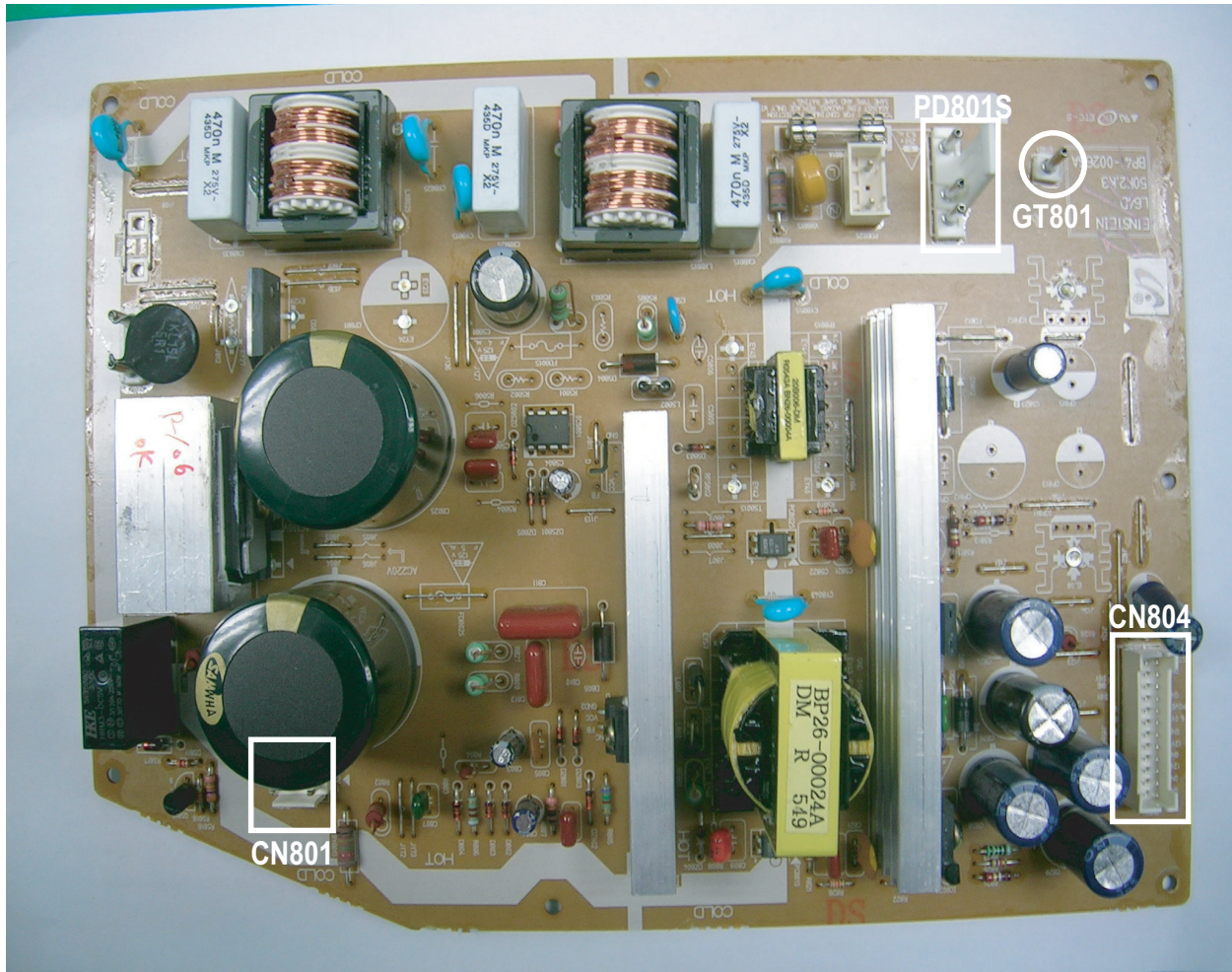


9. PCB Diagram

9-1 Power Board

9-1-1 Assy Power Board



■ DC Power Supply

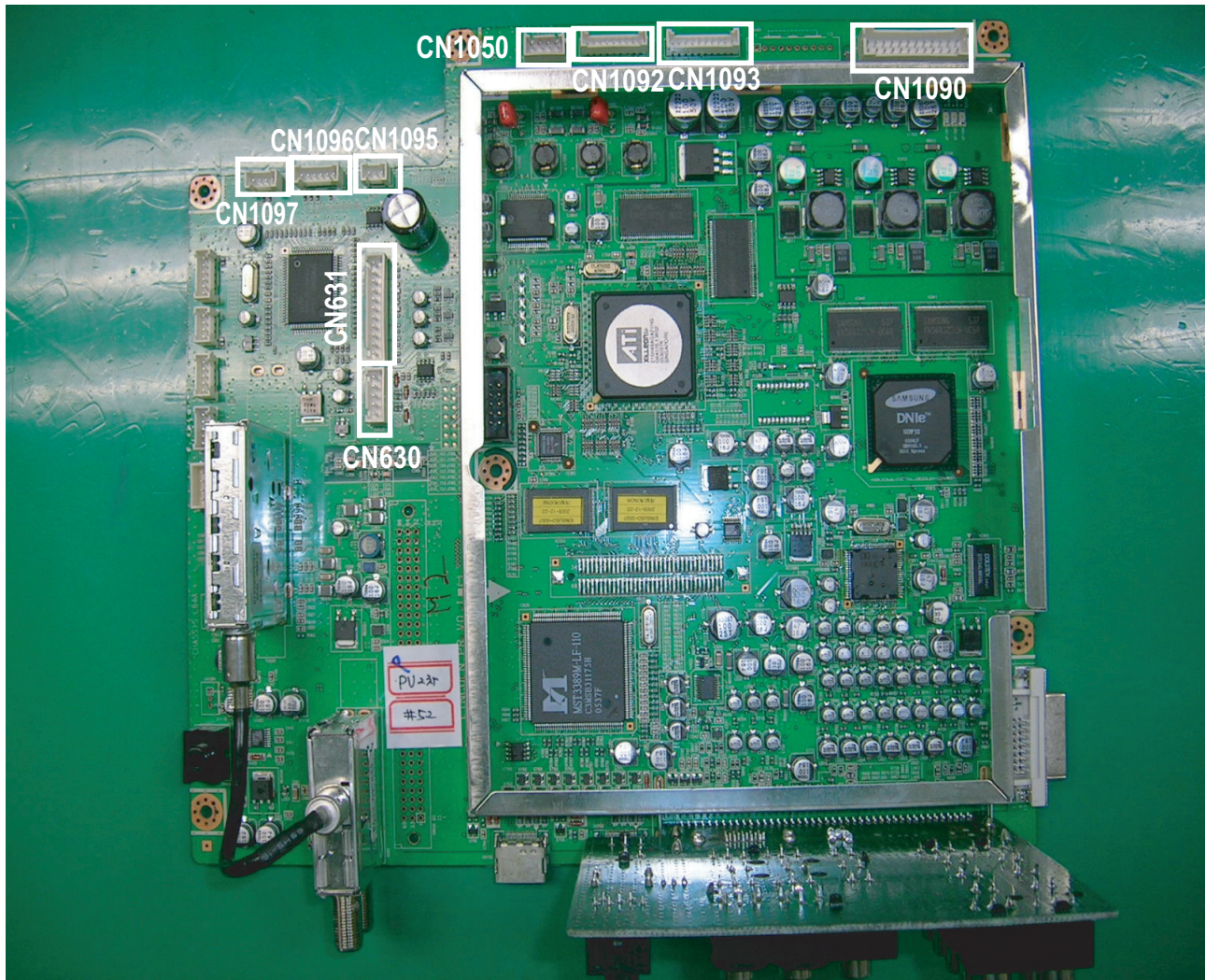
(Supplies DC power to the Main PCB. The analog board is responsible for the power supply to the digital/DMD board.)

9-1-2 Names & Roles of Key Parts

- * CN801 : Supplies power (DC330V \pm 10%) to the ballast.
- * GT801 : Anti-lightning wire connected to the digital board. The anti-lightning wire should be installed for safety purposes.
- * PD801S : Connecting with power cable.
- * CN804 : Supplies power to Main board.

9-2 Main Board

9-2-1 Assy Main Board



- Microprocessor (Generates turn-on signal to power board)
- All Digital Video Processing
- OSD / Menu
- Reset Switch
- Distributes supply voltage from the Power Board to DMD Board.
- Transfers Turn-on Command to Power Board.
- Analog Video Switching / Processing
- Analog Audio Switching / Processing

9-2-2 Names & Roles of Key Parts

* High Definition Multimedia Interface :

The HDMI™ (High Definition Multimedia Interface) supports uncompressed standard and high definition digital video formats and existing digital multi-channel audio formats.

* CN1090 : Transfer Power sources from SMPS board.

* CN1093 : connection with Sub-Detect Board.

Transfer power signal and I2C signal

* CN1092 : Transfer Power signal to DMD board.

* CN1050 : Transfer Sound signal to Speaker.

* CN1095 : Receive IR signal.

* CN1096 : Transfer Front LED power signal and Power switch signal.

* CN1097 : Receive Side Key signal.

* CN631 : Transfer AV & Sound Signal from Side AV Board.

* CN630 : Connection with Wiselink.

9-2-3 Main Board Connector Pin

CN1090

| Pin Name | PIN No. | | Pin Name |
|----------|---------|----|------------|
| STB-5V | 1 | 2 | Power-Mute |
| G | 3 | 4 | S16VB |
| 33VB | 5 | 6 | G |
| G | 7 | 8 | S16VB |
| POWER-SW | 9 | 10 | G |
| D5.7V | 11 | 12 | D5.7V |
| G | 13 | 14 | G |
| 12VB | 15 | 16 | 12VB |
| G | 17 | 18 | G |
| 12VB | 19 | 20 | 12VB |
| G | 21 | 22 | G |
| G | 23 | 24 | 70VB |

CN1092

| Pin No. | Pin Name |
|---------|----------|
| 1 | D5V |
| 2 | D5V |
| 3 | G |
| 4 | G |
| 5 | 12VB |
| 6 | 12VB |
| 7 | G |
| 8 | G |
| 9 | G |

CN1093

| Pin No. | Pin Name |
|---------|----------|
| 1 | G |
| 2 | 12VB |
| 3 | G |
| 4 | SDA-M1 |
| 5 | SCL-M1 |
| 6 | G |
| 7 | STB-5V |
| 8 | G |
| 9 | 70VB |
| 10 | G |

CN1097

| Pin No. | Pin Name |
|---------|----------|
| 1 | G |
| 2 | KEY1 |
| 3 | KEY2 |
| 4 | G |

CN1095

| Pin No. | Pin Name |
|---------|----------|
| 1 | IR |
| 2 | G |
| 3 | STB5V |

CN1096

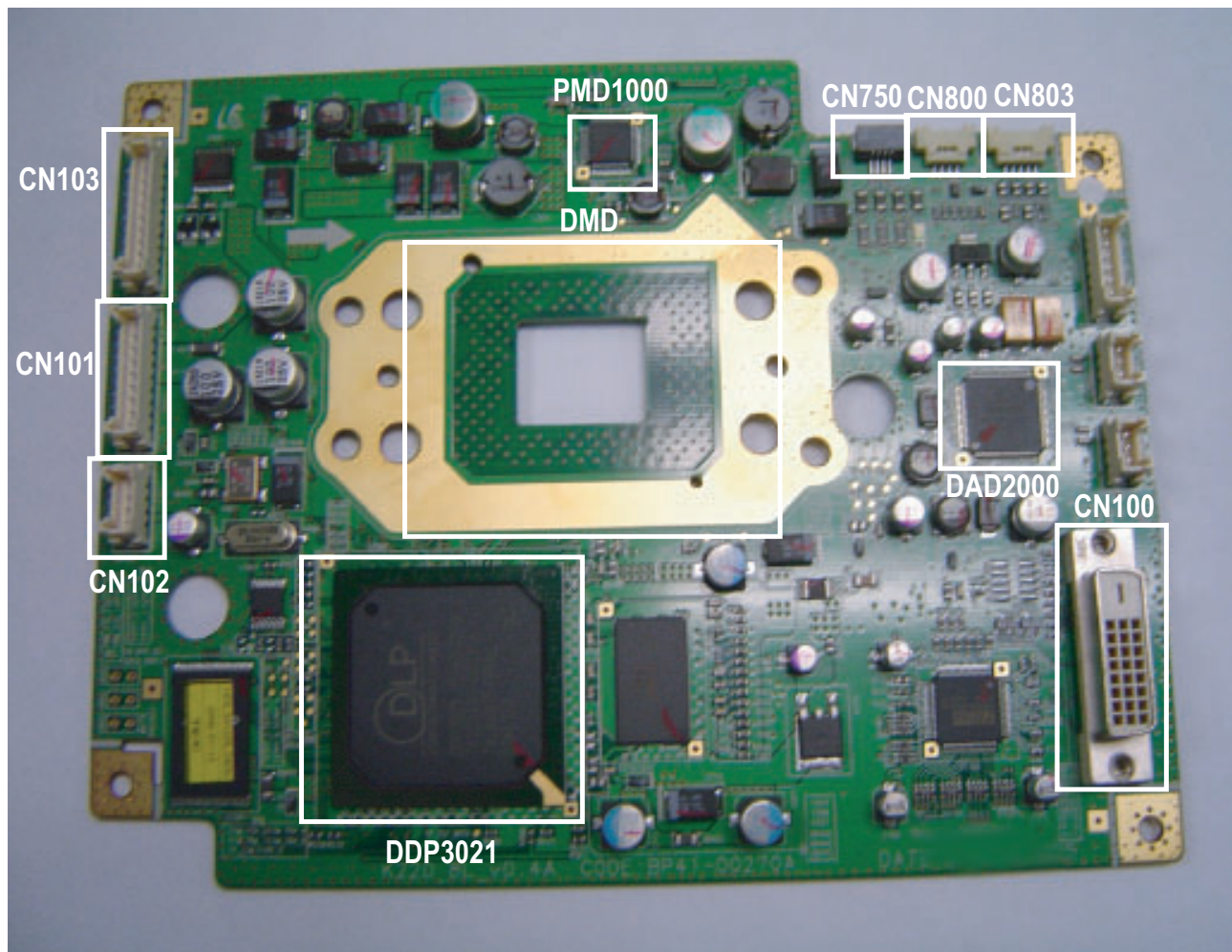
| Pin No. | Pin Name |
|---------|-----------|
| 1 | STB-5V |
| 2 | KEY-PWR |
| 3 | G |
| 4 | LED-STB |
| 5 | LED-LAMP |
| 6 | LED-TIMER |

CN1050

| Pin No. | Pin Name |
|---------|----------|
| 1 | -L-OUT |
| 2 | +L-OUT |
| 3 | -R-OUT |
| 4 | +R-OUT |

9-3 DMD Board

9-3-1 Assy DMD Board



- Controls the lamp (ON/OFF)
- Drives the color wheel motor
- Drives the panel

9-3-2 Names & Roles of Key Parts

- * CN101 : This receives the power source from the analog board and communicates with the I2C.
- * CN102 : This sends a 60Hz signal to the signal to the actuator module.
- * CN750 : This supplies the power to drive the color wheel.
- * CN800 : This receives the color wheel rotating signals.
- * CN803 : This sends signals to the ballast.
- * CN100 : The DVI cable terminal. This receives the image data from the digital board.
- * DMD PANEL : This is protected with a heat sink and fixtures.
- * DDP3021 : This processes the DMD drive and the signals.
- * PMD1000 : This supplies the DMD Board power and controls the color wheel rotating.
- * DAD2000 : This supplies DMD reset signals.

MEMO