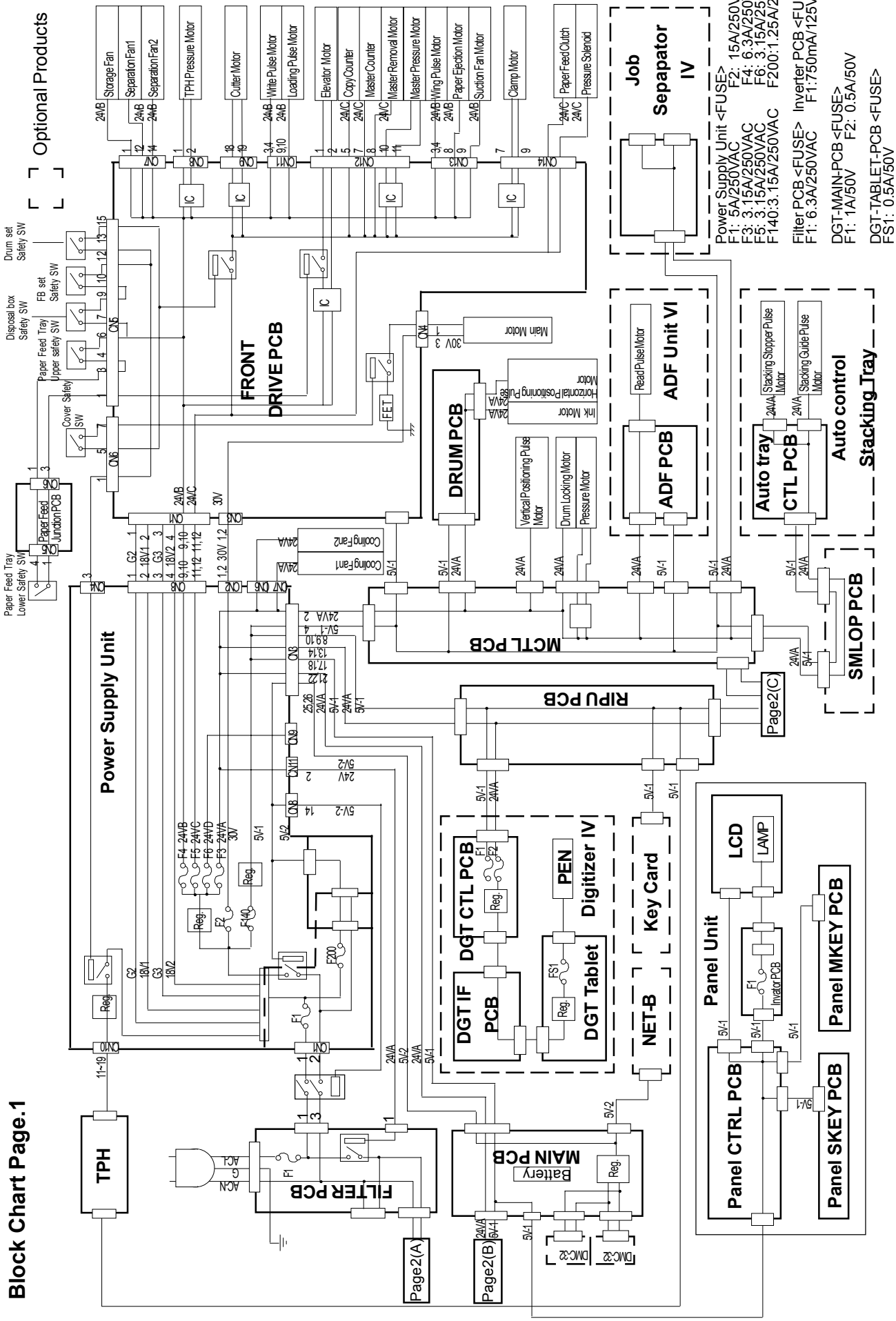
ГЛАВА 21. ОПИСАНИЕ ПЛАТ

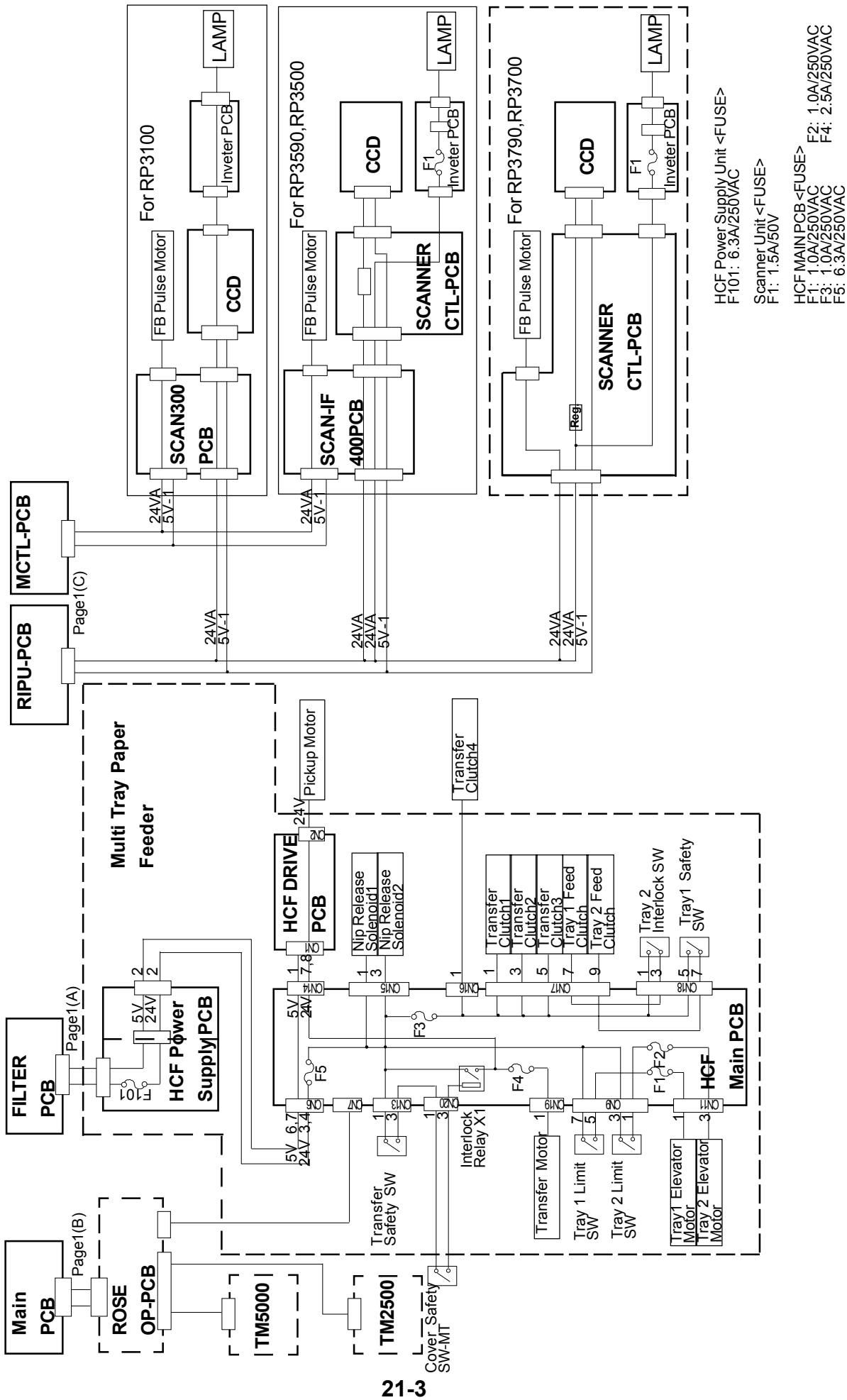
Содержание

1. BLOCK CHART 21-2
2. LOCATION OF PCBs 21-4
3. PCB Function 21-6
4. Description 21-7
4-1. Main PCB (SH PCB) 21-7
4-2. MCTL PCB 21-9
4-3. Front Drive PCB 21-11
4-4. Image Processing PCB (RIPU / RIPM) 21-13
4-5. Panel CTRL PCB 21-15
4-6. Drum Control PCB 21-16
4-7. Scanner Control PCB 21-17
4-8. ADF Control PCB 21-23
4-9. Power Supply PCB 21-24
4-10. SMLOP PCB 21-26
4-11. ROSE/OP PCB 21-27
4-12. RISORINC NET-B 21-28
4-13. Auto Tray CTL PCB 21-29
4-14. HCF CTL PCB 21-30

1. BLOCK CHART

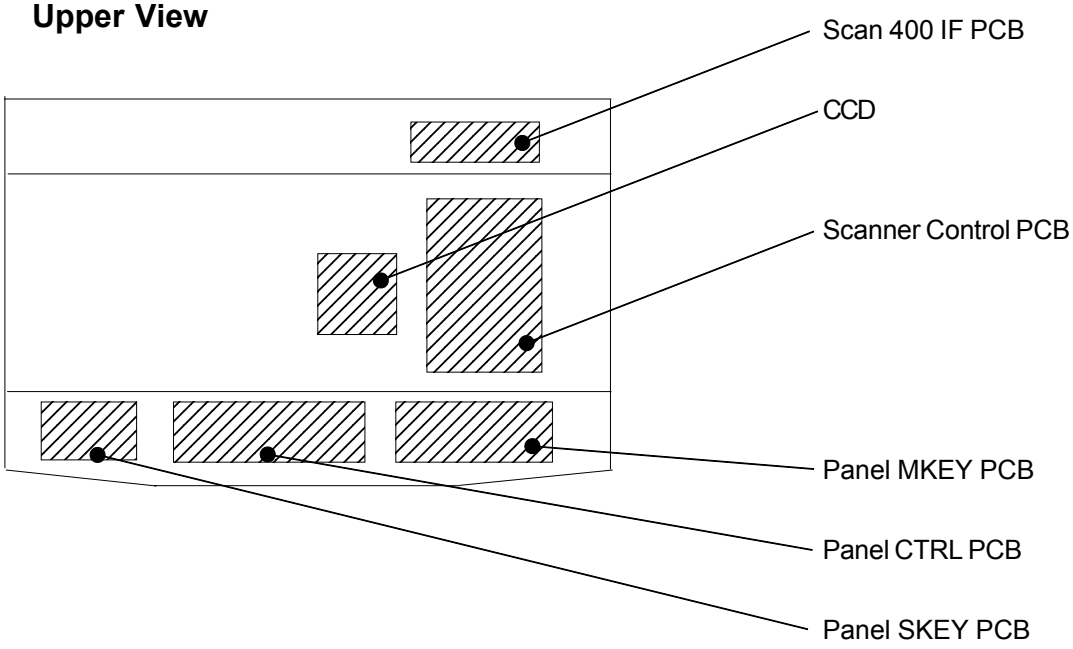


Block Chart Page.2

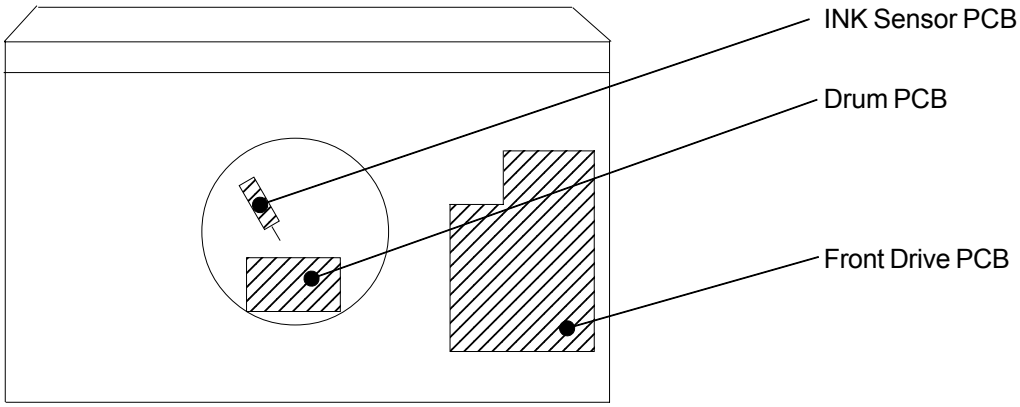


2. LOCATION OF PCBs

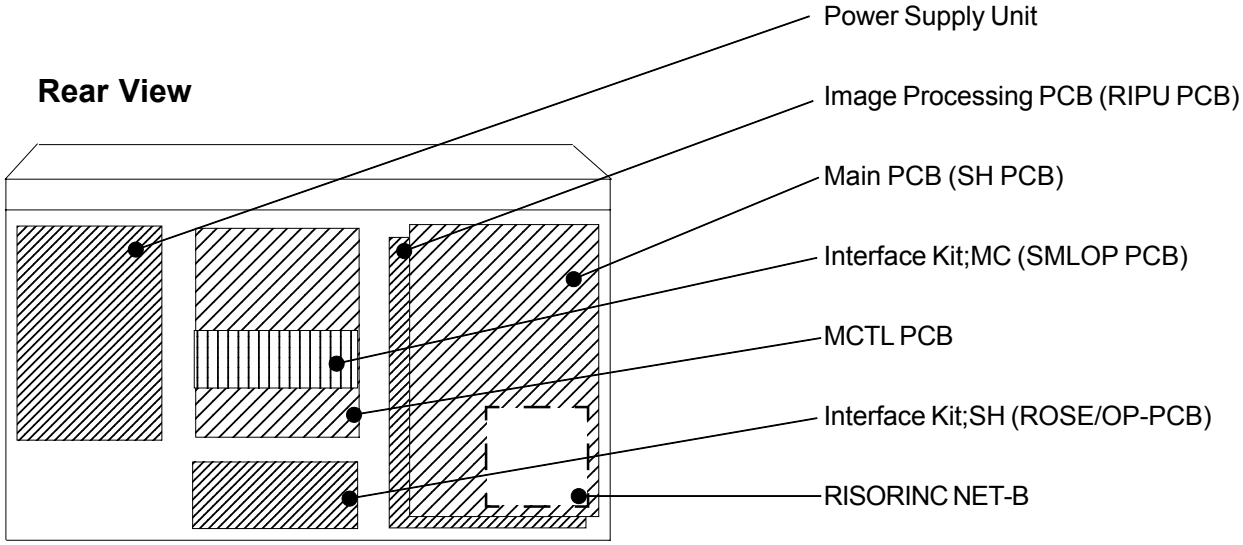
Upper View



Front View



Rear View



Compatibility

Risograph / Name	RP 3700	RP 3790	RP 3500	RP 3590	RP 3100
Main PCB (SH PCB)	○	○	○	○	○
MCTL PCB	○	○	○	○	○
Front Drive PCB	○	○	○	○	○
RIPU PCB	○	○			
RIPM PCB			○	○	○
PanelCTRL PCB	○	○	○	○	○
Panel MKEY PCB	○	○	○	○	○
Panel SKEY PCB	○	○	○	○	○
Drum Control PCB	○	○	○	○	○
Power Supply PCB	○	○	○	○	○
Sub Control PCB	○	○	○	○	○
Scanner Control PCB	○	○	●	●	⊗
SCAN400IF PCB			○	○	
SCAN300IF PCB					○
ADF Control PCB	▲	▲	▲	▲	▲
SMLOP PCB	△	○	△	○	△
ROSE/OP PCB	△	○	△	○	△
RISORINC NET-B	△	○	△	△	△
HCF Main PCB		○		○	
HCF Drive PCB		○		○	
HCF Power Supply PCB		○		○	

● For 400DPI machines only

⊗ For 300DPI machines only

▲ Inside of ADF Unit (Option)

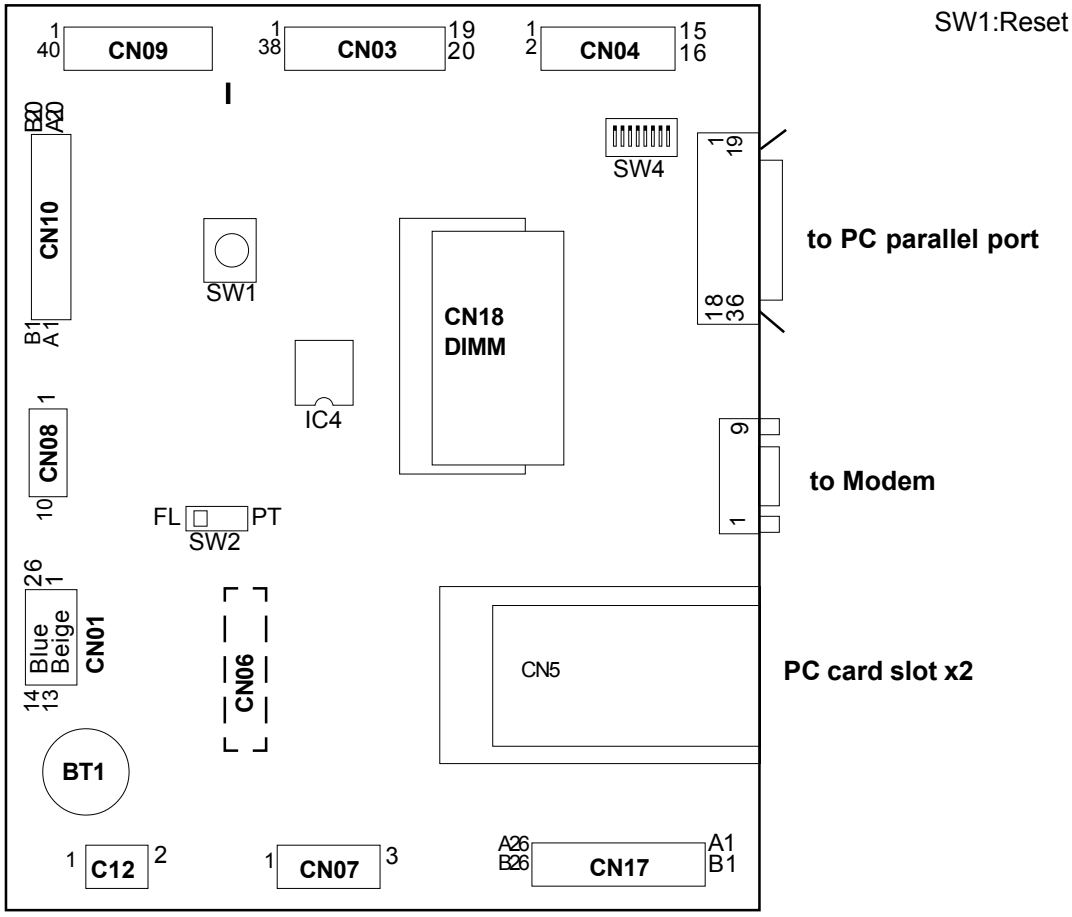
△ Option

3. PCB Function

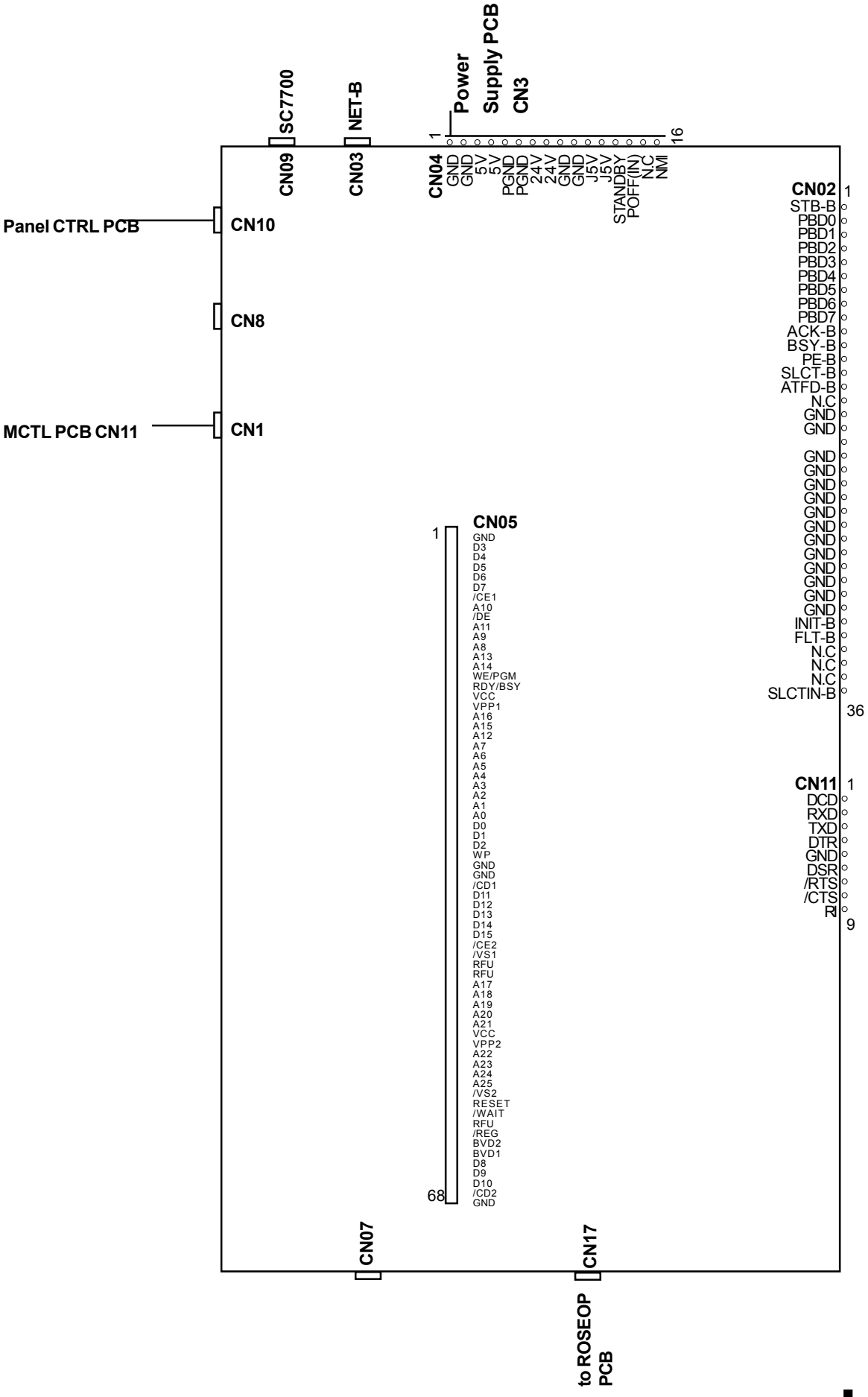
PCB Name	Function
Main PCB (SH PCB)	Overall Control, Computor Interface
MCTL PCB	Drive control of components
Front Drive PCB	Drive control of components
RIPU PCB	Processing Image Data
RIPM PCB	Processing Image Data
PanelCTRL PCB	Control of Display and Touch Panel
Panel MKEY PCB	Enter Main function key, Numeral Display
Panel SKEY PCB	Enter Sub function key
Drum Control PCB	Control of the inside of Drum
Power Supply PCB	Supply all voltages
Sub Control PCB	Supply voltage to TPH
Scanner Control PCB	FB Scanning control
SCAN400IF PCB	Convert Scanner resolution
ADF Control PCB	ADF control
SMLOP PCB	Junction of Auto control stacking tray
ROSE/OP PCB	Junction of Multi tray paper feed
RISORINC NET-B	Network connection
HCF Main PCB	Control of Multi Feed Tray unit
HCF Drive PCB	Drive control of Multi Feed Tray unit
HCF Power Supply PCB	Supply voltage to Multi Feed Tray unit

4. Description

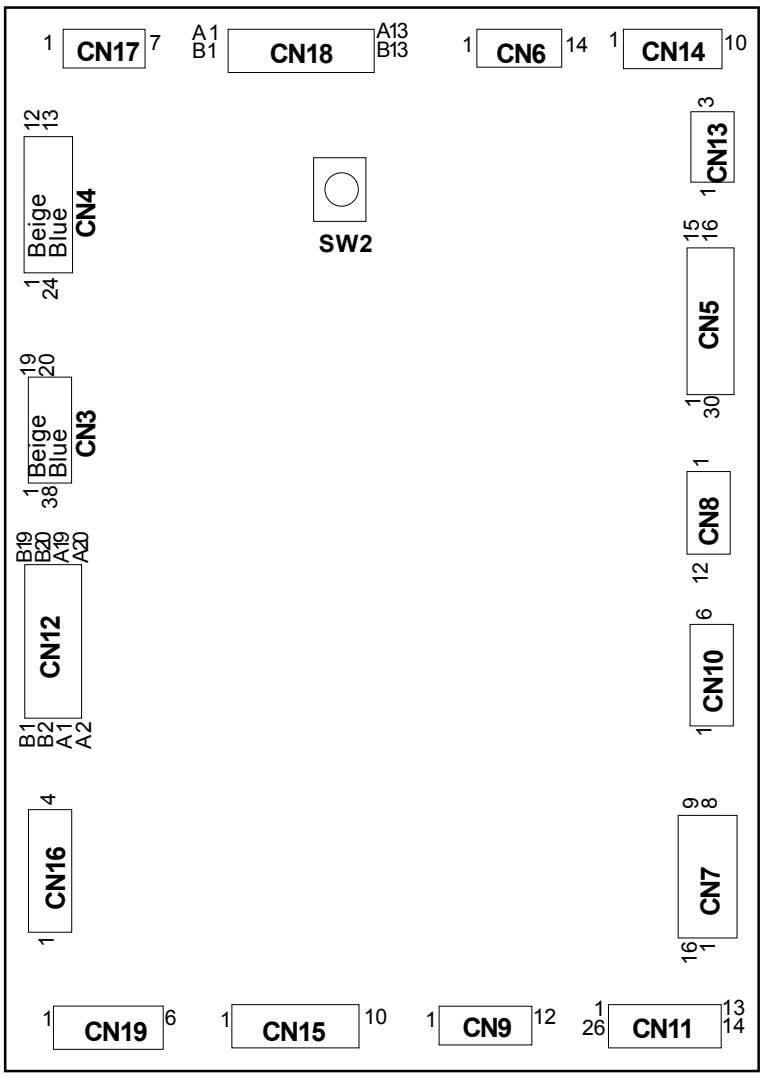
4-1. Main PCB (SH PCB)



4-1.


SC7700
NET-B
Power Supply PCB CN3
CN09
CN03
CN04
1
16
GND
GND
5V
5V
PGND
PGND
24V
24V
GND
GND
J5V
J5V
STANDBY
POFF(IN)
N.C
NM
Panel CTRL PCB
CN10
CN8
MCTL PCB CN11
CN1
CN02
1
STB-B
PBD0
PBD1
PBD2
PBD3
PBD4
PBD5
PBD6
PBD7
ACK-B
BSY-B
PE-B
SLCT-B
ATFD-B
N.C
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
INIT-B
FLT-B
N.C
N.C
N.C
SLCTIN-B
36
CN05
1
GND
D3
D4
D5
D6
D7
/CE1
A10
/DE
A11
A9
A8
A13
A14
WE/PGM
RDY/BSY
VCC
VPP1
A16
A15
A12
A7
A6
A5
A4
A3
A2
A1
A0
D0
D1
D2
WP
GND
GND
/CD1
D11
D12
D13
D14
D15
/CE2
/VS1
RFU
RFU
A17
A18
A19
A20
A21
VCC
VPP2
A22
A23
A24
A25
/VS2
RESET
/WAIT
RFU
/REG
BVD2
BVD1
D8
D9
D10
/CD2
GND
68
CN11
1
DCD
RXD
TXD
DTR
GND
DSR
/RTS
/CTS
RI
9
CN07
CN17
to ROSEOP PCB

4-2. MCTL PCB

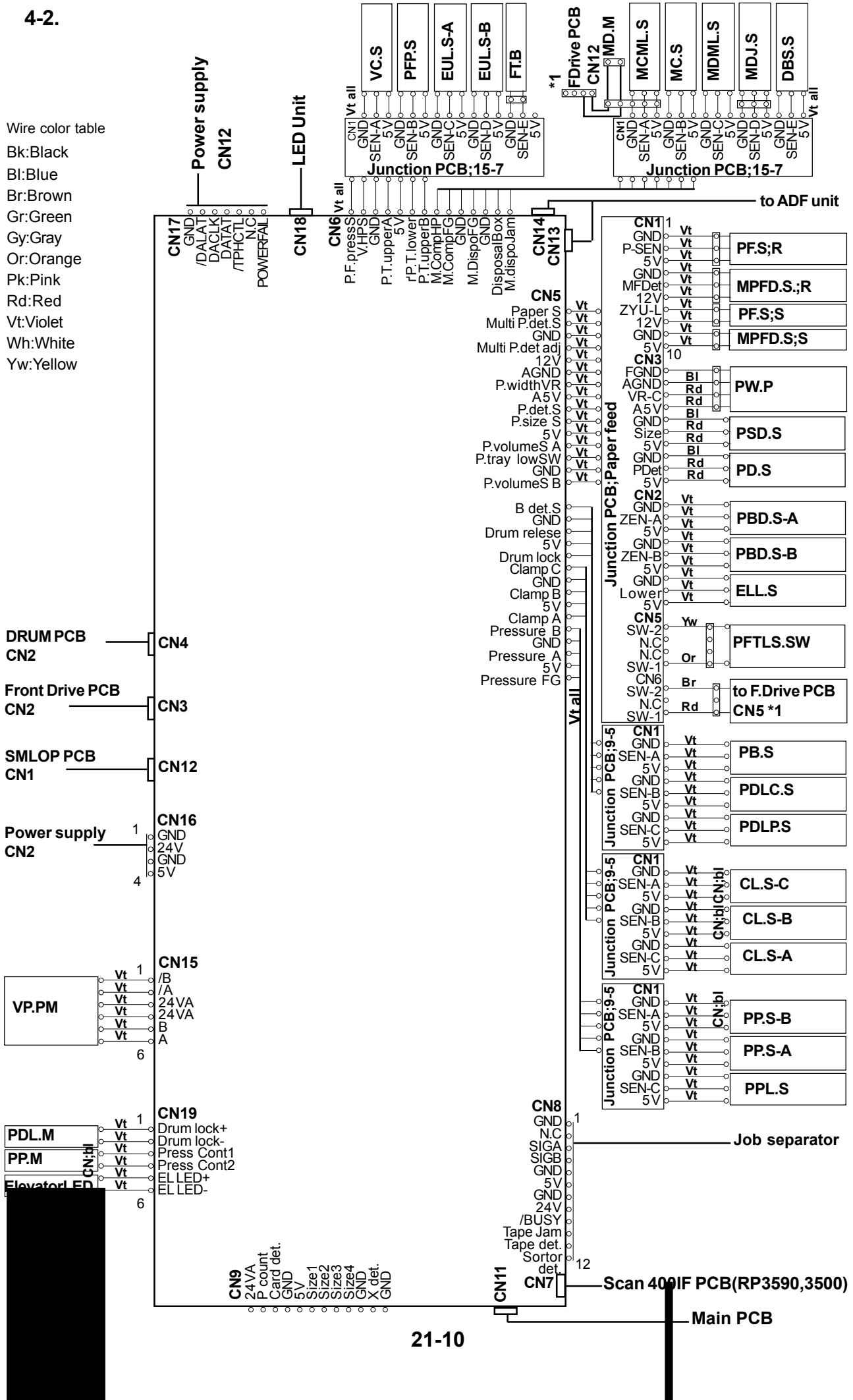


SW2: Main Motor Rotation
(15r.p.m.)

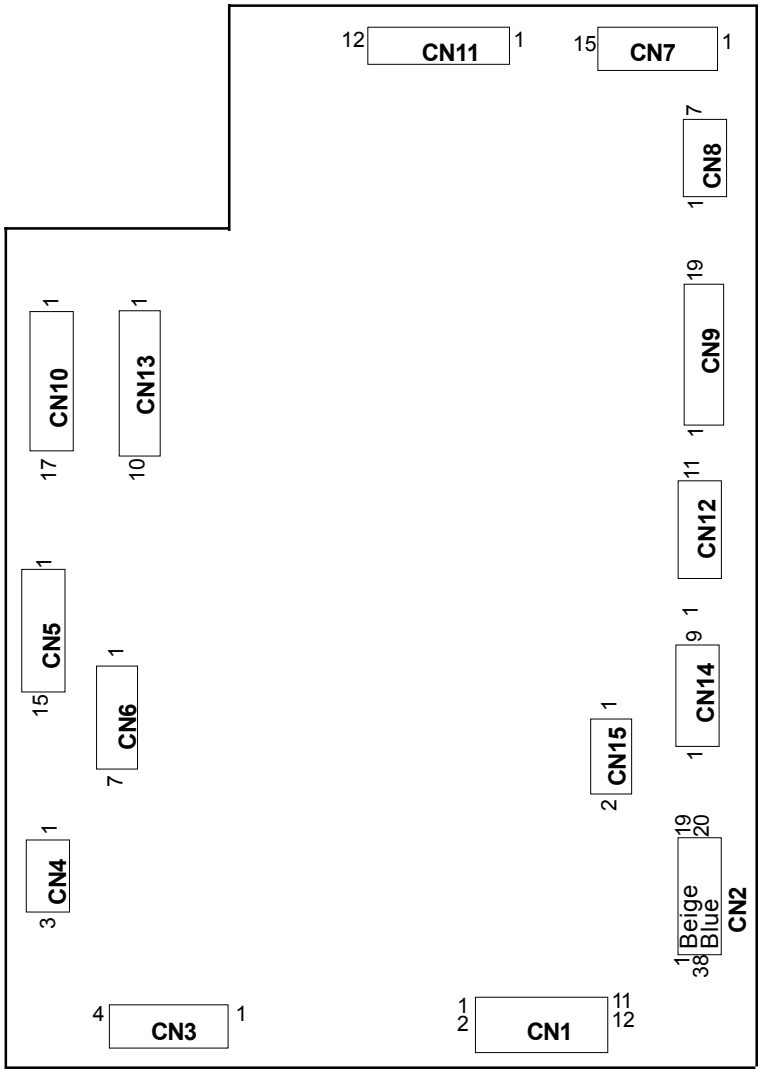
Abbreviation

CL.S-A	:	Clamp Sensor A
CL.S-B	:	Clamp Sensor B
CL.S-C	:	Clamp Sensor C
DBS.SW	:	Disposal Box Safety Switch
DTC.S	:	Disposal Top Cover Sensor
E.B	:	Elevator Button
EB.LED	:	Elevator Button LED
ELL.S	:	Elevator Lower Limit Sensor
EUL.S-A	:	Elevator Upper Limit SensorA
EUL.S-B	:	Elevator Upper Limit SensorB
MC.M	:	Master Compress Motor
MC.S	:	Master Compression Sensor
MCML.S	:	Mstr Compress Motor Limit Sensor
MD.M	:	Master Disposal Motor
MDJ.S	:	Master Disposal Jam Sensor
MDML.S	:	Mstr Disposal Motor Limit Sensor
MPFD.S	:	Multi-Paper Feed Det. Sensor
P.S	:	Paper Sensor
PB.S	:	Position B Sensor
PD.S	:	Paper Detection Sensor
PDL.M	:	Print Drum Locking Motor
PDLC.S	:	Print Drum Lock Cam Sensor
PDLP.S	:	Print Drum Lock Position Sensor
PFP.S	:	Paper Feed Pressure Sensor -High
PFTLS.SW	:	Paper Feed Tray Lower Safety SW
PP.M		Print Pressure Motor
PP.S-A	:	Print Pressure Sensor A
PP.S-B	:	Print Pressure Sensor B
PPL.S	:	Print Pressure Limit Sensor
PSD.S	:	Paper Size Detection Sensor
PVD.S-A	:	Paper Volume Det. Sensor A
PVD.S-B	:	Paper Volume Det. Sensor B
PW.P	:	Paper Width Potentiometer
VC.S	:	Vertical Centering Sensor
VP.PM	:	Vertical Position Pulse Motor

4-2.


Wire color table
Bk:Black
Bl:Blue
Br:Brown
Gr:Green
Gy:Gray
Or:Orange
Pk:Pink
Rd:Red
Vt:Violet
Wh:White
Yw:Yellow
Power supply
CN12
LED Unit
CN17
CN18
CN6
CN14
CN13
VC.S
PFP.S
EUL.S-A
EUL.S-B
FT.B
Junction PCB;15-7
FDrive PCB
CN12
MD.M
MCML.S
MC.S
MDML.S
MDJ.S
DBS.S
to ADF unit
CN5
CN1
CN3
CN2
Junction PCB;Paper feed
PF.S;R
MPFD.S.;R
PF.S;S
MPFD.S;S
PW.P
PSD.S
PD.S
PBD.S-A
PBD.S-B
ELL.S
PFTLS.SW
to F.Drive PCB
CN5 *1
Junction PCB;9-5
PB.S
PDLC.S
PDLP.S
CL.S-C
CL.S-B
CL.S-A
PP.S-B
PP.S-A
PPL.S
DRUM PCB
CN2
CN4
Front Drive PCB
CN2
CN3
SMLOP PCB
CN1
CN12
Power supply
CN2
CN16
CN15
VP.PM
CN19
PDL.M
PP.M
Elevator LED
CN;bl
CN8
Job separator
CN9
CN11
CN7
Scan 400IF PCB(RP3590,3500)
Main PCB

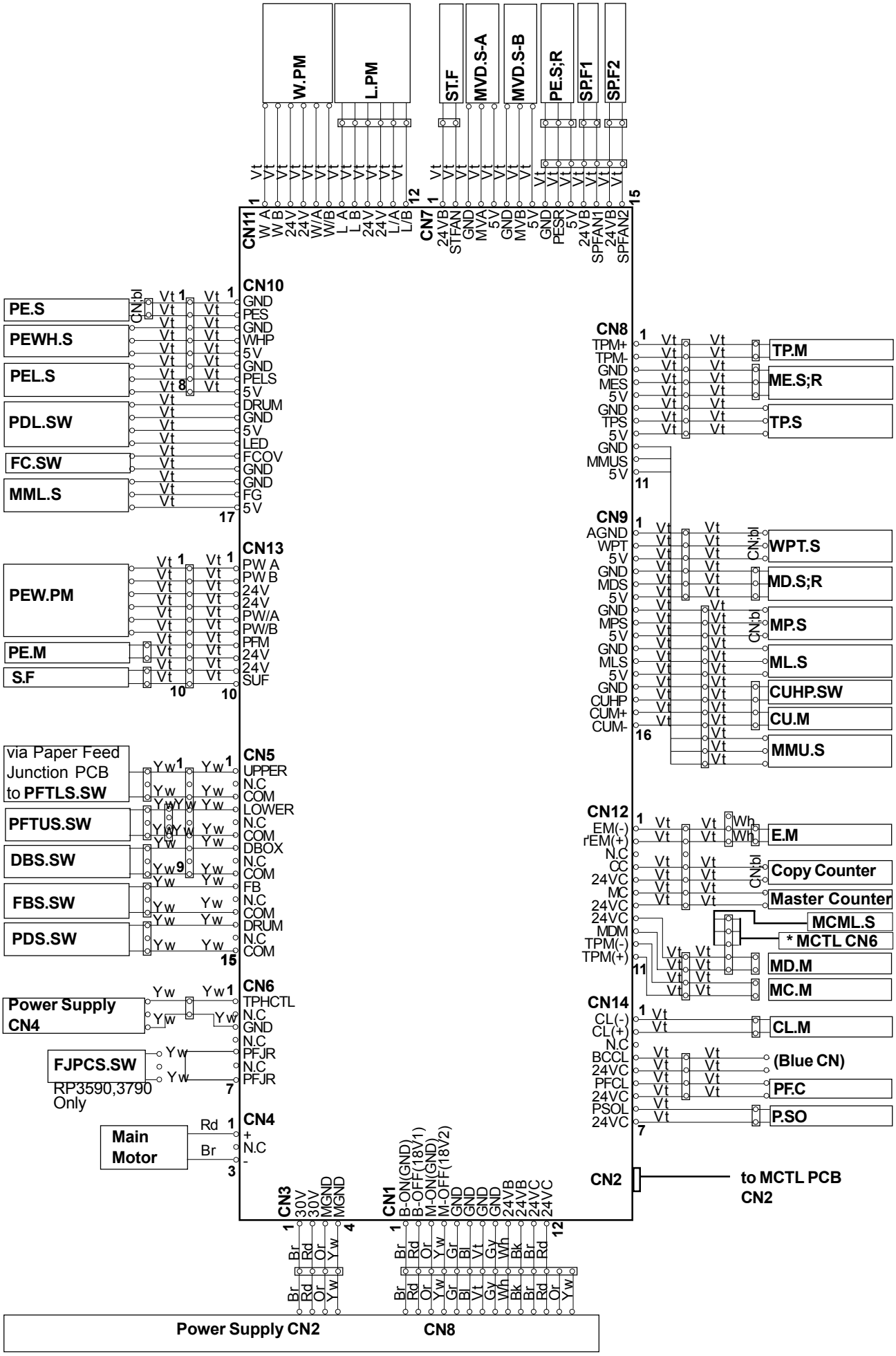
4-3. Front Drive PCB



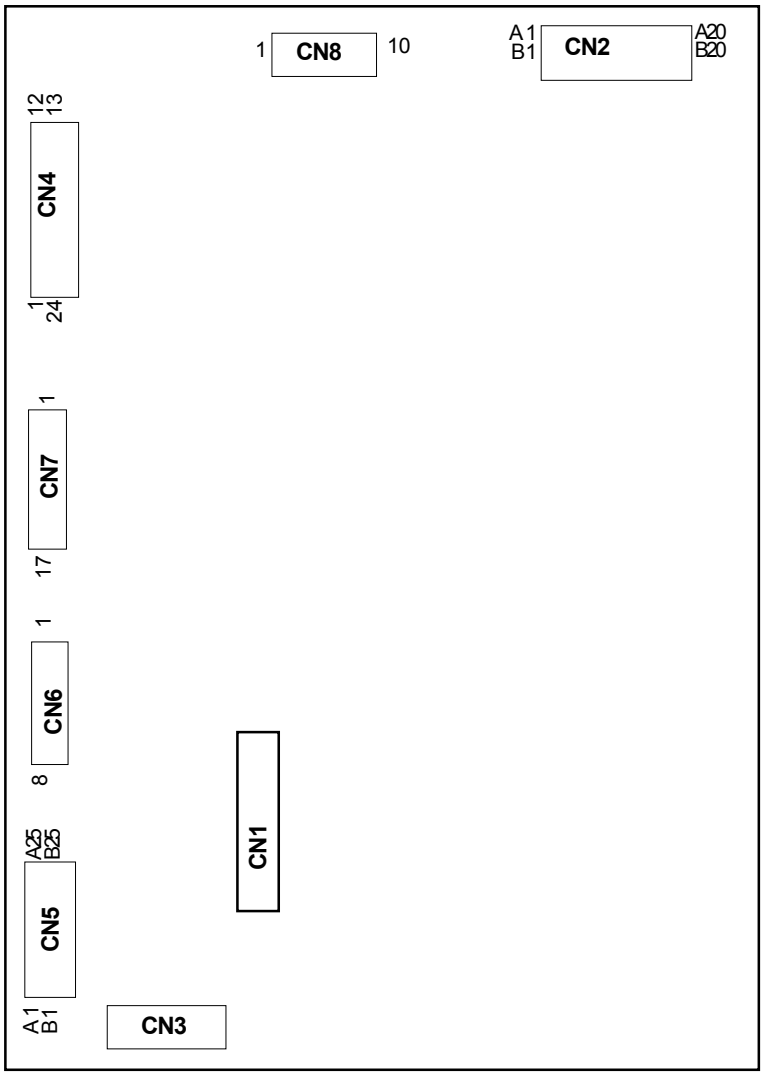
Abbreviation

CL.M	:	Clamp Motor
CU.M	:	Cutter Motor
CUHP.SW	:	Cutter Home Position Switch
E.M	:	Elevator Motor
FBS.SW	:	Flat Bed Set Switch
FC.SW	:	Front Cover Switch
FJPCS.SW	:	Feed Joint Pass. Cover Safety Sw
L.PM	:	Load Pulse Motor
M.M	:	Main Motor
MC.S	:	Master Compression Sensor
MD.S	:	Master Detection Sensor
ME.S	:	Master End Sensor
ML.S	:	Master Loading Sensor
MML.S	:	Main Motor Limit Sensor
MMU.S	:	Master Making Unit Sensor
MP.S	:	Master Positioning Sensor
MVD.S-A	:	Master Volume Det. Sensor A
MVD.S-B	:	Master Volume Det. Sensor B
P.SO	:	Pressure Solenoid
PDL.SW	:	Print Drum Release Button
PDS.SW	:	Print Drum Safety Switch
PE.M	:	Paper Ejection Motor
PE.S	:	Paper Ejection Sensor
PEL.S	:	Paper Ejection Limit Sensor
PEW.PM	:	Paper Ejection Wing Motor
PEWH.S	:	Paper Ejection Wing Home Sensor
PF.C	:	Paper feed clutch
PFTUS.SW	:	Paper Feed Tray Upper Safety SW
S.F	:	Suction Fan
SP.F	:	Separation Fan
ST.F	:	Storage Fan
TP.CTL	:	Thermal Power Control
TP.M	:	Thermal Pressure Motor
TP.S	:	TPH Pressure Switch
W.PM	:	Write Pulse Motor
WPT.S	:	Write Roller Temp. Sensor

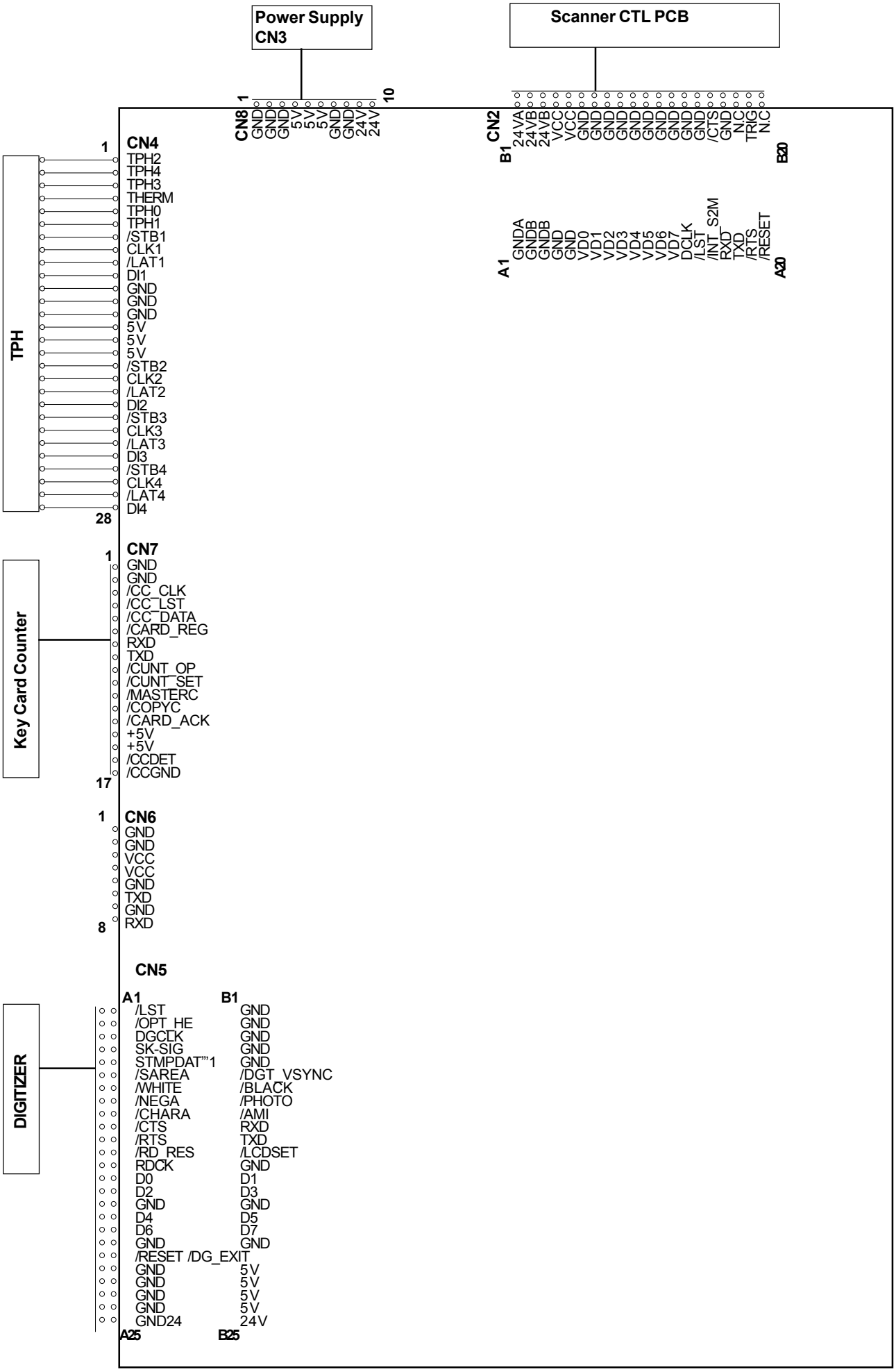
4-3.


W.PM
L.PM
ST.F
MVD.S-A
MVD.S-B
PE.S;R
SP.F1
SP.F2
CN11
W A
W B
24V
24V
W/A
W/B
L A
L B
24V
24V
L/A
L/B
CN7
24VB
STFAN
GND
MVA
5V
GND
MVB
5V
GND
PESR
5V
24VB
SPFAN1
24VB
SPFAN2
CN10
GND
PES
GND
WHP
5V
GND
PELS
5V
DRUM
GND
5V
LED
FCOV
GND
GND
FG
5V
PE.S
PEWH.S
PEL.S
PDL.SW
FC.SW
MML.S
CN13
PW A
PW B
24V
24V
PW/A
PW/B
PFM
24V
24V
SUF
PEW.PM
PE.M
S.F
CN5
UPPER
N.C
COM
LOWER
N.C
COM
DBOX
N.C
COM
FB
N.C
COM
DRUM
N.C
COM
via Paper Feed Junction PCB to PFTLS.SW
PFTUS.SW
DBS.SW
FBS.SW
PDS.SW
CN6
TPHCTL
N.C
GND
N.C
PFJR
N.C
PFJR
Power Supply CN4
FJPCS.SW
RP3590,3790 Only
CN4
+
N.C
-
Main Motor
CN3
30V
30V
MGND
MGND
CN1
B-ON(GND)
B-OFF(18V1)
M-ON(GND)
M-OFF(18V2)
GND
GND
GND
24VB
24VC
24VC
CN8
TPM+
TPM-
GND
MES
5V
GND
TPS
5V
GND
MMUS
5V
TP.M
ME.S;R
TP.S
CN9
AGND
WPT
5V
GND
MDS
5V
GND
MPS
5V
GND
MLS
5V
GND
CUHP
CUM+
CUM-
WPT.S
MD.S;R
MP.S
ML.S
CUHP.SW
CU.M
MMU.S
CN12
EM(-)
EM(+)
N.C
CC
24VC
MC
24VC
24VC
MDM
TPM(-)
TPM(+)
E.M
Copy Counter
Master Counter
MCML.S
* MCTL CN6
MD.M
MC.M
CN14
CL(-)
CL(+)
N.C
BCCL
24VC
PFCL
24VC
PSOL
24VC
CL.M
(Blue CN)
PF.C
P.SO
CN2
to MCTL PCB CN2
Power Supply CN2
CN8

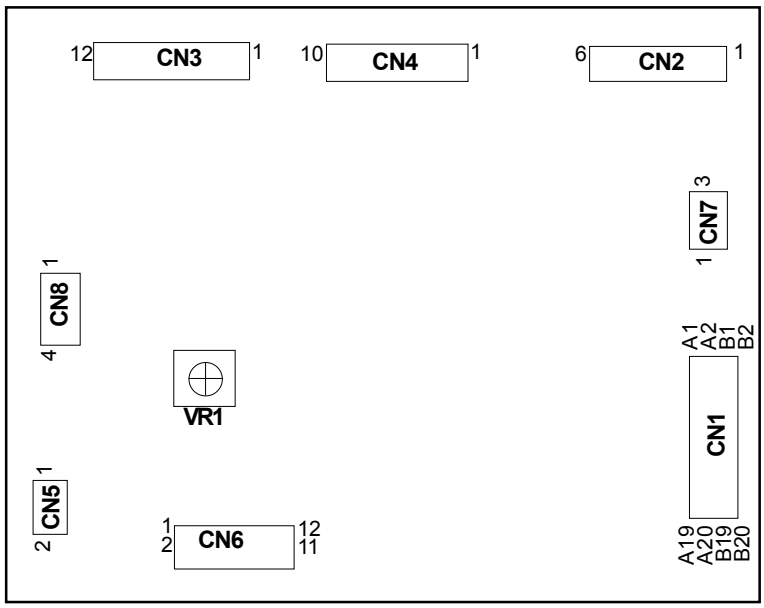
4-4. Image Processing PCB (RIPU / RIPM)



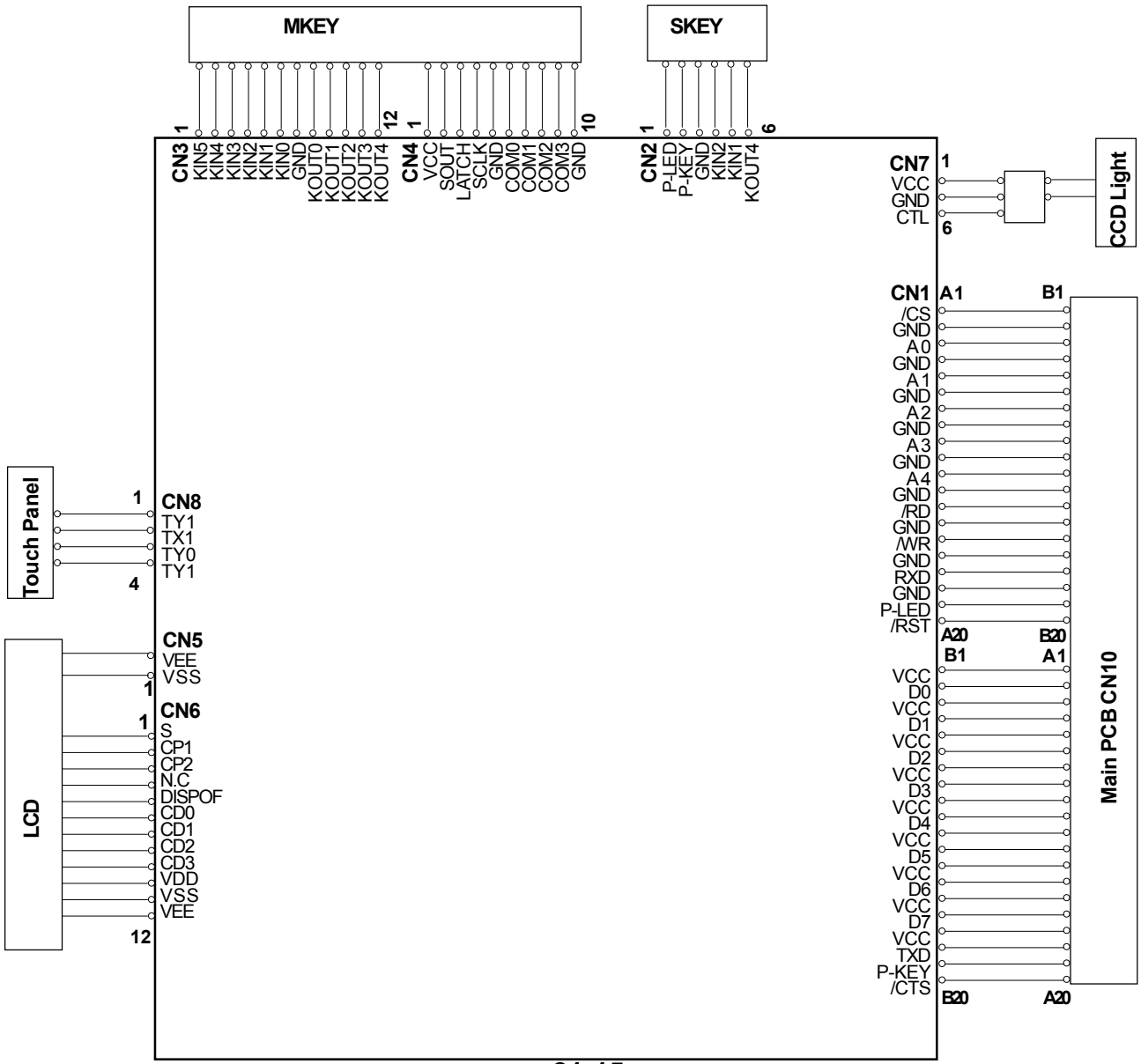
4-4.


Power Supply
CN3
Scanner CTL PCB
CN8
1
10
GND
GND
GND
5V
5V
5V
GND
GND
24V
24V
CN2
B1
B20
24VA
24VB
24VB
VCC
VCC
GND
GND
GND
GND
GND
GND
GND
GND
/CTS
GND
N.C
TRIG
N.C
A1
A20
GNDA
GNDB
GNDB
GND
GND
VD0
VD1
VD2
VD3
VD4
VD5
VD6
VD7
DCLK
/LST
/INT_S2M
RXD
TXD
/RTS
/RESET
TPH
CN4
1
28
TPH2
TPH4
TPH3
THERM
TPH0
TPH1
/STB1
CLK1
/LAT1
DI1
GND
GND
GND
5V
5V
5V
/STB2
CLK2
/LAT2
DI2
/STB3
CLK3
/LAT3
DI3
/STB4
CLK4
/LAT4
DI4
Key Card Counter
CN7
1
17
GND
GND
/CC_CLK
/CC_LST
/CC_DATA
/CARD_REG
RXD
TXD
/CUNT_OP
/CUNT_SET
/MASTERC
/COPYC
/CARD_ACK
+5V
+5V
/CCDET
/CCGND
CN6
1
8
GND
GND
VCC
VCC
GND
TXD
GND
RXD
CN5
DIGITIZER
A1
B1
A25
B25
/LST
GND
/OPT_HE
GND
DGCLK
GND
SK-SIG
GND
STMPDAT""1
GND
/SAREA
/DGT_VSYNC
/WHITE
/BLACK
/NEGA
/PHOTO
/CHARA
/AMI
/CTS
RXD
/RTS
TXD
/RD_RES
/LCDSET
RDCK
GND
D0
D1
D2
D3
GND
GND
D4
D5
D6
D7
GND
GND
/RESET
/DG_EXIT
GND
5V
GND
5V
GND
5V
GND
5V
GND24
24V

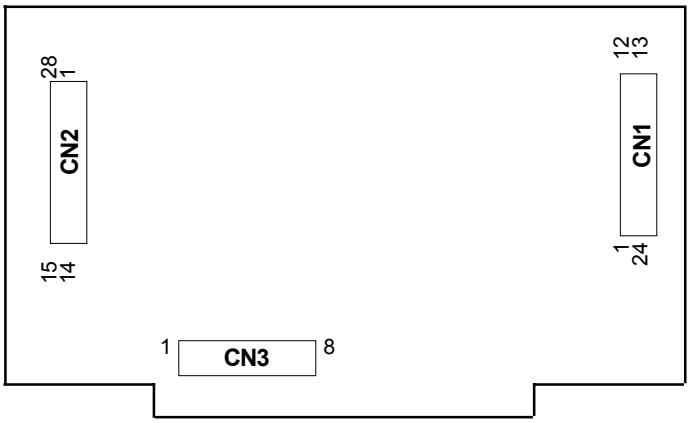
4-5. Panel CTRL PCB



VR1:LCD Contrast Adj.

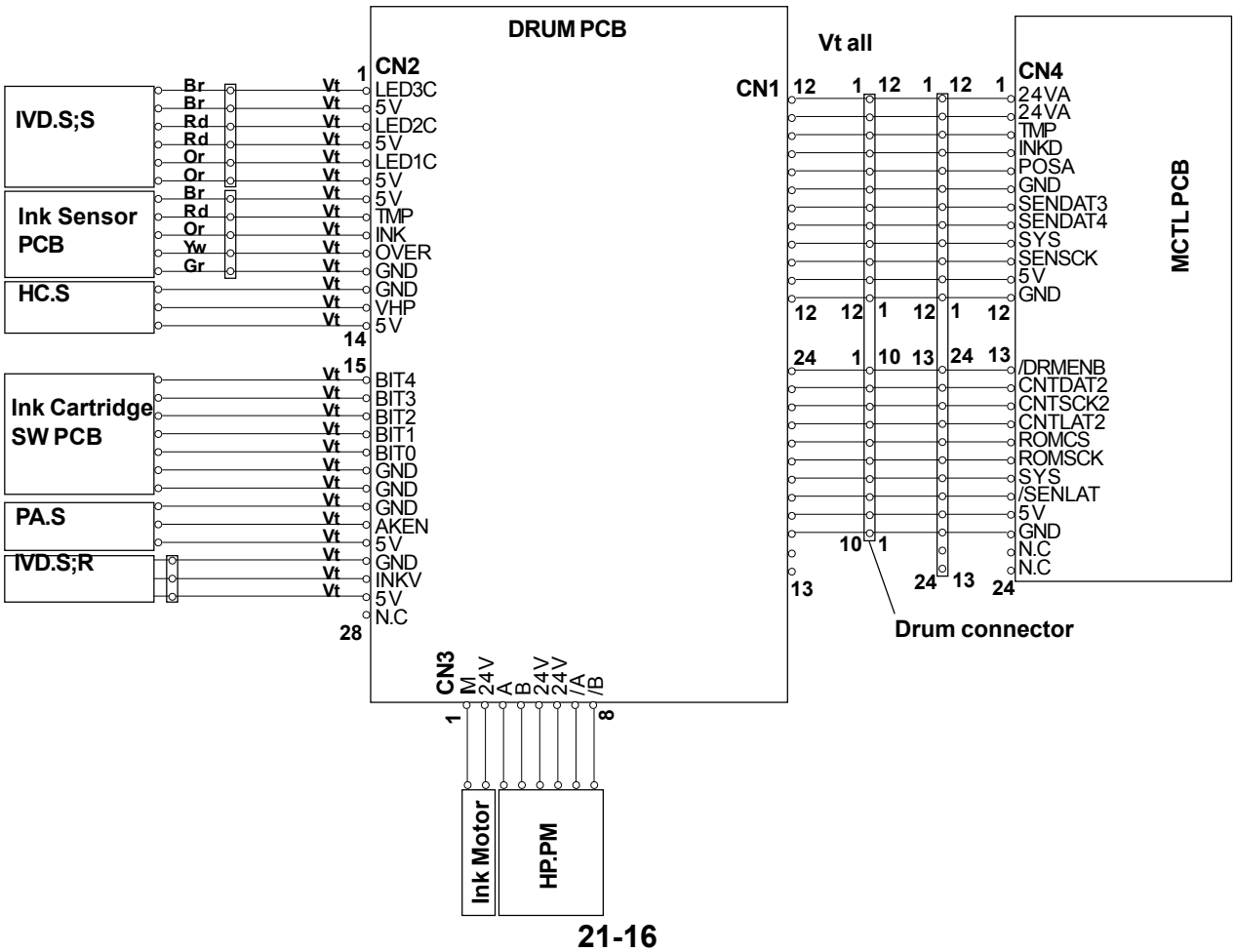


4-6. Drum Control PCB



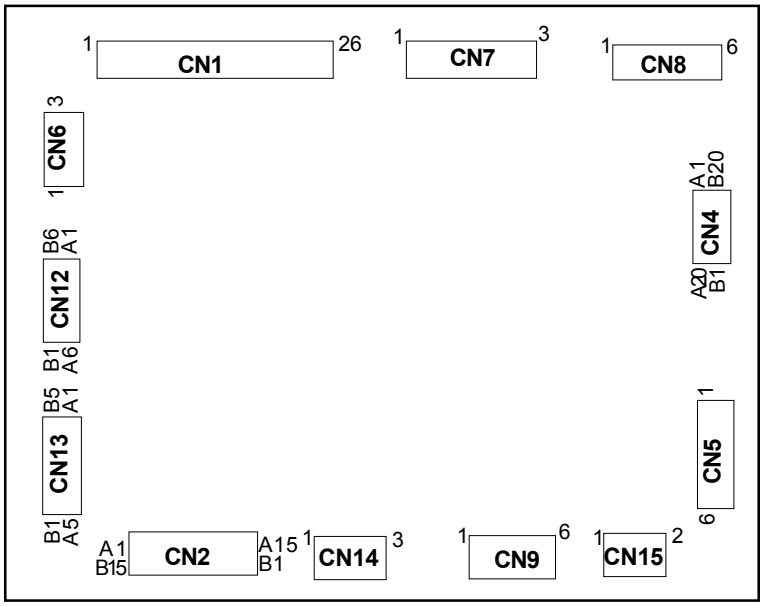
Abbreviation

HC.S	:	Horizontal Centering Sensor
HP.PM	:	Horizontal Position Pulse Motor
I.M	:	Inking Motor
I.S	:	Ink Sensor
IS.SW-1	:	Ink Cartridge Set SW1
IS.SW-2	:	Ink Cartridge Set SW2
IS.SW-3	:	Ink Cartridge Set SW3
IS.SW-4	:	Ink Cartridge Set SW4
IS.SW-5	:	Ink Cartridge Set SW5
IVD.S-1	:	Ink Volume Det. Sensor1
IVD.S-2	:	Ink Volume Det. Sensor2
IVD.S-3	:	Ink Volume Det. Sensor3
O.S	:	Overflow Sensor
PA.S	:	Position A Sensor

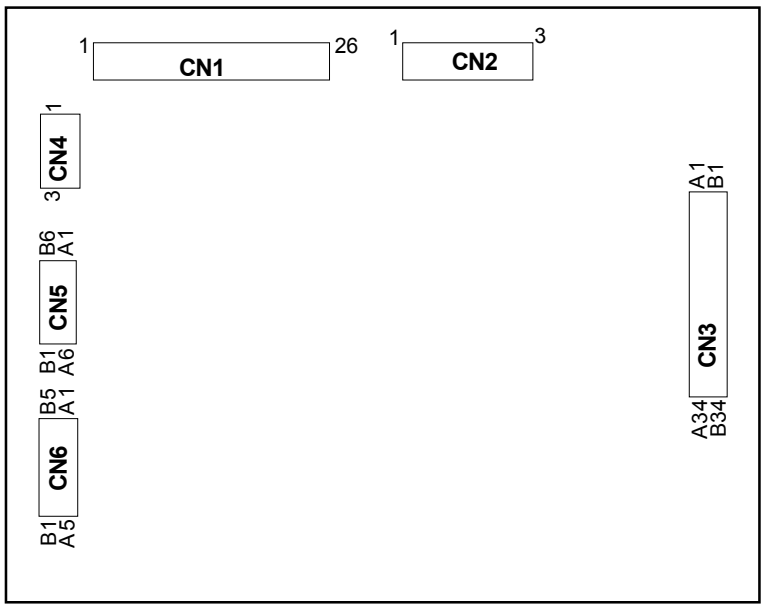


4-7. Scanner Control PCB

4-7-1. Scanner Control PCB for RP3700, RP3790



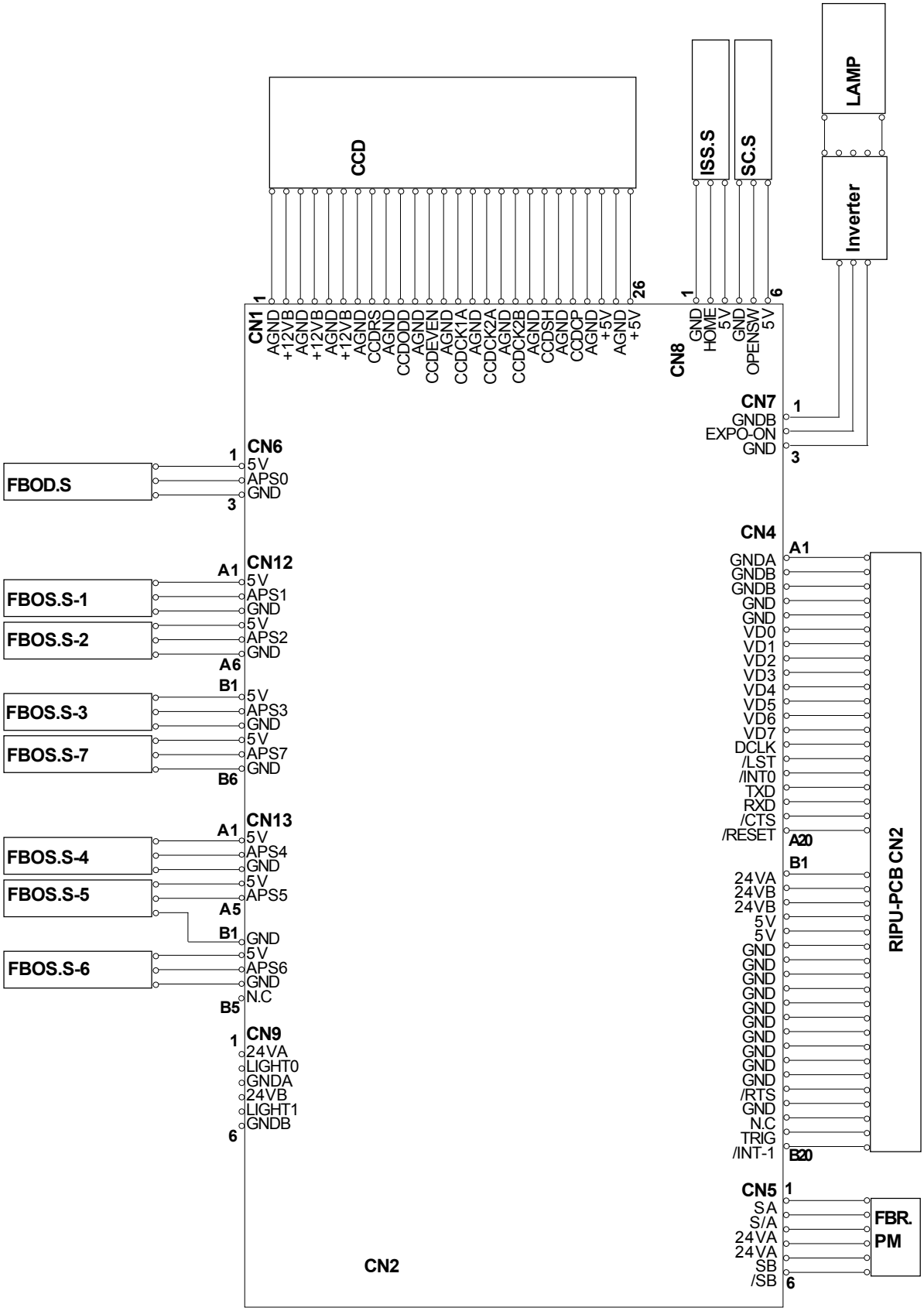
4-7-2. Scanner Control PCB for RP3500, RP3590



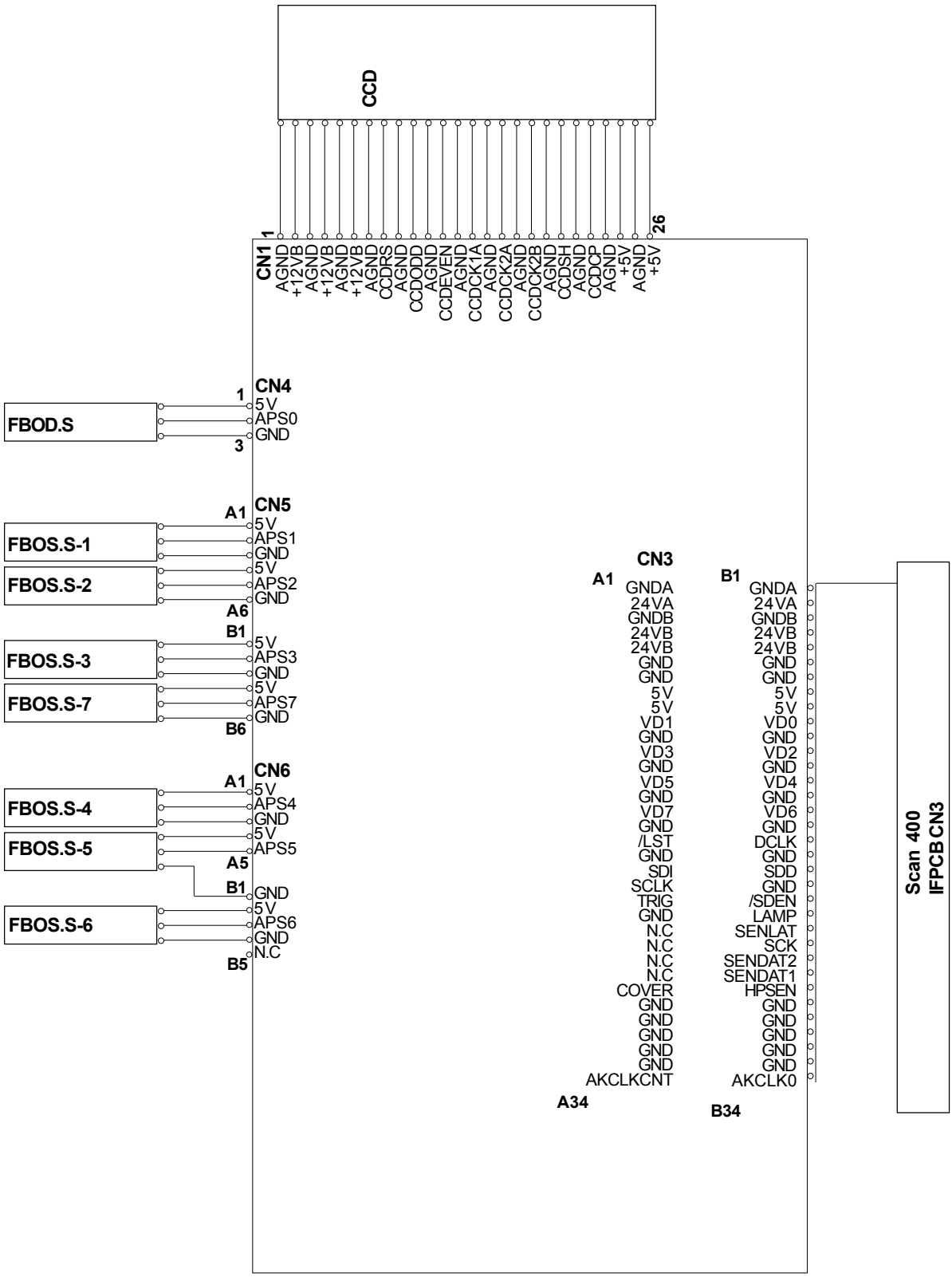
Abbreviation

FBOD.S	:	Flat Bed Original Det. Sensor
FBOS.S-1	:	Flat Bed Original Size Sensor 1
FBOS.S-2	:	Flat Bed Original Size Sensor 2
FBOS.S-3	:	Flat Bed Original Size Sensor 3
FBOS.S-4	:	Flat Bed Original Size Sensor 4
FBOS.S-5	:	Flat Bed Original Size Sensor 5
FBOS.S-6	:	Flat Bed Original Size Sensor 6
FBOS.S-7	:	Flat Bed Original Size Sensor 7
FBR.PM	:	FB read pulse motor
ISS.S	:	Image Scanner ADF Shading Sensor
SC.S	:	Stage Cover Sensor

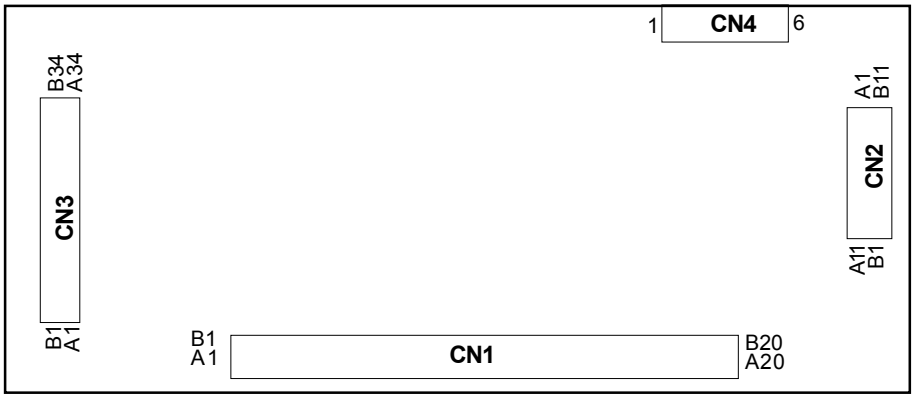
4-7-1.

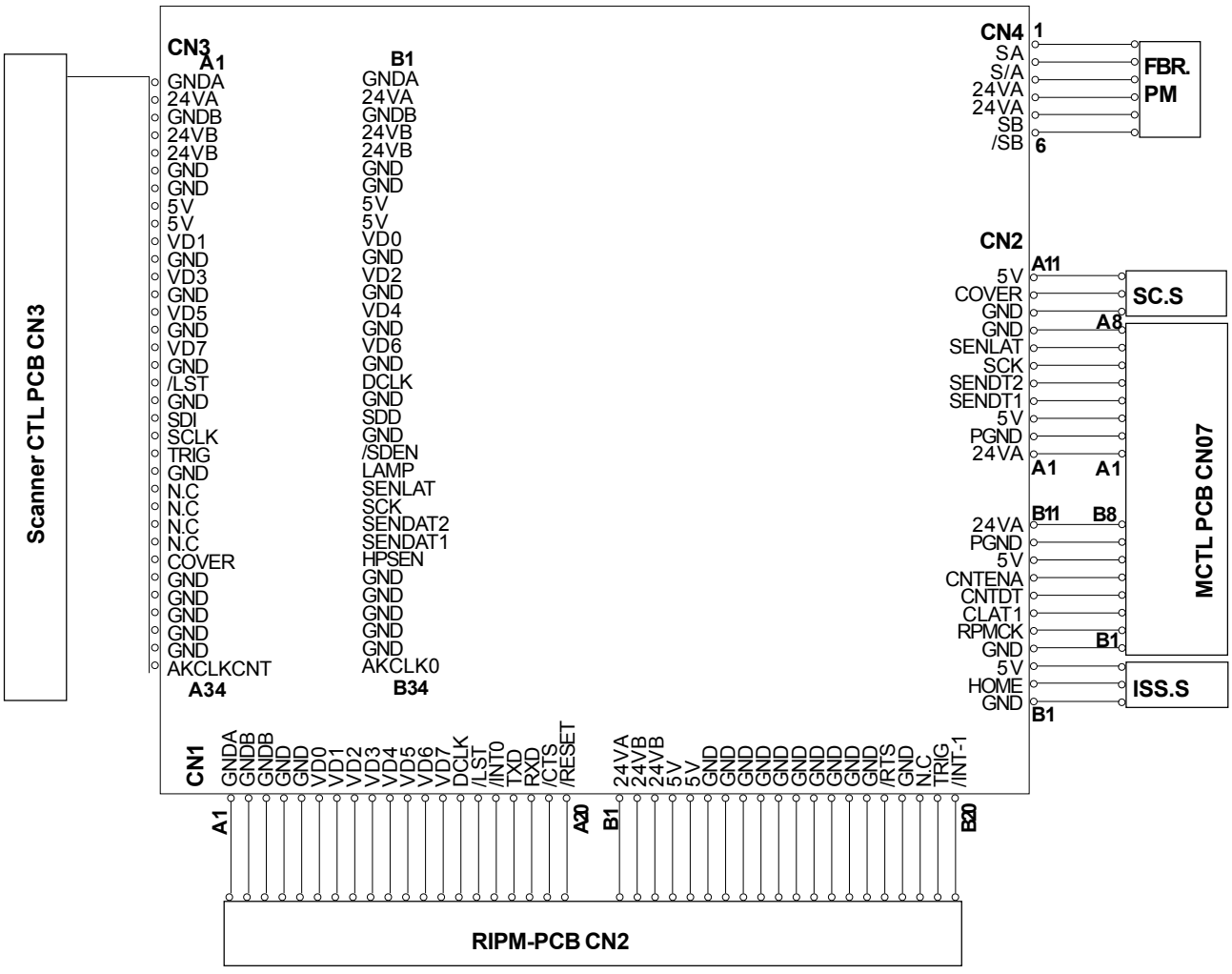

CCD
ISS.S
SC.S
LAMP
Inverter
CN1
1
AGND
+12VB
AGND
+12VB
AGND
+12VB
AGND
CCDRS
AGND
CCDODD
AGND
CCDEVEN
AGND
CCDCK1A
AGND
CCDCK2A
AGND
CCDCK2B
AGND
CCDSH
AGND
CCDCP
AGND
+5V
AGND
+5V
26
CN8
1
GND
HOME
5V
GND
OPENSW
5V
6
CN7
1
GNDB
EXPO-ON
GND
3
CN6
1
5V
APS0
GND
3
FBOD.S
CN12
A1
5V
APS1
GND
5V
APS2
GND
A6
FBOS.S-1
FBOS.S-2
B1
5V
APS3
GND
5V
APS7
GND
B6
FBOS.S-3
FBOS.S-7
CN13
A1
5V
APS4
GND
5V
APS5
A5
B1
GND
5V
APS6
GND
N.C
B5
FBOS.S-4
FBOS.S-5
FBOS.S-6
CN9
1
24VA
LIGHT0
GNDA
24VB
LIGHT1
GNDB
6
CN4
A1
GNDA
GNDB
GNDB
GND
GND
VD0
VD1
VD2
VD3
VD4
VD5
VD6
VD7
DCLK
/LST
/INT0
TXD
RXD
/CTS
/RESET
A20
B1
24VA
24VB
24VB
5V
5V
GND
GND
GND
GND
GND
GND
GND
GND
GND
GND
/RTS
GND
N.C
TRIG
/INT-1
B20
RIPU-PCB CN2
CN5
1
S A
S/A
24VA
24VA
SB
/SB
6
FBR.
PM
CN2

4-7-2.

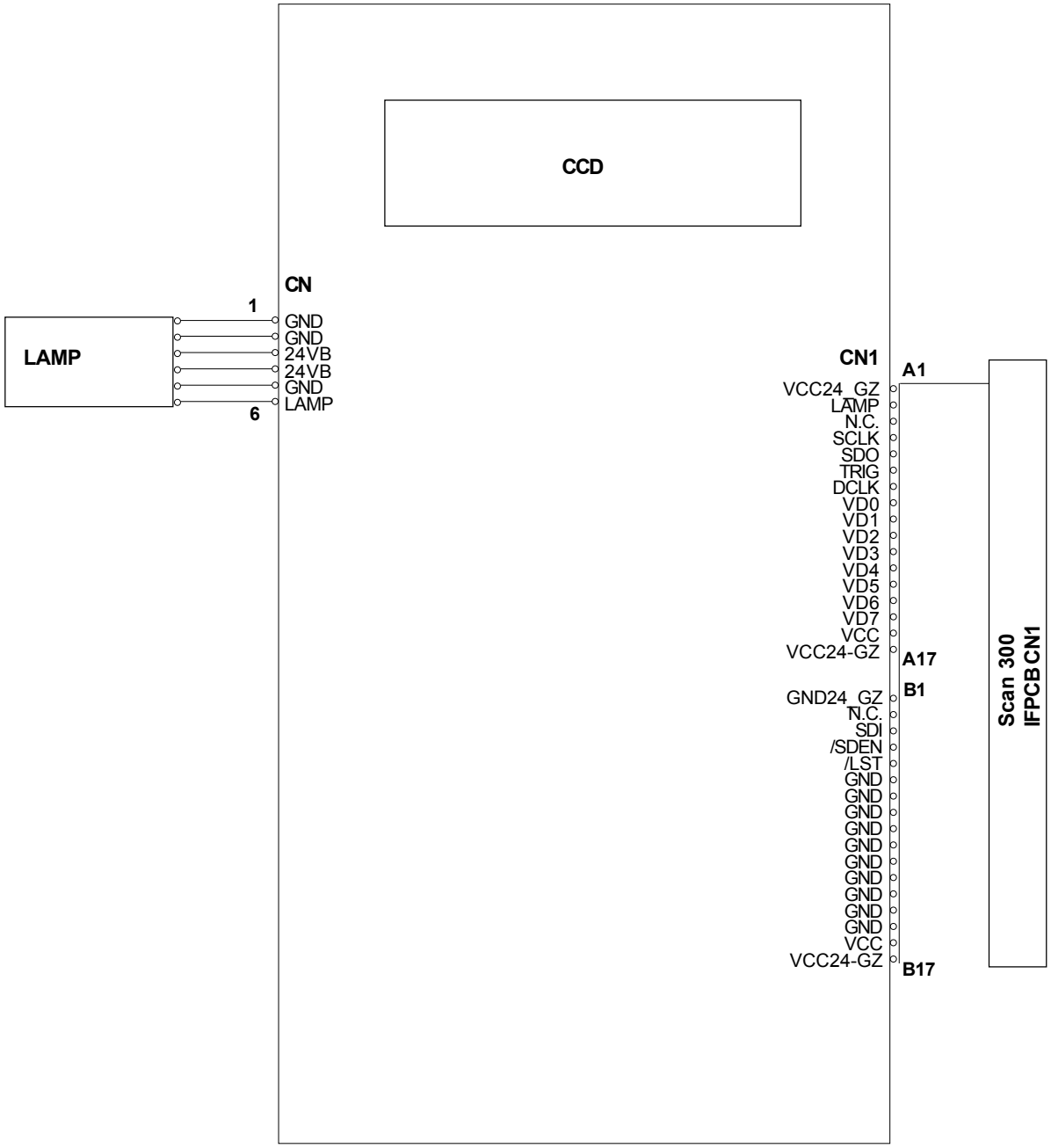

CCD
CN1
1
26
AGND
+12VB
AGND
+12VB
AGND
+12VB
AGND
CCDRS
AGND
CCDODD
AGND
CCDEVEN
AGND
CCDCK1A
AGND
CCDCK2A
AGND
CCDCK2B
AGND
CCDSH
AGND
CCDCP
AGND
+5V
AGND
+5V
CN4
1
5V
APS0
GND
3
FBOD.S
CN5
A1
5V
APS1
GND
5V
APS2
GND
A6
FBOS.S-1
FBOS.S-2
B1
5V
APS3
GND
5V
APS7
GND
B6
FBOS.S-3
FBOS.S-7
CN6
A1
5V
APS4
GND
5V
APS5
A5
B1
GND
5V
APS6
GND
N.C
B5
FBOS.S-4
FBOS.S-5
FBOS.S-6
CN3
A1
GNDA
24VA
GNDB
24VB
24VB
GND
GND
5V
5V
VD1
GND
VD3
GND
VD5
GND
VD7
GND
/LST
GND
SDI
SCLK
TRIG
GND
N.C
N.C
N.C
N.C
COVER
GND
GND
GND
GND
GND
AKCLKCNT
A34
B1
GNDA
24VA
GNDB
24VB
24VB
GND
GND
5V
5V
VD0
GND
VD2
GND
VD4
GND
VD6
GND
DCLK
GND
SDD
GND
/SDEN
LAMP
SENLAT
SCK
SENDAT2
SENDAT1
HPSEN
GND
GND
GND
GND
GND
GND
AKCLK0
B34
Scan 400
IFPCB CN3

4-7-3. Scan 400 IF PCB

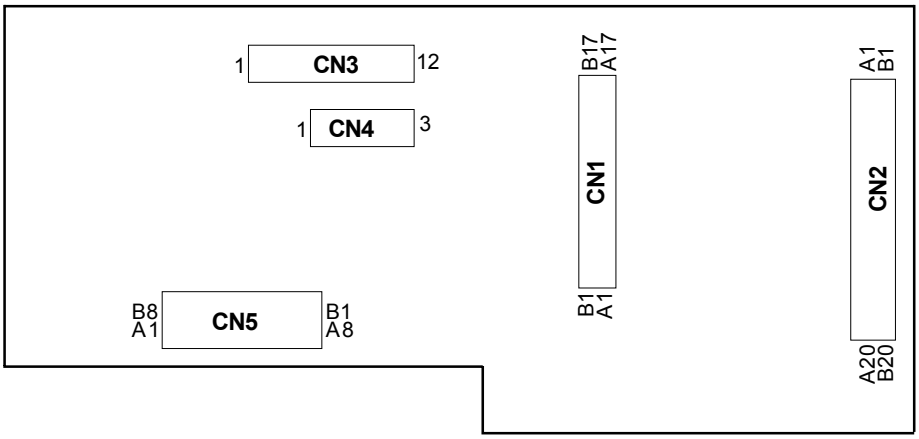


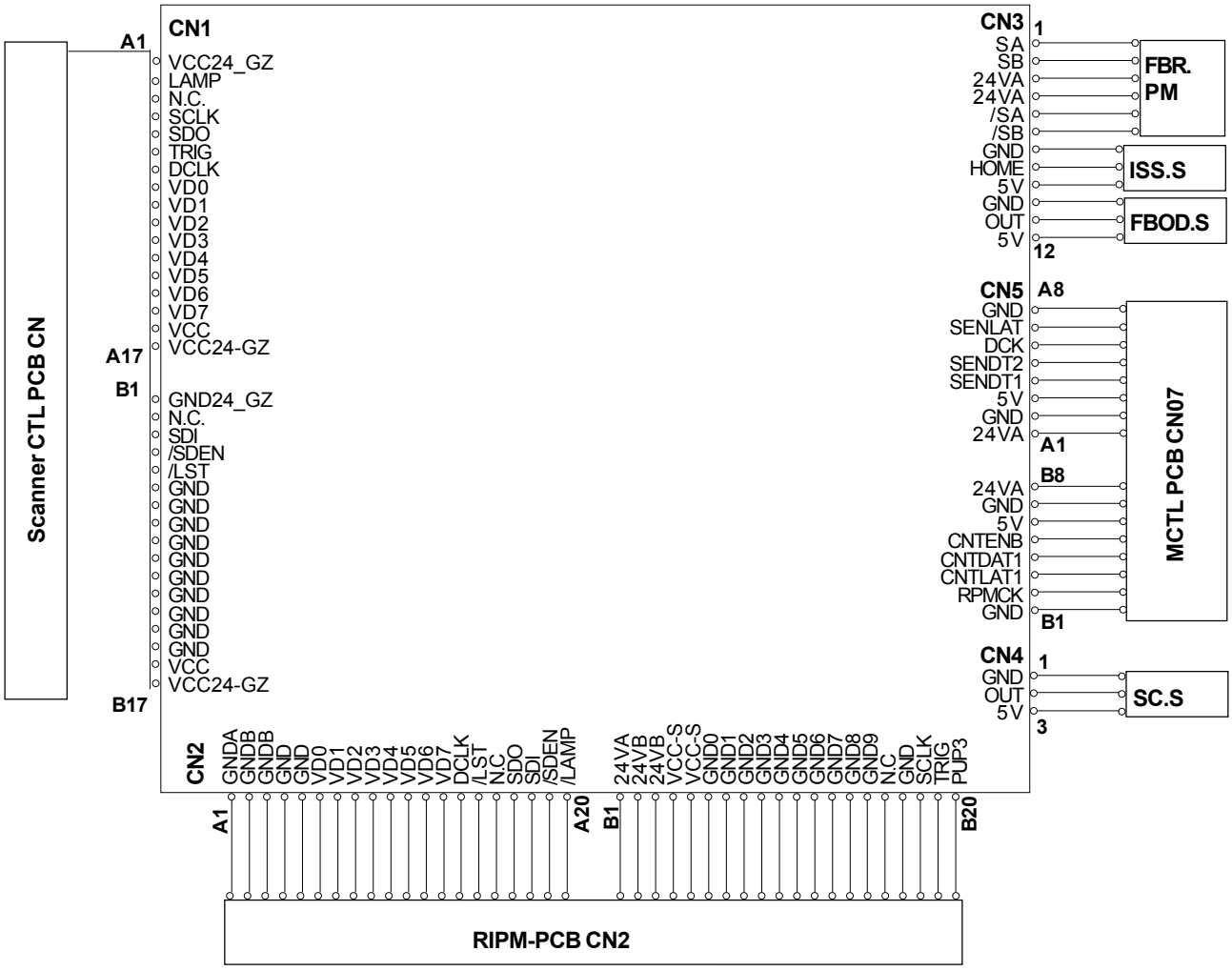


4-7-4. Scanner Control PCB for RP3100

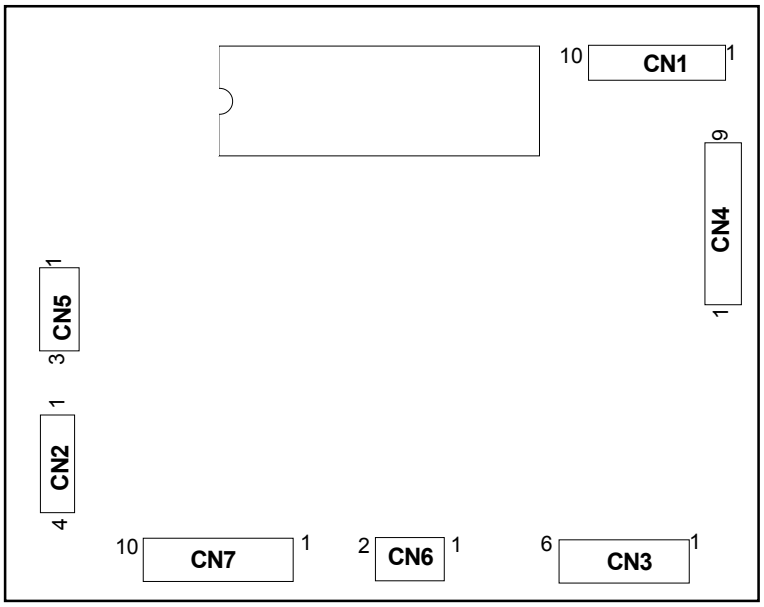


4-7-5. Scan 300 IF PCB



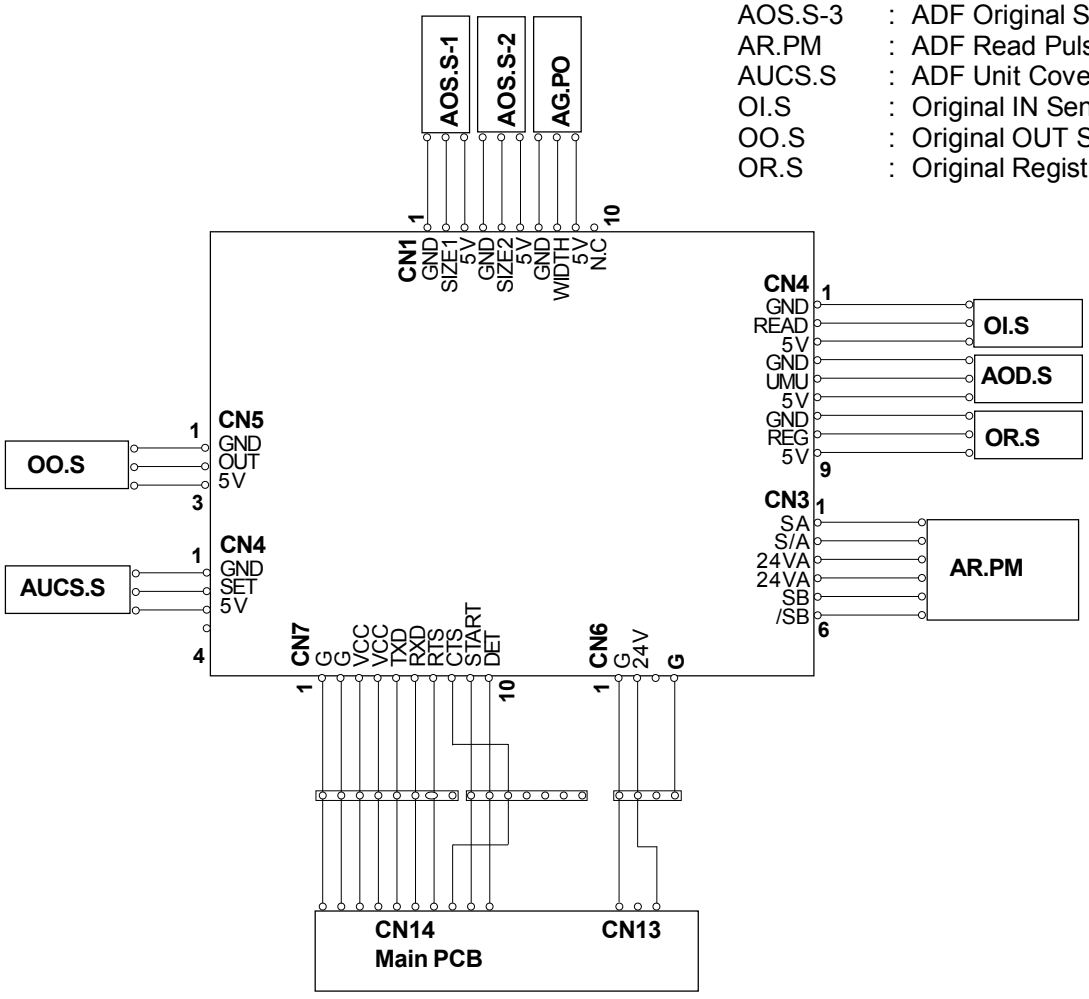


4-8. ADF Control PCB

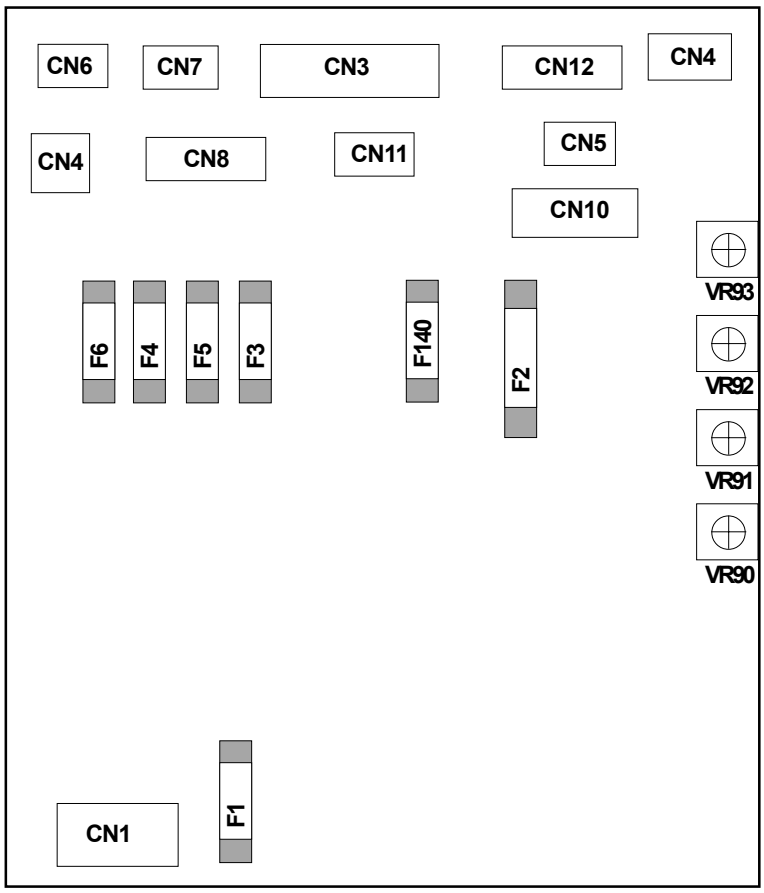


Abbreviation

AG.PO	:	ADF guide potentiometer
AOD.S	:	ADF Original Detection Sensor
AOS.S-1	:	ADF Original Size Sensor 1
AOS.S-2	:	ADF Original Size Sensor 2
AOS.S-3	:	ADF Original Size Sensor 3
AR.PM	:	ADF Read Pulse Motor
AUCS.S	:	ADF Unit Cover Set Sensor
OI.S	:	Original IN Sensor
OO.S	:	Original OUT Sensor
OR.S	:	Original Registration Sensor



4-9. Power Supply PCB

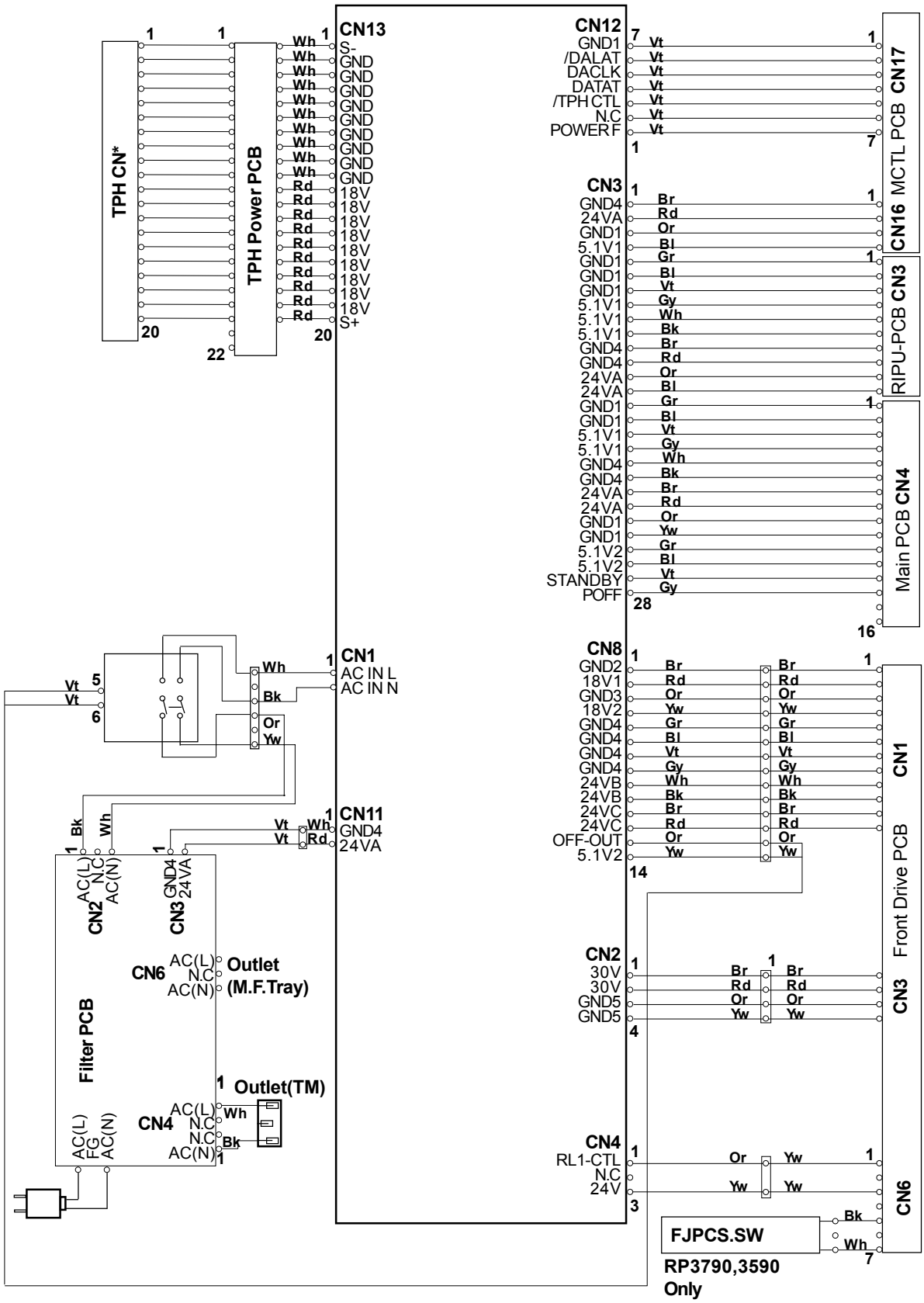


F1:125V 10A
F2:250V 15A
F3:125V 3.15A
F4:125V 6.3A
F5:125V 3.15A
F6:125V 3.15A
F140:125V 3.15A

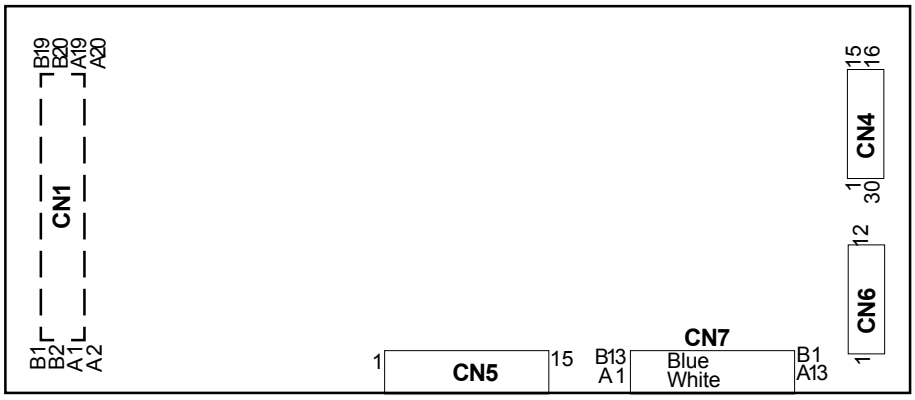
Fuse System

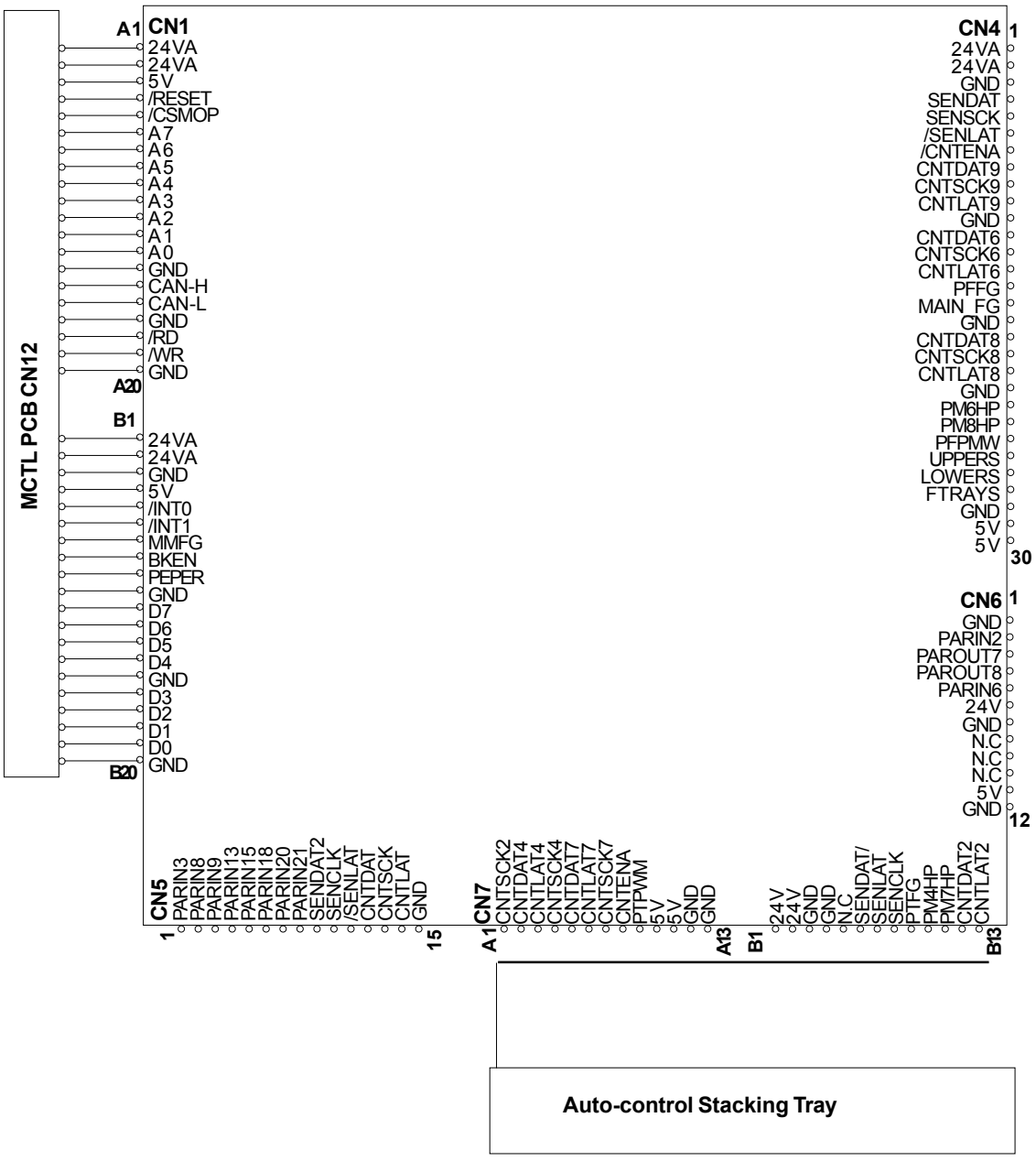
Fuse No.	System	Components
F1: 125V 10A	Main	All of them
F2: 250V 15A	30V	Main Motor
F3: 125V 3.15A	24VA	ADF Read Pulse Motor FB Read Pulse Motor Print Drum Locking Motor Print Pressure Motor Vertical Position Pulse Motor Horizontal Position Pulse Motc Multi Tray Feeder Inking Motor
F4: 125V 6.3A	24VB	Elevator Motor Load Pulse Motor Paper Ejection Motor Paper Ejection Wing Motor Separation Fan Storage Fan Suction Fan Thermal Pressure Motor Write Pulse Motor
F5: 125V 3.15A	24VC	Clamp Motor Cutter Motor Master Compress Motor Master Disposal Motor Paper feed clutch Pressure Solenoid
F6: 125V 3.15A	24VD	N.C.
F140: 125V 3.15A	5V	Sensors

4-9.

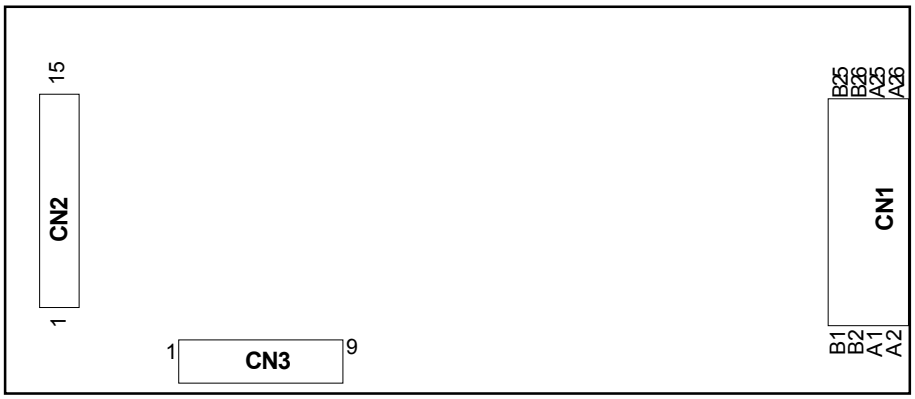

TPH CN*
TPH Power PCB
CN13
S-
GND
18V
S+
CN12
GND1
/DALAT
DACLK
DATAT
/TPH CTL
N.C
POWER F
CN17
MCTL PCB
CN3
GND4
24VA
GND1
5.1V1
CN16
RIPU-PCB
CN4
5.1V2
STANDBY
POFF
Main PCB
CN1
AC IN L
AC IN N
CN11
CN8
18V1
18V2
24VB
24VC
OFF-OUT
Front Drive PCB
CN2
30V
CN6
Outlet
(M.F.Tray)
Outlet(TM)
Filter PCB
AC(L)
FG
AC(N)
RL1-CTL
FJPCS.SW
RP3790,3590
Only

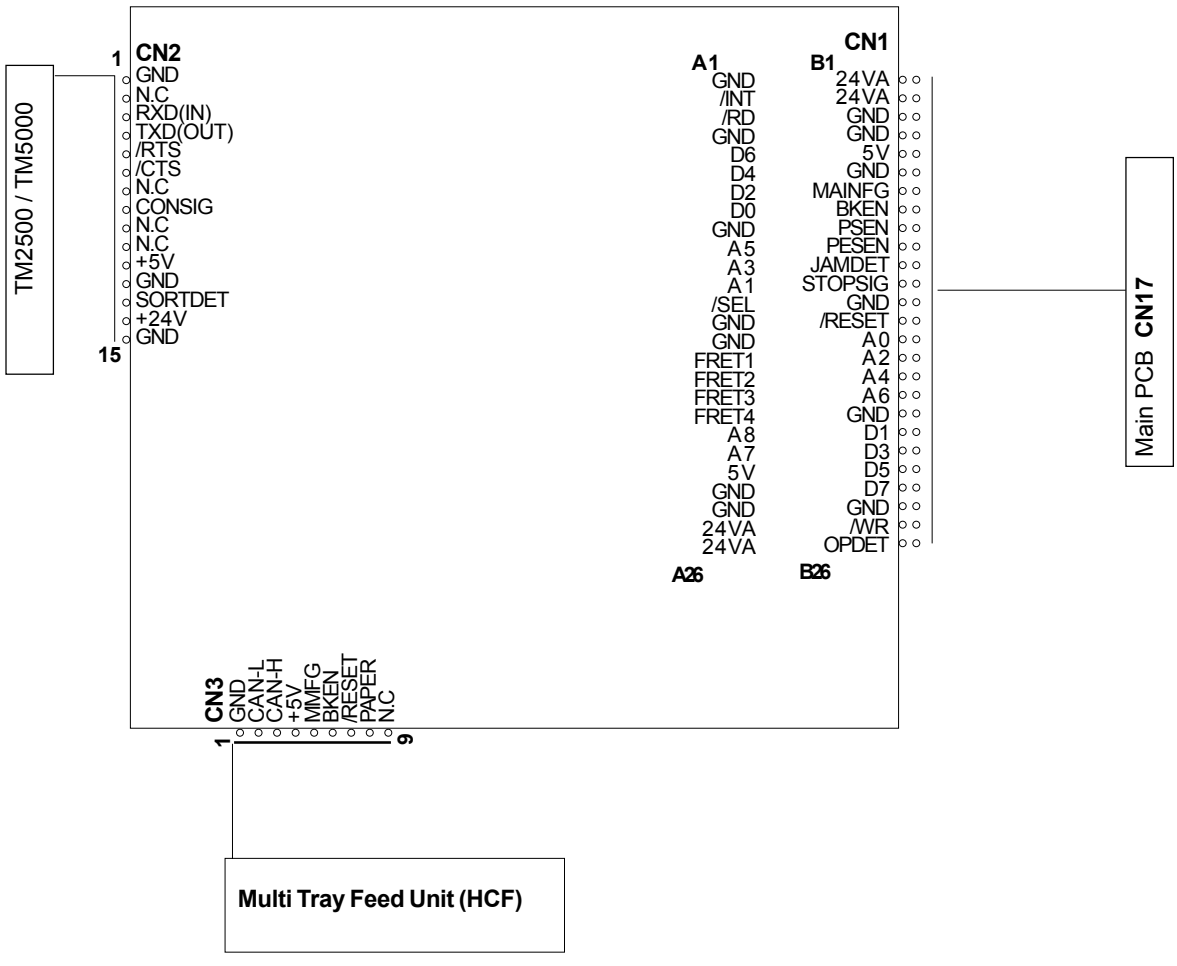
4-10. SMLOP PCB (MC Option Control Board)



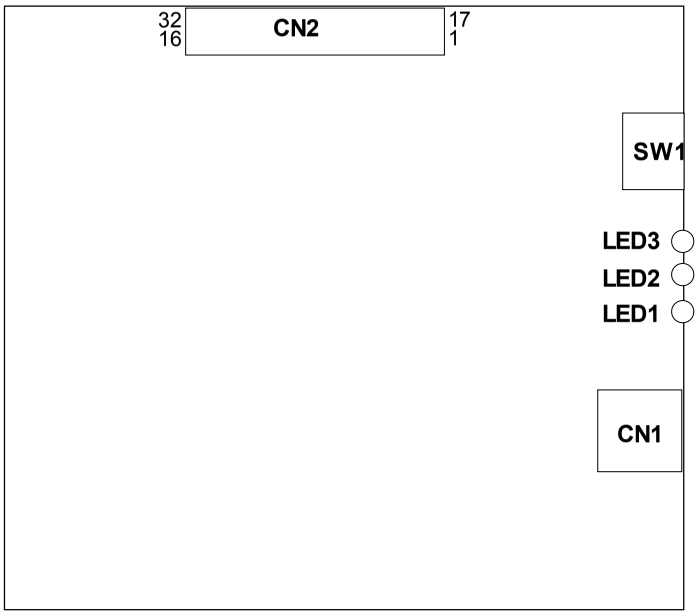


4-11. ROSE/OP PCB (SH Option Control Board)

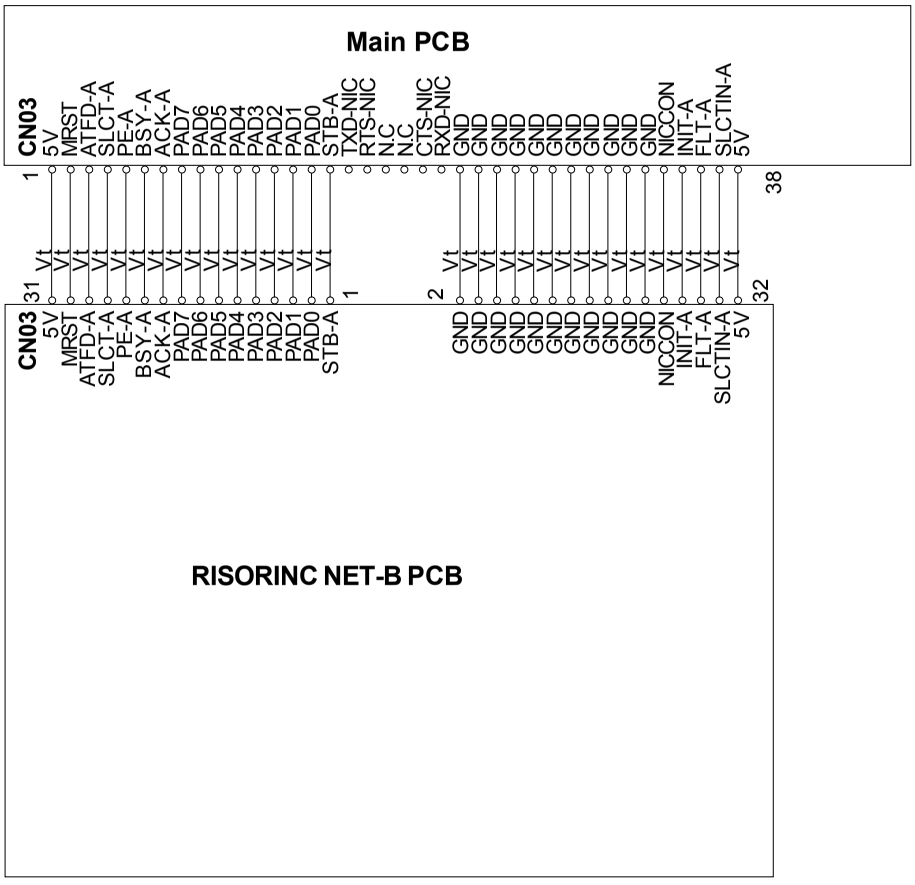




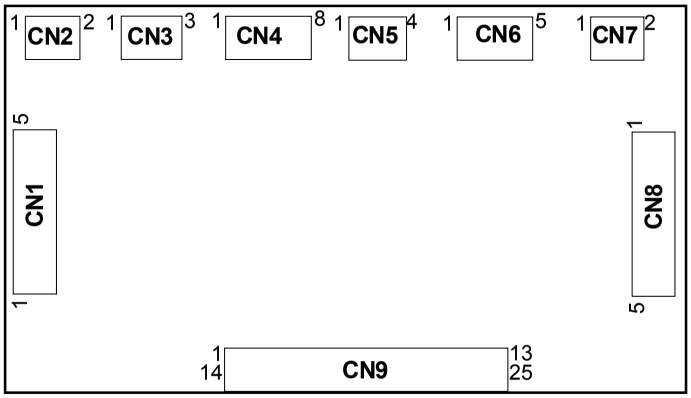
4-12. RISORINC NET-B



CN1:Network port(RJ45)

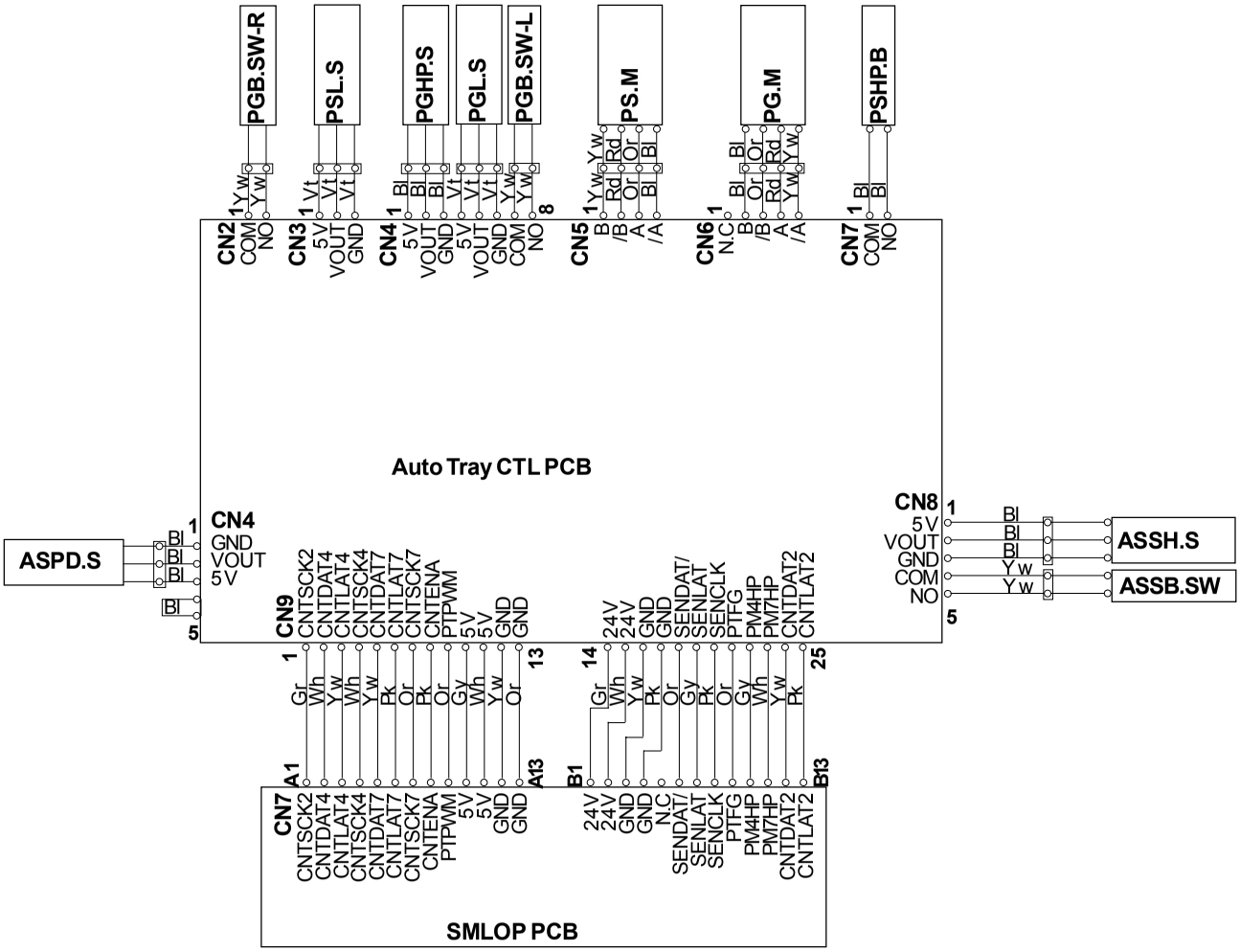


4-13. Auto Tray CTL PCB

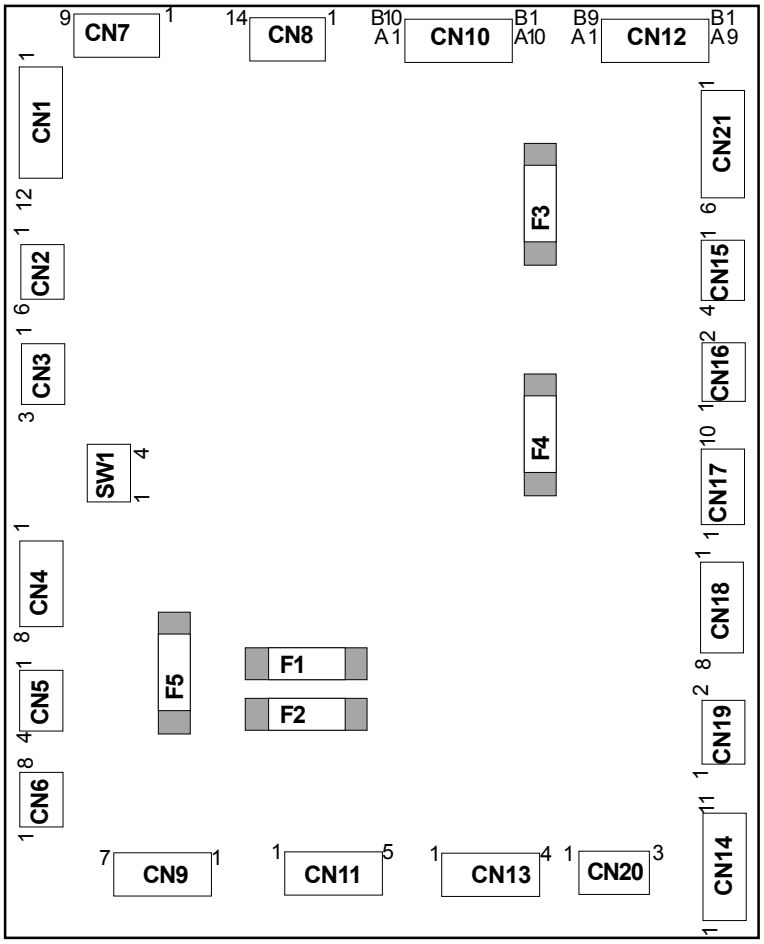


Abbreviation

ASPD.S	:	Auto Stacking Paper Det. Sensor
PG.M	:	Paper guide motor
PGB.SW-L	:	Paper guide Base SW (Left)
PGB.SW-R	:	Paper guide Base SW (Right)
PGHP.S	:	Paper guide HP sensor
PGL.S	:	Paper guide limit sensor
PS.M	:	Paper stopper motor
PSB.SW	:	Paper stopper Base SW
PSHP.S	:	Paper stopper HP sensor
PSHP.B	:	Paper stopper HP Button
PSL.S	:	Paper stopper limit sensor

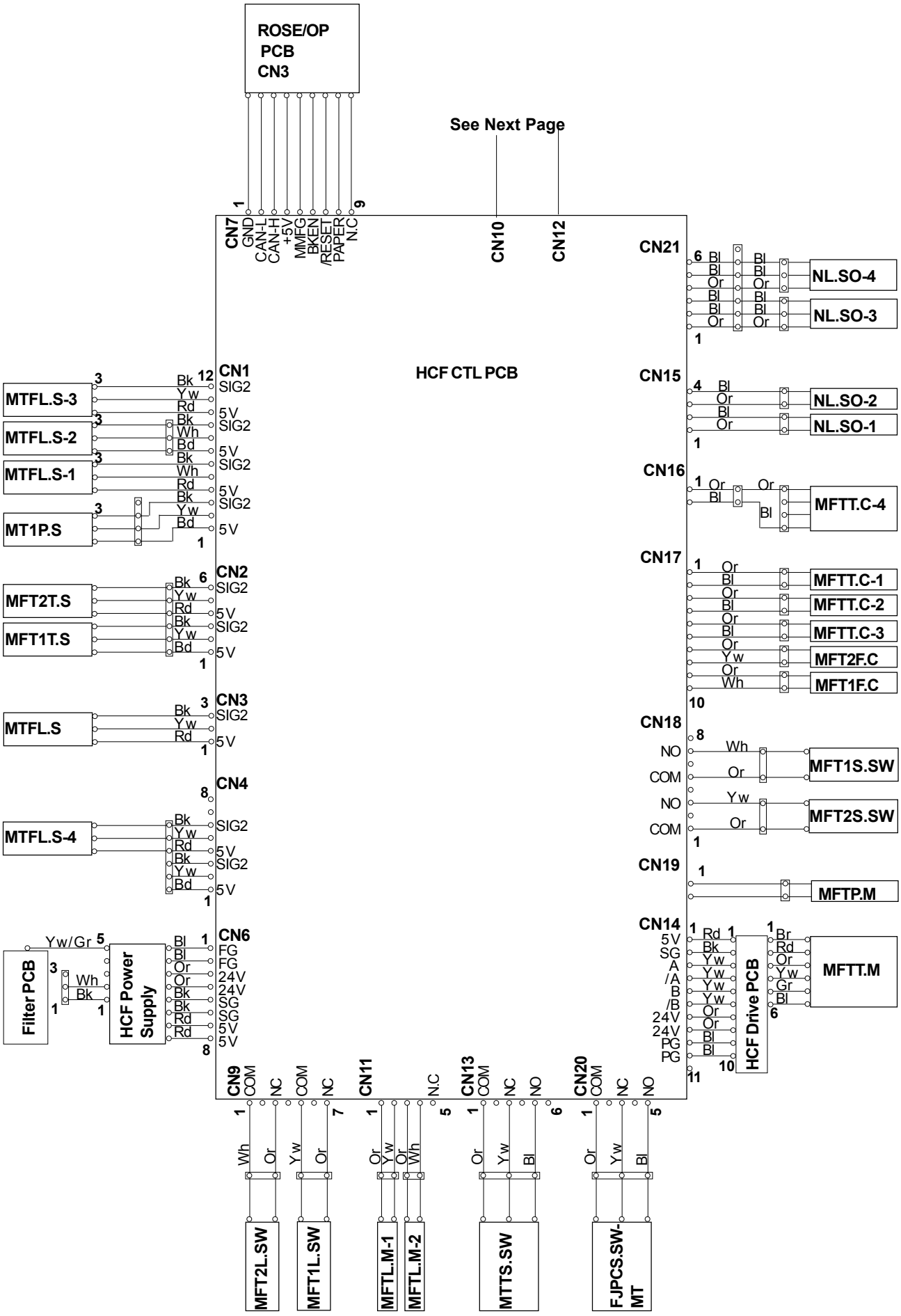


4-14. HCF CTL PCB

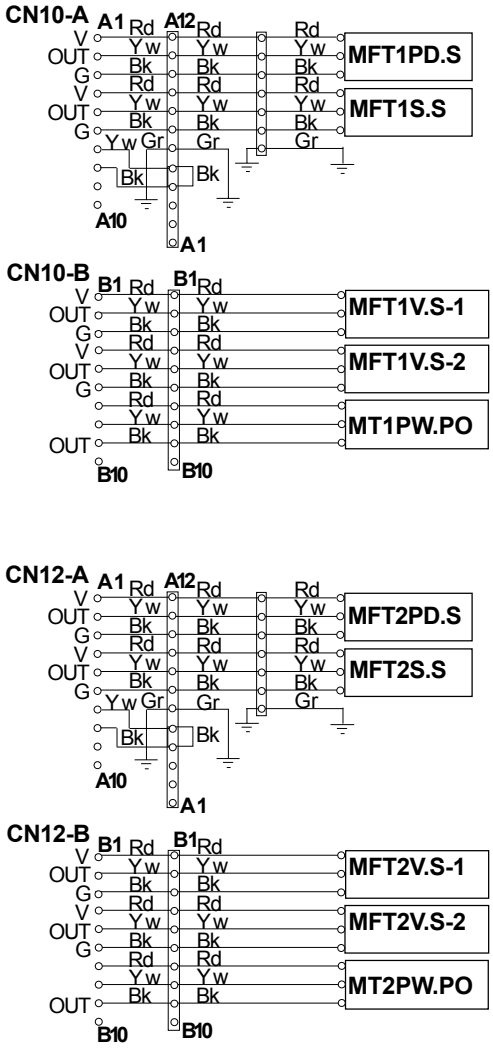


F1:250V 1.0A
F2:250V 1.0A
F3:250V 1.0A
F4:250V 2.5A
F5:250V 6.3A

4-14. Page 1/2


ROSE/OP PCB CN3
See Next Page
CN7 GND CAN-L CAN-H +5V MMFG BKEN /RESET PAPER N.C
CN10
CN12
HCF CTL PCB
CN1 SIG2 5V SIG2 5V SIG2 5V SIG2 5V
MTFL.S-3
MTFL.S-2
MTFL.S-1
MT1P.S
CN2 SIG2 5V SIG2 5V
MFT2T.S
MFT1T.S
CN3 SIG2 5V
MTFL.S
CN4 SIG2 5V SIG2 5V
MTFL.S-4
CN6 FG FG 24V 24V SG SG 5V 5V
Filter PCB
HCF Power Supply
CN9 COM NC COM NC
CN11 N.C
CN13 COM NC NO
CN20 COM NC NO
MFT2L.SW
MFT1L.SW
MFTL.M-1
MFTL.M-2
MTTS.SW
FJPCS.SW-MT
CN21
NL.SO-4
NL.SO-3
CN15
NL.SO-2
NL.SO-1
CN16
MFTT.C-4
CN17
MFTT.C-1
MFTT.C-2
MFTT.C-3
MFT2F.C
MFT1F.C
CN18 NO COM NO COM
MFT1S.SW
MFT2S.SW
CN19
MFTP.M
CN14 5V SG A /A B /B 24V 24V PG PG
HCF Drive PCB
MFTT.M

4-14. Page 2/2



Abbreviation

FJPCS.SW-MT	:	Feed Joint Pass. Cover Safety SwMT
MFT1F.C	:	Multi-Feed Tray 1 Feed Clutch
MFT1L.SW	:	Multi-Feed Tray 1 Limit Sw
MFT1PD.S	:	Multi-Feed Tray 1 Paper det. Sensor
MFT1S.S	:	Multi-Feed Tray 1 Size Sensor
MFT1S.SW	:	Multi-Feed Tray 1 Safety Sw
MFT1T.S	:	Multi-Feed Tray 1 Upper Limit Sensor
MFT1V.S-1	:	Multi-Feed Tray 1 Volume Sensor1
MFT1V.S-2	:	Multi-Feed Tray 1 Volume Sensor2
MFT2F.C	:	Multi-Feed Tray 2 Feed Clutch
MFT2L.SW	:	Multi-Feed Tray 2 Limit Sw
MFT2PD.S	:	Multi-Feed Tray 2 Paper det. Sensor
MFT2S.S	:	Multi-Feed Tray 2 Size Sensor
MFT2S.SW	:	Multi-Feed Tray 2 Safety Sw
MFT2T.S	:	Multi-Feed Tray 2 Upper Limit Sensor
MFT2V.S-1	:	Multi-Feed Tray 2 Volume Sensor1
MFT2V.S-2	:	Multi-Feed Tray 2 Volume Sensor2
MFTL.M-1	:	Multi-Feed Tray Elevator Motor 1
MFTL.M-2	:	Multi-Feed Tray Elevator Motor 2
MFTP.M	:	Multi-Feed Tray Pickup Motor
MFTT.C-1	:	Multi-Feed Tray Transfer Clutch1
MFTT.C-2	:	Multi-Feed Tray Transfer Clutch2
MFTT.C-3	:	Multi-Feed Tray Transfer Clutch3
MFTT.C-4	:	Multi-Feed Tray Transfer Clutch4
MFTT.M	:	Multi-Feed Tray Transfer Motor
MT1P.S	:	Multi-Tray 1 Pickup Sensor
MTFL.S	:	Multi-Tray Feed Limit Sensor
MTFL.S-1	:	Multi-Tray Feed Sensor 1
MTFL.S-2	:	Multi-Tray Feed Sensor 2
MTFL.S-3	:	Multi-Tray Feed Sensor 3
MTFL.S-4	:	Multi-Tray Feed Sensor 4
MT1PW.PO	:	Multi-Tray 1Paper width potentiometer
MT2PW.PO	:	Multi-Tray 2Paper width potentiometer
MTTS.SW	:	Multi-Tray Transfer Safety Sw
NL.SO-1	:	Nip Release Solenoid 1
NL.SO-2	:	Nip Release Solenoid 2
NL.SO-3	:	Nip Release Solenoid 3
NL.SO-4	:	Nip Release Solenoid 4