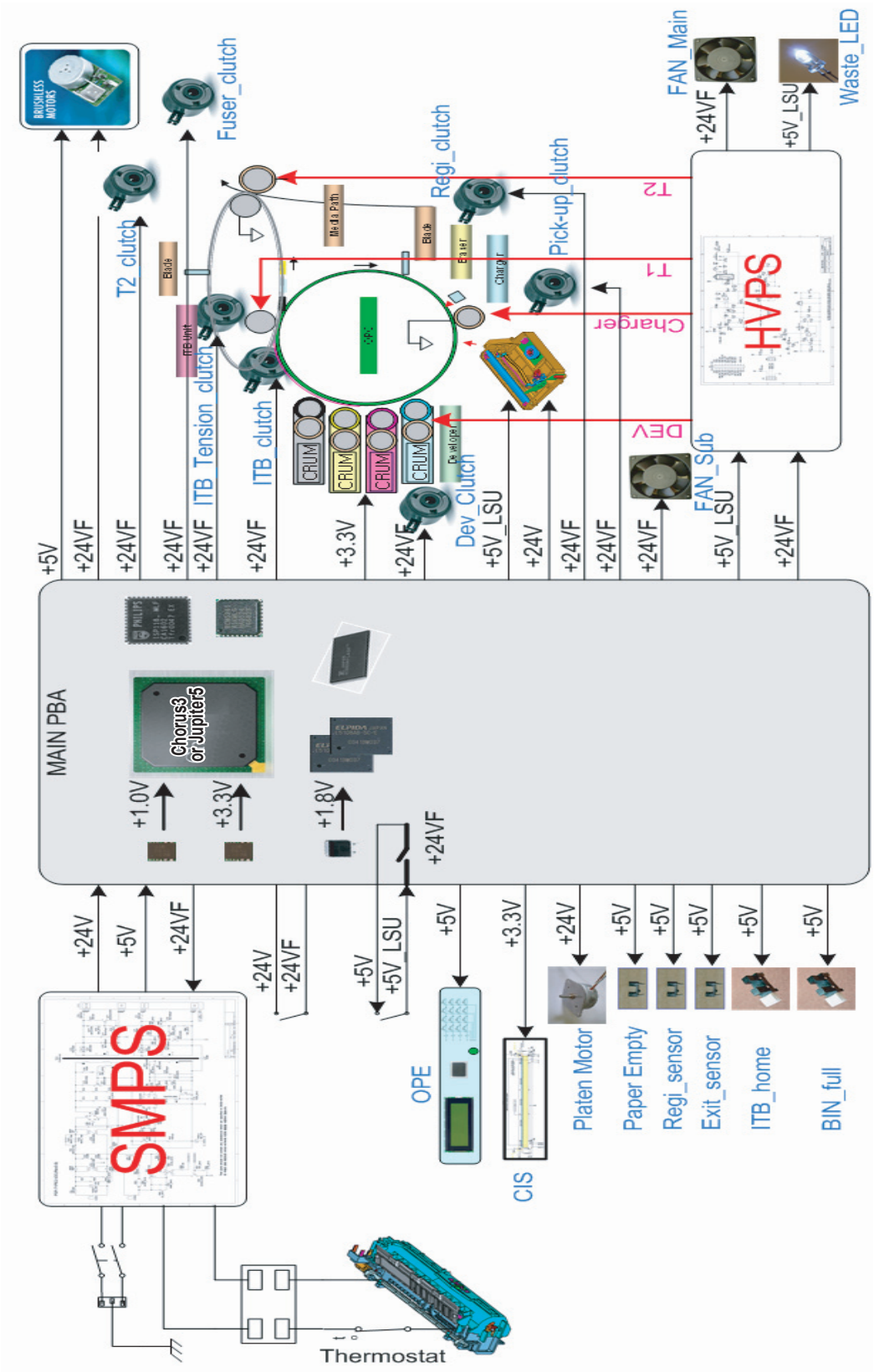
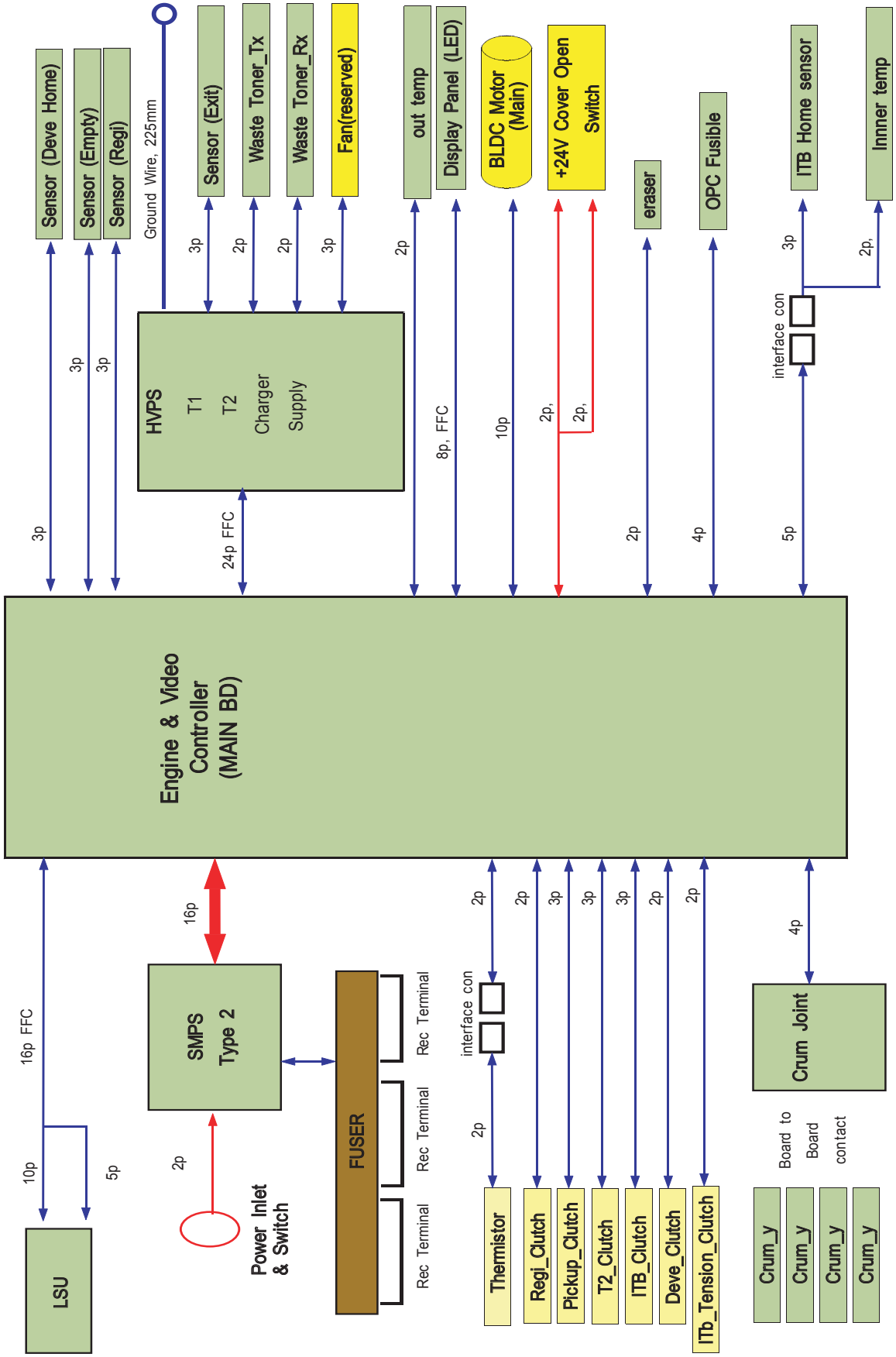
5. System Diagram

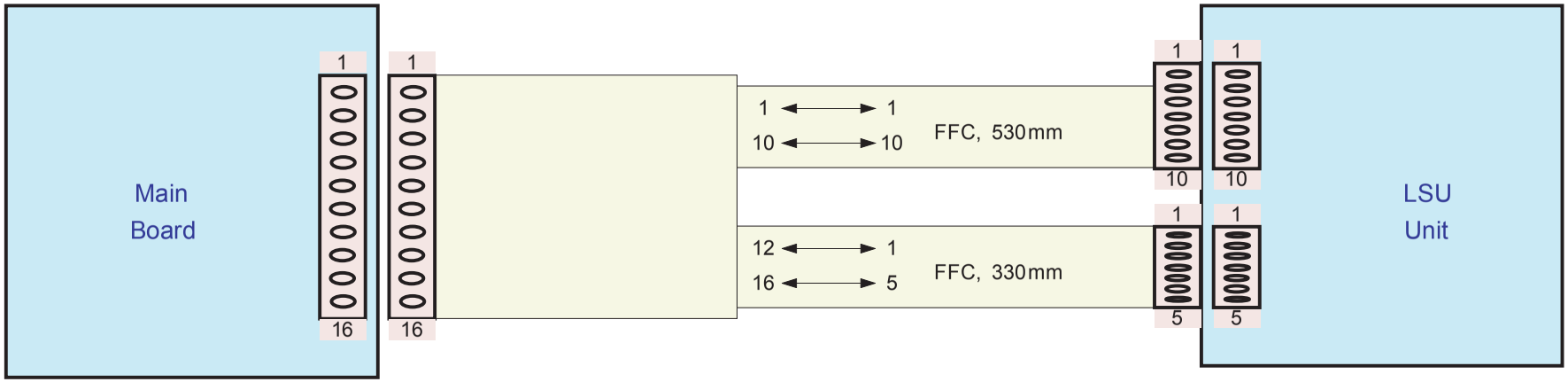
5.1 Block Diagram



5.2 Connection Diagram



1. Main Board ↔ LSU Unit

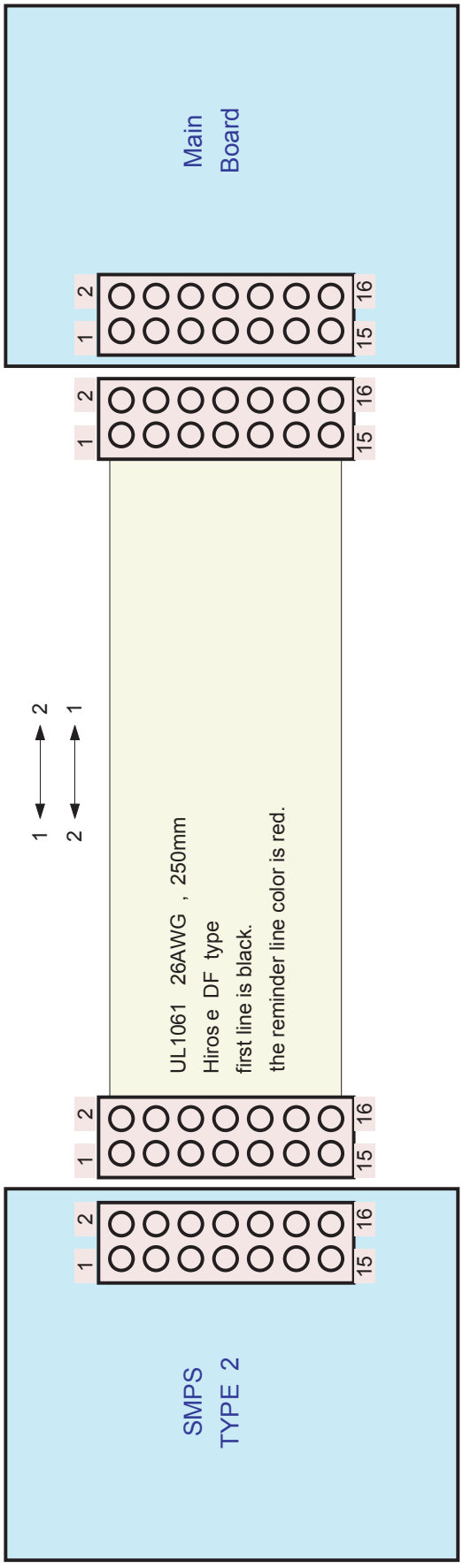


1	+ 5V_LSU
2	DGND
3	VDO1_plus
4	VDO1_minus
5	DGND
6	LSU_SH1
7	nHSYNC1
8	DGND
9	LD_POWER
10	nLE_EN
11	-
12	LSU_MOT_CLK
13	nLSU_READY
14	nLSU_MOT_EN
15	DGND
16	+24V

1	+ 5V_LSU
2	DGND
3	VDO1_plus
4	VDO1_minus
5	DGND
6	LSU_SH1
7	nHSYNC1
8	DGND
9	LD_POWER
10	nLE_EN

1	LSU_MOT_CLK
2	nLSU_READY
3	nLSU_MOT_EN
4	DGND
5	+ 24V

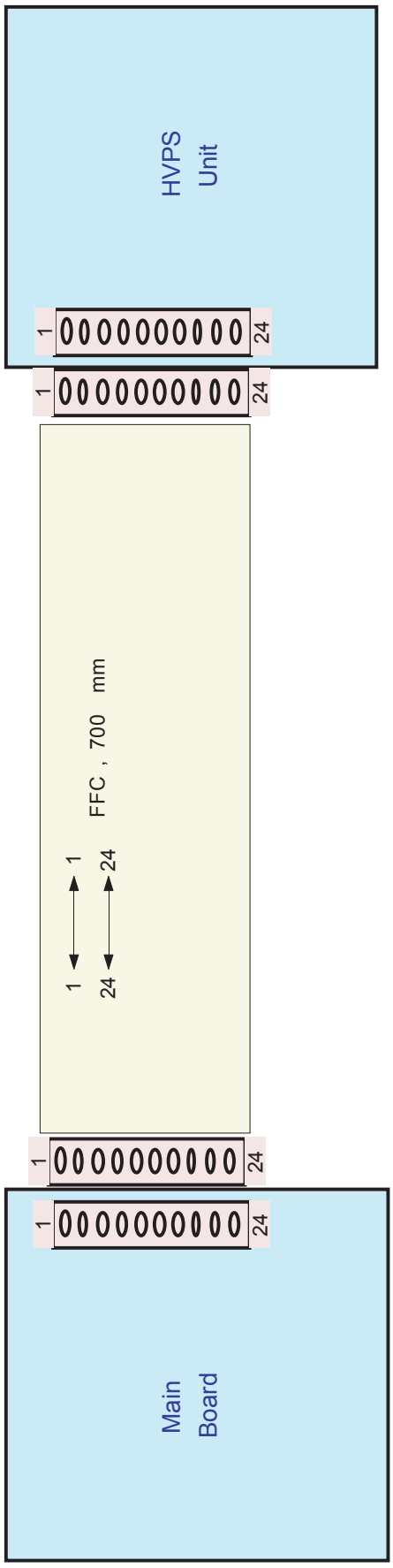
2. SMPS ↔ Main board



FUSER_ON	1	2	+24 VF
+ 24VA	3	4	DGND
+ 24VA	5	6	DGND
+ 24VA	7	8	DGND
+24V	9	10	DGND
+5V	11	12	DGND
+5V	13	14	DGND
+5V	15	16	DGND

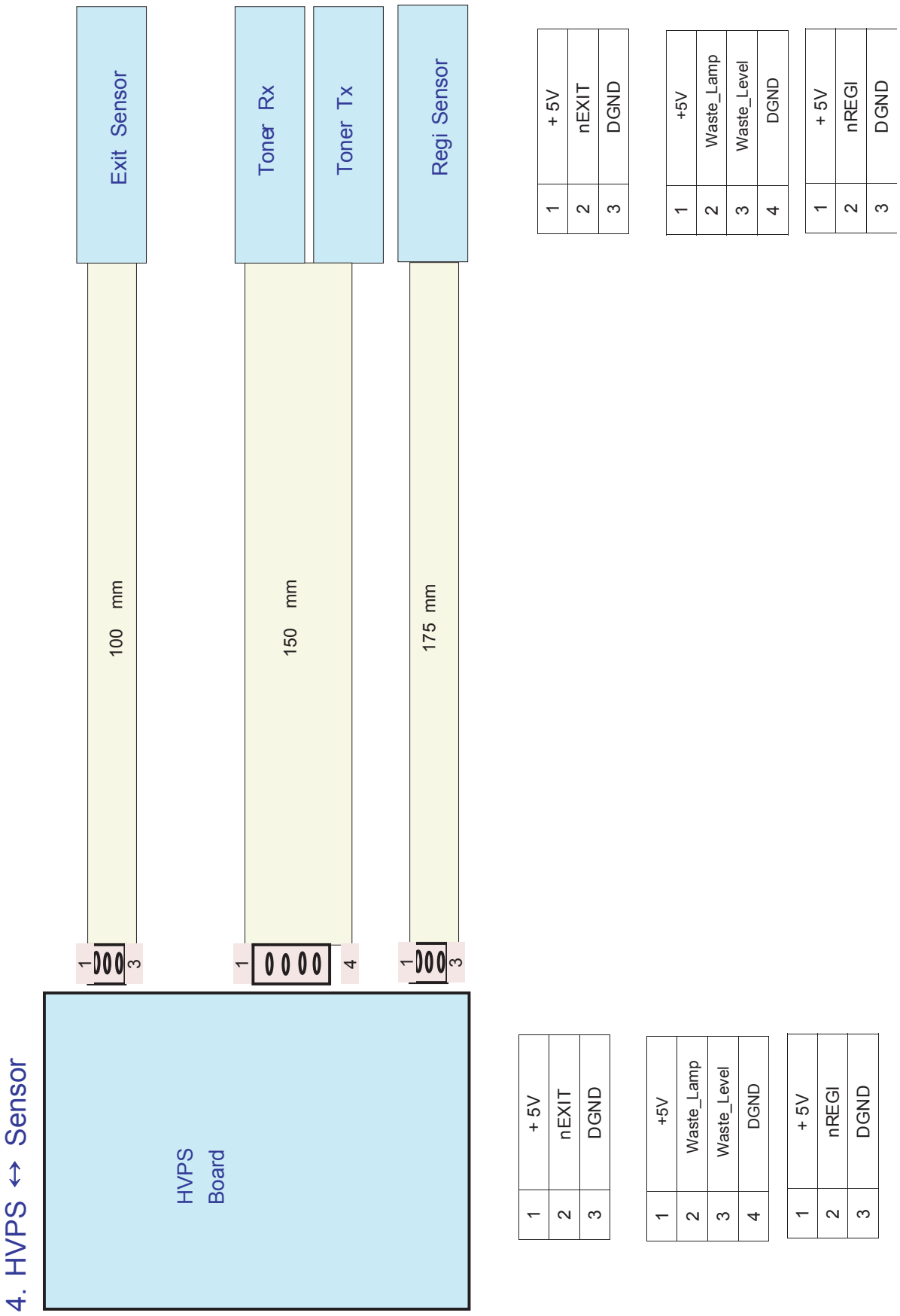
+24VF	1	2	FUSER_ON
DGND	3	4	+24VA
DGND	5	6	+24VA
DGND	7	8	+24VA
DGND	9	10	+ 24V
DGND	11	12	+ 5V
DGND	13	14	+ 5V
DGND	15	16	+ 5V

3. Main Board ↔ HVPS

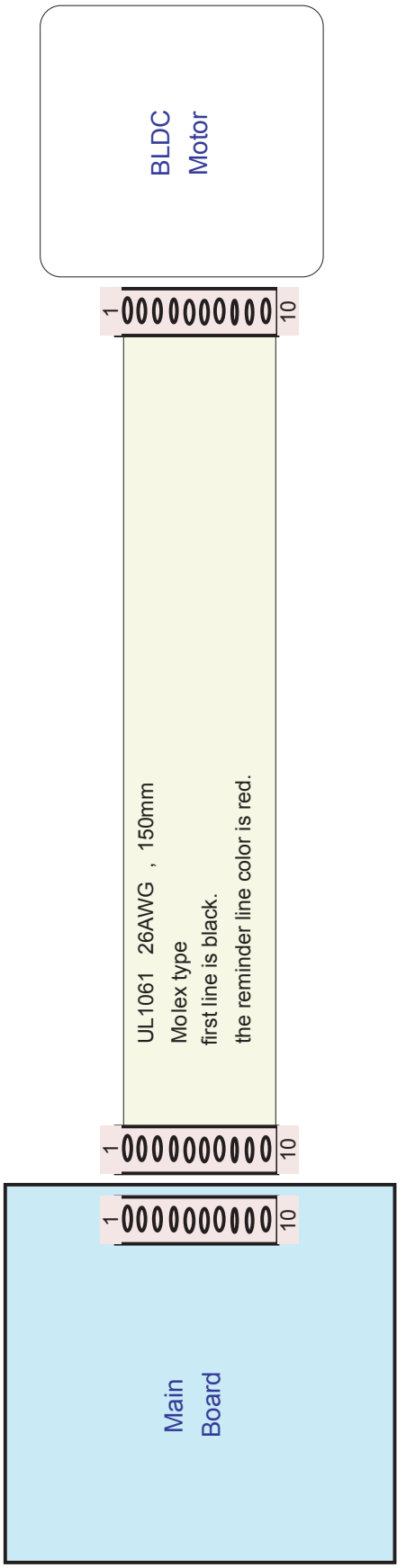


1	+ 24VF
2	+ 24VF
3	DGND
4	DGND
5	nDEV_EN
6	PWM_DEV_VPP
7	PWM_DEV_AC
8	PWM_DEV_DC
9	PWM_ITHV
10	PWM_THV
11	PWM_MHV
12	nTHV_EN
13	ITHV_READ
14	THV_READ
15	-
16	nP_EXIT
17	DEV_SOL2
18	DEV_SOL1
19	nREGI
20	DEV_SOL3
21	WASTE_LED_TX
22	WASTE_LED_RX
23	FAN_MAIN
24	+ 5V_LSU

1	+ 24VF
2	+ 24VF
3	DGND
4	DGND
5	nDEV_EN
6	PWM_DEV_VPP
7	PWM_DEV_AC
8	PWM_DEV_DC
9	PWM_ITHV
10	PWM_THV
11	PWM_MHV
12	nTHV_EN
13	ITHV_READ
14	THV_READ
15	-
16	nP_EXIT
17	DEV_SOL2
18	DEV_SOL1
19	nREGI
20	DEV_SOL3
21	WASTE_LED_TX
22	WASTE_LED_RX
23	FAN_MAIN
24	+ 5V_LSU

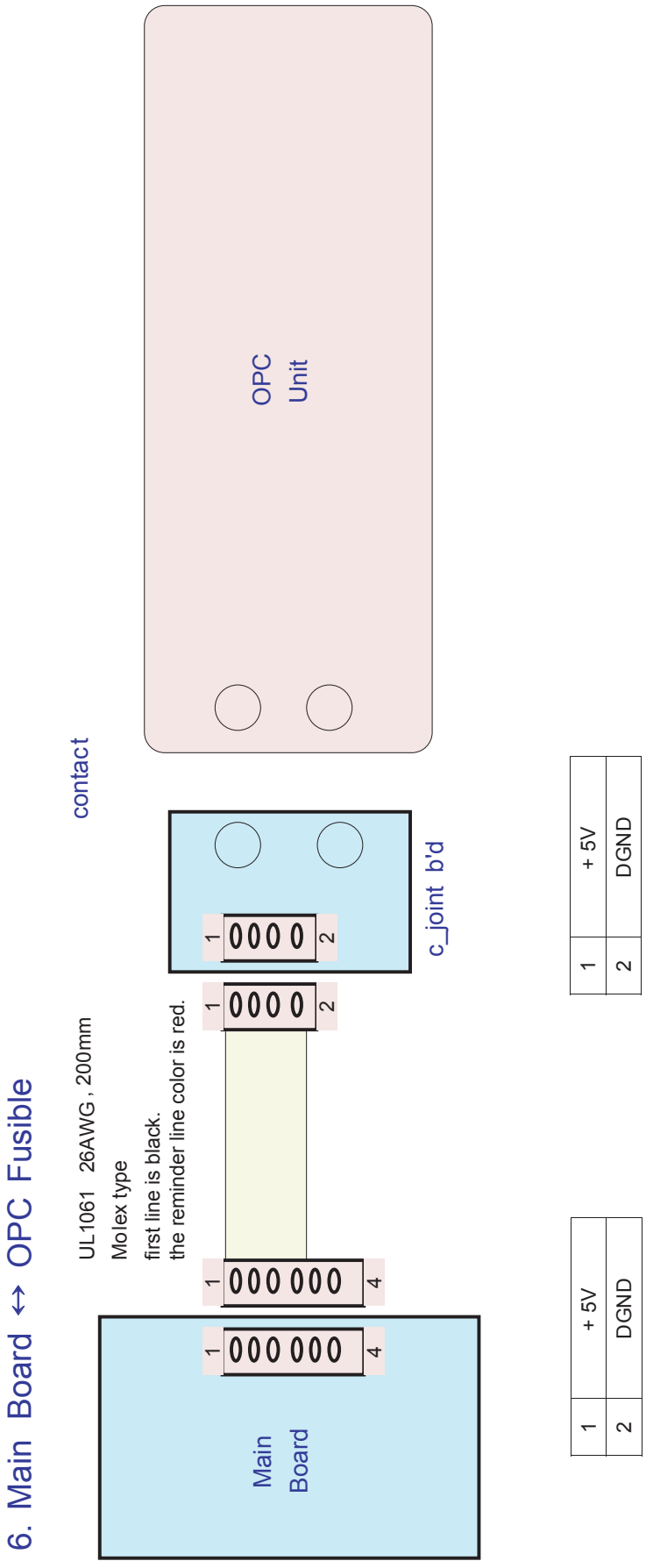

4. HVPS ↔ Sensor
HVPS
Board
Exit Sensor
Toner Rx
Toner Tx
Regi Sensor
100 mm
150 mm
175 mm
1
3
4
+ 5V
nEXIT
DGND
+5V
Waste_Lamp
Waste_Level
DGND
nREGI

5. Main Board ↔ BLDC

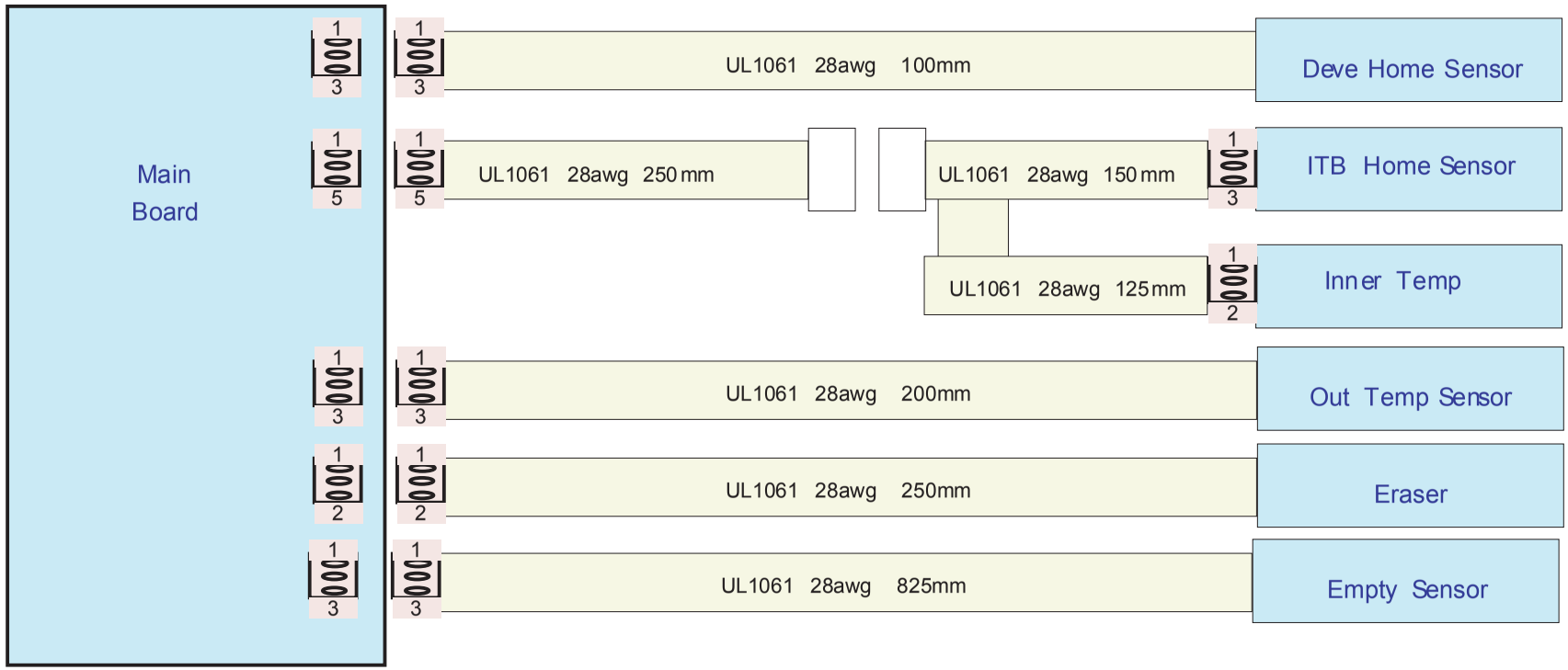


1	+ 24VF
2	+ 24VF
3	DGND
4	DGND
5	DGND
6	+ 5V
7	nBLDC_MOTOR_EN
8	BLDC_MOTOR_READY
9	PWM_MOT
10	GAIN

1	+ 24VF
2	+ 24VF
3	DGND
4	DGND
5	DGND
6	+ 5V
7	nBLDC_MOTOR_EN
8	BLDC_MOTOR_READY
9	PWM_MOT
10	GAIN


6. Main Board ↔ OPC Fusible
Main Board
1
000 000
4
UL1061 26AWG , 200mm
Molex type
first line is black.
the reminder line color is red.
1
0000
2
c_joint b'd
contact
OPC Unit
1 + 5V
2 DGND
1 + 5V
2 DGND

7. Main board ↔ Sensor



1	+ 5V
2	nITB_HOME
3	DGND
4	INNER TEMP
5	DGND

1	+ 5V
2	ERASER_LAMP

1	OUT_TEMP
2	DGND

1	+ 5V
2	nDEV_HOME
3	DGND

1	+ 5V
2	nP_EMPTY
3	DGND

1	+ 5V
2	nITB_HOME
3	DGND
4	INNER TEMP
5	DGND

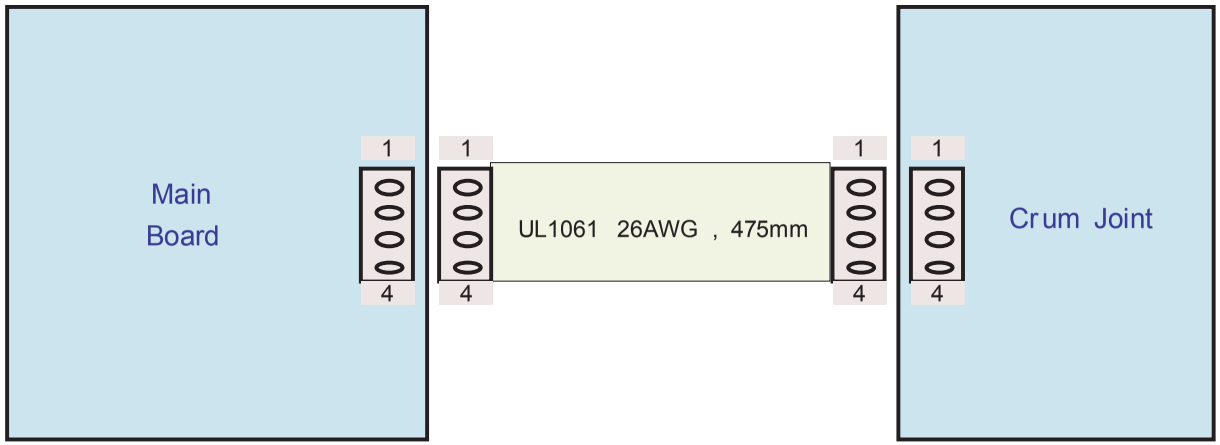
1	+ 5V
2	ERASER_LAMP

1	OUT_TEMP
2	DGND

1	+ 5V
2	nDEV_HOME
3	DGND

1	+ 5V
2	nP_EMPTY
3	DGND

8. Main Board ↔ Crum Joint



1	+ 3.3V
2	SCL
3	SDA
4	DGND

1	+ 3.3V
2	SCL
3	SDA
4	DGND

Crum Y

1	+ 3.3V
2	SCL
3	SDA
4	DGND

Crum M

1	+ 3.3V
2	SCL
3	SDA
4	DGND

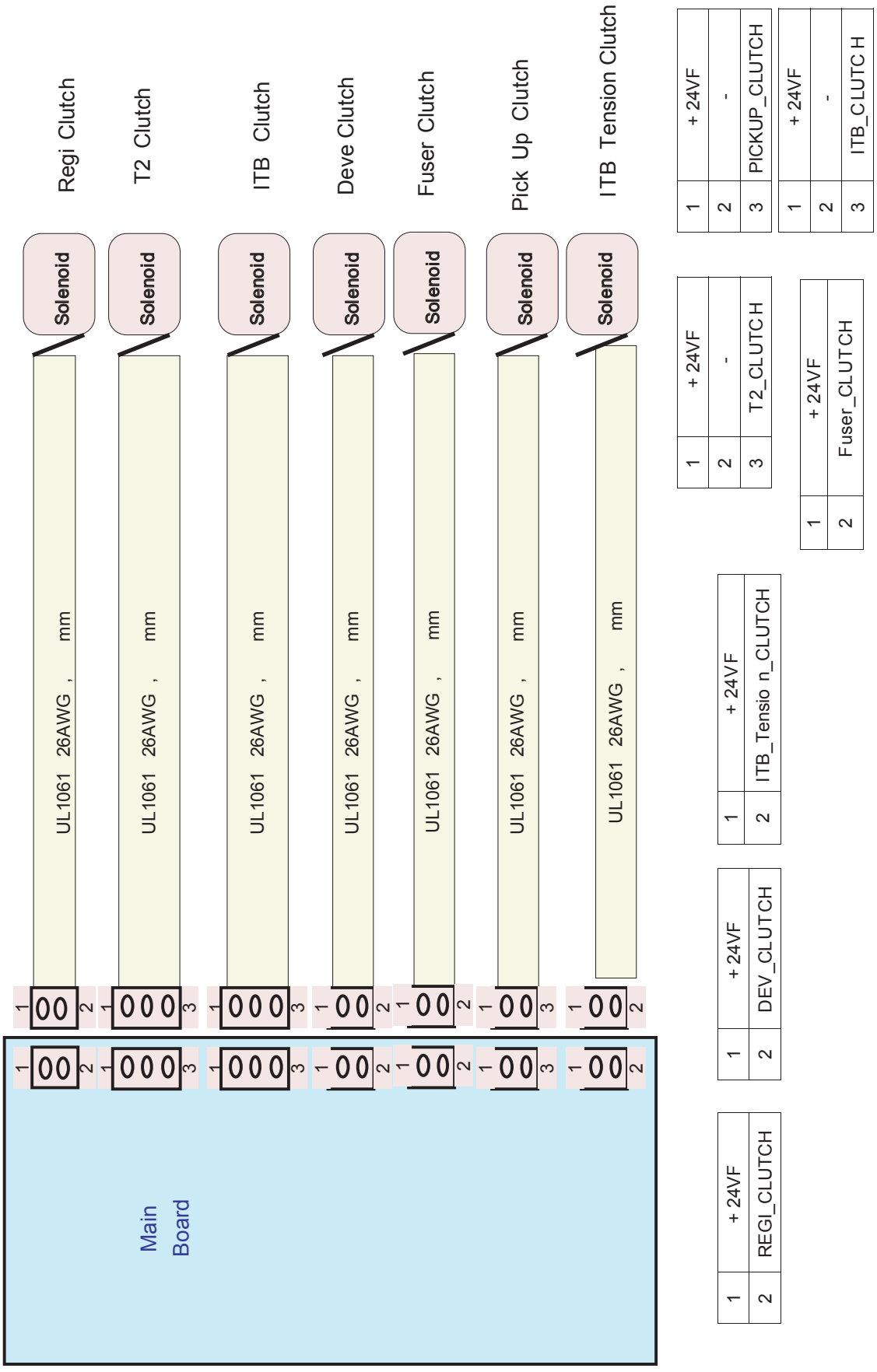
Crum C

1	+ 3.3V
2	SCL
3	SDA
4	DGND

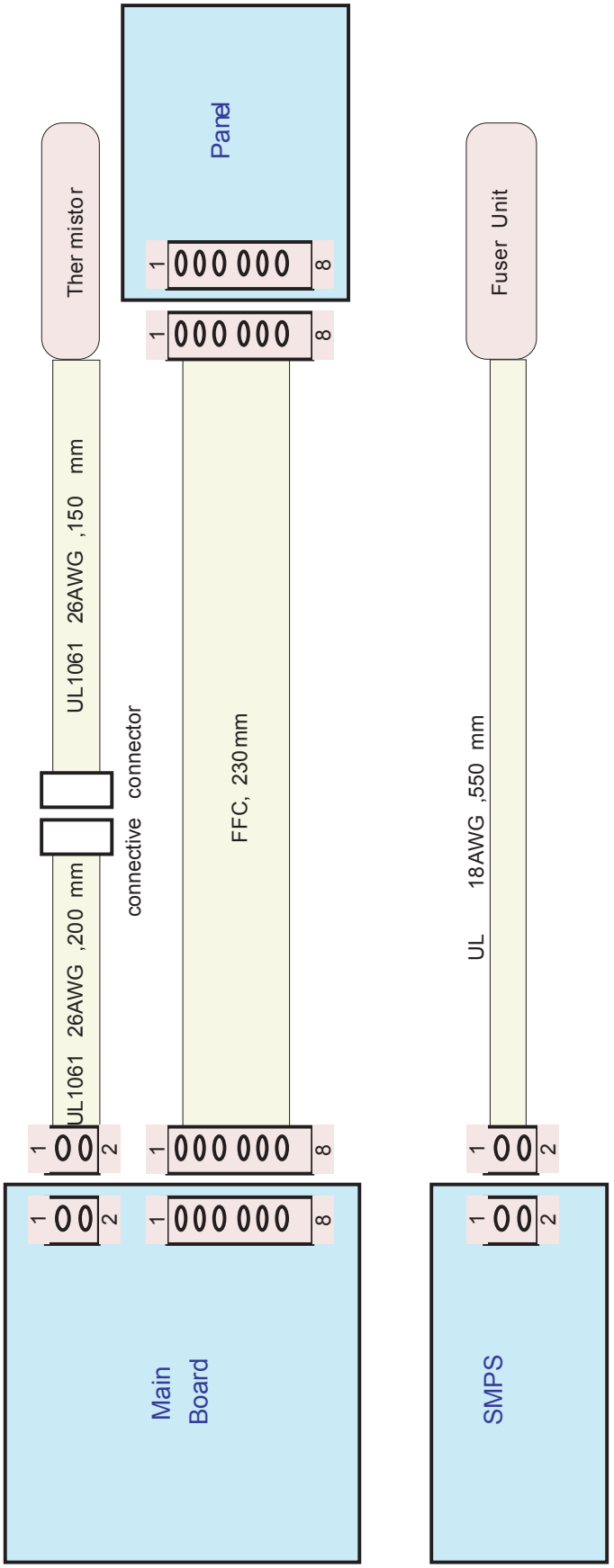
Crum K

1	+ 3.3V
2	SCL
3	SDA
4	DGND

9. Main Board ↔ Actuator



10. Main Board ↔ Heater Unit



1	FUSER_THERM1
2	FUSER_THERM2

1	AC_L
2	AC_N

1	DGND
2	OP_C_LED
3	OP_M_LED
4	OP_Y_LED
5	OP_K_LED
6	OP_STA_LED1
7	OP_STA_LED1
8	nOP_KEY_ONLINE