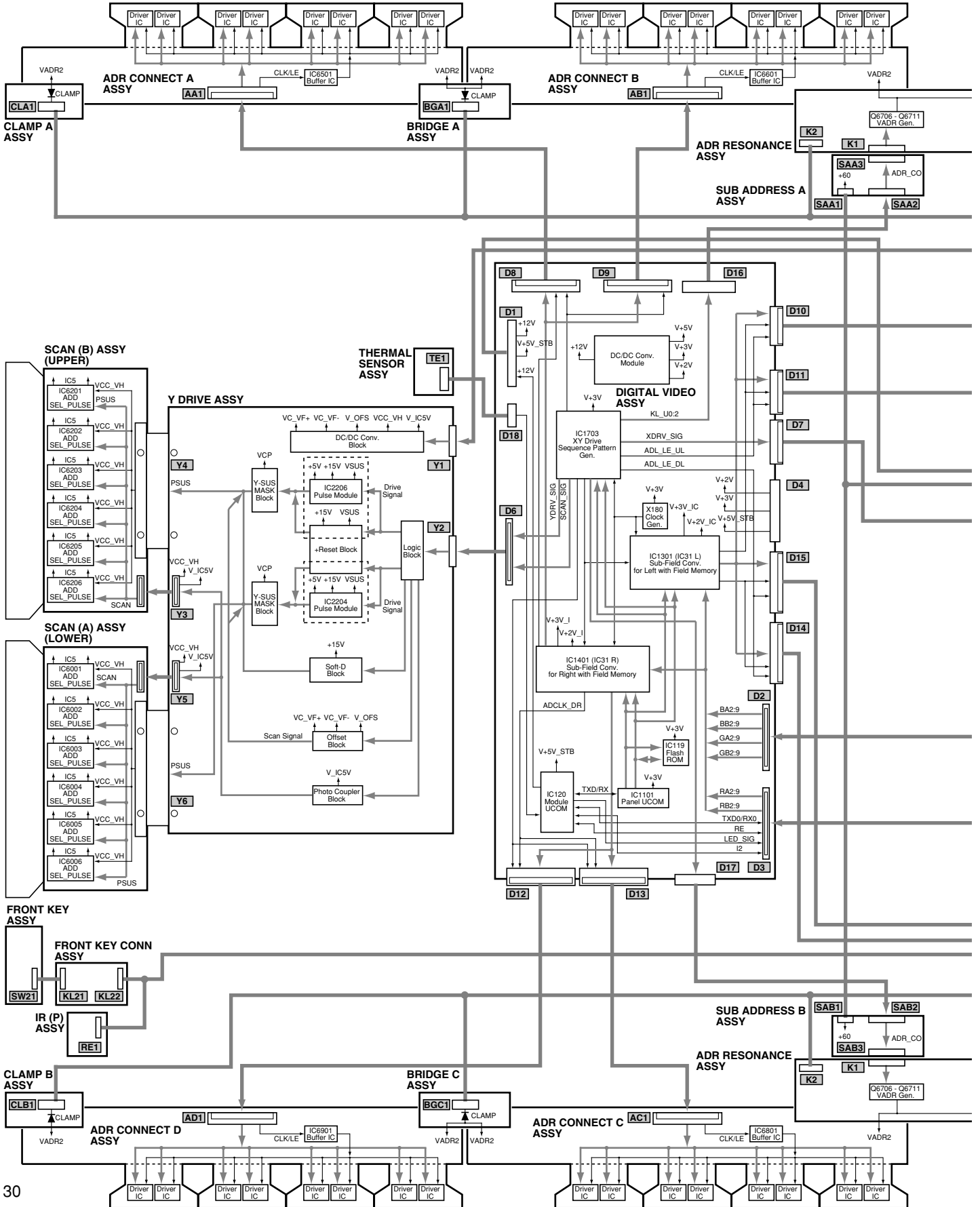


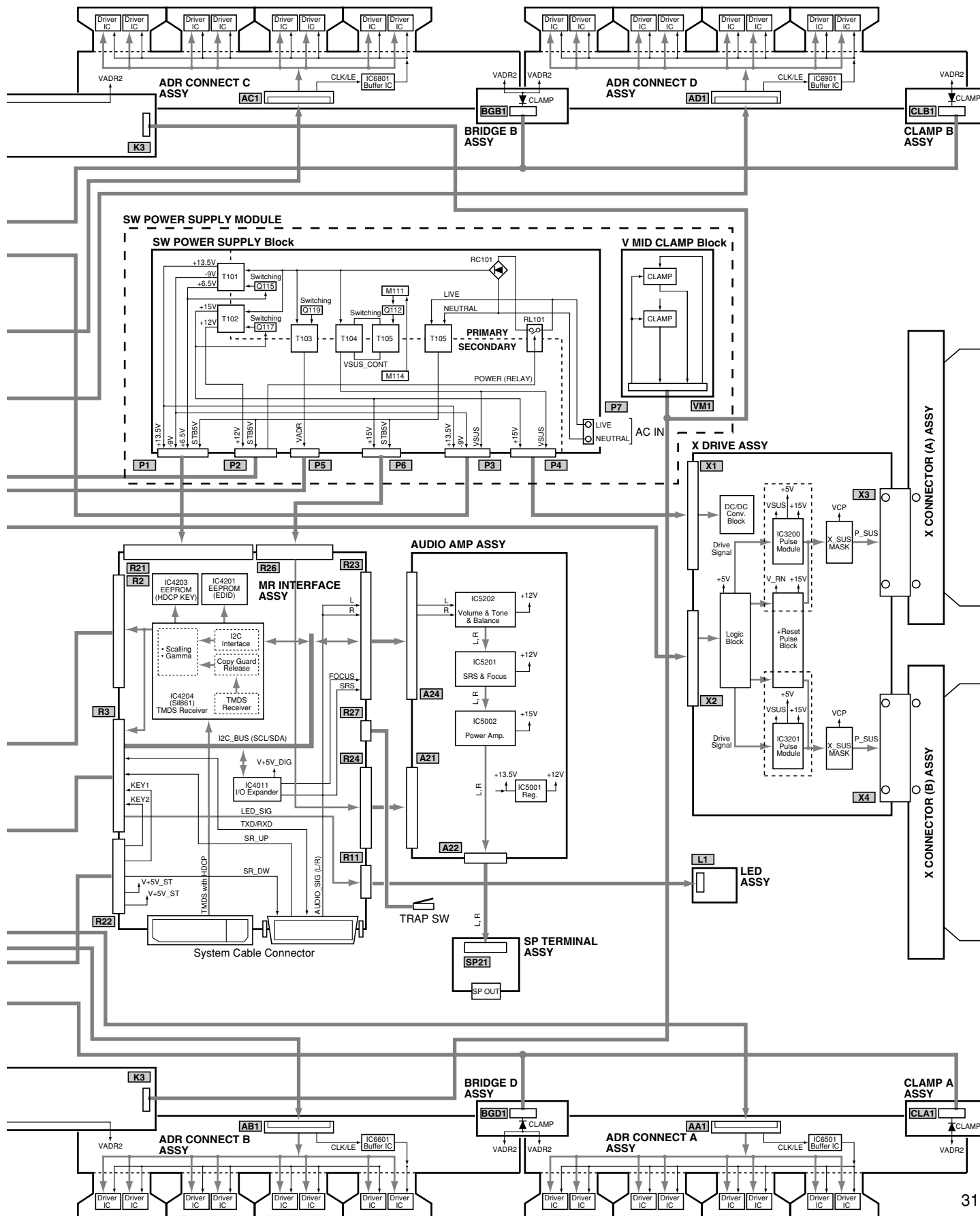
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

3.1.1 OVERALL DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



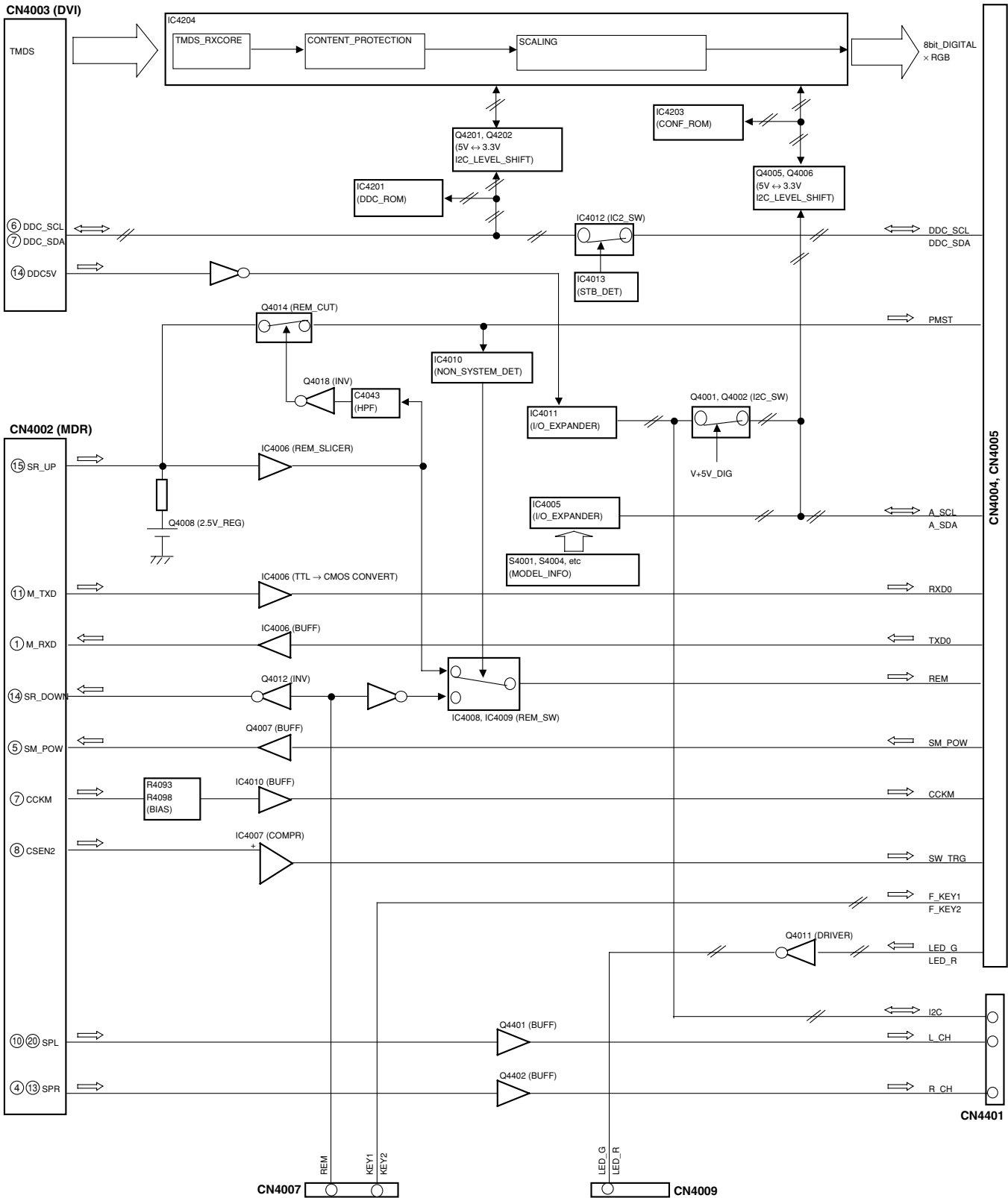
A

B

C

D

3.1.2 MR INTERFACE ASSY



● Voltages

CN4002 (MDR Connector) (↔ Media Receiver)

| No. | Name | Description | Voltage at INPUT4 NTSC Input |
|-----|---------|---|------------------------------|
| 1 | M_RXD | 232C bus (PDP → MR) | 0-5V swing square wave |
| 2 | GND | | |
| 3 | SENCE | Connecting detection for MR | 0.0V DC |
| 4 | SPR | Audio signal R ch | Analog audio signal wave |
| 5 | SMPOW | MR relay control | 3.5V DC |
| 6 | GND | | |
| 7 | CCKM | System activation detection | 1.9V DC |
| 8 | CSEN2 | System activation signal | 5.0V DC |
| 9 | CSEN1 | Not used | |
| 10 | SPL | Audio signal L ch | Analog audio signal wave |
| 11 | M_TXD | 232C bus (MR → PDP) | 0-3.3V swing square wave |
| 12 | GND | | |
| 13 | SPR | Audio signal R ch | Analog audio signal wave |
| 14 | SR_DW | Remote control signal | 5.0V DC |
| 15 | SR_UP | MDR connecting detection signal multiplex remote control signal | 3.75V DC |
| 16 | GND | | |
| 17 | FRASH_W | Not used | |
| 18 | SRST | Not used | |
| 19 | GND | | |
| 20 | SPL | Audio signal L ch | Analog audio signal wave |

CN4003 (DVI Connector) (↔ Media Receiver)

| No. | Name | Description | Voltage at INPUT4 NTSC Input |
|-----|---------|--------------------------|------------------------------|
| 1 | RX2- | DVI signal | DVI signal |
| 2 | RX2+ | DVI signal | DVI signal |
| 3 | GND | | |
| 4 | NC | | |
| 5 | NC | | |
| 6 | DDC_SCL | I2C for DDC | 0-5V swing square wave |
| 7 | DDC_SDA | I2C for DDC | 0-5V swing square wave |
| 8 | NC | | |
| 9 | RX1- | DVI signal | DVI signal |
| 10 | RX1+ | DVI signal | DVI signal |
| 11 | GND | | |
| 12 | NC | | |
| 13 | NC | | |
| 14 | DDC_+5V | I2C power supply for DDC | 5.0V DC |
| 15 | GND | | |
| 16 | HPD | HOT_PLUG detection | 5.0V DC |
| 17 | RX0- | DVI signal | DVI signal |
| 18 | RX0+ | DVI signal | DVI signal |
| 19 | GND | | |
| 20 | NC | | |
| 21 | NC | | |
| 22 | GND | | |
| 23 | RXC+ | DVI signal | DVI signal |
| 24 | RXC- | DVI signal | DVI signal |

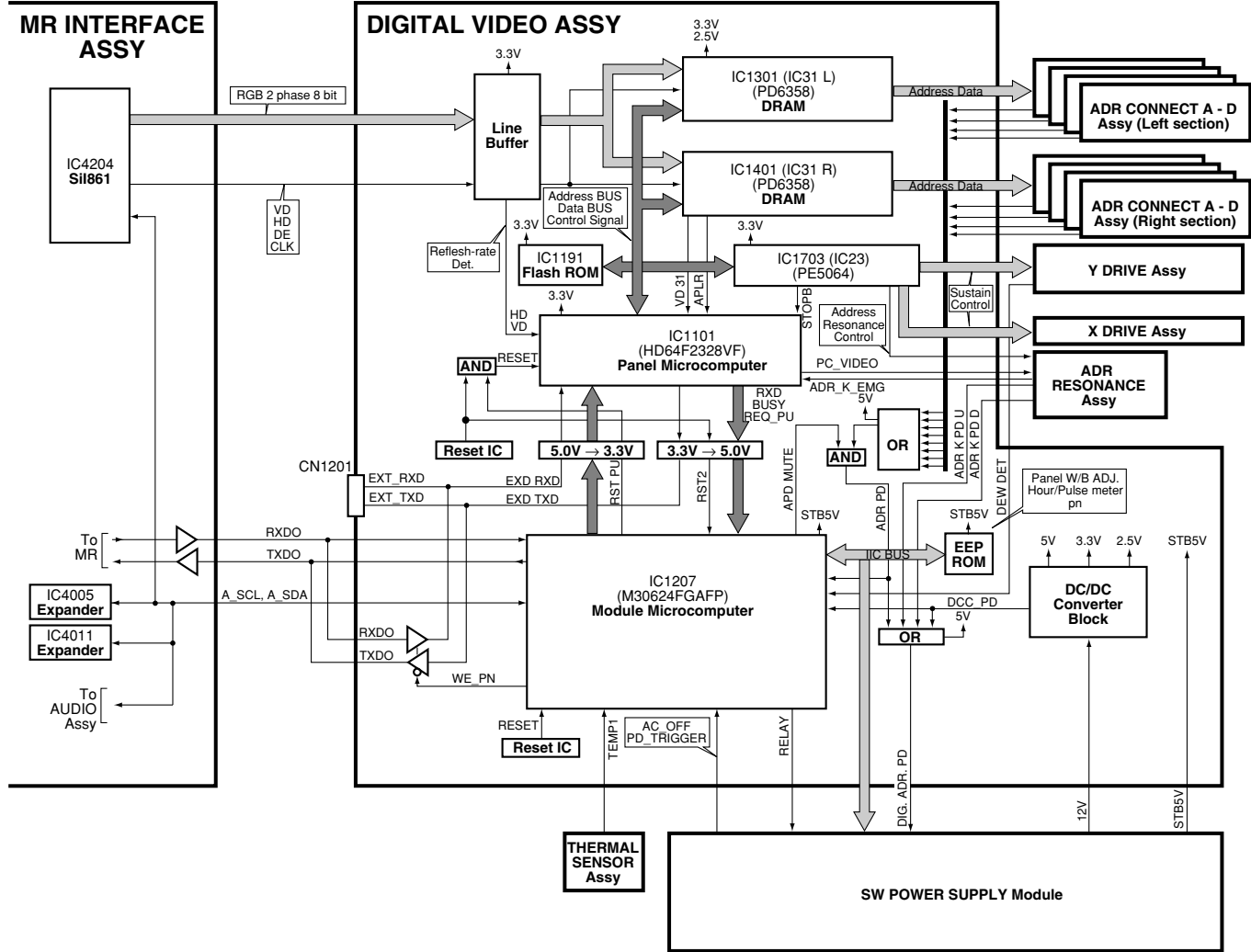
CN4004 (50P_FFC Connector) (↔ DIGITAL VIDEO Assy)

| No. | Name | Description | Voltage at INPUT4 NTSC Input |
|-----|------|--------------------|------------------------------|
| 1 | GND | | |
| 2 | GND | | |
| 3 | NC | | |
| 4 | NC | | |
| 5 | NC | | |
| 6 | NC | | |
| 7 | BB0 | 8 bit video signal | 0-3.3V swing square wave |
| 8 | BA0 | 8 bit video signal | 0-3.3V swing square wave |
| 9 | BB1 | 8 bit video signal | 0-3.3V swing square wave |
| 10 | BA1 | 8 bit video signal | 0-3.3V swing square wave |
| 11 | BB2 | 8 bit video signal | 0-3.3V swing square wave |
| 12 | BA2 | 8 bit video signal | 0-3.3V swing square wave |
| 13 | BB3 | 8 bit video signal | 0-3.3V swing square wave |
| 14 | BA3 | 8 bit video signal | 0-3.3V swing square wave |
| 15 | BB4 | 8 bit video signal | 0-3.3V swing square wave |
| 16 | BA4 | 8 bit video signal | 0-3.3V swing square wave |
| 17 | BB5 | 8 bit video signal | 0-3.3V swing square wave |
| 18 | BA5 | 8 bit video signal | 0-3.3V swing square wave |
| 19 | BB6 | 8 bit video signal | 0-3.3V swing square wave |
| 20 | BA6 | 8 bit video signal | 0-3.3V swing square wave |
| 21 | BB7 | 8 bit video signal | 0-3.3V swing square wave |
| 22 | BA7 | 8 bit video signal | 0-3.3V swing square wave |
| 23 | GND | | |
| 24 | GND | | |
| 25 | NC | | |
| 26 | NC | | |
| 27 | NC | | |
| 28 | NC | | |
| 29 | GB0 | 8 bit video signal | 0-3.3V swing square wave |
| 30 | GA0 | 8 bit video signal | 0-3.3V swing square wave |
| 31 | GB1 | 8 bit video signal | 0-3.3V swing square wave |
| 32 | GA1 | 8 bit video signal | 0-3.3V swing square wave |
| 33 | GB2 | 8 bit video signal | 0-3.3V swing square wave |
| 34 | GA2 | 8 bit video signal | 0-3.3V swing square wave |
| 35 | GB3 | 8 bit video signal | 0-3.3V swing square wave |
| 36 | GA3 | 8 bit video signal | 0-3.3V swing square wave |
| 37 | GB4 | 8 bit video signal | 0-3.3V swing square wave |
| 38 | GA4 | 8 bit video signal | 0-3.3V swing square wave |
| 39 | GB5 | 8 bit video signal | 0-3.3V swing square wave |
| 40 | GA5 | 8 bit video signal | 0-3.3V swing square wave |
| 41 | GB6 | 8 bit video signal | 0-3.3V swing square wave |
| 42 | GA6 | 8 bit video signal | 0-3.3V swing square wave |
| 43 | GB7 | 8 bit video signal | 0-3.3V swing square wave |
| 44 | GA7 | 8 bit video signal | 0-3.3V swing square wave |
| 45 | GND | | |
| 46 | GND | | |
| 47 | NC | | |
| 48 | NC | | |
| 49 | GND | | |
| 50 | GND | | |

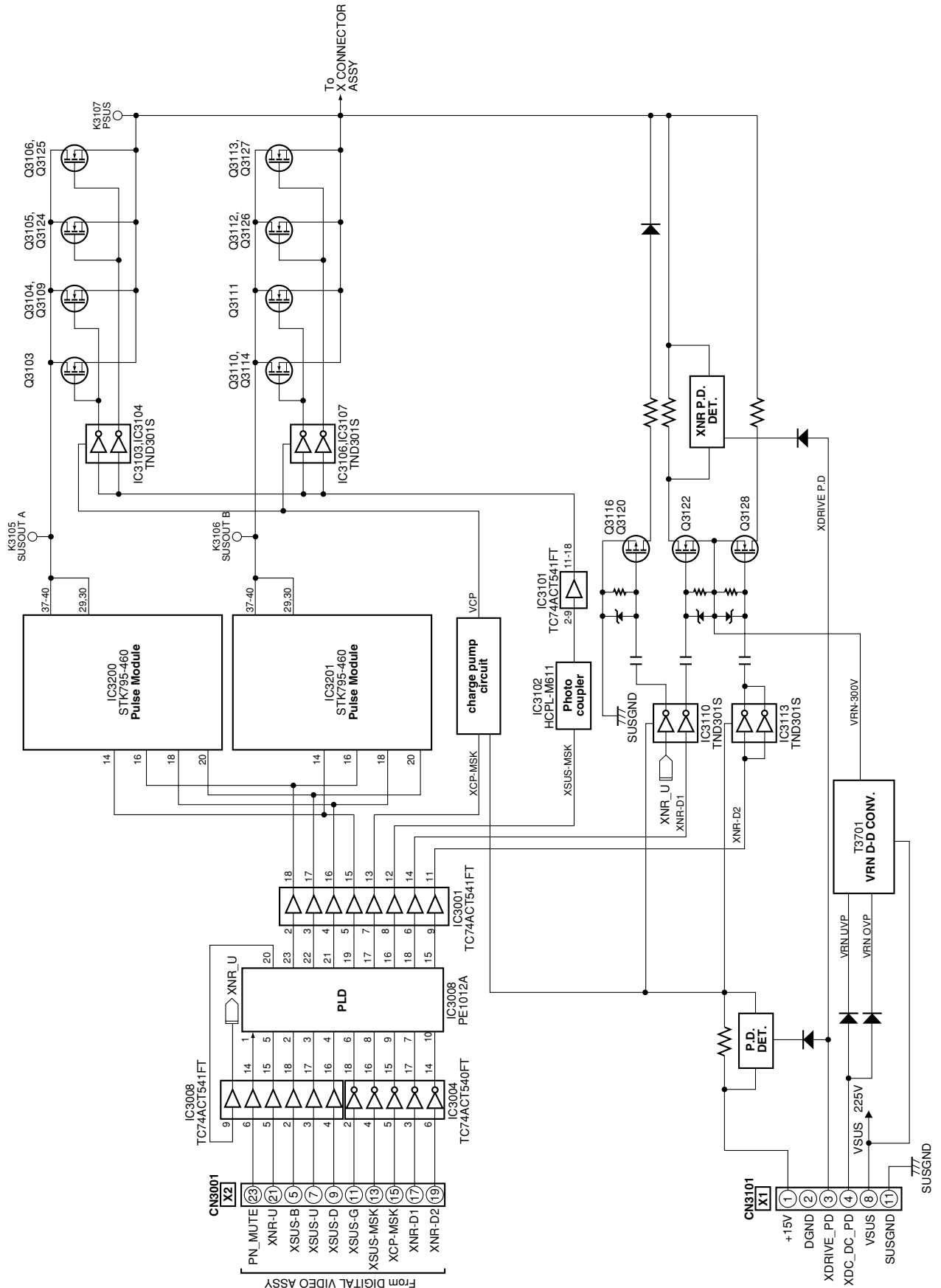
CN4005 (50P_FFC Connector) (↔ DIGITAL VIDEO Assy)

| No. | Name | Description | Voltage at INPUT4 NTSC Input |
|-----|---------|-----------------------------------|---|
| 1 | NC | | |
| 2 | NC | | |
| 3 | NC | | |
| 4 | NC | | |
| 5 | RB0 | 8 bit video signal | 0-3.3V swing square wave |
| 6 | RA0 | 8 bit video signal | 0-3.3V swing square wave |
| 7 | RB1 | 8 bit video signal | 0-3.3V swing square wave |
| 8 | RA1 | 8 bit video signal | 0-3.3V swing square wave |
| 9 | RB2 | 8 bit video signal | 0-3.3V swing square wave |
| 10 | RA2 | 8 bit video signal | 0-3.3V swing square wave |
| 11 | RB3 | 8 bit video signal | 0-3.3V swing square wave |
| 12 | RA3 | 8 bit video signal | 0-3.3V swing square wave |
| 13 | RB4 | 8 bit video signal | 0-3.3V swing square wave |
| 14 | RA4 | 8 bit video signal | 0-3.3V swing square wave |
| 15 | RB5 | 8 bit video signal | 0-3.3V swing square wave |
| 16 | RA5 | 8 bit video signal | 0-3.3V swing square wave |
| 17 | RB6 | 8 bit video signal | 0-3.3V swing square wave |
| 18 | RA6 | 8 bit video signal | 0-3.3V swing square wave |
| 19 | RB7 | 8 bit video signal | 0-3.3V swing square wave |
| 20 | RA7 | 8 bit video signal | 0-3.3V swing square wave |
| 21 | GND | | |
| 22 | CLK | Clock | 0-3.3V swing square wave (40MHz) |
| 23 | GND | | |
| 24 | DE | Data enable | 0-3.3V swing square wave (+ polarity) |
| 25 | GND | | |
| 26 | HD | Horizontal sync. signal | 0-3.3V swing square wave |
| 27 | GND | | |
| 28 | VD | Vertical sync. signal | 0-3.3V swing square wave (- polarity 48.4kHz) |
| 29 | GND | | |
| 30 | A_SCL | I2C bus | 0-5V swing square wave |
| 31 | F_KEY1 | Front key signal 1 | 5.0V DC |
| 32 | PMST | MDR connection Detect signal | 3.75V DC |
| 33 | SMPOW | MRrelay control | 5.0V DC |
| 34 | A_MUTE | Audio mute | 0.0V DC |
| 35 | CCKM | System activation detect | 1.9V DC |
| 36 | M_STATE | Si1861 I2C bus master information | 0.0V DC |
| 37 | SW_STC | Not used | |
| 38 | A_NG | Not used | |
| 39 | SW_TRG | System activation signal | 5.0V DC |
| 40 | F_KEY2 | Front key signal 2 | 5.0V DC |
| 41 | A_SDA | I2C bus | 0-5V swing square wave |
| 42 | *LED_G | Green LED control signal | 0.0V DC |
| 43 | TXD0 | 232C bus | 0-5V swing square wave |
| 44 | *LED_R | Red LED control signal | 5.0V DC |
| 45 | RXD0 | 232C bus | 0-5V swing square wave |
| 46 | DDC_SCL | I2C for DDC | 0-5V swing square wave |
| 47 | REM | Remote control signal | 5.0V DC |
| 48 | DDC_SDA | I2C for DDC | 0-5V swing square wave |
| 49 | GND | | |
| 50 | GND | | |

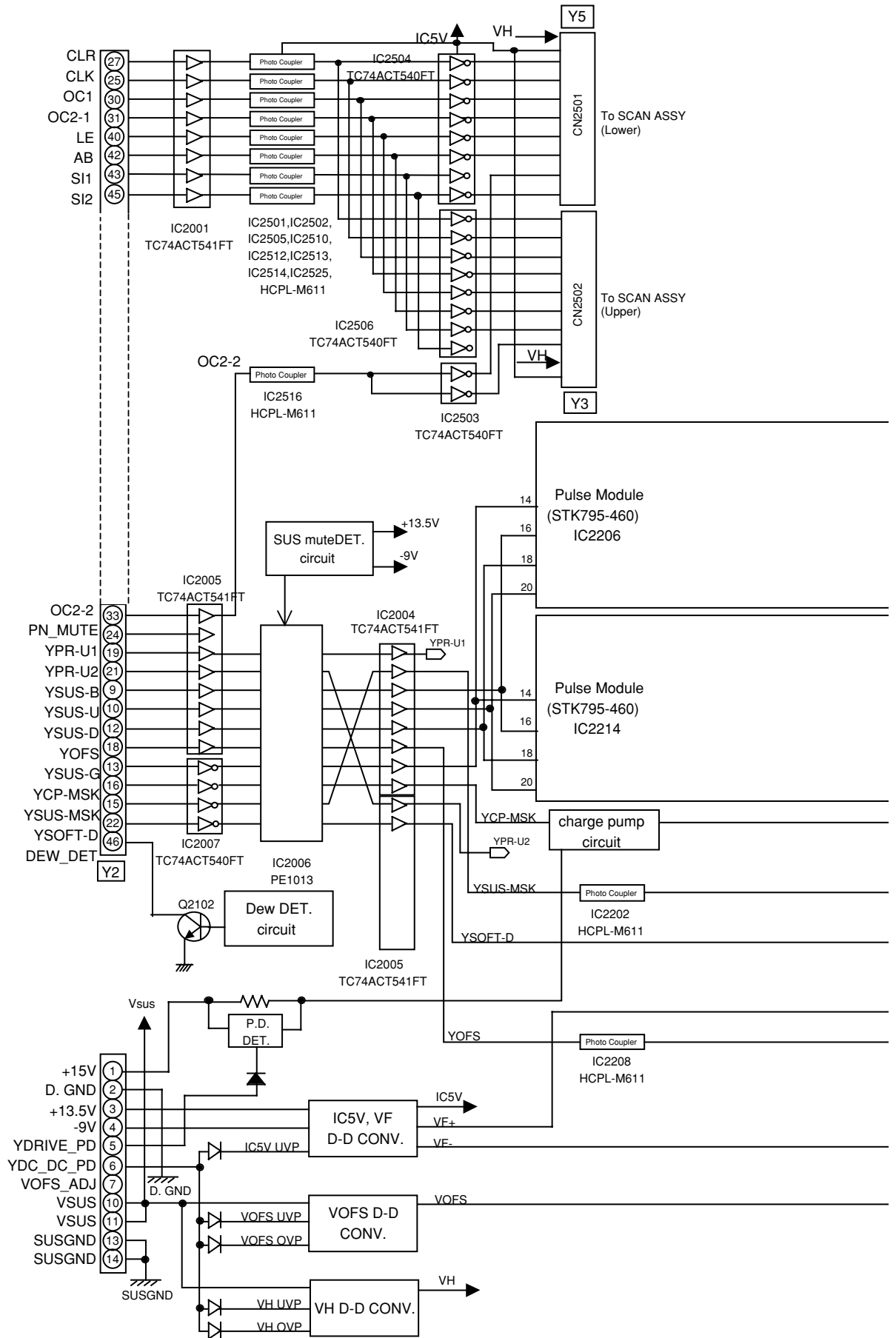
3.1.3 DIGITAL VIDEO ASSY

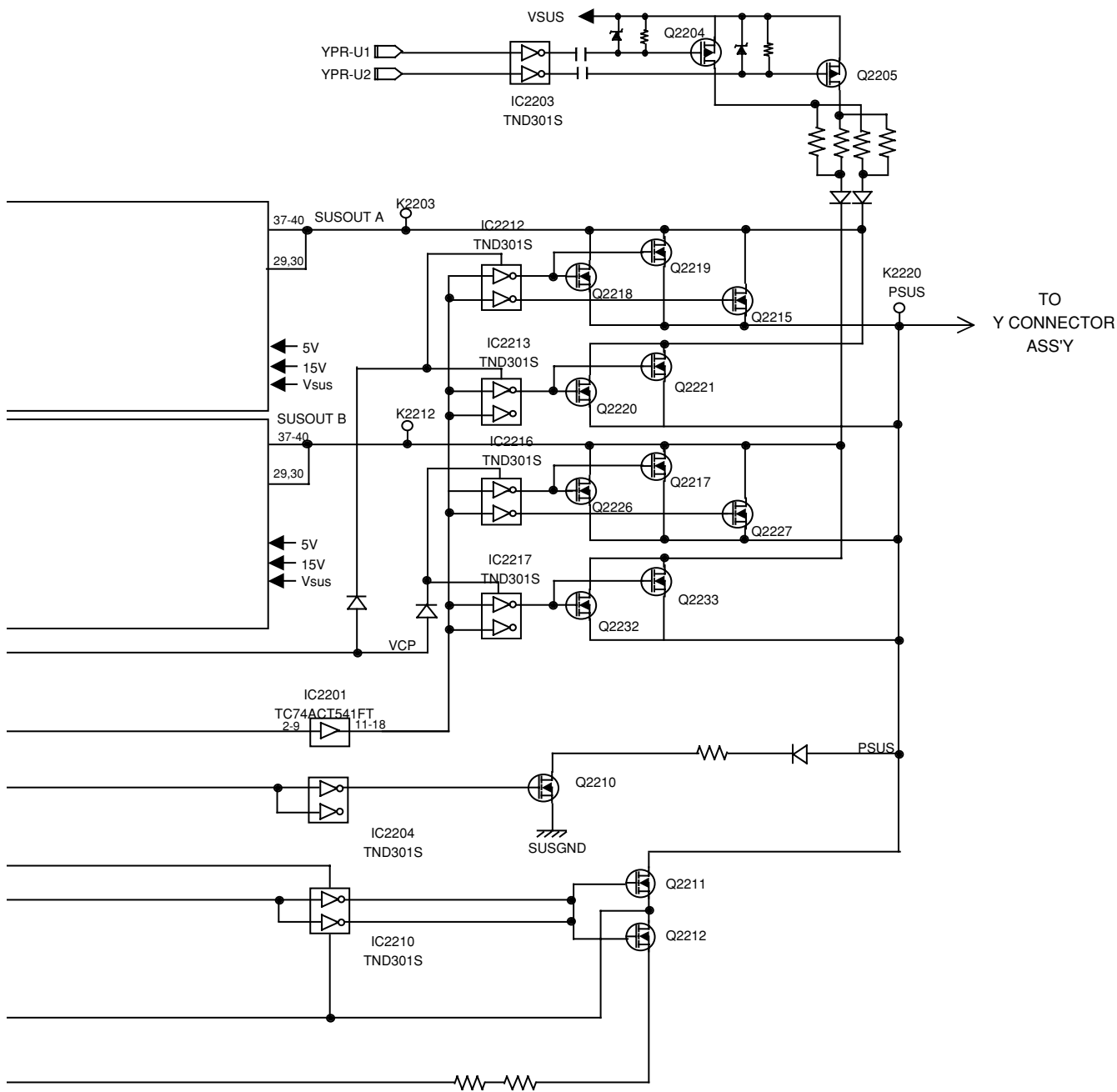


3.1.4 X DRIVE ASSY



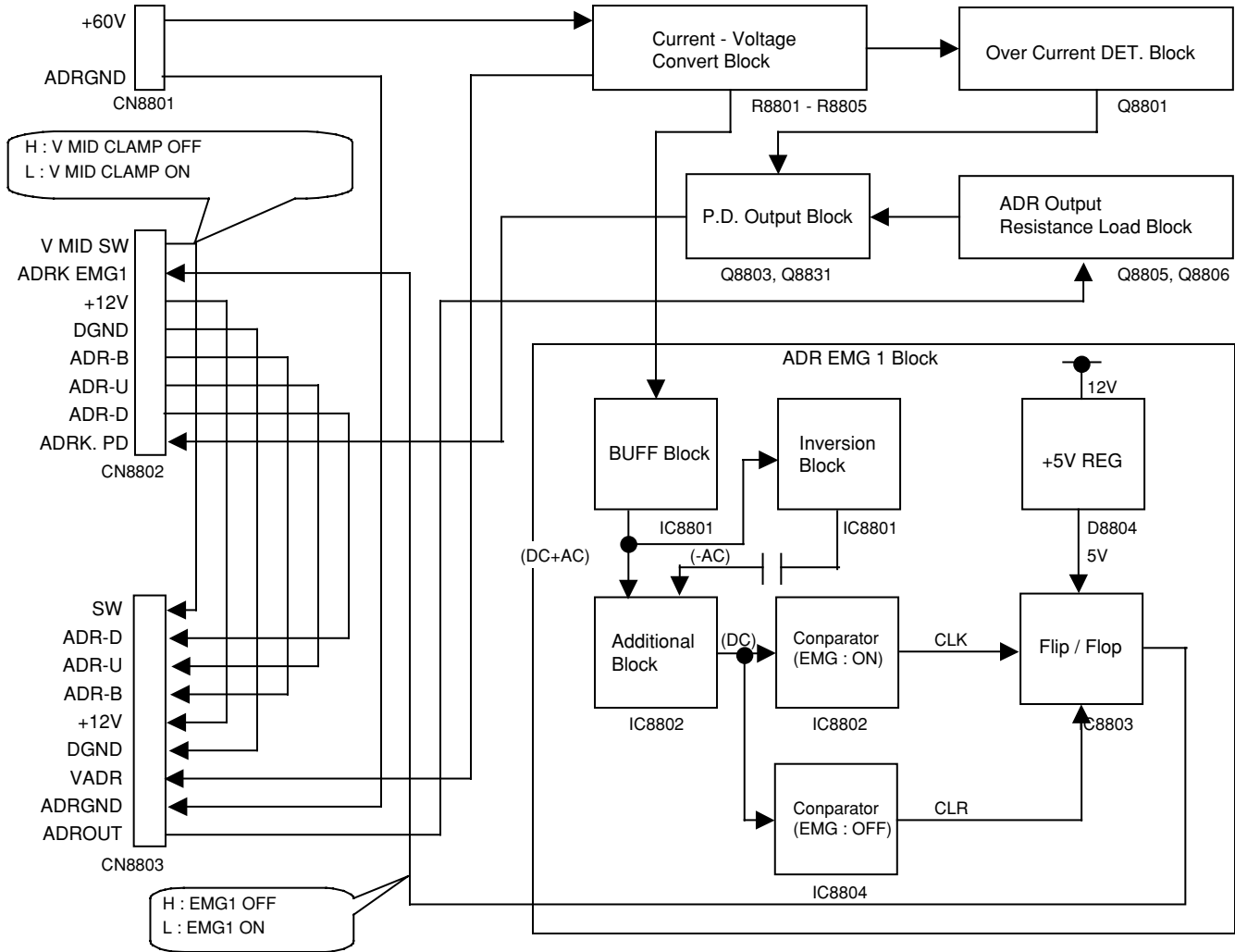
3.1.5 Y DRIVE ASSY



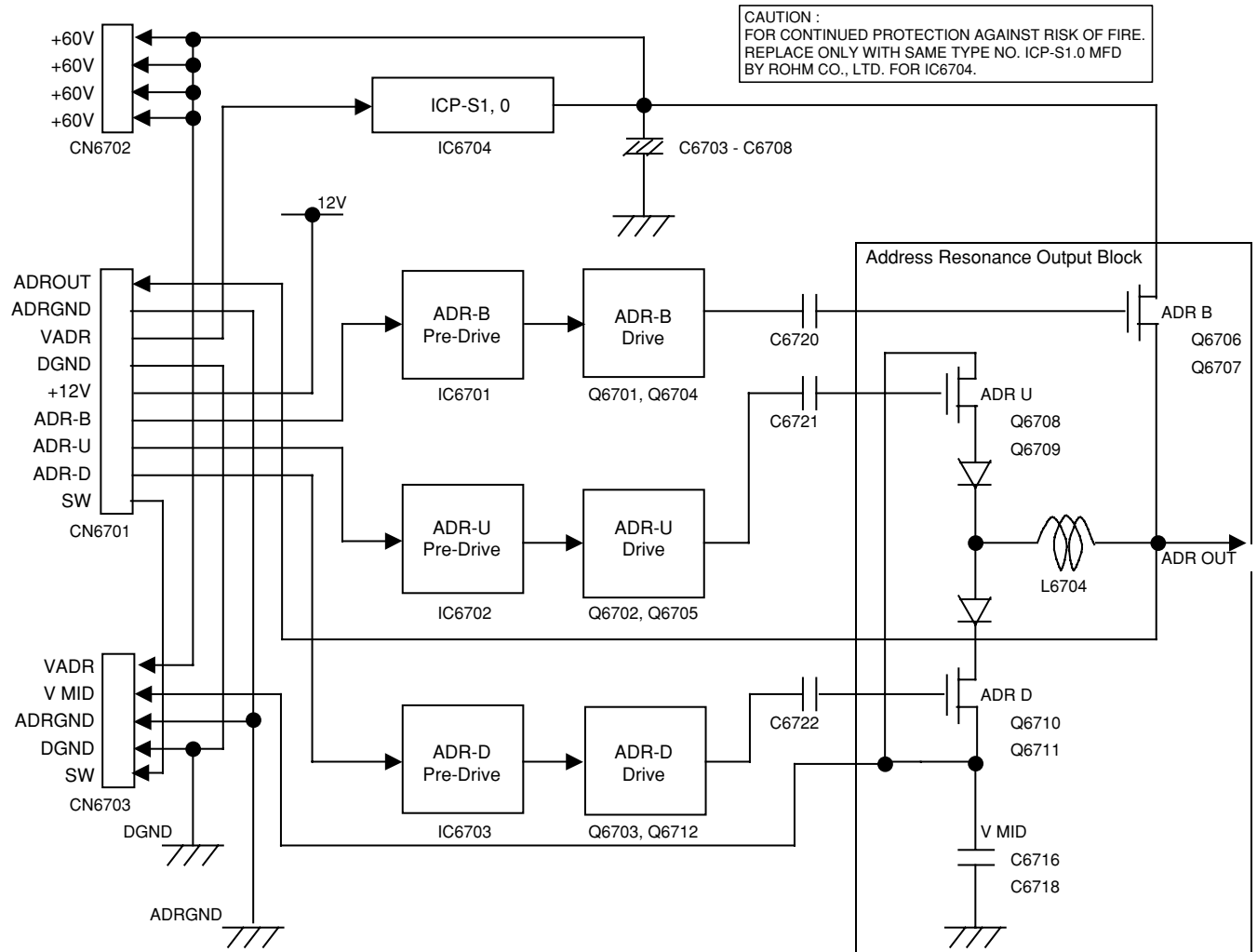


A
B
C
D

3.1.6 SUB ADDRESS A and B ASSYS

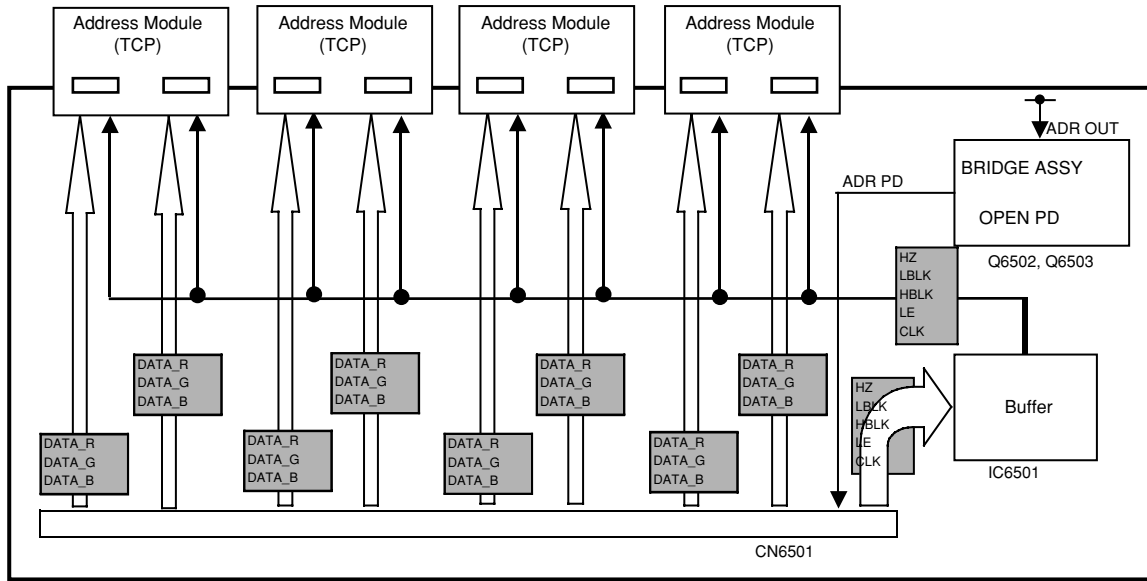


3.1.7 ADR RESONANCE ASSY



A
B
C
D

3.1.8 ADR CONNECT A, B, C and D ASSYS



3.1.9 AUDIO AMP and SP TERMINAL ASSYS

AUDIO AMP ASSY

IC5202 (CXA2021S)

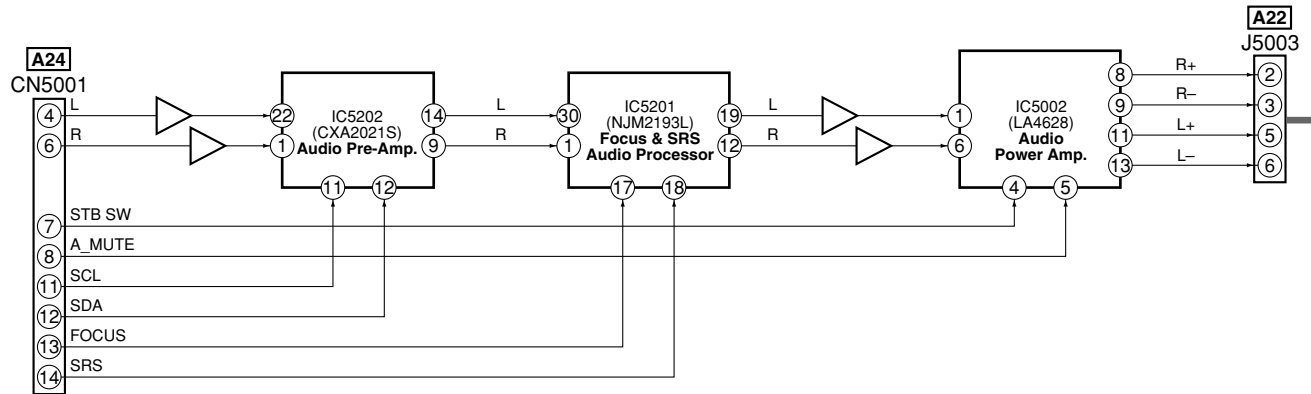
| No. | Voltage (V) | No. | Voltage (V) |
|-----|-------------|-----|-------------|
| 1 | 5.9 | 12 | 5.25 |
| 2 | 0 | 13 | 1.73 |
| 3 | 5.95 | 14 | 5.95 |
| 4 | 5.94 | 15 | 5.92 |
| 5 | 5.98 | 16 | 5.91 |
| 6 | 6.02 | 17 | 5.93 |
| 7 | 6.02 | 18 | 5.92 |
| 8 | 7.38 | 19 | 5.94 |
| 9 | 5.95 | 20 | 5.95 |
| 10 | 1.55 | 21 | 11.91 |
| 11 | 5.24 | 22 | 5.9 |

IC5201 (NJM2193L)

| No. | Voltage (V) | No. | Voltage (V) |
|-----|-------------|-----|-------------|
| 1 | 5.95 | 16 | 11.91 |
| 2 | 5.94 | 17 | 0 |
| 3 | 5.84 | 18 | 0 |
| 4 | 5.98 | 19 | 5.98 |
| 5 | 5.98 | 20 | 5.91 |
| 6 | 5.97 | 21 | 5.97 |
| 7 | 5.98 | 22 | 5.98 |
| 8 | 5.98 | 23 | 5.98 |
| 9 | 5.98 | 24 | 5.98 |
| 10 | 5.97 | 25 | 5.97 |
| 11 | 5.97 | 26 | 5.98 |
| 12 | 5.98 | 27 | 5.98 |
| 13 | 5.96 | 28 | 5.84 |
| 14 | 5.98 | 29 | 5.94 |
| 15 | 0 | 30 | 5.95 |

IC5002 (LA4628)

| No. | Voltage (V) |
|-----|-------------|
| 1 | 1.6 |
| 2 | 7.5 |
| 3 | 0 |
| 4 | 3.37 |
| 5 | 2.29 |
| 6 | 1.6 |
| 7 | 1.97 |
| 8 | 7.3 |
| 9 | 7.3 |
| 10 | 0 |
| 11 | 7.3 |
| 12 | 0 |
| 13 | 7.3 |
| 14 | 15 |



SP TERMINAL ASSY

