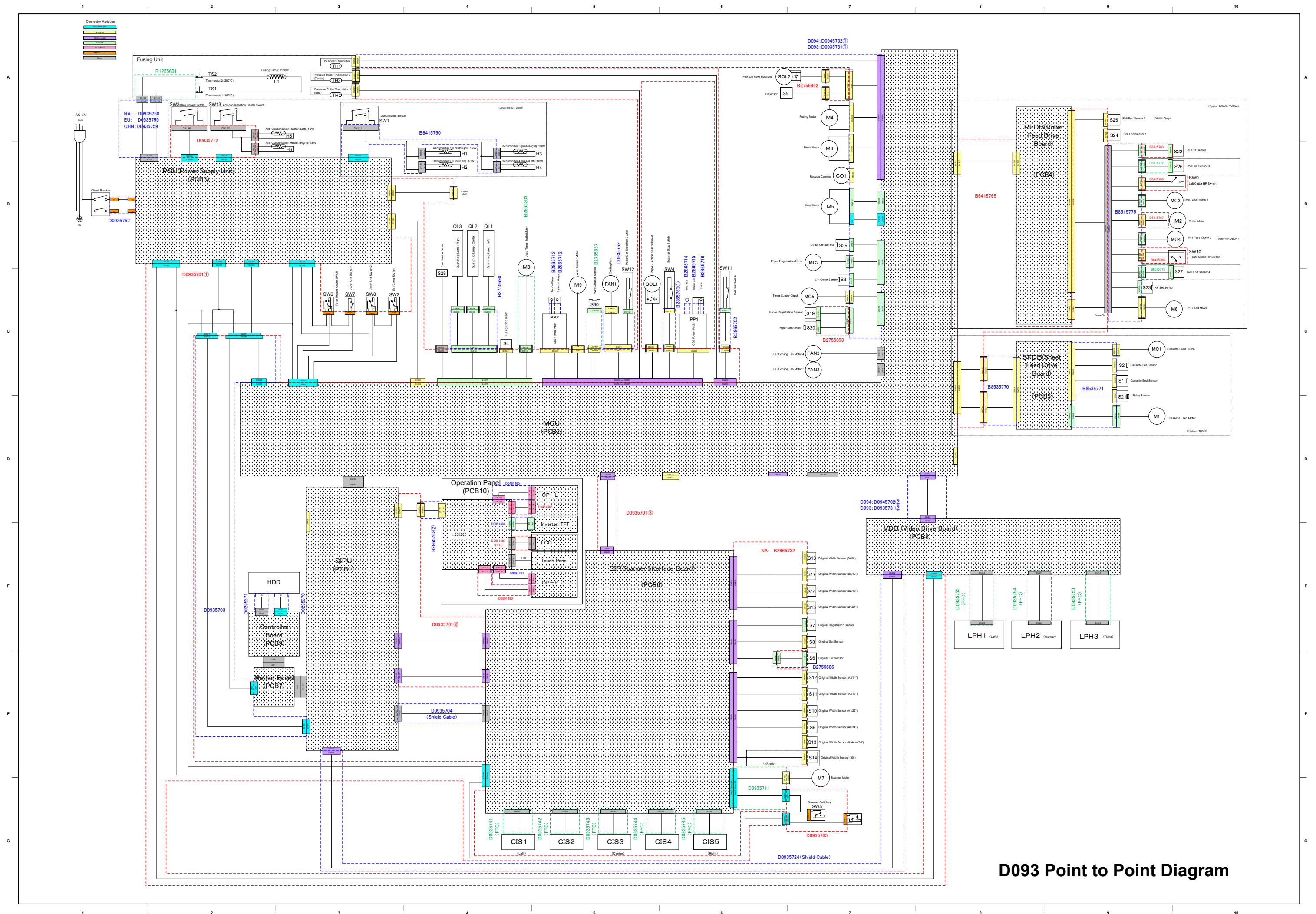




D093 Point to Point Diagram

Pin No	Signal	Description	I/O	Action
1	A[31]	NRVAM : Data	O	—
2	A [30]	NRVAM : Data	O	—
3	A[29]	NRVAM : Data	O	—
4	A[28]	NRVAM : Data	O	—
5	A[27]	NRVAM : Data	O	—
6	A[26]	NRVAM : Data	O	—
7	A[25]	NRVAM : Data	O	—
8	A[24]	NRVAM : Data	O	—
9	A[23]	NRVAM : Data	O	—
10	A[22]	NRVAM : Data	O	—
11	A[21]	NRVAM : Data	O	—
12	A[20]	NRVAM : Data	O	—
13	A[19]	NRVAM : Data	O	—
14	A[18]	NRVAM : Data	O	—
15	A[17]	NRVAM : Data	O	—
16	NC	—	—	—
17	RD_N	NRVAM : Read	O	—
18	WR_N	NRVAM : Write	O	—
19	NRVAM_CS_N	NRVAM : CS	O	—
20	—	—	—	—
21	D[0]	NRVAM : Address	B	—
22	D[1]	NRVAM : Address	B	—
23	D[2]	NRVAM : Address	B	—
24	D[3]	NRVAM : Address	B	—
25	D[4]	NRVAM : Address	B	—
26	D[5]	NRVAM : Address	B	—
27	D[6]	NRVAM : Address	B	—
28	D[7]	NRVAM : Address	B	—
29	3.3V	—	P	—
30	3.3V	—	P	—
31	5V	—	P	—
32	5V	—	P	—
33	5V	—	P	—

Pin No	Signal	Description	I/O	Action
1	A[31]	NRVAM : Data	O	—
2	A [30]	NRVAM : Data	O	—
3	A[29]	NRVAM : Data	O	—
4	A[28]	NRVAM : Data	O	—
5	A[27]	NRVAM : Data	O	—
6	A[26]	NRVAM : Data	O	—
7	A[25]	NRVAM : Data	O	—
8	A[24]	NRVAM : Data	O	—
9	A[23]	NRVAM : Data	O	—
10	A[22]	NRVAM : Data	O	—
11	A[21]	NRVAM : Data	O	—
12	A[20]	NRVAM : Data	O	—
13	A[19]	NRVAM : Data	O	—
14	A[18]	NRVAM : Data	O	—
15	A[17]	NRVAM : Data	O	—
16	NC	—	—	—
17	RD_N	NRVAM : Read	O	—
18	WR_N	NRVAM : Write	O	—
19	NRVAM_CS_N	NRVAM : CS	O	—
20	—	—	—	—
21	D[0]	NRVAM : Address	B	—
22	D[1]	NRVAM : Address	B	—
23	D[2]	NRVAM : Address	B	—
24	D[3]	NRVAM : Address	B	—
25	D[4]	NRVAM : Address	B	—
26	D[5]	NRVAM : Address	B	—
27	D[6]	NRVAM : Address	B	—
28	D[7]	NRVAM : Address	B	—
29	3.3V	—	P	—
30	3.3V	—	P	—
31	5V	—	P	—
32	5V	—	P	—
33	5V	—	P	—

Pin No	Signal	Description	I/O	Action
1	GND	—	G	—
2	DEV0	IC_CARD : Data	B	—
3	SWAMP_N	IC_CARD : SWAMP	I	—
4	D[13]	IC_CARD : Data	B	—
5	D[4]	IC_CARD : Data	B	—
6	D[10]	IC_CARD : Data	B	—
7	D[3]	IC_CARD : Data	B	—
8	D[9]	IC_CARD : Data	B	—
9	D[5]	IC_CARD : Data	B	—
10	D[6]	IC_CARD : Data	B	—
11	D[11]	IC_CARD : Data	B	—
12	D[0]	IC_CARD : Data	B	—
13	A[21]	IC_CARD : Address	O	—
14	GND	—	G	—
15	CARD_CS_N	IC_CARD : CS	O	—
16	A[20]	IC_CARD : Address	O	—
17	A[22]	IC_CARD : Address	O	—
18	A[23]	IC_CARD : Address	O	—
19	A[19]	IC_CARD : Address	O	—
20	A[18]	IC_CARD : Address	O	—
21	A[13]	IC_CARD : Address	O	—
22	A[17]	IC_CARD : Address	O	—
23	A[12]	IC_CARD : Address	O	—
24	A[10]	IC_CARD : Address	O	—
25	A[11]	IC_CARD : Address	O	—
26	5V	IC_CARD : Address	O	—
27	A[15]	IC_CARD : Address	O	—
28	A[14]	IC_CARD : Address	O	—
29	A[15]	IC_CARD : Address	O	—
30	A[24]	IC_CARD : Address	O	—
31	A[25]	IC_CARD : Address	O	—
32	A[26]	IC_CARD : Address	O	—
33	A[27]	IC_CARD : Address	O	—
34	A[28]	IC_CARD : Address	O	—
35	A[29]	IC_CARD : Address	O	—
36	A[30]	IC_CARD : Address	O	—
37	3.3V	—	P	—
38	D[15]	IC_CARD : Data	B	—
39	D[7]	IC_CARD : Data	B	—
40	D[14]	IC_CARD : Data	B	—
41	D[8]	IC_CARD : Data	B	—
42	D[12]	IC_CARD : Data	B	—
43	D[5]	IC_CARD : Data	B	—
44	CARD_SET_N	IC_CARD : SET	I	— Not set
45	GND	—	G	—

Pin No	Signal	Description	I/O	Action
1	SDI_RSRT_N	Emulator	I	—
2	3.3V	—	P	—
3	3.3V	—	P	—
4	TDO	Emulator	O	—
5	TCK	Emulator	I	—
6	GND	—	G	—
7	TMS	Emulator	I	—
8	TDI	Emulator	I	—
9	GND	—	G	—
10	TRES	Emulator	I	—
11	DB	Emulator	I	—
12	GND	—	G	—
13	TRISYNC	Emulator	O	—
14	GND	—	G	—
15	TRCLK	Emulator	O	—
16	GND	—	G	—
17	TRDATAD	Emulator	O	—
18	GND	—	G	—
19	TRDATA1	Emulator	O	—
20	GND	—	G	—
21	TRDATA2	Emulator	O	—
22	GND	—	G	—
23	TRDATA3	Emulator	O	—
24	GND	—	G	—
25	TRDATA4	Emulator	O	—
26	GND	—	G	—
27	TRDATAS	Emulator	O	—
28	GND	—	G	—
29	TRDATA6	Emulator	O	—
30	GND	—	G	—
31	TRDATA7	Emulator	O	—
32	GND	—	G	—
33	EVENTS	Emulator	O	—
34	GND	—	G	—
35	EVENT1	Emulator	O	—
36	SEL_3	Emulator	I	—

Pin No	Signal	Description	I/O	Action
1	5V	Debug Monitor	P	—
2	DEBU0_1_ND	Debug Monitor	O	—
3	DEBU0_0_ND	Debug Monitor	I	—
4	GND	Debug Monitor	G	—

CN132: Folder Unit				
Pin No	Signal	Description	I/O	Action
A1	GND	—	G	—
A2	G_ND	—	G	—
A3	G_ND	—	G	—
A4	G_ND	—	G	—
A5	G_ND	—	G	—
A6	G_ND	—	G	—
A7	G_ND	—	G	—
A8	G_ND	—	G	—
B1	UARTTXD_0	Folder :TX	I	—
B2	UARTTXD_A	—	I	—
B3	UARTTXD_2	Folder :TX	O	—
B4	UARTTXD_Y	—	O	—
B5	ORL_V0_SEN0	Folder :PIN : OFFCN : Detection	I	H : OFF I : L : ON
B6	+5V_NEP	Main :PW : FFRON : Out	H : OFF O : L : ON	
B7	G_ND	—	G	—
B8	SEN0_0N0	Connection Check: Folder	I	H : Not connected I : L : Connected

CN13: SPU IF (1 ~ 20 Pins)				
Pin No.	Signal	Description	I/O	Action
1	—	—	—	—
2	+24V	OPU : Power (Backlight)	P	—
3	GND	—	G	—
4	VB0_LSYNC	VB0LSYNC	H : Disabled O : L : Enabled	—
5	GND	—	G	—
6	ICB_SET	ICB_ : Set Detection	I	—
7	FUCK1	Energy Sensor	I	—
8	SLEEP_OFF	SLEEP_N	O	—
9	BCU_STATE	3.3V : pulse : Fixed	I	—
10	GND	—	G	—
11	SW_B0_0 : Save	Power Off Signal	I	—
12	GND	—	G	—
13	DEV0_FJ1	Janitor : 0	I	—
14	DEV1_FJ1	Janitor : 1	I	—
15	DEV2_FJ1	Janitor : 2	I	—
16	GND	—	G	—
17	SOME_Data0	Conf lg : Completed : Data0	I	—
18	SOME_S_1B	Conf lg : Completed : S_1B	I	—
19	ADCON1_1 : G_Data0	Conf lg : Start : Data0	I	—
20	+CONF_1 : G_S_1B	Conf lg : Start : S_1B	O	—

Pin No	Signal	Description	I/O	Action
21	XRGATE	Scanner : FGATE	O	—
22	GND	—	G	—
23	I_PU_CLK0	P : All : Item	O	—
24	I_PU_CLK0_N	—	O	—
25	I_PU_CLK_N	—	O	—
26	I_PU_RESET_N	—	O	—
27	I_PU_CLK_N0	CETUS	O	—
28	I_PU_CLK_M0	R0 : 2001(DEV0 - 4)	O	—
29	I_PU_CLK_N0	(C1B : R0 : 2001A)	O	—
30	I_PU_CLK_N0	—	O	—
31	I_PU_CLK_M0	S1B : (R0 : 2005)	O	—
32	I_PU_CLK_N0	S1B : (R0SA : 1)	O	—
33	GND	—	G	—
34	I_PU_I_N02_N	Reverse	I	—
35	I_PU_I_N01_N	CETUS	I	—
36	I_PU_I_N03_N	LUPUS	I	—
37	GND	—	G	—
38	GND	—	G	—
39	NC	—	—	—
40	NC	—	—	—
41	—	—	—	—
42	—	—	—	—
43	+24 V	OP : U Power (Backlight)	P	—
44	GND	—	G	—
45	GND	—	G	—
46	I_PU_DATA(16)	I : PU : Data Bus	B	—
47	I_PU_DATA(14)	I : PU : Data Bus	B	—
48	I_PU_DATA(13)	I : PU : Data Bus	B	—
49	I_PU_DATA(12)	I : PU : Data Bus	B	—
50	I_PU_DATA(11)	I : PU : Data Bus	B	—
51	I_PU_DATA(10)	I : PU : Data Bus	B	—
52	I_PU_DATA(9)	I : PU : Data Bus	B	—
53	I_PU_DATA(8)	I : PU : Data Bus	B	—
54	I_PU_DATA(7)	I : PU : Data Bus	B	—
55	I_PU_DATA(6)	I : PU : Data Bus	B	—
56	I_PU_DATA(5)	I : PU : Data Bus	B	—
57	I_PU_DATA(4)	I : PU : Data Bus	B	—
58	I_PU_DATA(3)	I : PU : Data Bus	B	—
59	I_PU_DATA(2)	I : PU : Data Bus	B	—
60	I_PU_DATA(1)	I : PU : Data Bus	B	—

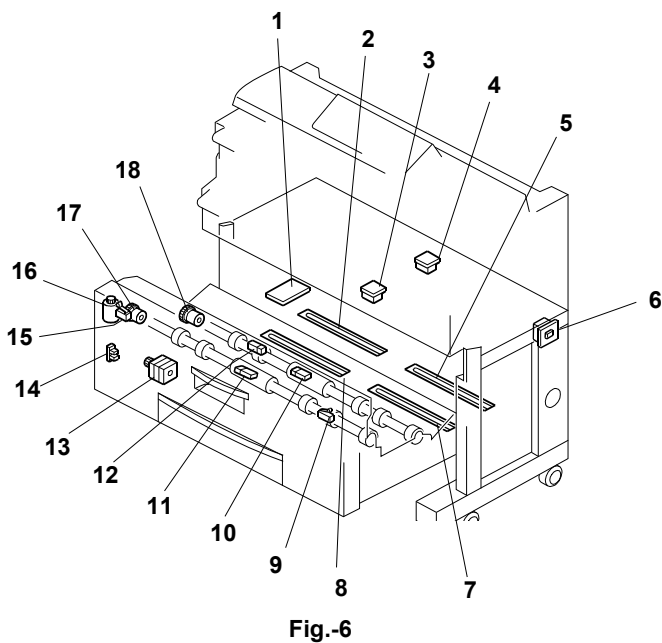
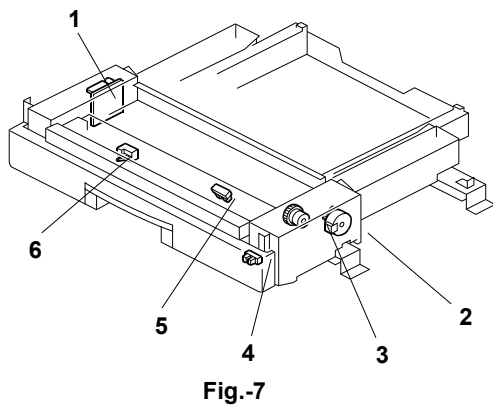
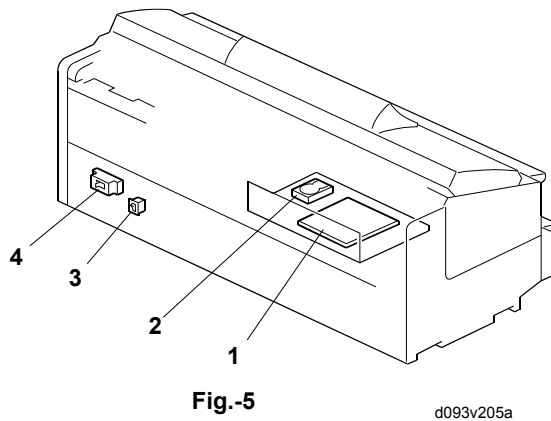
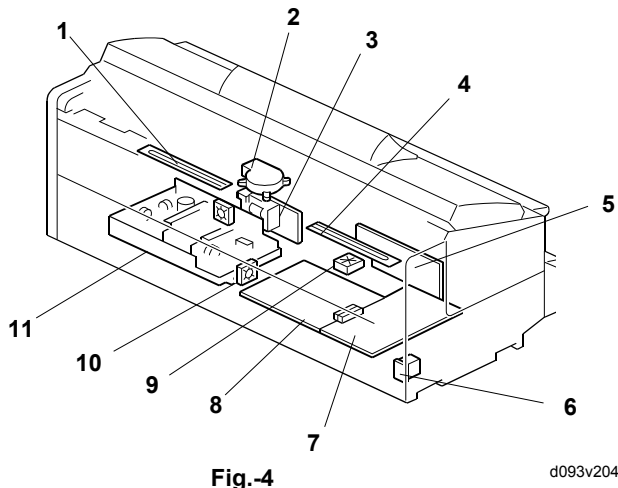
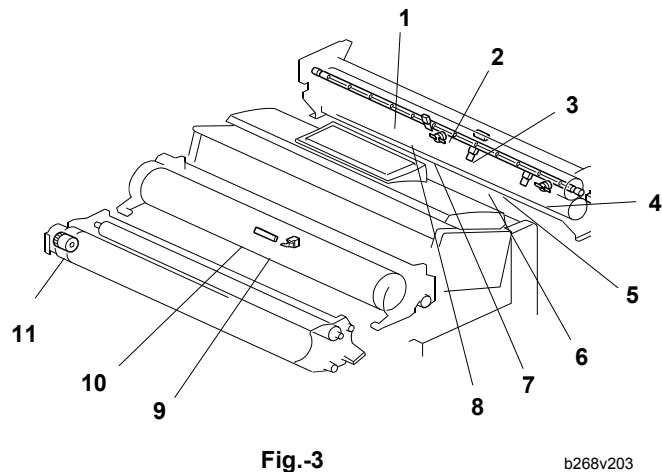
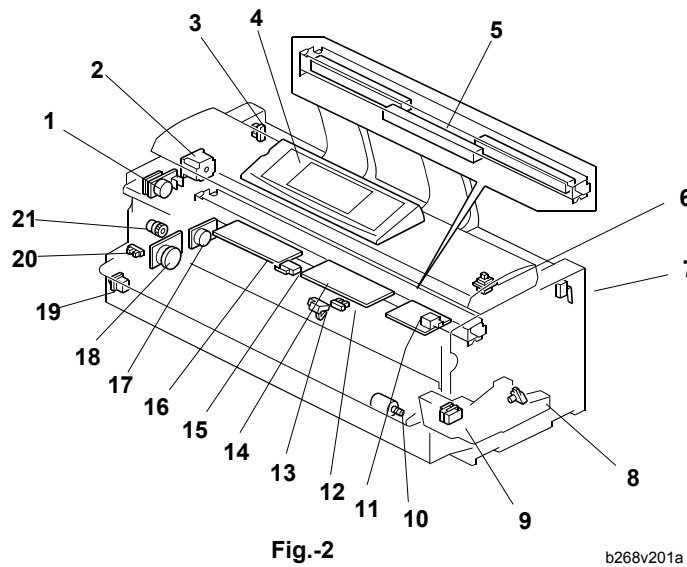
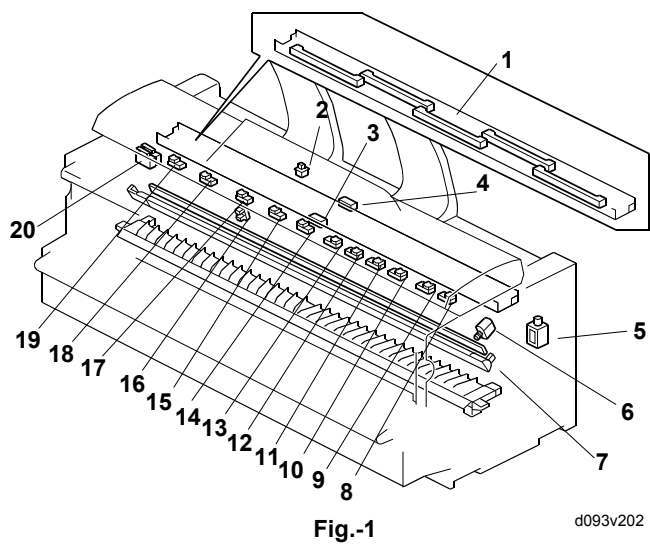
Pin No	Signal	Description	I/O	Action
1	18V	—	P	—
2	GND	—	G	—
3	5V	—	P	—
4	GND	—	G	—
5	12V	—	P	—
6	GND	—	G	—
7	12V	—	P	—
8	GND	—	G	—

Pin No	Signal	Description	I/O	Action
1	24VDD	PSU : Fan	P	—
2	GND	—	G	—
3	PSU_FAN	PSU : Fan	O	H : OFF O : ON
4	TRG_SH_FNG	—	O	H : OFF O : L : ON
5	24V_FSU	Power Relay	O	L : ON
6	XRT_ZSR0	Zero Cross Interruption	I	—
7	TRG_FUS	Fusing Lamp TRG1	O	H : ON I : OFF
8	TRG_FUM0	Datumfilter	O	L : OFF

CN206: Scanner Drive				
Pin No.	Signal	Description	I/O	Action
1	S_RESET_DOC	Original Registration Sensor	I	H : Paper detected I : Not detected
2	REF_CSAN	Scanner Motor : r : P W SW	O	H : Normal L : P W reduction
3	GND	GND	G	—
4	XRES_SCAN	Scanner Motor : RESET	H	H : Normal O : L : Read
5	XENB_SCAN	Scanner Motor : ENABLE	O	H : Normal L : PW out
6	GND	GND	G	—
7	CCW_SCAN	Scanner Motor : r : CCWCCW	O	H : Reverse L : Forward
8	TPU_SCAN	Scanner Motor : r : CLOCK	G	—
9	MOD	Scanner Motor : r : MODE1	O	H : W1-2 : phase L : W1-2 : phase

CN04: PP_Cooling Fan_CCM				
Pin No	Signal	Description	I/O	Action
A1	ERR_DOC	PP-D : Error : Detection	I	-
A2	TRG_PP_DOC	PP_Separation_DOC_TRG	O	L : G_NF
A3	P_P :_DAC_STR	Se p and str n AC Start S g not	O	L : G_NF
A4	TR_G_P_P :_DAC	P_P : Se p and str n A C TR G	O	L : G_NF
A5	PLT_T	P_P : T Return	I	-
A6	TR_G_P_P :_T	P_P : Transfer TR : G	O	L : G_NF
A7	GND	-	G	-
A8	GND	-	G	-
A9	24V1_V0	P_P : C : G : B	P	-
A10	CLX_M_ZC	W1 w : Cleaner : Motor (:)	O	L : CW
A11	CLX_M_ZC1	W1 w : Cleaner : Motor (:)	O	L : CW
A12	24V1_V02	C : setting : Fan SW w	P	-
A13	2FAN1	C : setting : Fan SW w	O	L : G_NF
A14	PLD_M_FAN1	C : setting : Fan Lo ck	I	L : L : O : OK
A15	S_P :_S_FAN	Not used	P	-
A16	5V	-	P	-
A17	CLM_L_O_K	W1 w : Cleaner : Motor (:) : O_K	I	L : L : O : OK
A18	GND	-	G	-
B1	PLB	P_P : B : Return	I	-
B2	TR_G_P_P :_B	P_P : B : w : TR : G	O	L : G_NF
B3	GND	-	G	-
B4	TR_G_P_P :_G	P_P : G : w : TR : G	O	L : G_NF
B5	ERR_C	PP-L : Error : Detection	I	-
B6	TRG_PP_C	PP : Charger TRG	O	L : G_NF
B7	GND	-	G	-
B8	GND	-	G	-
B9	24V_INT1	PP : TD	P	-
B10	KRY_ST_OP	Scanner Stop Key	I	L : G_NF
B11	GND	-	G	-
B12	24VDD	Paper Junction Gate : S : O : L	P	-
B13	S_O_L_O_P :_JAN	Paper Junction Gate : S : O : L	O	L : G_NF
B14	24VDD2	Paper Junction Gate : S : O : L	P	-
B15	S_O_L_O_P :_JAN2	Paper Junction Gate : S : O : L	O	L : G_NF
B16	24VDD3	Paper Junction Gate : S : O : L	P	-
B17	S_O_L_O_P :_JAN3	Paper Junction Gate : S : O : L	O	L : G_NF
B18	GND	-	G	-

D093 ELECTRICAL COMPONENT LAYOUT



Symbol	Index No.	Description	P to P
CIS			
CIS1 - 5	Fig.1-1	CIS 1 - 5 (Contact Image Sensor)	G4-6
LPH			
LPH1 - 3	Fig.2-5	LPH1 - 3 (LED Print Head)	E8-9
Lamp			
L1	Fig.3-3	Fusing Lamp	A2
Magnetic Clutches			
MC1	Fig.7-3	Cassette Feed Clutch	D9
MC2	Fig.2-21	Paper Registration Clutch	B7
MC3	Fig.6-17	Roll Feed Clutch 1	B10
MC4	Fig.6-18	Roll Feed Clutch 2	B10
MC5	Fig.3-11	Toner Supply Clutch	C7
Motors			
M1	Fig.7-2	Cassette Feed Motor	D9
M2	Fig.6-16	Cutter Motor	B10
M3	Fig.2-1	Drum Motor	B7
M4	Fig.2-17	Fusing Motor	A7
M5	Fig.2-18	Main Motor	B7
M6	Fig.6-13	Roll Feed Motor	C10
M7	Fig.2-2	Scanner Motor	G7
M8	Fig.2-10	Used Toner Bottle Motor	C4
M9	Fig.1-5	Wire Cleaner Motor	C5
Fans			
FAN1	Fig.4-2	Cooling Fan	C5
FAN2	Fig.4-10	PCB Cooling Fan Motor 4	C7
FAN3	Fig.4-9	PCB Cooling Fan Motor 5	C7
PCB			
PCB1	Fig.4-7	SIPU	E3
PCB2	Fig.4-8	MCU	D5
PCB3	Fig.4-11	PSU (Power Supply Unit)	B2
PCB4	Fig.6-1	RFDB (Roll Feed Drive Board)	A8
PCB5	Fig.7-1	SFDB (Sheet Feed Drive Board)	C8
PCB6	Fig.2-14	SIF (Scanner Interface Board)	E5
PCB7	Fig.4-5	Mother Board	F2
PCB8	Fig.2-16	VDB (Video Drive Board)	E7
PCB9	Fig.5-1	Controller Board	E2
PCB10	Fig.2-4	Operation Panel	D4
Power Packs			
PP1	Fig.2-11	CGB Power Pack	C6
PP2	Fig.4-3	T&S Power Pack	C5
QL			
QL1 - 3	Fig.1-7	Quenching Lamp (1:Left, 2:Center, 3:Right)	B4

Symbol	Index No.	Description	P to P
Sensors			
S1	Fig.7-5	Cassette End Sensor	C9
S2	Fig.7-4	Cassette Set Sensor	C9
S3	Fig.2-3	Exit Cover Sensor	C7
S4	Fig.3-2	Fusing Exit Sensor	C4
S5	Fig.3-10	ID Sensor	A6
S6	Fig.1-4	Original Exit Sensor	F7
S7	Fig.1-3	Original Registration Sensor	E7
S8	Fig.1-14	Original Set Sensor (A4/8.5" SEF)	E7
S9	Fig.1-9	Original Width Sensor (A0/34")	F7
S10	Fig.1-11	Original Width Sensor (A1/22")	F7
S11	Fig.1-12	Original Width Sensor (A2/17")	F7
S12	Fig.1-13	Original Width Sensor (A3/11")	F7
S13	Fig.1-8	Original Width Sensor (914mm/36")	F7
S14	Fig.1-10	Original Width Sensor (30")	F7
S15	Fig.1-18	Original Width Sensor (B1/24")	E7
S16	Fig.1-19	Original Width Sensor (B2/18")	E7
S17	Fig.1-17	Original Width Sensor (B3/12")	E7
S18	Fig.1-15	Original Width Sensor (B4/9")	E7
S19	Fig.2-12	Paper Registration Sensor	C7
S20	Fig.2-13	Paper Set Sensor	C7
S21	Fig.7-6	Relay Sensor	D9
S22	Fig.6-12	RF Exit Sensor	B10
S23	Fig.6-14	RF Set Sensor	C9
S24	Fig.6-3	Roll End Sensor 1	A9
S25	Fig.6-4	Roll End Sensor 2	A9
S26	Fig.6-11	Roll End Sensor 3	B10
S27	Fig.6-10	Roll End Sensor 4	C10
S28	Fig.2-8	Toner Overflow Sensor	C4
S29	Fig.2-20	Upper Unit Sensor	B7
S30	Fig.1-16	Wire Cleaner Sensor	C5
Solenoids			
SOL1	Fig.1-5	Paper Junction Gate Solenoid	C5
SOL2	Fig.3-9	Pick-Off Pawl Solenoid	A7
Switches			
SW1	Fig.6-6	Dehumidifier Switch	A3
SW2	Fig.2-7	Exit Cover Switch	C5
SW3	Fig.2-19	Main Power Switch	A2
SW4	Fig.2-6	Scanner Stop Switch	C6
SW5	Fig.1-20	Scanner Switches	G7
SW6	Fig.2-15	Toner Hopper Cover Switch	C3
SW7	Fig.2-9	Upper Unit Switch 1	C3
SW8	Fig.2-9	Upper Unit Switch 2	C3
SW9	Fig.6-15	Left Cutter HP Switch	B10
SW10	Fig.6-9	Right Cutter HP Switch	B10
SW11	Fig.3-4	Exit Unit Switch	C6
SW12	Fig.1-2	Paper Exit Selection Switch	C5
SW13	Fig.5-3	Anti-condensation Heater Switch	A2

Symbol		Description	P to P
Others			
CO1	Fig.4-6	Recycle Counter	B7
H1	Fig.6-7	Dehumidifier 1 (Front/Right)	B4
H2	Fig.6-8	Dehumidifier 2 (Front/Left)	B4
H3	Fig.6-2	Dehumidifier 3 (Rear/Right)	B4
H4	Fig.6-5	Dehumidifier 4 (Rear/Left)	B4
H5	Fig.4-4	Anti-Condensation Heater (Left)	A3
H6	Fig.4-1	Anti-Condensation Heater (Right)	A3
HDD	Fig.5-2	HDD	E2
TH1	Fig.3-1	Hot Roller Thermistor	A3
TH2	Fig.3-6	Pressure Roller Thermistor 1 (End)	A3
TH3	Fig.3-7	Pressure Roller Thermistor 2 (Center)	A3
TS1	Fig.3-8	Thermostat 1 (199°C)	A2
TS2	Fig.3-5	Thermostat 2 (200°C)	A2
CB	Fig.5-4	Circuit Breaker	B1