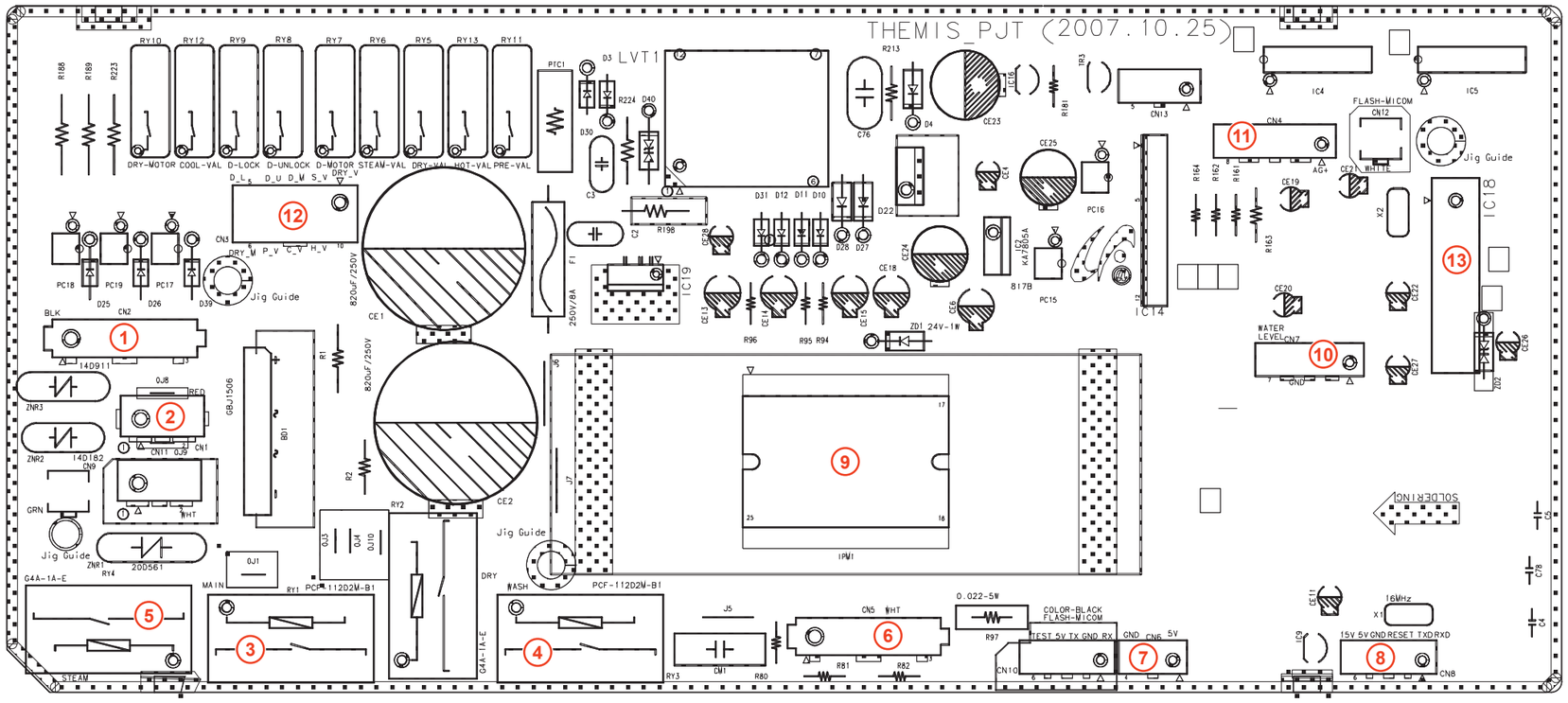
6. PCB DIAGRAM

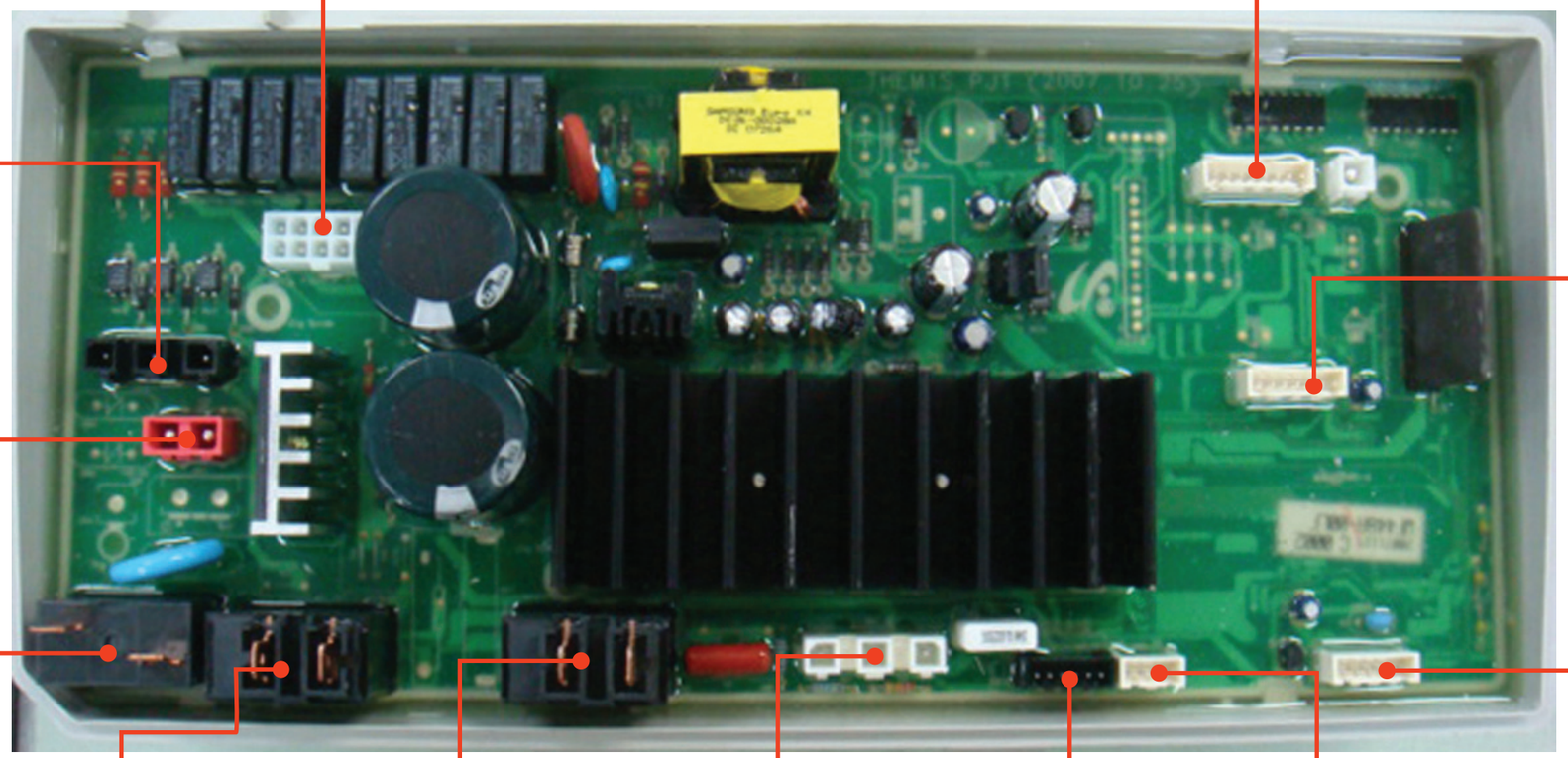
6-1. MAIN PCB



Location	Part No.	Function	Description
1	CN2	PBA Power Supply	Supplies 120V of AC power
2	CN1	Reactor Connection Port	Blocks noise generated when the motor operates.
3	RY1	Main Relay	Supplies PBA power when the Power button is pressed.
4	RY3	Washing Heater Relay	The switch for the Washing Heater power supply drive.
5	RY4	Steam Heater Relay	The switch for the Steam Heater power supply drive.
6	CN5	Motor Power Supply Port	Supplies the 3-phase drive voltage for the Washing Motor.
7	CN6	Hole Sensor Connection Port	Detects whether the Washing Motor is working normally.

Location	Part No.	Function	Description
8	CN8	SUB PBA Connection Port	Supplies power to the Sub PBA and provides a communications function.
9	IPM1	Washing Motor Drive IC	Switches and supplies the voltages for the motor.
10	CN7	Water Level And Temperature Sensor Connector	Detects the laundry, water supply, and water draining operations and detects whether each heater is working properly.
11	CN4	Door And Silver Nano Connector	Detects the door operations and supplies power for the Silver Nano.
12	CN3	Each Load Connection Port	The port to supply power for each electric device.
13	IC18	Ag IC	Drives the Ag IC.

6-2. CONNECTOR AND RELAY PORT PART DETAILED MANUAL (MAIN PCB)



► **CN3**
1. Door Lock Close
2. Door Lock Open
3. Drain Pump
4. Steam Valve
5. Bleach Valve
6. Circulation Pump
7. Pre Valve
8. Main Valve
9. Hot Valve

► **CN4**
1. Door Switch
2. Empty Pin
3. Door Switch
4. Empty Pin
5. Empty Pin
6. Empty Pin
7. AG Sensor
8. AG Sensor

► **CN2**
1. AC Power Port
2. AC Power OFF Detection Sensor
3. Door Detection Sensor (LOCK, UNLOCK)

► **CN7**
1. Empty Pin
2. Empty Pin
3. Empty Pin
4. Washing Water Temperature Sensor
5. Ground
6. Washing Water Level Sensor
7. Washing Water Level Sensor

► **CN1**
1. Reactor Connection Port
2. Reactor Connection Port

► **CN8**
1. Communications Port (Rx)
2. Communications Port (Tx)
3. Rest Signal Output
4. Ground
5. 5V
6. 15V

► **RY4**
1. Steam Heater Relay Switch
2. Steam Heater Relay Switch

► **RY1**
1. Main Power Relay Switch
2. Main Power Relay Switch

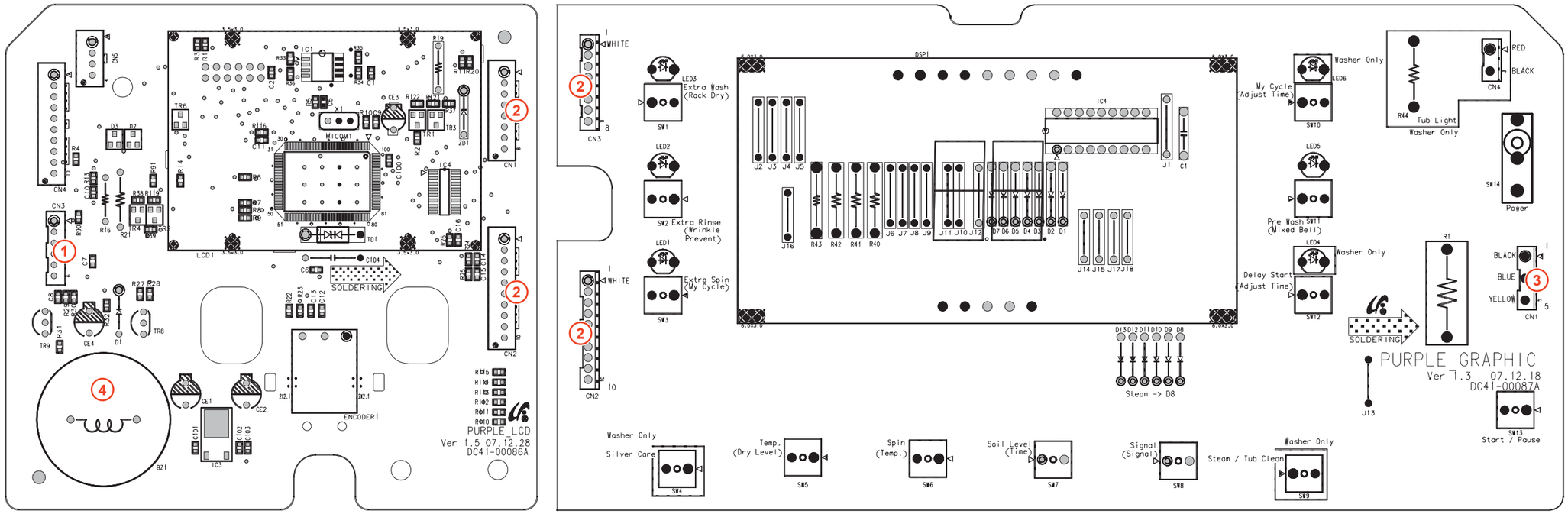
► **RY4**
1. Washing Heater Relay Switch
2. Washing Heater Relay Switch

► **CN5**
1. Motor Power (U Phase)
2. Motor Power (V Phase)
3. Motor Power (W Phase)

► **CN10**
1. AC OFF Check
2. Test Mode
3. 5V
4. Transmission Port
5. Ground
6. Input Port

► **CN6**
1. 5V
2. Hole Sensor Signal
3. Hole Sensor Signal
4. Ground

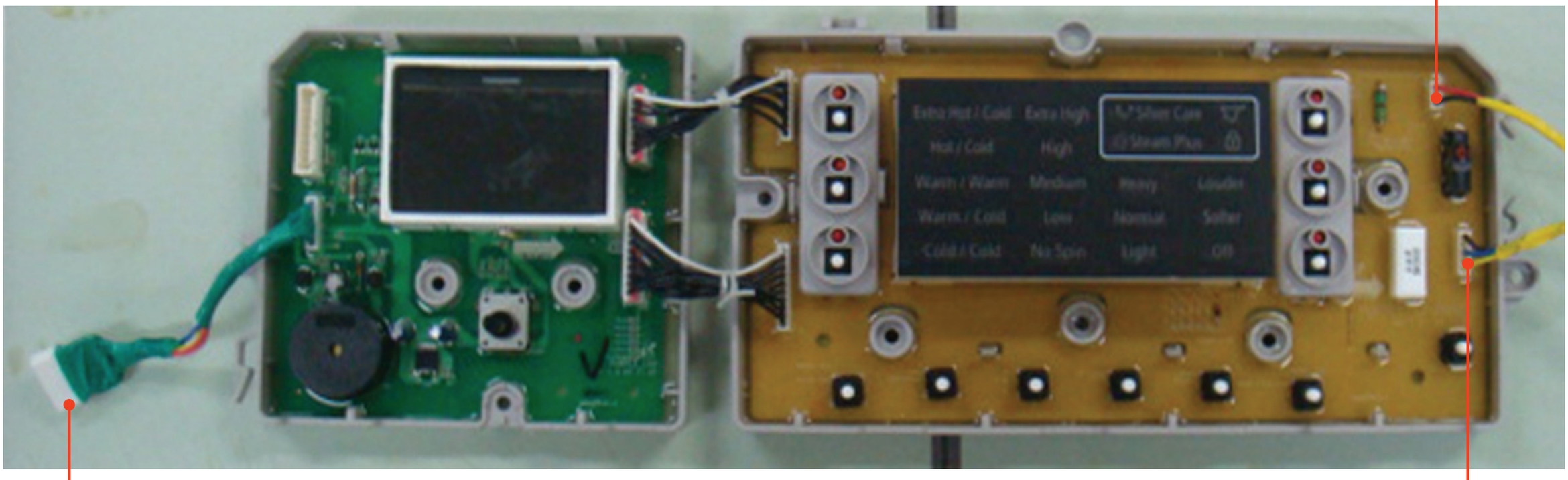
6-3. SUB PCB



Location	Part No.	Function	Description
1	LCD CN3	Main PBA Connection Port	Receives power from the Main PBA and provides a communications function.
2	LCD CN1 and so on.	LCD, Display Connection Port	Connects the LCD Board and the Graphics Board.
3	Graphic CN1	Power Connection Port	Connects power.
4	BZ1	Buzzer Circuit	Generates sound when the Menu key is pressed, the Encoder operates and the menu is closed.

6-4. CONNECTOR PORT PART DETAILED MANUAL (SUB PCB)

► **CN4_GRAPHIC**
1. Tub Light Drive Signal
2. Empty Pin
3. Ground



► **CN1_LCD**
1. Communications Port (Tx)
2. Communications Port (Rx)
3. Outputs the Reset Signal
4. Ground
5. 5V
6. 15V

► **CN1_GRAPHIC**
1. CO
2. Empty Pin
3. NO
4. Empty Pin
5. NC