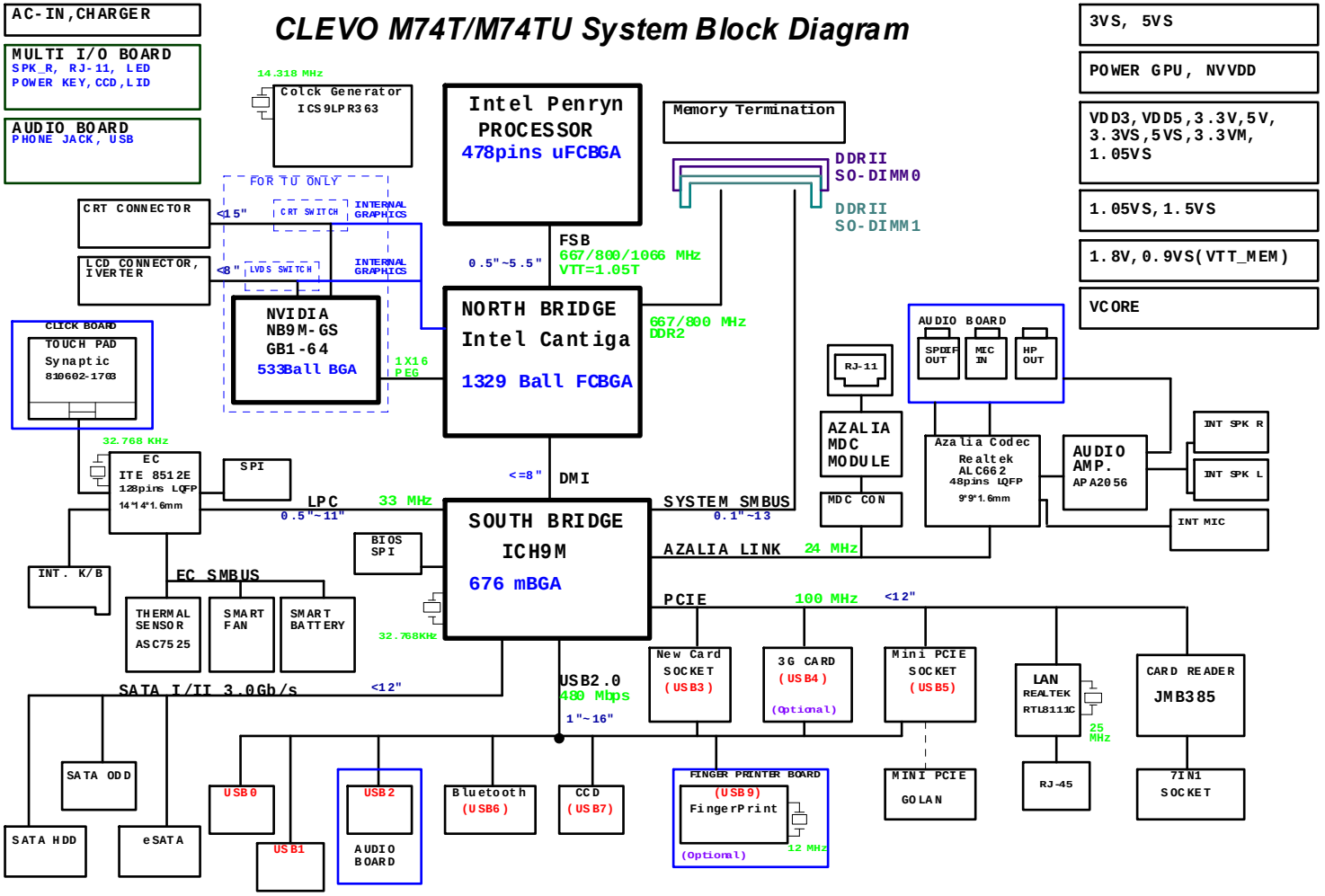
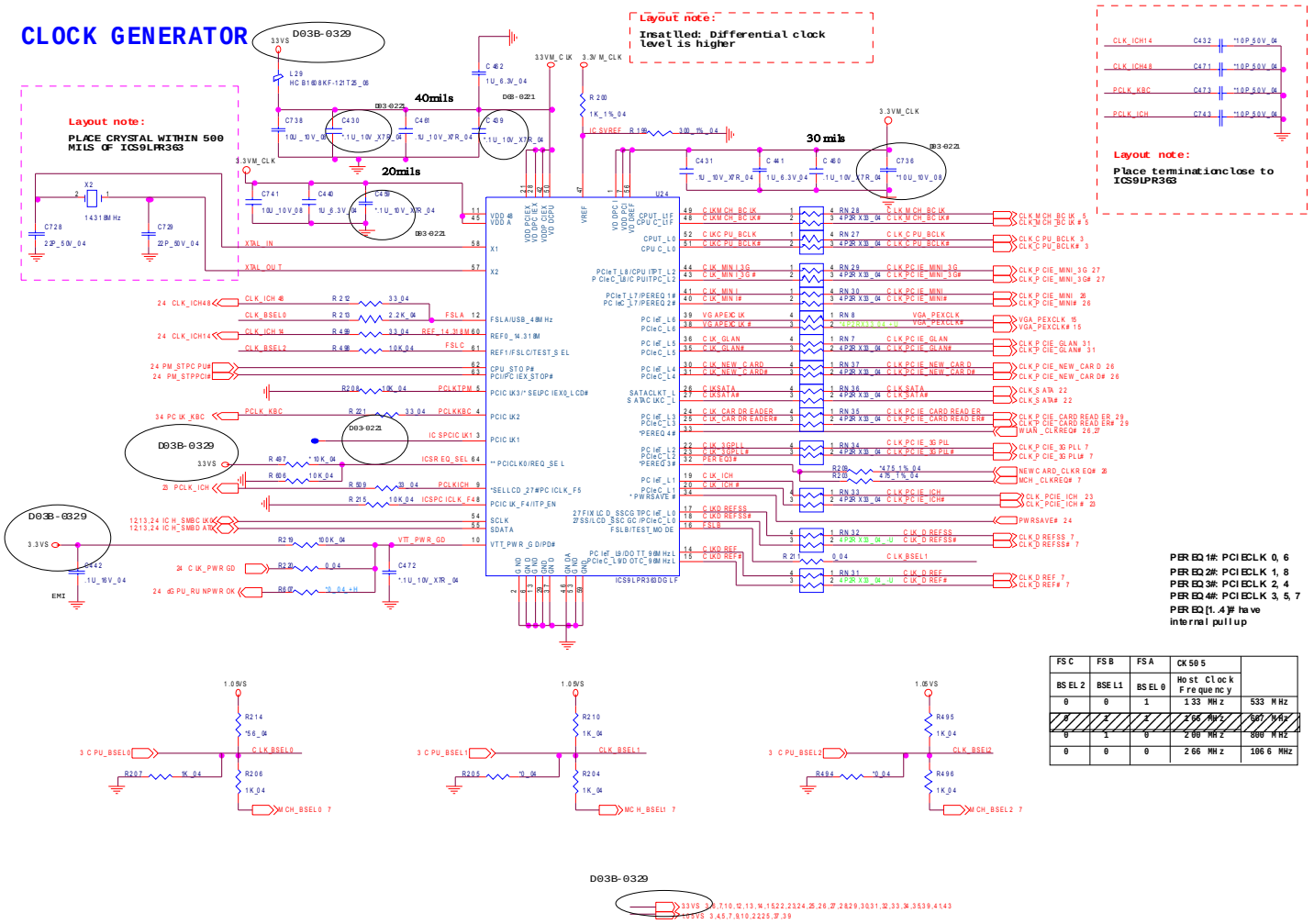
System Block Diagram

Sheet 1 of 51
System Block Diagram



Clock Generator



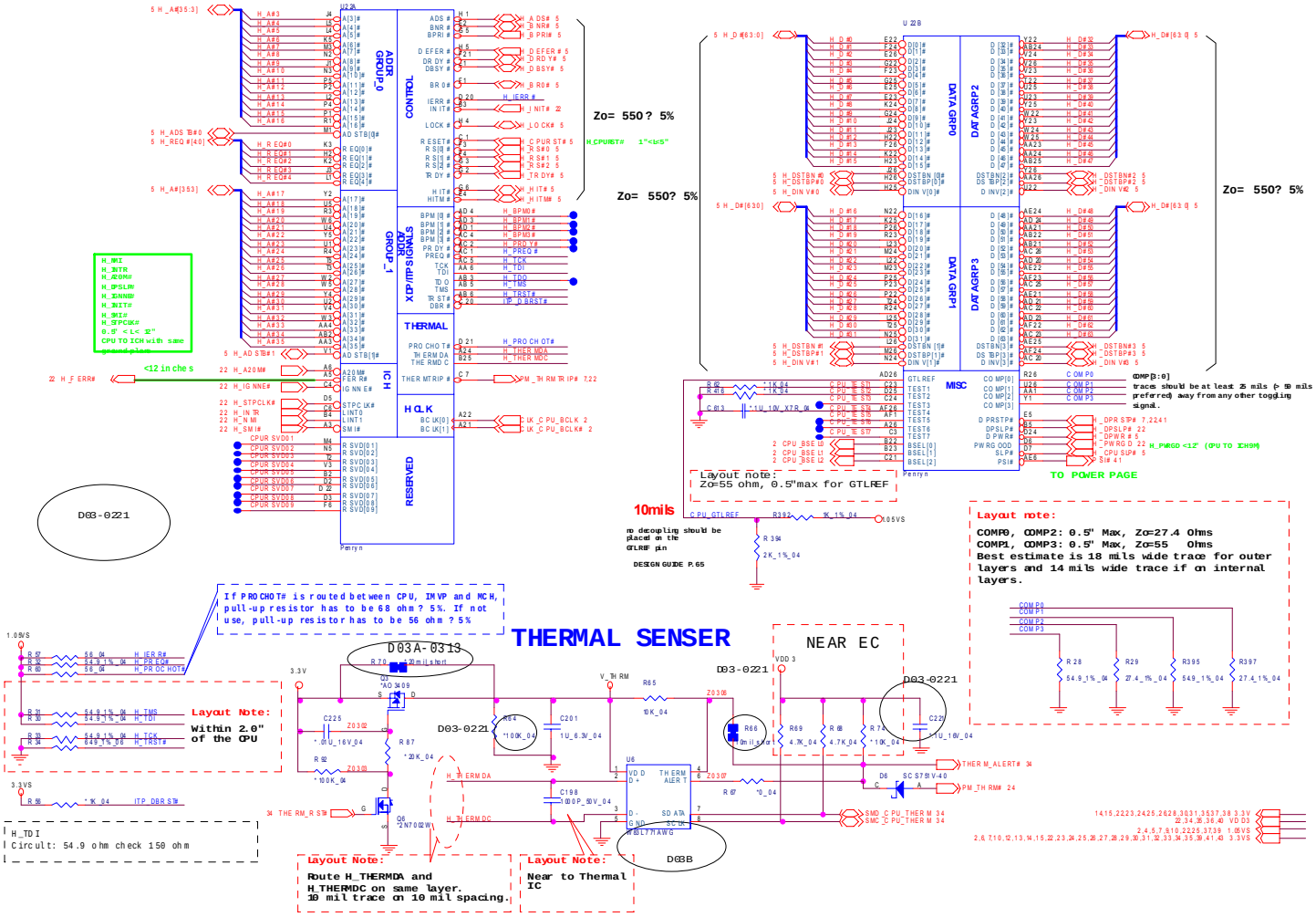
FS C	FS B	FS A	CK 505	
BS EL 2	BSE L1	BS EL 0	Host Clock Frequency	
0	0	1	133 MHz	533 MHz
0	1	1	266 MHz	667 MHz
0	1	0	200 MHz	800 MHz
0	0	0	266 MHz	1066 MHz

Sheet 2 of 51
Clock Generator

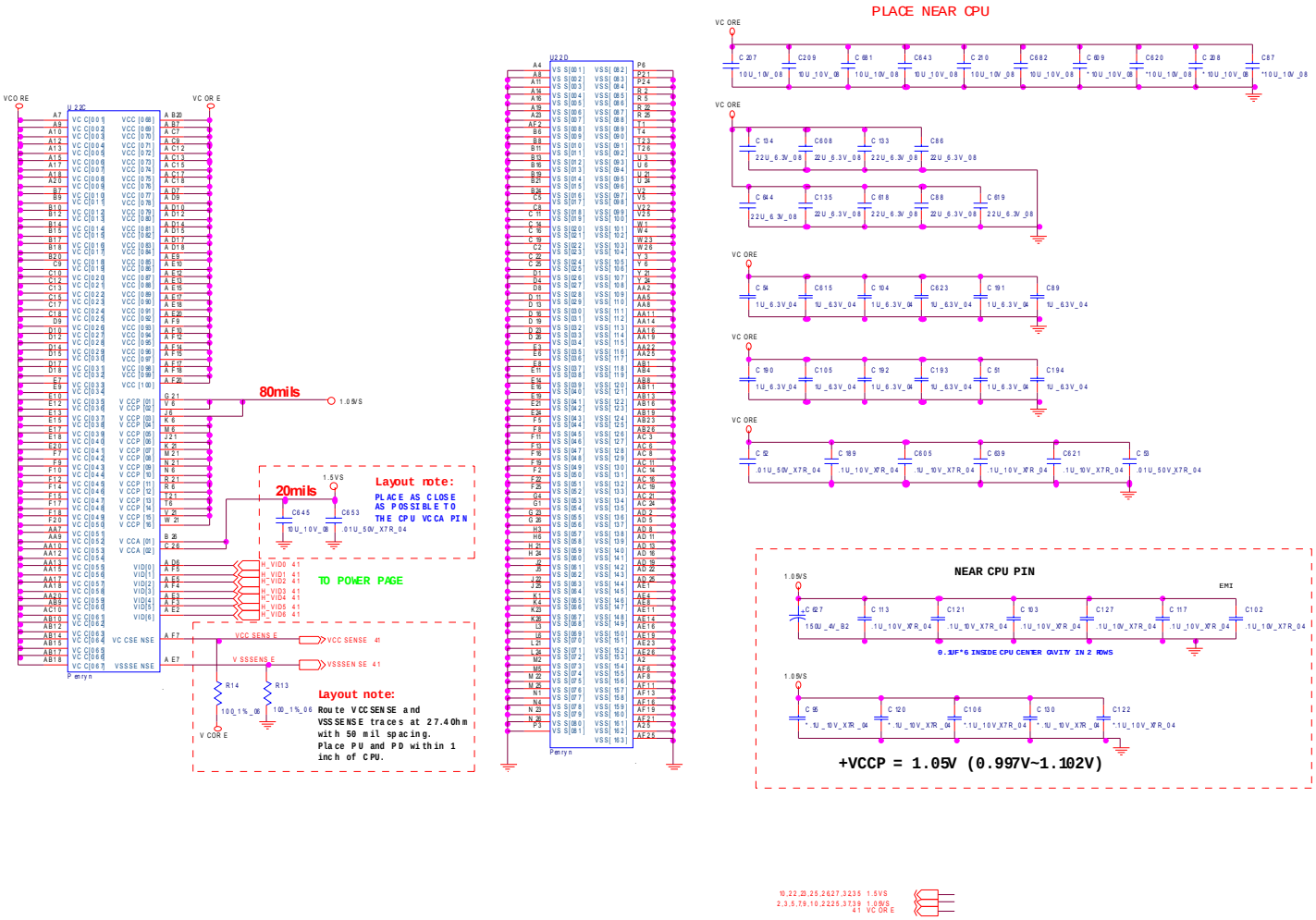
B.Schematic Diagrams

Penryn (Socket-P) CPU 1/2

Sheet 3 of 51
Penryn (Socket-P)
CPU 1/2



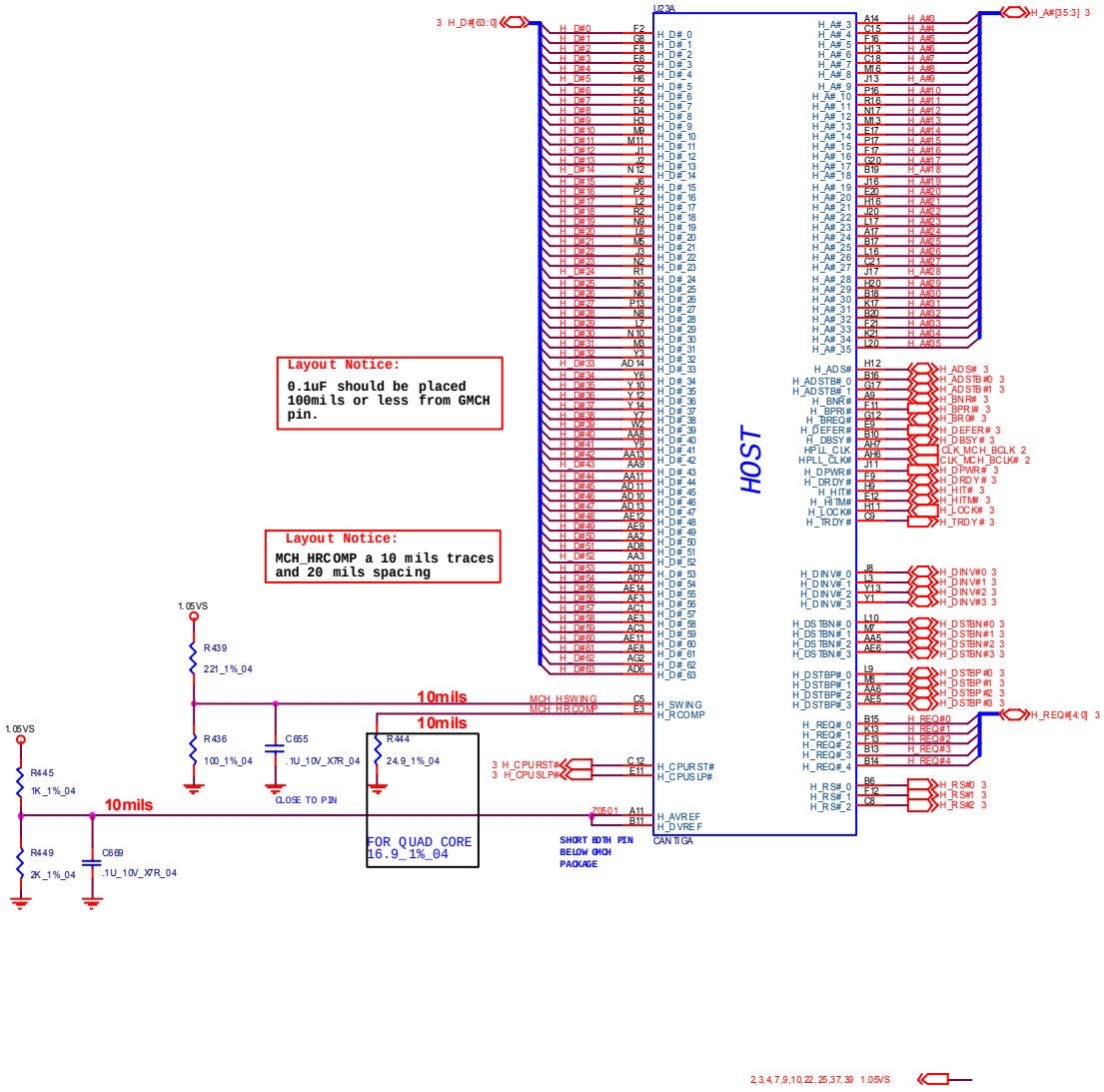
Penryn (Socket-P) CPU 2/2



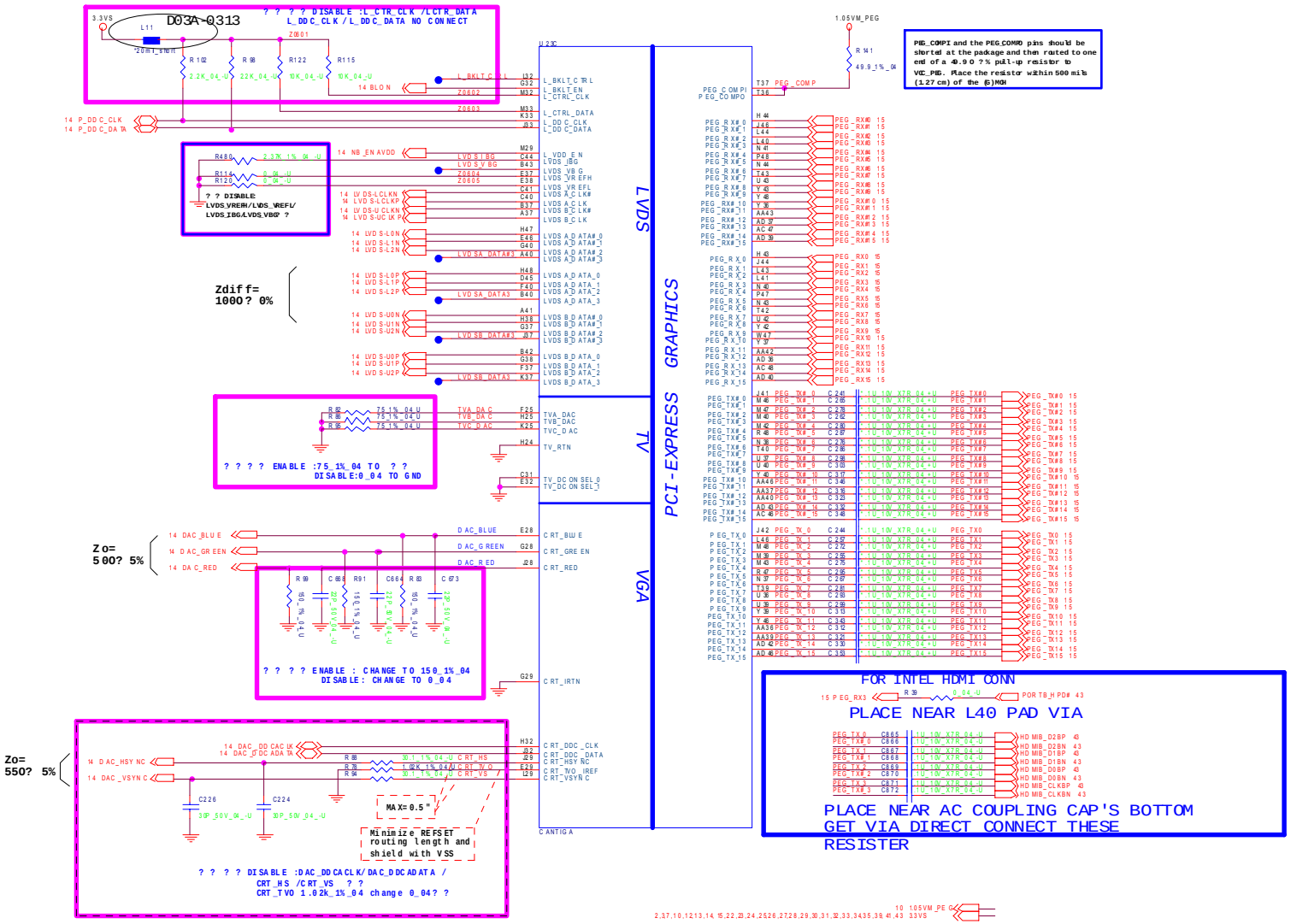
Sheet 4 of 51
Penryn (Socket-P)
CPU 2/2

CANTIGA 1/7, Host

Sheet 5 of 51
CANTIGA 1/7, Host



CANTIGA 2/7, Graphics

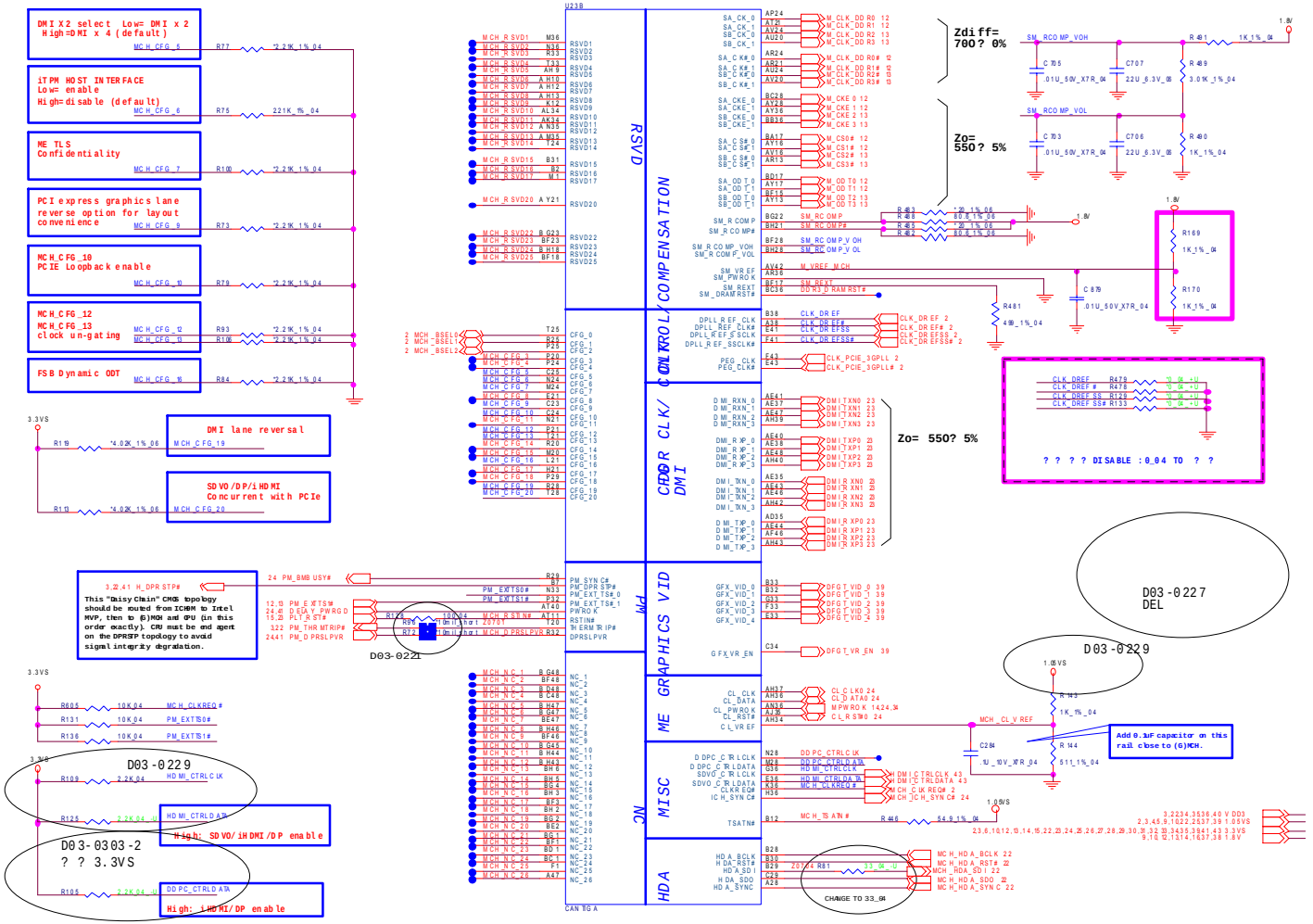


Sheet 6 of 51
CANTIGA 2/7, Graphics

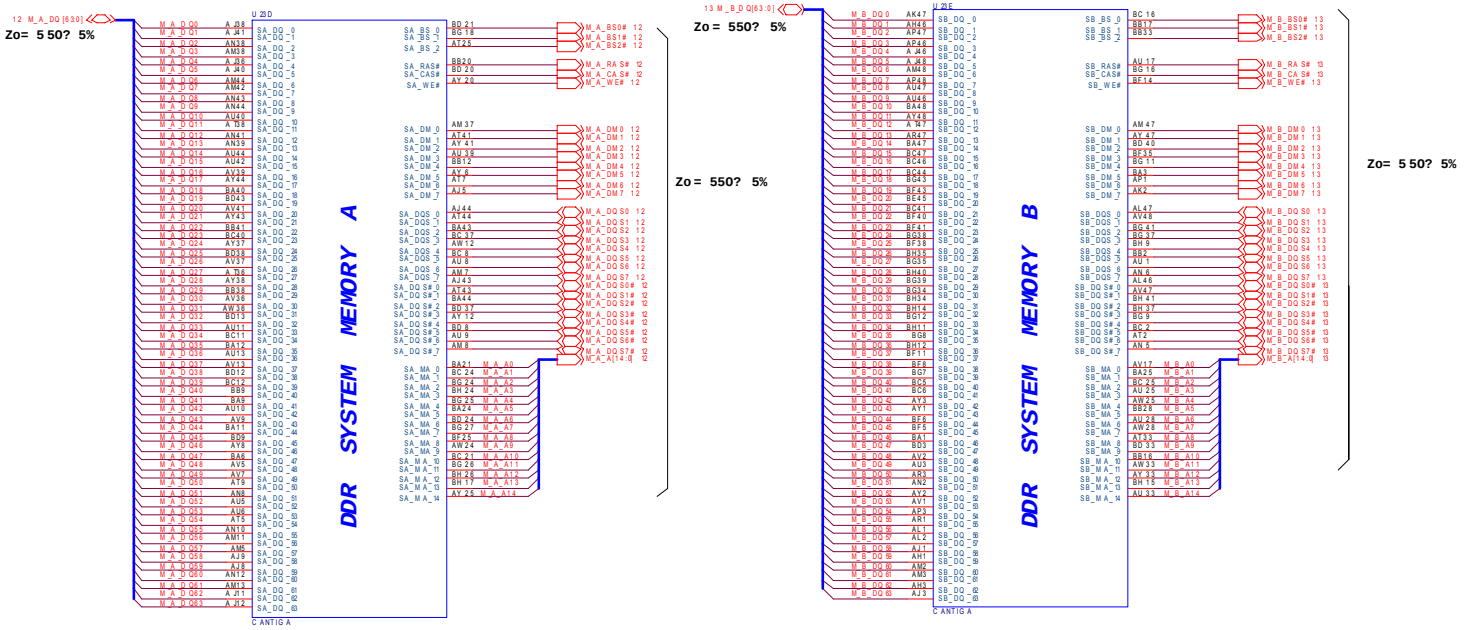
B.Schematic Diagrams

CANTIGA 3/7

Sheet 7 of 51
CANTIGA 3/7



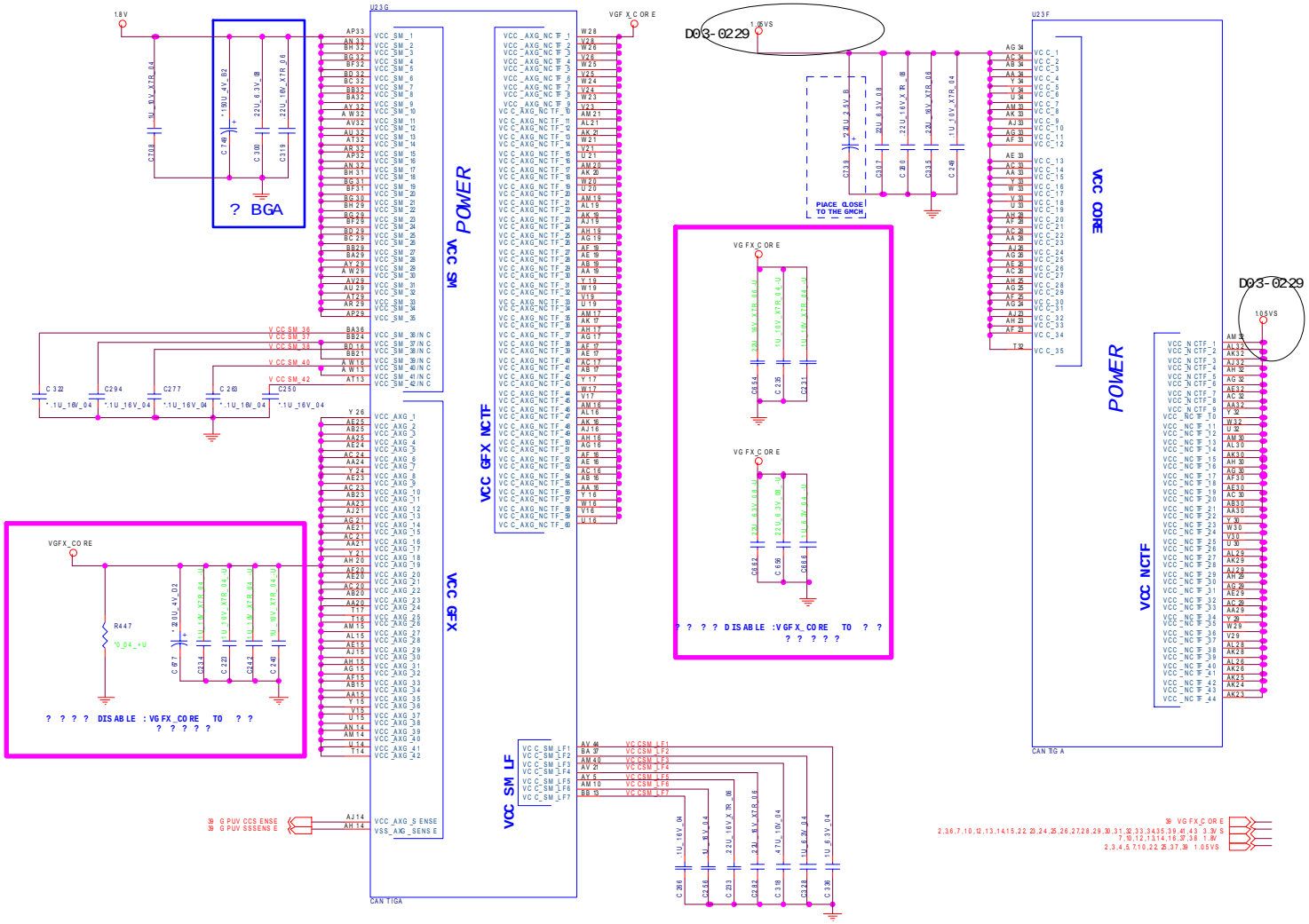
CANTIGA 4/7



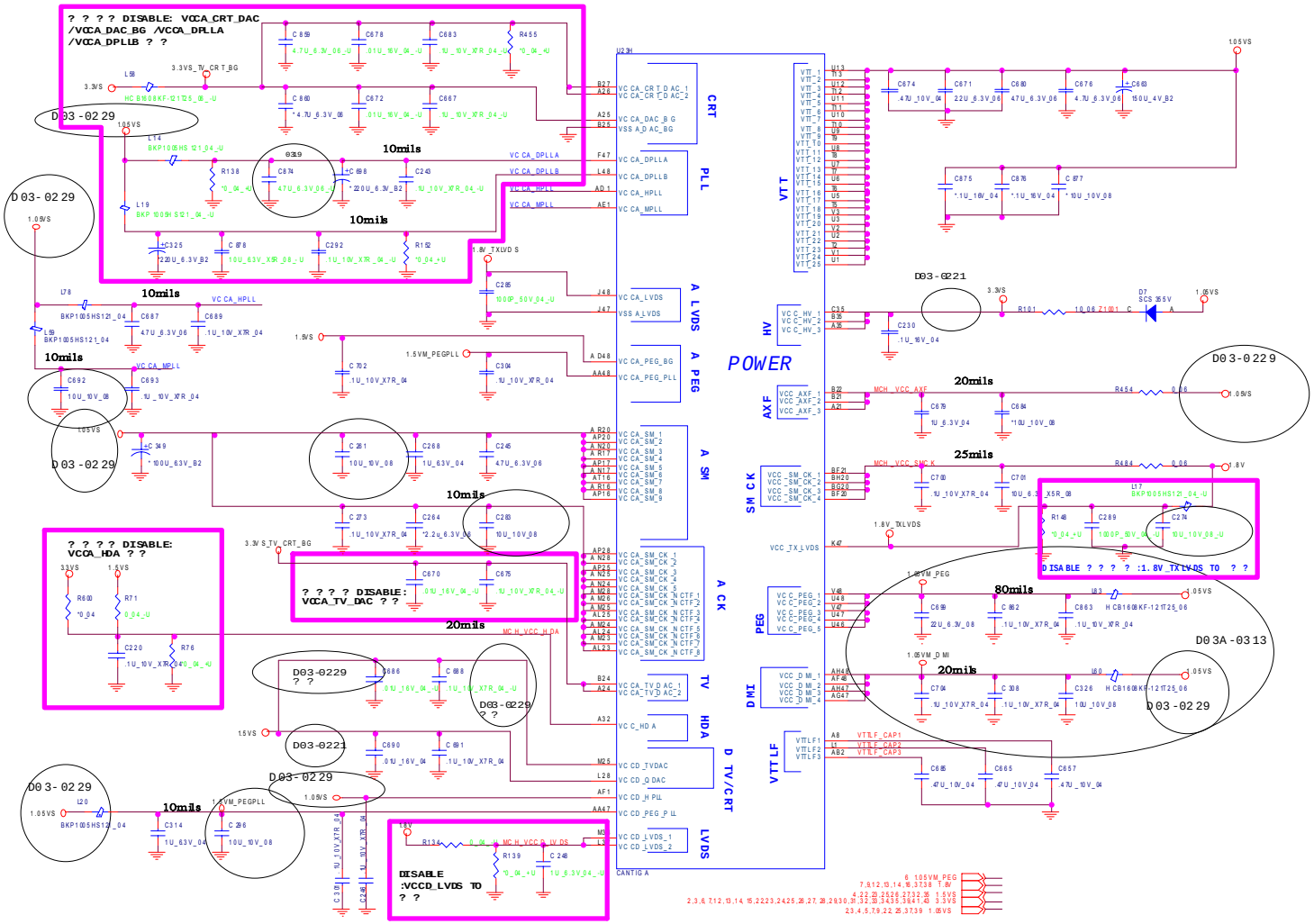
Sheet 8 of 51
CANTIGA 4/7

CANTIGA 5/7

Sheet 9 of 51
CANTIGA 5/7



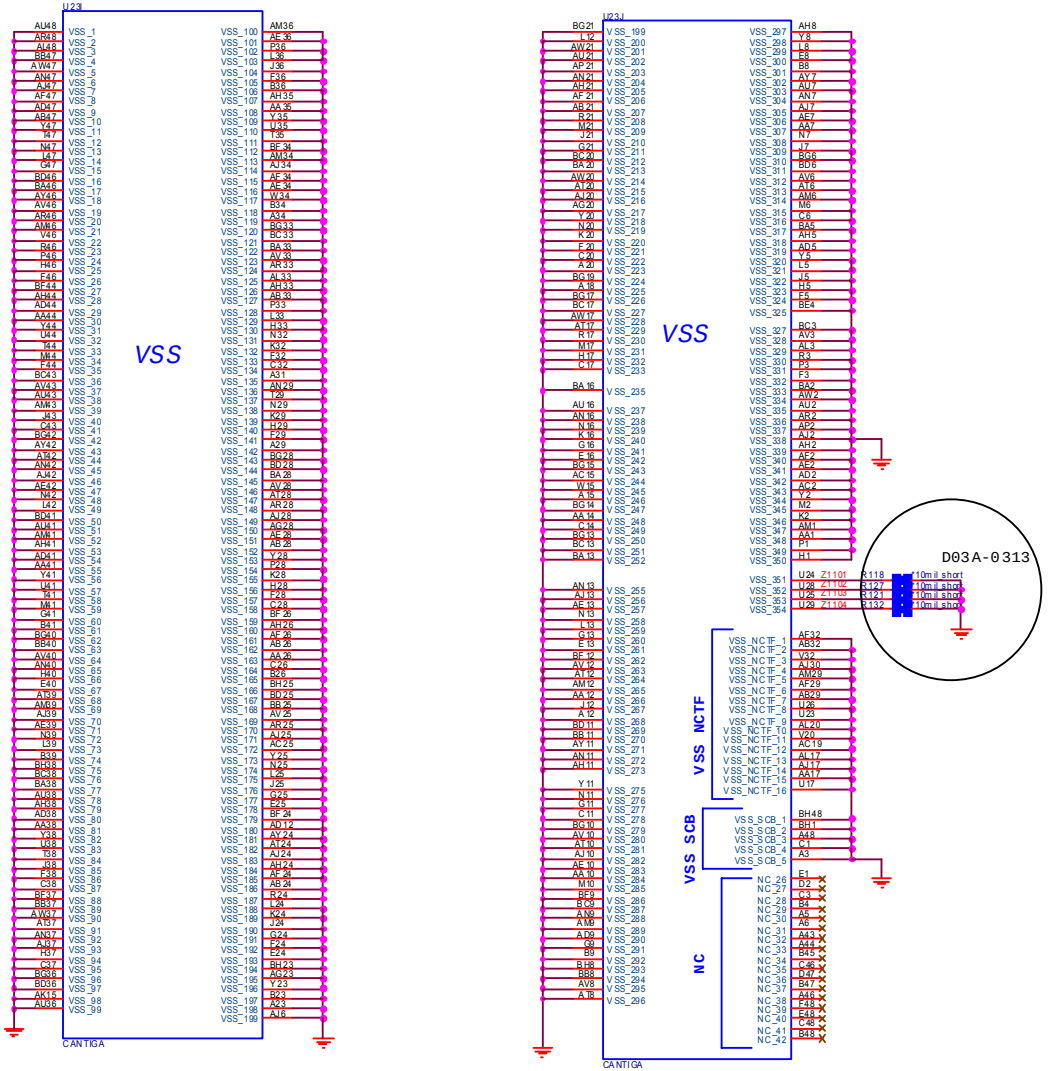
CANTIGA 6/7



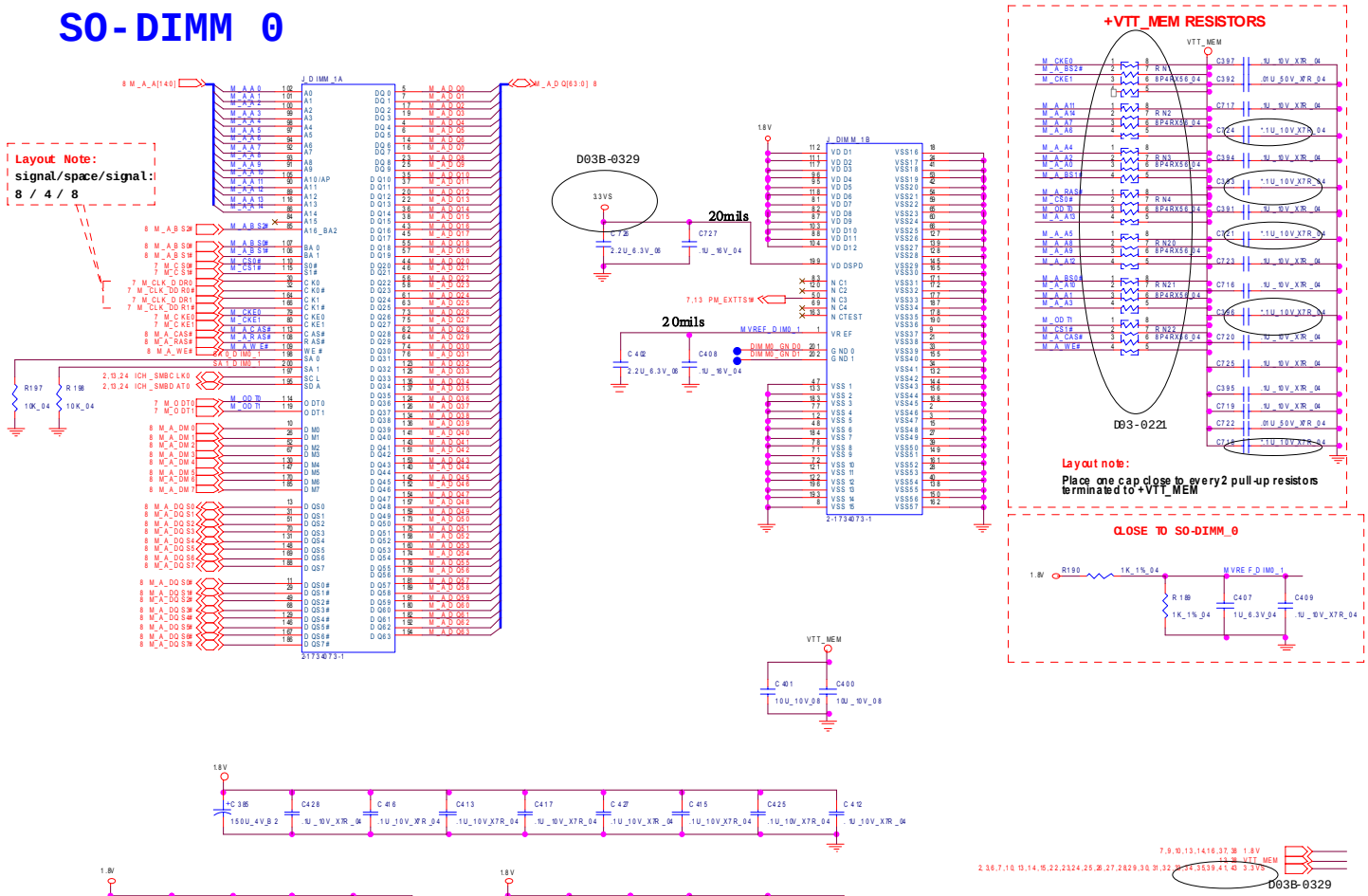
Sheet 10 of 51
CANTIGA 6/7

CANTIGA 7/7

Sheet 11 of 51
CANTIGA 7/7



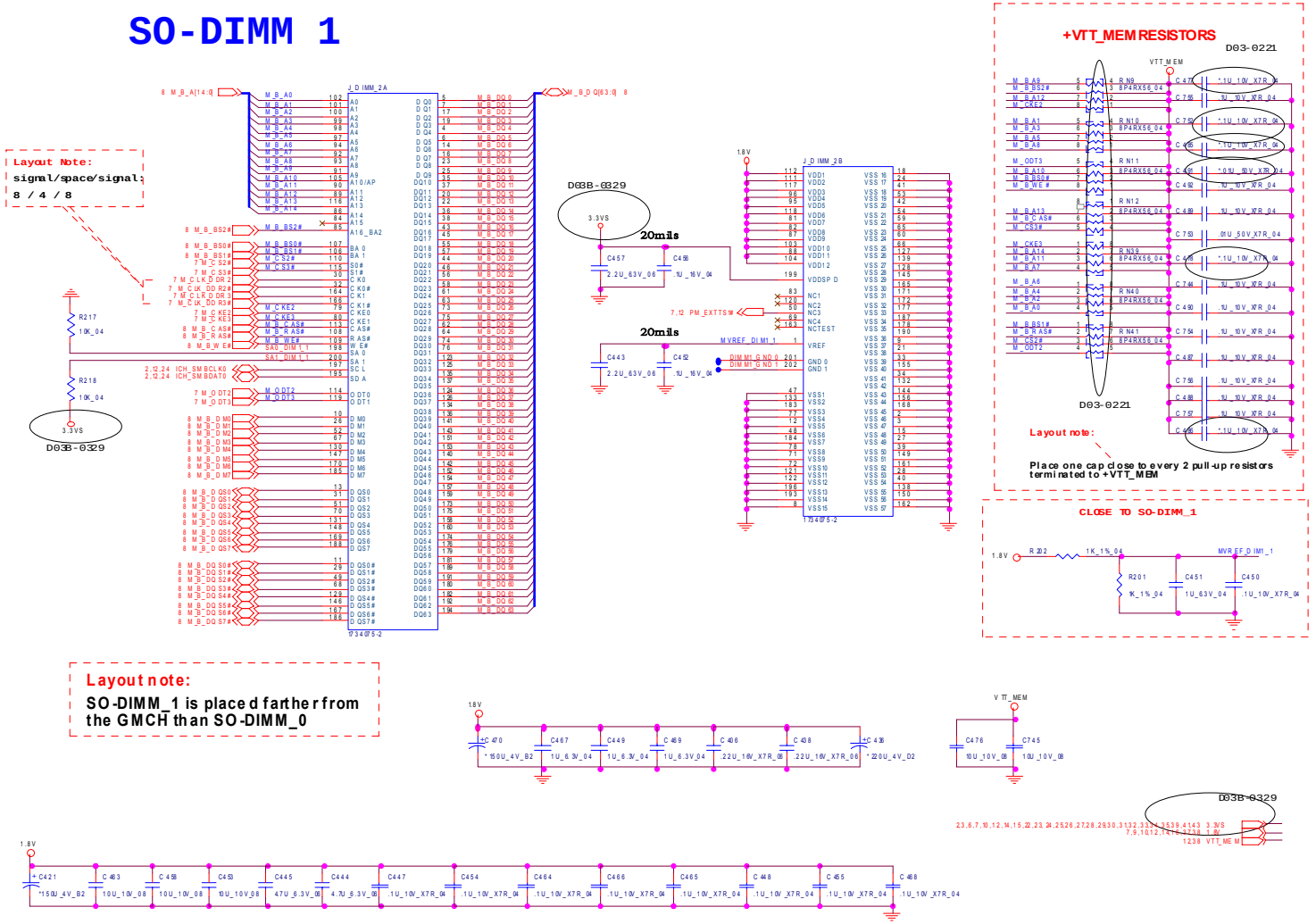
DDRII SO-DIMM - 0



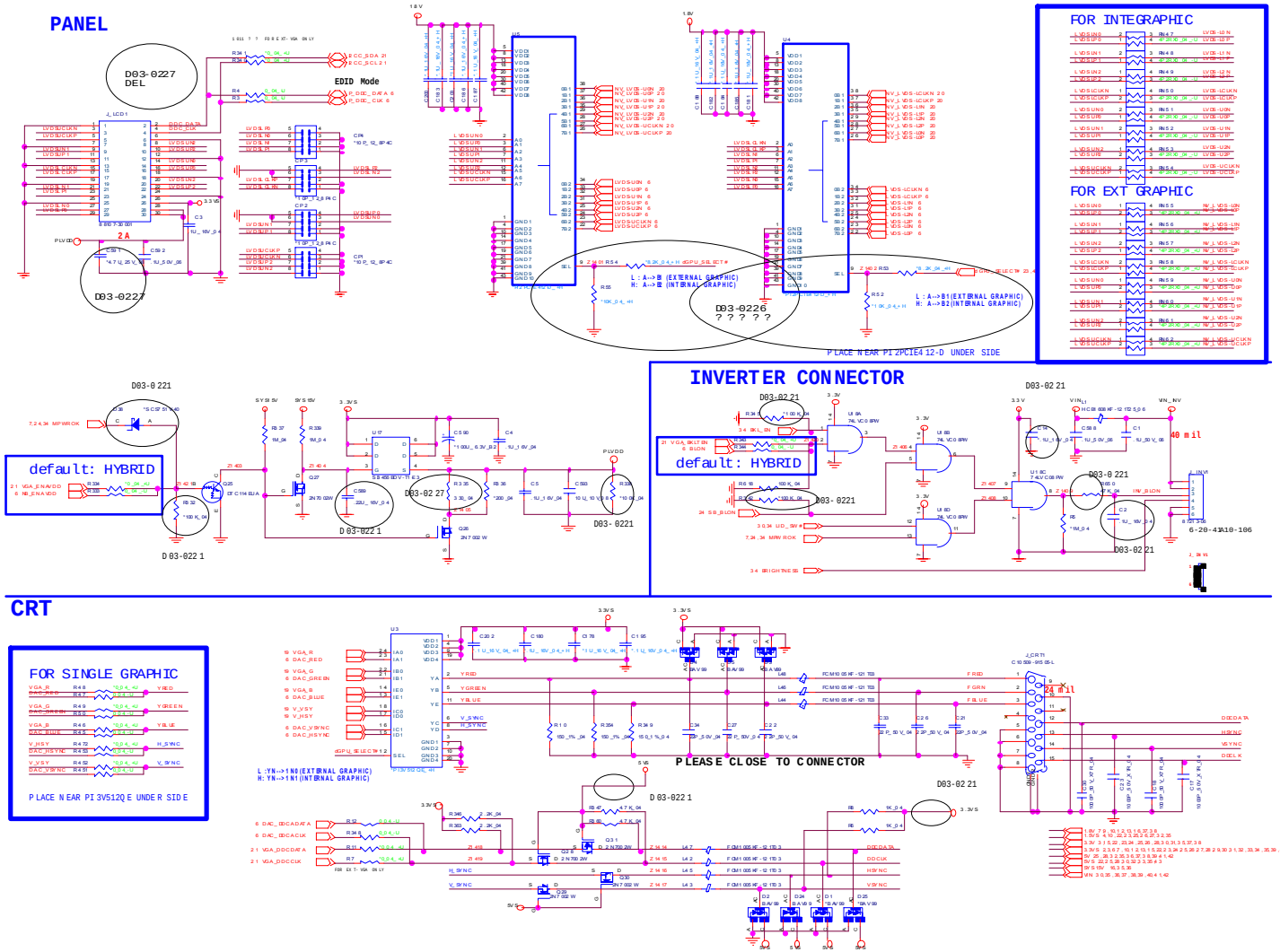
Sheet 12 of 51
DDRII SO-DIMM - 0

DDRII SO-DIMM - 1

Sheet 13 of 51
DDRII SO-DIMM - 1



Panel, Inverter, CRT

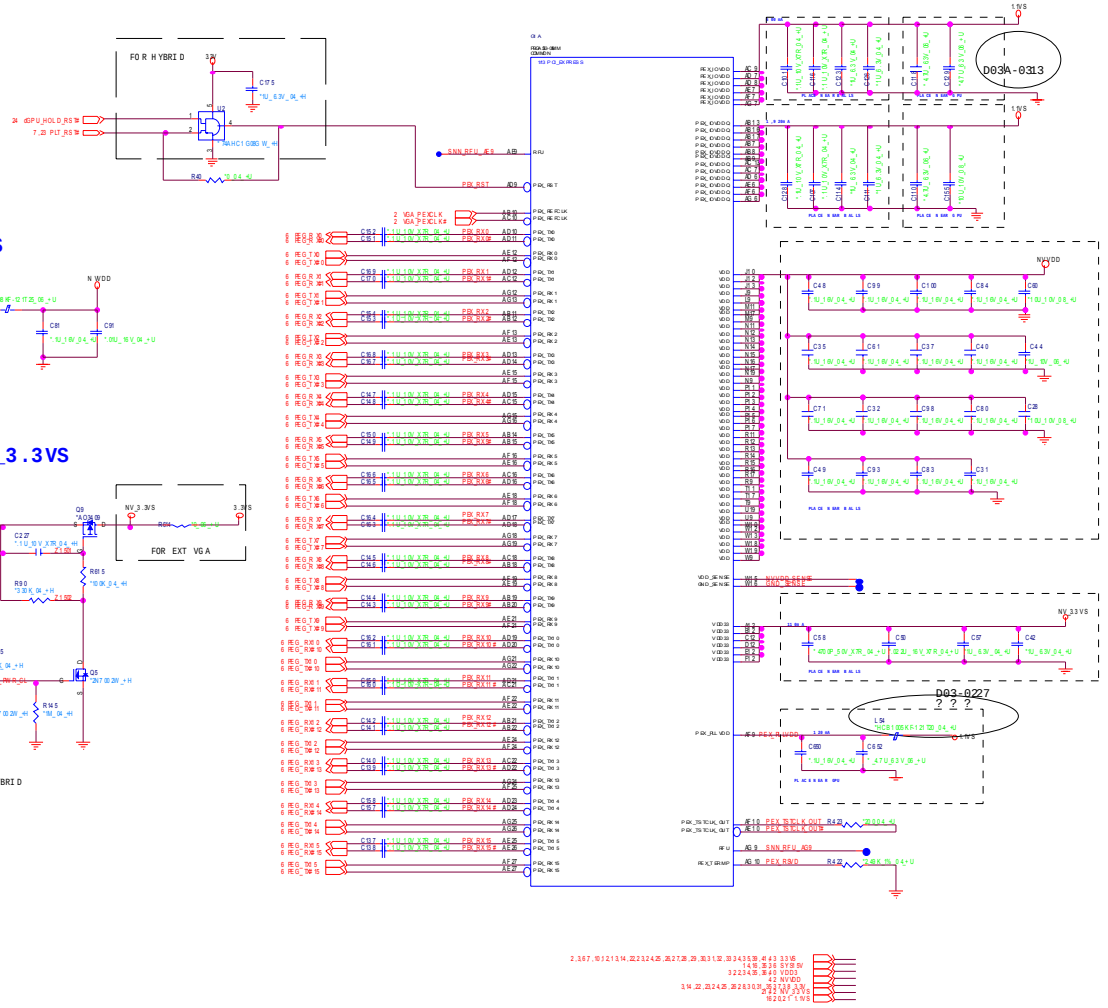


Sheet 14 of 51
Panel, Inverter, CRT

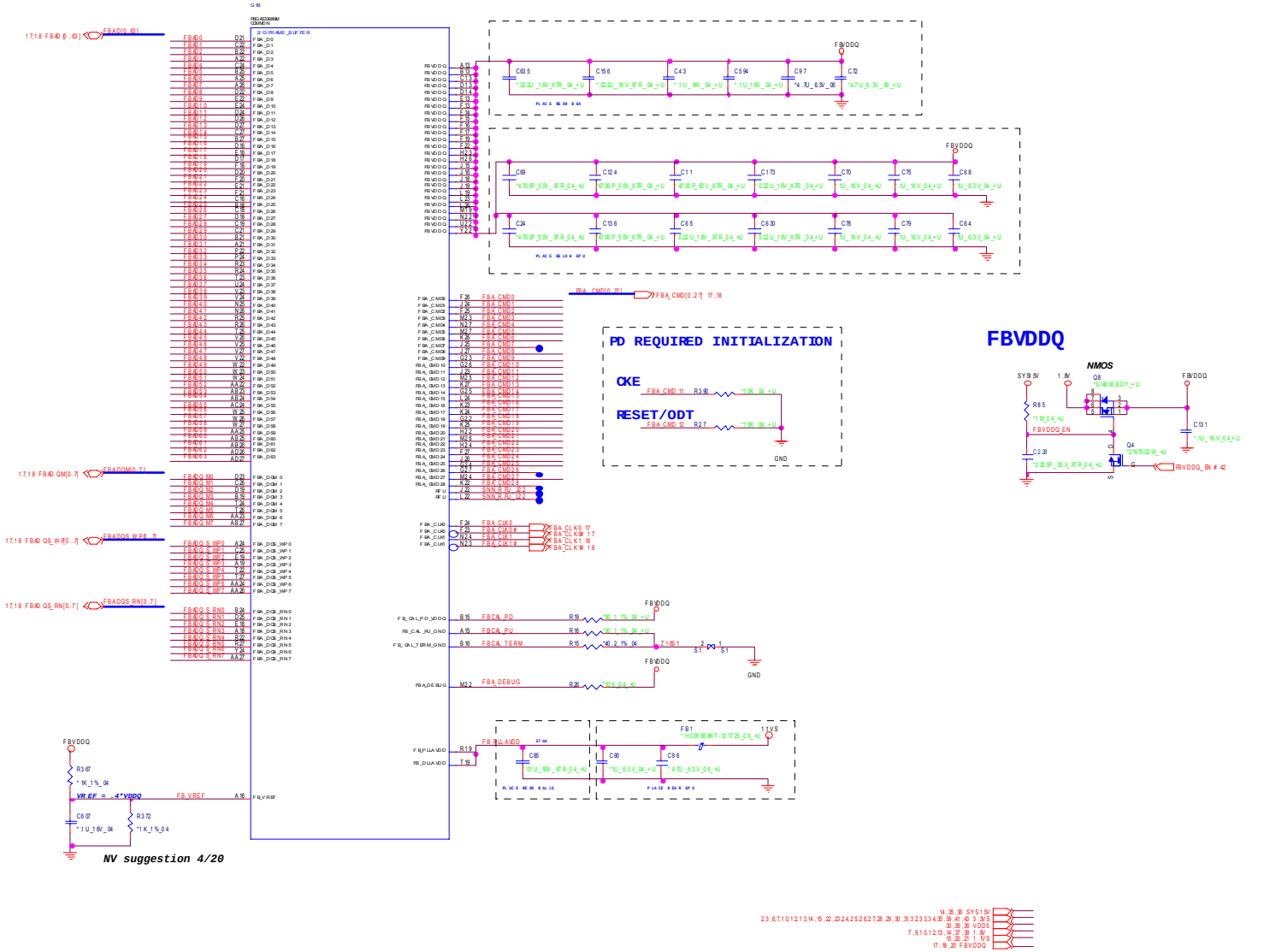
B.Schematic Diagrams

VGA NB9M-1

Sheet 15 of 51
VGA NB9M-1



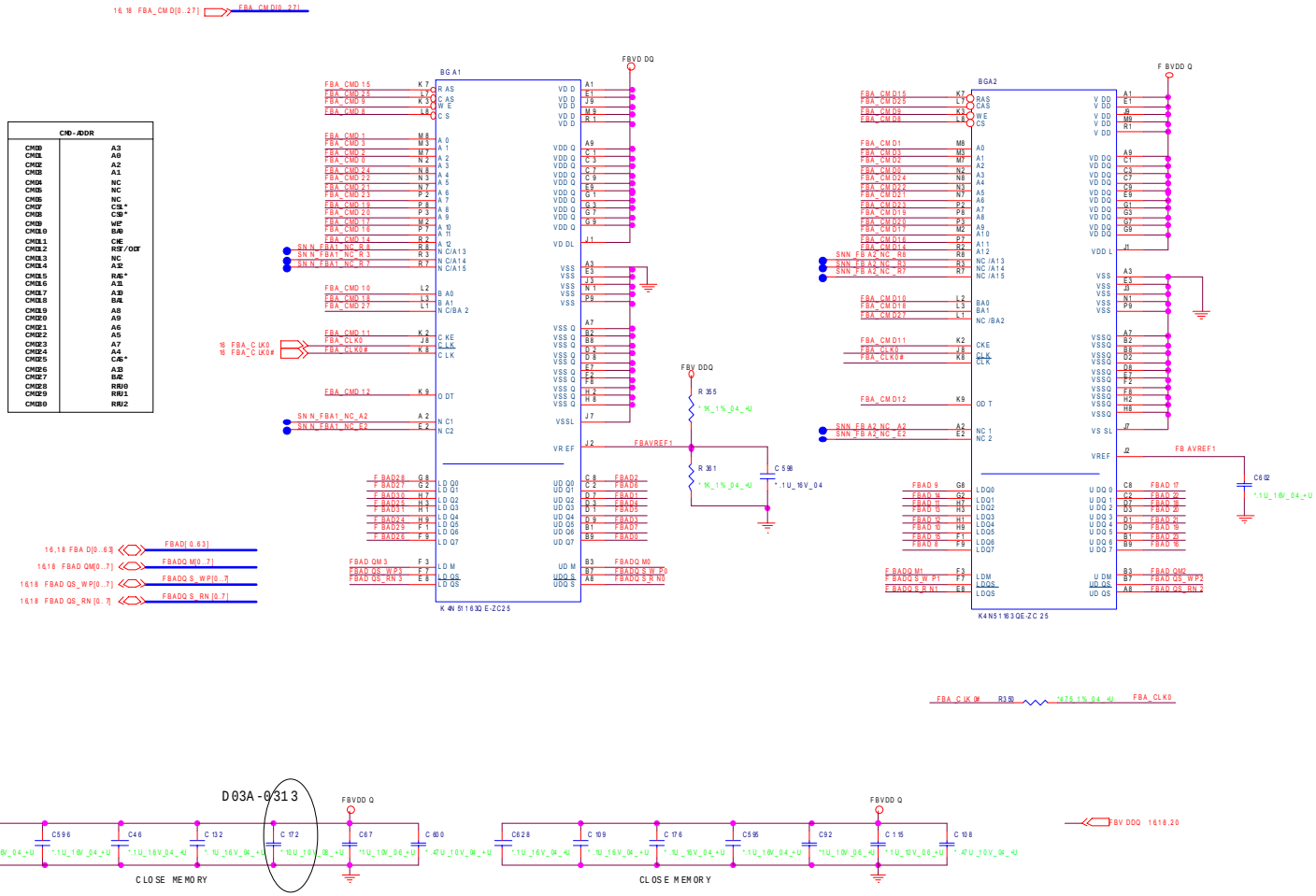
VGA NB9M-2



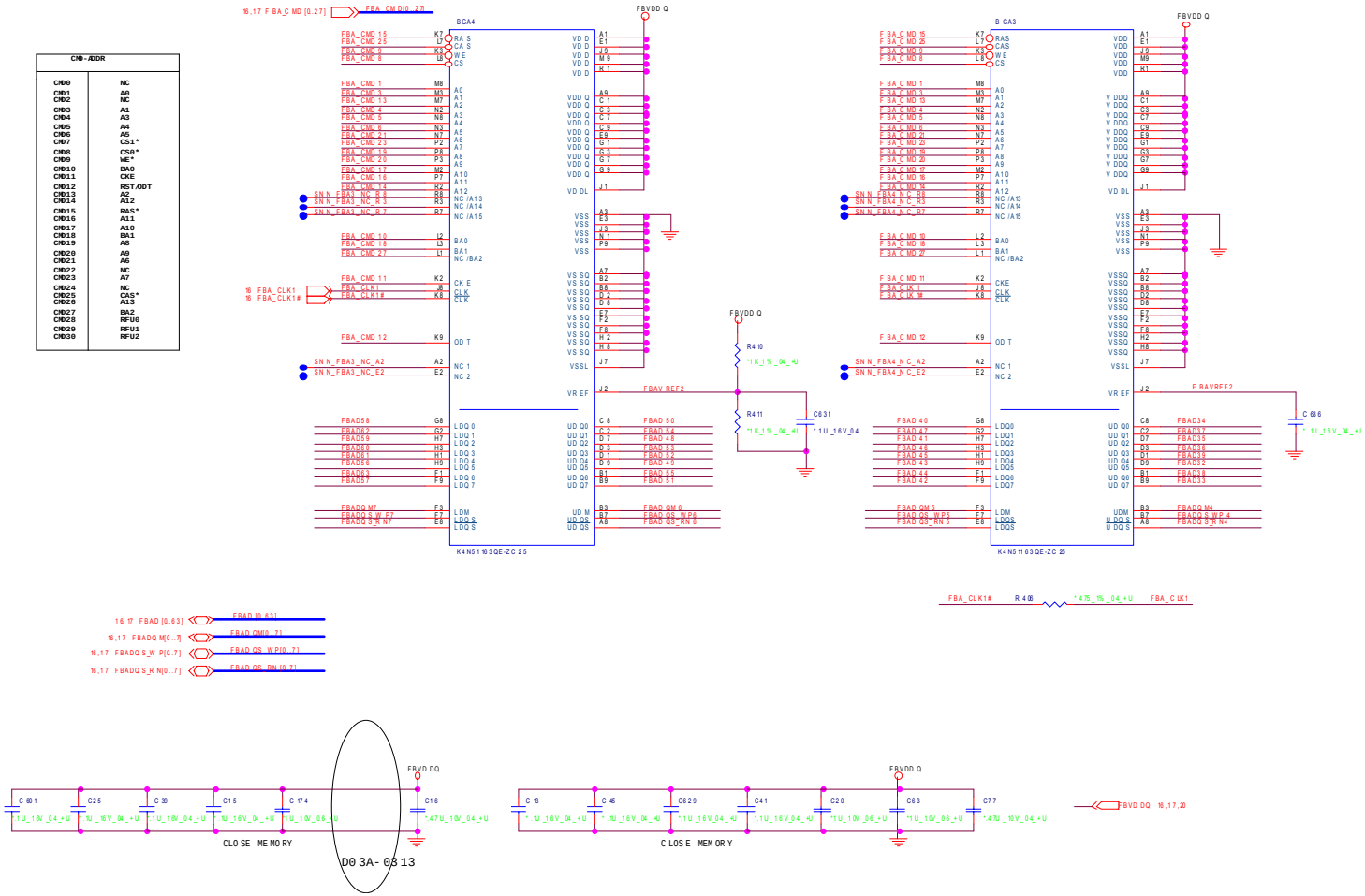
Sheet 16 of 51
VGA NB9M-2

VGA NB9M-3

Sheet 17 of 51
VGA NB9M-3



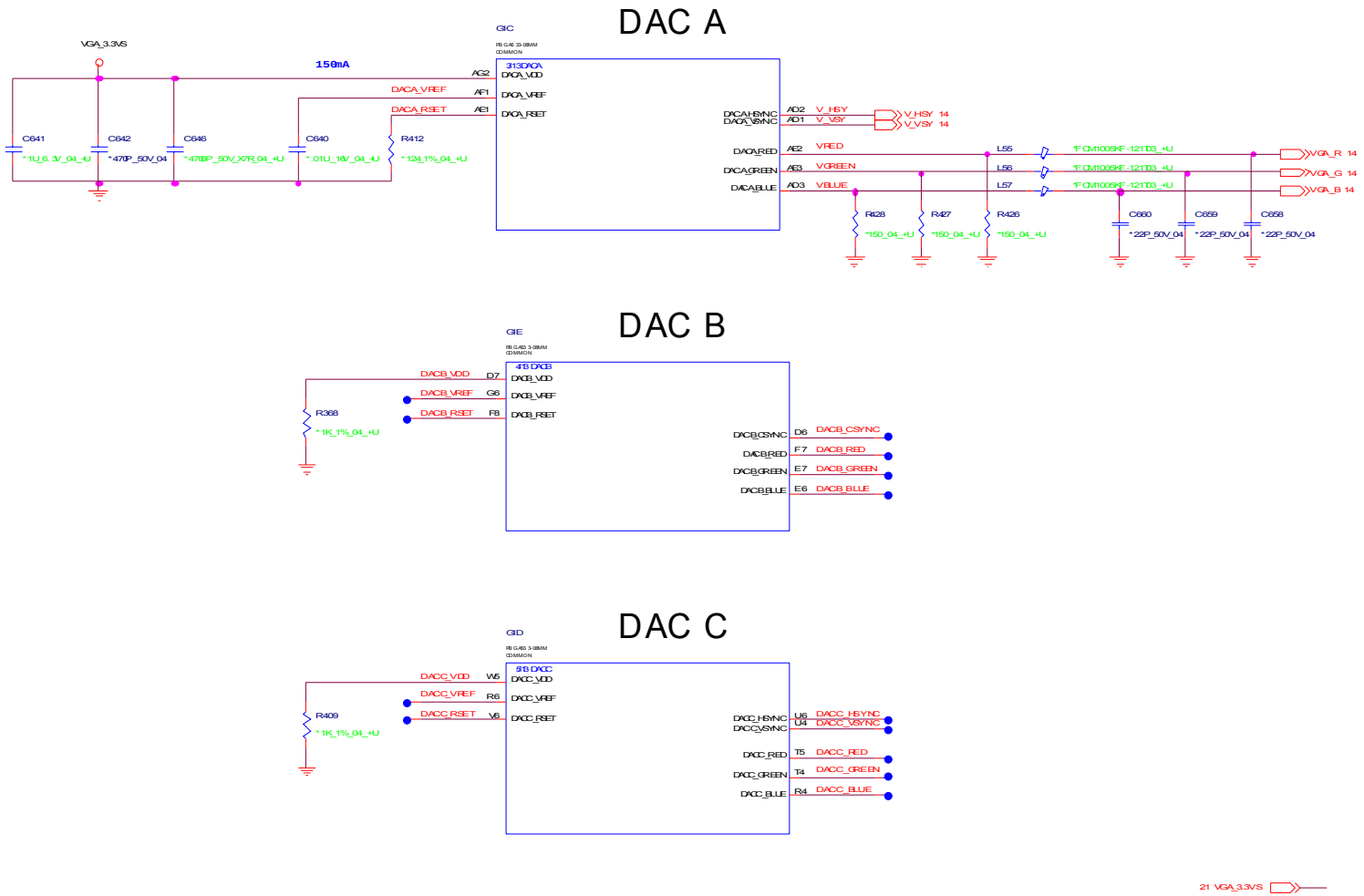
VGA NB9M-4



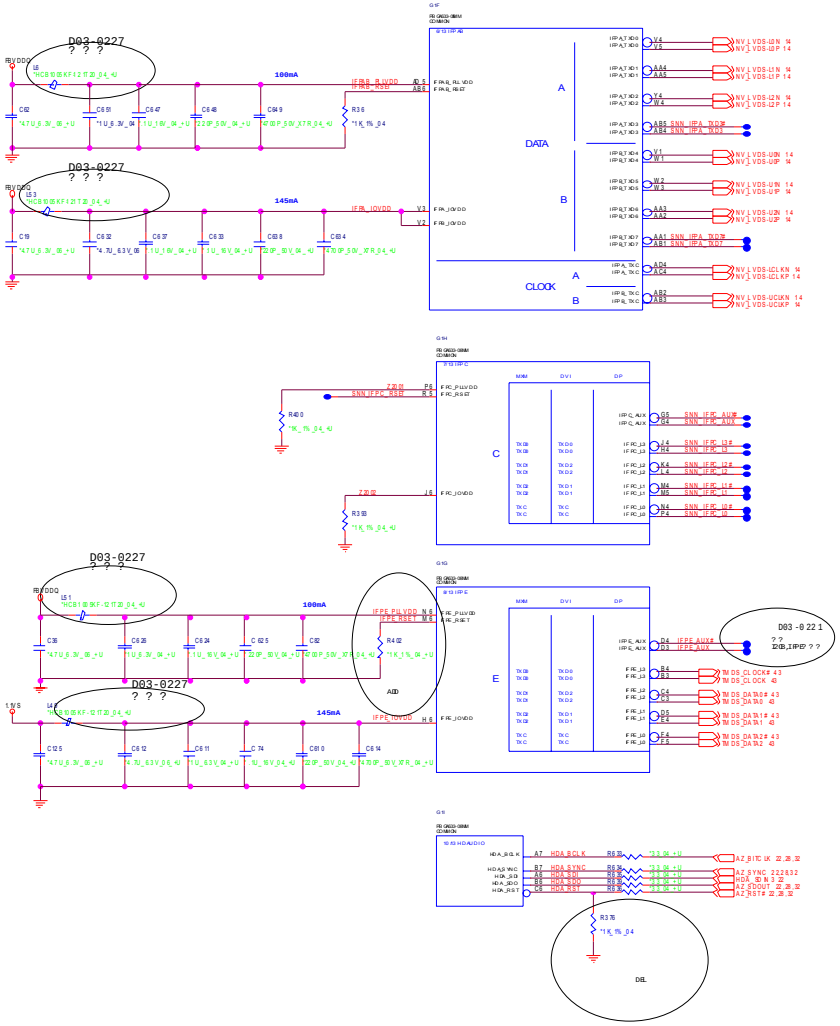
Sheet 18 of 51
VGA NB9M-4

VGA NB9M-5

Sheet 19 of 51
VGA NB9M-5



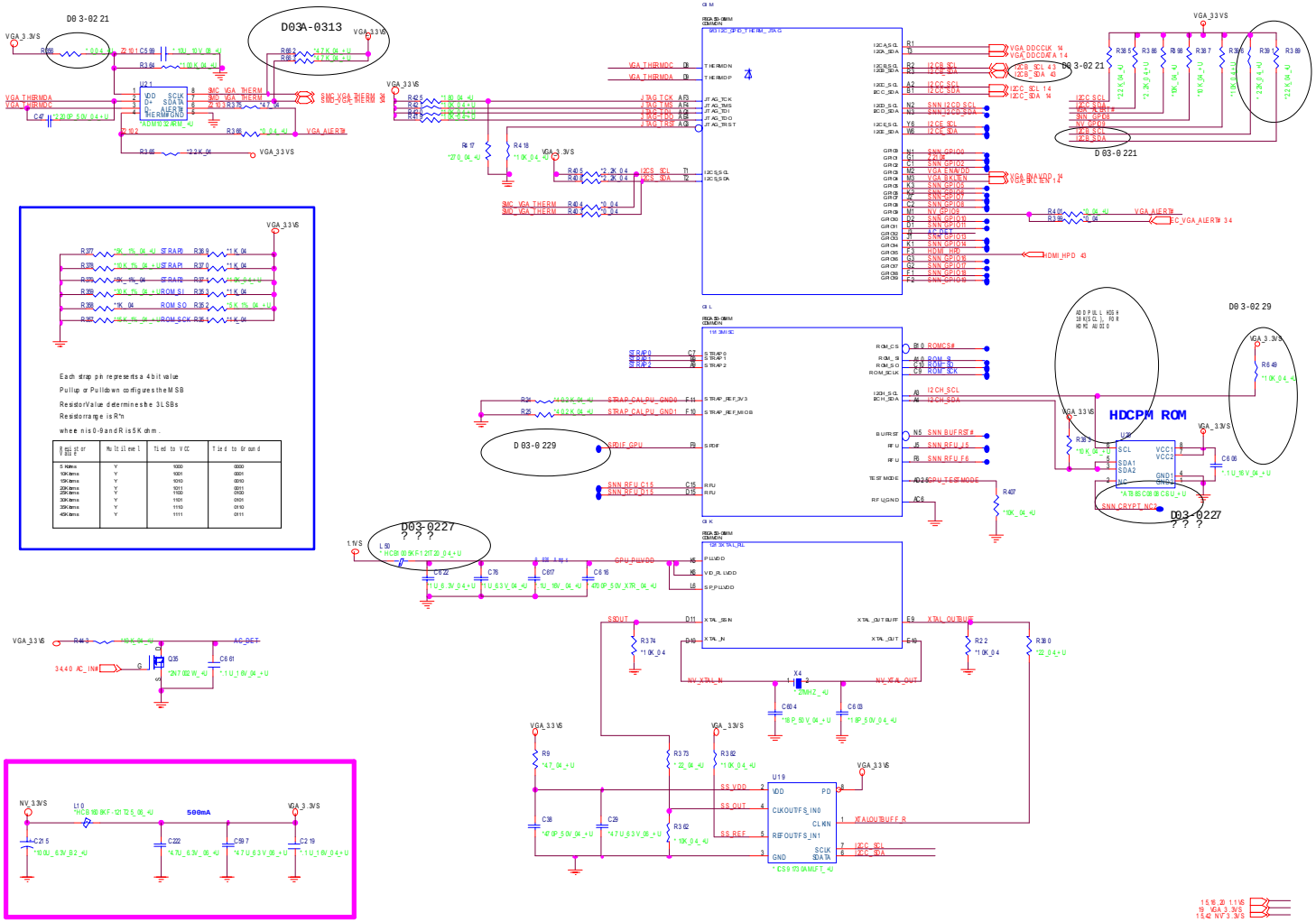
VGA NB9M-6



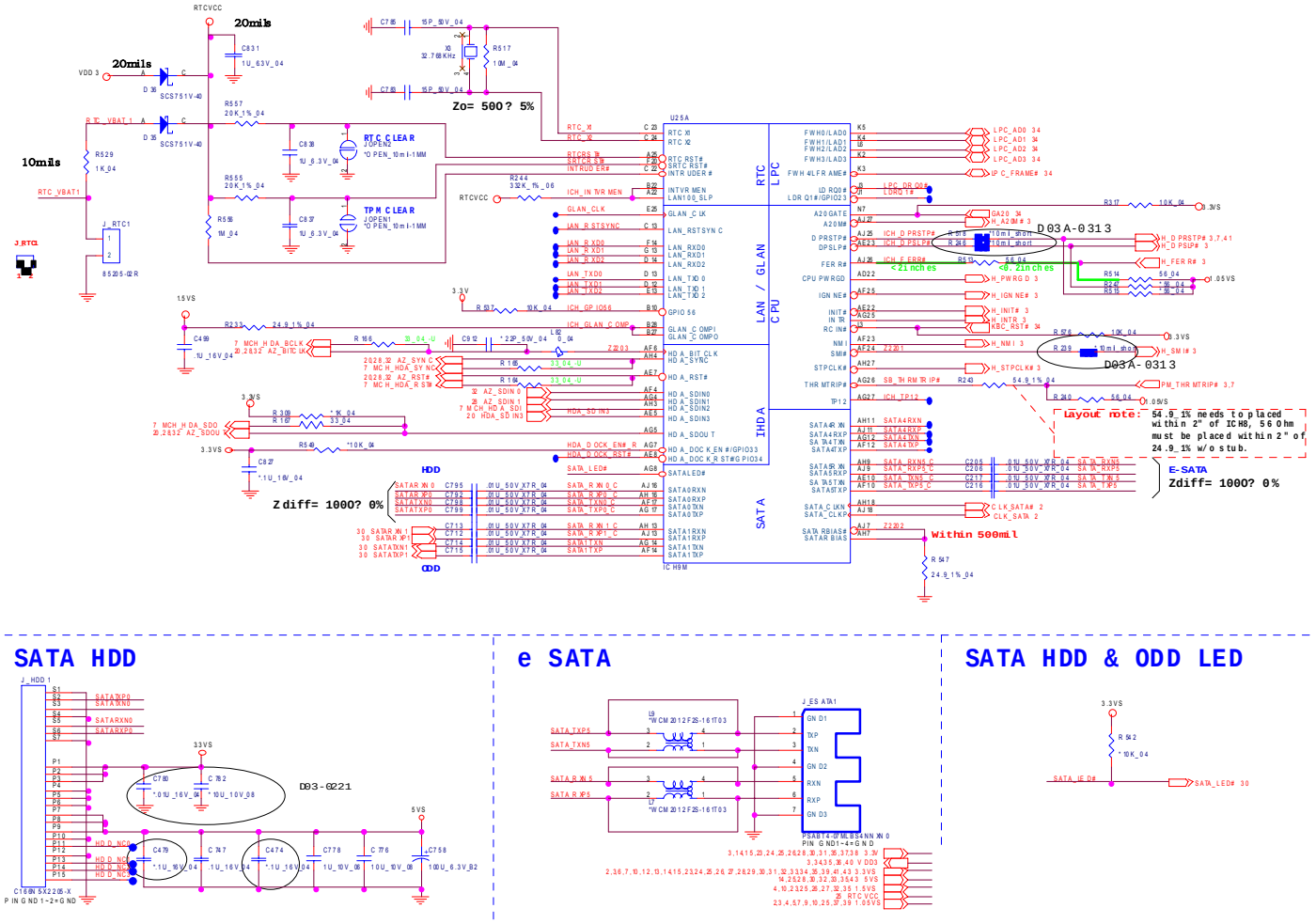
Sheet 20 of 51
VGA NB9M-6

VGA NB9M-7

Sheet 21 of 51
VGA NB9M-7



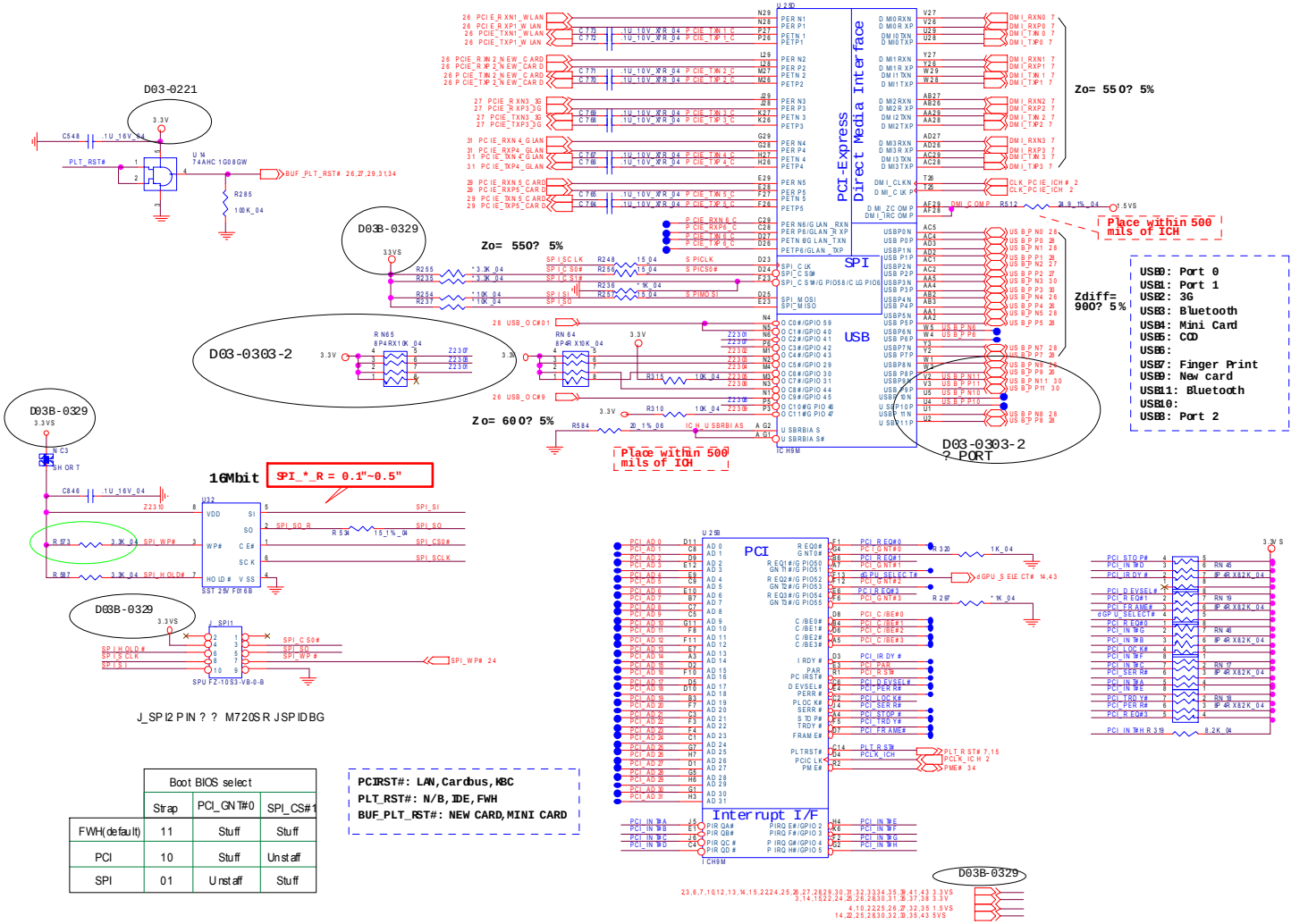
ICH9M 1/4, SATA



Sheet 22 of 51
ICH9M 1/4, SATA

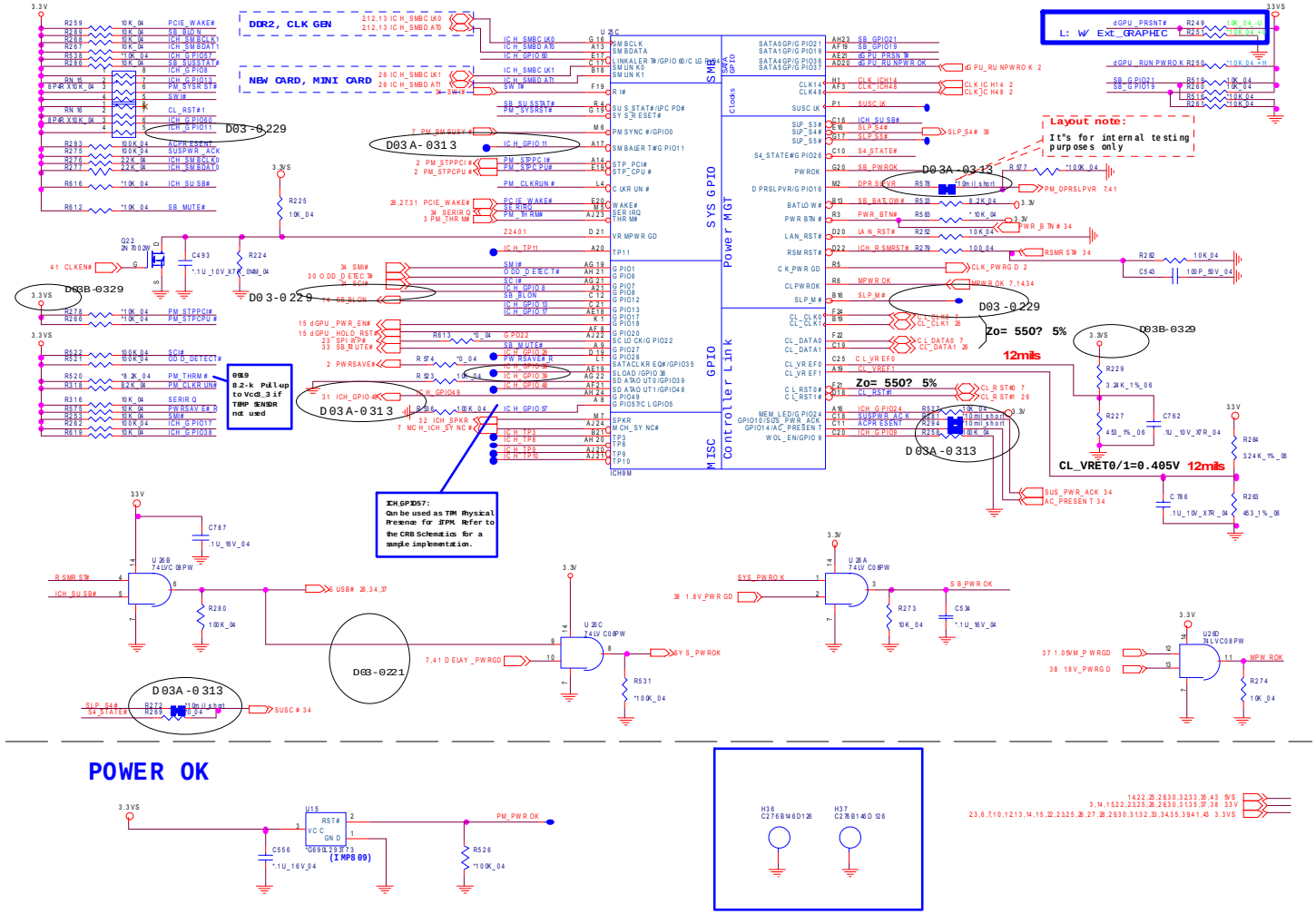
ICH9M 2/4, PCI, USB

Sheet 23 of 51
ICH9M 2/4,
PCI, USB



Boot BIOS select			
	Strap	PCI_GNT#0	SPI_CS#1
FWH(default)	11	Stuff	Stuff
PCI	10	Stuff	Unstaff
SPI	01	Unstaff	Stuff

ICH9M 3/4

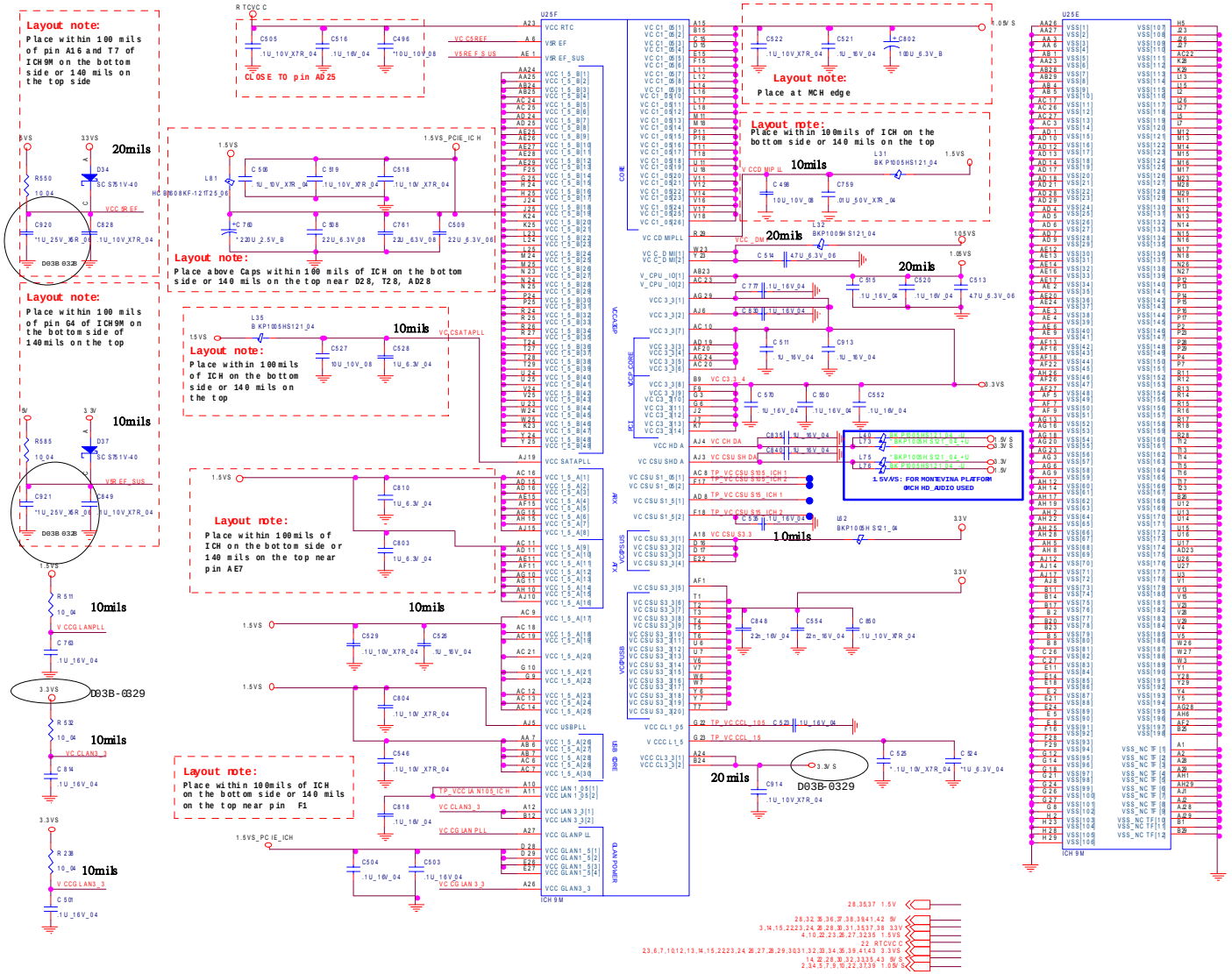


Sheet 24 of 51
ICH9M 3/4

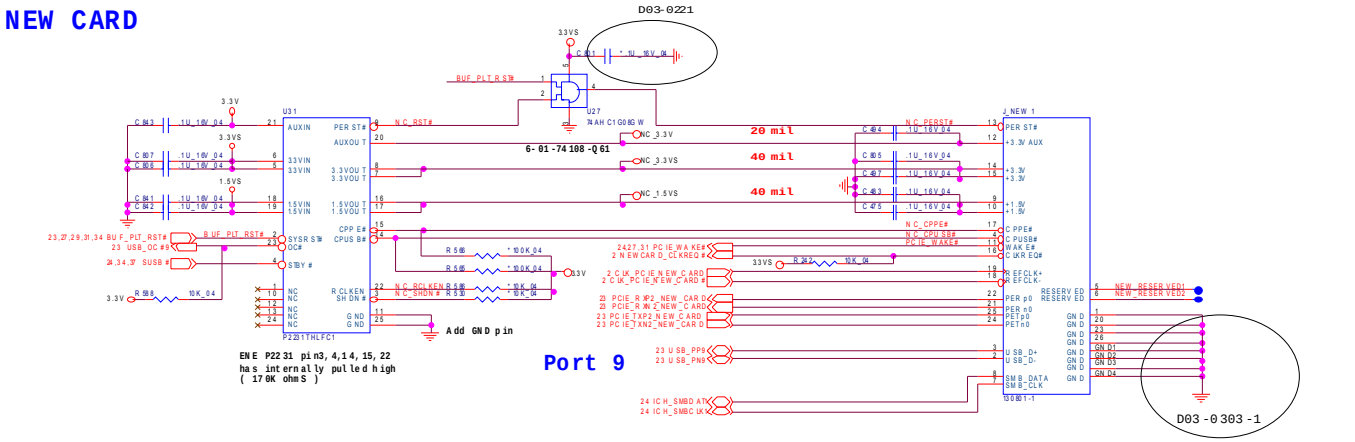
B.Schematic Diagrams

ICH9M 4/4

Sheet 25 of 51
ICH9M 4/4



New Card, Mini PCIE

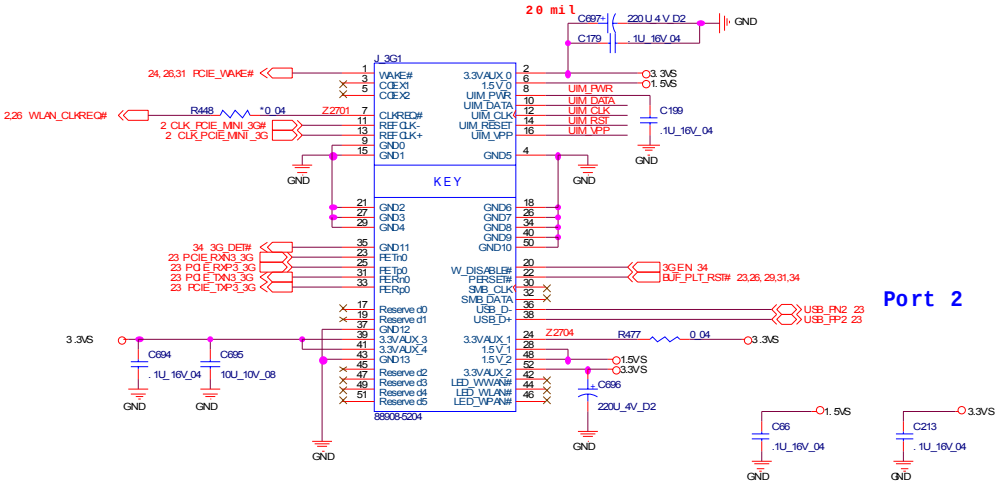


Sheet 26 of 51
New Card,
Mini PCIE

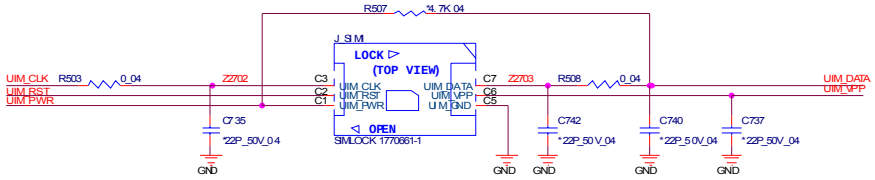
3G, Powergood

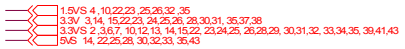
Sheet 27 of 51
3G, Powergood

3G

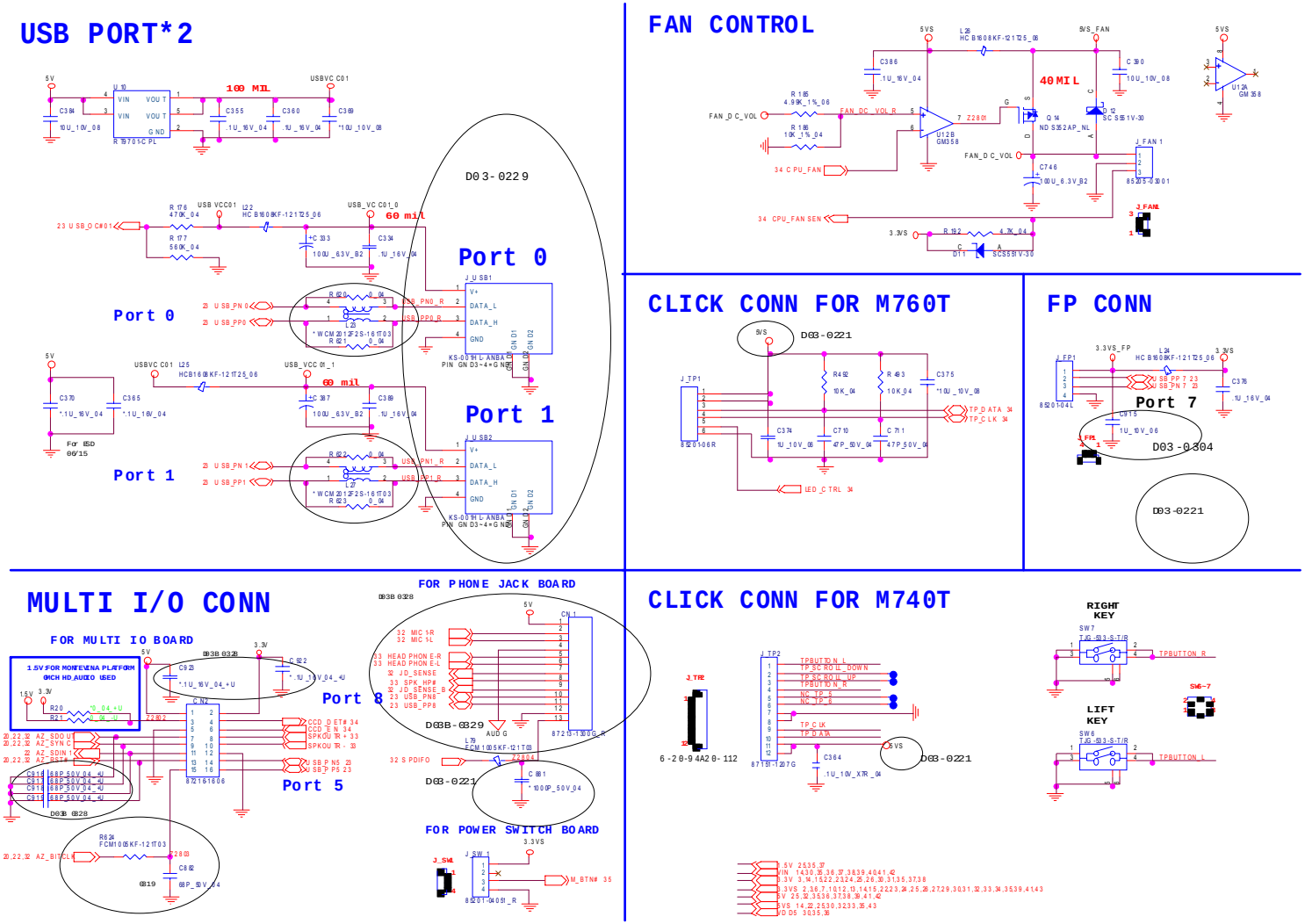


SIM CONN





USB, Fan, TP, FP, Multi CON

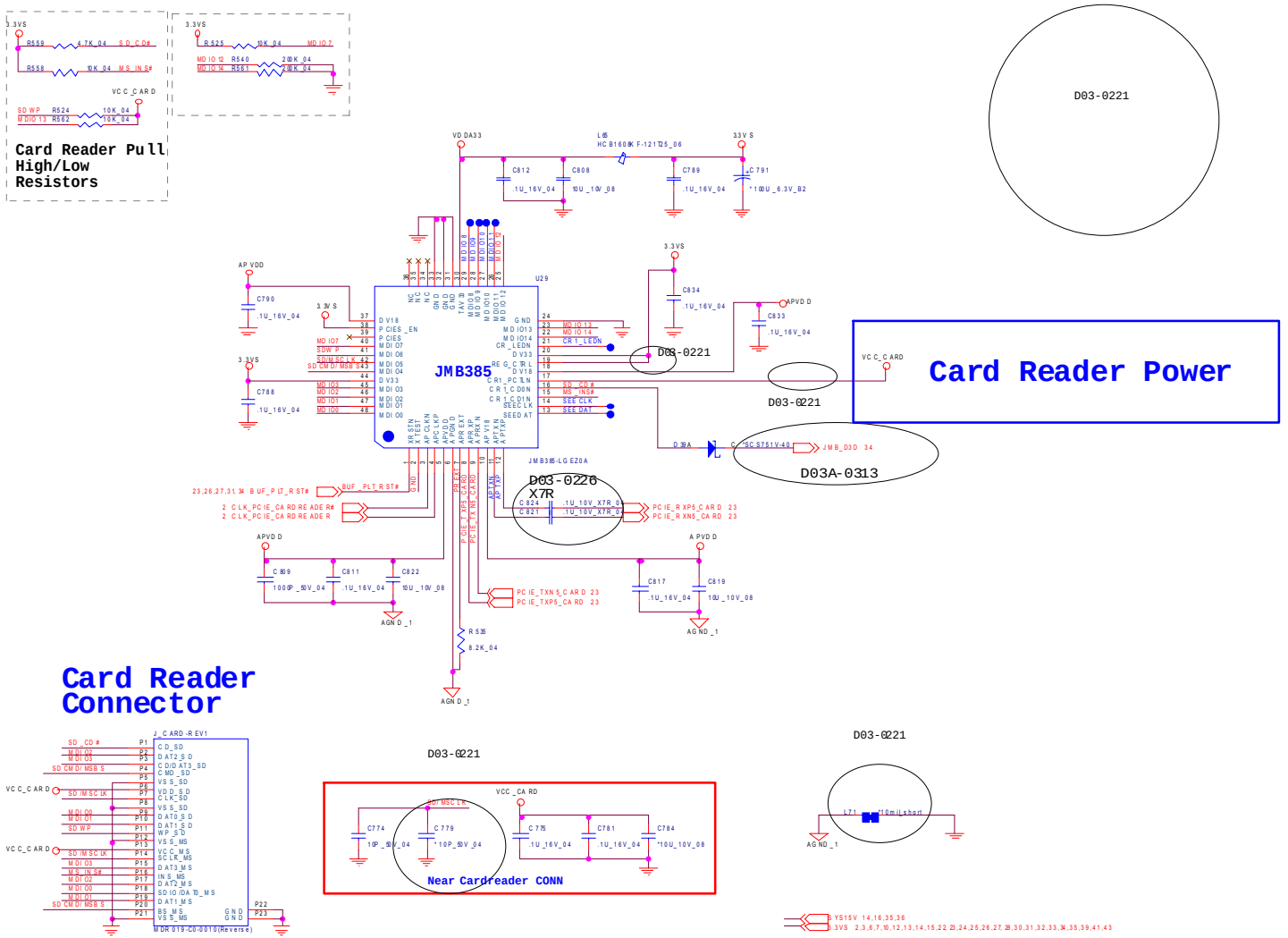


Sheet 28 of 51
USB, Fan, TP, FP, Multi CON

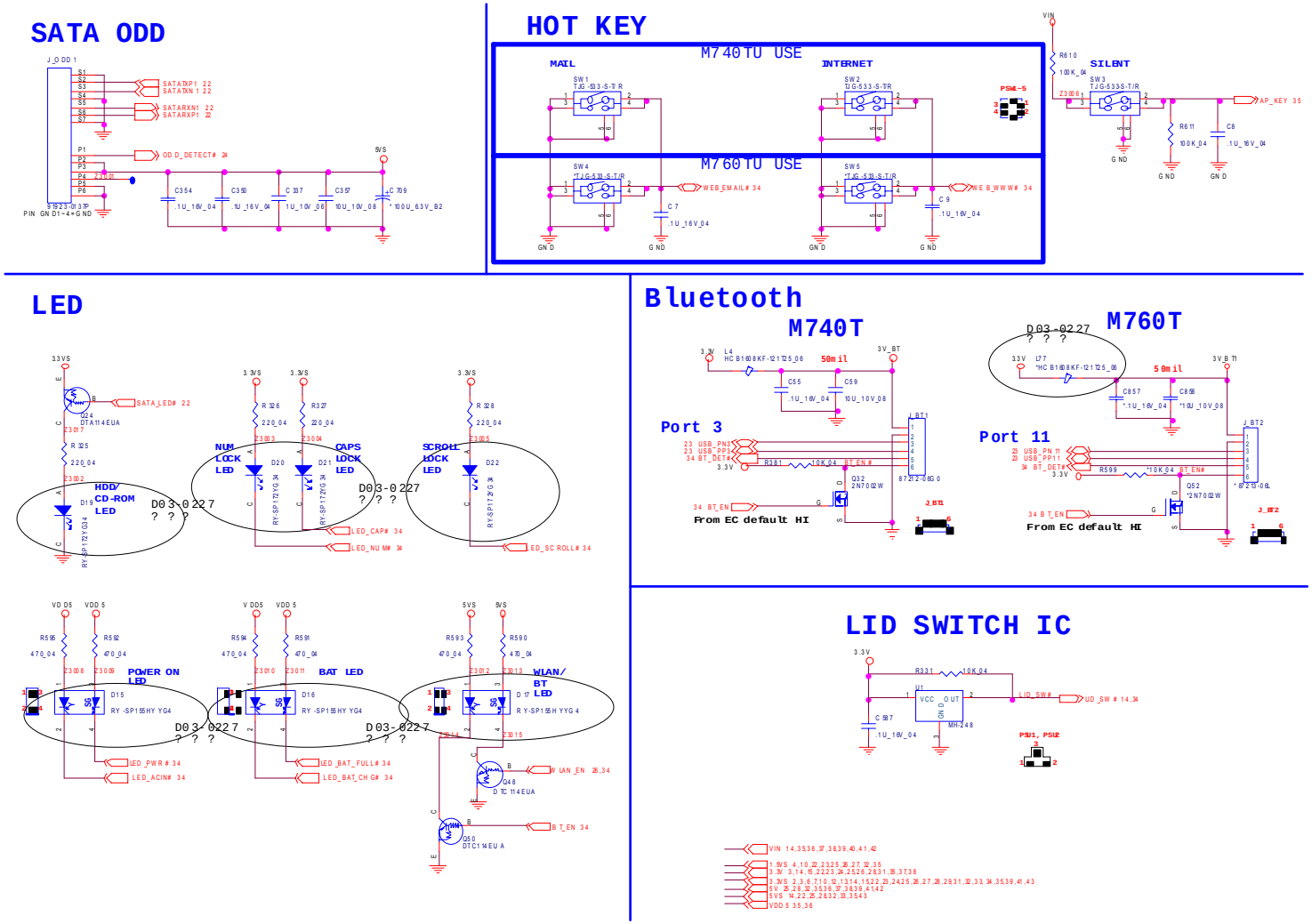
B.Schematic Diagrams

Card Reader

Sheet 29 of 51
Card Reader



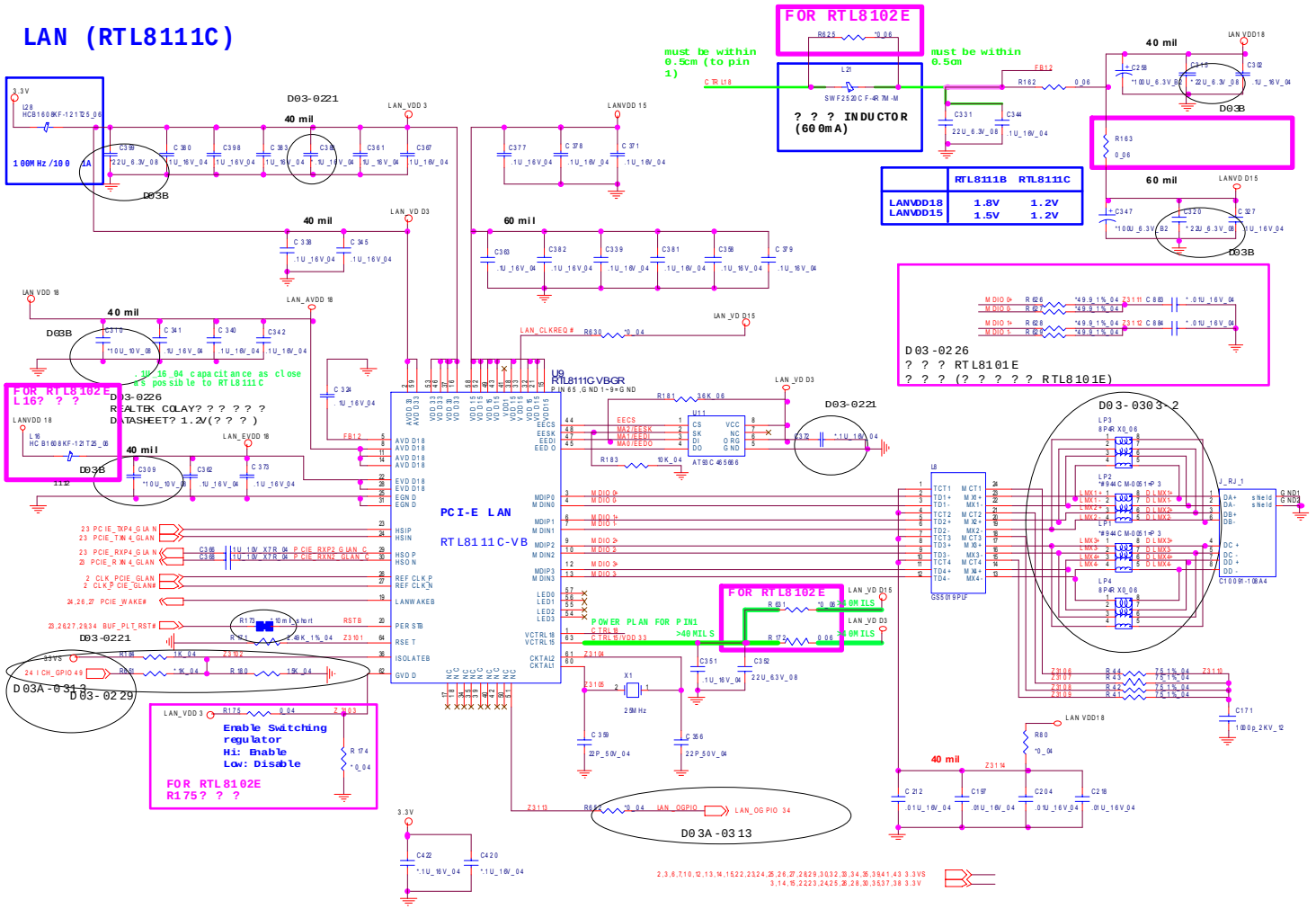
SATA ODD, LED, Hotkey, LID SW



Sheet 30 of 51
SATA ODD, LED, Hotkey, LID SW

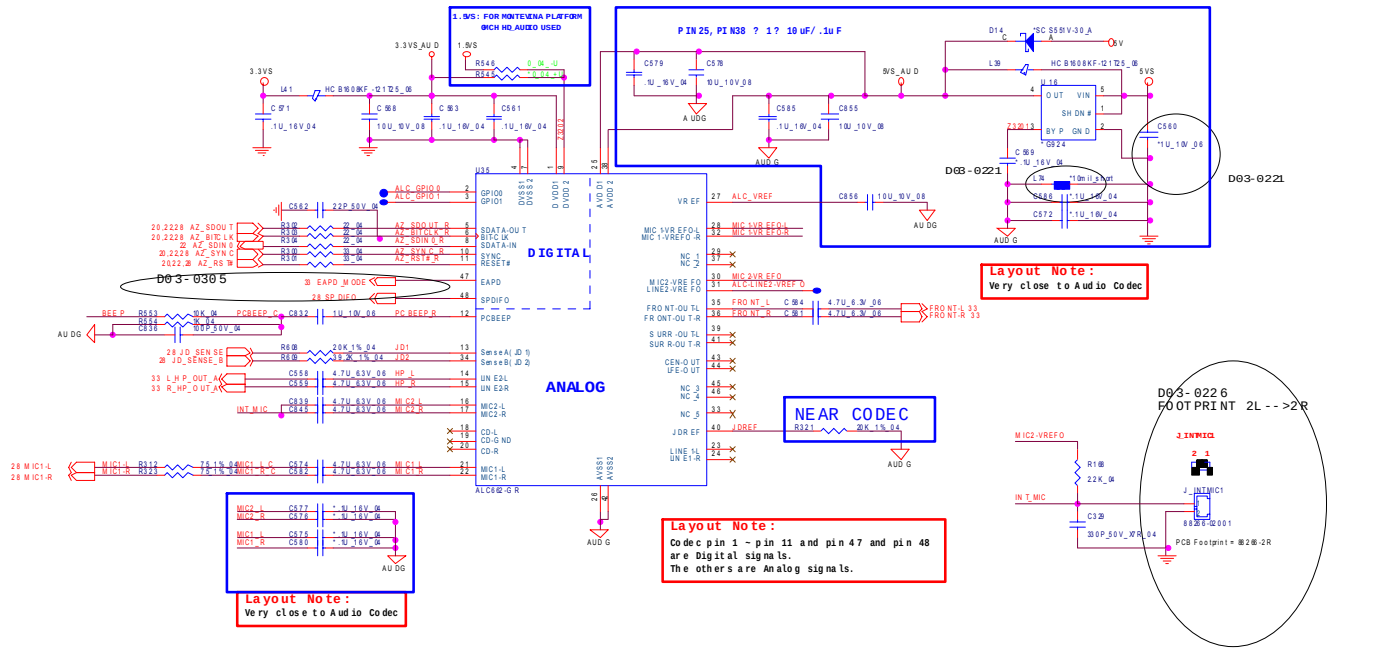
PCI-E LAN RTL8111C

Sheet 31 of 51
PCI-E LAN
RTL8111C

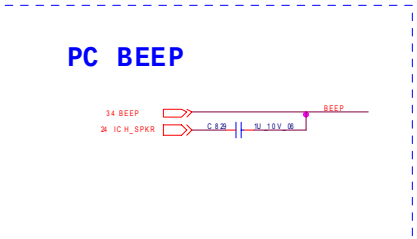


Audio Codec ALC662

CODEC (ALC662-GR)



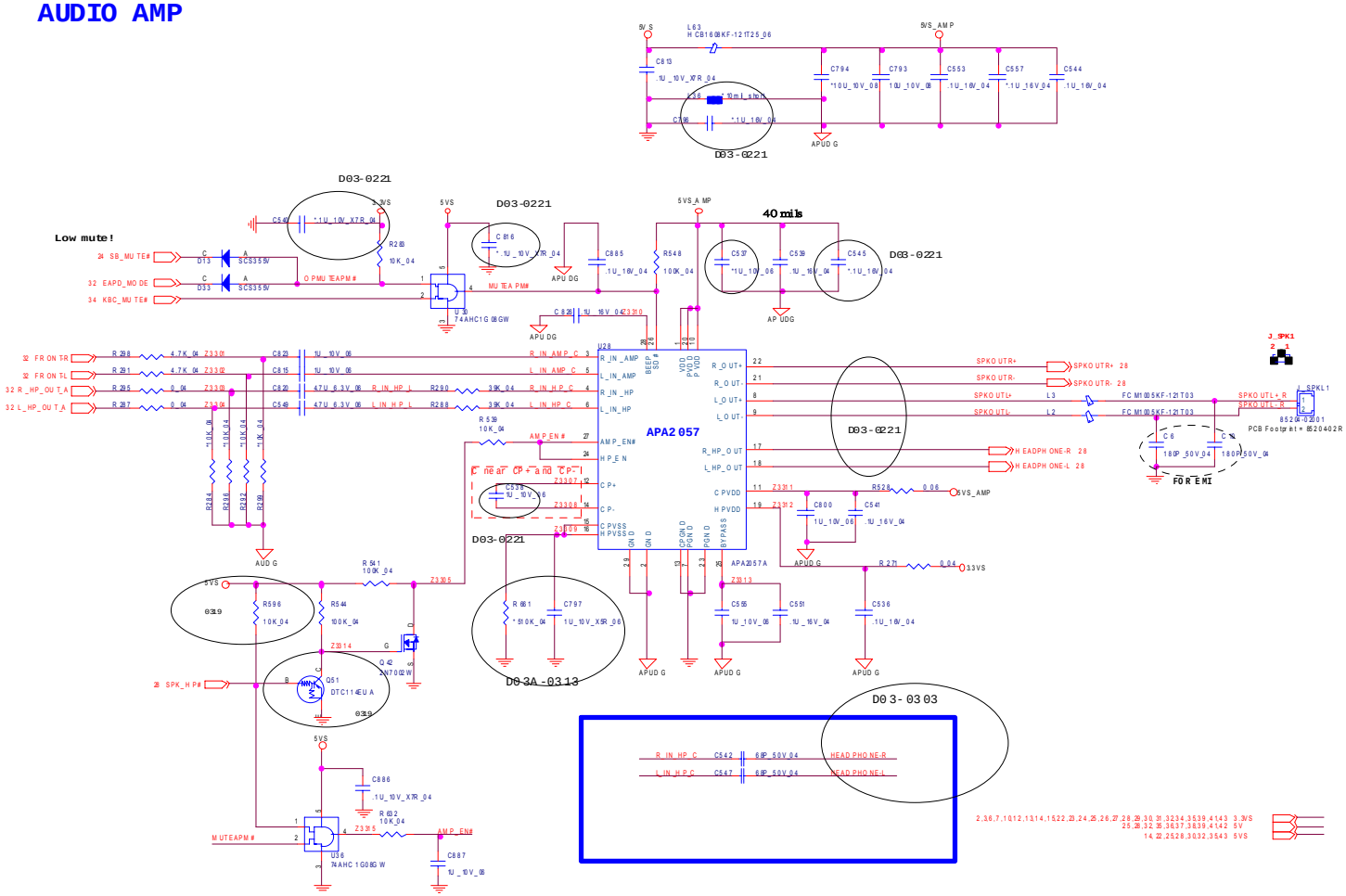
PC BEEP



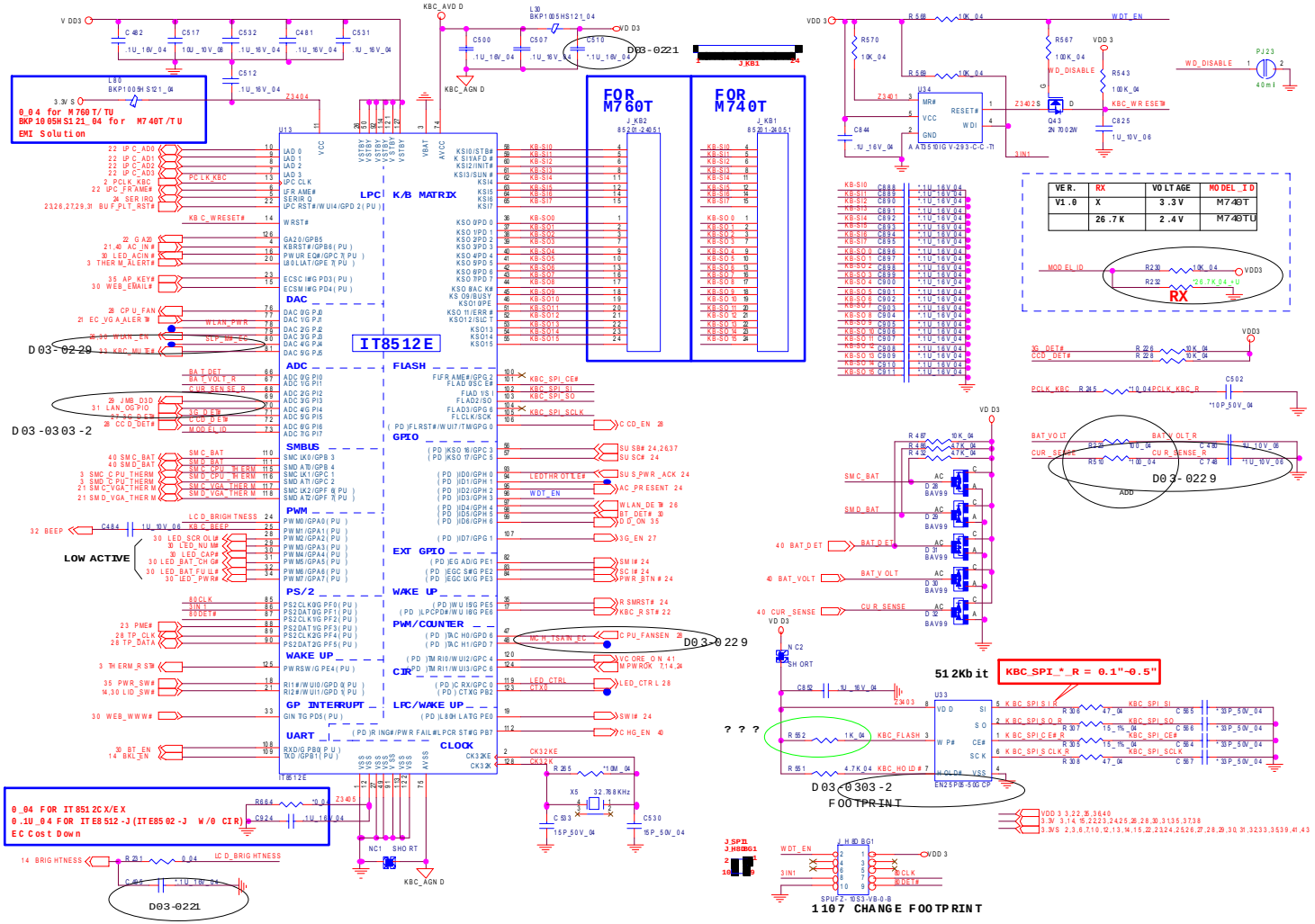
Sheet 32 of 51
Audio Codec
ALC662

Audio AMP

Sheet 33 of 51
Audio AMP



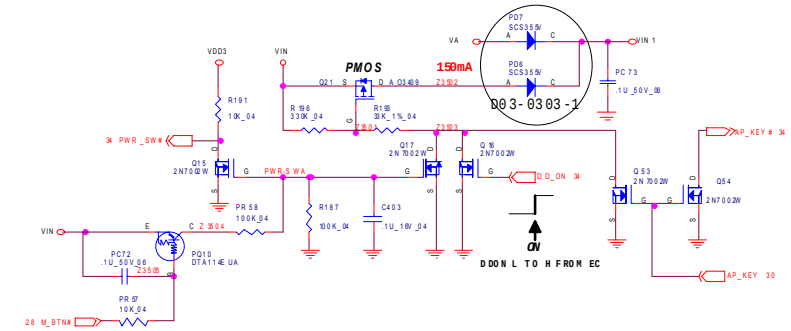
KBC-ITE IT8512E



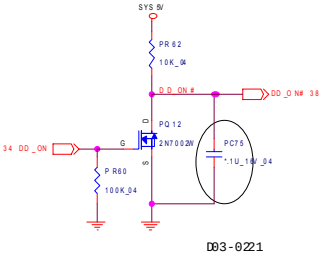
Sheet 34 of 51
KBC-ITE IT8512E

5VS, 3VS, 3.3VM, 1.05VS, VIN1

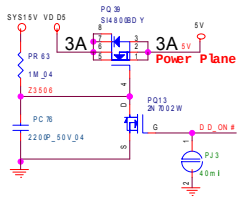
Sheet 35 of 51
5VS, 3VS, 3.3VM,
1.05VS, VIN1



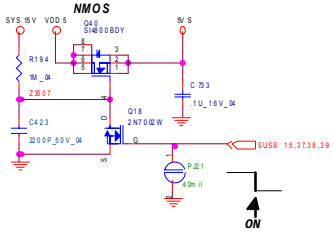
D03-0229



5V

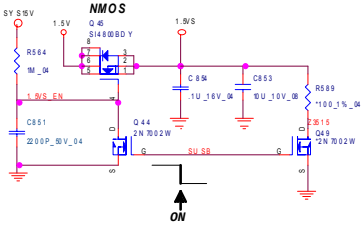


5VS

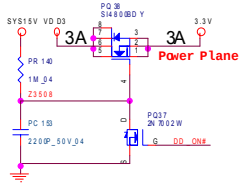


D03-0229

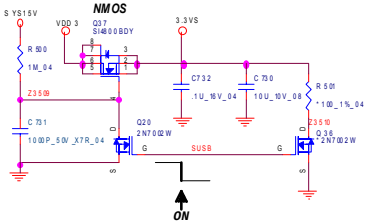
1.5VS



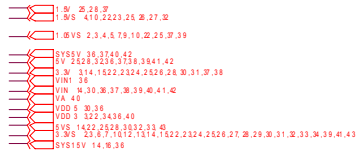
3.3V



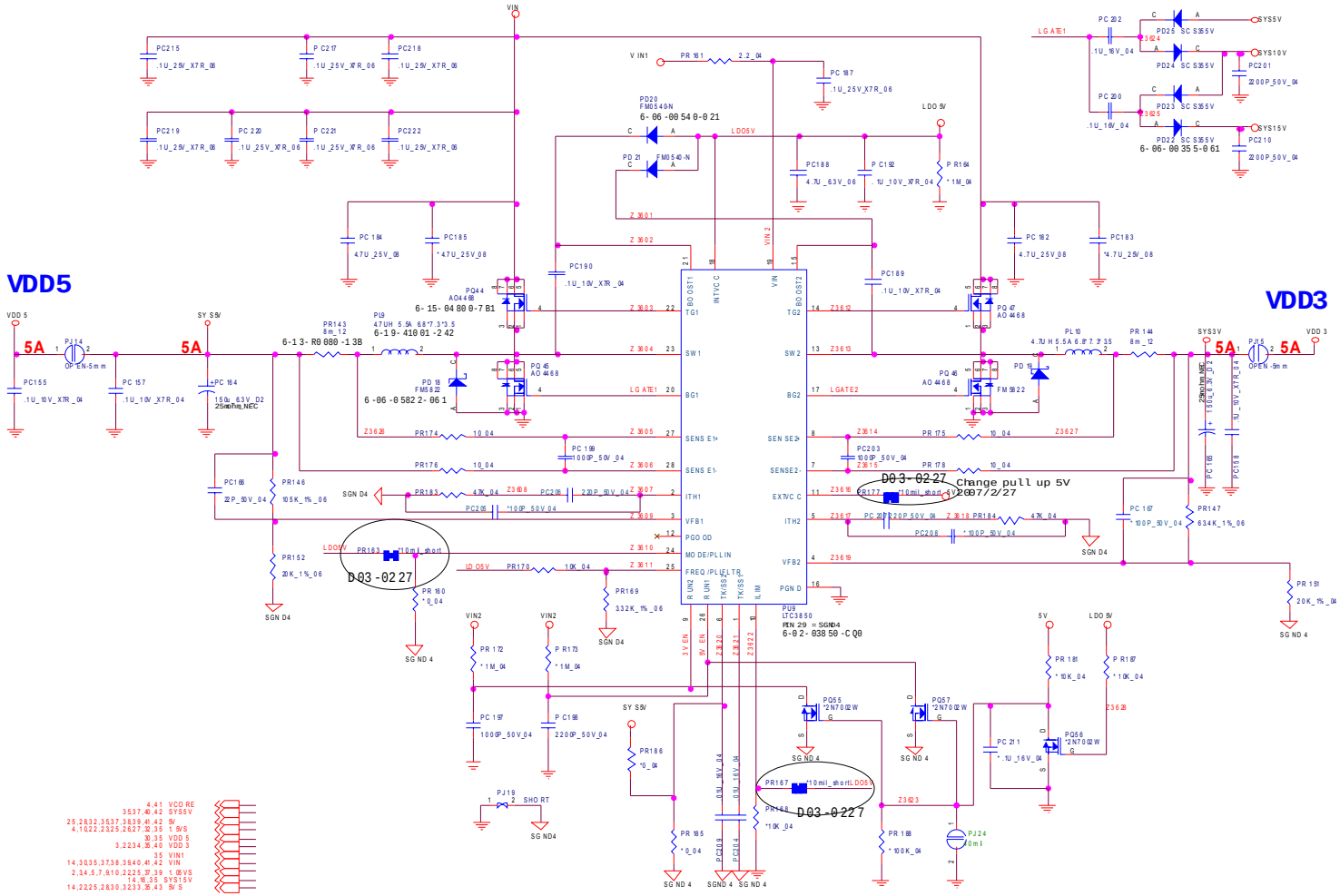
3.3VS



D03B-0329



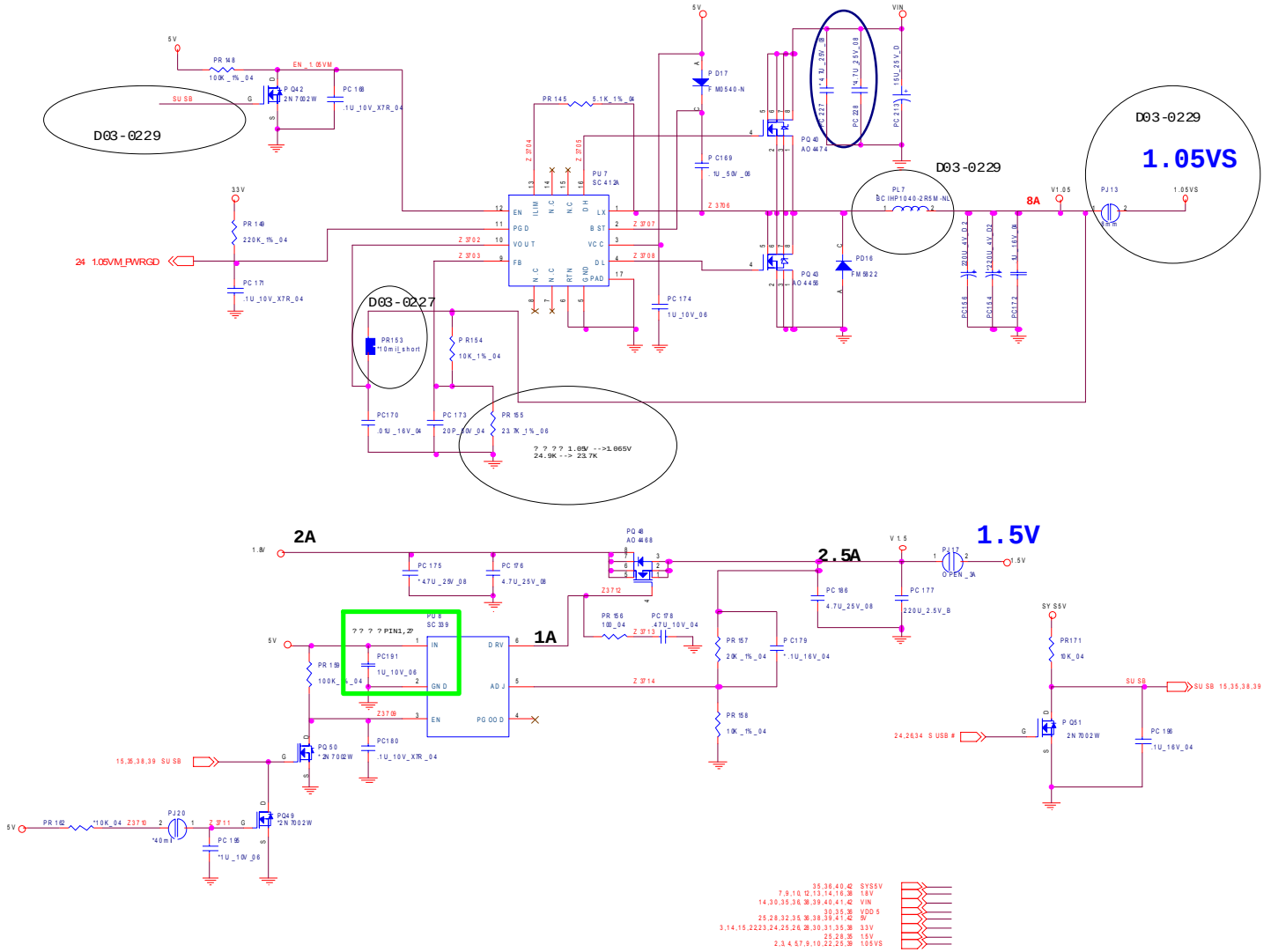
Power 3.3V/5V



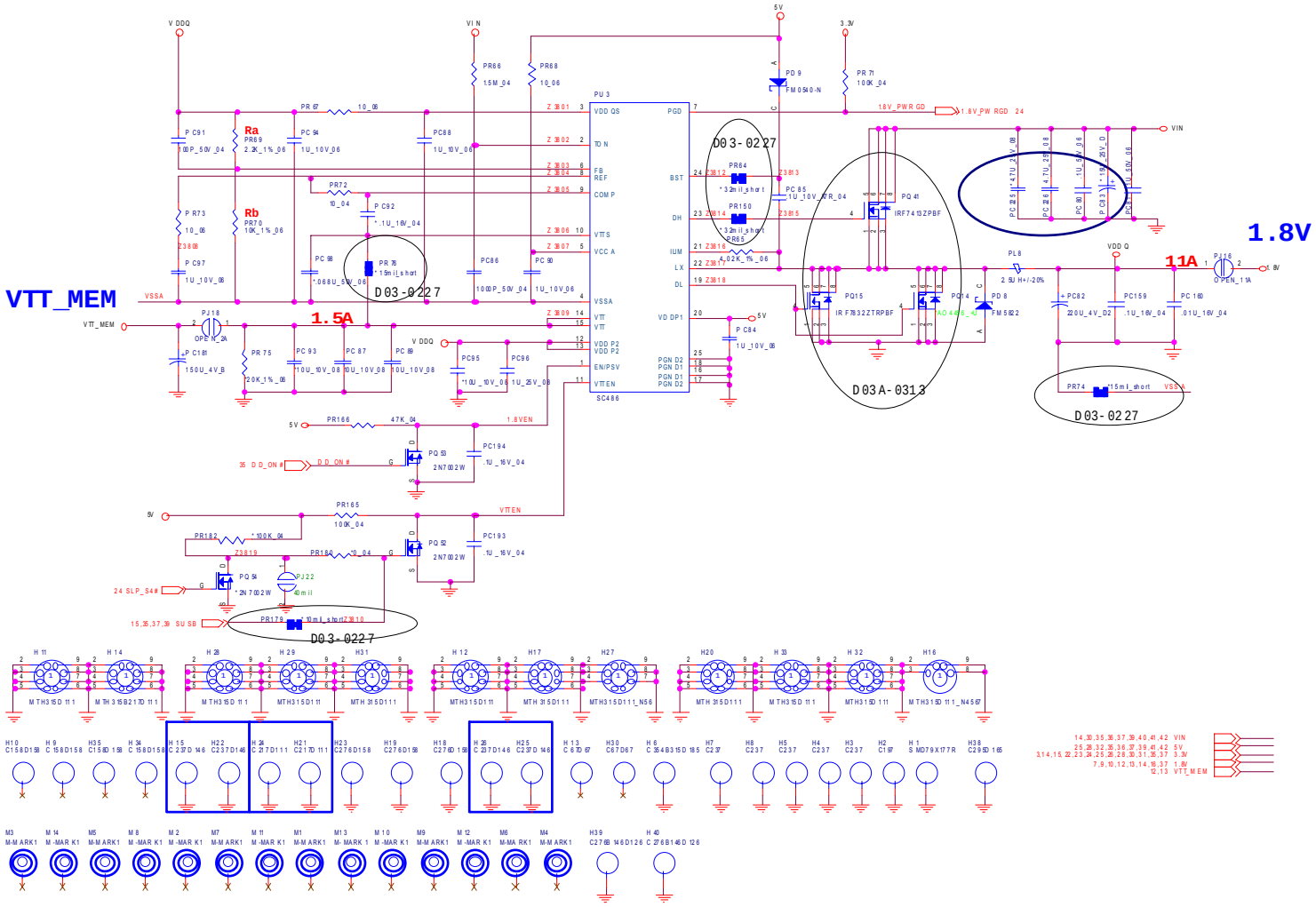
Sheet 36 of 51
Power 3.3V/5V

Power 1.5VS/1.05VS

Sheet 37 of 51
Power 1.5VS/
1.05VS



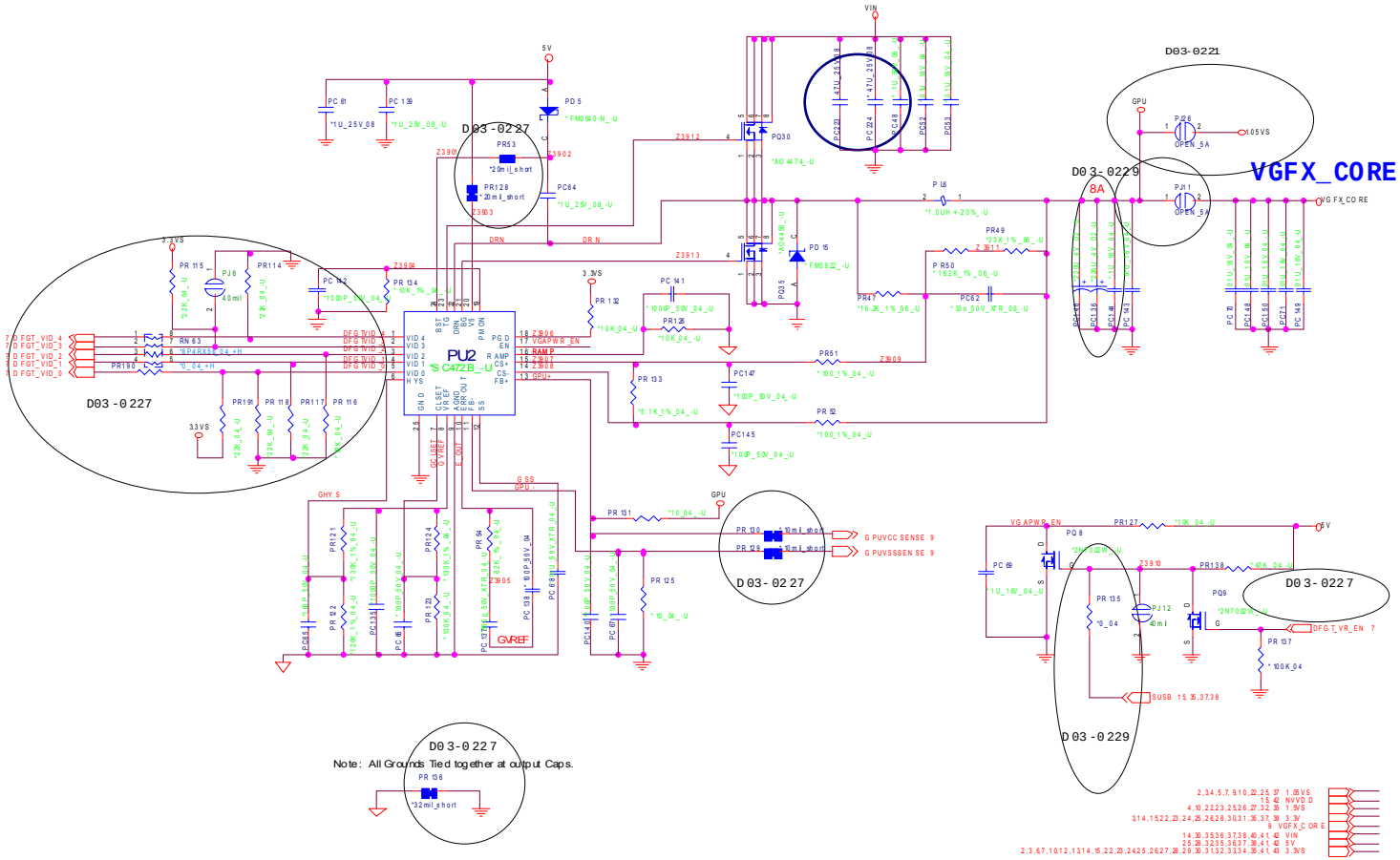
Power 1.8V/0.9V



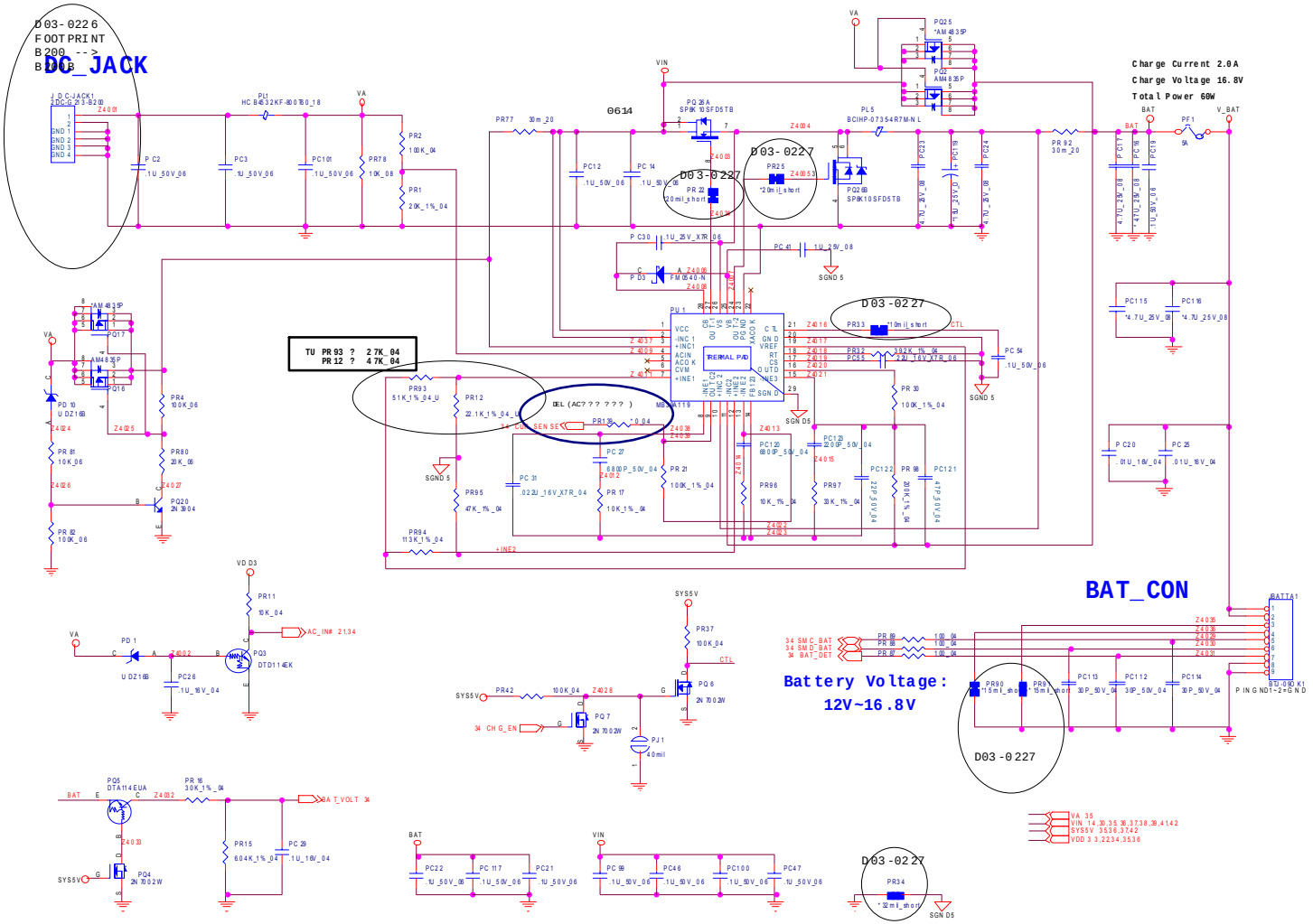
Sheet 38 of 51
Power 1.8V/0.9V

Power GPU/NVVDD

Sheet 39 of 51
Power GPU/NVVDD



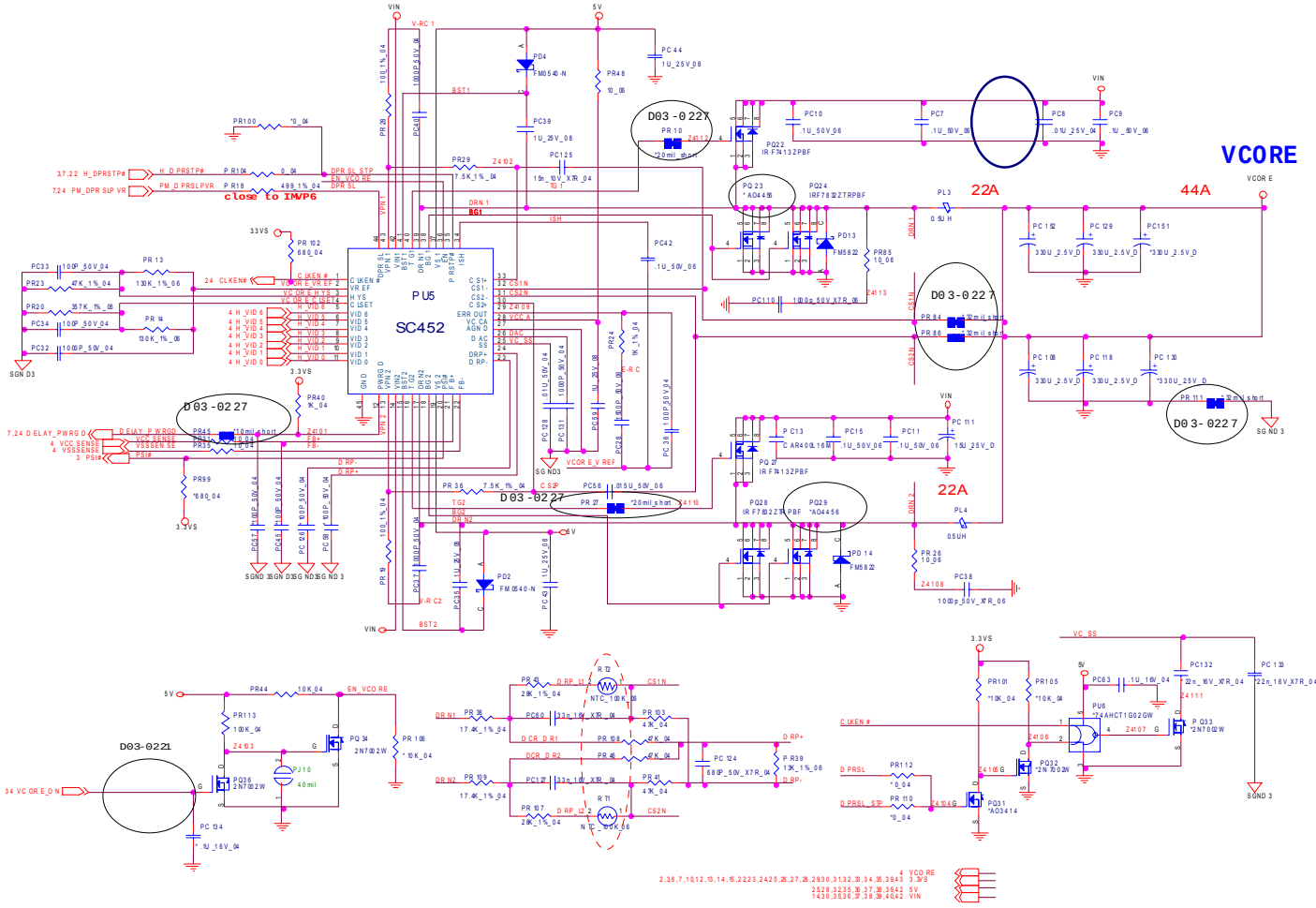
AC-IN, Charger



Sheet 40 of 51
AC-IN, Charger

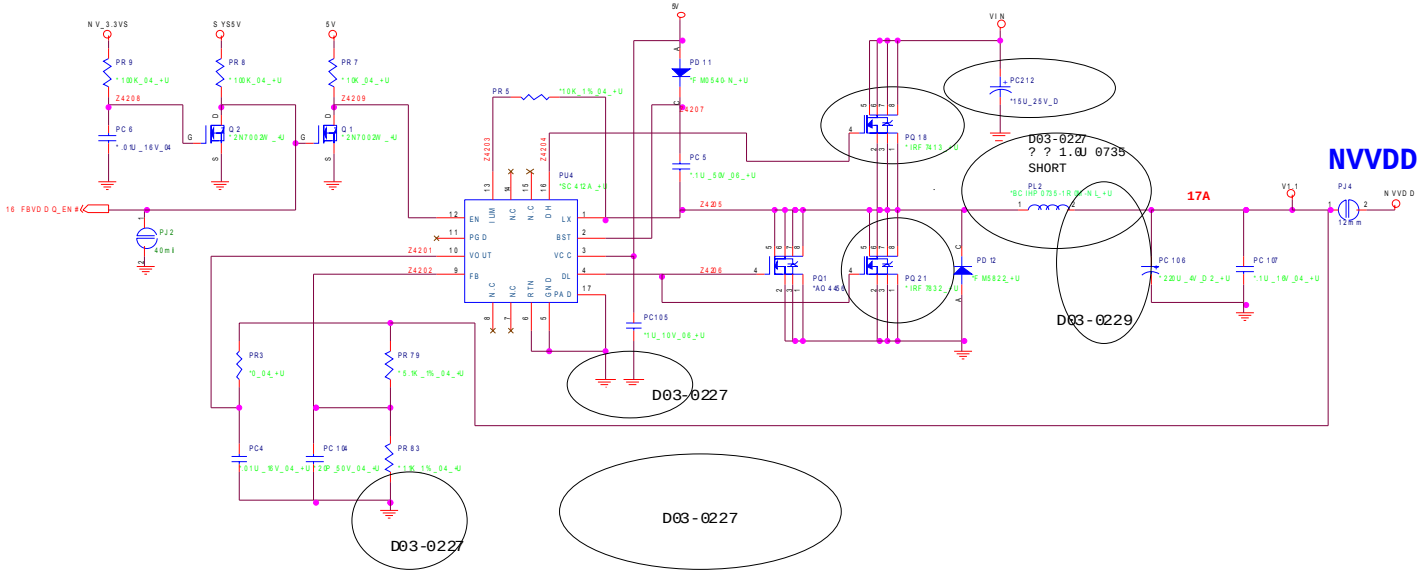
VCORE

Sheet 41 of 51
VCORE



NVVDD

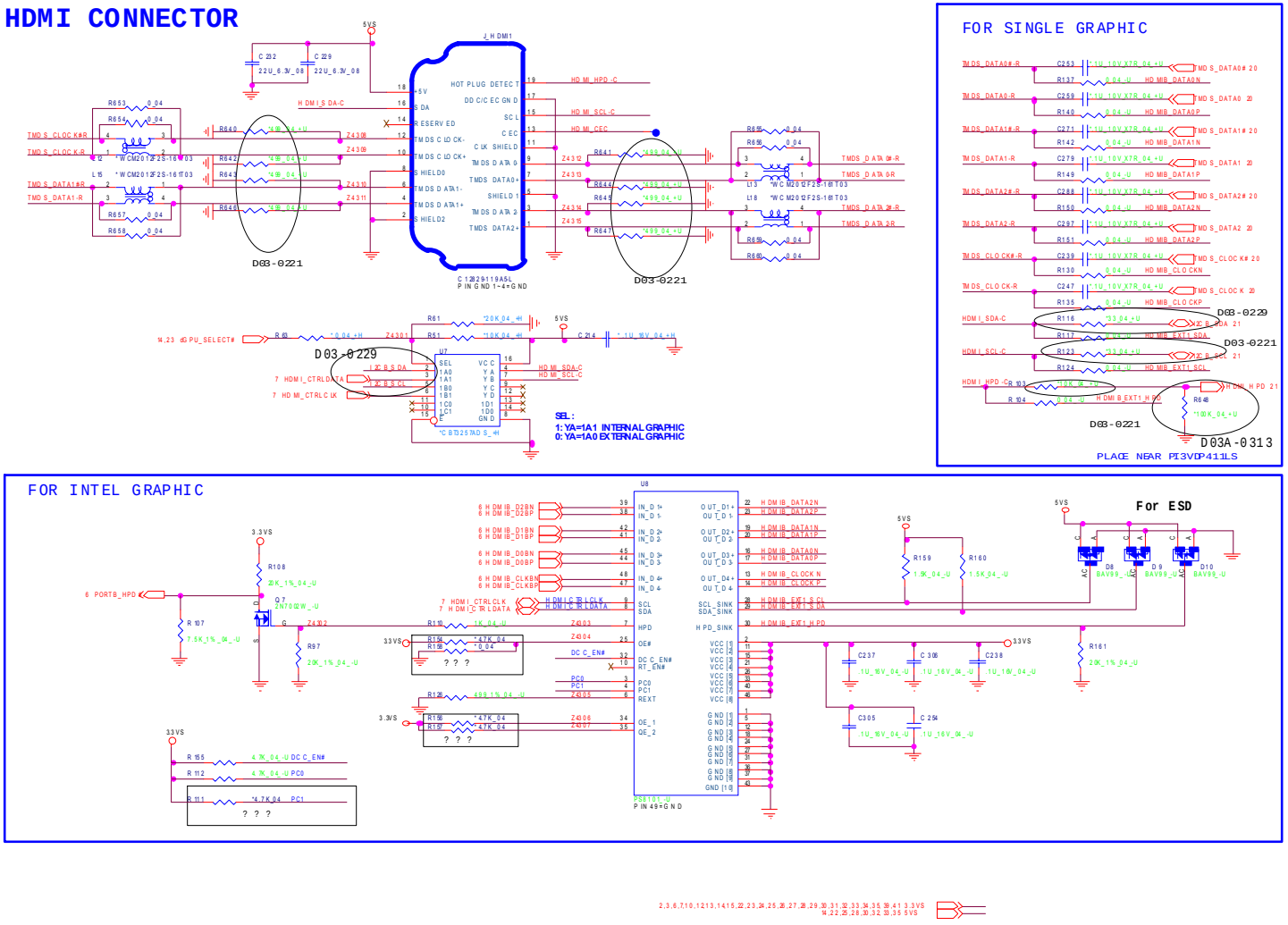
FOR NV VGA



Sheet 42 of 51
NVVDD

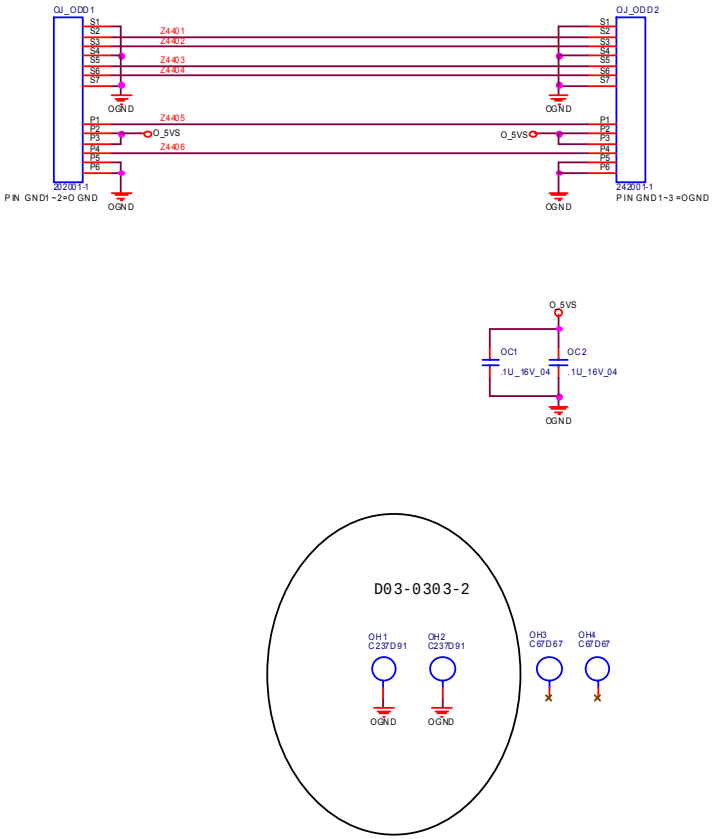
HDMI

Sheet 43 of 51
HDMI



External ODD Board for M76

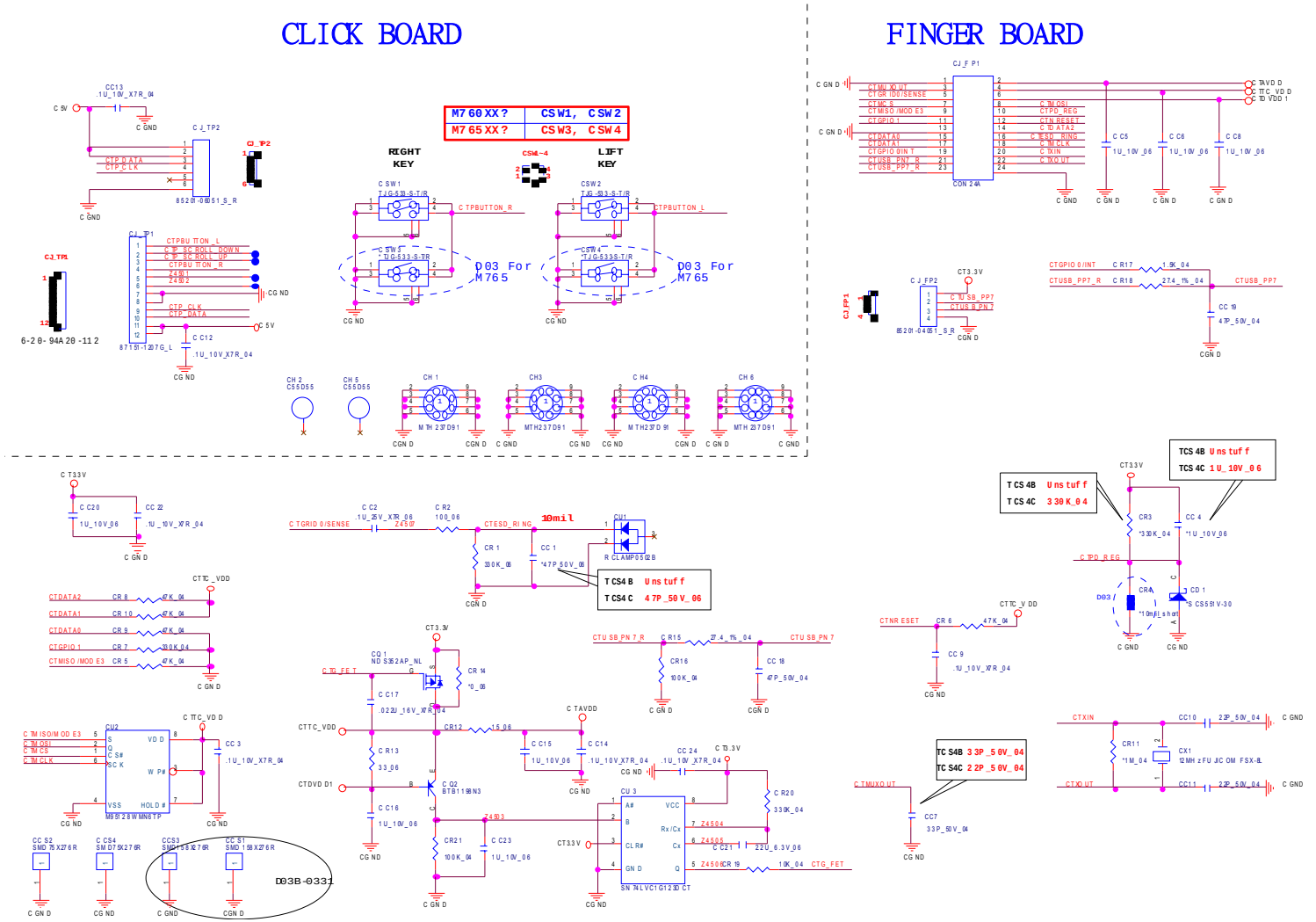
ODD BOARD



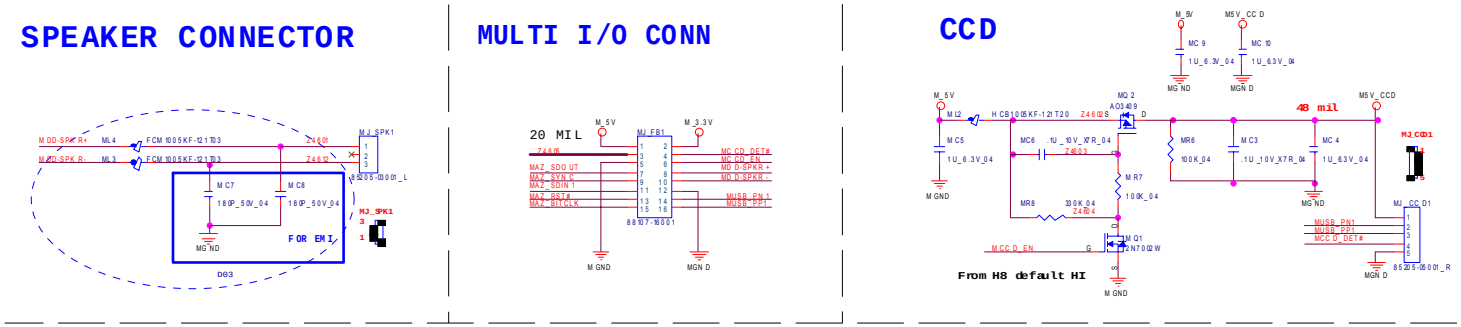
Sheet 44 of 51
External ODD
Board for M76

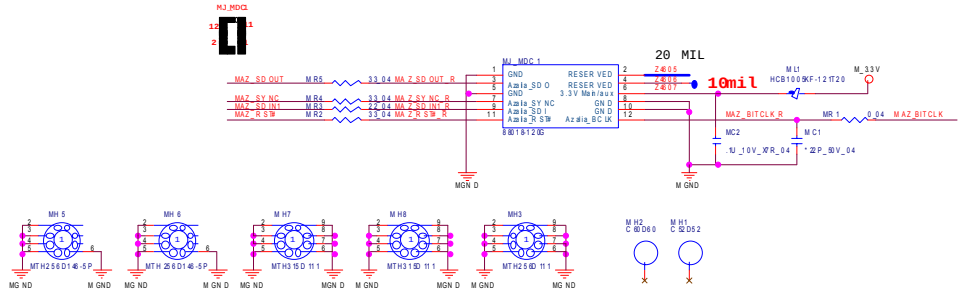
Click & Finger Board for M76

Sheet 45 of 51
Click Finger Board
for M76



Multi Function Board



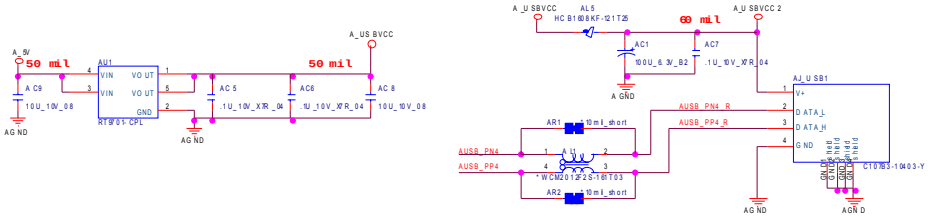


Sheet 46 of 51
Multi Function Board

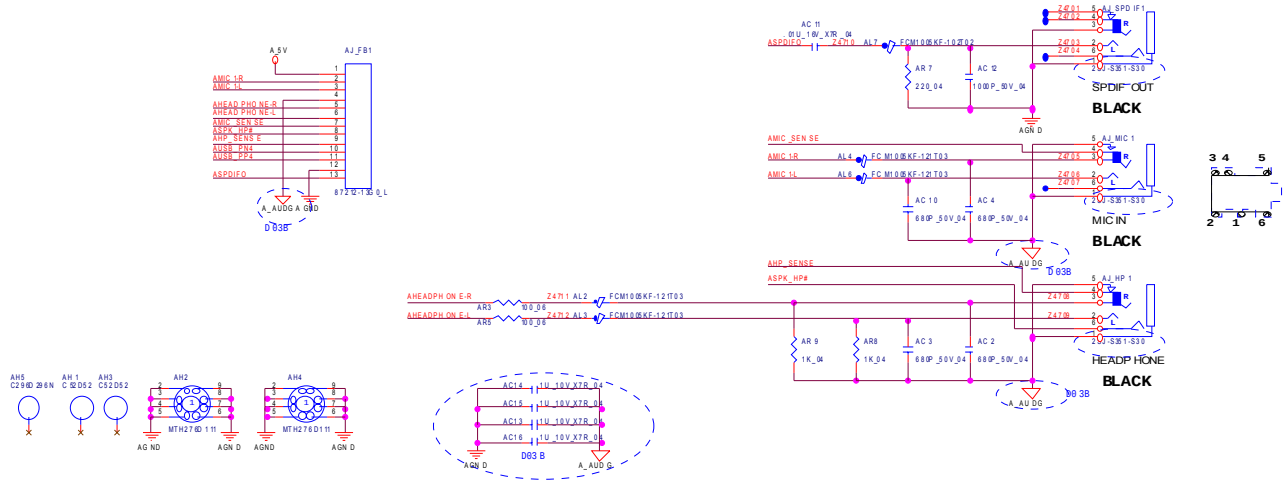
Audio Board

Sheet 47 of 51
Audio Board

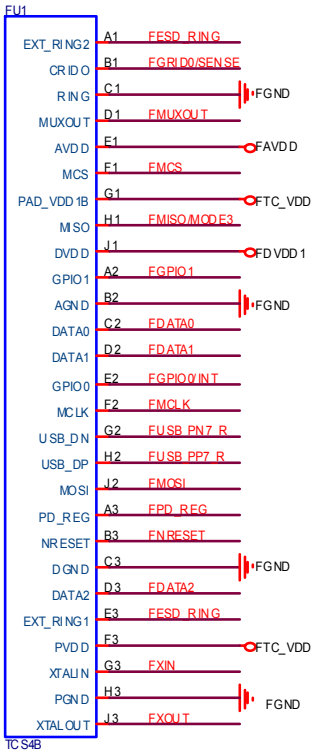
USB PORT

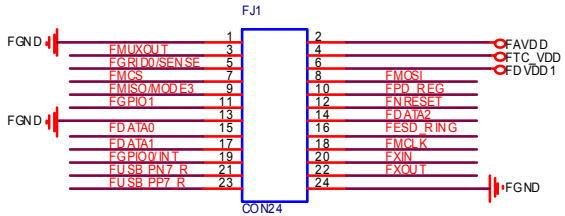


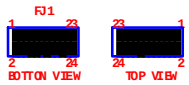
AUDIO JACK



Finger Sensor Board for M76





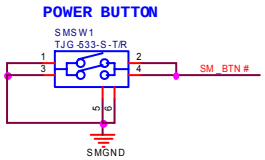


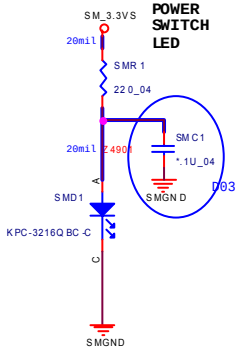
Sheet 48 of 51
Finger Sensor Board for M76

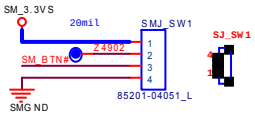
Power Switch Board for M74

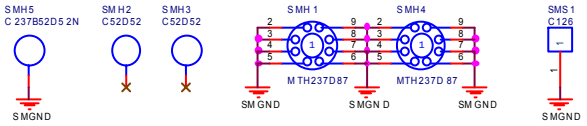
POWER SW & POWER LED FOR M74

Sheet 49 of 51
Power Switch
Board for M74

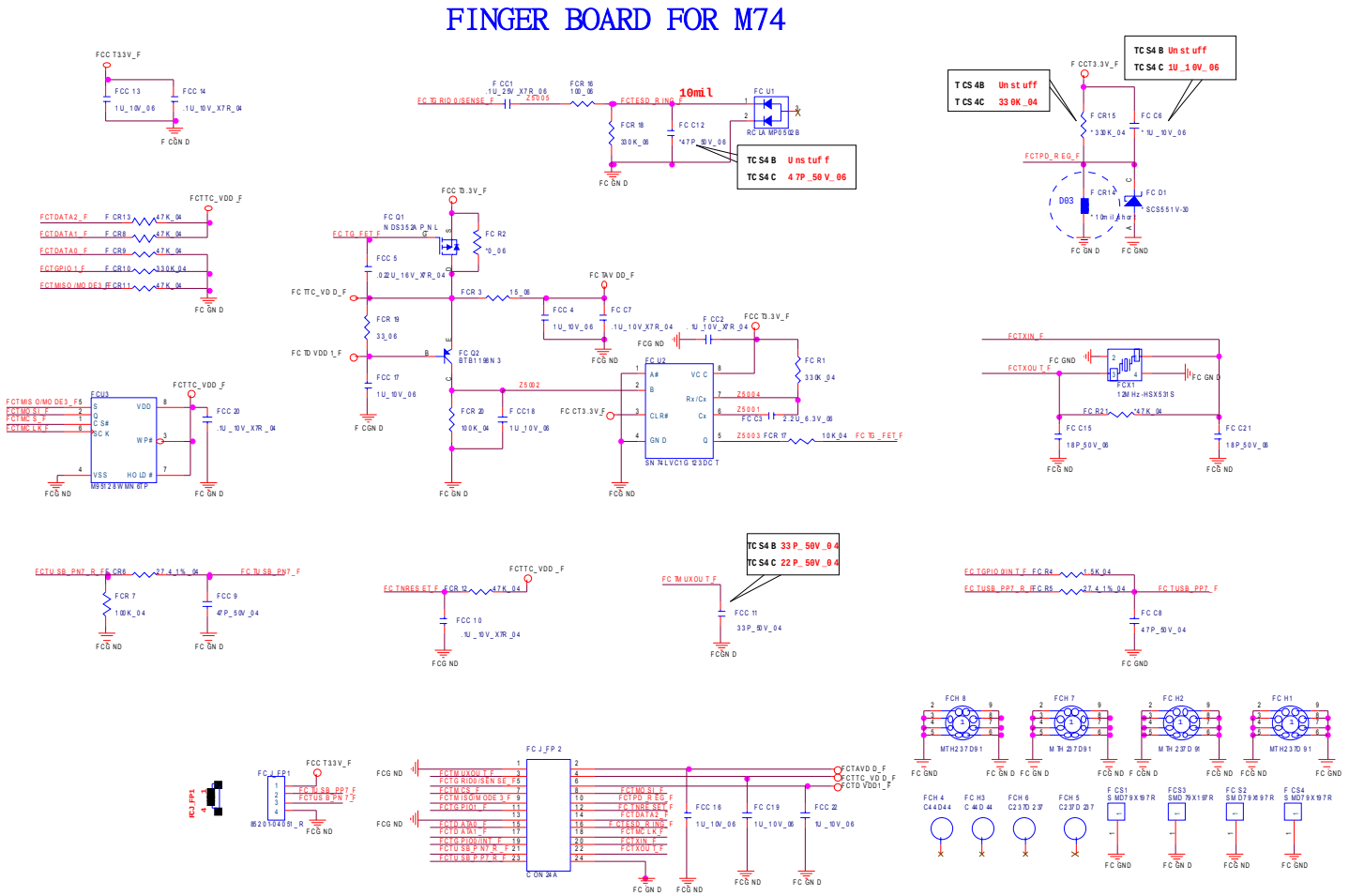








FingerPrint Board for M74



Sheet 50 of 51
FingerPrint Board
for M74

Power Switch Board for M76

Sheet 51 of 51
Power Switch
Board for M76

POWER SW & POWER LED FOR M76