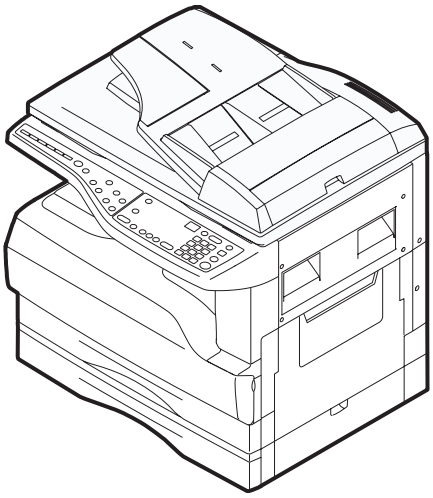
# SHARP CIRCUIT DIAGRAM

CODE : 00ZARM205/C1/



# デジタル複合機
# DIGITAL COPIER

**AR-200M** [Japan only]
**AR-160M** [Japan only]
**AR-M205** [Except Japan]
**AR-M160** [Except Japan]
**MODEL AR-5220** [Except Japan]

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安全性・信頼性確保のため部品は、必ず正規のものをご使用下さい。
⚠ 印の部品は、安全上重要な部品です。交換をする時は、安全および性能維持のため必ず指定の部品をご使用下さい。

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.


本書はサービス活動用に作成した資料です。
一部内容が製品の改良・改善等により予告なしに変わることがあります。



SHARP CORPORATION



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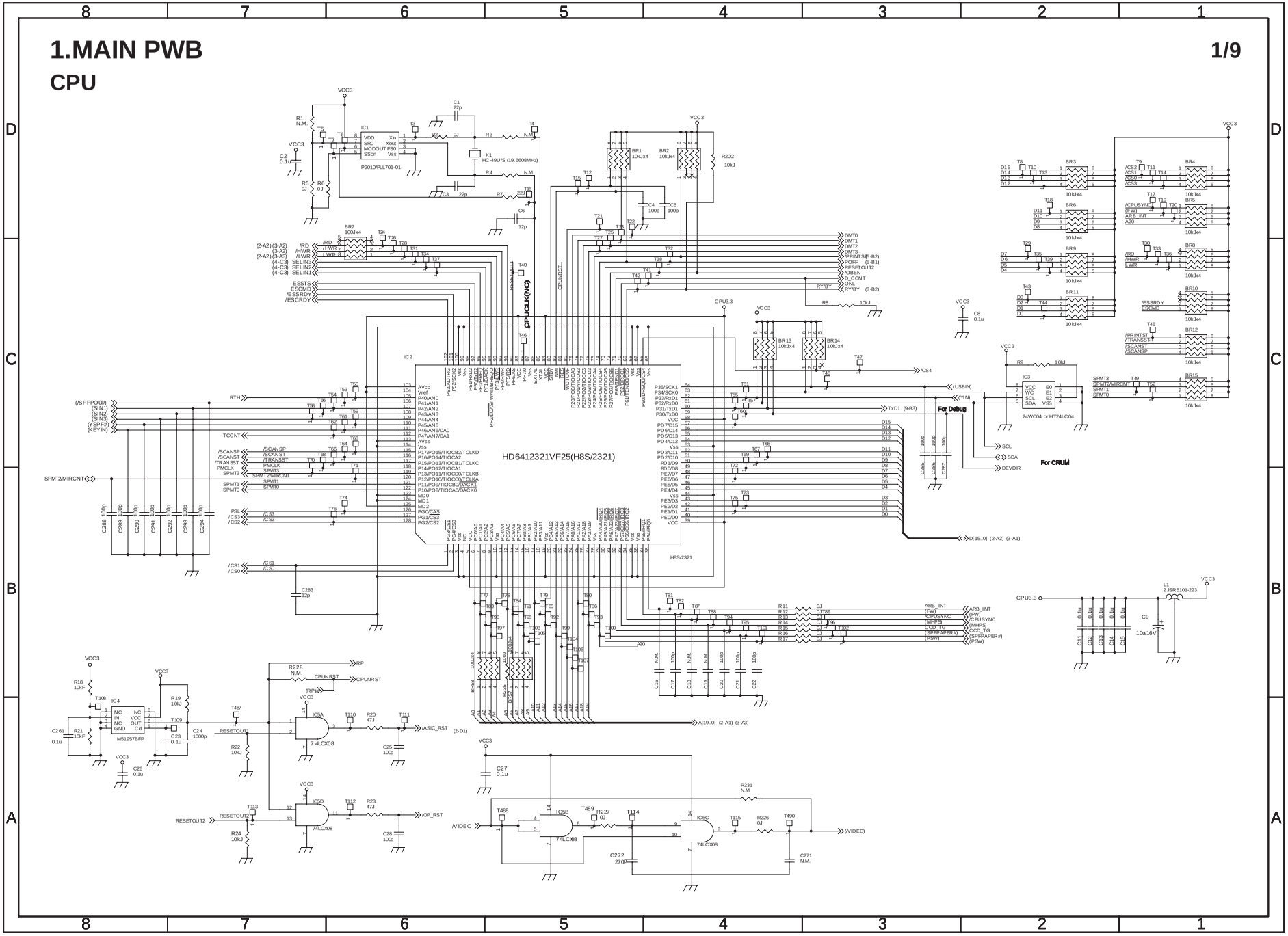
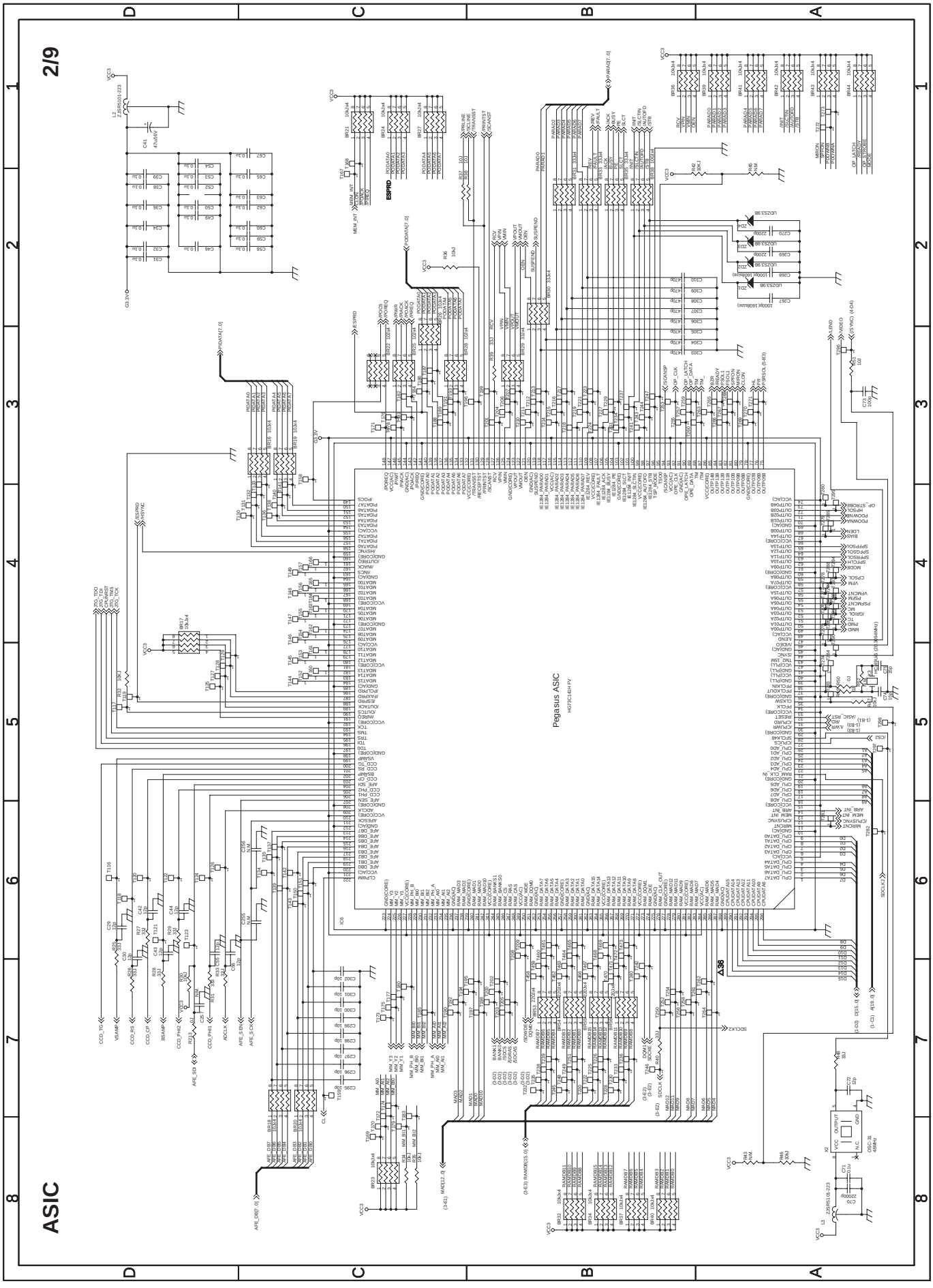
The contents are subject to change without notice.

# 1.MAIN PWB

## CPU

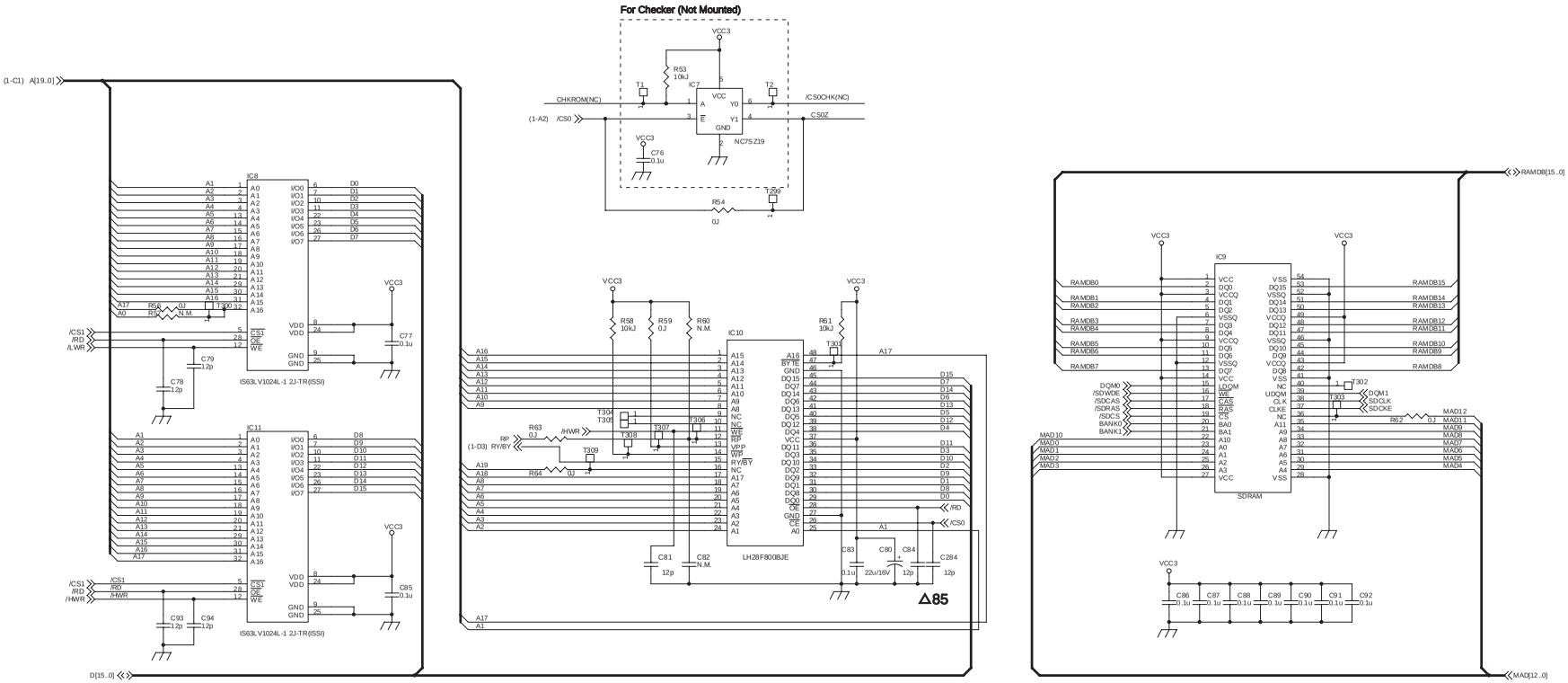
1/9




2/9
ASIC
Pegasus ASIC
HG73C141H-FV

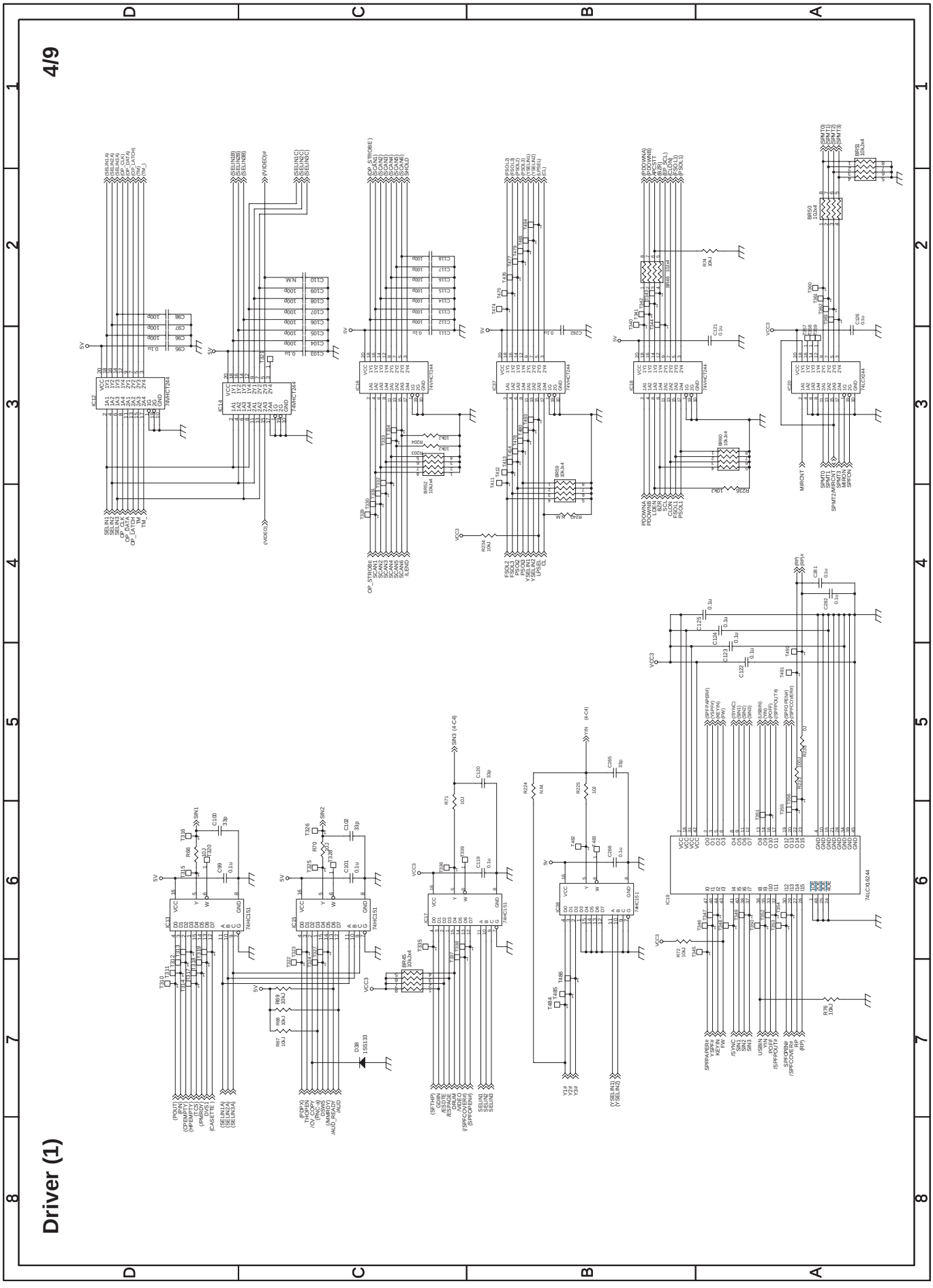
# Memory

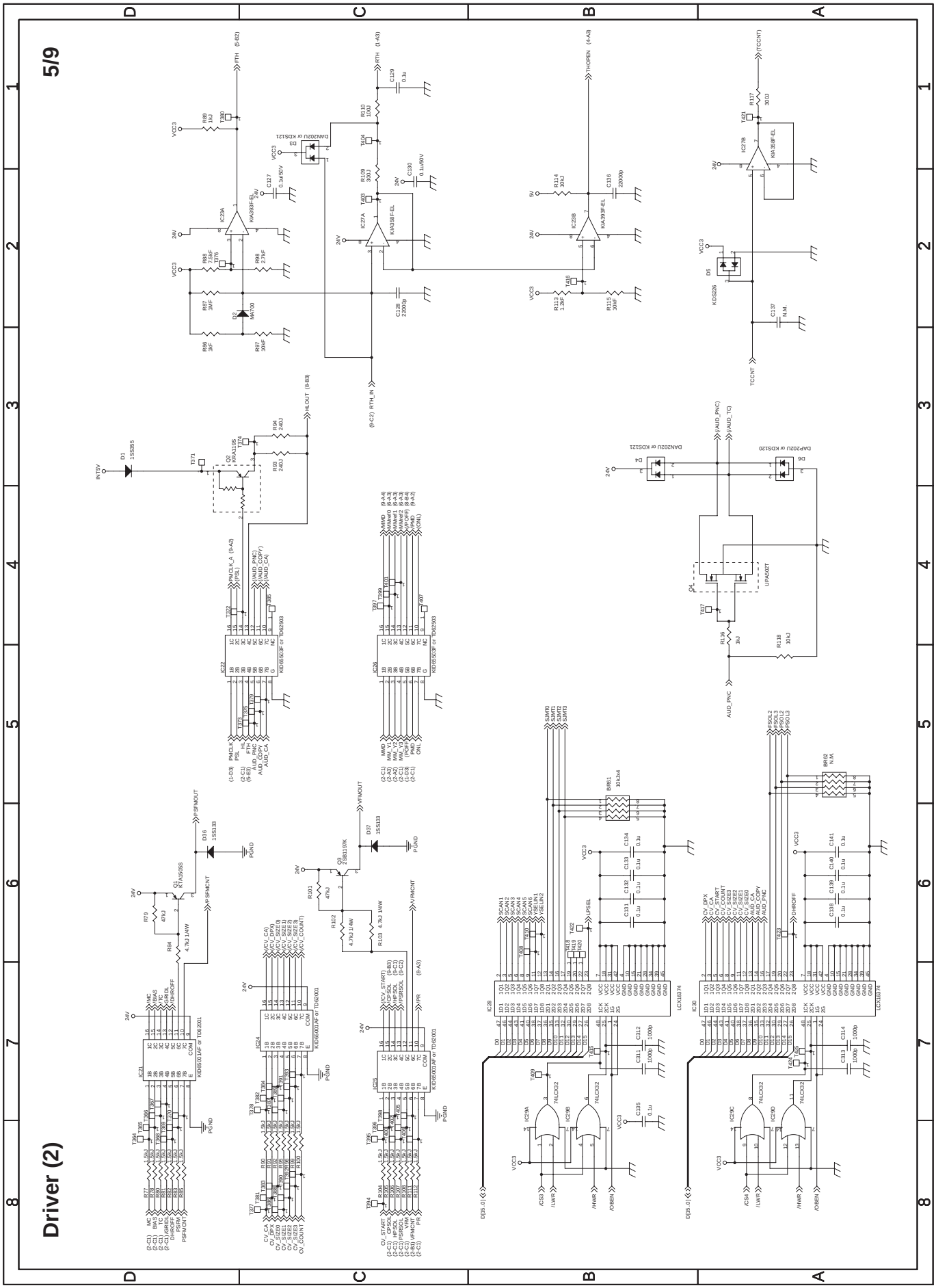





**SDRAM △2**

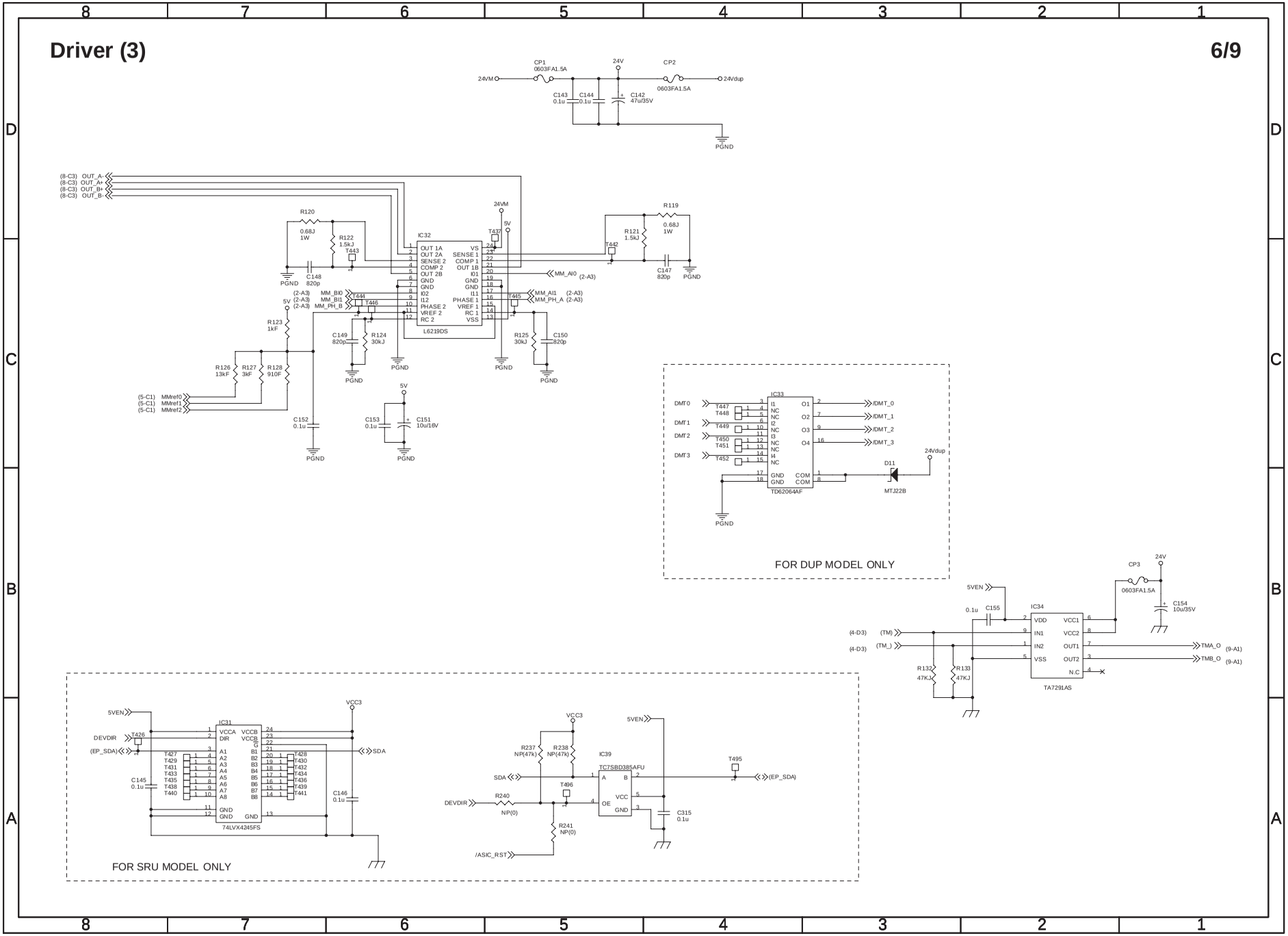
| Model | | Vendor/Type | R62 (*7) |
|---|---|---|---|
| | 128Mb(2Mx16bitx4bank) | K4S281632D-1H(Samsung) | **OPEN** |
| | 256Mb(4Mx16bitx4bank) | K4S561632D-TC75(Samsung) | **0J** |


4/9
Driver (1)


5/9
Driver (2)

# Driver (3)

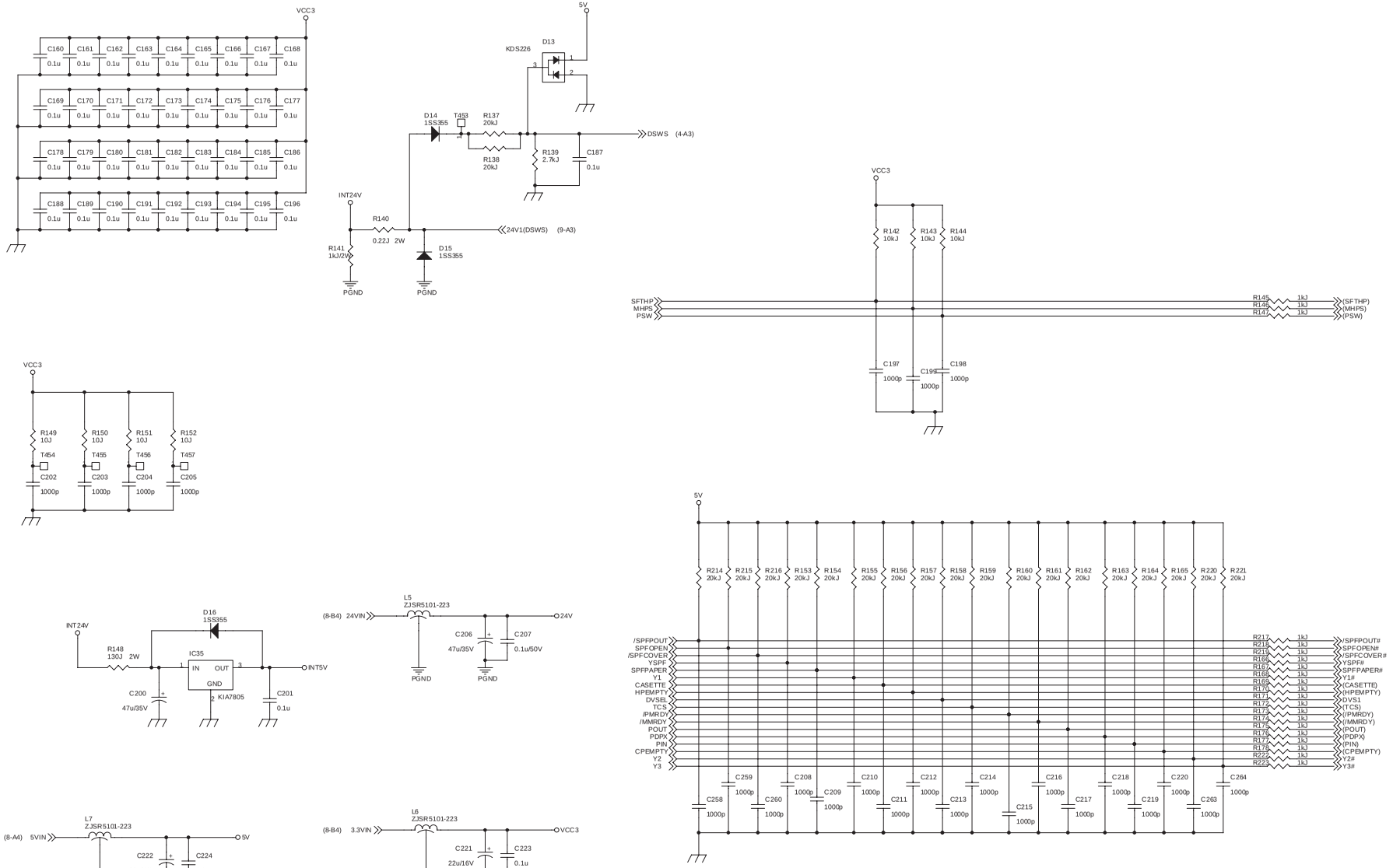
6/9

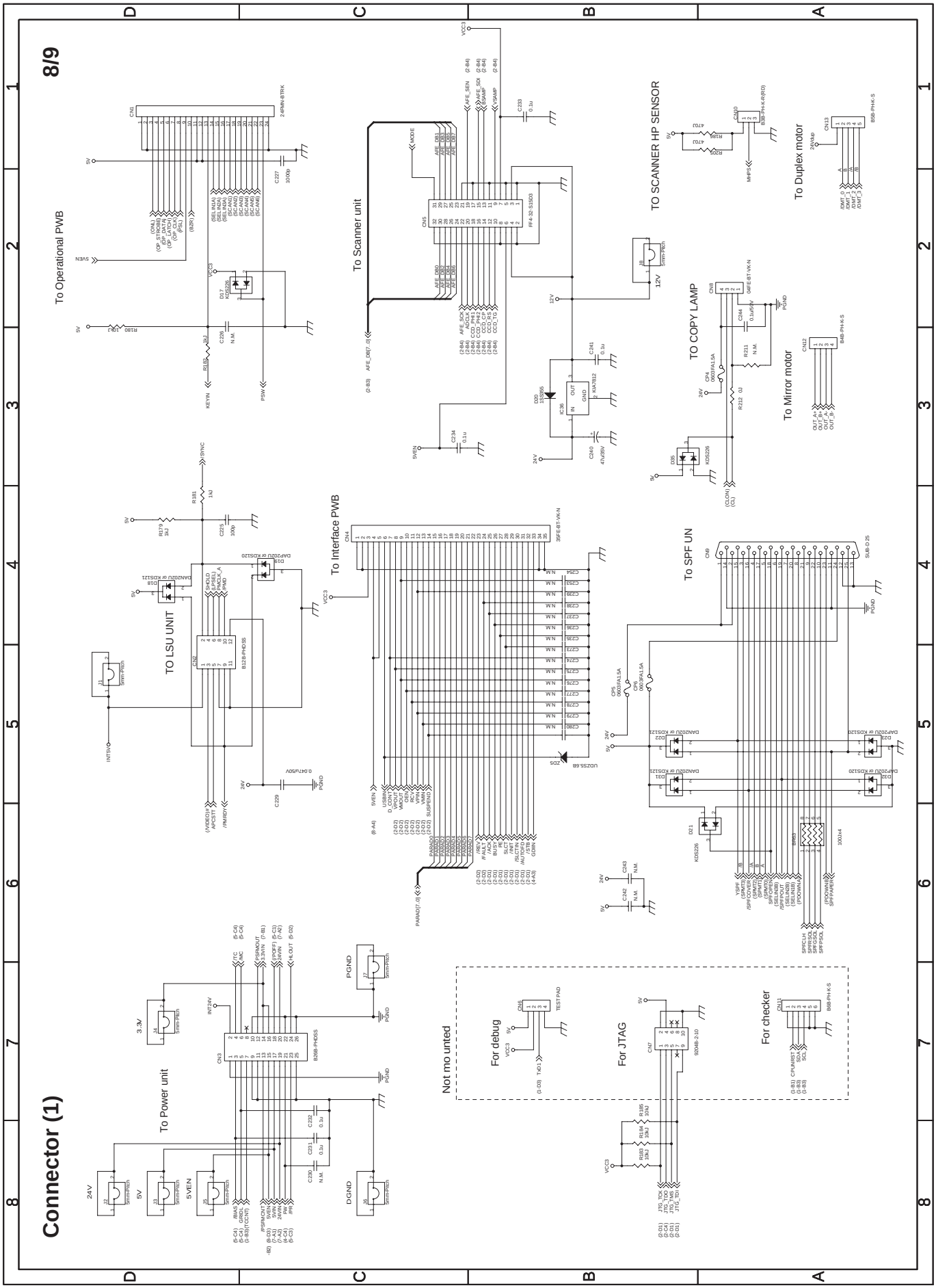


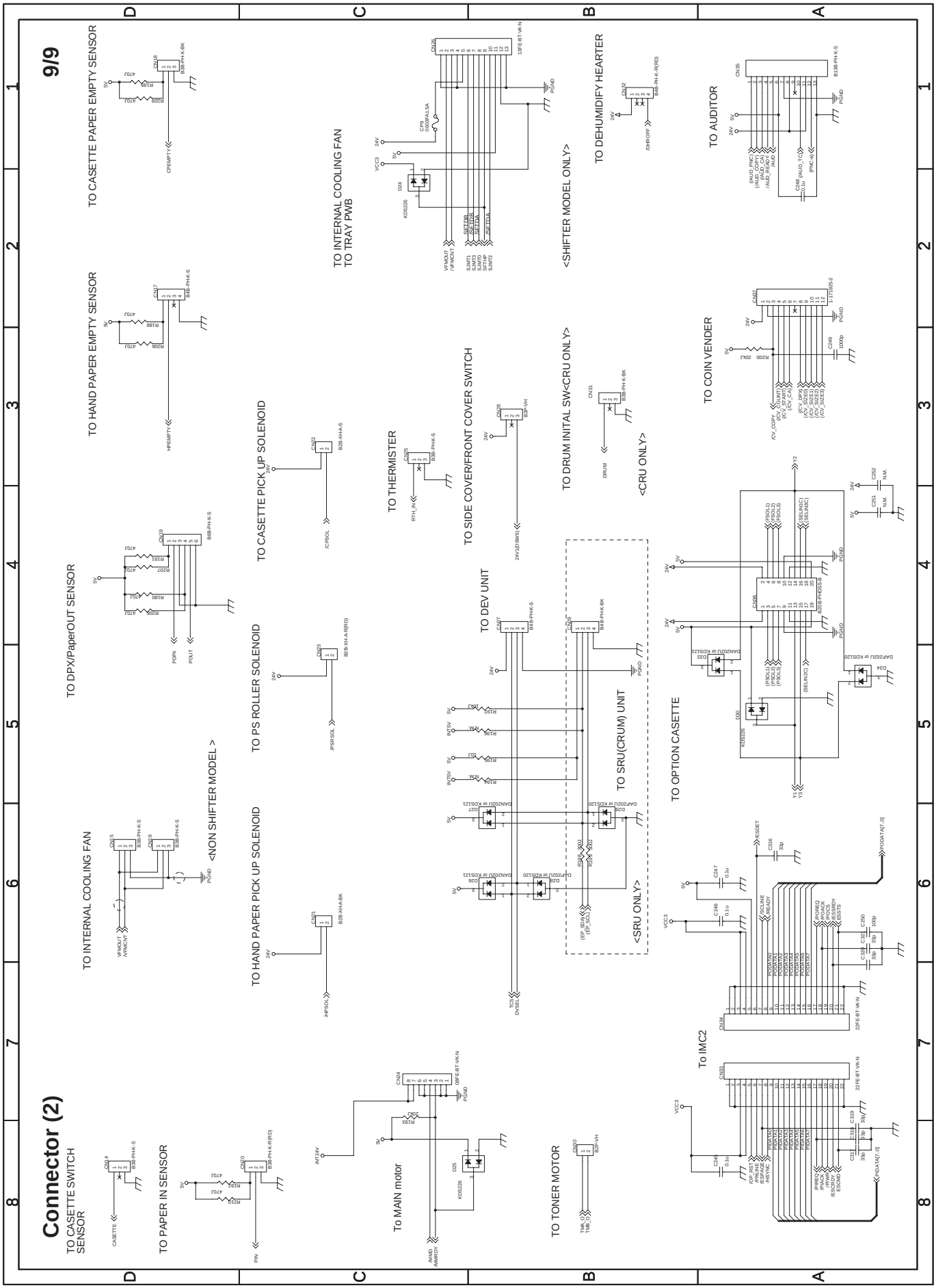
CP1
0603FA1.5A
24V
CP2
0603FA1.5A
24VM
24Vdup
C143
0.1u
C144
0.1u
C142
47u/35V
PGND
(8-C3) OUT_A-
(8-C3) OUT_A+
(8-C3) OUT_B+
(8-C3) OUT_B-
R120
0.68J
1W
R122
1.5kJ
T443
C148
820p
IC32
L6219DS
OUT 1A
OUT 2A
SENSE 2
COMP 2
OUT 2B
GND
GND
I02
I12
PHASE 2
VREF 2
RC 2
VS
SENSE 1
COMP 1
OUT 1B
I01
GND
GND
I11
PHASE 1
VREF 1
RC 1
VSS
T437
5V
R119
0.68J
1W
R121
1.5kJ
T442
C147
820p
MM_AI0 (2-A3)
MM_AI1 (2-A3)
MM_PH_A (2-A3)
(2-A3) MM_BI0
(2-A3) MM_BI1
(2-A3) MM_PH_B
T444
T446
T445
R123
1kF
C149
820p
R124
30kJ
R125
30kJ
C150
820p
R126
13kF
R127
3kF
R128
910F
(5-C1) MMref0
(5-C1) MMref1
(5-C1) MMref2
C152
0.1u
C153
0.1u
C151
10u/16V
IC33
TD62064AF
DMT0
DMT1
DMT2
DMT3
T447
T448
T449
T450
T451
T452
/DMT_0
/DMT_1
/DMT_2
/DMT_3
D11
MTJ22B
FOR DUP MODEL ONLY
CP3
0603FA1.5A
C154
10u/35V
5VEN
0.1u
C155
IC34
TA7291AS
VDD
IN1
IN2
VSS
VCC1
VCC2
OUT1
OUT2
N.C
(4-D3) (TM)
(4-D3) (TM_)
R132
47KJ
R133
47KJ
TMA_O (9-A1)
TMB_O (9-A1)
IC31
74LVX4245FS
VCCA
DIR
VCCB
A1
A2
A3
A4
A5
A6
A7
A8
B1
B2
B3
B4
B5
B6
B7
B8
GND
GND
GND
5VEN
DEVDIR
T426
(EP_SDA)
VCC3
SDA
C145
0.1u
C146
0.1u
T427
T429
T431
T433
T435
T438
T440
T428
T430
T432
T434
T436
T439
T441
R237
NP(47k)
R238
NP(47k)
IC39
TC7SBD385AFU
T495
(EP_SDA)
T496
R240
NP(0)
R241
NP(0)
C315
0.1u
/ASIC_RST
FOR SRU MODEL ONLY

# Noise filter/Pull-up





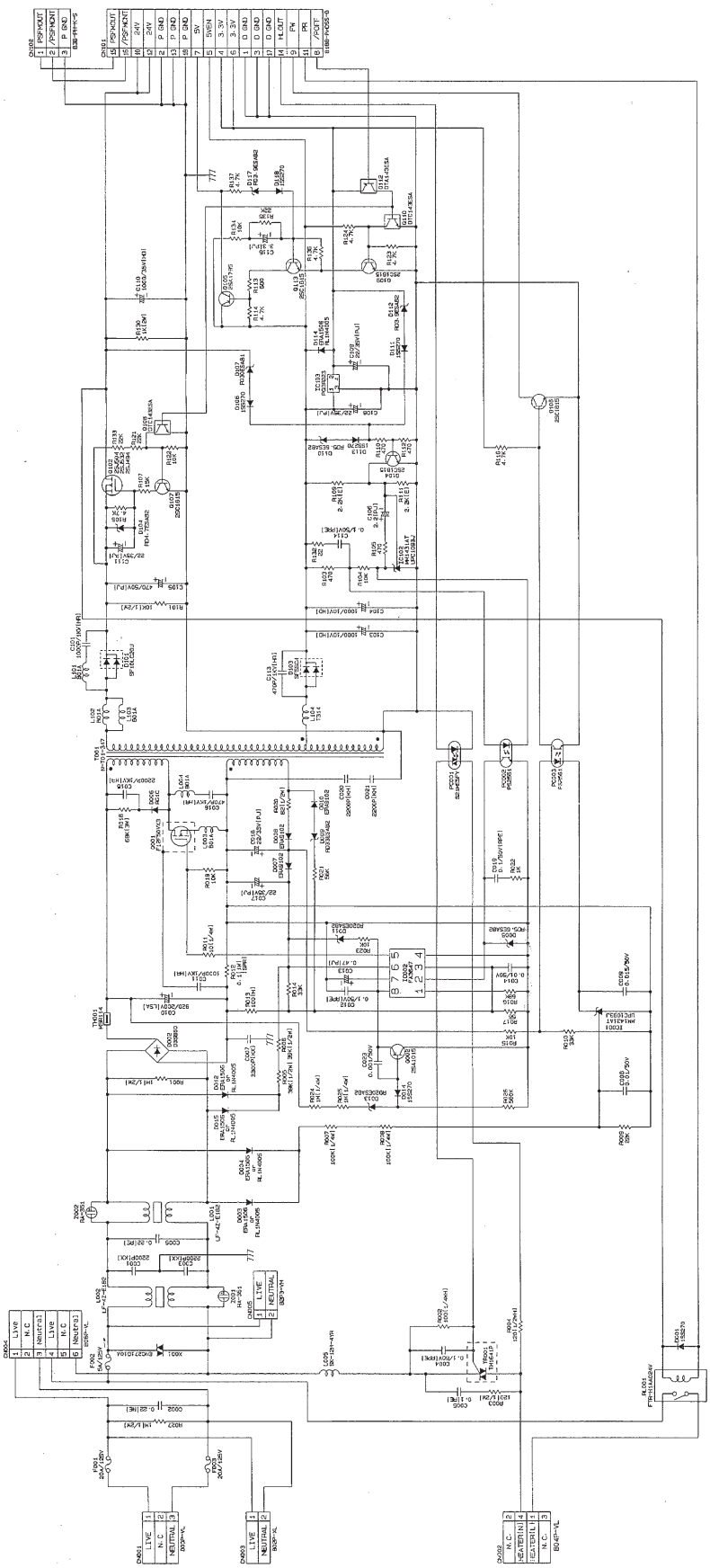

8/9
Connector (1)
To Operational PWB
To Scanner unit
TO SCANNER HP SENSOR
To Duplex motor
TO COPY LAMP
To Mirror motor
To Interface PWB
TO LSU UNIT
To SPF UN
To Power unit
Not mo unted
For debug
For JTAG
For checker

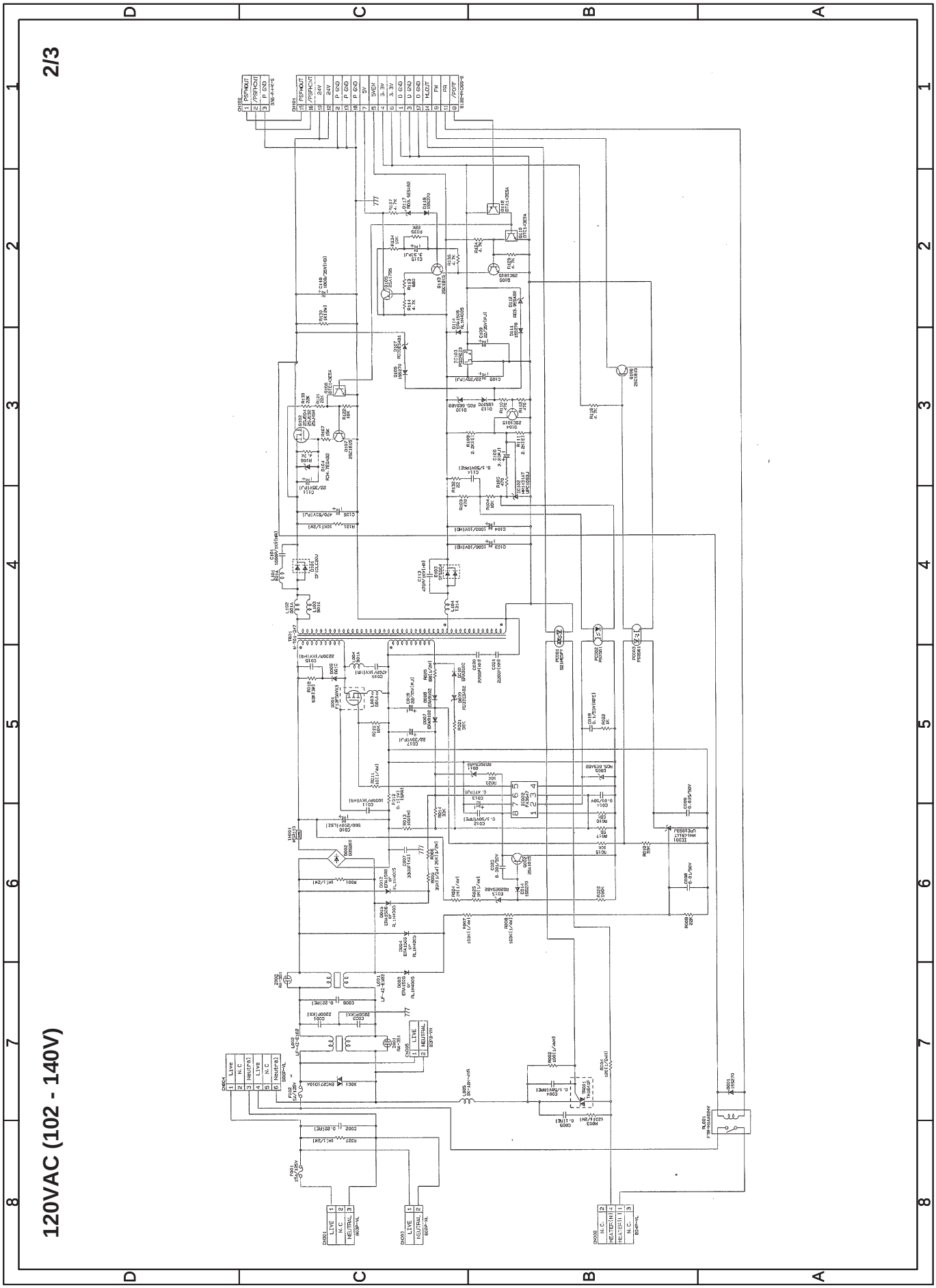

9/9
Connector (2)
TO CASETTE SWITCH SENSOR
TO PAPER IN SENSOR
TO MAIN motor
TO TONER MOTOR
TO INTERNAL COOLING FAN
<NON SHIFTER MODEL >
TO DPX/PaperOUT SENSOR
TO HAND PAPER EMPTY SENSOR
TO CASETTE PAPER EMPTY SENSOR
TO HAND PAPER PICK UP SOLENOID
TO PS ROLLER SOLENOID
TO CASETTE PICK UP SOLENOID
TO INTERNAL COOLING FAN
TO TRAY PWB
TO THERMISTER
TO SIDE COVER/FRONT COVER SWITCH
TO DEV UNIT
TO SRU(CRUM) UNIT
<SRU ONLY>
TO DRUM INITAL SW<CRU ONLY>
<CRU ONLY>
TO DEHUMIDIFY HEARTER
<SHIFTER MODEL ONLY>
TO COIN VENDER
TO AUDITOR
TO OPTION CASETTE
To IMC2

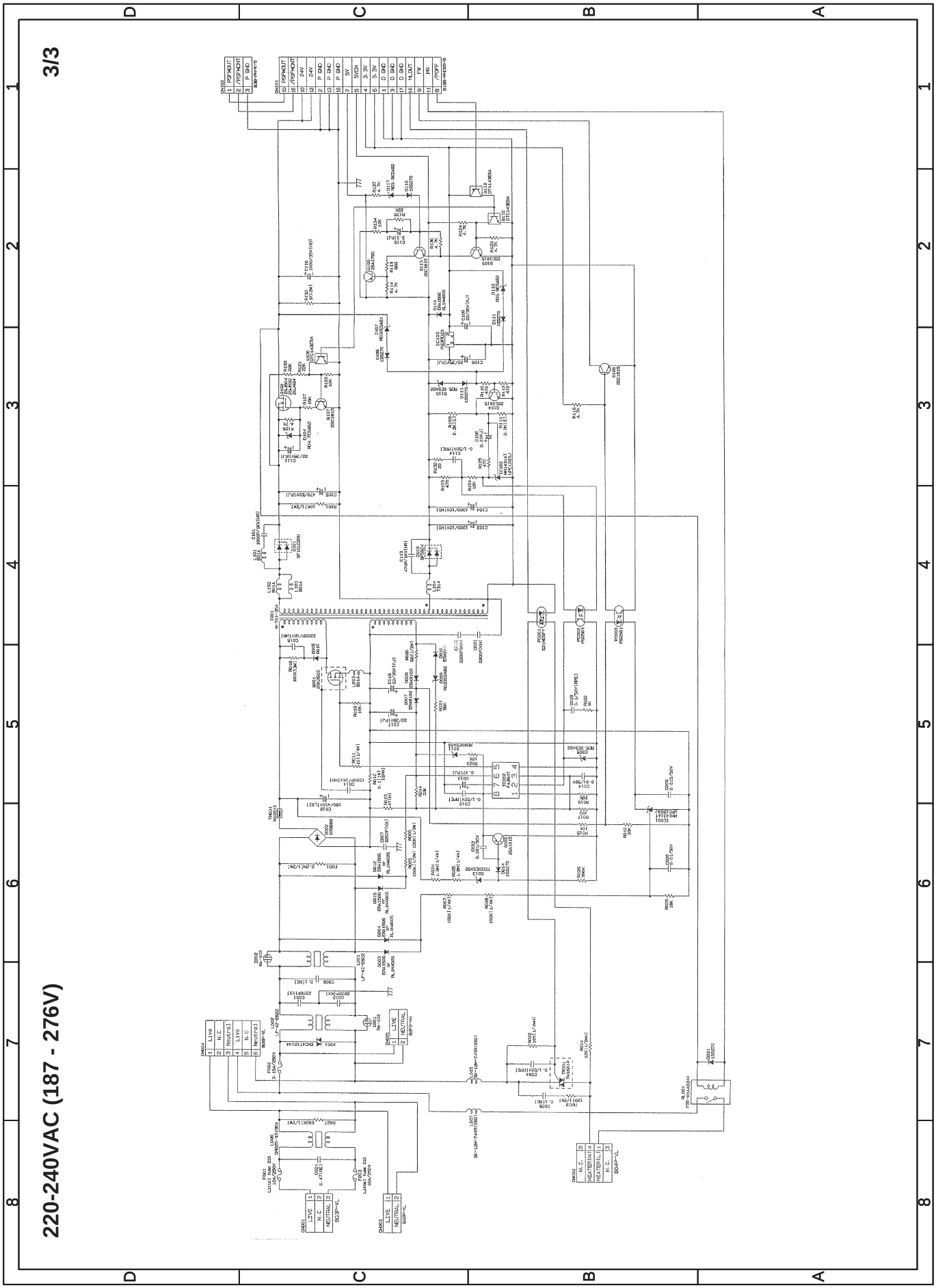
# 2. LOW VOLTAGE POWER SUPPLY

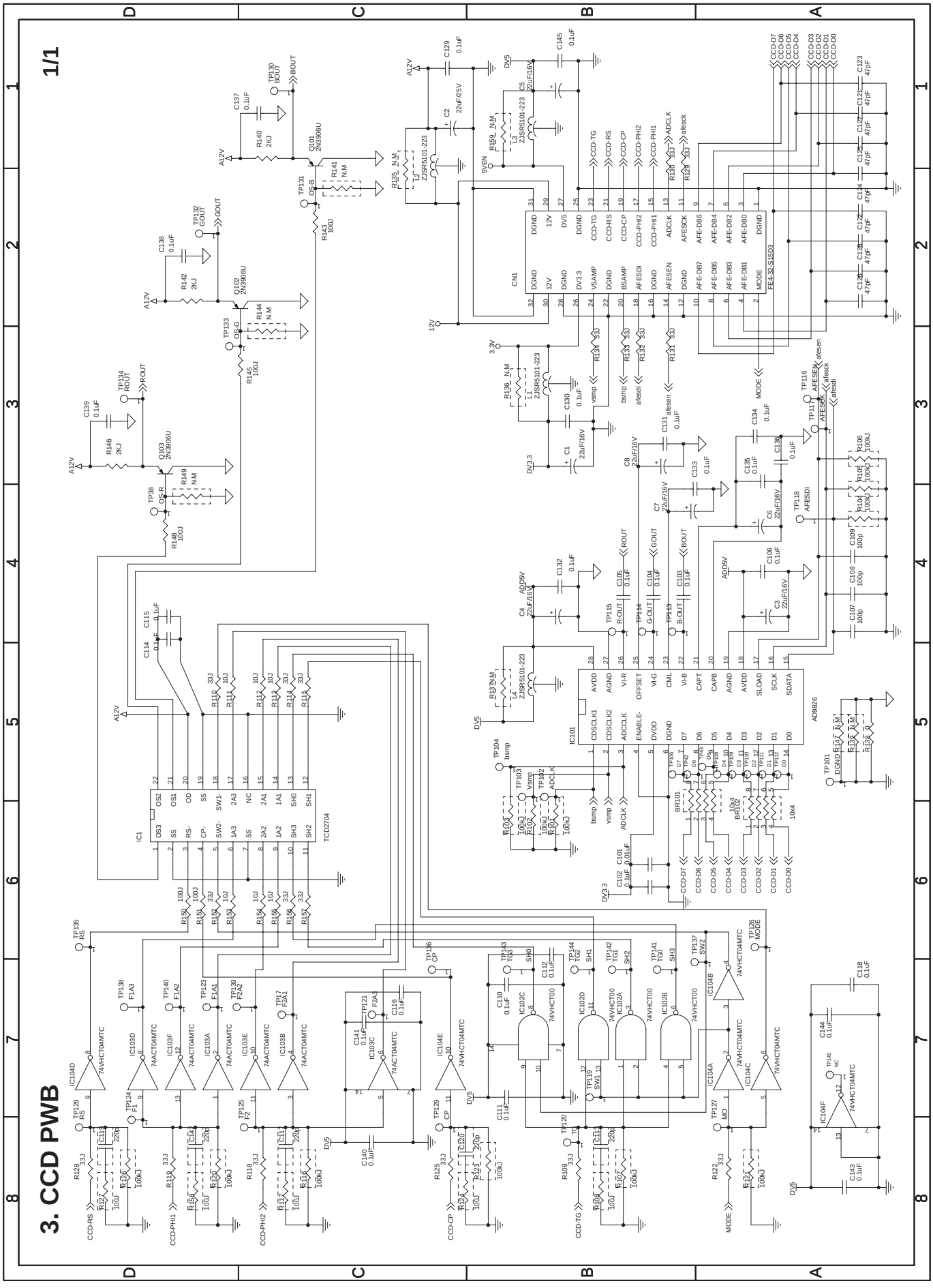
## 100VAC (85 - 127V)

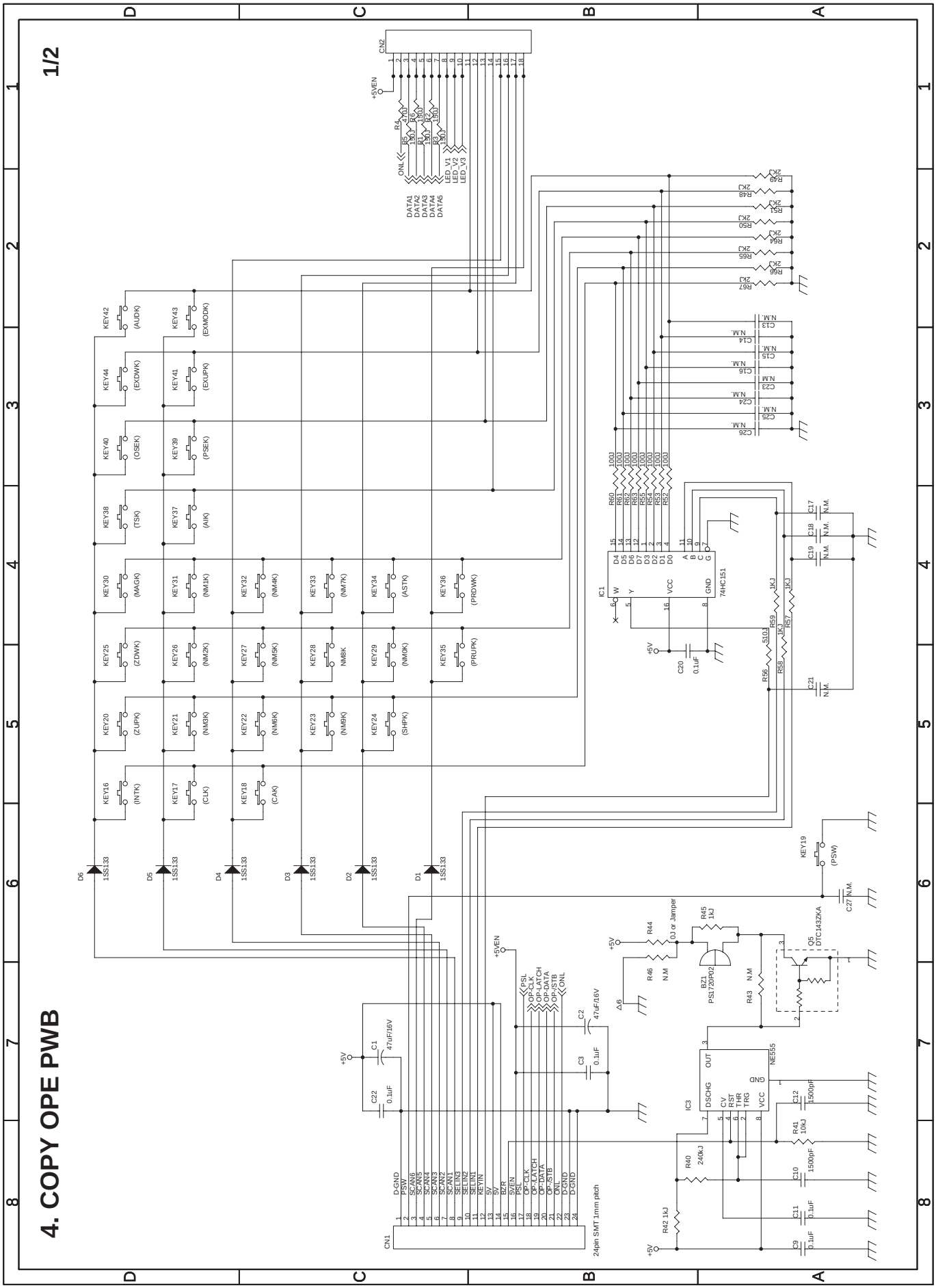
1/3

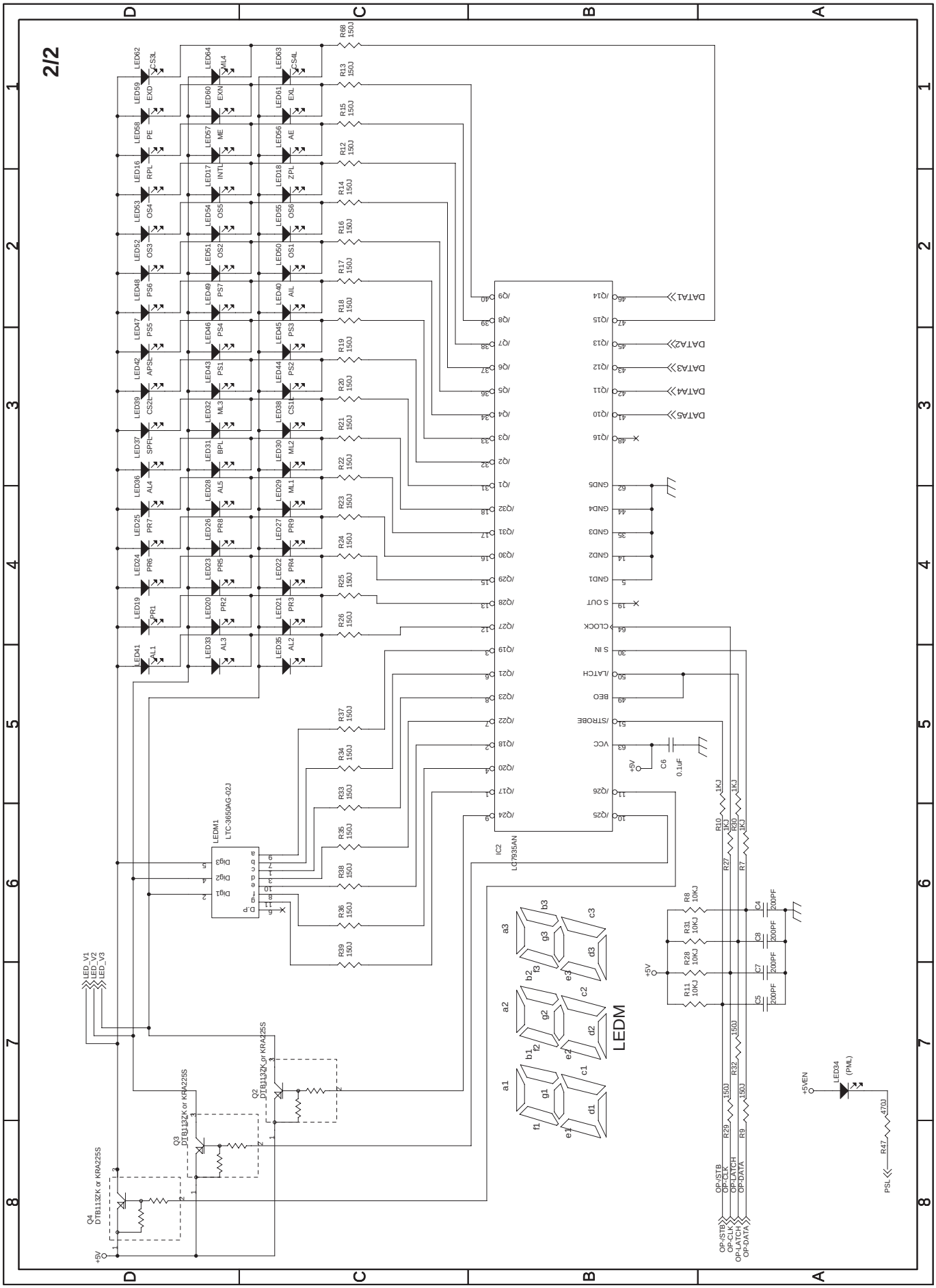


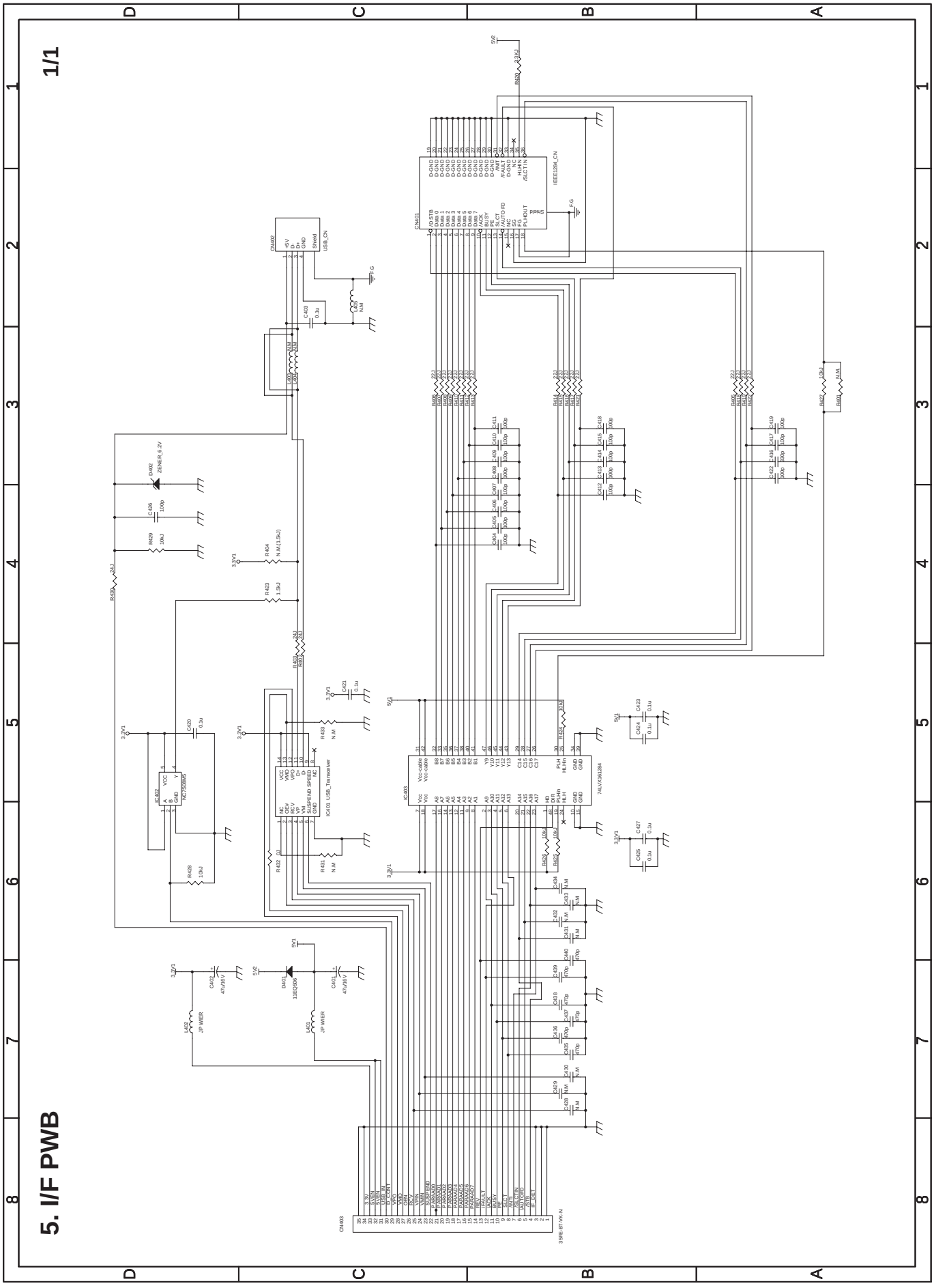

2/3
120VAC (102 - 140V)

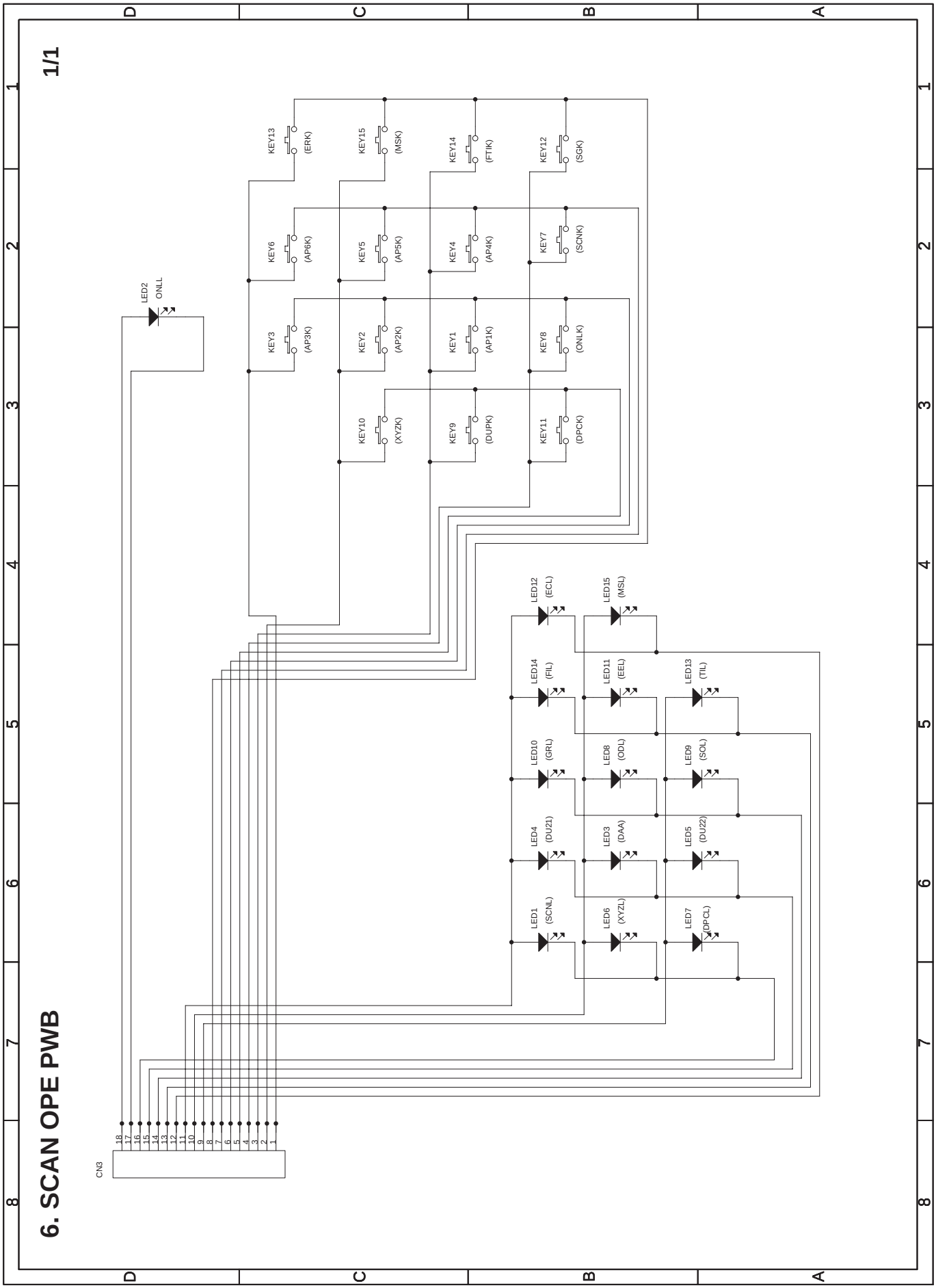

3/3
220-240VAC (187 - 276V)


3. CCD PWB
1/1


4. COPY OPE PWB
1/2
CN1
24pin SMT 1mm pitch
CN2
IC1
74HC151
IC3
NE555
KEY16 (INTK)
KEY17 (CLK)
KEY18 (CAK)
KEY19 (PSW)
KEY20 (ZUPK)
KEY21 (NM3K)
KEY22 (NM6K)
KEY23 (NM9K)
KEY24 (SHPK)
KEY25 (ZDWK)
KEY26 (NM2K)
KEY27 (NM5K)
KEY28 NM8K
KEY29 (NM0K)
KEY30 (MAGK)
KEY31 (NM1K)
KEY32 (NM4K)
KEY33 (NM7K)
KEY34 (ASTK)
KEY35 (PRUPK)
KEY36 (PRDWK)
KEY37 (AIK)
KEY38 (TSK)
KEY39 (PSEK)
KEY40 (OSEK)
KEY41 (EXUPK)
KEY42 (AUDK)
KEY43 (EXMODK)
KEY44 (EXDWK)
D1 1SS133
D2 1SS133
D3 1SS133
D4 1SS133
D5 1SS133
D6 1SS133
Q5 DTC1432KA
BZ1 PS1720P02
+5V
+5VEN
D-GND
PSW
SCAN6
SCAN5
SCAN4
SCAN3
SCAN2
SCAN1
SELIN3
SELIN2
SELIN1
KEYIN
5V
5V
BZR
5VEN
PSEL
OP-CLK
OP-LATCH
OP-DATA
OP-/STB
ONL
DATA1
DATA2
DATA3
DATA4
DATA5
LED_V1
LED_V2
LED_V3


2/2
IC2
LC7935AN
LEDM1
LTC-3650AG-02J
LEDM
DATA1
DATA2
DATA3
DATA4
DATA5
LED34
(PML)
+5VEN
PSL
OP-/STB
OP-CLK
OP-LATCH
OP-DATA
+5V
LED_V1
LED_V2
LED_V3
Q2
DTB113ZK or KRA225S
Q3
DTB113ZK or KRA225S
Q4
DTB113ZK or KRA225S


5. I/F PWB
1/1


6. SCAN OPE PWB
1/1
D
C
B
A
1
2
3
4
5
6
7
8
LED2
ONLL
KEY13
(ERK)
KEY15
(MSK)
KEY14
(FTIK)
KEY12
(SGK)
KEY6
(AP6K)
KEY5
(AP5K)
KEY4
(AP4K)
KEY7
(SCNK)
KEY3
(AP3K)
KEY2
(AP2K)
KEY1
(AP1K)
KEY8
(ONLK)
KEY10
(XYZK)
KEY9
(DUPK)
KEY11
(DPCK)
LED12
(ECL)
LED15
(MSL)
LED14
(FIL)
LED11
(EEL)
LED13
(TIL)
LED10
(GRL)
LED8
(ODL)
LED9
(SOL)
LED4
(DU21)
LED3
(DAA)
LED5
(DU22)
LED1
(SCNL)
LED6
(XYZL)
LED7
(DPCL)
CN3
18
17
16
15
14
13
12
11
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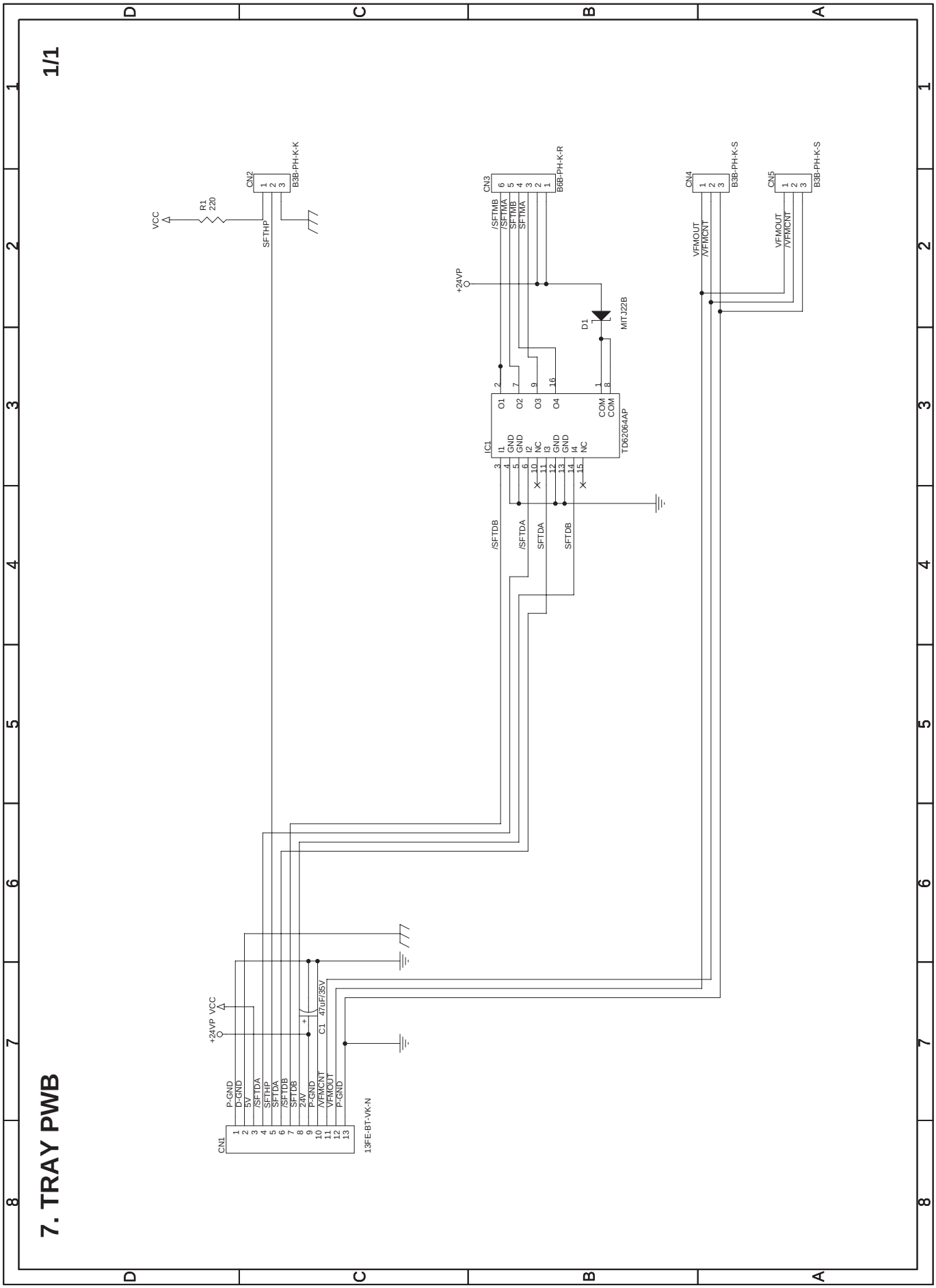
9
8
7
6
5
4
3
2
1


7. TRAY PWB
1/1
CN1
13FE-BT-VK-N
P-GND
D-GND
5V
/SFTDA
SFTHP
SFTDA
/SFTDB
SFTDB
24V
P-GND
/VFMCNT
VFMOUT
P-GND
+24VP
VCC
C1 47uF/35V
CN2
B3B-PH-K-K
VCC
R1 220
SFTHP
CN3
B6B-PH-K-R
/SFTMB
/SFTMA
SFTMB
SFTMA
+24VP
D1
MITJ22B
IC1
TD62064AP
O1
O2
O3
O4
COM
COM
I1
I2
I3
I4
GND
NC
/SFTDB
/SFTDA
SFTDA
SFTDB
CN4
B3B-PH-K-S
VFMOUT
/VFMCNT
CN5
B3B-PH-K-S
VFMOUT
/VFMCNT

SHARP

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