 2.2               |
| JK601,602                            | 066 C-4833A01       | PIN JACK 6P (G .BLU.R)          |
| J601-605                             | 066 C-4963A01       | HDMI SOCKTE                     |
| <b>016 E-1489B00 PCB ASSY</b>        |                     |                                 |
|                                      | 501 E-1489-B        | PCB ASSY (VIDEO)                |
| L501-503                             | 021 TLAL02TB100K    | MICRO INDUCTOR 10uH             |
| L504,506,509,512                     | 021 TLAL02TB4R7K    | MICRO INDUCTOR 4.7uH            |
| L505,507,508                         | 021 TLAL02TB6R8K    | MICRO INDUCTOR 6.8uH            |
| XT501                                | 023 HC49U-001WR     | CRYSTAL 14.31818MHZ             |
| L510,511                             | 025 BK2125HS601     | BEAD COIL CHIP BK2125HS601-T    |
| IC516,517,521                        | 031 AD8063ART       | IC SMD (AMP) ADV8063ARTZ-R2     |
| IC524                                | 031 MB90050PF-G-001 | IC SMD (OSD)                    |
| IC522                                | 031 MM1108XFFE      | IC SMD (SYNC SEPARATOR)         |
| IC504,505,515                        | 031 MM1227XFBE      | IC SMD (VIDEO SWITCH)           |
| IC506-514,518-520                    | 031 MM1508XNRE      | IC SMD (VIDEO SWITCH)           |
| IC525                                | 031 NJM7805FA       | IC (REG. +5VDC)KIA7805API       |
| IC523                                | 031 NJM7808FA       | IC (REG.+8VDC)KIA7808API        |
| IC501-503                            | 031 TEA6425D        | IC SMD (VIDEO SWITCH)           |
| Q503                                 | 032 KRC107S         | TRANSISTOR CHIP KRC107S         |
| Q501,502,504,505                     | 032 KTC3875S-Y      | TRANSISTOR KTC3875S-Y-RTK       |
| D501-503                             | 037 KDS226RTK       | DIODE CHIP KDS226RTK            |
| C503,505,507-515,522-524,528,529     | 041 TUTES1A101-7TF  | ELECTROLYTIC CAPACITOR 10V100uF |
| C541-550,560,567-569                 | 041 TUTES1A101-7TF  | ELECTROLYTIC CAPACITOR 10V100uF |
| C502,504,506,519-521,572-574         | 041 TUTES1A471-7TF  | ELECTROLYTIC CAPACITOR 10V470uF |
| C583,587                             | 041 TUTES1E470-7TF  | ELECTROLYTIC CAPACITOR 25V47uF  |
| C552                                 | 041 TUTES1H010-7TF  | ELECTROLYTIC CAPACITOR 50V1uF   |
| C501,530-540,551,553-555,557-559     | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF  |
| C561,562,566,570,575,582,584-586     | 041 TUTES1H100-7TF  | ELECTROLYTIC CAPACITOR 50V10uF  |
| C580                                 | 041 TUTES1H3R3-7TF  | ELECTROLYTIC CAPACITOR 50V3.3uF |
| C589-632,634,639,643-646,648-651     | 047 3535104122      | CERAMIC CAPACITOR CHIP 0.1uF    |
| C581                                 | 047 3535104122      | CERAMIC CAPACITOR CHIP 0.1uF    |
| C647,652,653                         | 047 3535200122      | CERAMIC CAPACITOR CHIP 20pF     |

| SYMBOL                           | PARTS NO.          | DESCRIPTION                      |
|----------------------------------|--------------------|----------------------------------|
| C516-518,525-527                 | 047 3535224122     | CERAMIC CAPACITOR CHIP 0.22uF    |
| C578                             | 047 3535392122     | CERAMIC CAPACITOR CHIP 3900pF    |
| C633                             | 047 ECJ1VC1H100D   | CERAMIC CAPACITOR CHIP 10pF      |
| C564,571                         | 047 ECJ1VC1H100D   | CERAMIC CAPACITOR CHIP 10pF      |
| C642                             | 047 ECJ1VC1H101J   | CERAMIC CAPACITOR CHIP 100pF     |
| C577                             | 047 ECJ1VC1H102J   | CERAMIC CAPACITOR CHIP 1000pF    |
| C637,638,641                     | 047 ECJ1VC1H220J   | CERAMIC CAPACITOR CHIP 22pF      |
| C556,579                         | 047 ECJ1VC1H561J   | CERAMIC CAPACITOR CHIP 560pF     |
| C635,636,640                     | 047 ECJ1VC1H820J   | CERAMIC CAPACITOR CHIP 82pF      |
| R602,605                         | 054 1WS10J         | MOF RESISTOR 1W 10               |
| R620                             | 055 ERJ3EKF1000V   | RESISTOR CHIP 100                |
| R544-547,561,566,576,591         | 055 ERJ3EKF1000V   | RESISTOR CHIP 100                |
| R521,523,594,612-614             | 055 ERJ3EKF1001V   | RESISTOR CHIP 1K                 |
| R578-581,586,593,616,617         | 055 ERJ3EKF1002V   | RESISTOR CHIP 10K                |
| R596,604                         | 055 ERJ3EKF1003V   | RESISTOR CHIP 100K               |
| R501                             | 055 ERJ3EKF10R0V   | RESISTOR CHIP 10                 |
| R528,529,550,551,553-560,562,563 | 055 ERJ3EKF10R0V   | RESISTOR CHIP 10                 |
| R575,577,582,583                 | 055 ERJ3EKF10R0V   | RESISTOR CHIP 10                 |
| R520,522                         | 055 ERJ3EKF2001V   | RESISTOR CHIP 2K                 |
| R599,601                         | 055 ERJ3EKF2202V   | RESISTOR CHIP 22K                |
| R587,588                         | 055 ERJ3EKF2701V   | RESISTOR CHIP 2.7K               |
| R572,573,597                     | 055 ERJ3EKF3000V   | RESISTOR CHIP 300                |
| R571                             | 055 ERJ3EKF3303V   | RESISTOR CHIP 330K               |
| R606,607                         | 055 ERJ3EKF33R0V   | RESISTOR CHIP 33                 |
| R530-543,552,589,592,600         | 055 ERJ3EKF4701V   | RESISTOR CHIP 4.7K               |
| R564,565                         | 055 ERJ3EKF5600V   | RESISTOR CHIP 560                |
| R621-623                         | 055 ERJ3EKF6040V   | RESISTOR CHIP 604                |
| R567,569,584                     | 055 ERJ3EKF6040V   | RESISTOR CHIP 604                |
| R511-519                         | 055 ERJ3EKF68R0V   | RESISTOR CHIP 68                 |
| R502-510                         | 055 ERJ3EKF75R0V   | RESISTOR CHIP 75                 |
| R595                             | 055 ERJ3EKF8202V   | RESISTOR CHIP 82K                |
| R524,608-611,615                 | 055 ERJ3GEY0R00V   | RESISTOR CHIP 0                  |
| R598,603                         | 055 ERJ3RQF1R0V    | RESISTOR CHIP 1                  |
| R525-527                         | 055 ERJ3RQF2R2V    | RESISTOR CHIP 2.2                |
| JK501-503                        | 066 C-4964A01      | 2P PIN JACK + DIN JACK           |
| CP601                            | 068 B12B-PH-KS     | CONNECTOR WAFER 12P              |
| CP605                            | 068 B4B-PH-KS      | CONNECTOR WAFER 4P               |
| <b>016 X-1494A01-02 PCB ASSY</b> |                    |                                  |
|                                  | 501 X-1494-B       | PCB ASSY (FRONT)                 |
| XT101                            | 023 CSTLS16M0X51BO | CERAMIC RESONATOR                |
| IC101                            | 031 CXP81120-127Q  | IC SMD (CPU) MASKING             |
| RMC101                           | 031 RPM7138H9      | IC (REMOTE RECEIVER)             |
| IC102-104                        | 031 TD62C950RF     | IC SMD (FL DISPLAY) TD62C950RFG  |
| Q101,102                         | 032 KRC107S        | TRANSISTOR CHIP KRC107S          |
| FL101                            | 035 HNA22ML04      | FL TUBE                          |
| D101,102                         | 037 KDS184RTK      | DIODE CHIP                       |
| C103                             | 041 TUTES1E470-7TF | ELECTROLYTIC CAPACITOR 25V47uF   |
| C105,106                         | 041 TUTES1H100-7TF | ELECTROLYTIC CAPACITOR 50V10uF   |
| C101                             | 041 TUTES1H3R3-7TF | ELECTROLYTIC CAPACITOR 50V3.3uF  |
| C102,104                         | 047 ECJ2VB1H223K   | CAPACITOR CAPACITOR CHIP 0.022uF |
| C130                             | 047 ECJ2VF1H104Z   | CAPACITOR CAPACITOR CHIP 0.1uF   |
| C107-109                         | 047 ECJ2VF1H104Z   | CAPACITOR CAPACITOR CHIP 0.1uF   |
| R111-113,116                     | 055 ERJ6ENF1002V   | RESISTOR CHIP 10K                |
| R115                             | 055 ERJ6ENF10R0V   | RESISTOR CHIP 10                 |
| (R114)                           | 055 ERJ6ENF1800V   | RESISTOR CHIP 180                |
| (R114)                           | 055 ERJ6ENF4700V   | RESISTOR CHIP 470                |

| SYMBOL                                    | PARTS NO.            | DESCRIPTION                              |
|-------------------------------------------|----------------------|------------------------------------------|
| R109                                      | 055 ERJ6ENF4701V     | RESISTOR CHIP 4.7K                       |
| R120                                      | 055 ERJ6ENF4702V     | RESISTOR CHIP 47K                        |
| R101-108                                  | 055 ERJ6ENF4702V     | RESISTOR CHIP 47K                        |
| R110,117                                  | 055 ERJ6GEY0R00V     | RESISTOR CHIP 0                          |
| SW101-116                                 | 061 C-4679A03        | TACT SWITCH 5mm GRY HV061050GS           |
| CP104                                     | 068 B2B-PH-KS        | CONNECTOR WAFER 2P                       |
| CP103                                     | 068 B3B-PH-KS        | CONNECTOR WAFER 3P                       |
| CP101                                     | 068 B8B-PH-KS        | CONNECTOR WAFER 8P                       |
| <b>016 E-1495C00 PCB ASSY</b>             |                      |                                          |
|                                           | 501 E-1495           | PCB ASSY (DIGITAL)                       |
| L401-404                                  | 021 2888100012       | PULSE TRANS. EP7-01-201M                 |
| IC418                                     | 023 CXOSMD-003       | CRYSTAL SMD 24.576MHZ                    |
| XT402                                     | 023 HC49USMD-015     | CRYSTAL SMD 5.00MHZ                      |
| L419,421                                  | 025 BK2125HS101      | BEAD COIL CHIP BK2125HS101-T             |
| L405,407,409,410,411,413,414,417          | 025 BK2125HS102      | BEAD COIL CHIP BK2125HS102-T             |
| L406,408,412,415,416,418,420              | 025 BK2125HS601      | BEAD COIL CHIP BK2125HS601-T             |
| IC406                                     | 031 74HC157          | IC SMD (QUAD MPX) 74VHC157               |
| IC417                                     | 031 74HC244          | IC SMD (OCTAL BUFFER) 74VHC244           |
| IC422                                     | 031 74HCT125         | IC SMD (QUAD BUFFER) 74HCT125D           |
| IC414                                     | 031 AK4114VQ         | IC SMD (D/A TRANSCEIVER) AK4114VQP       |
| IC438                                     | 031 AME1117CCGT      | IC SMD (REGULATOR) ABF AME1117CCGTZ      |
| IC434                                     | 031 AT24C16A10PU-2.7 | IC DIP (EPROM)                           |
| IC411,415,423,426                         | 031 DSD1791DB        | IC SMD (DAC)                             |
| IC433                                     | 031 ES29LV160E-X58   | IC SMD (SOFT WRITING) DSP ROM            |
| IC410                                     | 031 HEF4094BT        | IC SMD (SHIFT REGISTER)                  |
| IC405                                     | 031 HIN232CB         | IC SMD (TRANSMITTER RECEIVER) HIN232CBZ  |
| IC432                                     | 031 K4S641632K-UC75  | IC SMD (MEMORY)                          |
| IC401-404                                 | 031 LTV817           | IC (PHOTO COUPLER)                       |
| IC407-409,412,419,424,427-430,435,436,439 | 031 NJM2068M         | IC SMD (OPE DUAL)                        |
| IC437                                     | 031 PCM1804DBG4      | IC SMD (ADC)                             |
| IC413,425                                 | 031 SN74LVC1G125DBV  | IC SMD (BUFFER)                          |
| IC420                                     | 031 SN74LVC1G3157DB  | IC SMD ANALOG SWITCH)                    |
| IC416                                     | 031 TC9482BFG        | IC SMD (VOLUME)                          |
| IC431                                     | 031 TMS320DA610      | IC SMD (DSP)                             |
| IC421                                     | 031 UPD70F3712-P69   | IC SMD (SOFT WRITING) Main CPU and Flash |
| Q419                                      | 032 KRA107S          | TRANSISTOR CHIP KRA107S                  |
| Q413-418,420,421                          | 032 KRC107S          | TRANSISTOR CHIP KRC107S                  |
| Q401-406                                  | 032 KRC231S          | TRANSISTOR CHIP KRC231S                  |
| Q407-412                                  | 032 TA1450-ST        | TRANSISTOR 2SA1450AA-ST                  |
| D401-403                                  | 037 KDS184RTK        | DIODE CHIP KDS184RTK                     |
| C507                                      | 041 TEEUFC1H4R7B     | ELECTROLYTIC CAPACITOR 50V4.7uF          |
| C467,509,541,589,630,657,718,719          | 041 TUTES1A101-7TF   | ELECTROLYTIC CAPACITOR 10V100uF          |
| C490                                      | 041 TUTES1A471-7TF   | ELECTROLYTIC CAPACITOR 10V470uF          |
| C465,466,472,489,504-506,515,520,525      | 041 TUTES1E470-7TF   | ELECTROLYTIC CAPACITOR 25V47uF           |
| C538-540,546,565,568,582,585,586,600-605  | 041 TUTES1E470-7TF   | ELECTROLYTIC CAPACITOR 25V47uF           |
| C611,616,623,649,654,655,669,686,687      | 041 TUTES1E470-7TF   | ELECTROLYTIC CAPACITOR 25V47uF           |
| C702,703,705,710,722                      | 041 TUTES1E470-7TF   | ELECTROLYTIC CAPACITOR 25V47uF           |
| C426,433,448,449,485,522,564,618          | 041 TUTES1H010-7TF   | ELECTROLYTIC CAPACITOR 50V1uF            |
| C650,704                                  | 041 TUTES1H0R1-7TF   | ELECTROLYTIC CAPACITOR 50V0.1uF          |
| C440-445,447,473-478,484,496,521,533      | 041 TUTES1H100-7TF   | ELECTROLYTIC CAPACITOR 50V10uF           |
| C537,563,572-577,617,670-676,713          | 041 TUTES1H100-7TF   | ELECTROLYTIC CAPACITOR 50V10uF           |
| C508                                      | 041 TUTES1H3R3-7TF   | ELECTROLYTIC CAPACITOR 50V3.3uF          |
| C486                                      | 041 TUTES1HR22-7TF   | ELECTROLYTIC CAPACITOR 50V0.22uF         |
| C494                                      | 041 TUTES1HR47-7TF   | ELECTROLYTIC CAPACITOR 50V0.47uF         |
| C481,487,518,523,545,566,614,621          | 047 ECJ1VB1H182K     | CERAMIC CAPACITOR CHIP 1800pF            |
| C668,678,717,723                          | 047 ECJ1VB1H222K     | CERAMIC CAPACITOR CHIP 2200pF            |



| SYMBOL                                   | PARTS NO.        | DESCRIPTION                    |
|------------------------------------------|------------------|--------------------------------|
| C666,712                                 | 047 ECJ1VB1H223K | CERAMIC CAPACITOR CHIP 0.022uF |
| C415,417,418,681-684,706,707,715         | 047 ECJ1VC1H100D | CERAMIC CAPACITOR CHIP 10pF    |
| C419-422,424,425,427-432                 | 047 ECJ1VC1H101J | CERAMIC CAPACITOR CHIP 100pF   |
| C640-645,664,677,714,720                 | 047 ECJ1VC1H101J | CERAMIC CAPACITOR CHIP 100pF   |
| C470,471,479,480                         | 047 ECJ1VC1H220J | CERAMIC CAPACITOR CHIP 22pF    |
| C457-462,633-638                         | 047 ECJ1VC1H470J | CERAMIC CAPACITOR CHIP 47pF    |
| C468,482,488,497,512,519,524,531,542     | 047 ECJ1VC1H561J | CERAMIC CAPACITOR CHIP 560pF   |
| C549,567,570,598,615,622,631             | 047 ECJ1VC1H561J | CERAMIC CAPACITOR CHIP 560pF   |
| C401-414,416,423,434-439,446,450-456     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C463,464,469,483,491-493,495,498-503     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C510,511,513,514,516,517,526-530,532     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C534-536,543,544,547,548,550-562,569     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C571,578-581,583,584,587,588,590-597     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C599,606-610,612,613,619,620,624-629     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C632,639,646,647,648,651-653,656         | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C658-663,665,667,679,680,685,688-701     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| C708,709,711,716,721                     | 047 ECJ1VF1H104Z | CERAMIC CAPACITOR CHIP 0.1uF   |
| RM401-409                                | 055 CN43-220     | NETWORK RESISTOR CHIP 22       |
| R417-420,425,426,474-479,496,527,529,540 | 055 ERJ3EKF1000V | RESISTOR CHIP 100              |
| R542,546-548,560,565,568,571,574-576,579 | 055 ERJ3EKF1000V | RESISTOR CHIP 100              |
| R588,614,623,632,634-639,657,660,668,688 | 055 ERJ3EKF1000V | RESISTOR CHIP 100              |
| R707,711,716,717,729,730,732-735,739     | 055 ERJ3EKF1000V | RESISTOR CHIP 100              |
| R430-435,481,502,505,506,509,510,513     | 055 ERJ3EKF1001V | RESISTOR CHIP 1K               |
| R538,541,543,599,600,603,604,607,608     | 055 ERJ3EKF1001V | RESISTOR CHIP 1K               |
| R611,690,693,694,697,698,701             | 055 ERJ3EKF1001V | RESISTOR CHIP 1K               |
| R442-446,465-468,553,555,558,640,661     | 055 ERJ3EKF1002V | RESISTOR CHIP 10K              |
| R687,702                                 | 055 ERJ3EKF1002V | RESISTOR CHIP 10K              |
| R453-458,480,497,501,503,504,507,508,511 | 055 ERJ3EKF1003V | RESISTOR CHIP 100K             |
| R512,545,552,589,593,601,602,605,606,609 | 055 ERJ3EKF1003V | RESISTOR CHIP 100K             |
| R610,633,644,691,692,695,696,699,700     | 055 ERJ3EKF1003V | RESISTOR CHIP 100K             |
| R517,518                                 | 055 ERJ3EKF1004V | RESISTOR CHIP 1M               |
| R401-410,421,422,473                     | 055 ERJ3EKF10R0V | RESISTOR CHIP 10               |
| R483,484,487,488,491,492                 | 055 ERJ3EKF1202V | RESISTOR CHIP 12K              |
| R670,671,674,675,678,679,709,718,736,742 | 055 ERJ3EKF1501V | RESISTOR CHIP 1.5K             |
| R617,628                                 | 055 ERJ3EKF1502V | RESISTOR CHIP 15K              |
| R498,514,523,525,549,559,561,564,572     | 055 ERJ3EKF1801V | RESISTOR CHIP 1.8K             |
| R577,590,595,596,597,616,619,621,641     | 055 ERJ3EKF1801V | RESISTOR CHIP 1.8K             |
| R645,651,662,666,681,703,706,708,721     | 055 ERJ3EKF1801V | RESISTOR CHIP 1.8K             |
| R531                                     | 055 ERJ3EKF1802V | RESISTOR CHIP 18K              |
| R447-449                                 | 055 ERJ3EKF2002V | RESISTOR CHIP 20K              |
| R495,519,521,536,544,566,569,584,587     | 055 ERJ3EKF2202V | RESISTOR CHIP 22K              |
| R612,631,649,663,685                     | 055 ERJ3EKF2202V | RESISTOR CHIP 22K              |
| R532-535,580-583,624-627,648,682-684     | 055 ERJ3EKF22R1V | RESISTOR CHIP 22.1             |
| R723-727                                 | 055 ERJ3EKF2700V | RESISTOR CHIP 270              |
| R499,520,522,537,550,567,570,585,591,613 | 055 ERJ3EKF3301V | RESISTOR CHIP 3.3K             |
| R618,629,642,650,652,686,710,714,731,737 | 055 ERJ3EKF3301V | RESISTOR CHIP 3.3K             |
| R615,665,689,712,722                     | 055 ERJ3EKF3901V | RESISTOR CHIP 3.9K             |
| R436-441                                 | 055 ERJ3EKF3902V | RESISTOR CHIP 39K              |
| R427,469                                 | 055 ERJ3EKF4700V | RESISTOR CHIP 470              |
| R459-464,482,485,486,489,490,493,494     | 055 ERJ3EKF4701V | RESISTOR CHIP 4.7K             |
| R516,528,530,539,563,586,594,630,647     | 055 ERJ3EKF4701V | RESISTOR CHIP 4.7K             |
| R653-656,658,659,669,672,673,676,677     | 055 ERJ3EKF4701V | RESISTOR CHIP 4.7K             |
| R680,704,705,719,720                     | 055 ERJ3EKF4701V | RESISTOR CHIP 4.7K             |
| R713,715,738,741                         | 055 ERJ3EKF47R0V | RESISTOR CHIP 47               |
| R500,515,524,526,551,562,573,578,592     | 055 ERJ3EKF6800V | RESISTOR CHIP 680              |
| R598,620,622,643,646,664,667             | 055 ERJ3EKF6800V | RESISTOR CHIP 680              |
| R423,424,428,429,450-452,470-472         | 055 ERJ3EKF75R0V | RESISTOR CHIP 75               |



| SYMBOL                                | PARTS NO.          | DESCRIPTION                      |
|---------------------------------------|--------------------|----------------------------------|
| R411-416,740                          | 055 ERJ3RQF2R2V    | RESISTOR CHIP 2.2                |
| R728                                  | 055 ERJ3RQF4R7V    | RESISTOR CHIP 4.7                |
| SW401                                 | 061 C-4679A03      | TACT SWITCH 5mm GRY HV061050GS   |
| JAK401-406                            | 065 HSJ1002-016020 | 3.5Φ MINI JACK                   |
| JAK417                                | 066 C-4764A03      | 2P PIN JACK (Y.Y)                |
| JAK415                                | 066 C-4792A01      | 6P PIN JACK (W.R)                |
| JAK416                                | 066 C-4829A01      | 1P PIN JACK (YEL)                |
| JAK409,410                            | 066 C-4859A01      | 2P PIN JACK (BLK)                |
| JAK407                                | 066 SY010-8P/K     | RJ45 TERMINAL SY010-8P           |
| JAK411-414                            | 066 TORX142L       | OPTICAL MODULE TORX142L-F        |
| JAK408                                | 066 TOTX142L       | OPTICAL TERMINAL TOTX142L-F      |
| CP501                                 | 068 B11B-PH-KS     | CONNECTOR WAFER 11P              |
| CP606                                 | 068 B14B-PH-KS     | CONNECTOR WAFER 14P              |
| CP304,305                             | 068 B15B-PH-KS     | CONNECTOR WAFER 15P              |
| CP201                                 | 068 B2B-PH-KS      | CONNECTOR WAFER 2P               |
| CP406,502,607                         | 068 B6B-PH-KS      | CONNECTOR WAFER 6P               |
| CP603                                 | 068 B7B-PH-KS      | CONNECTOR WAFER 7P               |
| <b>016 X-1496B01-03 PCB ASSY</b>      |                    |                                  |
|                                       | 501 X-1496         | PCB ASSY (POWER)                 |
| LF101                                 | 021 TRL-356        | LINE CHOKE COIL LF-2217 150uH    |
| T101                                  | 022 T-1075N02      | SUB TRANSFORMER                  |
| Q102,204                              | 032 TC3708-ST      | TRANSISTOR 2SC3708AA-ST          |
| D216,217                              | 034 KBL406         | POWER DIODE 400V6A               |
| D214,215,218                          | 034 KBP206         | POWER DIODE 200V6A               |
| ZD101,102                             | 034 MTZJ3.9B       | ZENER DIODE 3.9V                 |
| D101-105,205,207,210,212,213,219-221  | 034 T1N4004-TB     | DIODE 1N4004-F                   |
| ZD104                                 | 034 TRD12JST1      | ZENER DIODE 12V                  |
| ZD103                                 | 034 TRD24JST1      | ZENER DIODE 24V                  |
| ZD105,106                             | 034 TRD5.1JST1     | ZENER DIODE 5.1V                 |
| F102* for 230V                        | 036 5ST1.6-R       | FUSE 250V1.6A                    |
| F102* for 120V                        | 036 5ST2-R         | FUSE 250V2A                      |
| F101                                  | 036 5ST315-R       | FUSE 250V314mA                   |
| F203-206                              | 036 5ST4-R         | FUSE 250V4A                      |
| C212,221                              | 041 TUTES1C102-7TS | ELECTROLYTIC CAPACITOR 16V1000uF |
| C223                                  | 041 TUTES1E470-7TF | ELECTROLYTIC CAPACITOR 25V47uF   |
| C238-243,253,254,255                  | 041 TUTES1H010-7TF | ELECTROLYTIC CAPACITOR 50V1uF    |
| C104,107                              | 041 TUTES1H220-7TF | ELECTROLYTIC CAPACITOR 50V22uF   |
| C112                                  | 041 TUTES1J471-7TS | ELECTROLYTIC CAPACITOR 63V470uF  |
| C230-237                              | 041 UTWE1E472-7    | ELECTROLYTIC CAPACITOR 25V4700uF |
| C213,244-252                          | 043 TC50V104       | CERAMIC CAPACITOR 0.1uF          |
| C101-103                              | 044 3549472109     | AC CAPACITOR 400V0.0047uF        |
| C214-220,222,224,225,226,228,229      | 044 BQ014E0103J    | M.P. CAPACITOR 100V0.01uF        |
| R208                                  | 053 CR14-101J-A    | CARBON RESISTOR 1/4W 100         |
| R211,216                              | 053 CR14-102J-A    | CARBON RESISTOR 1/4W 1K          |
| R217-220                              | 053 CR14-103J-A    | CARBON RESISTOR 1/4W 10K         |
| R104,105                              | 053 CR14-221J-A    | CARBON RESISTOR 1/4W 220         |
| R109,212,215                          | 053 CR14-222J-A    | CARBON RESISTOR 1/4W 2.2K        |
| R102                                  | 053 CR14-470J-A    | CARBON RESISTOR 1/4W 47          |
| R213                                  | 053 CR14-472J-A    | CARBON RESISTOR 1/4W 4.7K        |
| R106-108                              | 053 CR14-4R7J-A    | CARBON RESISTOR 1/4W 4.7         |
| RLY101                                | 063 DG1U-12        | RELAY DG12D1-O(M)-2              |
| CT101                                 | 068 4428503746     | CONNECTOR WAFER 3P               |
| CP404                                 | 068 B14B-PH-KS     | CONNECTOR WAFER 14P              |
| CT103,104,CT100,CTA101,102,CTS101,102 | 068 B2P3-VH        | CONNECTOR WAFER 2P               |
| CT203                                 | 068 B2P-VH         | CONNECTOR WAFER 2P               |
| CP204                                 | 068 B4B-PH-KS      | CONNECTOR WAFER 4P               |

| SYMBOL                    | PARTS NO.       | DESCRIPTION                           |
|---------------------------|-----------------|---------------------------------------|
| CP302                     | 068 B5B-PH-KS   | CONNECTOR WAFER 5P                    |
| CP106                     | 068 B7B-PH-KS   | CONNECTOR WAFER 7P                    |
| CP211                     | 068 B8B-EH      | CONNECTOR WAFER 8P                    |
| CP604                     | 068 B8B-PH-KS   | CONNECTOR WAFER 8P                    |
| <b>HEAT SINK ASSEMBLY</b> |                 |                                       |
|                           | 505 HSRSP-1069  | HEAT SINKER ASSY (with 501 X-1496-01) |
|                           | 017 WQ3-05B00   | HEAT SINKER BOARD                     |
| IC202,203.205             | 031 KIA278R05PI | IC KIA278R05PI/P (REG.+5VDC)          |
| IC204                     | 031 NJM317F     | IC (REGULATOR)                        |
| IC201                     | 031 NJM7805FA   | IC (REG. +5VDC) KIA7805AP             |
| IC208,209                 | 031 NJM7812FA   | IC (REG. +12VDC) KIA7812AP            |
| IC207                     | 031 NJM7815FA   | IC (REG. +15VDC) KIA7815AP            |
| IC206                     | 031 NJM7915FA   | IC (REG. -15VDC) KIA7915PI            |
| <b>OTHERS</b>             |                 |                                       |
|                           | 011 FP-613A-B   | BLACK PANEL ASSY                      |
|                           | 011 FP-613A-S   | SILVER PANEL ASSY                     |
|                           | 011 TH3-01B00   | H/S PANEL                             |
|                           | 012 C-4844B01   | KNOB 10Φ (BLACK)                      |
|                           | 012 C-4844B02   | KNOB 10Φ (SILVER)                     |
|                           | 012 C-4845B01   | KNOB 33Φ (BLACK)                      |
|                           | 012 C-4845B02   | KNOB 33Φ (SILVER)                     |
|                           | 012 RV4-09A00   | PUSH BUTTON 14Φ (BLACK)               |
|                           | 012 RV4-09A01   | PUSH BUTTON 14Φ (SILVER)              |
|                           | 012 TB3-18A00   | TACT BUTTON 16 KEY (BLACK)            |
|                           | 012 TB3-18A01   | TACT BUTTON 16 KEY (SILVER)           |
|                           | 014 C-4723B05   | UPPER COVER                           |
|                           | 019 4TQF-17B    | KNOB RING (RED) 33Φ                   |
|                           | 019 4TQF-17B#2  | KNOB RING (BLU) 33Φ                   |
|                           | 019 4TSH-19#2   | PLASTIC FOOT 50Φ BLACK                |
|                           | 019 C-4714A00   | POWER KNOB RING 14Φ (BLACK)           |
|                           | 019 C-4714A01   | POWER KNOB RING 14Φ (SILVER)          |
|                           | 022 T-1108N04   | POWER TRANSFORMER                     |
|                           | 034 SEL1124R    | LED (RED) 1X5                         |
|                           | 034 SEL1E24W    | LED (BLU) 1X5                         |
|                           | 061 C-4838A00   | ROCKER SWITCH SR1N6BB                 |
|                           | 069 C-4629A01   | AC 2P INLET 6102.3100 (WIRING)        |
|                           | 072 C-4621A03   | AC CORD SET (SJT AWG16) for USA       |
|                           | 072 C-4622A02   | AC CORD SET for AUSTRALIA             |
|                           | 072 C-4623A02   | AC CORD SET for UK                    |
|                           | 072 C-4624A03   | AC CORD SET for EUROPE                |
|                           | 072 C-4738A01   | PIN PLUG CORD AU                      |
|                           | 072 C-4786A00   | COMPUTER I/O CABLE (4-P)              |
|                           | 081 WK3-05A00   | INSIDE CARTON                         |
|                           | 081 WK3-06A00   | SHIPPING CARTON                       |
|                           | 081 ZE-204      | ETHAFOAM MOULDING                     |
|                           | 082 OMRSP-1069  | OWNER'S MANUAL                        |
|                           | 092 RR-1060     | REMOTE UNIT                           |

## Addendum List for Black and Silver

RSP-1069/ -1

| SYMBOL | PARTS         | DESCRIPTION              |
|--------|---------------|--------------------------|
| ①      | 011 FP-613A-B | BLACK PANEL ASS Y        |
| ②      | 011 FP-613A-S | SILVER PANEL ASS Y       |
| ③      | 011 TH3-01B00 | H/S PANEL H109           |
|        | 012 C-4844B01 | KNOB 10F (BLK)           |
|        | 012 C-4844B02 | KNOB 10F (SLV)           |
|        | 012 C-4845B01 | KNOB 33F NO LINE (BLK)   |
|        | 012 C-4845B02 | KNOB 33F NO LINE (SLV)   |
|        | 012 RV4-09A00 | PUSH BUTTON 14F (BLK)    |
|        | 012 RV4-09A01 | PUSH BUTTON 14F (SLV)    |
|        | 012 TB3-18A00 | TACT BUTTON 16 KEY (BLK) |
|        | 012 TB3-18A01 | TACT BUTTON 16 KEY (SLV) |
|        | 034 SEL1124R  | LED (RED) 1X5            |
|        | 034 SEL1E24W  | LED (BLU) 1X5            |

*Panel Assy is included:*

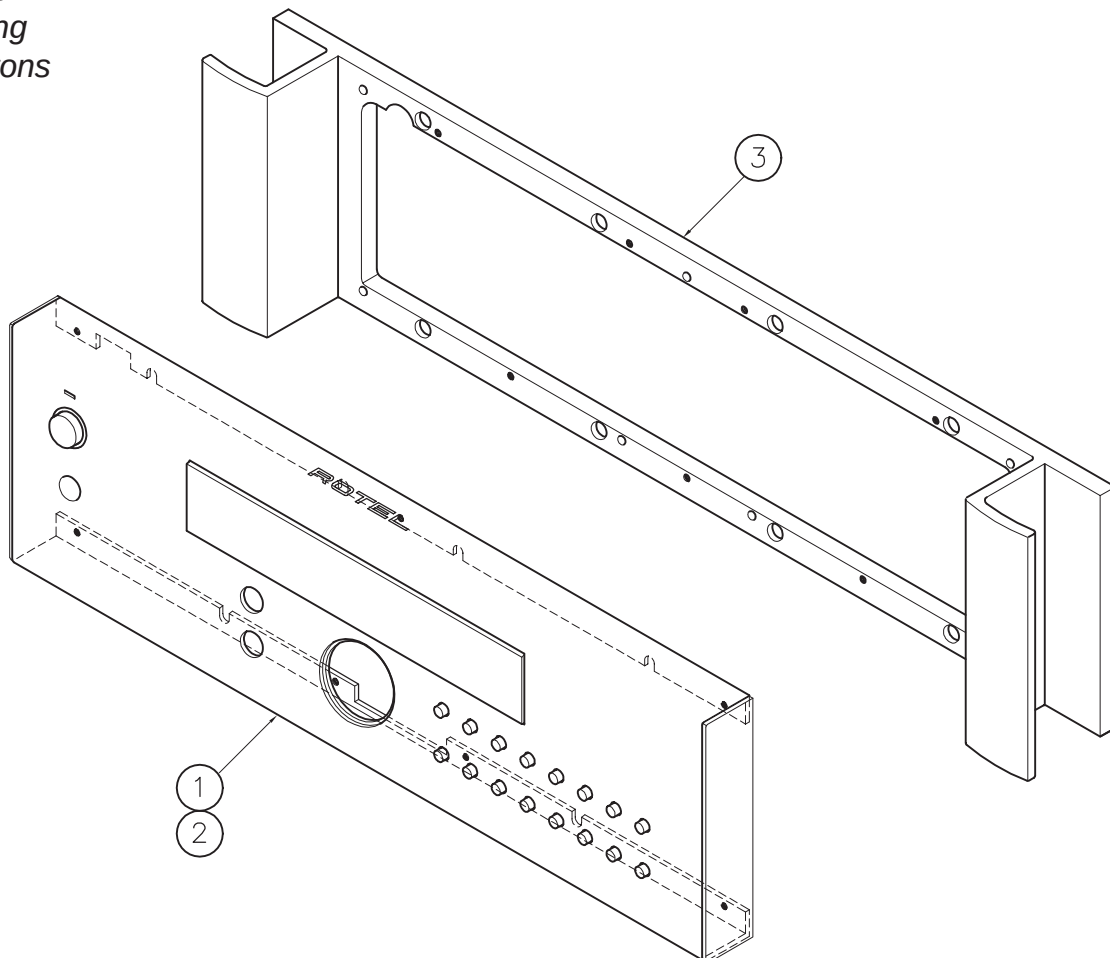
*Panel Window*

*Side Cap*

*Knob Ring*

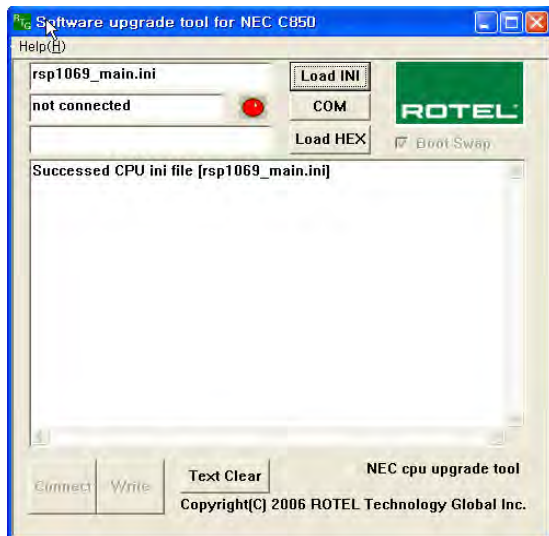
*Tact buttons*

*LED*

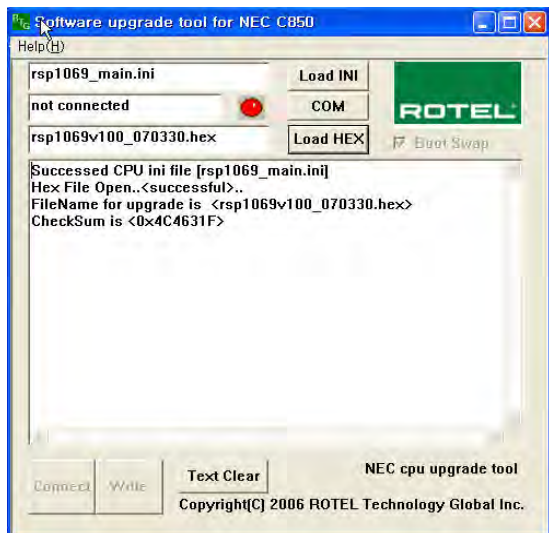


## RSP-1069 Main Upgrade Software Procedure

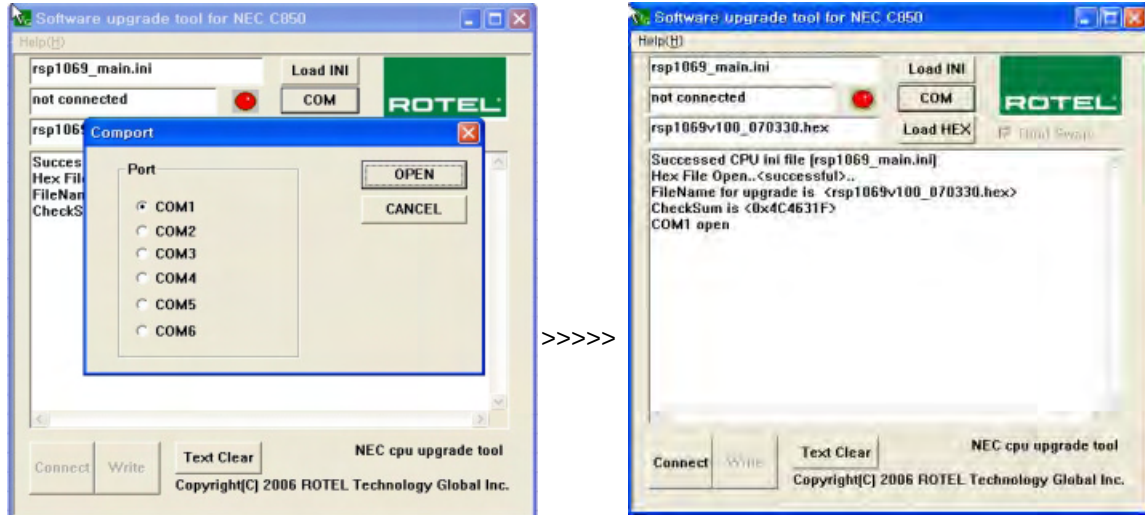
1. Execute nec flash upgrade.exe then will be created new folder as "C:\Program Files\nec upgrade".
2. Connect upgrade cable between RSP-1069 and PC
3. Set upgrade environment on OSD Menu  
"OSD Main Menu-> Other -> Main Upgrade -> yes " press Enter.
4. Copy Object file(.HEX) and INI file (main\_rsp1069.ini) file, and save it in temporary same folder.
5. Execute nec\_flash\_upgrade.exe from Program list.
6. Load INI file by pushing "Load INI" button.  
load main\_rsp1069.ini for RSP1069 main micom.



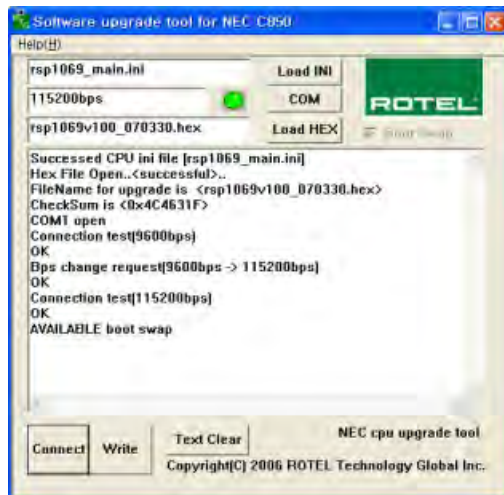
7. Load HEX file by pushing "Load HEX" button.  
load rsp1069vxxx\_xxxxxx.hex for RSP1069 main micom.



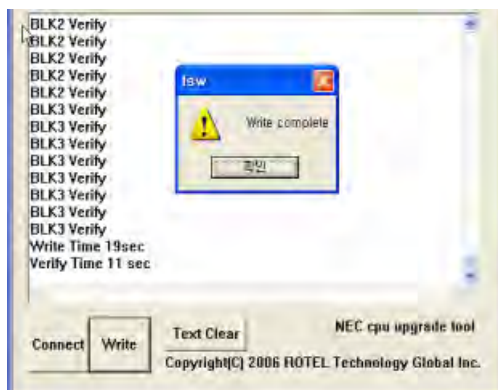
8. After pushing "COM" button placed at "HEX" button upper, and choosing COM1~COM4.  
(connecting PC's COM1 ~COM4 and cable).



9. Push "Connect" button placed at program's below left side, and BaudRate placed next to "COM" button will be displayed if the above process is OK.



10. Click "Write" button placed next to "Connect" button .

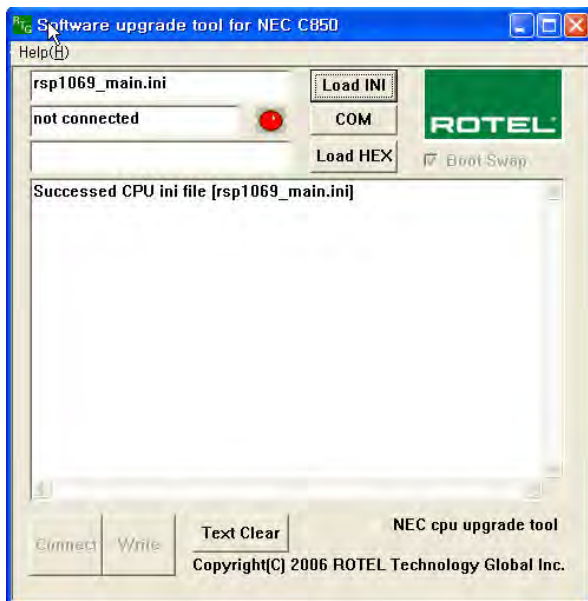


11. After finishing "Write", then the total writing time will be displayed.

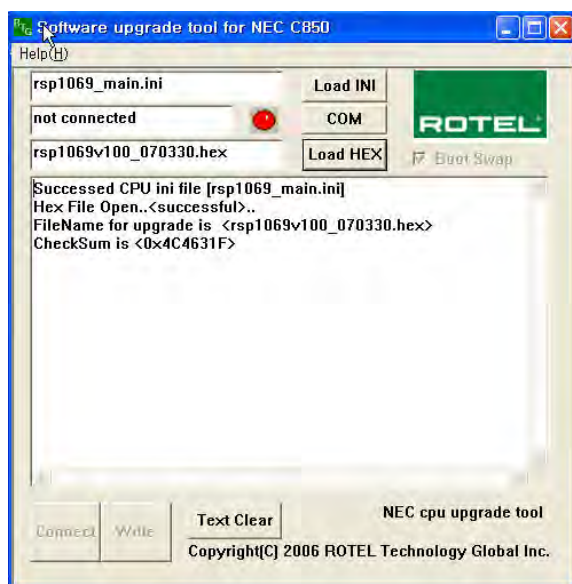
12. AC Power "OFF" and "ON" again to save.

## RSP-1069 Scalar (VIDEO) Upgrade Software Procedure

1. Execute nec flash upgrade.exe then will be created new folder as "C:\Program Files\nec upgrade".
2. Connect upgrade cable between RSP-1069 and PC.
3. Set upgrade environment on OSD Menu  
"OSD Main Menu-> VIDEO/HDMI -> Video Upgrade -> yes " press Enter.
4. Copy Object file(.HEX) and INI file (video\_scaler.ini) file, and save it in temporary same folder.
5. Execute nec\_flash\_upgrade.exe from Program list.
6. Load INI file by pushing "Load INI" button.  
load video\_scaler.ini for video scaler CPU of the RSP-1069.

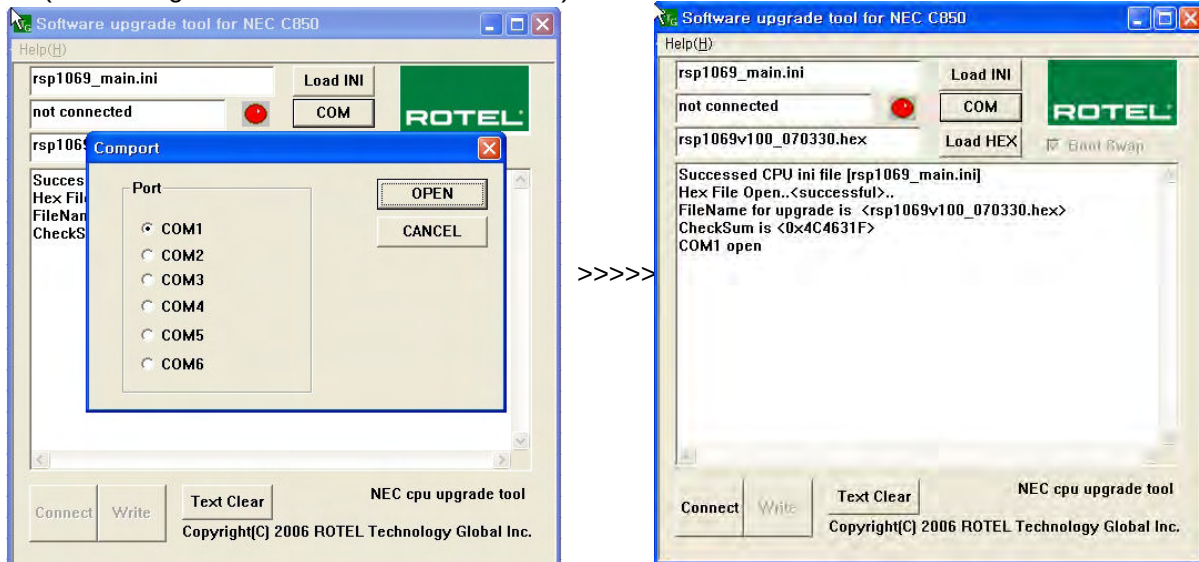


7. Load HEX file by pushing "Load HEX" button.  
load scaler1058vxxx.hex for video scaler CPU of the RSP-1069.

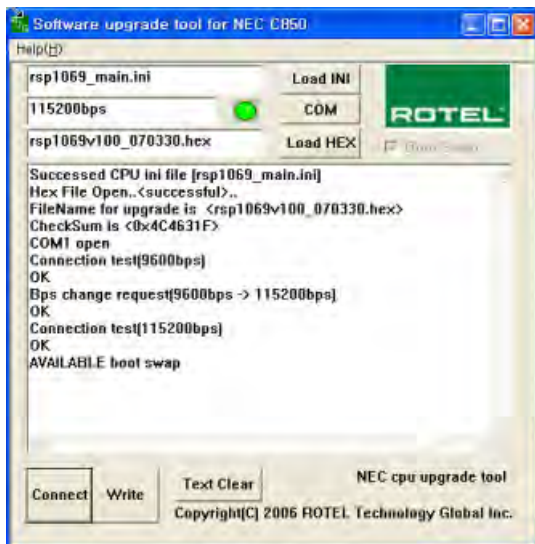




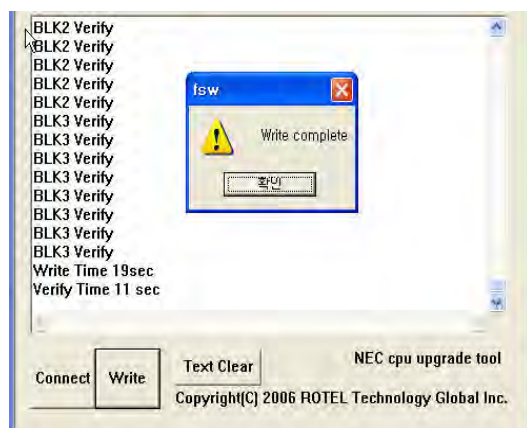
8. After pushing "COM" button placed at "HEX" button upper, and choosing COM1~COM4.  
(connecting PC's COM1 ~COM4 and cable).



9. Push "Connect" button placed at program's below left side, and BaudRate placed next to "COM" button will be displayed if the above process is OK.



10. Click "Write" button placed next to "Connect" button .



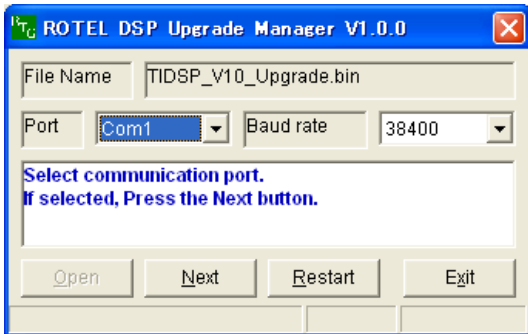
- 11 After finishing "Write", then the total writing time will be displayed.

- 12 AC Power "OFF" and "ON" again to save.

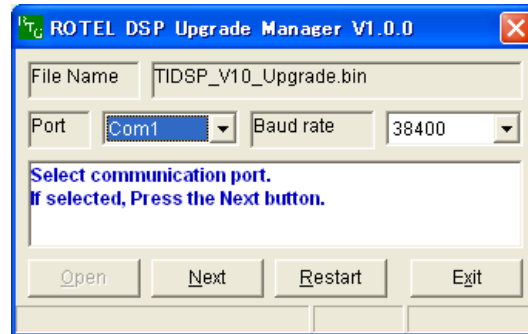
## RSP-1069 DSP Upgrade Manager V1.0.0 Procedure

Install the “DSP Upgrade Manager\_V100” program which is provided by ROTEL in the computer. And connect RS232 Cable with DB-9 to RJ45 terminations.

1. Click “Open File” -> select Upgrade file

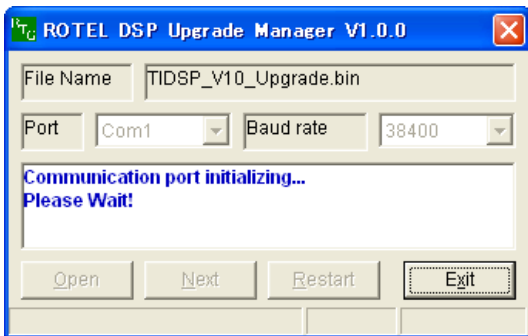


2. Confirm Port and Baud Rate setting. Then, click “Next” button. (ref: RSP-1069 Baud Rate is 38400)

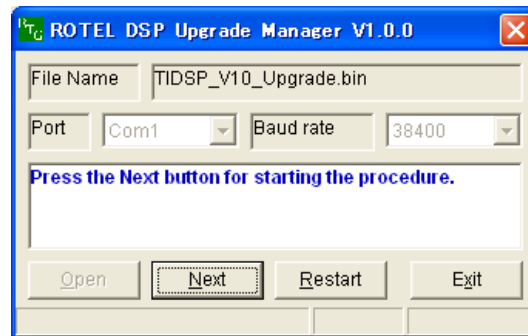


3. Communication port initializing .....

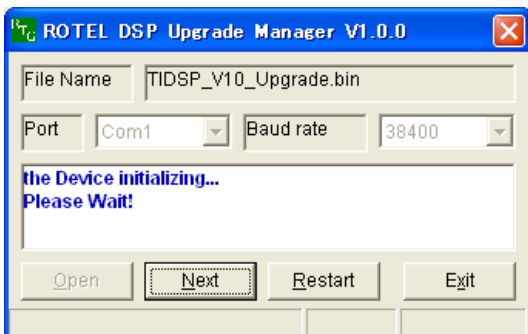
Wait. Then click “Next” button.



4. Press the “Next” button for starting the procedure.



5. Click “Next” button.



6. The device's current version is displayed. Click “Next” button.

7. The sector is erasing. Wait a moment.

8. The sector is erased. The flash is writing automatically. Wait a while.

9. If the writing and checksum is OK, wait a next procedure.

10. Completed all procedure. Power off and on again on main switch of rear. Click “Exit” button to finish the “Upgrade Manager” program.

11. Finish.

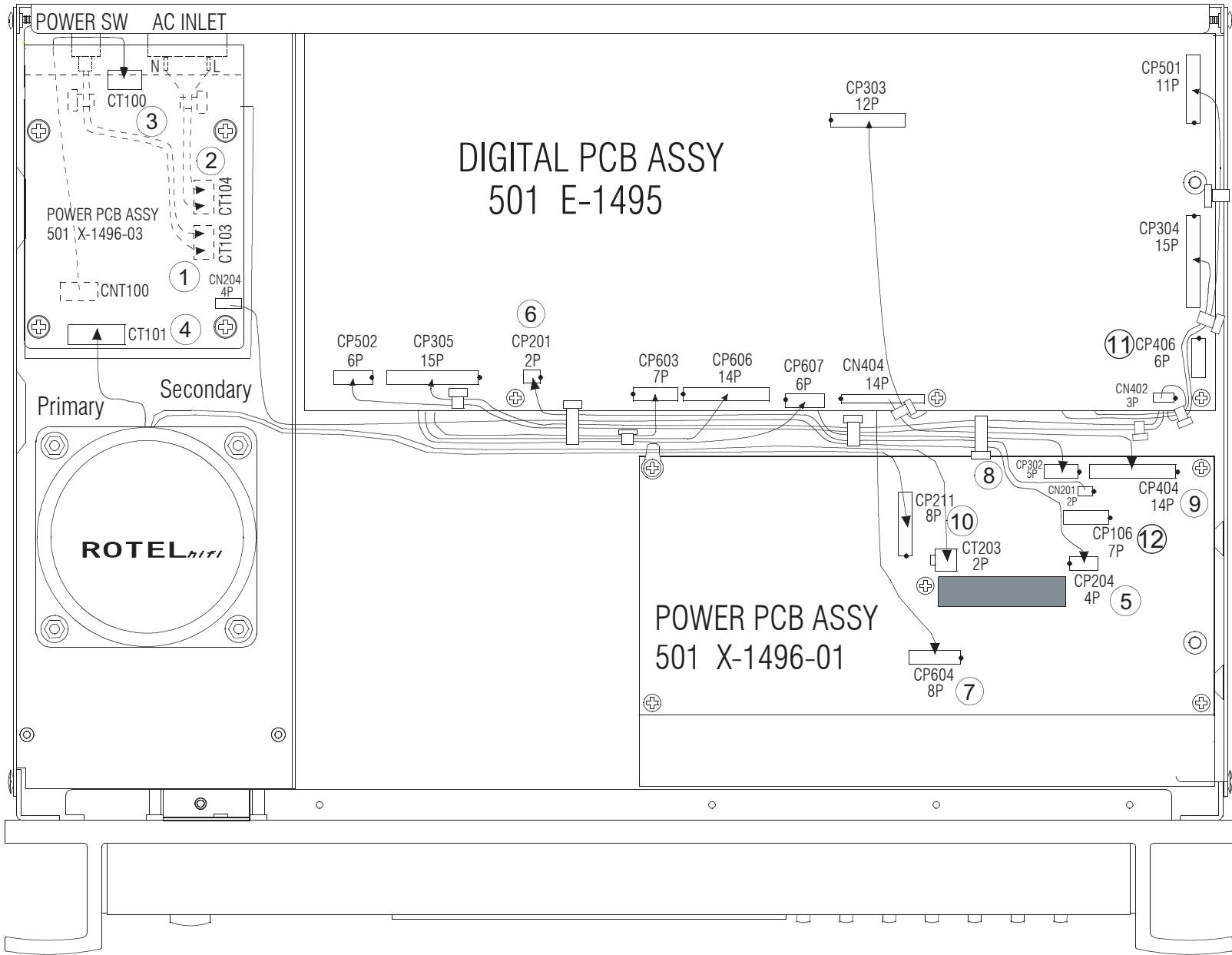
## <MEMO 1>

Light-up ALL FL segments to check:

RSP-1069 will get FL full illumination from "Direct" and "Always ON" setting on Power Option menu.

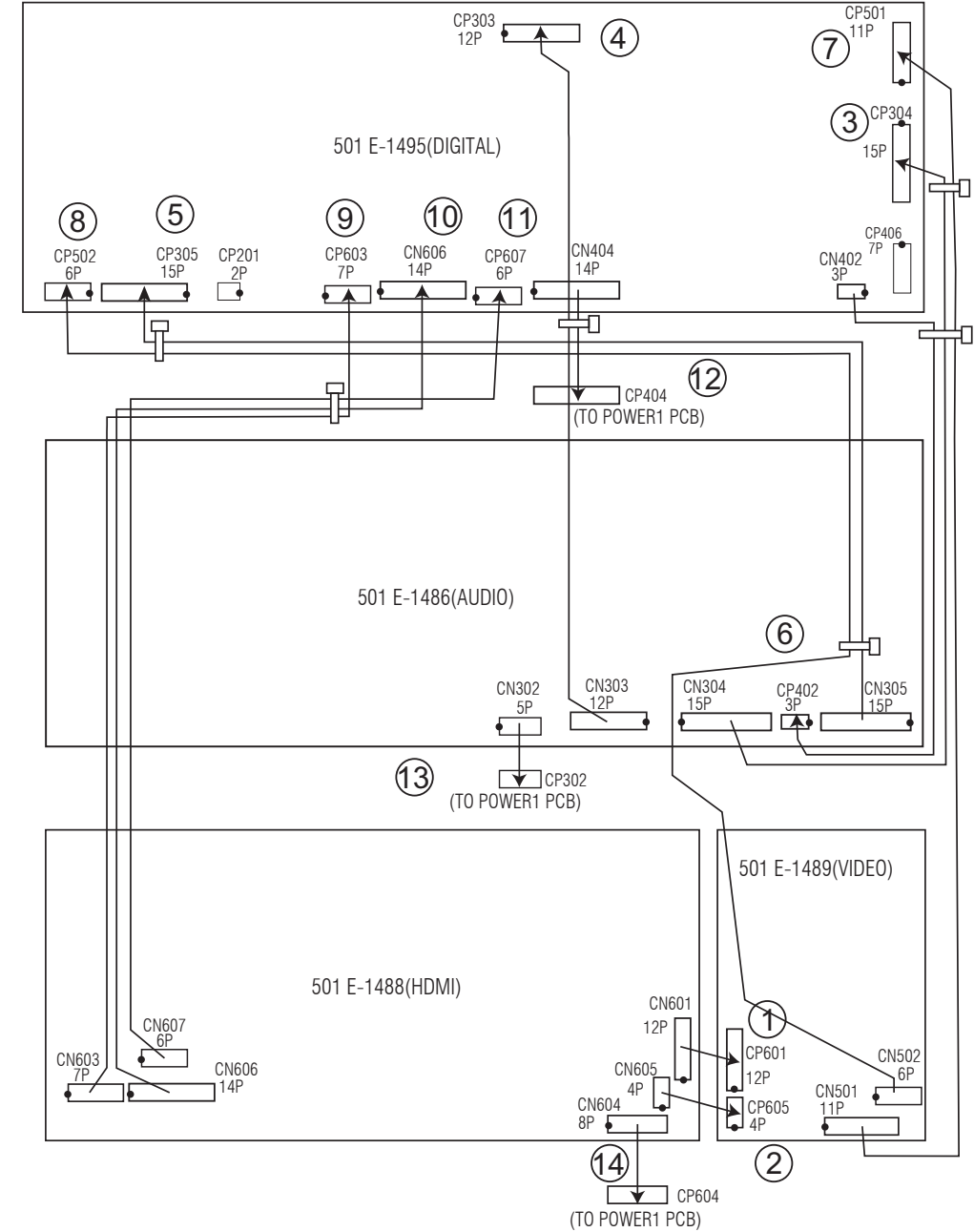
Press "2CH" and "MUTE" of front panel while turn on the rear panel master power switch. When release the lighting, press STANDBY switch or master power switch.

<MEMO 2>



|   | PCB                            | POWER 1 | POWER3      | DIGITAL |
|---|--------------------------------|---------|-------------|---------|
| ① | POWER SW                       | →       | CT103       |         |
| ② | AC INLET                       | →       | CT104       |         |
| ③ | POWER (501 X-1496-02) CNT100   | →       | CT100       |         |
| ④ | POWER TRANS Primary            | →       | CT101       |         |
| ⑤ | POWER (501 X-1496-03) CN204    | →       | CP204       |         |
| ⑥ | POWER (501 X-1496-01) CN201    | →       | CP201       |         |
| ⑦ | HDMI (501 E-1488) CN604        | →       | CP604       |         |
| ⑧ | AUDIO (501 E-1486) CN302       | →       | CP302       |         |
| ⑨ | DIGITAL (501 E-1495) CN404     | →       | CP404       |         |
| ⑩ | POWER TRANS Secondary          | →       | CP211,CT203 |         |
| ⑪ | CN102 FRONT PCB (501 X1494-01) | →       | CP406       |         |
| ⑫ | CN106 FRONT PCB (501 X1494-01) | →       | CP106       |         |

REAR ASSY

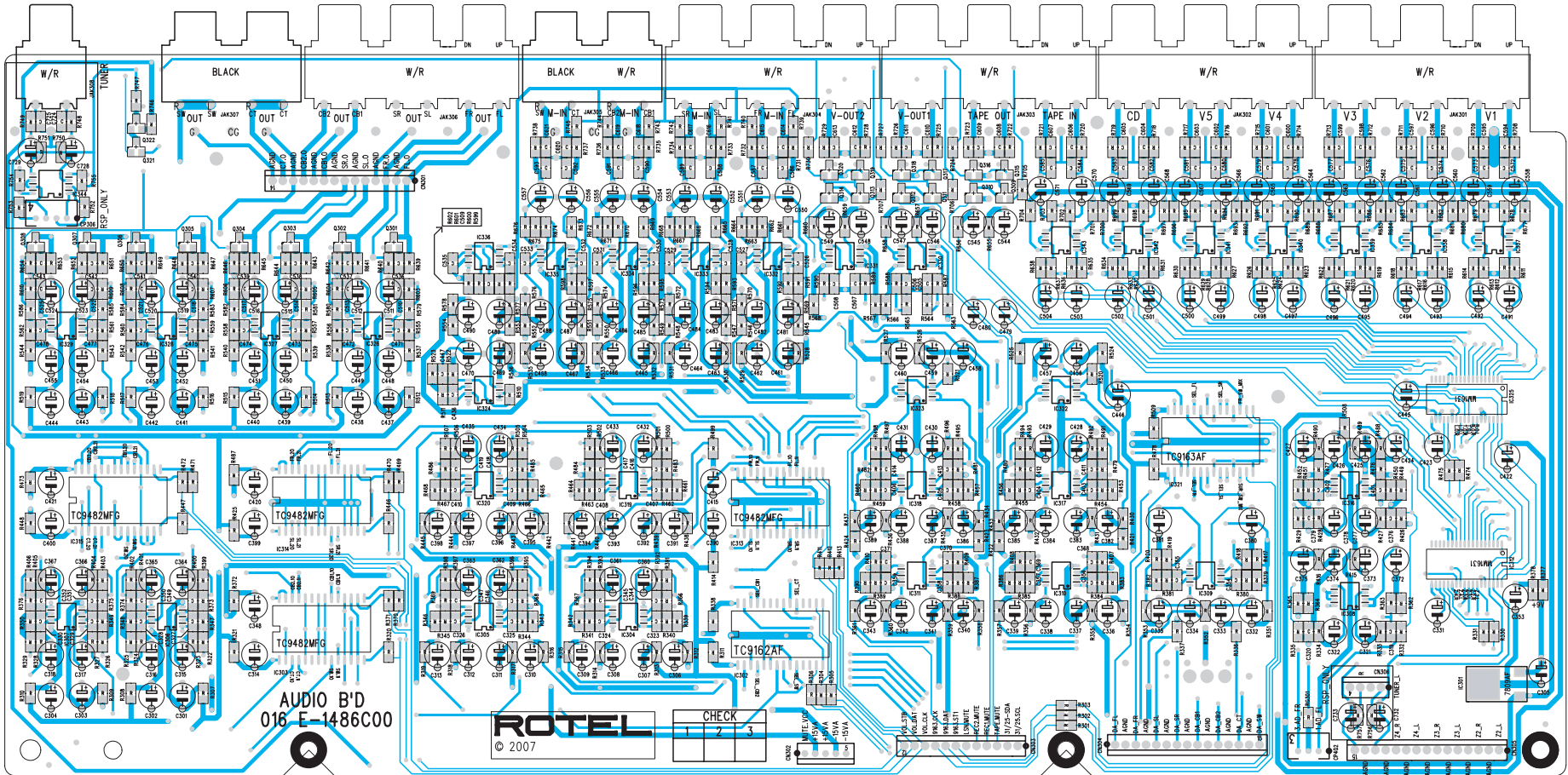


|   | PCB                            | AUDIO | DIGITAL | VIDEO INPUT | POWER1 PCB |
|---|--------------------------------|-------|---------|-------------|------------|
| ① | HDMI (501 E-1488) CN601        | →     | CP601   |             |            |
| ② | HDMI (501 E-1488) CN605        | →     | CP605   |             |            |
| ③ | AUDIO (501 E-1486) CN304       | →     | CP304   |             |            |
| ④ | AUDIO (501 E-1486) CN303       | →     | CP303   |             |            |
| ⑤ | AUDIO (501 E-1486) CN305       | →     | CP305   |             |            |
| ⑥ | DIGITAL (501 E-1495) CN402     | →     | CP402   |             |            |
| ⑦ | VIDEO INPUT (501 E-1489) CN501 | →     | CP501   |             |            |
| ⑧ | VIDEO INPUT (501 E-1489) CN502 | →     | CP502   |             |            |
| ⑨ | HDMI (501 E-1488) CN603        | →     | CP603   |             |            |
| ⑩ | HDMI (501 E-1488) CN606        | →     | CP606   |             |            |
| ⑪ | HDMI (501 E-1488) CN607        | →     | CP607   |             |            |
| ⑫ | DIGITAL (501 E-1495) CN404     | →     |         |             | CP404      |
| ⑬ | AUDIO (501 E-1486) CN302       | →     |         |             | CP302      |
| ⑭ | HDMI (501 E-1488) CN604        | →     |         |             | CP604      |

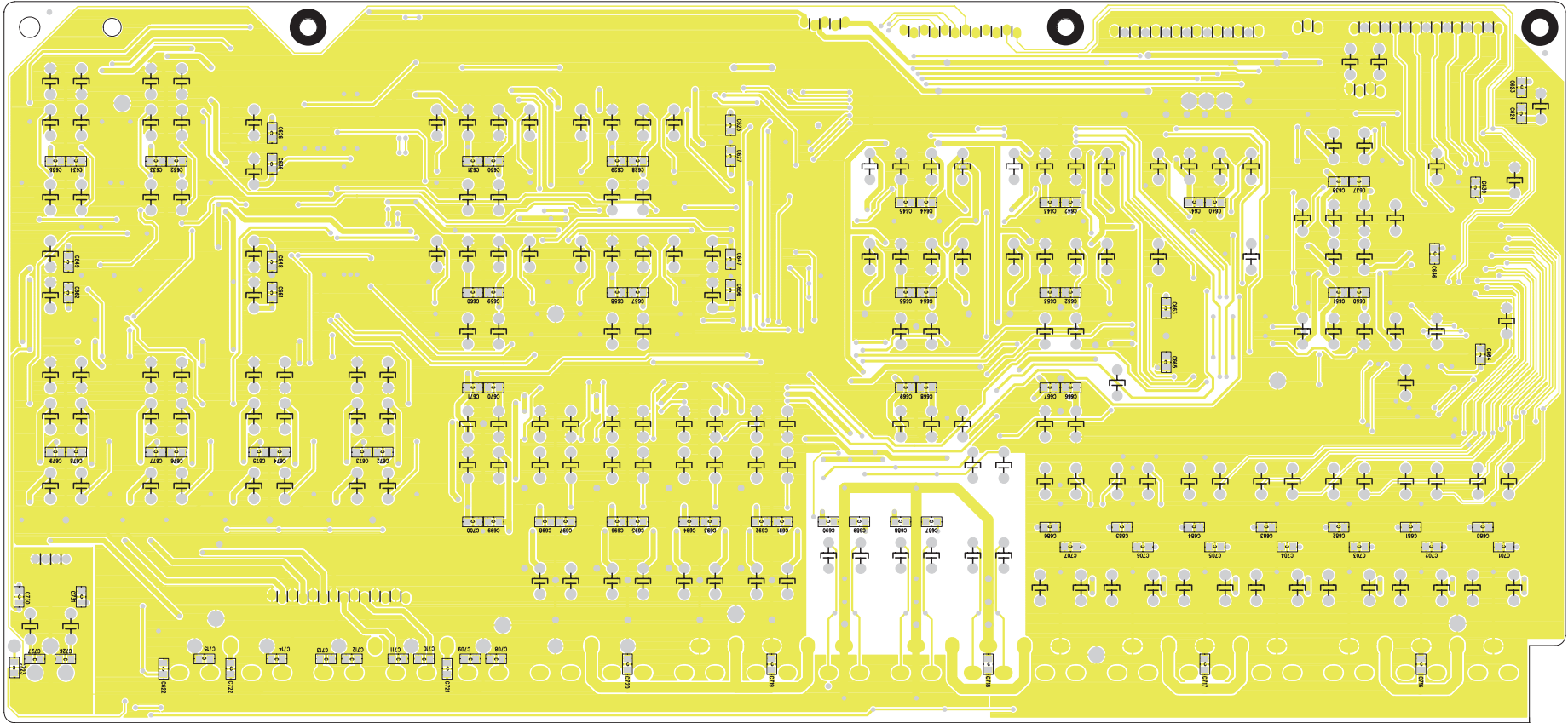


Audio PCB 016 E-1486C00

Top View



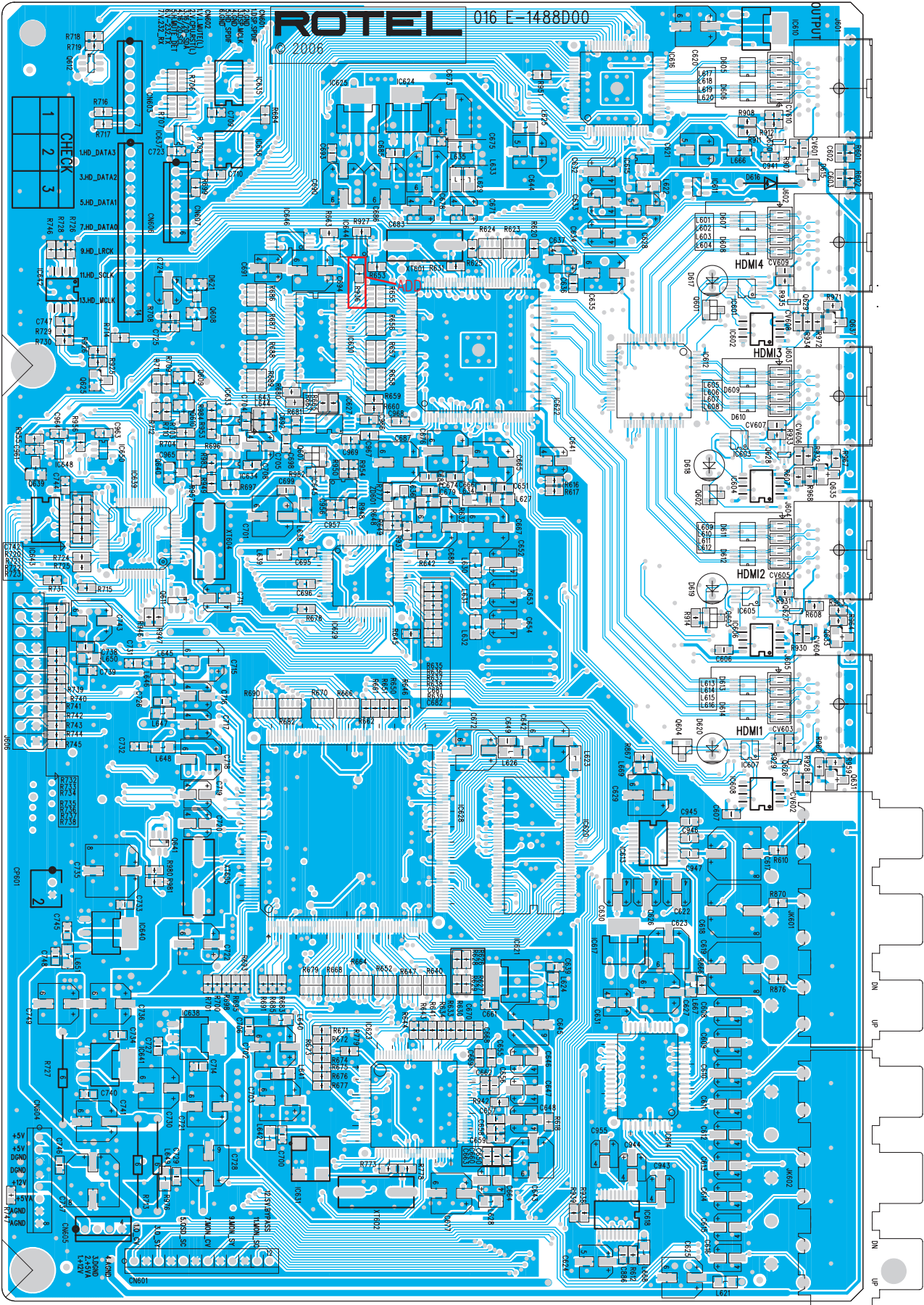
Bottom View



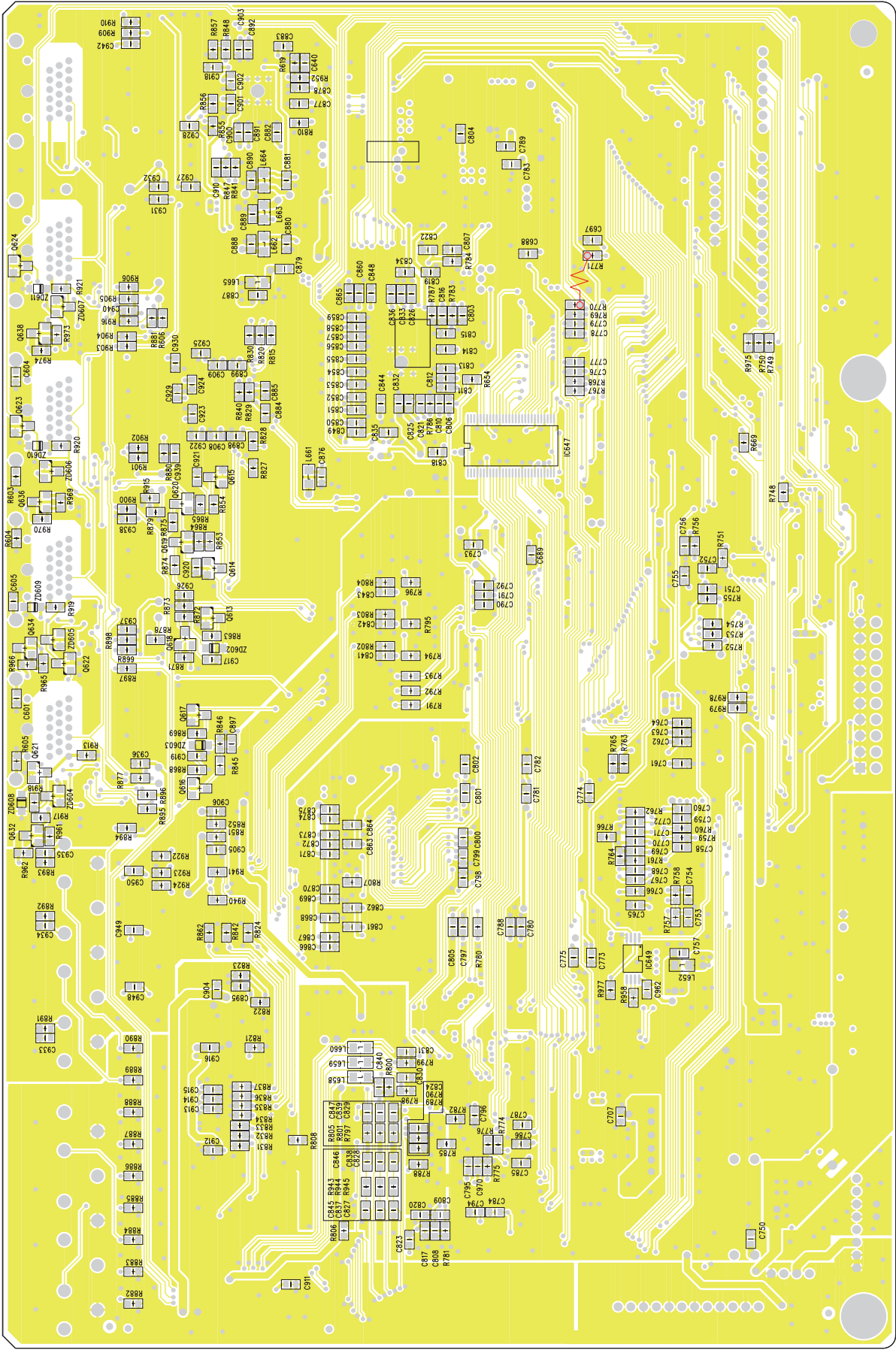


HDMI IN/OUT PCB 016 E-1488E00

Top View



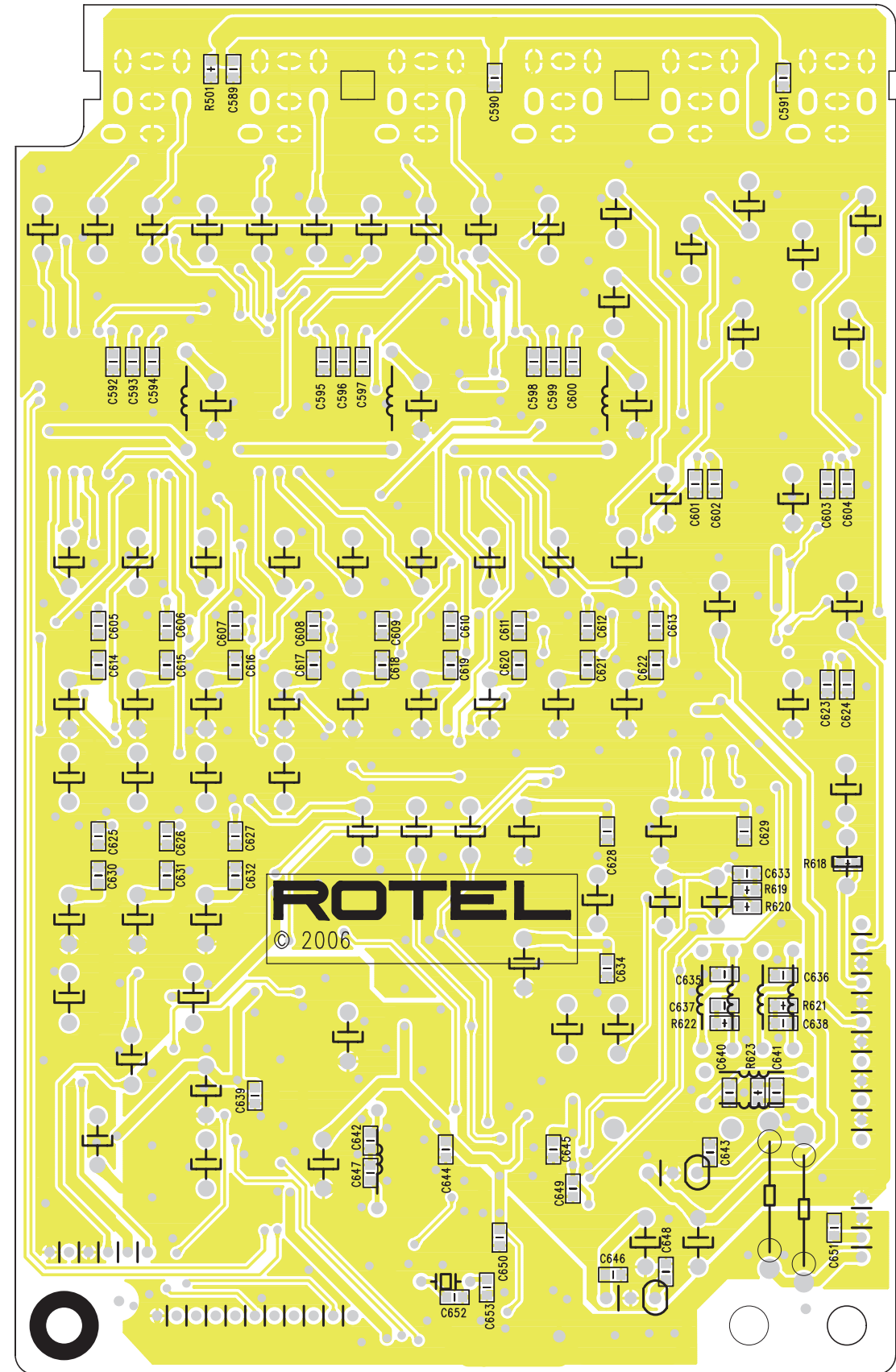
Bottom View





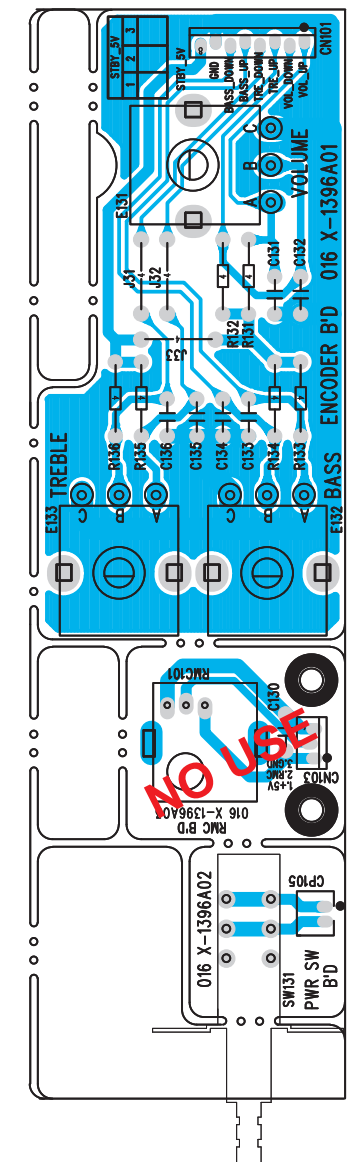
## PCB Assembly 3/6

## Bottom View



## Encoder PCB 016 X-1396A01-03

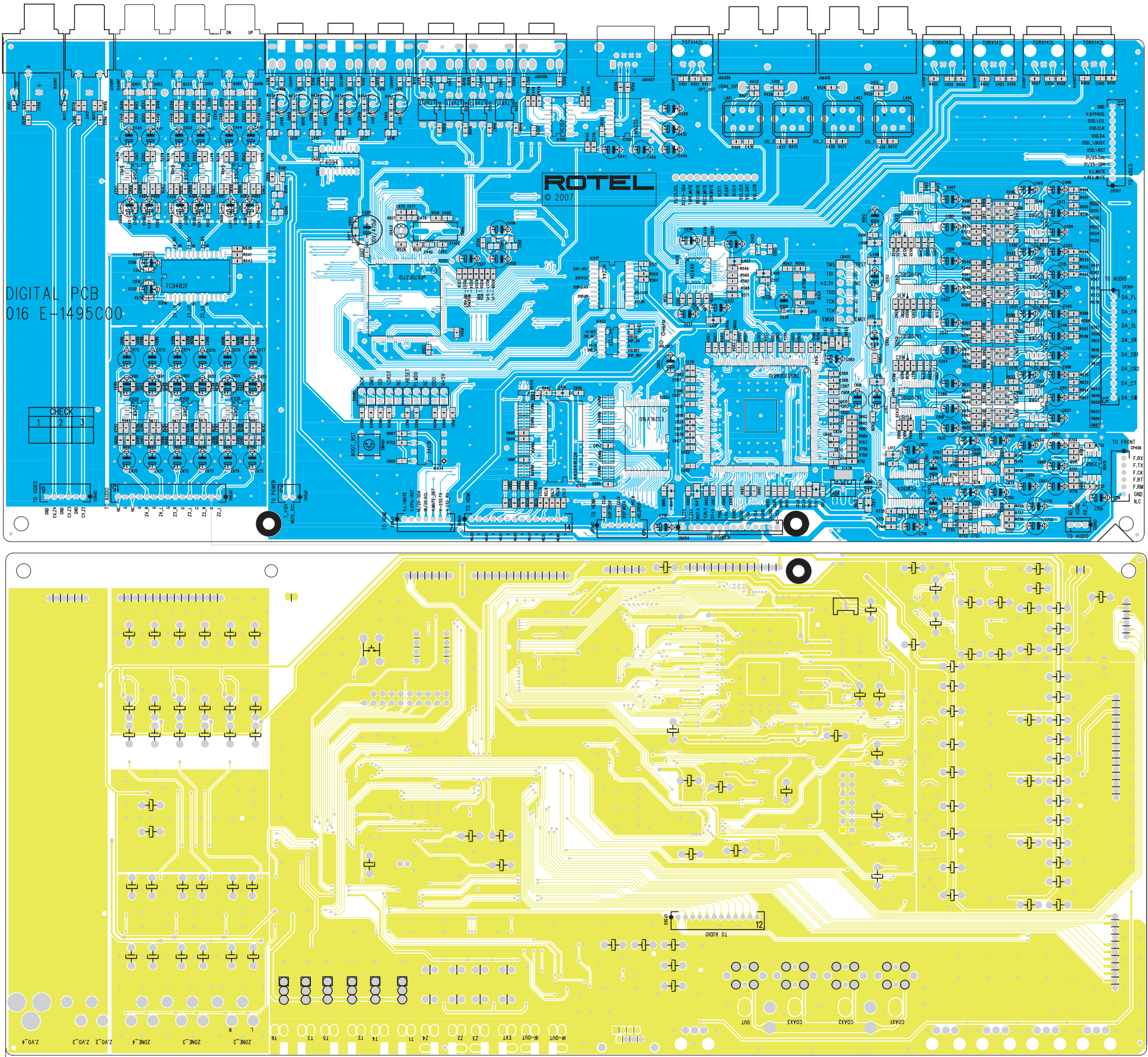
## Top View



25

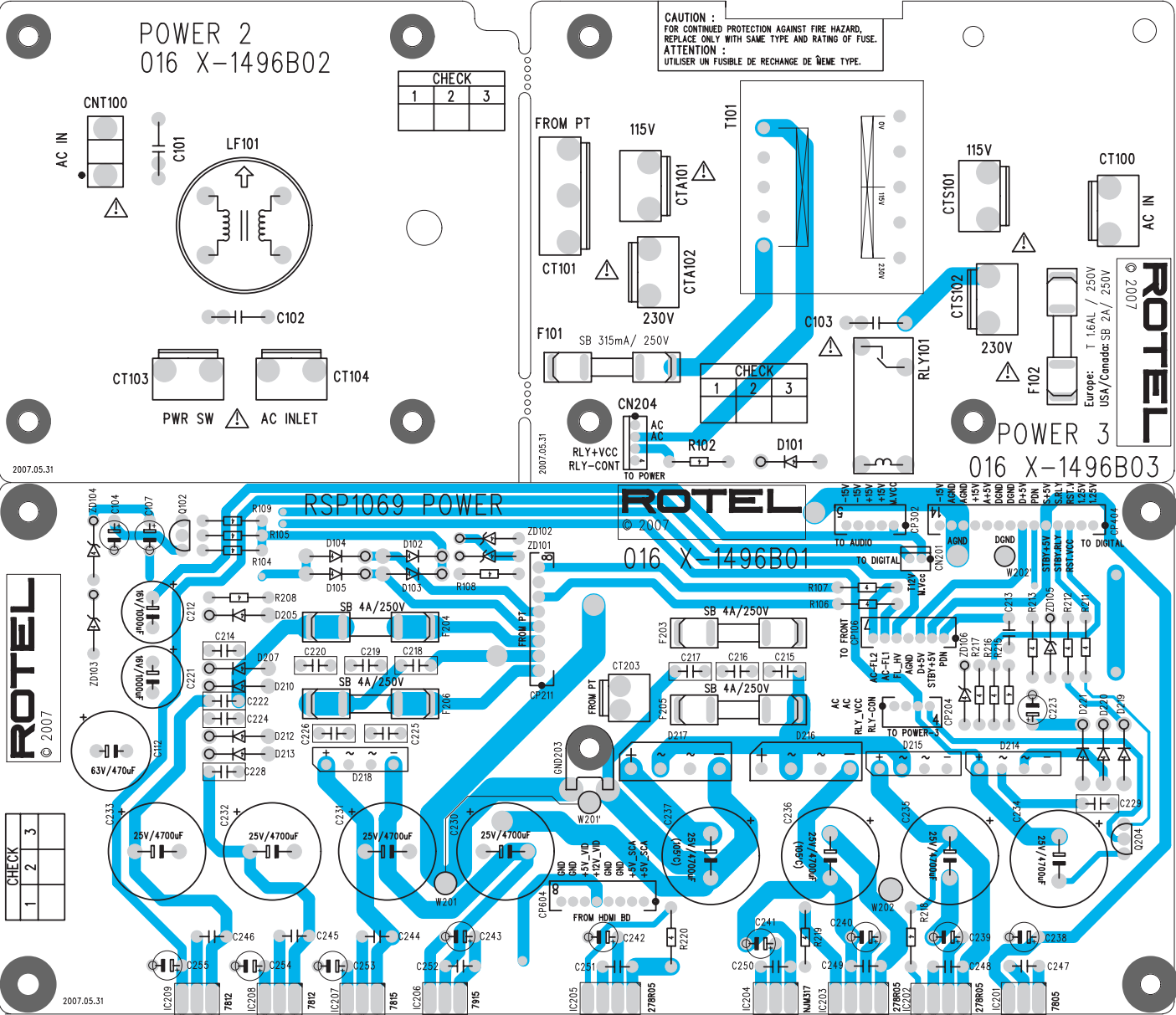


Digital PCB 016 E-1495C00

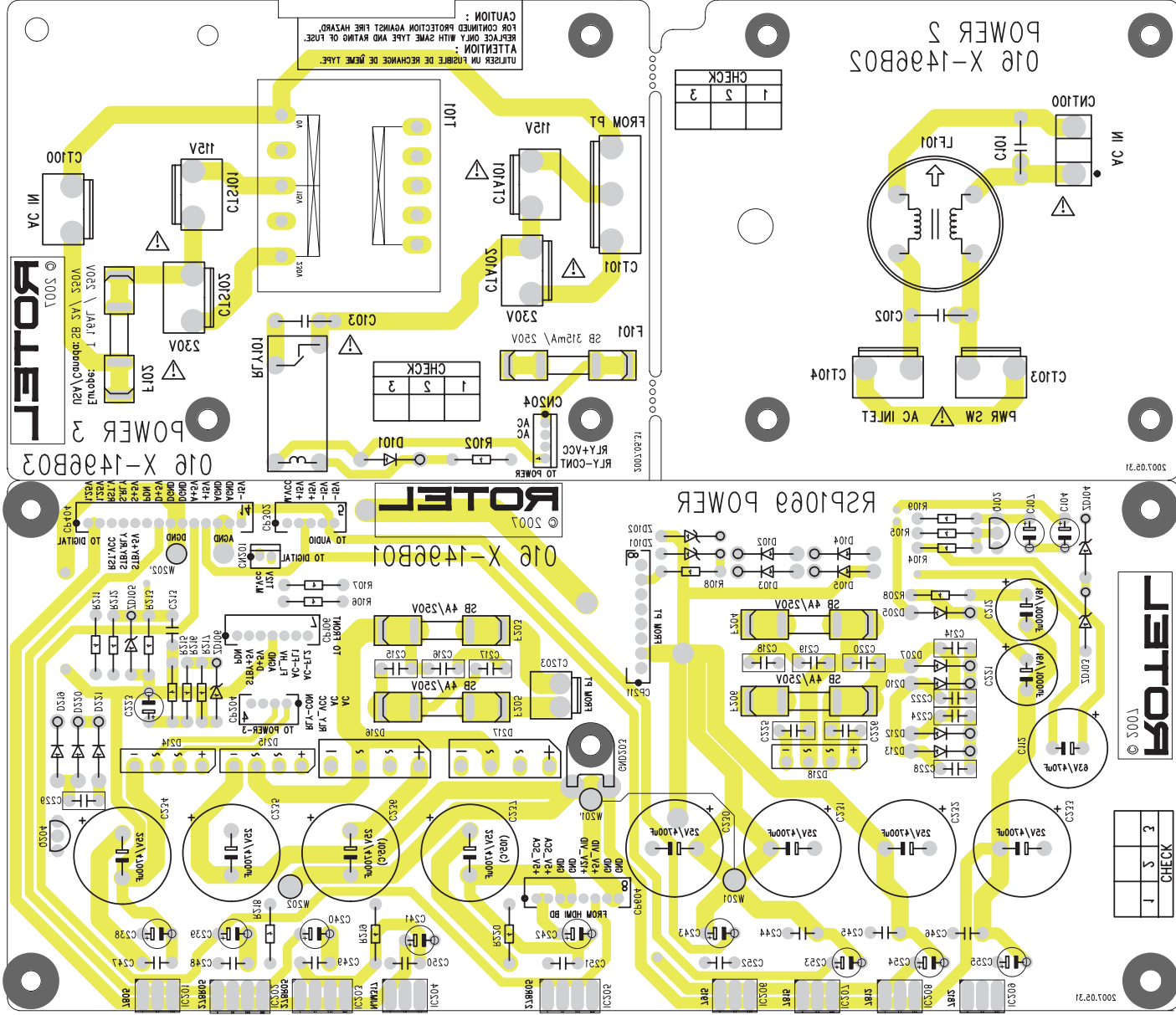


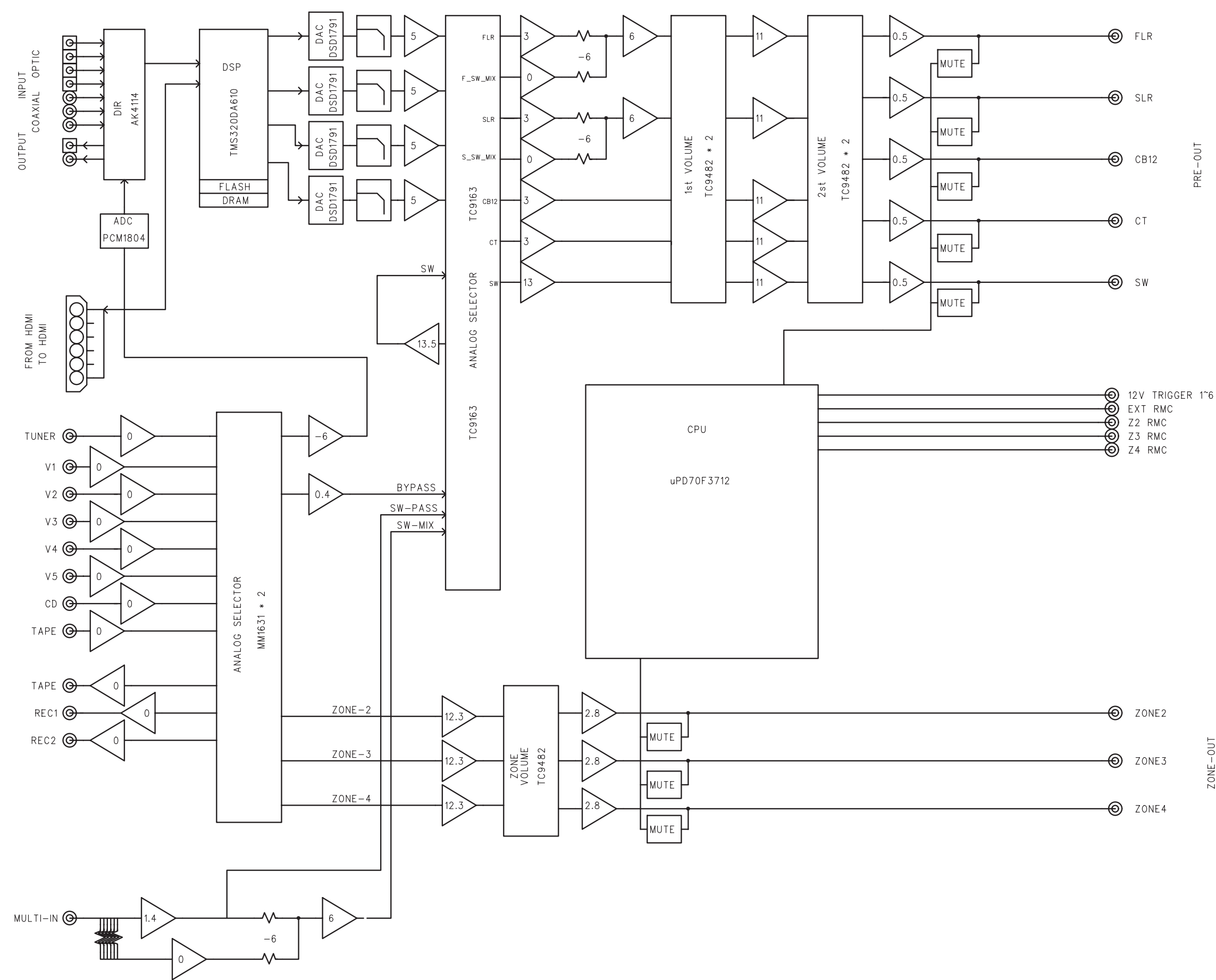
Power PCB 016 X-1496B01~03

Top View



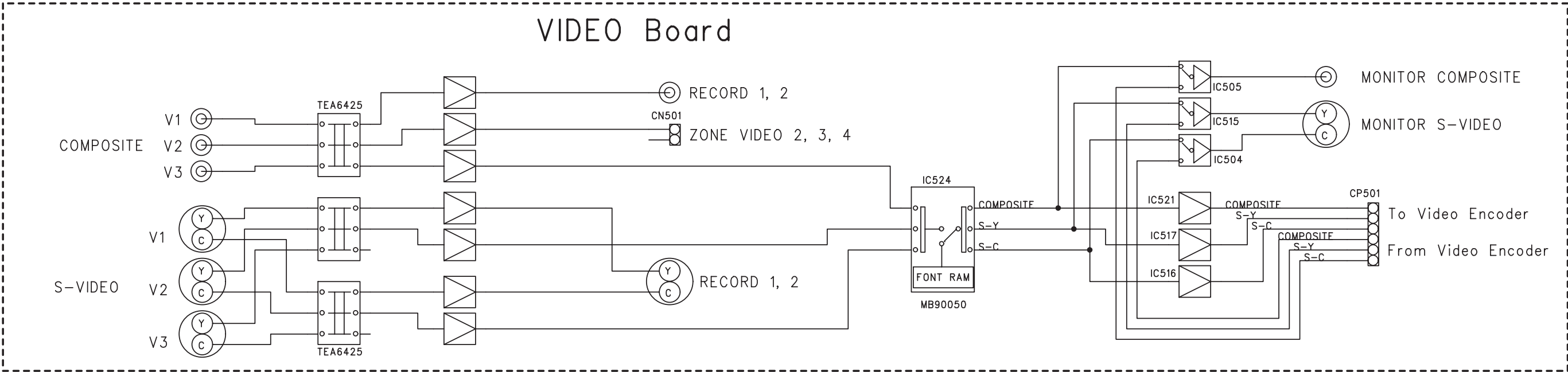
Bottom View



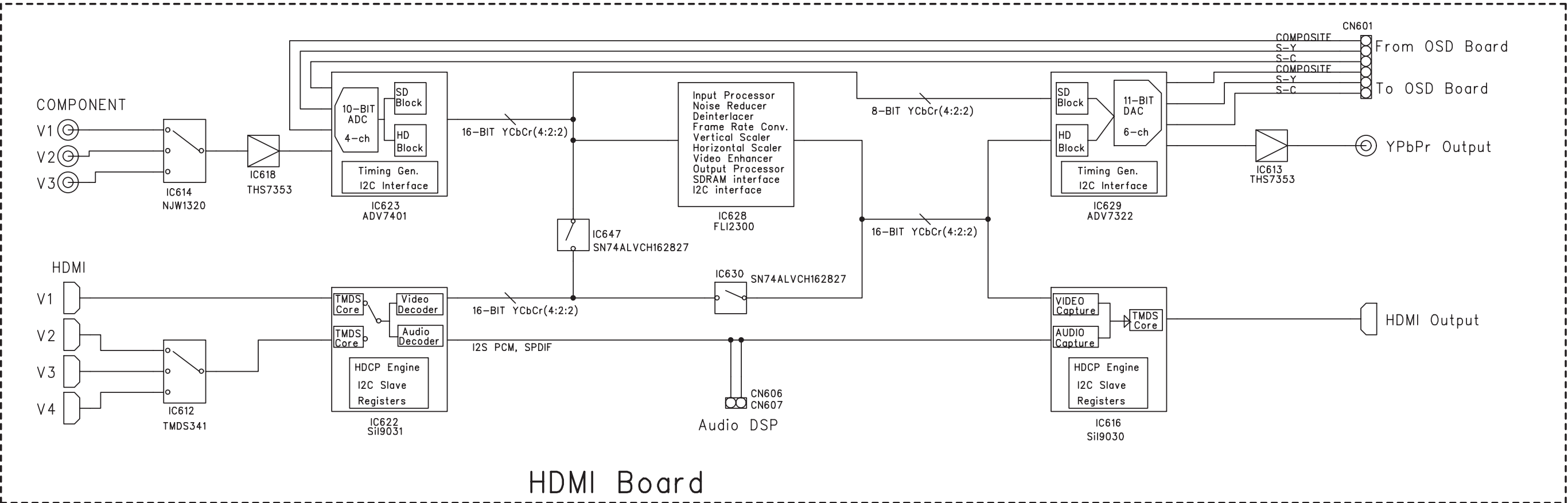




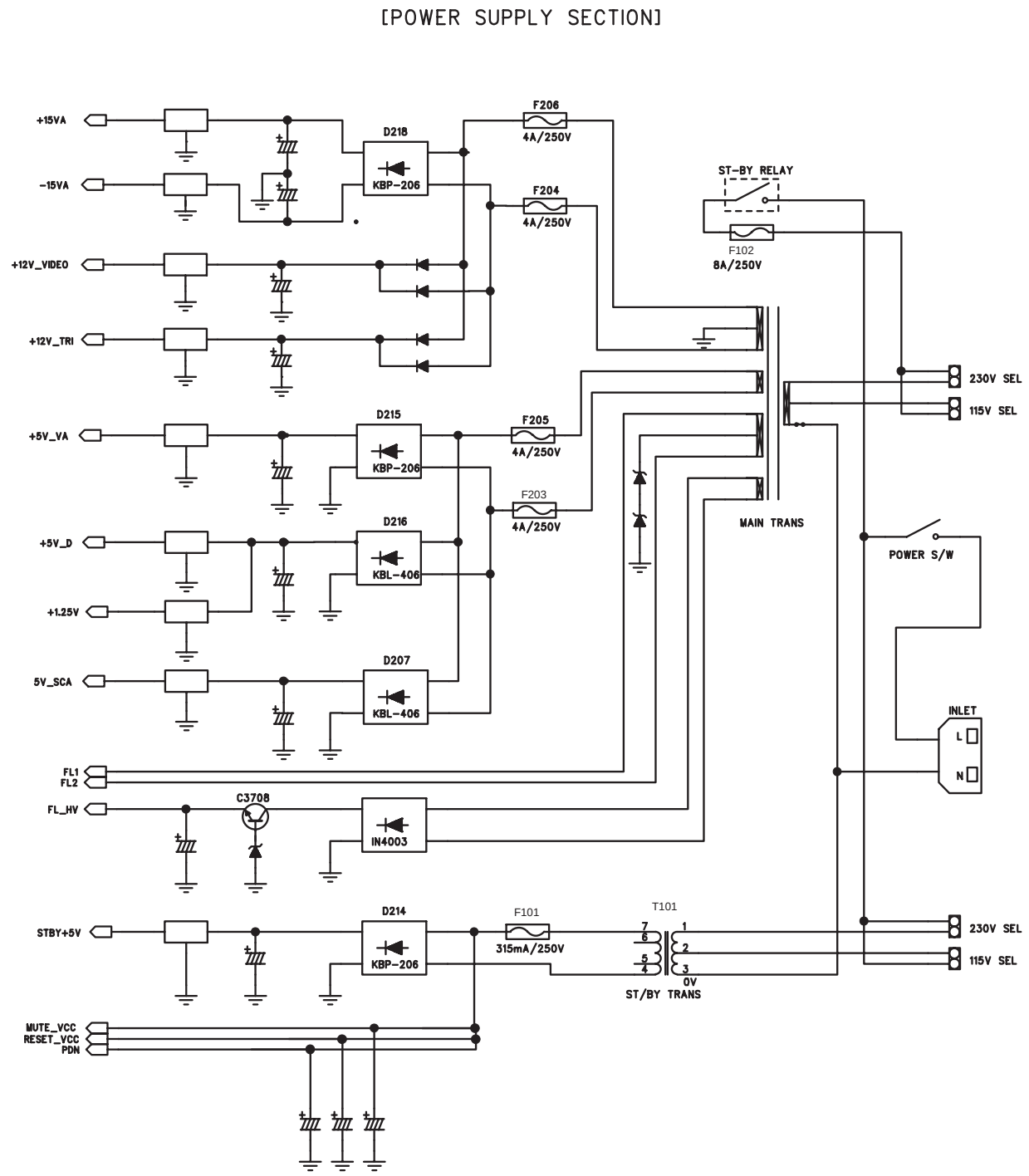
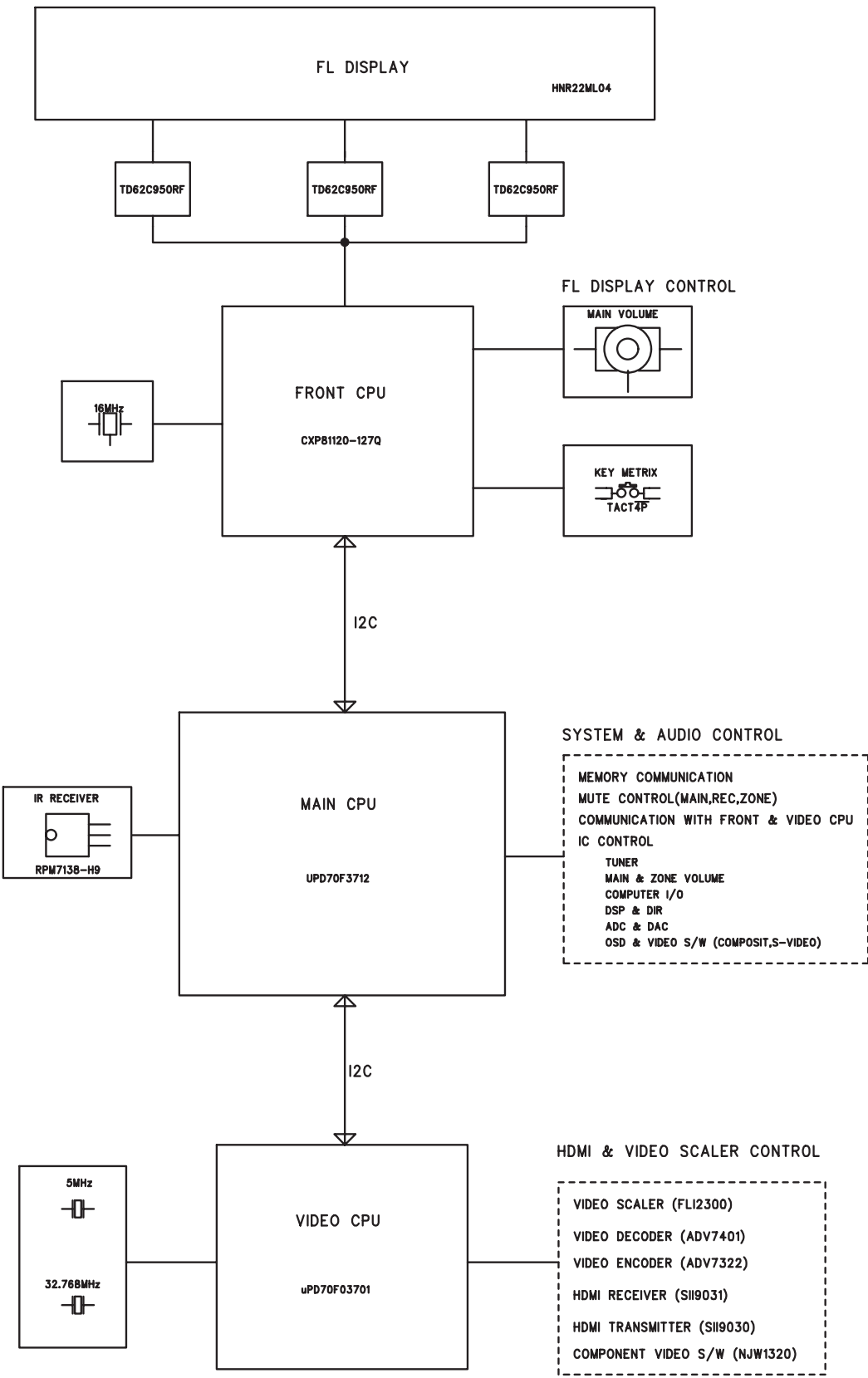
Video PCB 016 E1489B00



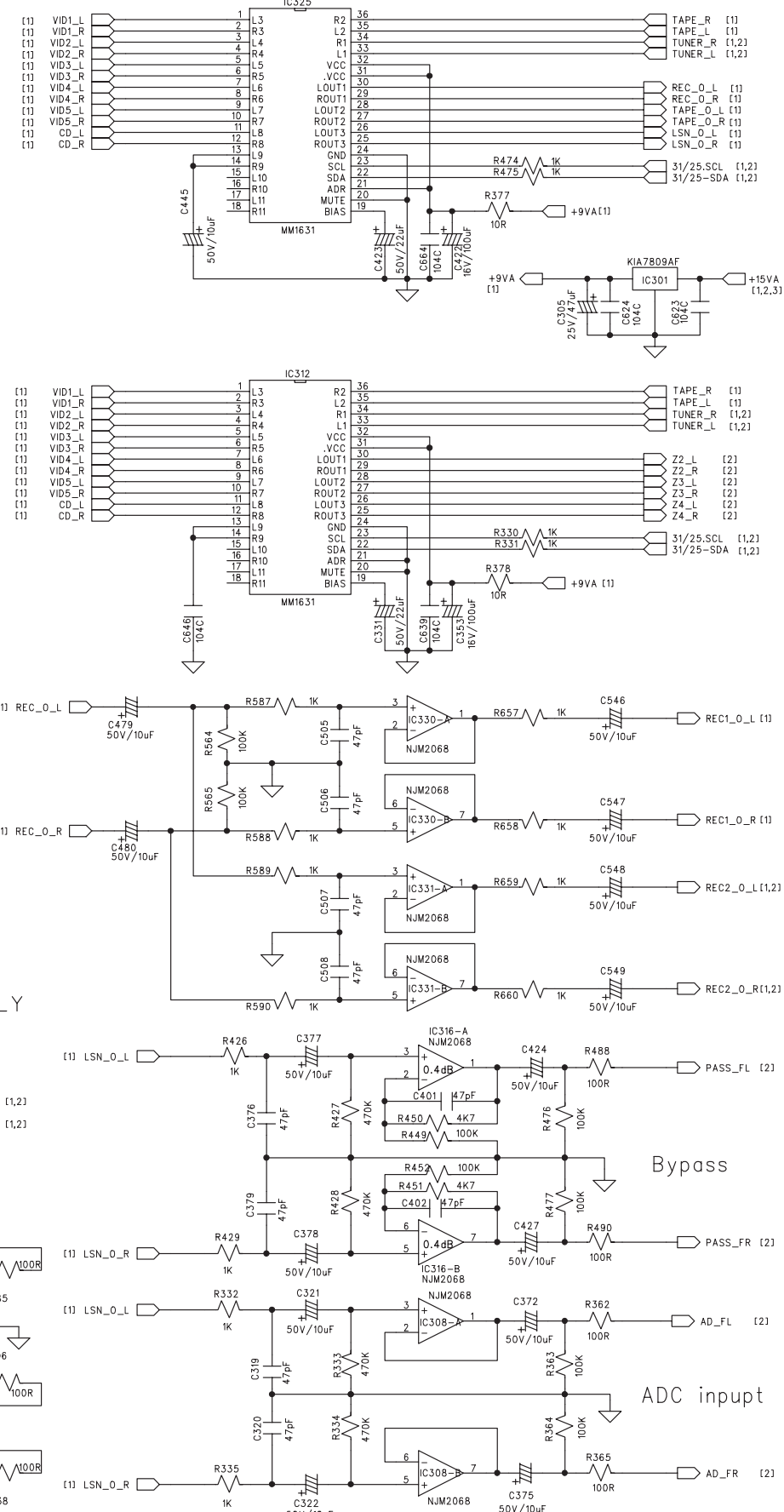
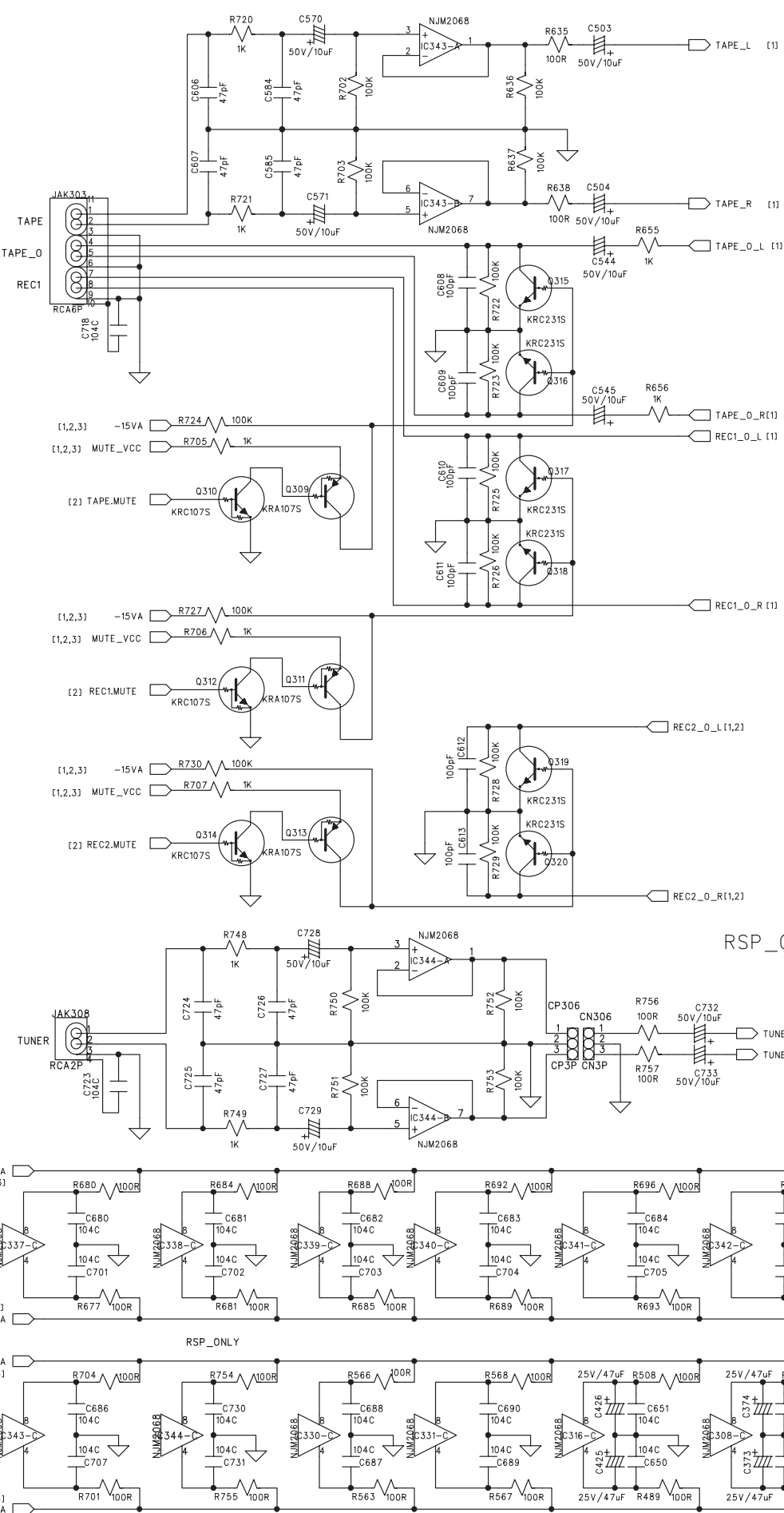
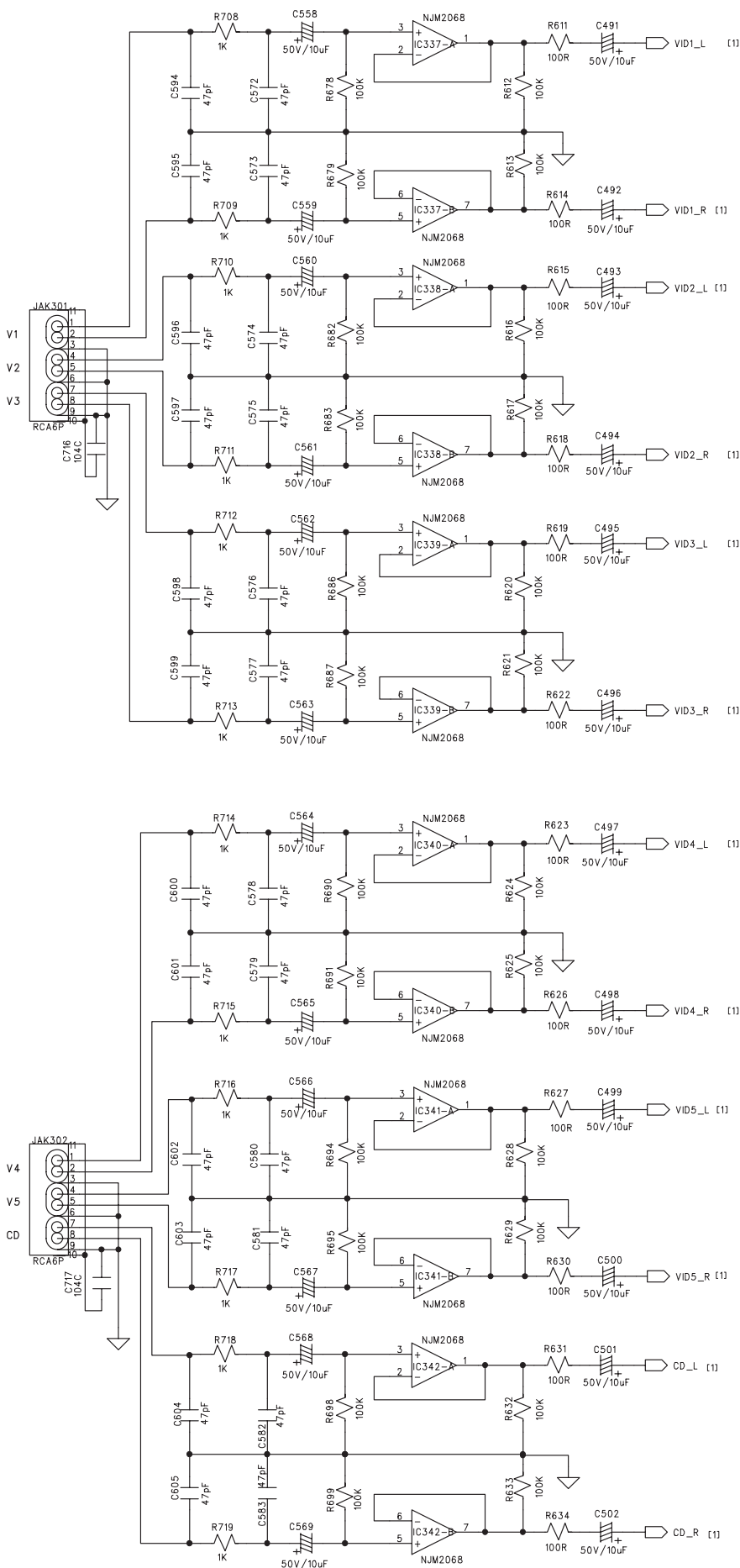
HDMI PCB 016 E1488E00



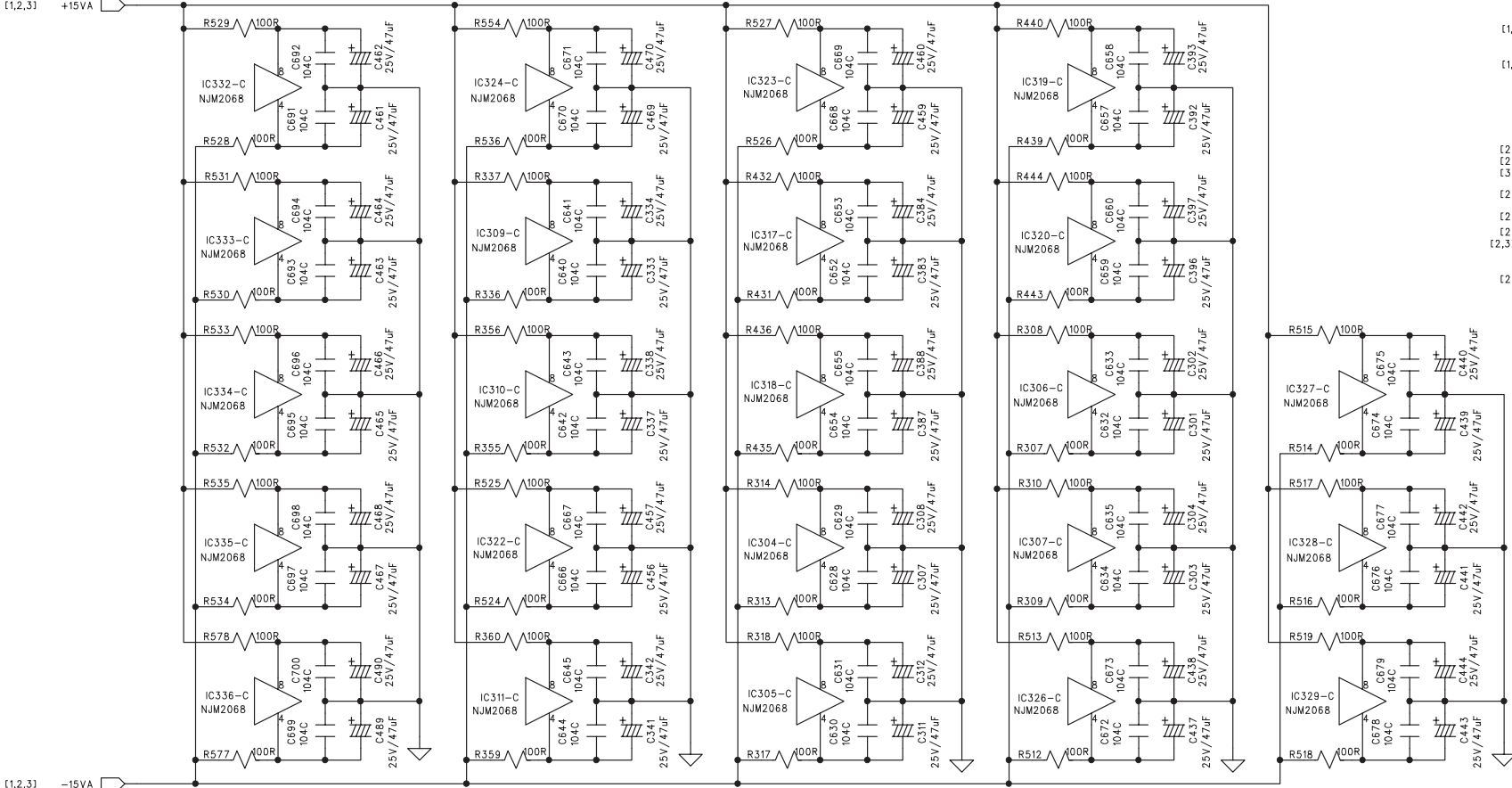
POWER & CONTROL PART



Audio PCB (1/3) 016 E-1486C00

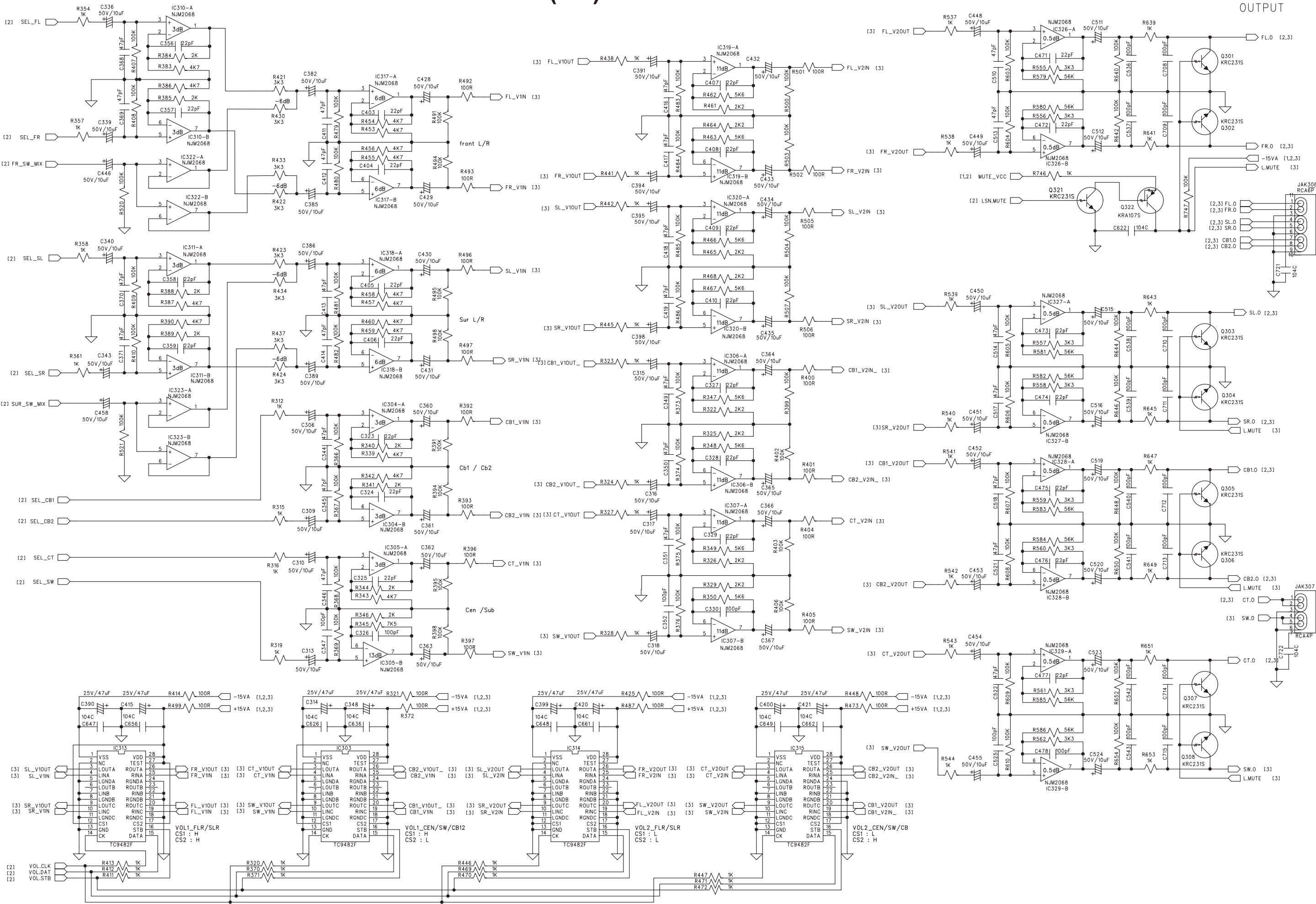


**016 E-1486C00**

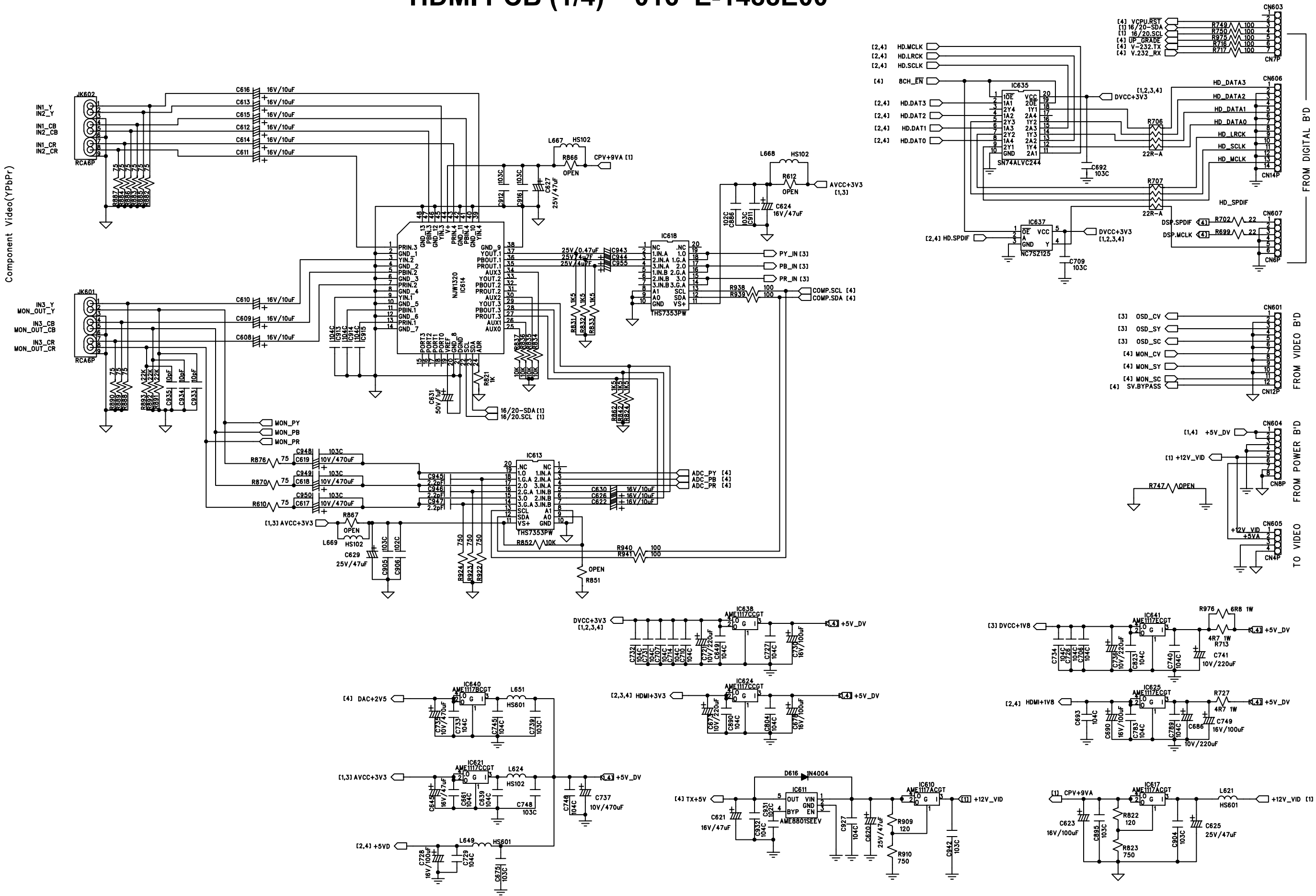




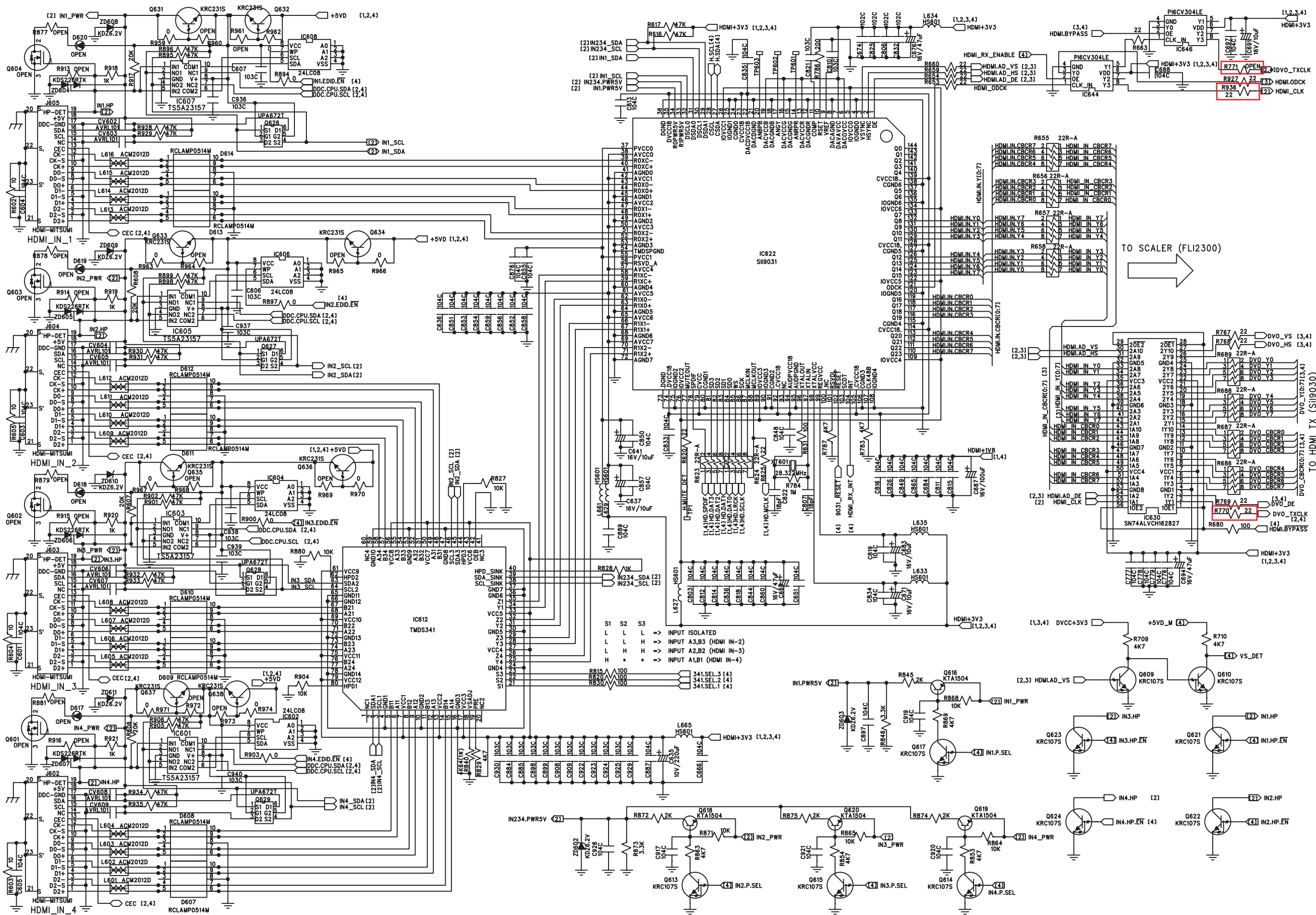
Audio PCB (3/3) 016 E-1486C00



HDMI PCB (1/4) 016 E-1488E00

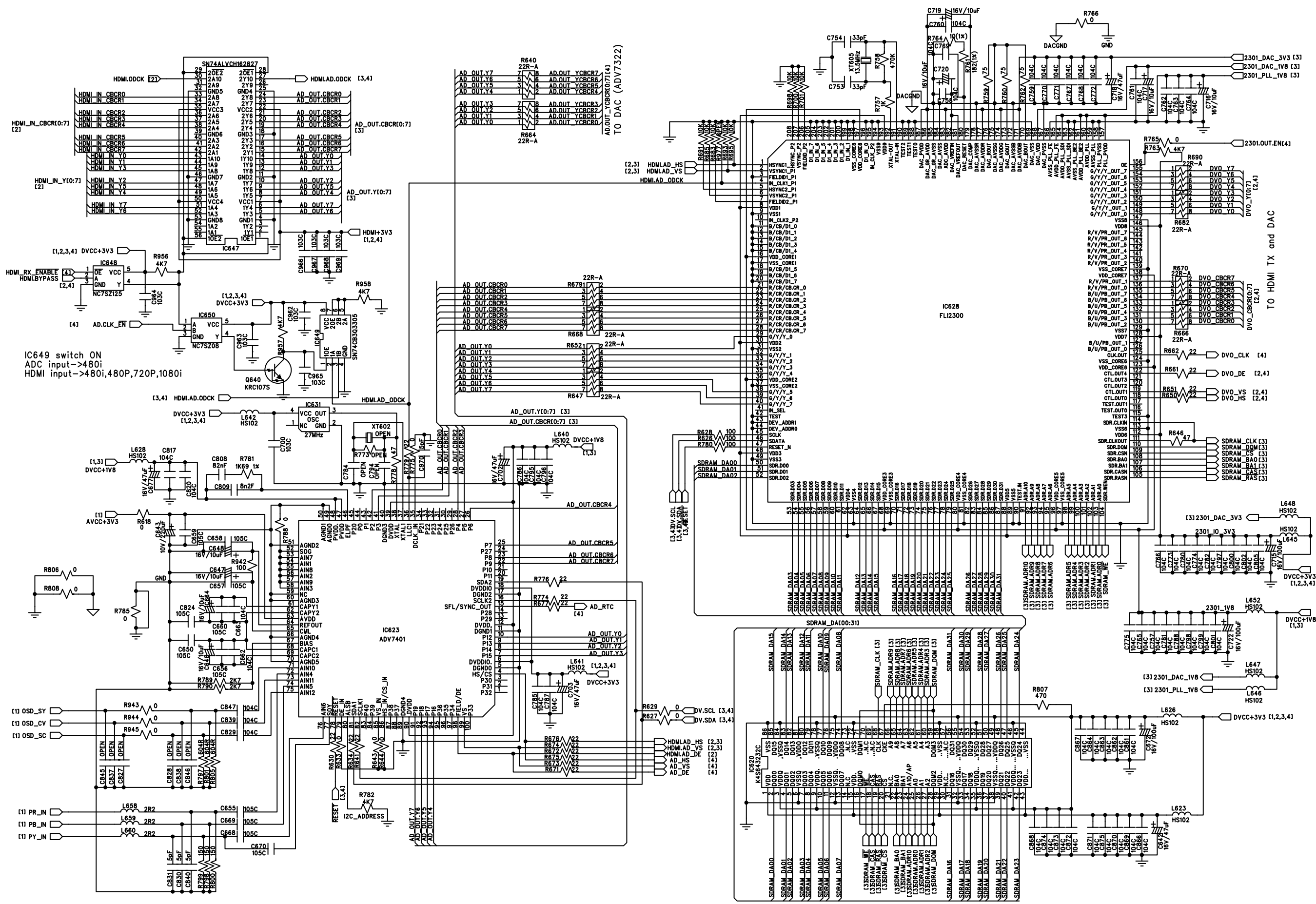


HDMI PCB (2/4) 016 E-1488E00





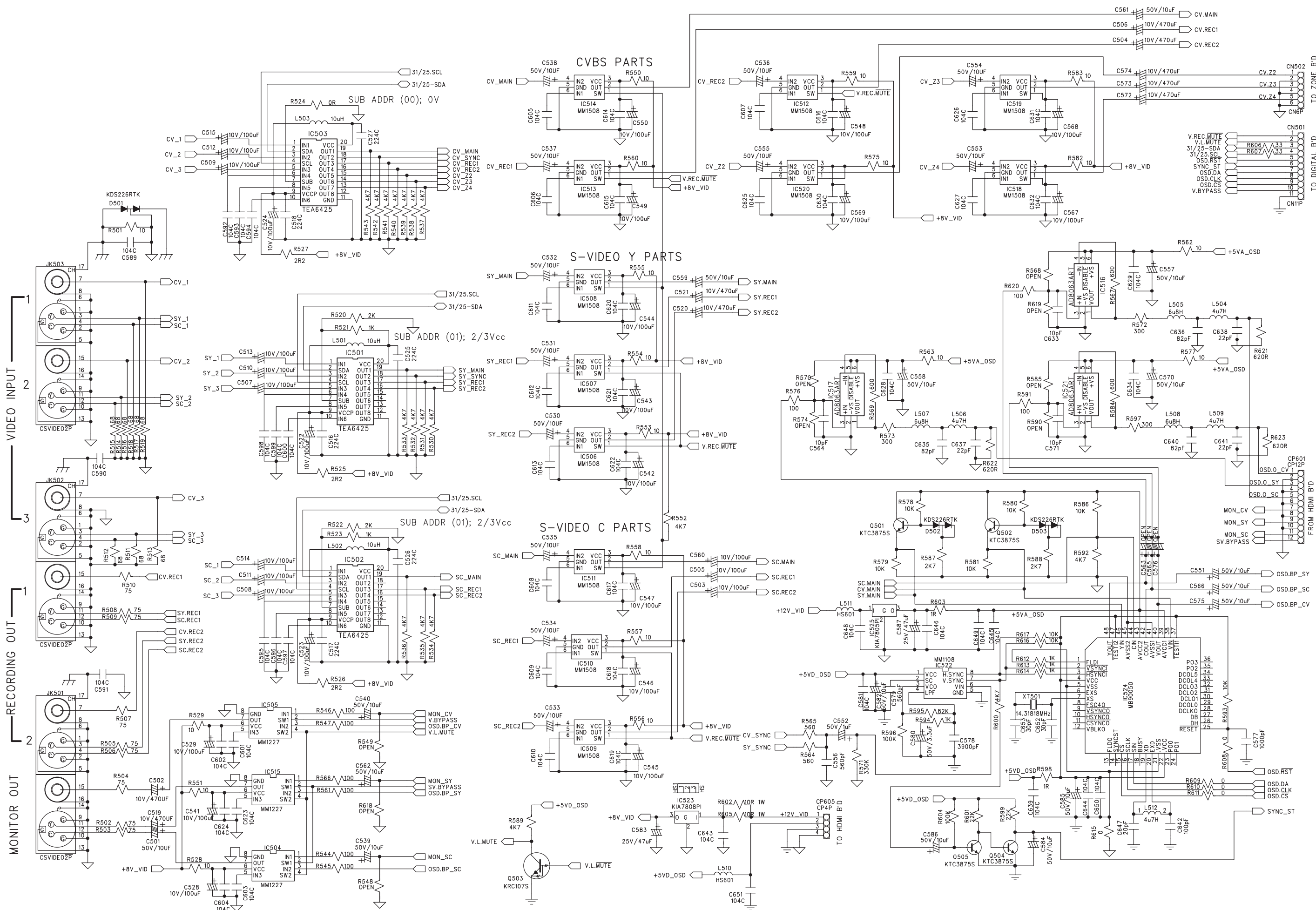
HDMI PCB (3/4) 016 E-1488E00



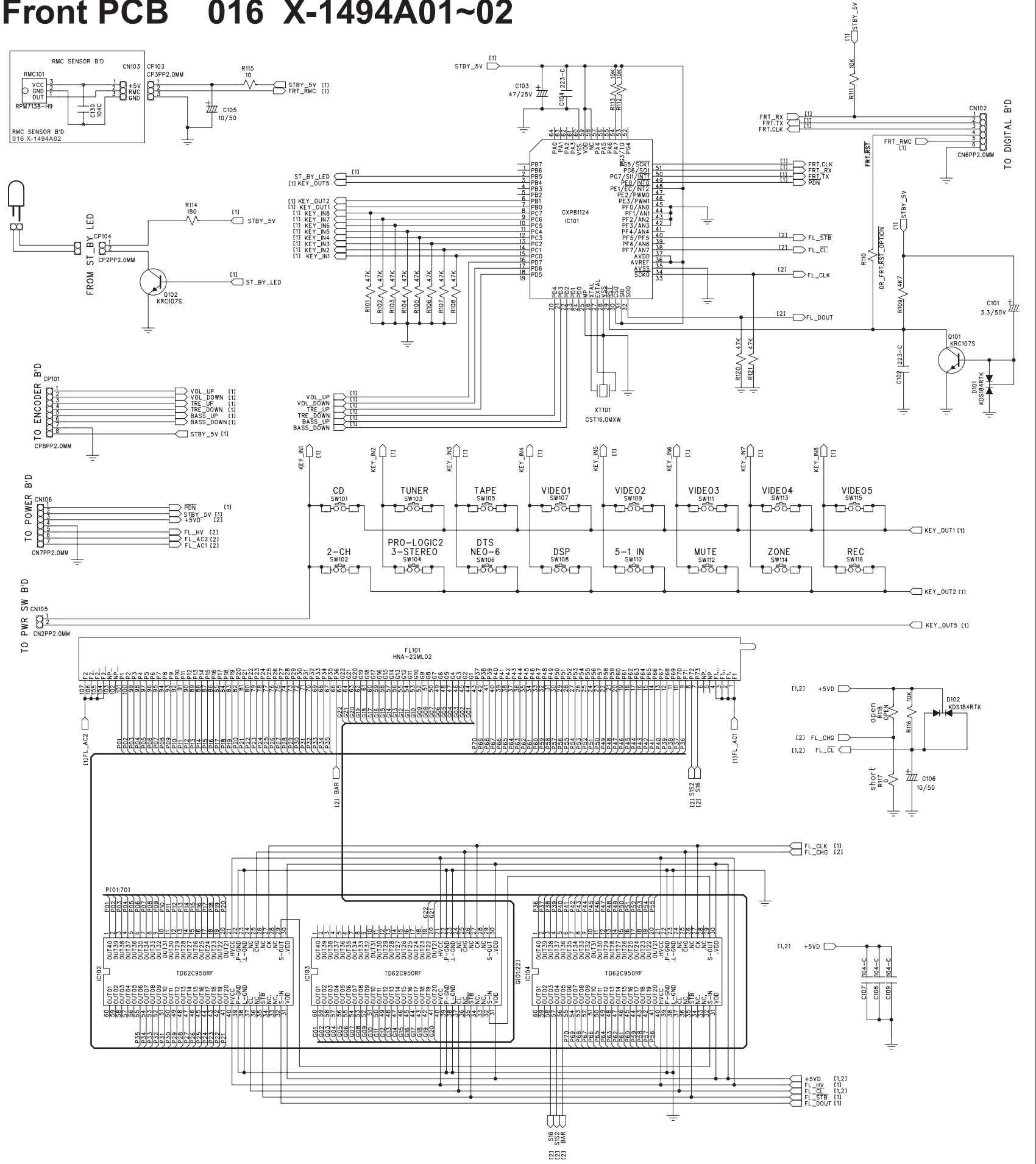




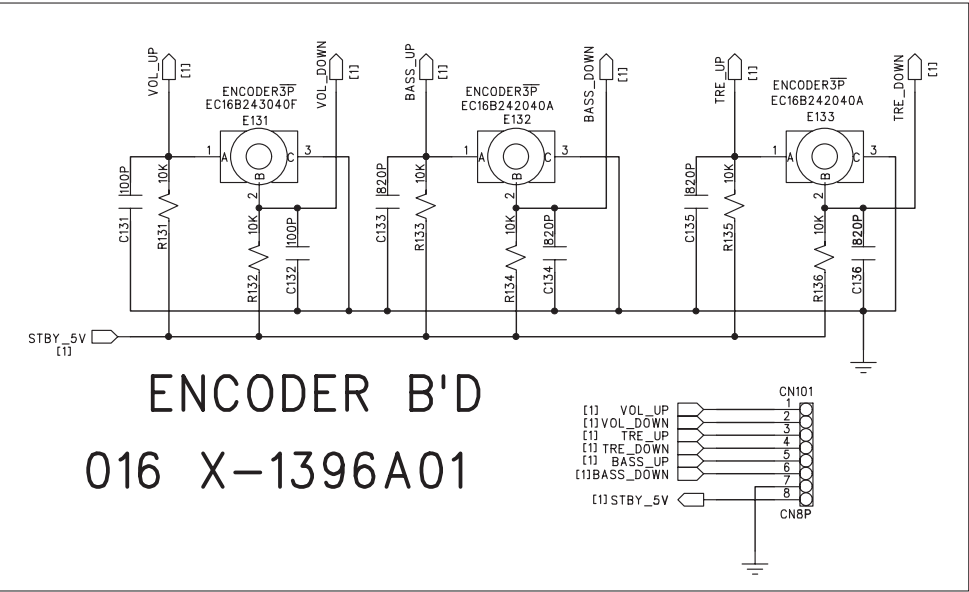
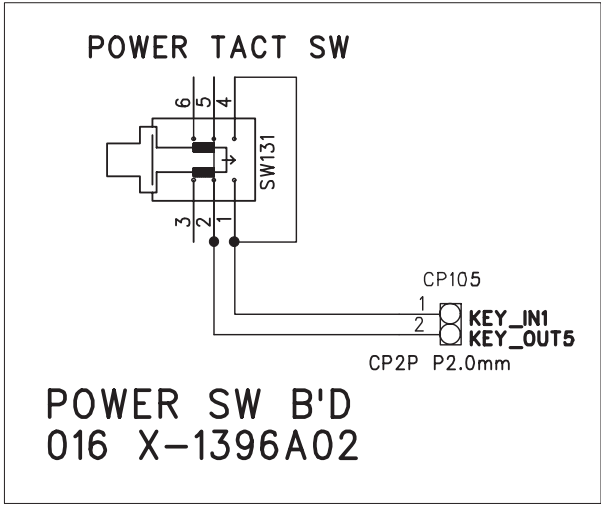
Video Input PCB 016 E-1489B00



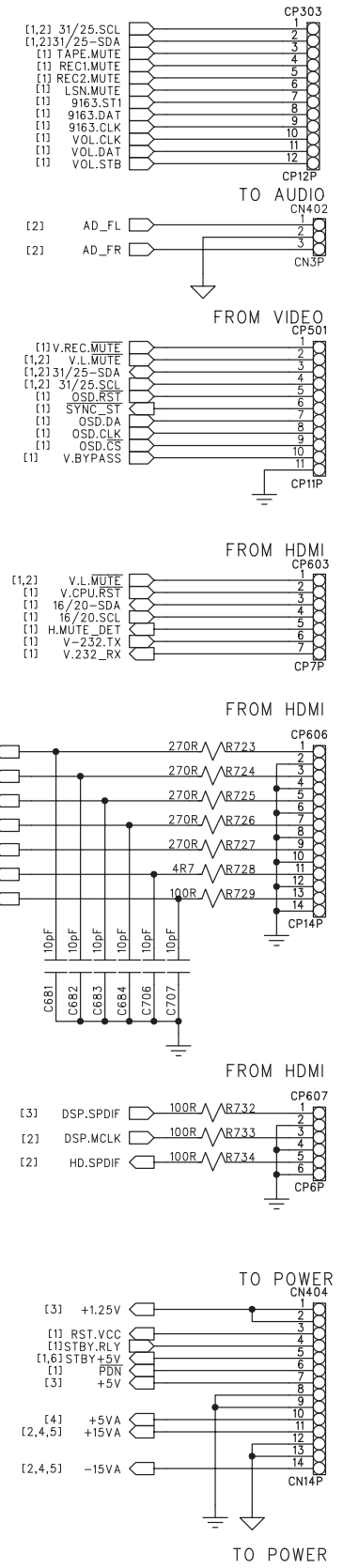
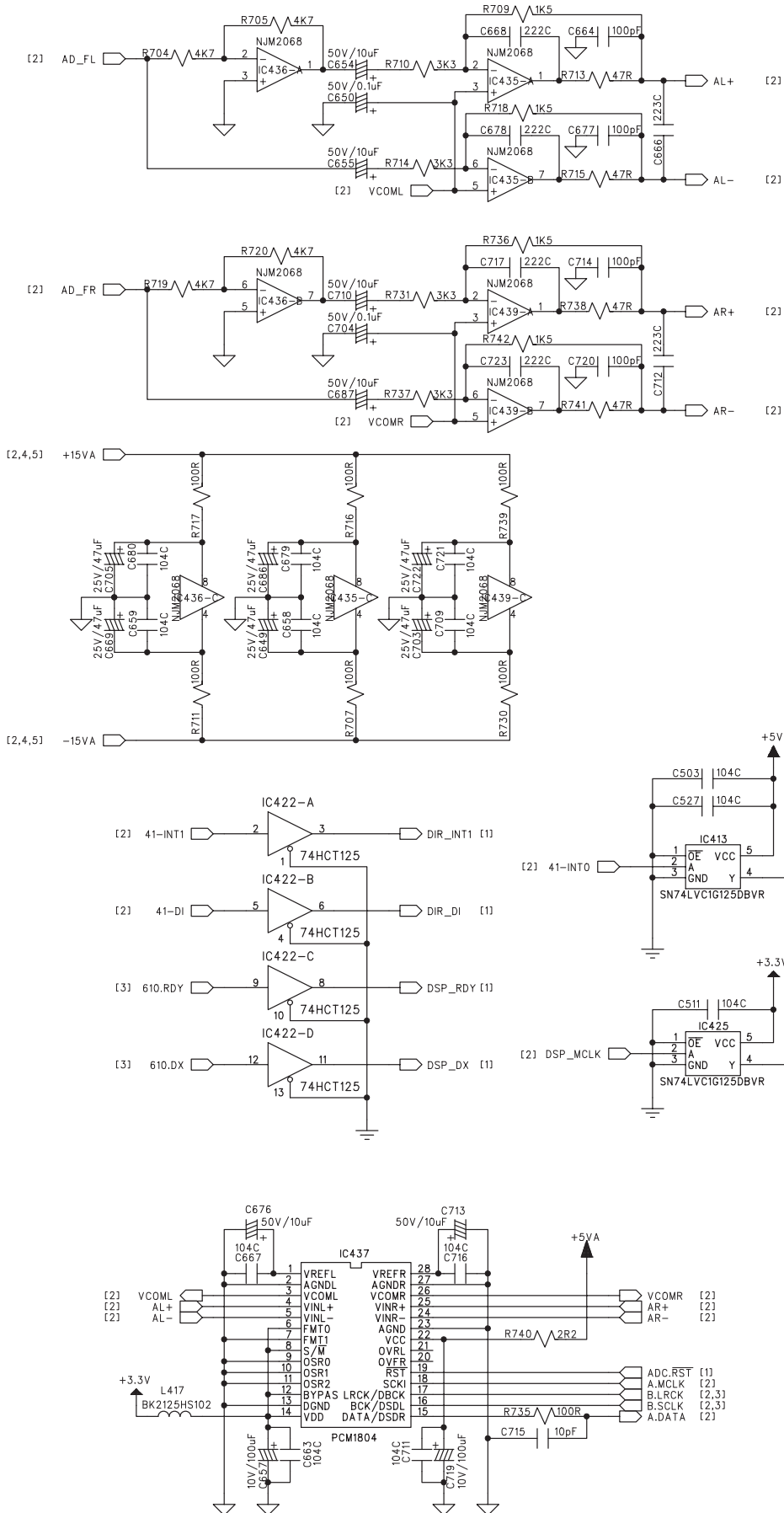
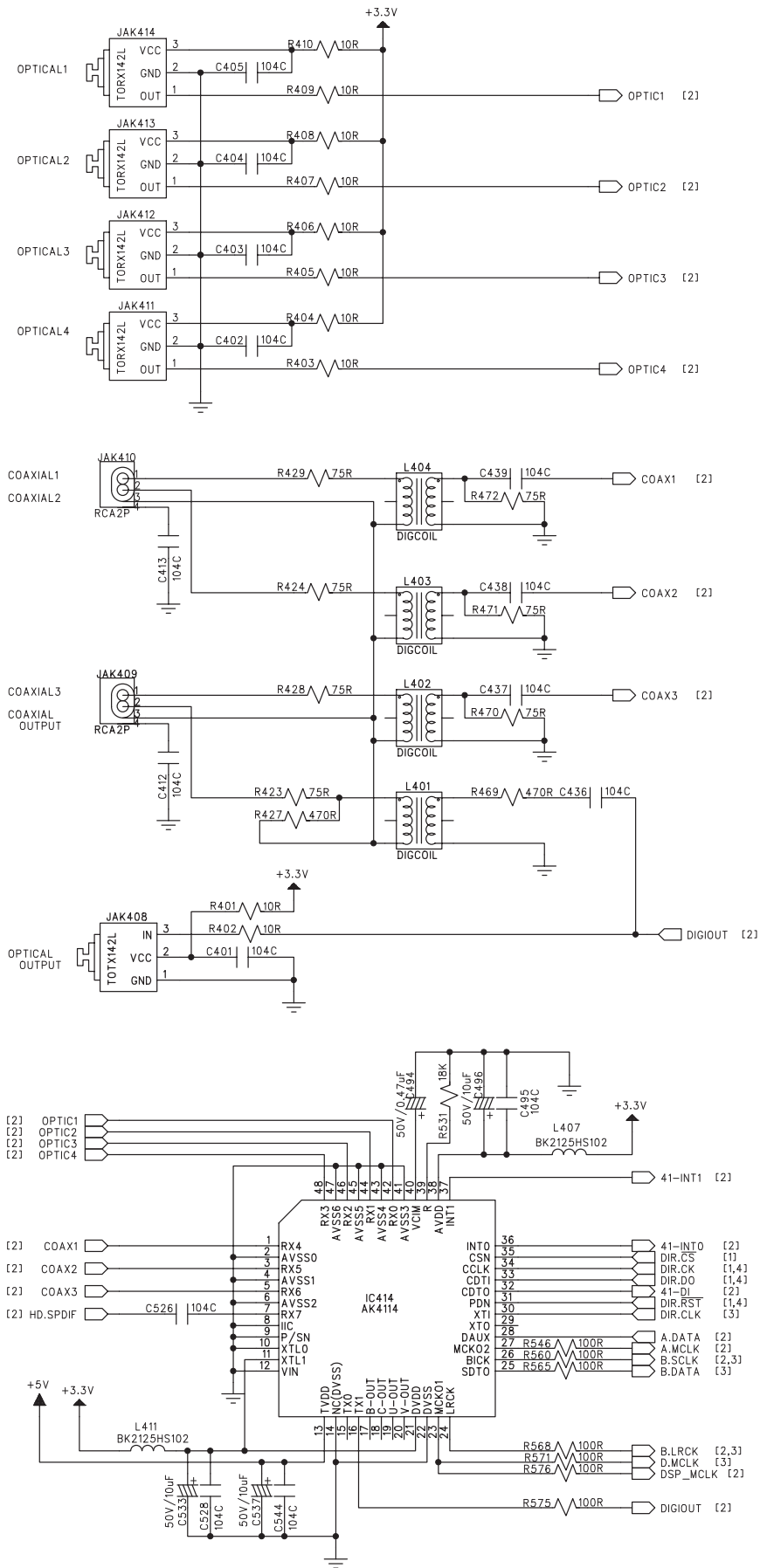
Front PCB 016 X-1494A01~02



Encoder, Power SW PCB 016 X-1396A01~03



**016 E-1495C00**

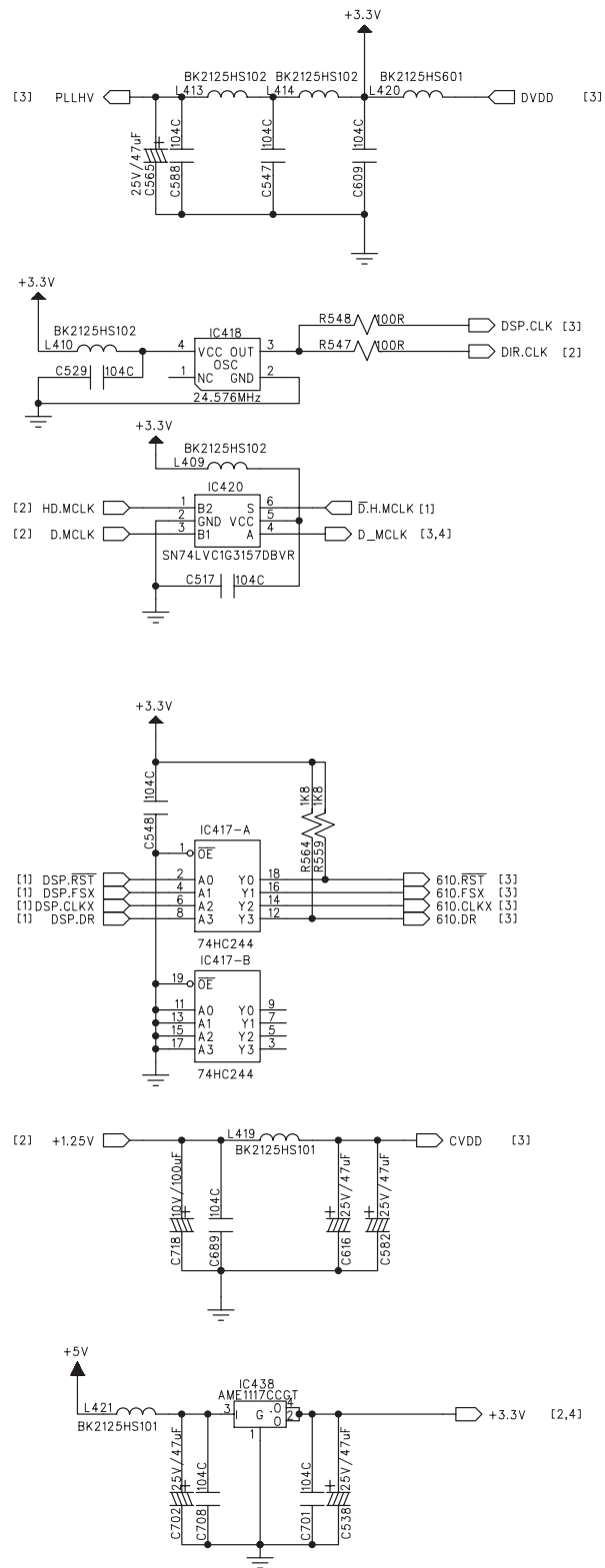




The schematic diagram illustrates the hardware for the 'The Art of Electronics' book. It features a multi-layer PCB layout with various components and connections. Key components include:

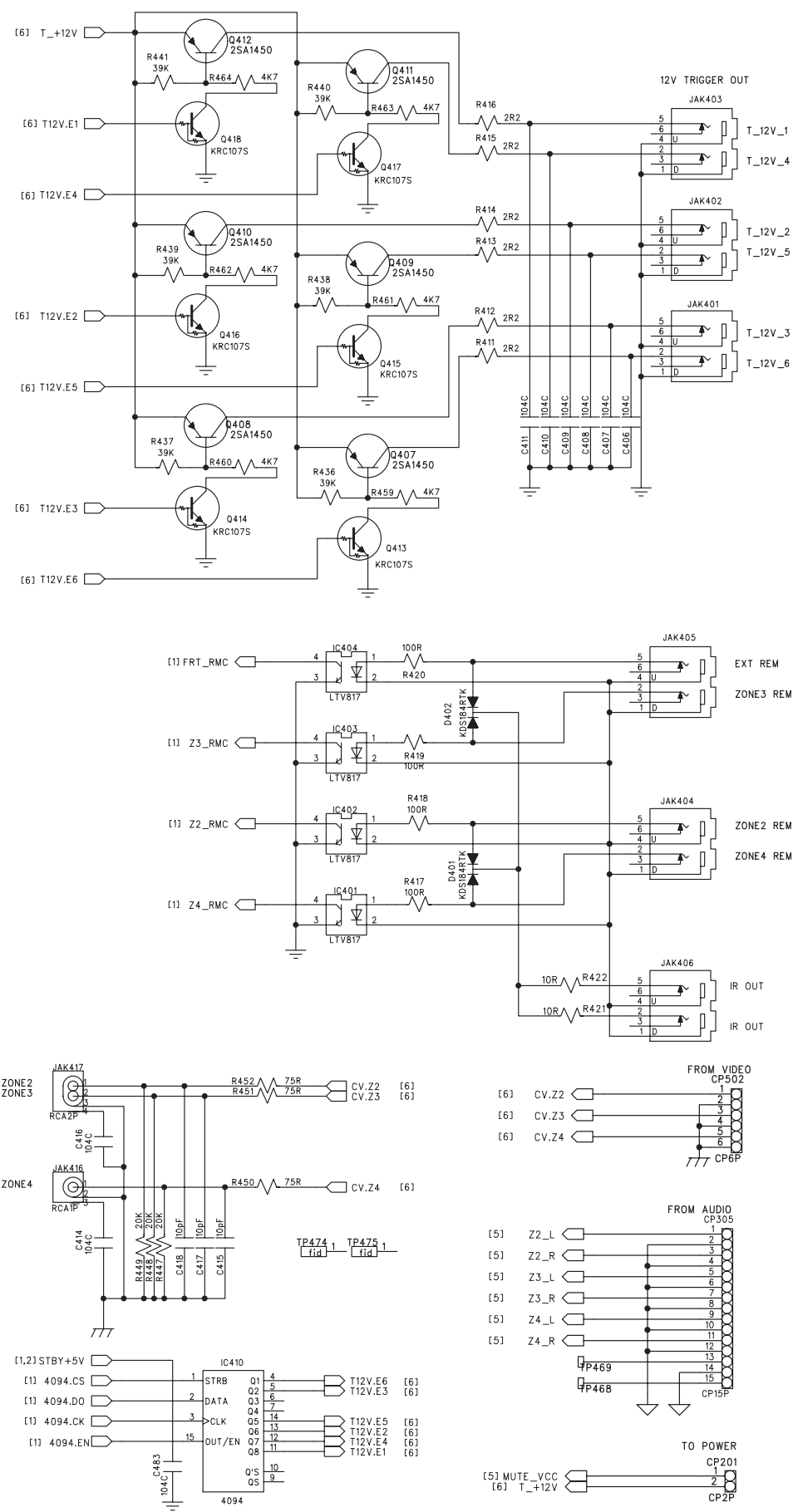
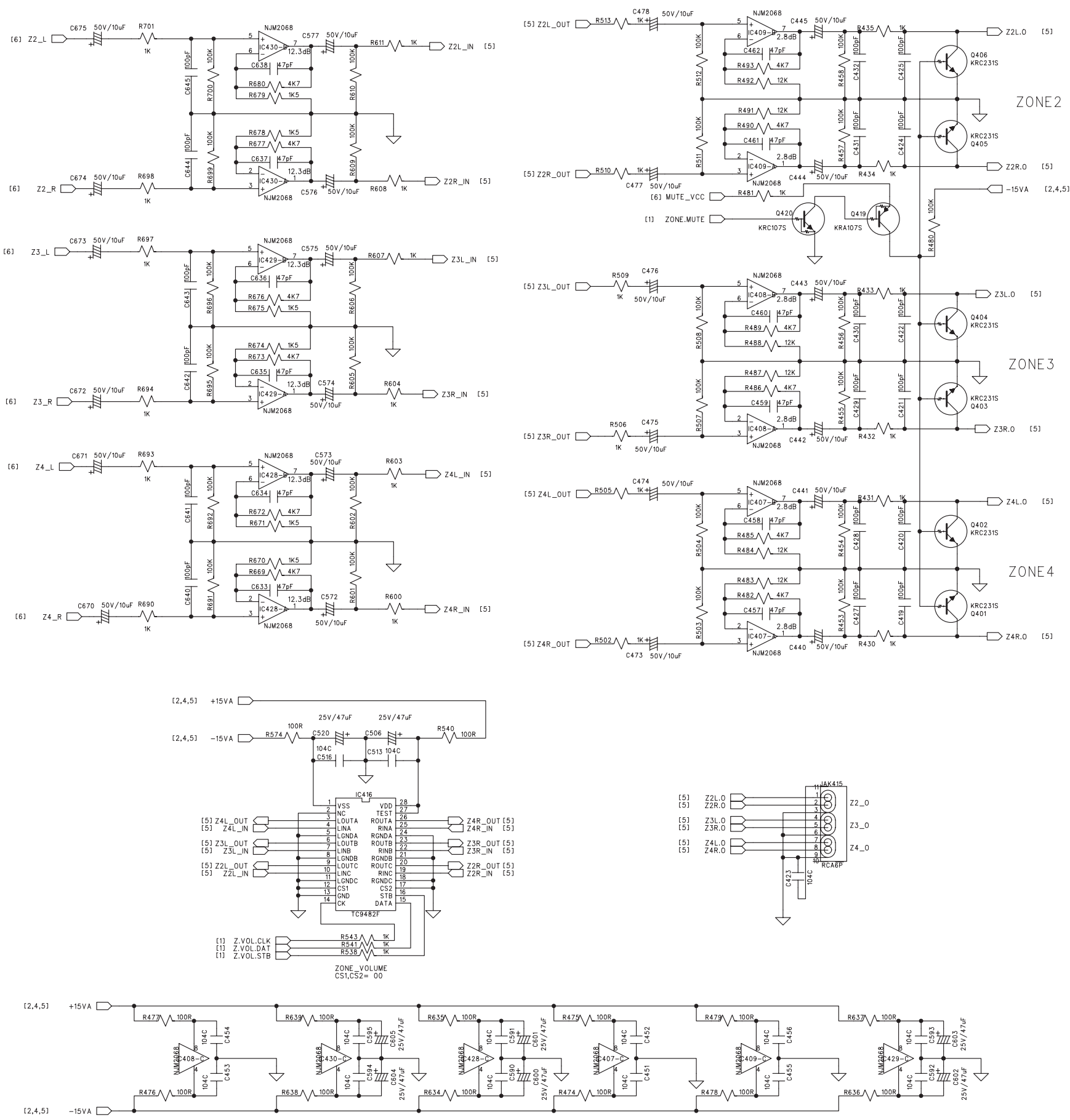
- Microcontrollers:** IC433 (top center) and IC432 (bottom center).
- Memory:** ES29LV160 (top center, below IC433).
- Passive Components:** Resistors (RM409, RM407, RM405, RM401, RM408, RM406, RM403, RM402), capacitors (C688, C685, C661, C651, C646, C606, R640, R688), and inductors (L416BK2125HS601).
- Connectors and Interfaces:** JTAG (top left), TRST (top left), EMU1 (top right), FWE (top left), FCE (top right), and ECLK0 (bottom right).
- Power and Grounding:** +3.3V supply lines and ground connections are shown throughout the board.

The diagram is divided into several sections, with component labels and pin numbers clearly visible. The layout includes a JTAG interface at the top left, a TRST pin at the top left, and an EMU1 pin at the top right. The main microcontroller IC433 is located in the top center, with its pins connected to various components. The ES29LV160 memory chip is located below IC433. The IC432 microcontroller is located in the bottom center. The RM409, RM407, RM405, and RM401 resistors are located on the left side of the board. The RM408, RM406, RM403, and RM402 resistors are located on the right side of the board. The C688, C685, C661, C651, C646, and C606 capacitors are located in the top right section. The R640 resistor is located in the top right section. The R688 resistor is located in the bottom right section. The L416BK2125HS601 inductor is located in the top left section. The +3.3V supply lines and ground connections are shown throughout the board.





Digital PCB (4/4) 016 E-1495C00



## C203A

