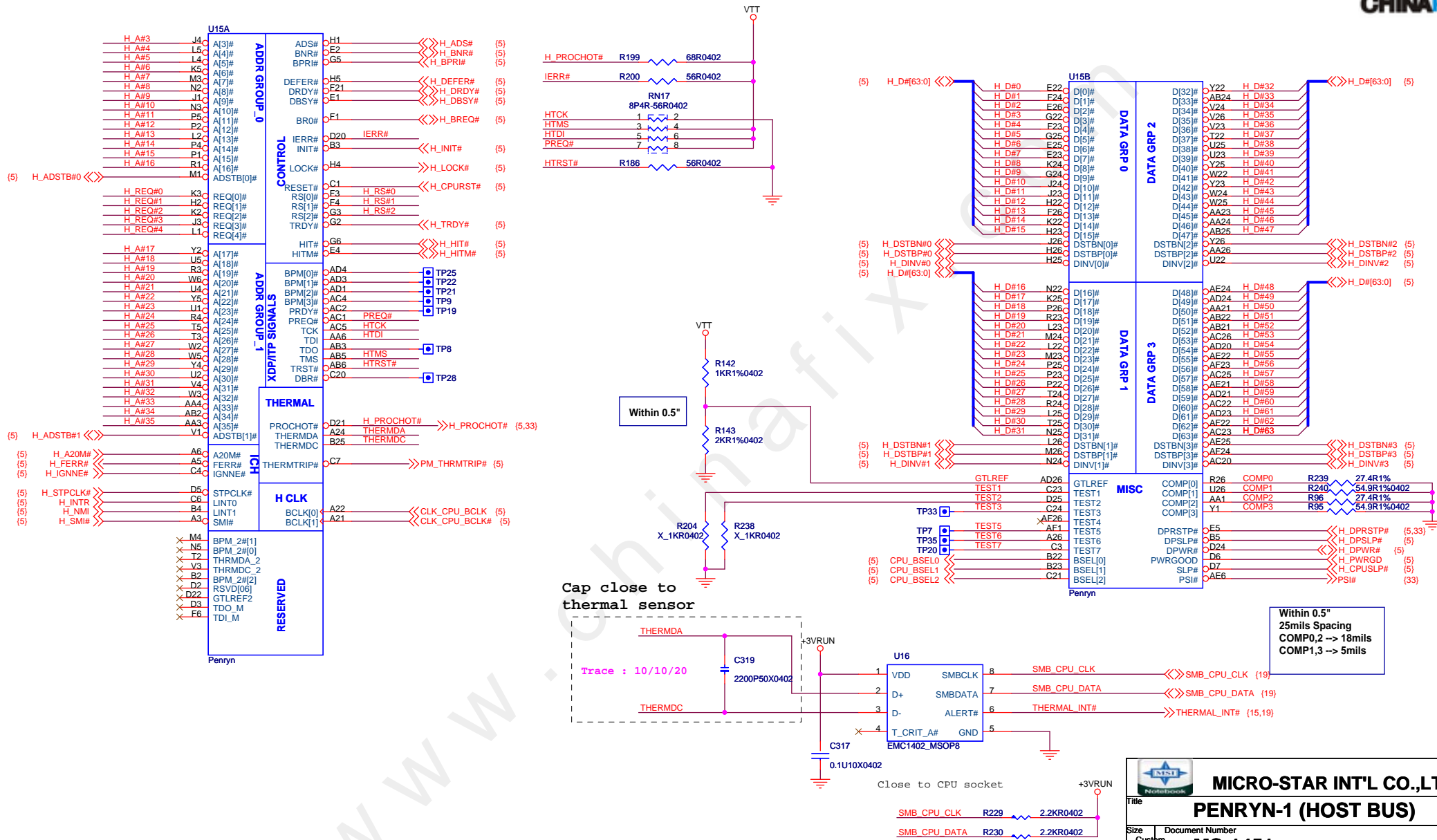
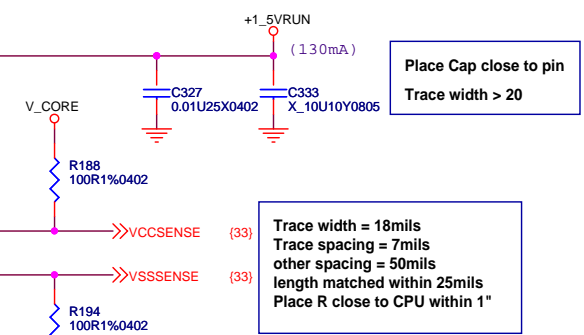
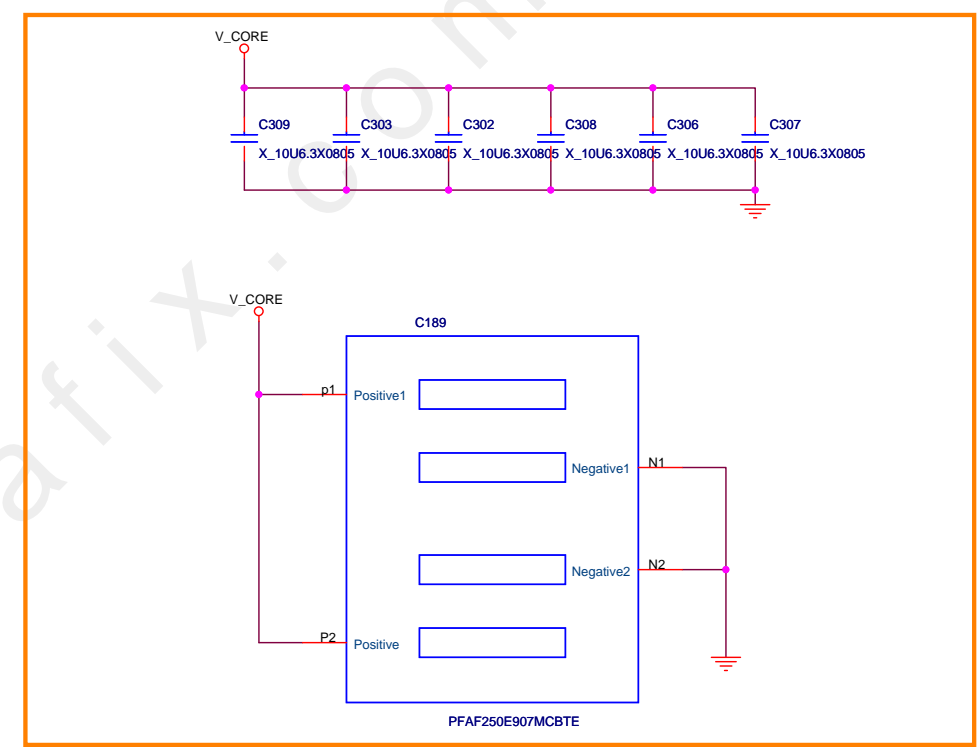
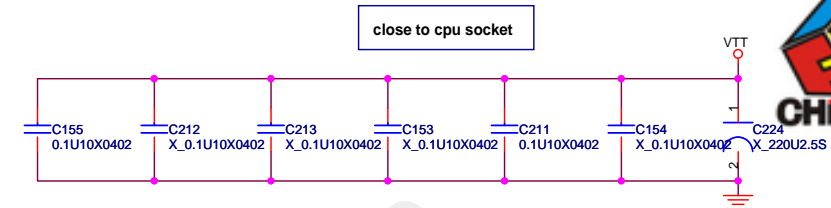
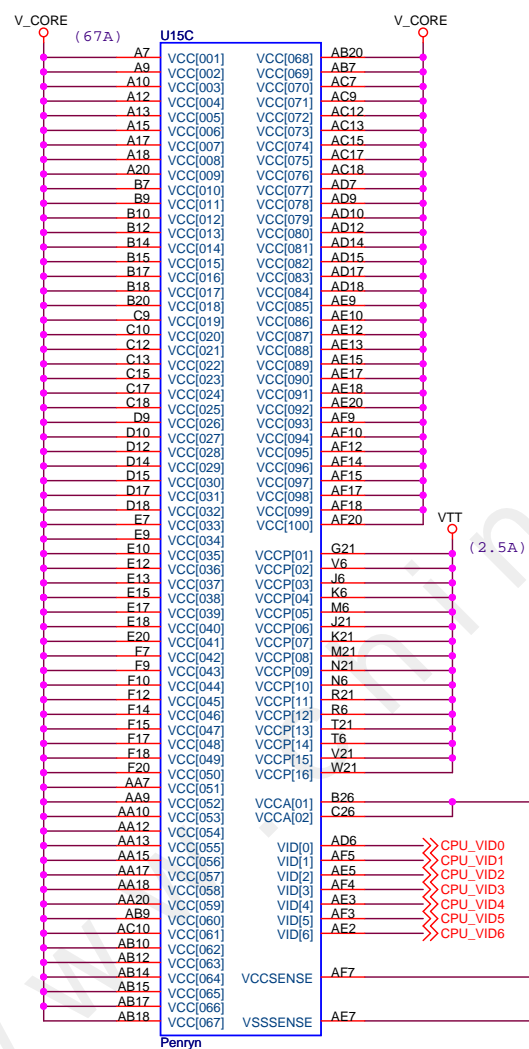
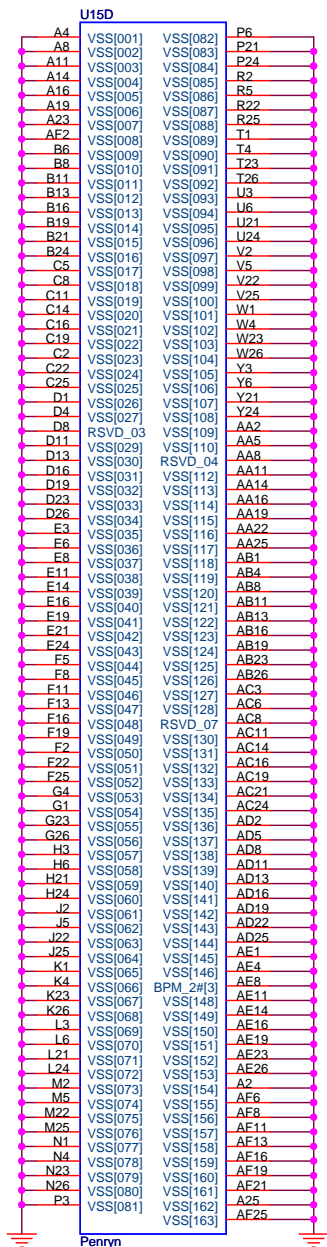


(5) H_A#(35:3) <<>> H_A#(35:3)
 (5) H_RS#(2:0) <<>> H_RS#(2:0)
 (5) H_REQ#(4:0) <<>> H_REQ#(4:0)





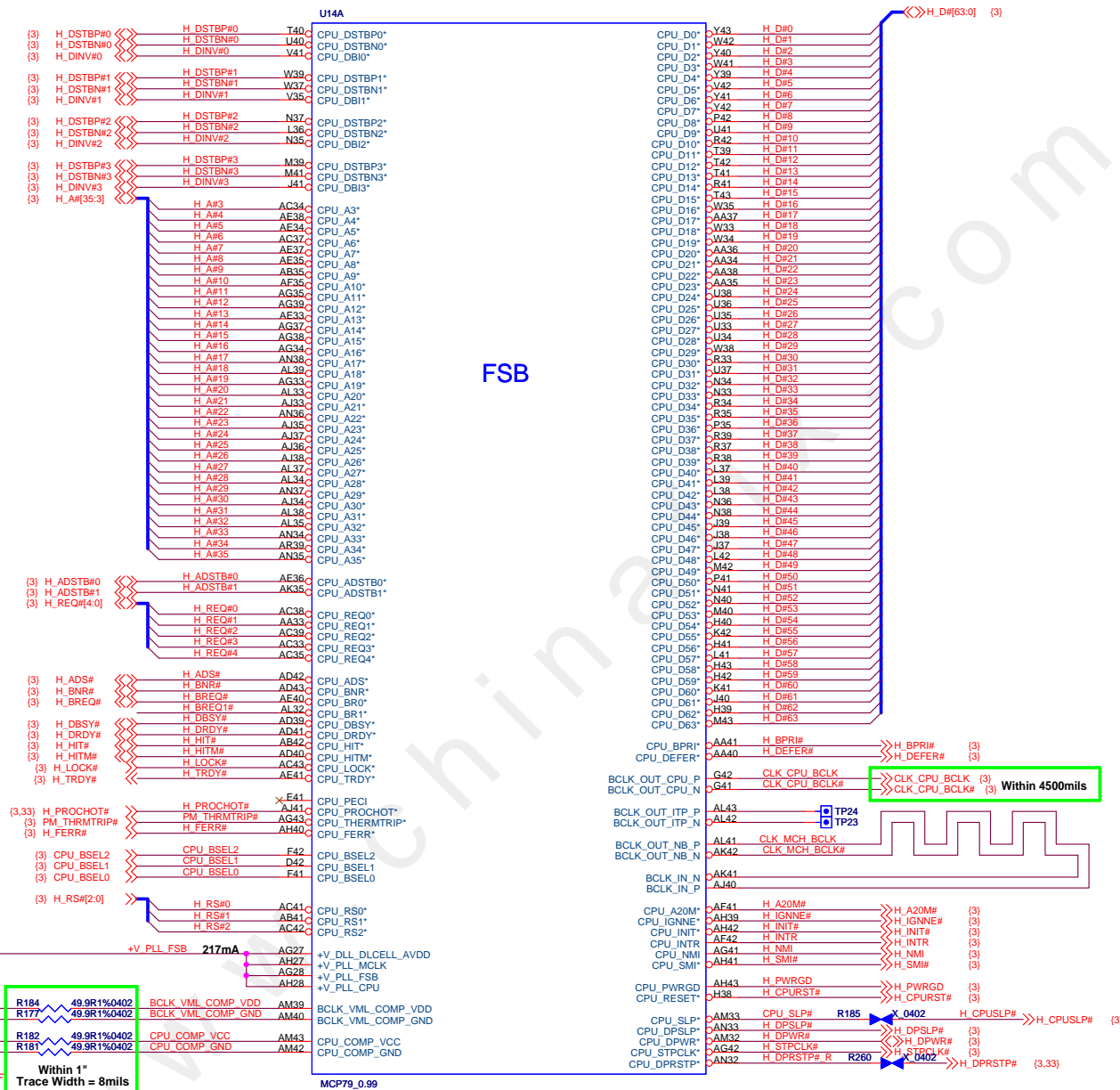
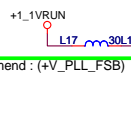
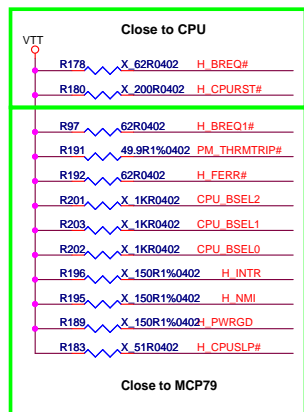
MICRO-STAR INT'L CO.,LTD.

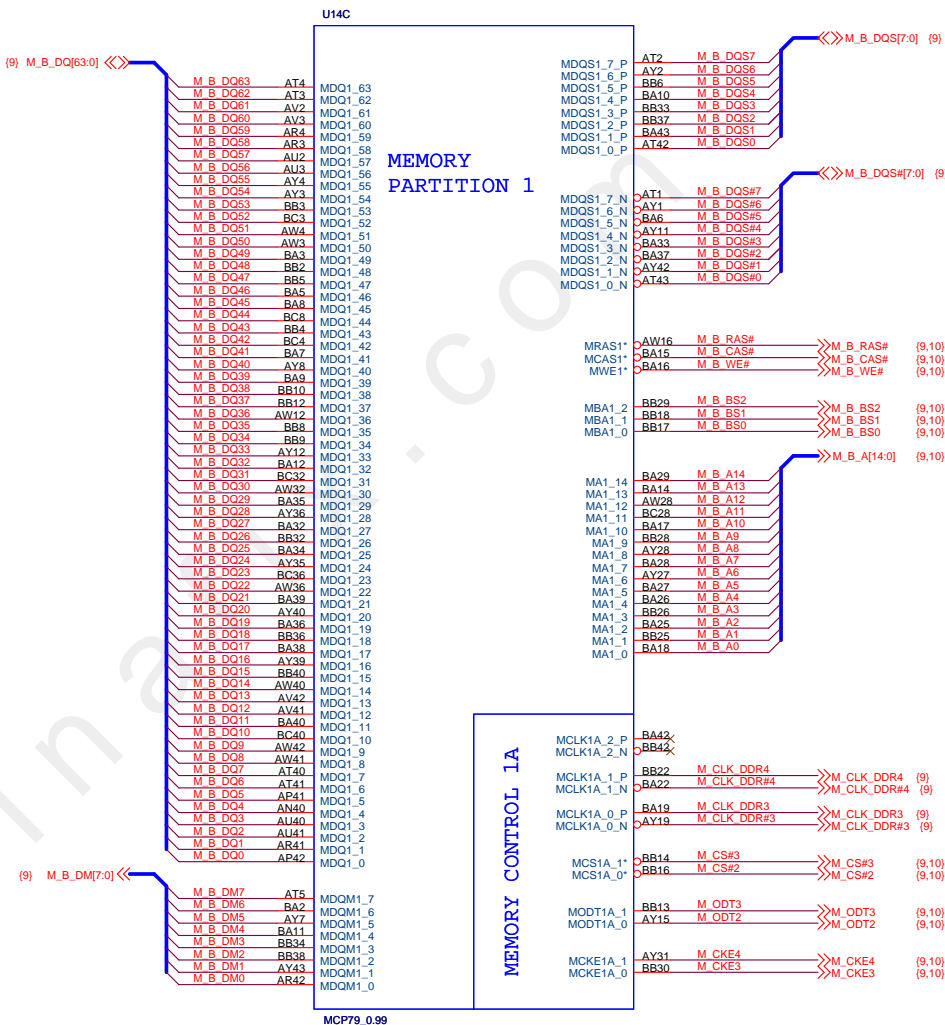
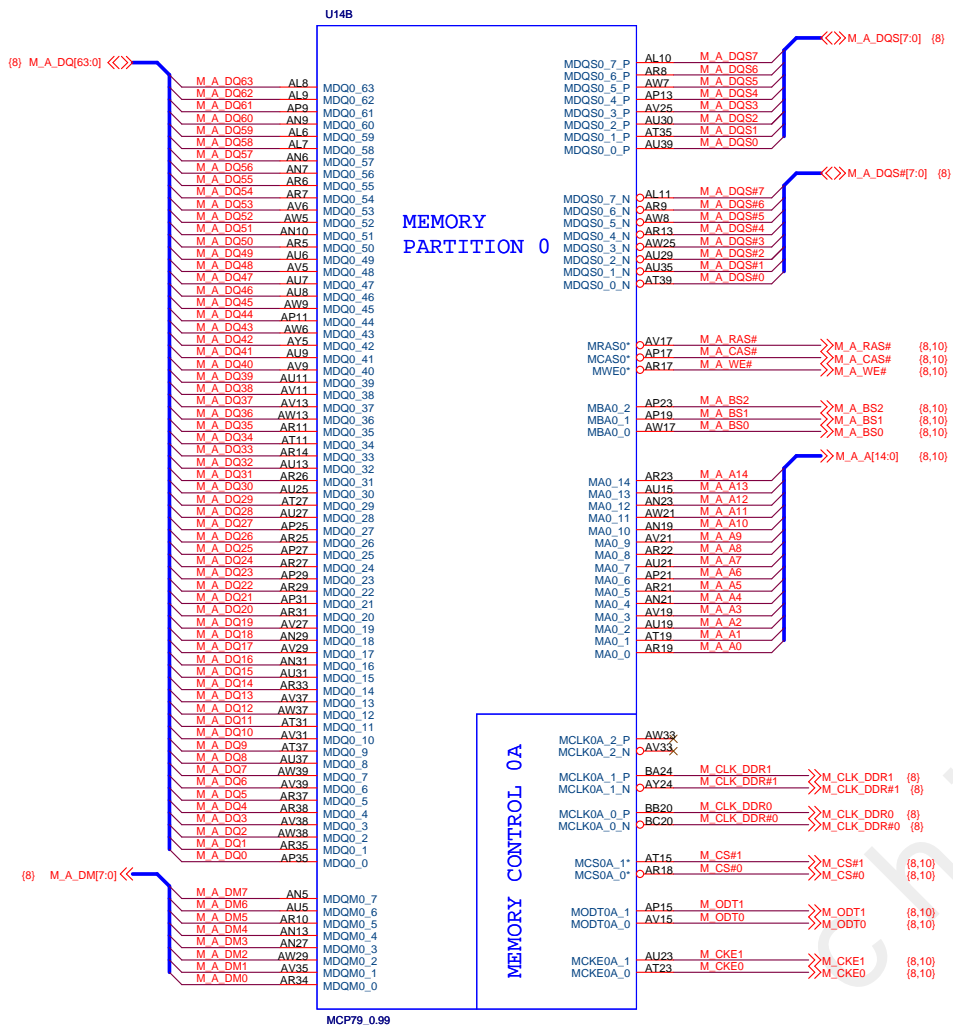
PENRYN-2 (POWER/GND)

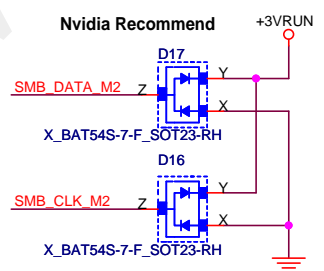
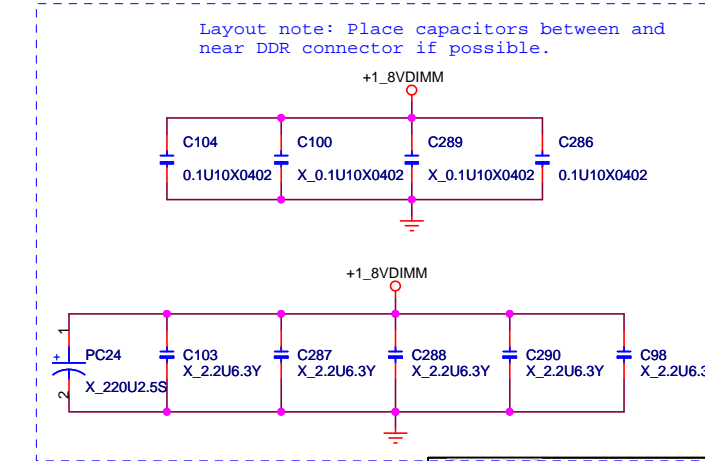
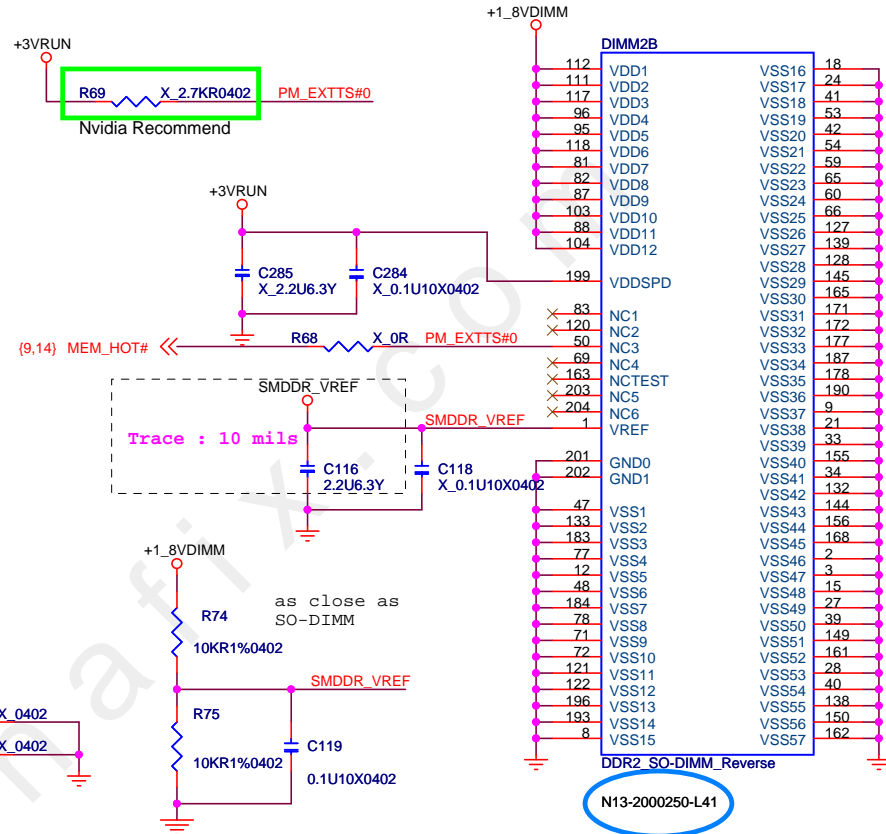
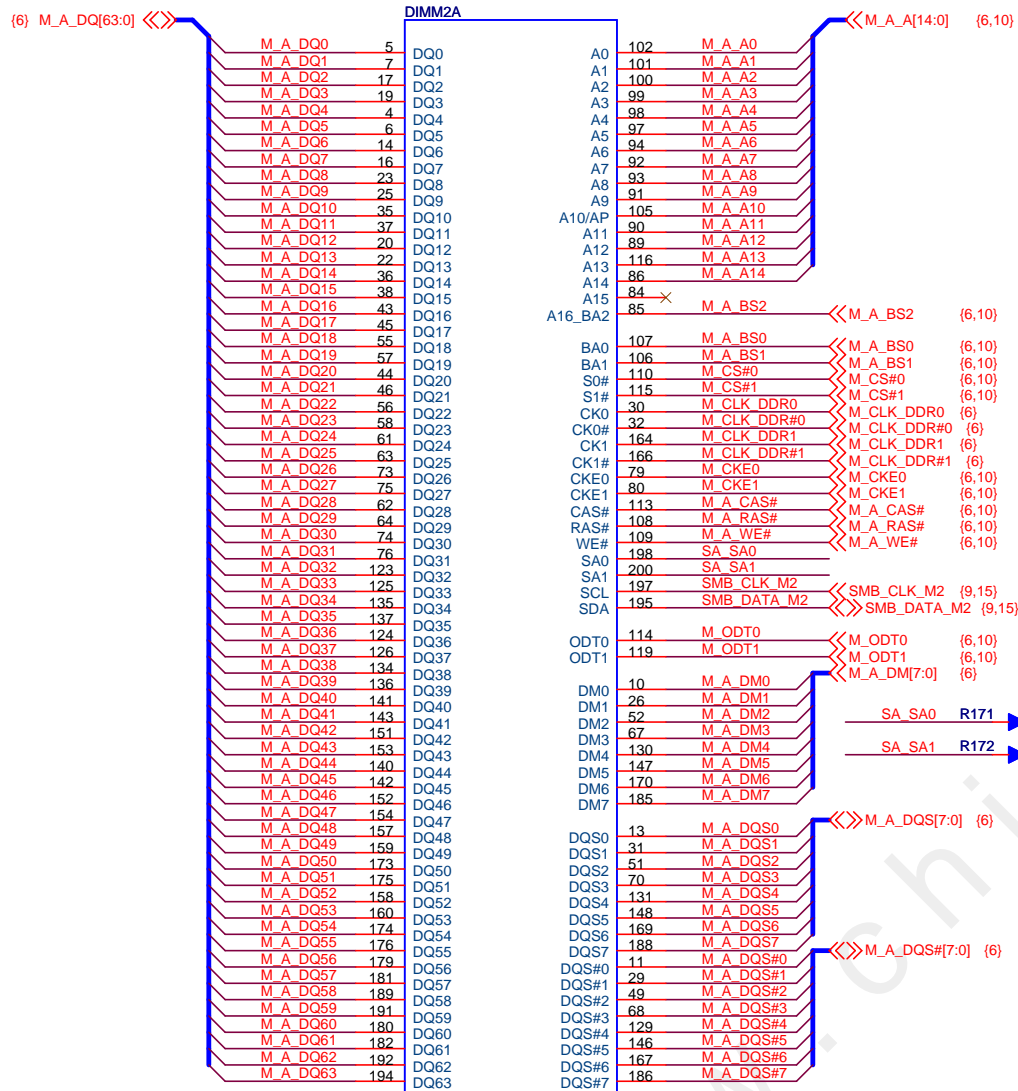
Title

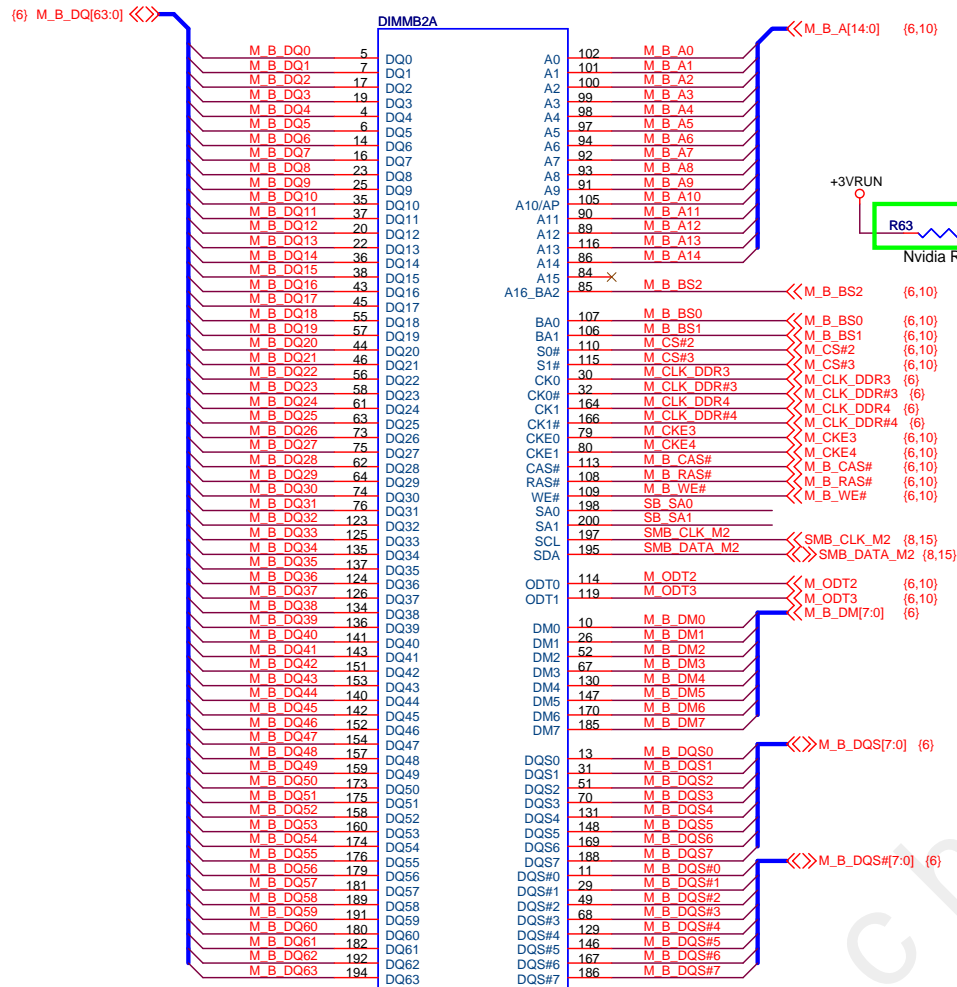
Size Custom Document Number MS-1451 Rev 1.2

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+3VRUN

R63 X 2.7KR0402 PM_EXTTS#1
Nvidia Recommend

+3VRUN

C282 X_2.2U6.3Y

C283 X_0.1U10X0402

R62 X 0R PM_EXTTS#1

{8,14} MEM_HOT# <<>

Trace : 10 mils

SMDDR_VREF

SMDDR_VREF

+3VRUN

C86 X_2.2U6.3Y

C82 0.1U10X0402

SB_SA0 R65

X_0402

SB_SA1 R64

X_0402

Layout note: Place capacitors between and near DDR connector if possible.

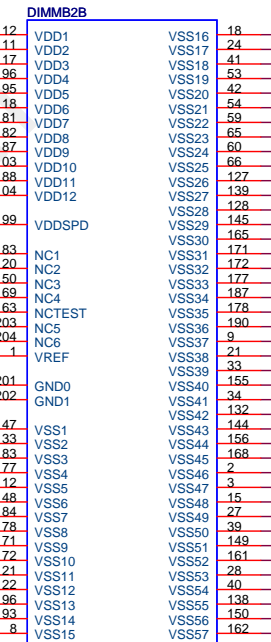
+1_8VDIMM


C95 0.1U10X0402 C96 0.1U10X0402 C71 0.1U10X0402 C72 0.1U10X0402

+1_8VDIMM

C99 X_2.2U6.3Y C73 X_2.2U6.3Y C70 X_2.2U6.3Y C75 X_2.2U6.3Y C97 X_2.2U6.3Y

+1_8VDIMM




MICRO-STAR INT'L CO.,LTD.

DDR2 SODIMM 1

Size Custom

Document Number MS-1451

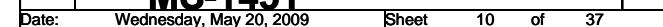
Rev 1.2

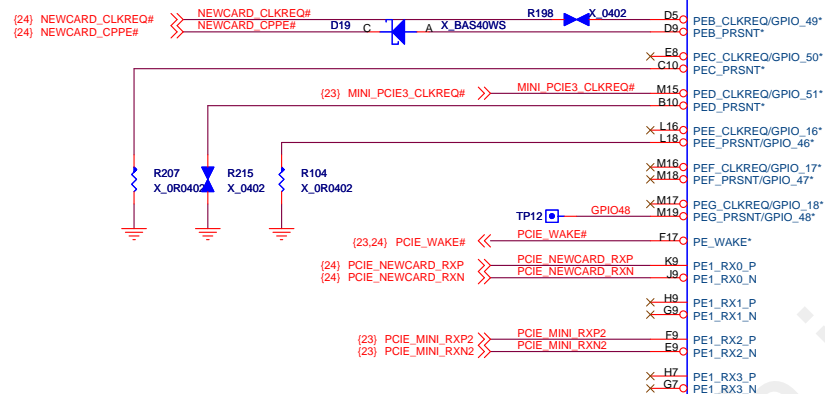
Date: Wednesday, May 20, 2009

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1





Nvidia Recommend : (+DVDD_PEX)

1x4.7u

2x1u

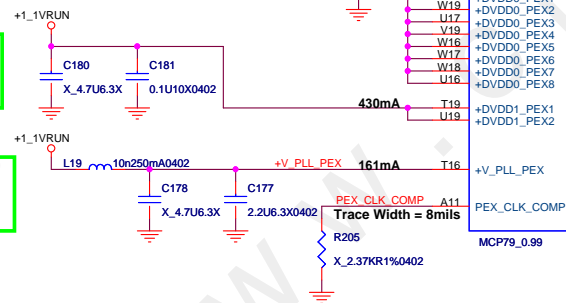
2x0.1u

Nvidia Recommend : (+V_PLL_PEX)

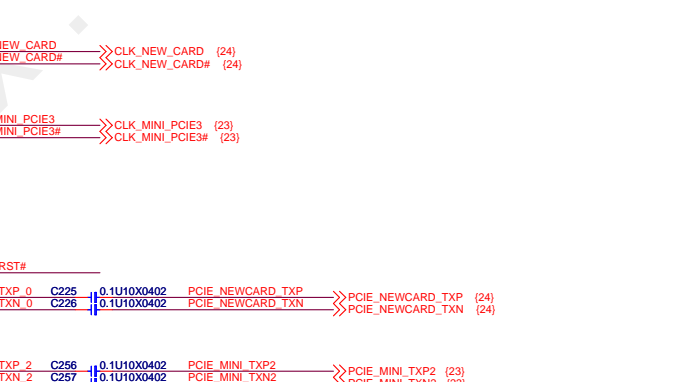
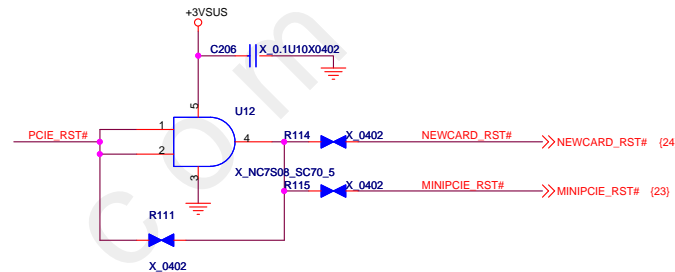
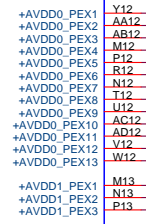
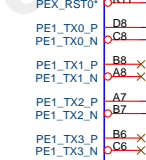
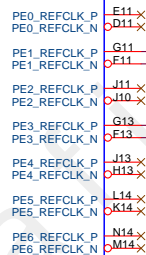
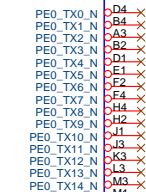
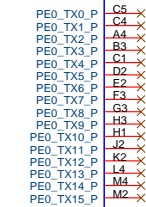
1x10nH

1x4.7u

1x2.2u



PCIE



close to connector

Nvidia Recommend : (+AVDD_PEX)

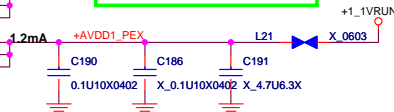
1xBead

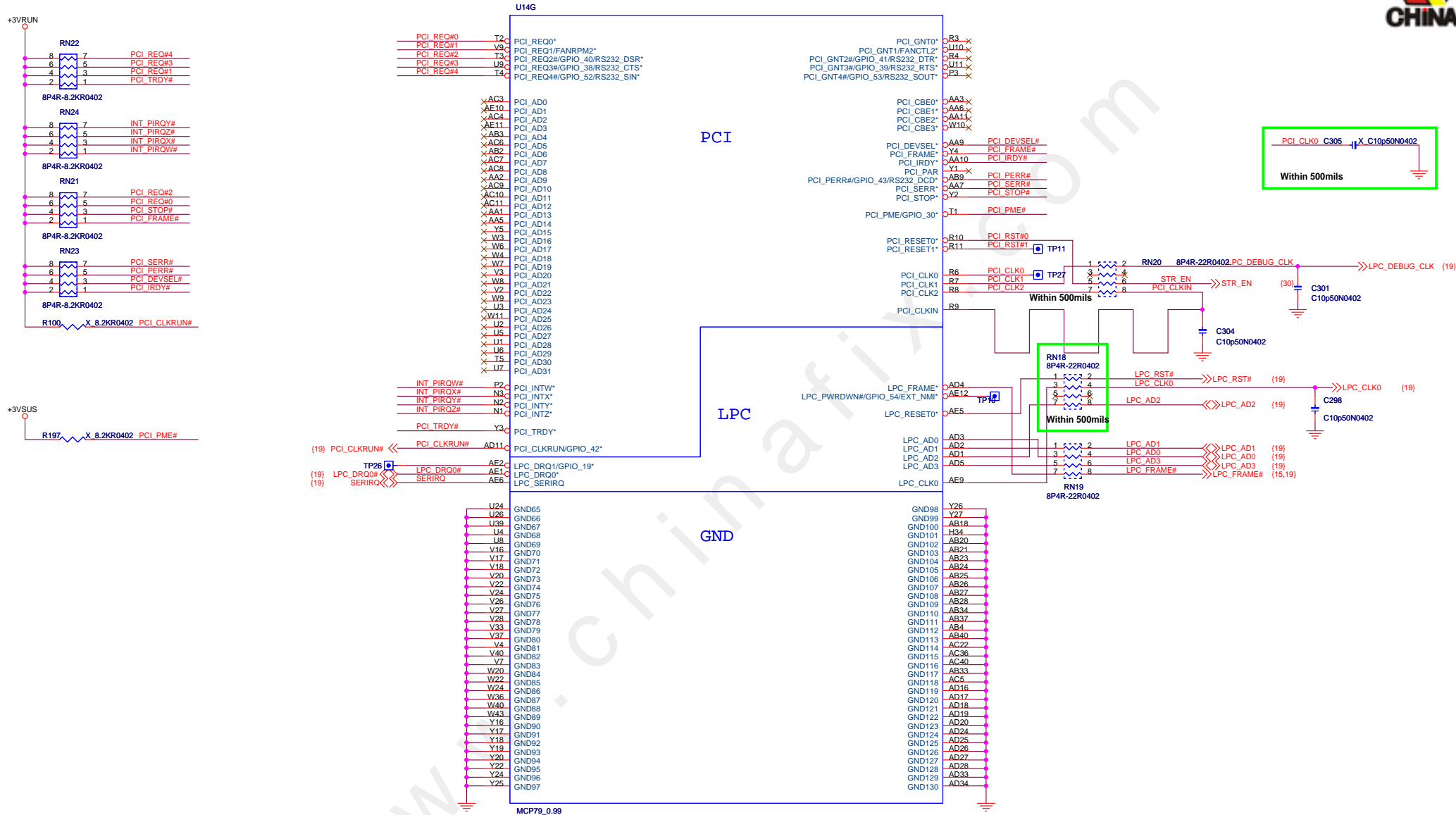
1x10u

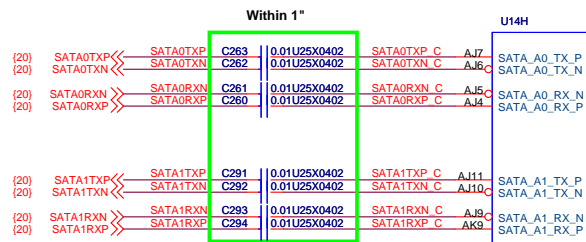
1x4.7u

2x1u

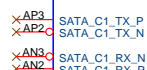
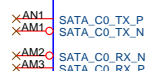
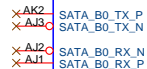
2x0.1u



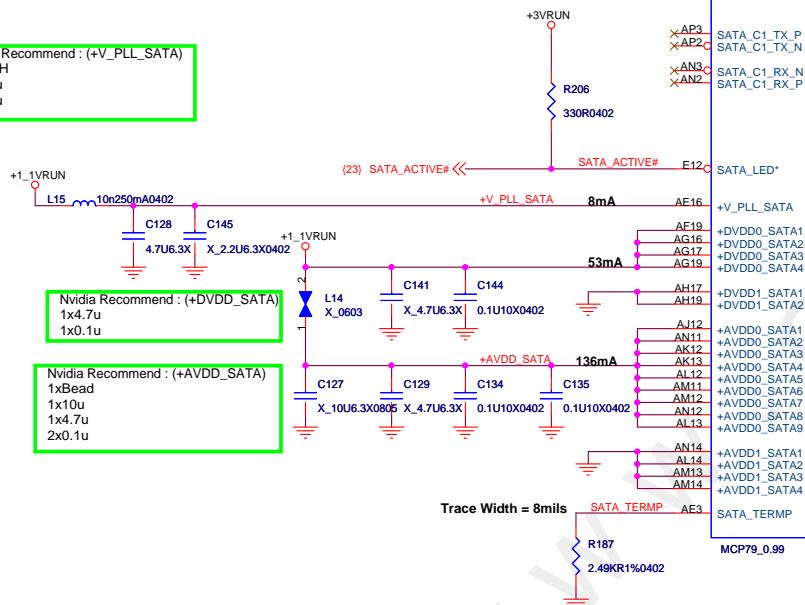




Place Cap Close to Connector



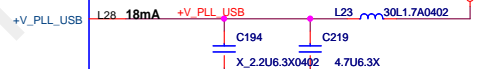
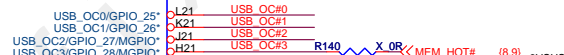
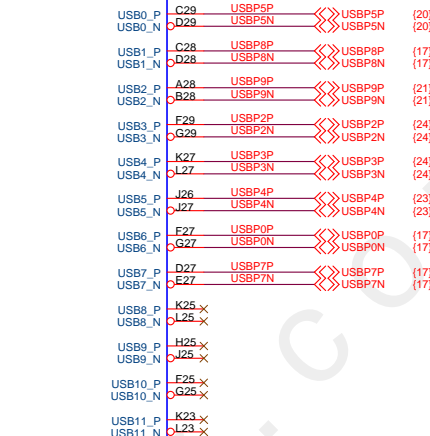
Nvidia Recommend : (+V_PLL_SATA)
1x10nH
1x4.7u
1x2.2u



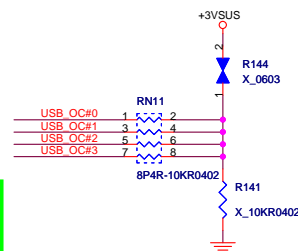
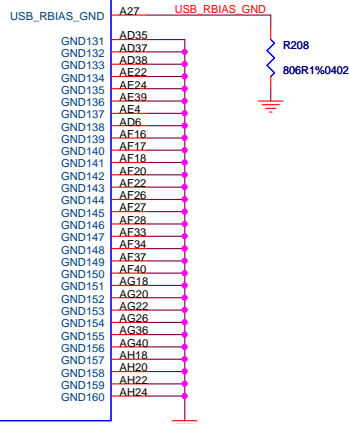
Nvidia Recommend : (+DVDD_SATA)
1x4.7u
1x0.1u

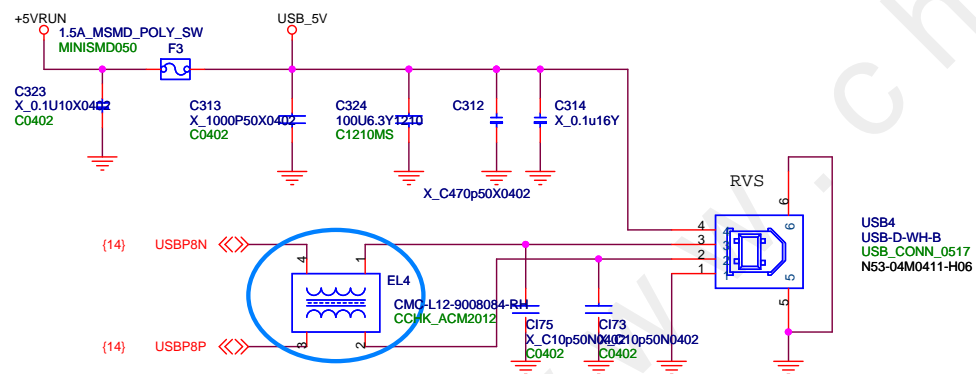
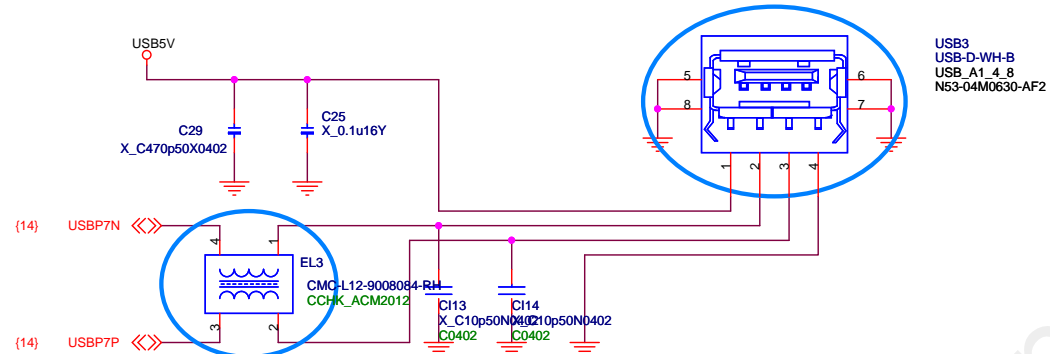
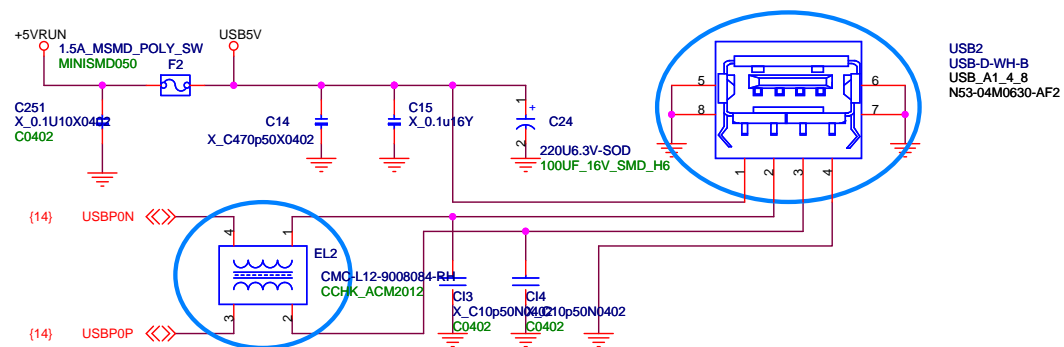
Nvidia Recommend : (+AVDD_SATA)
1xBead
1x10u
1x4.7u
2x0.1u

SATA USB

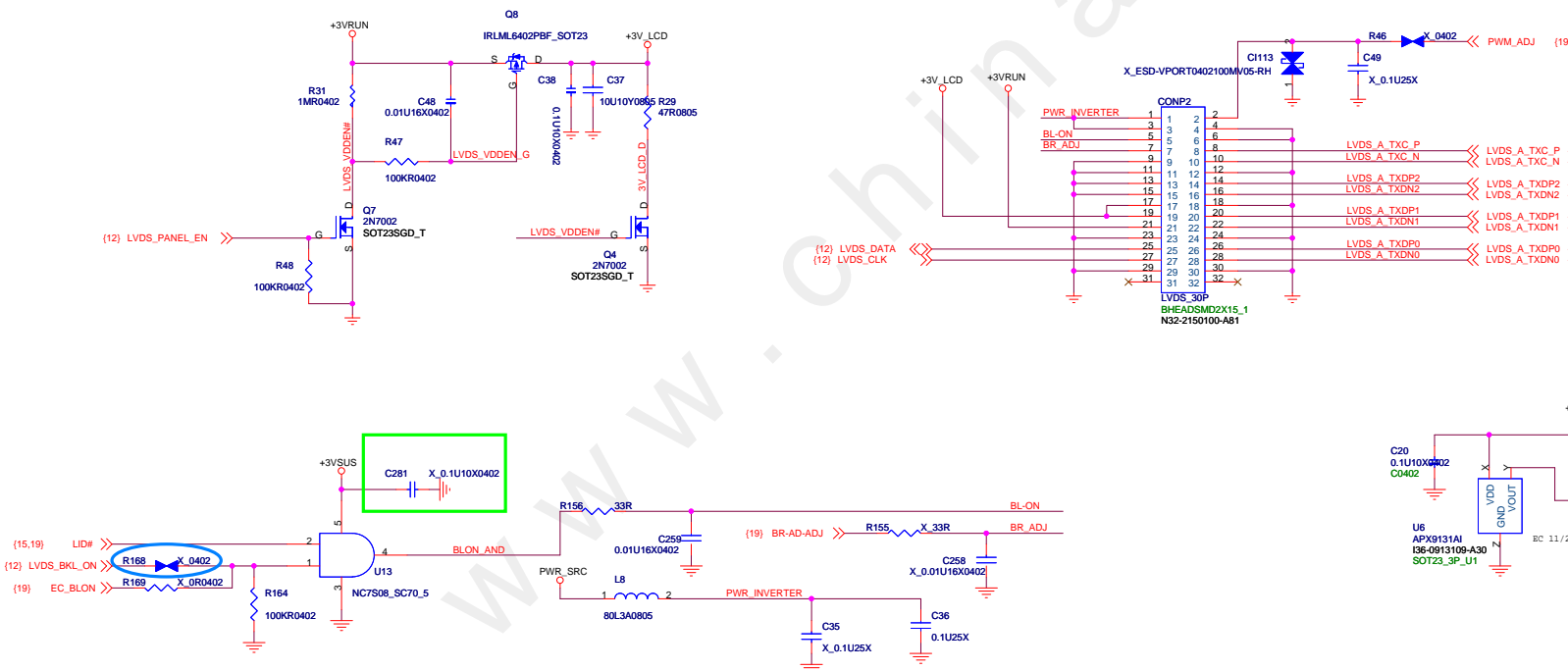
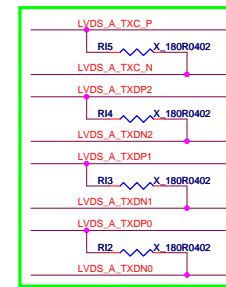
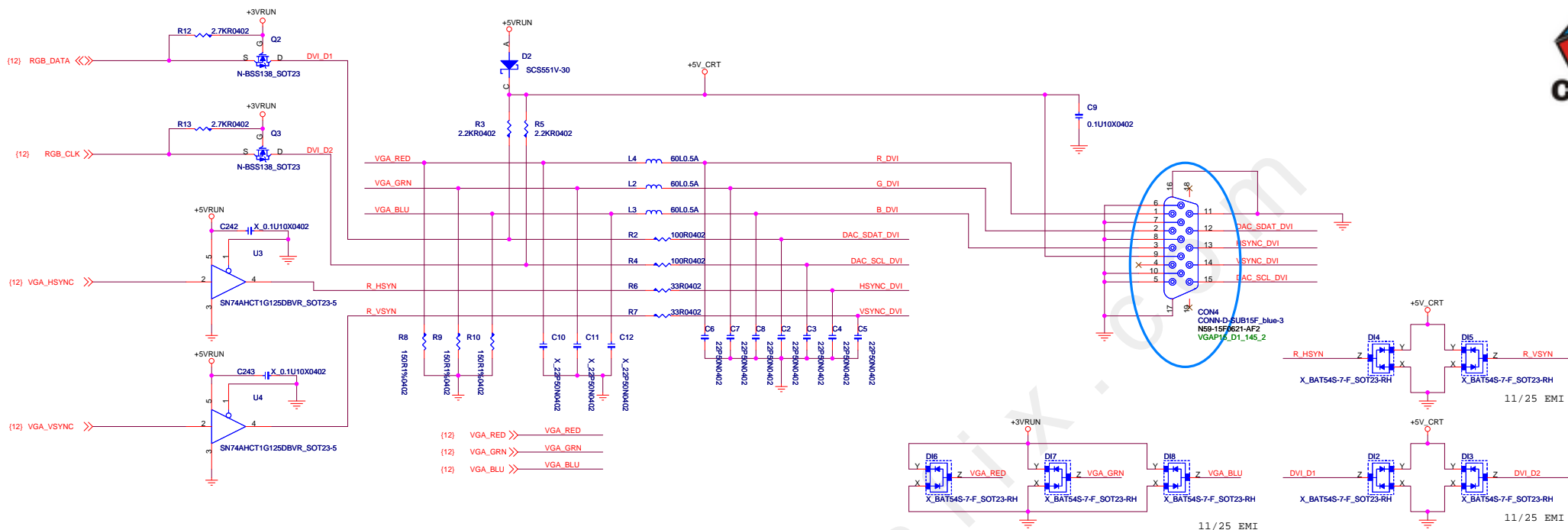


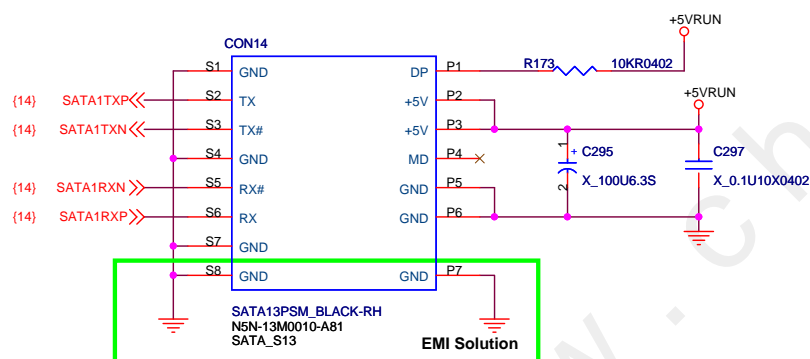
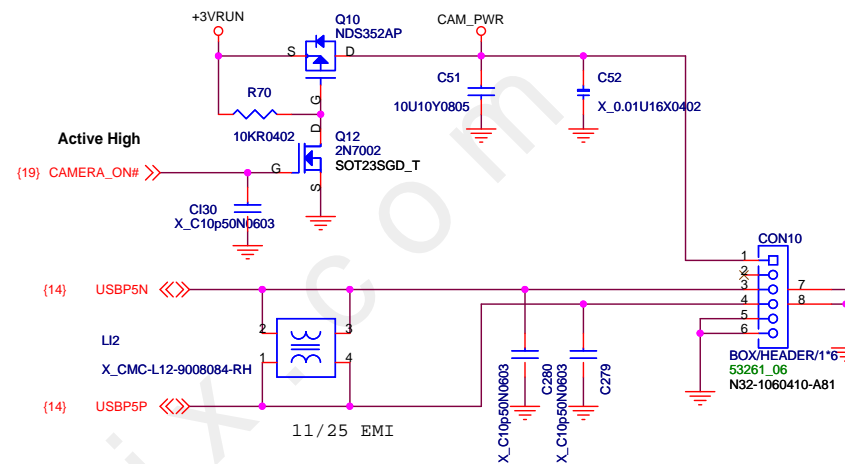
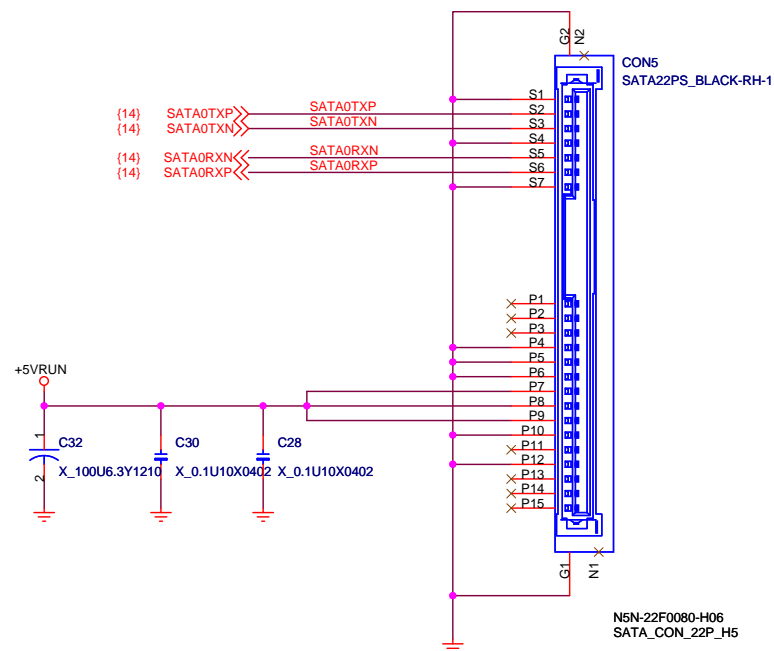
Nvidia Recommend : (+V_PLL_USB)
1xBead
1x4.7u
1x2.2u

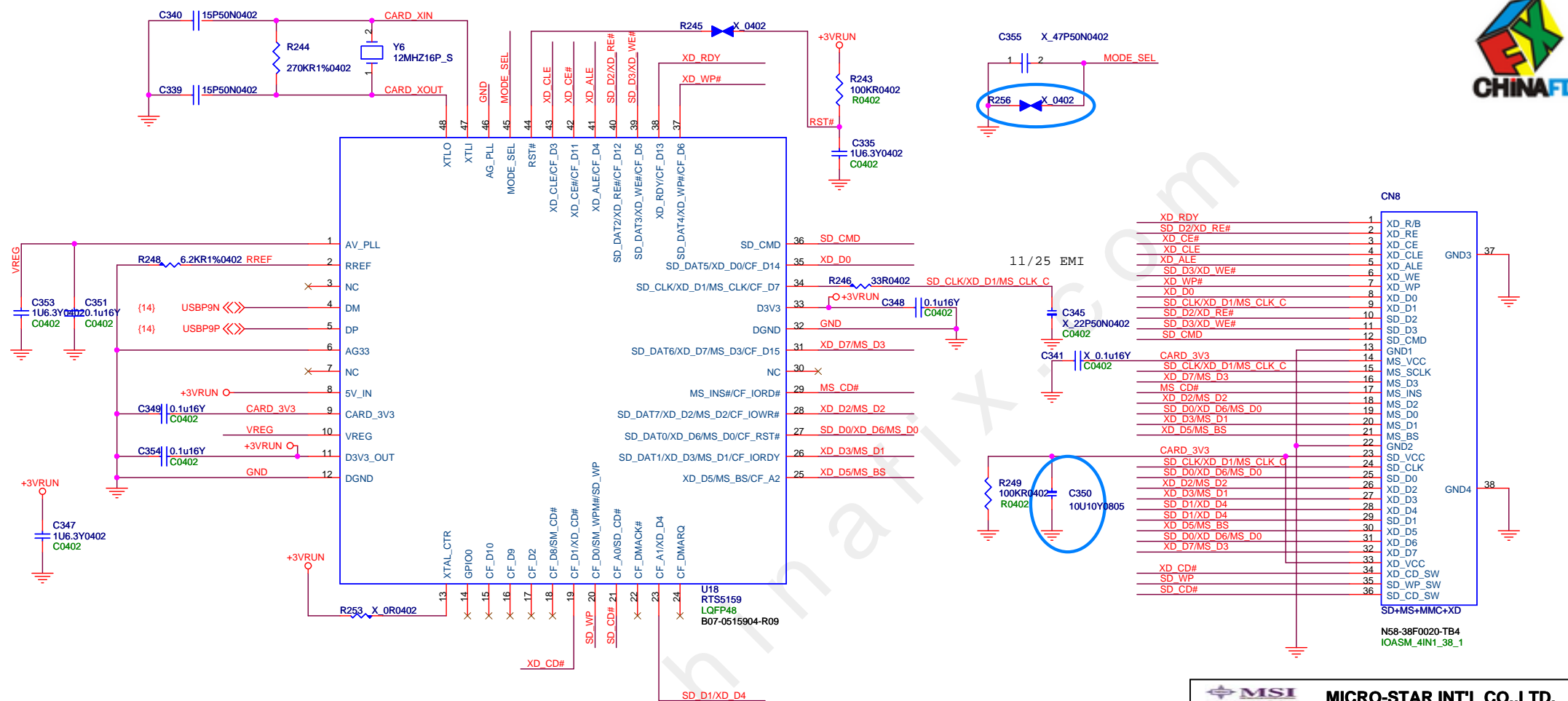




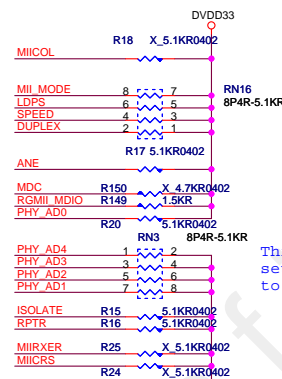
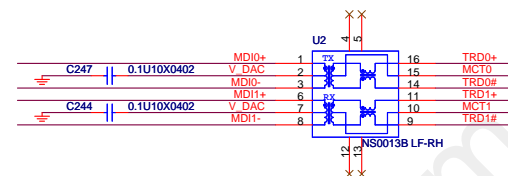
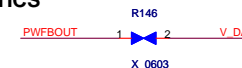
Title		
USB_CONN		
Size	Document Number	Rev
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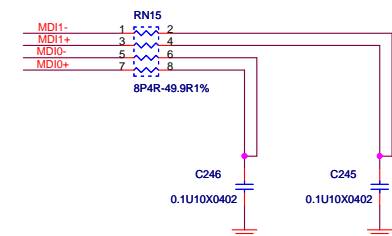




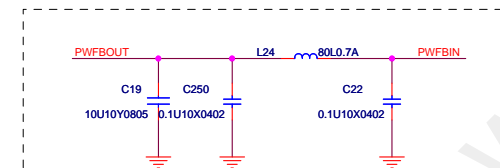
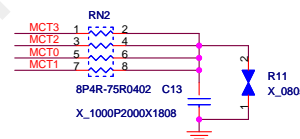
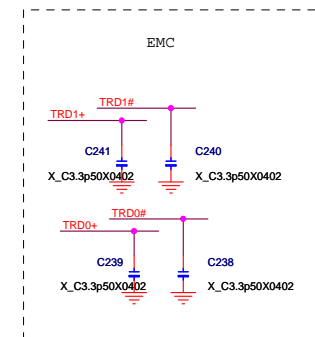
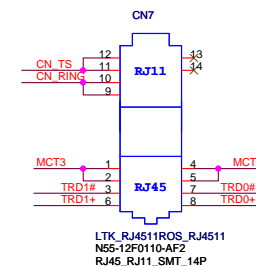
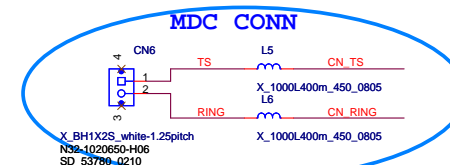
LAN MAGNETICS



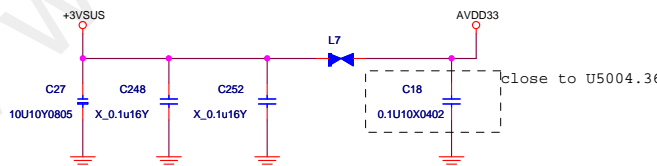
This schematic sets PHY address to 00001b.

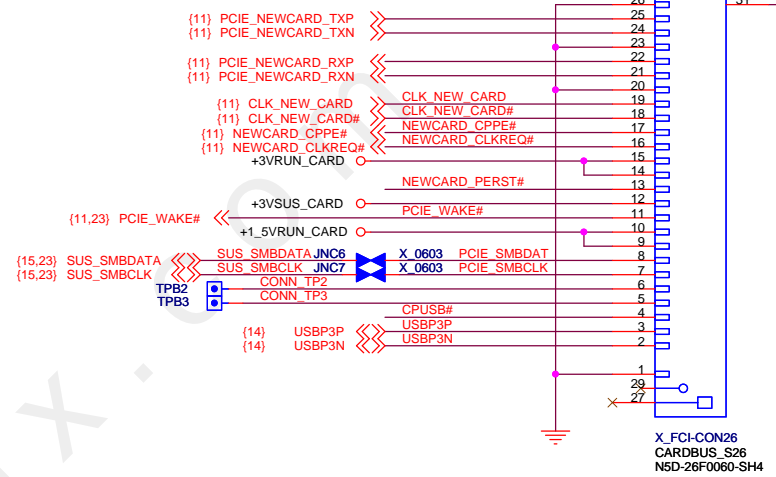
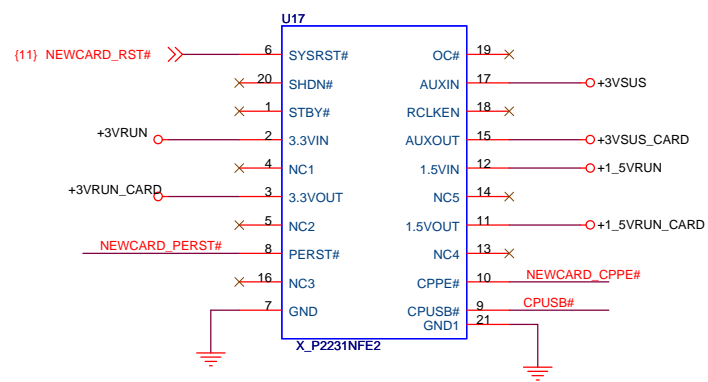


R375 R376 C514 close U5004
R377 R379 C513 close U5003

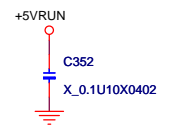
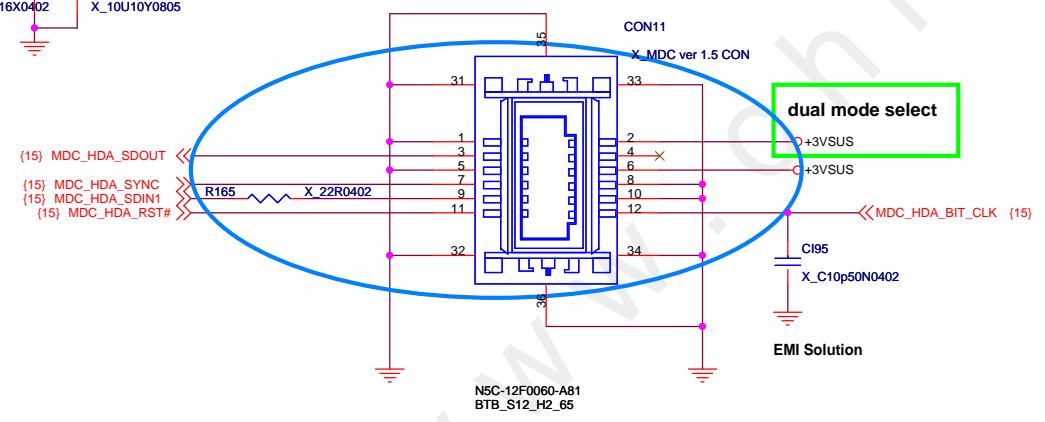
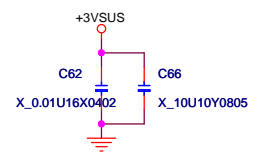


please C416, C417, L32 close to PWFBOUT(U5004.32)
and C418 close to PWFBIN (U5004.8)

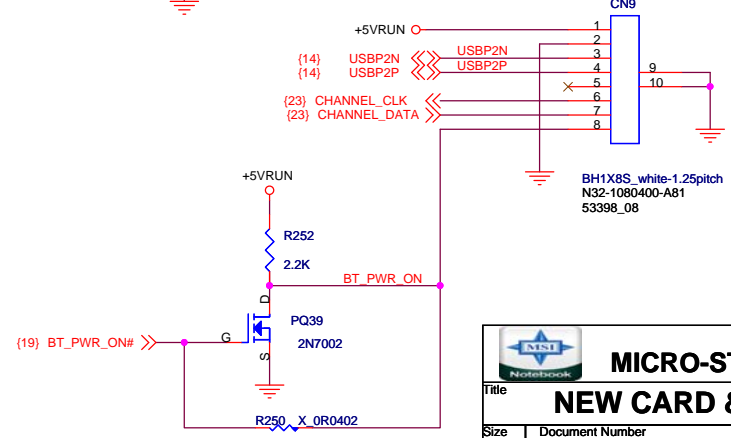




MDC Connector Ver 1.5



BLUETOOTH



MICRO-STAR INT'L CO.,LTD.

NEW CARD & MDC CONN

MS-1451

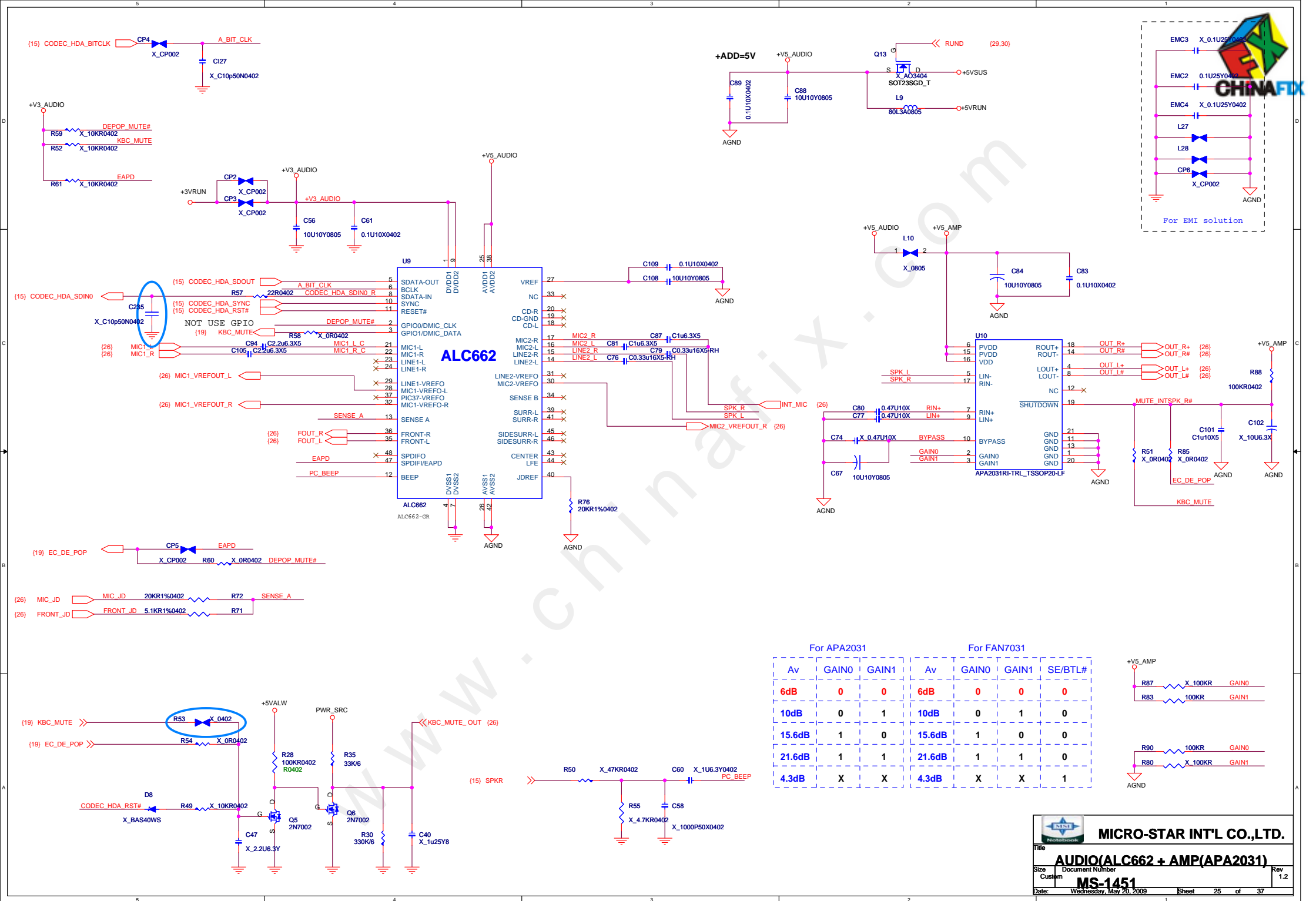
Document Number

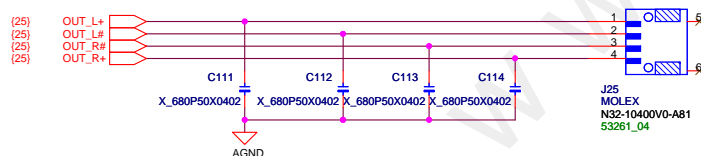
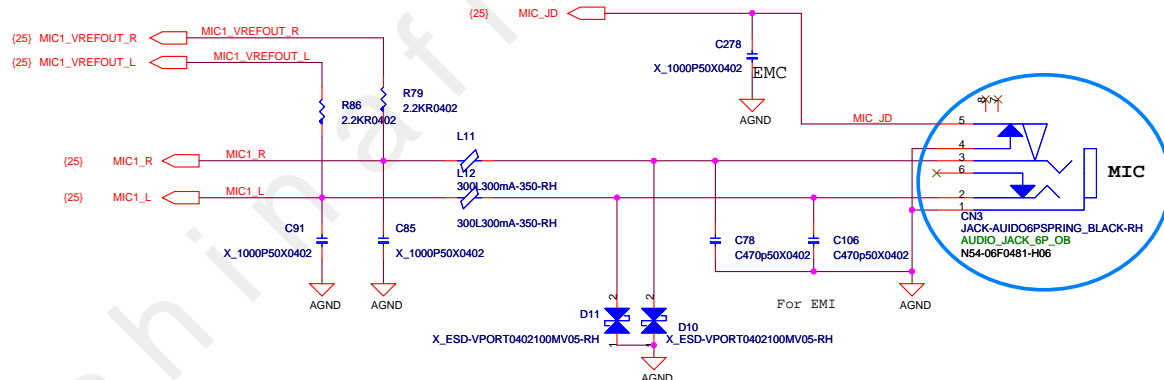
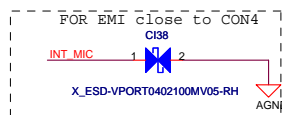
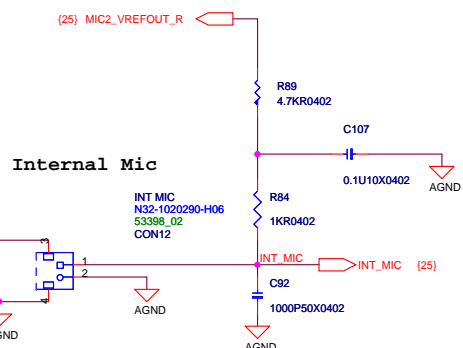
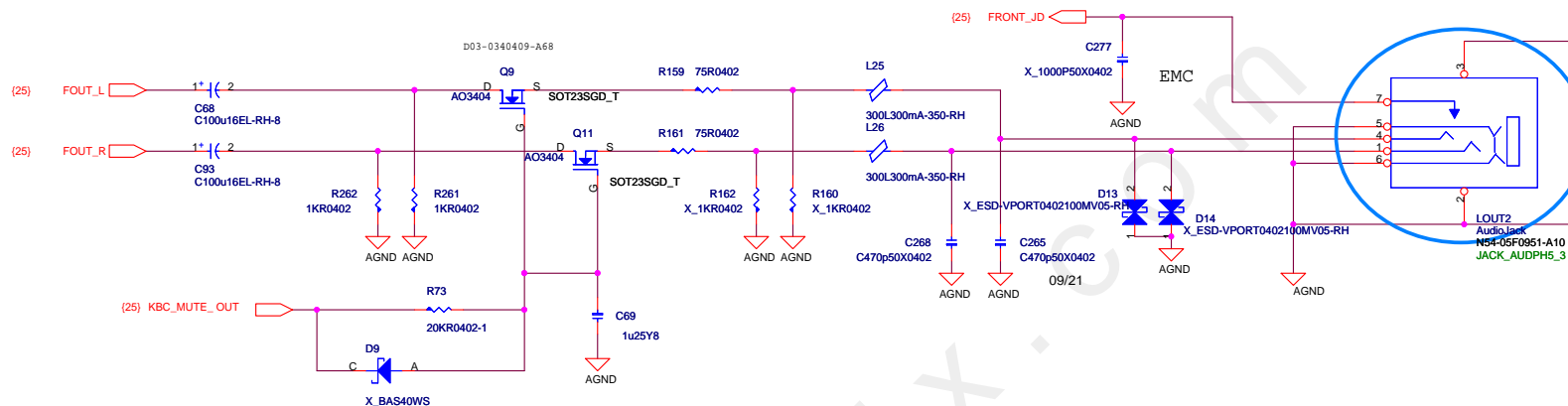
Size Custom

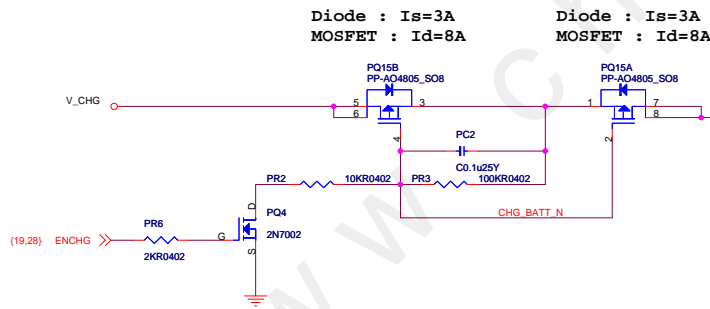
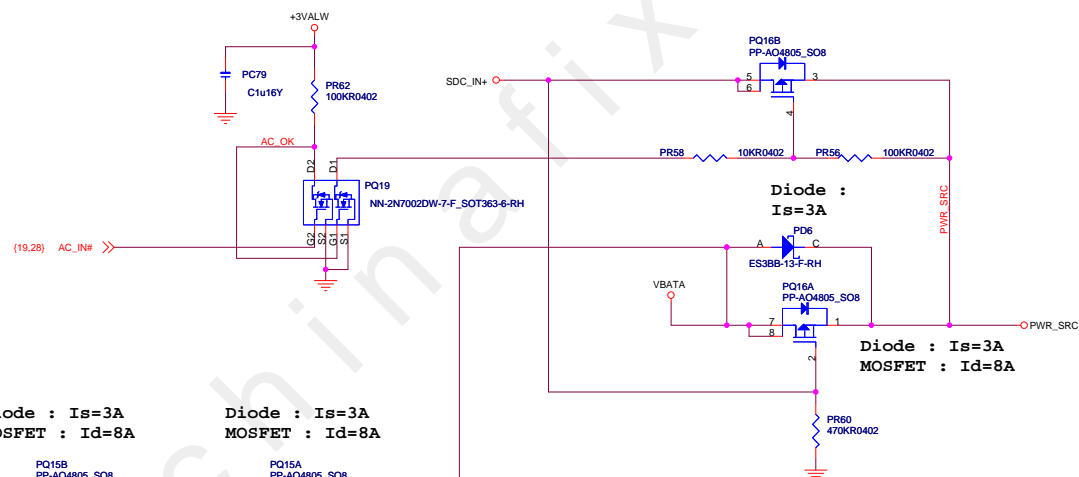
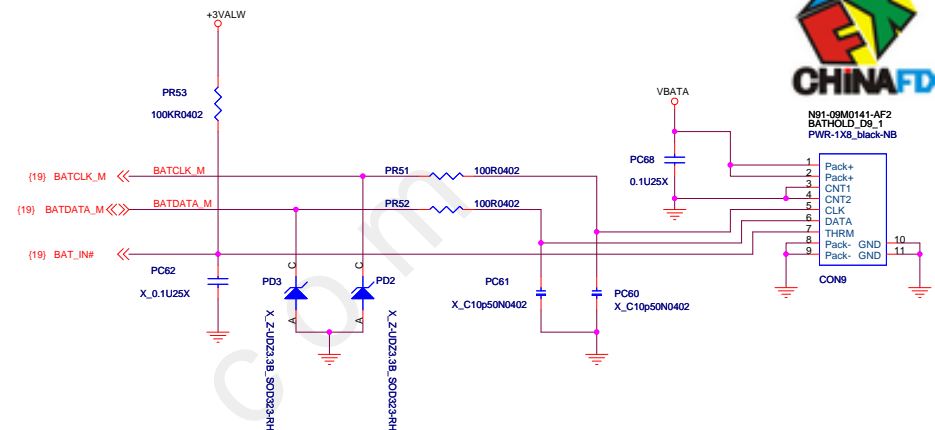
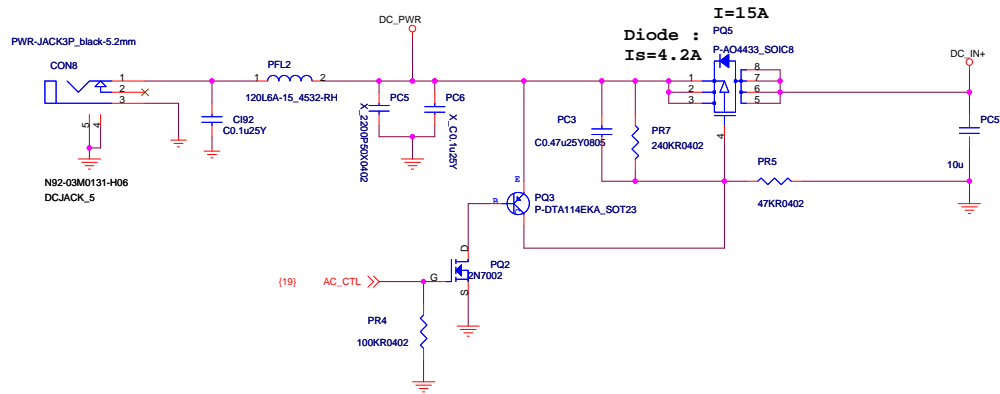
Date: Wednesday, May 20, 2009

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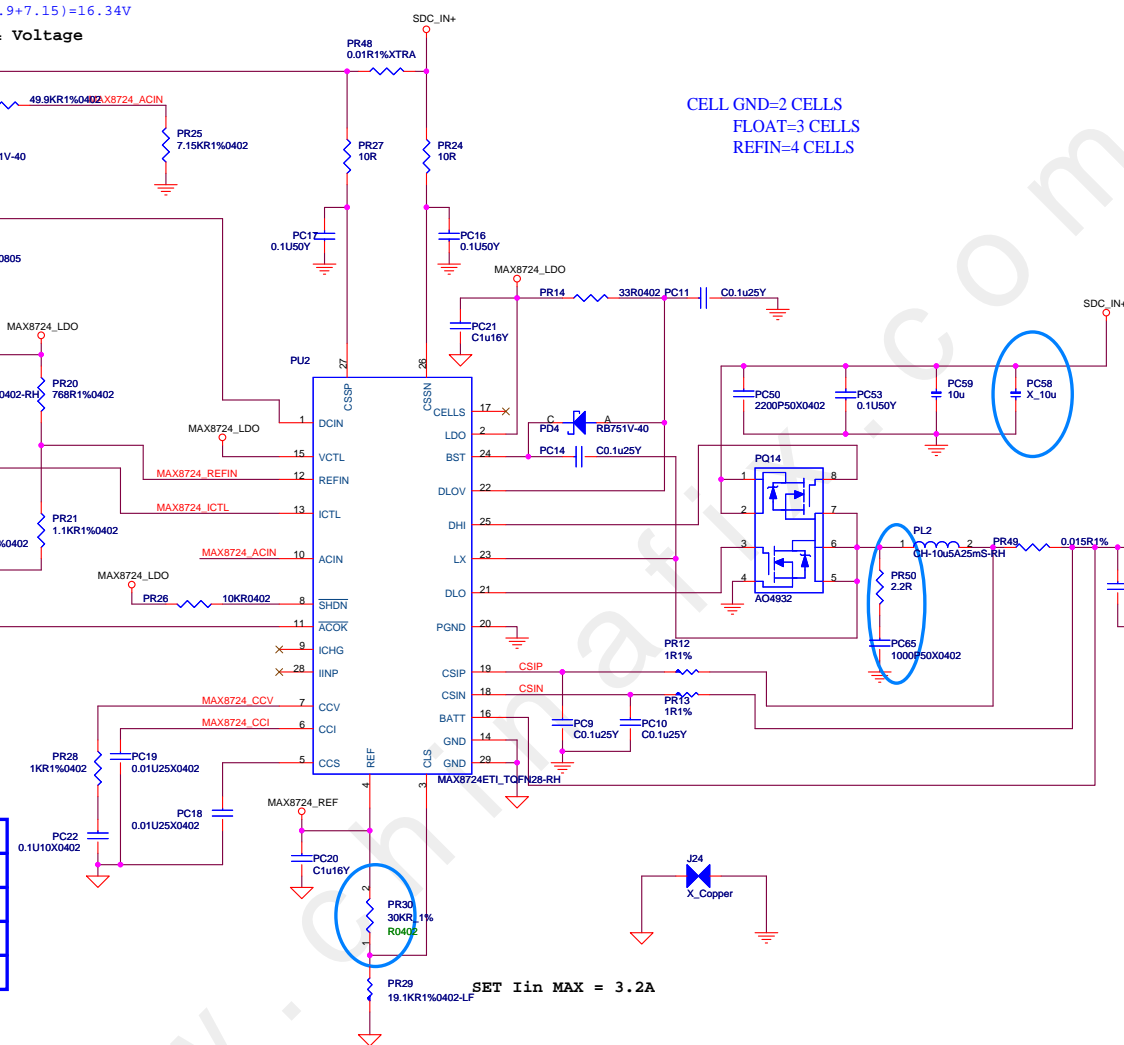
MSI CORPORATION			
Title	Battery Select		
Size	Document Number	Rev	
Custom	MS-1451	1.2	
Date:	Wednesday, May 20, 2009	Sheet	27 of 37

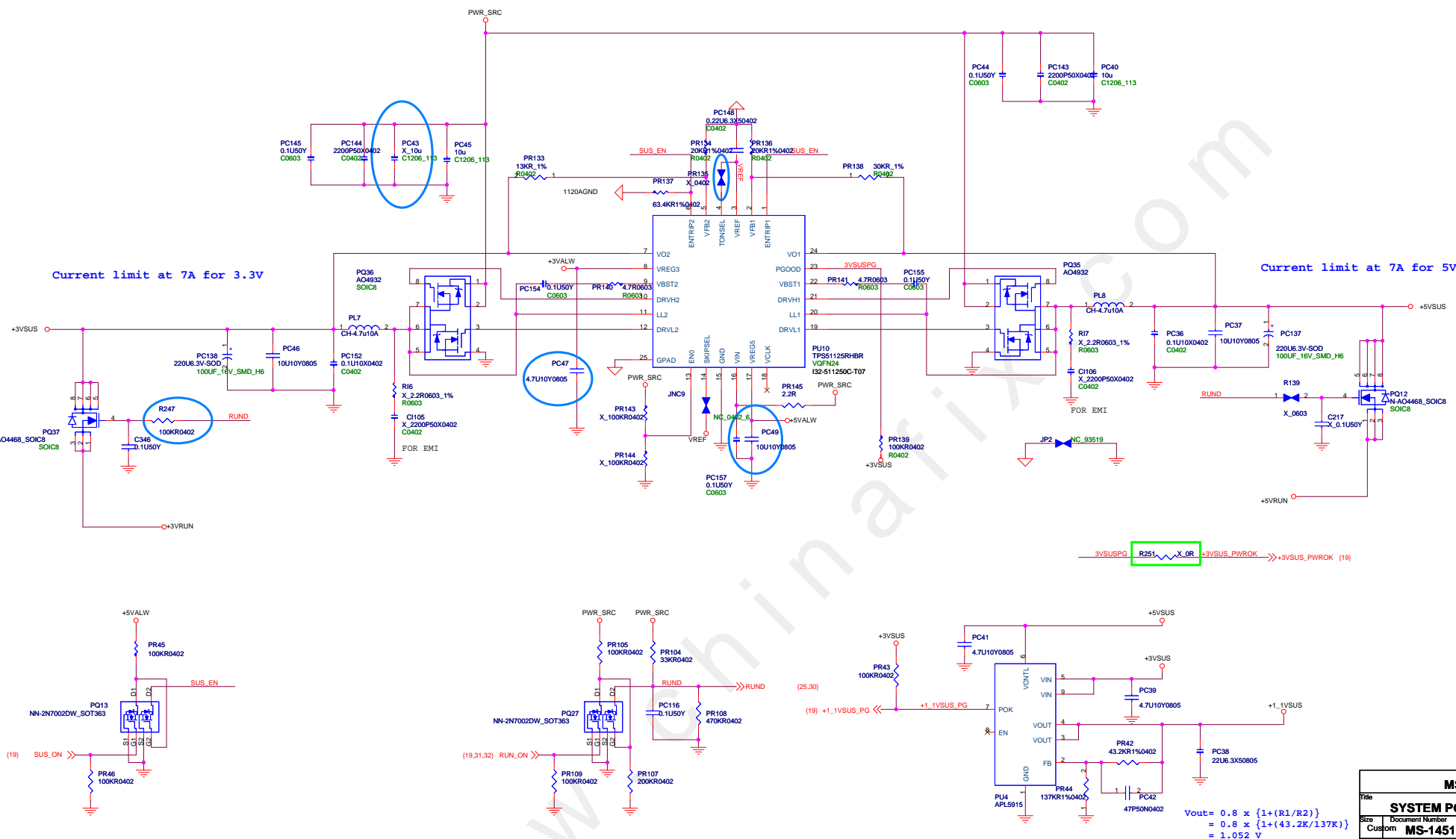
Adapter= 65 W $2.048/7.15 \times (49.9+7.15)=16.34V$
 Adapter input voltage set 16.34 Voltage

CELL_GND=2 CELLS
 FLOAT=3 CELLS
 REFIN=4 CELLS

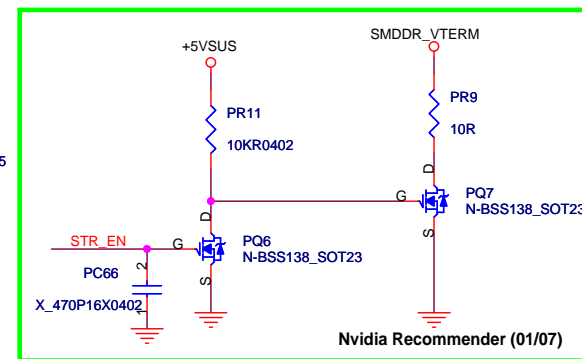
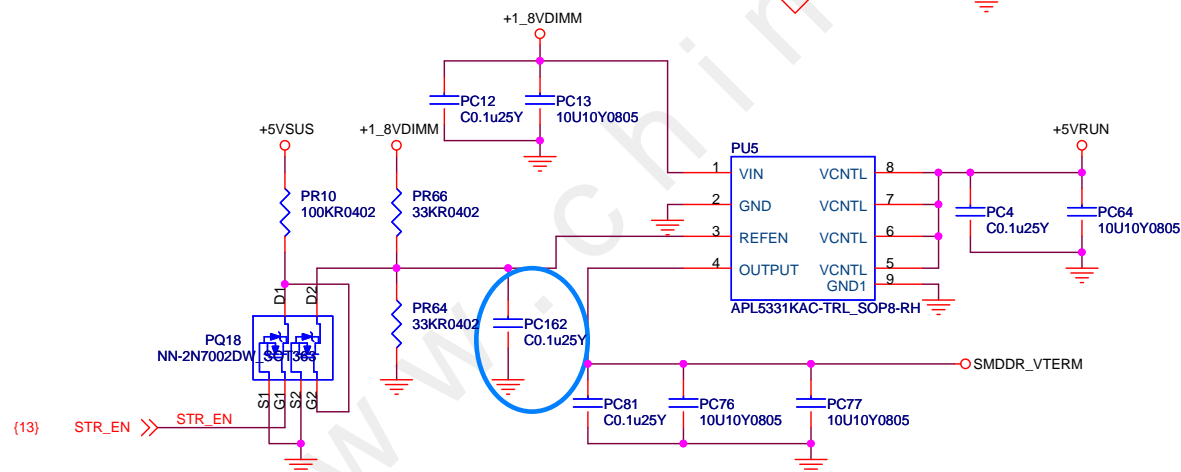
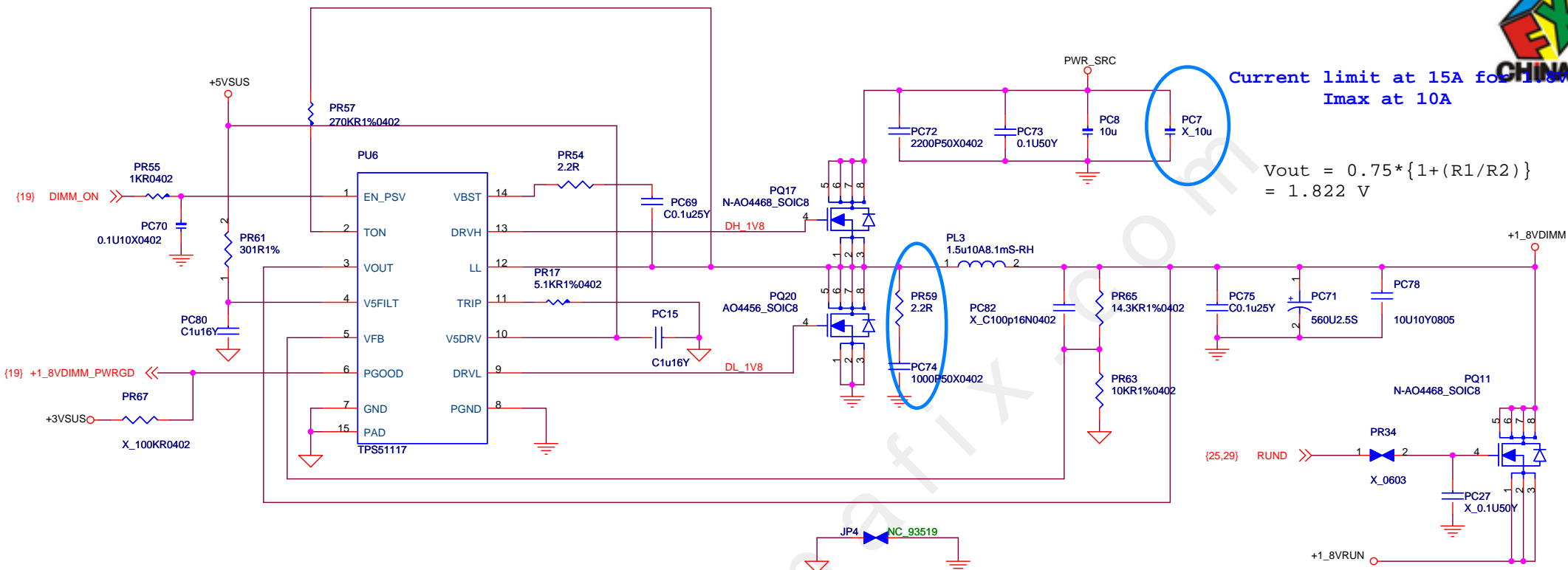
2P: Charge current set 3 Amp
 3P: Charge current set 4.5 Amp
 Pre-charger: Charge current set 200mA

ENCHG-2P	PRE_CHG	ENCHG	
0	1	1	Pre-charge
0	0	1	3S3P-Fast charge
1	0	1	3S2P-Fast charge
X	X	0	STOP CHARGE

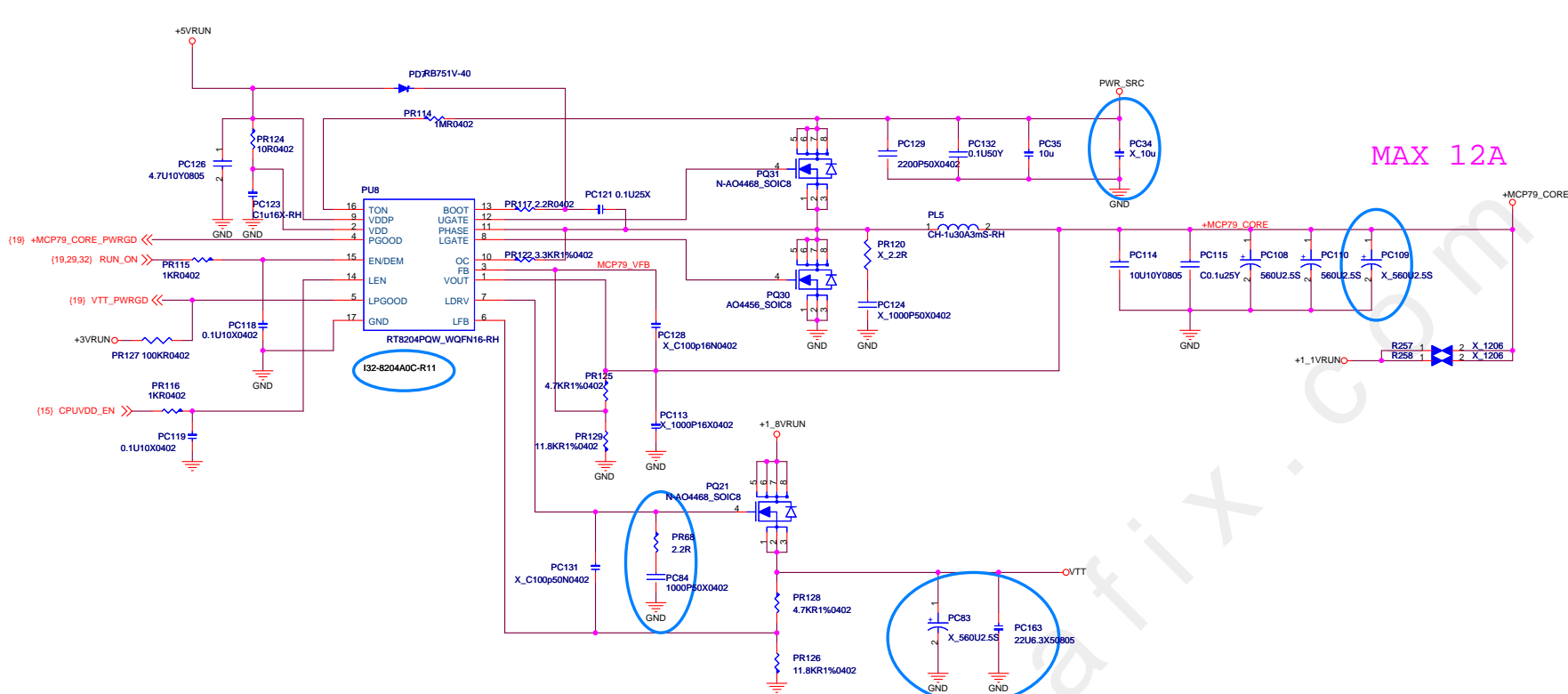




MSI CORPORATION		
Title	SYSTEM POWER	
Size	Document Number	Rev
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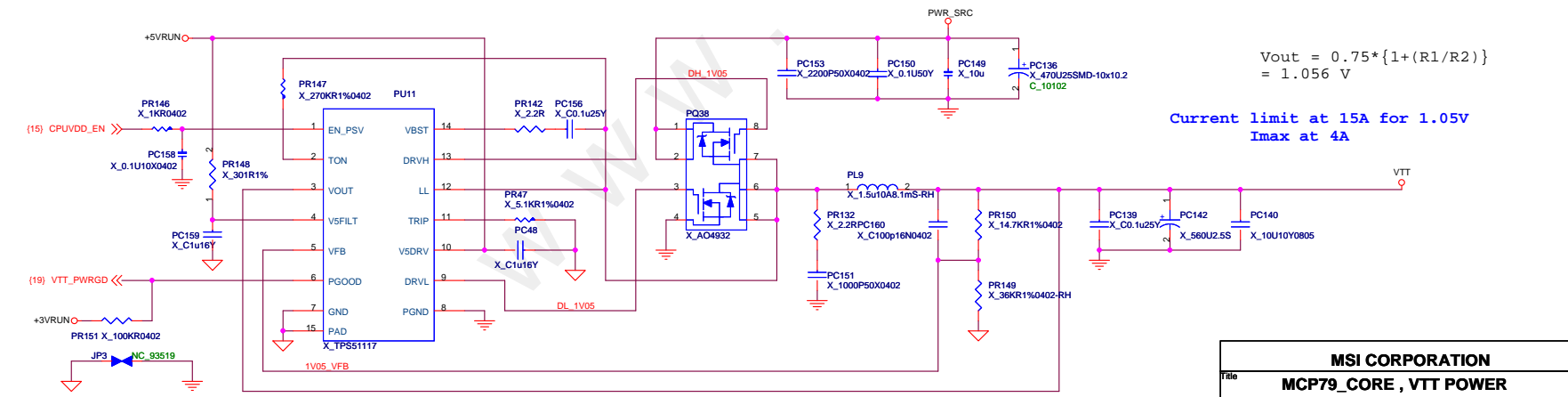
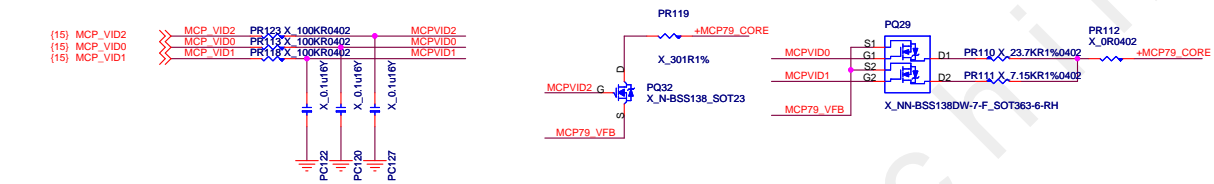


MSI CORPORATION			
Title		DDR2 RAM POWER	
Size	Document Number	Rev	
Custom	MS-1451	1.2	
Date:	Wednesday, May 20, 2009	Sheet	30 of 37



+MCP CORE POWER TABLE

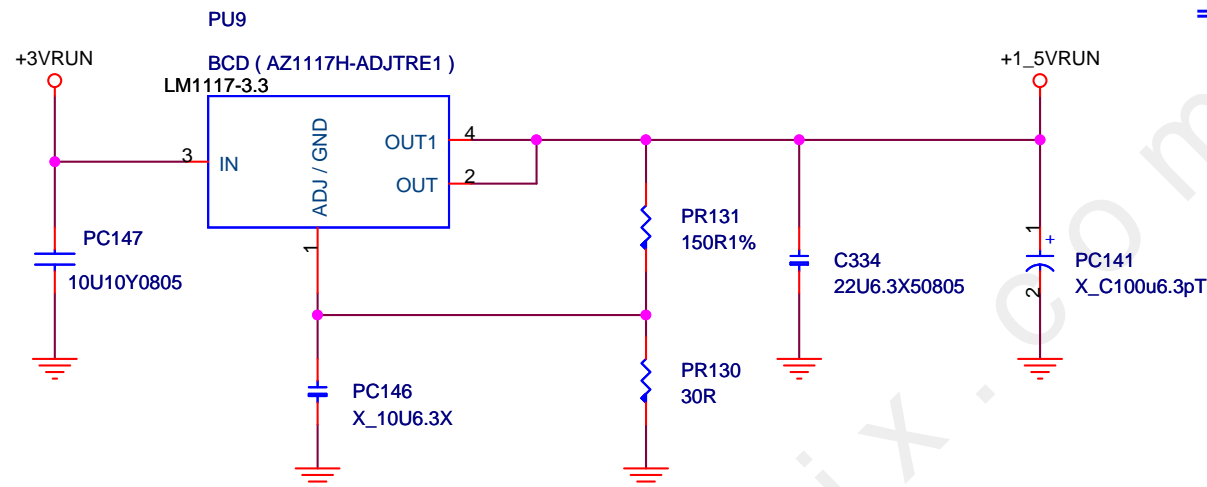
VID2	VID1	VID0	+MCP CORE POWER
0	0	0	1.056 V
0	0	1	1.007 V
0	1	0	0.937 V
0	1	1	0.918 V



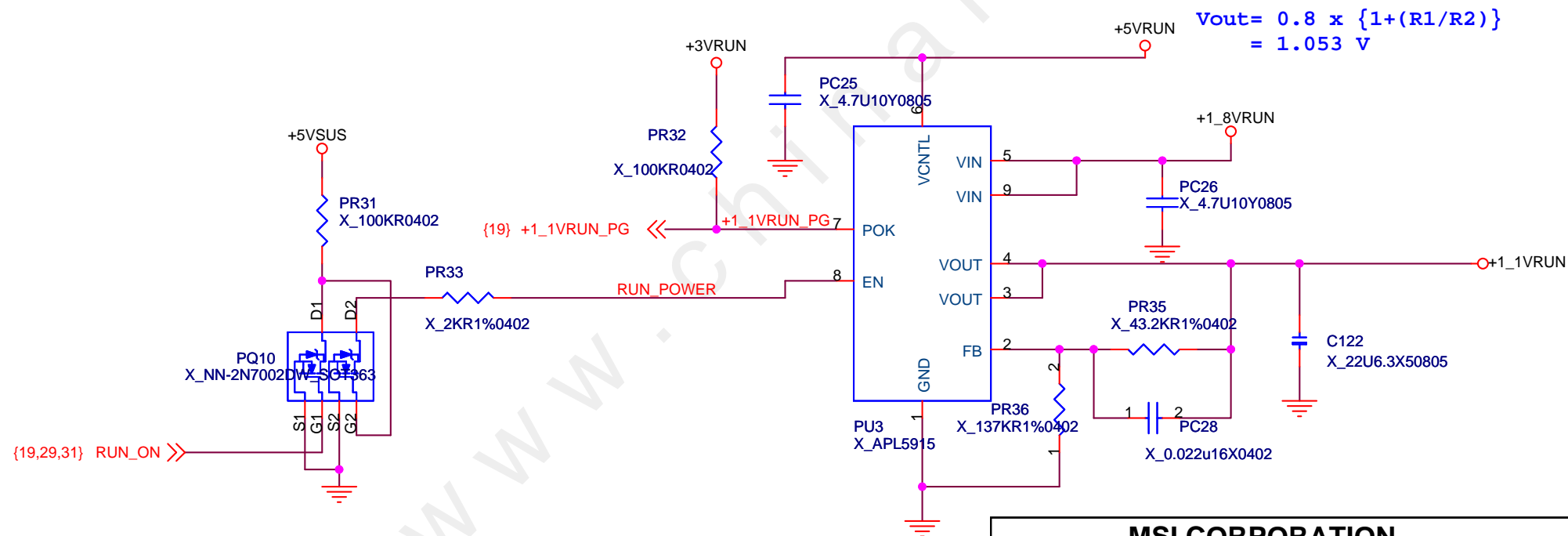
$$V_{out} = 0.75 * \{1 + (R1/R2)\} = 1.056 V$$

Current limit at 15A for 1.05V
Imax at 4A

$$V_{out} = 1.25 \times \{1 + (30/150)\} = 1.5 \text{ V}$$

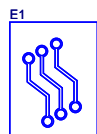


$$V_{out} = 0.8 \times \{1 + (R1/R2)\} = 1.053 \text{ V}$$

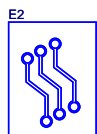


MSI CORPORATION

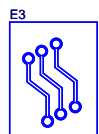
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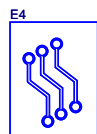
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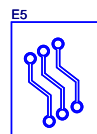
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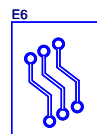
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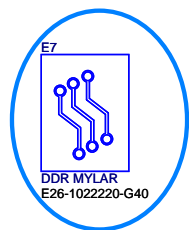
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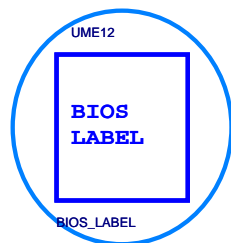
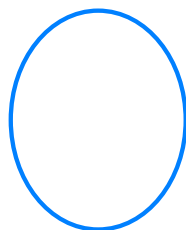
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Touchpad Rubber
E2Y-4520311-Y40



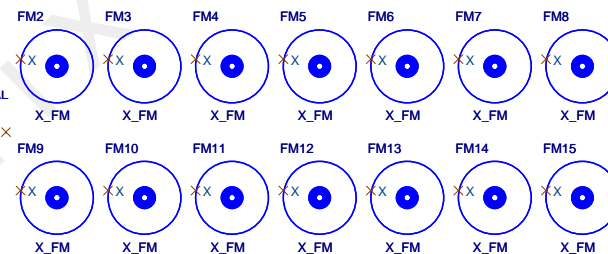
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BIOS_LABEL

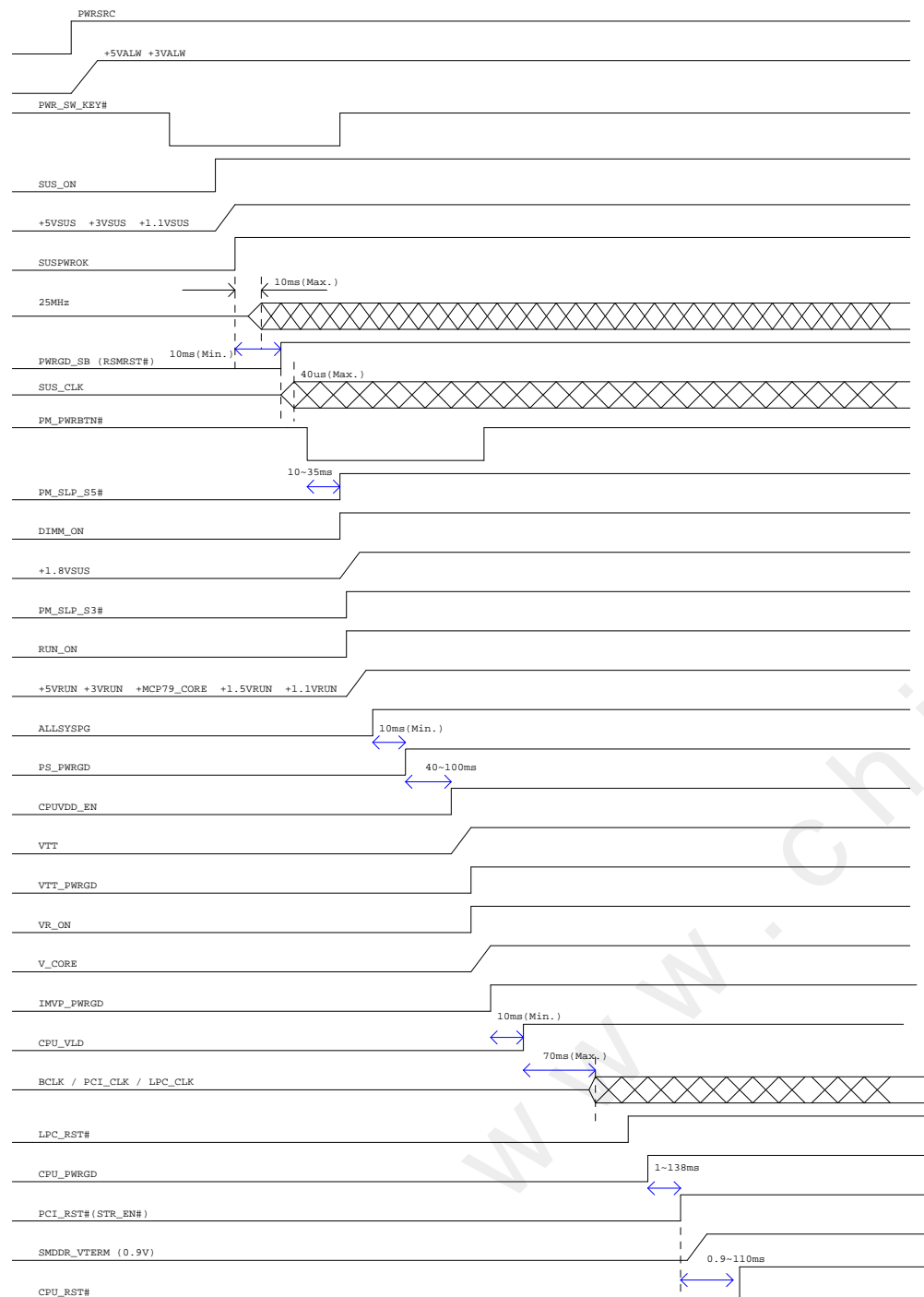


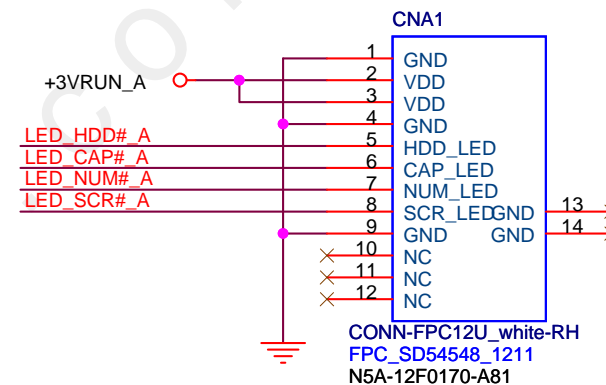
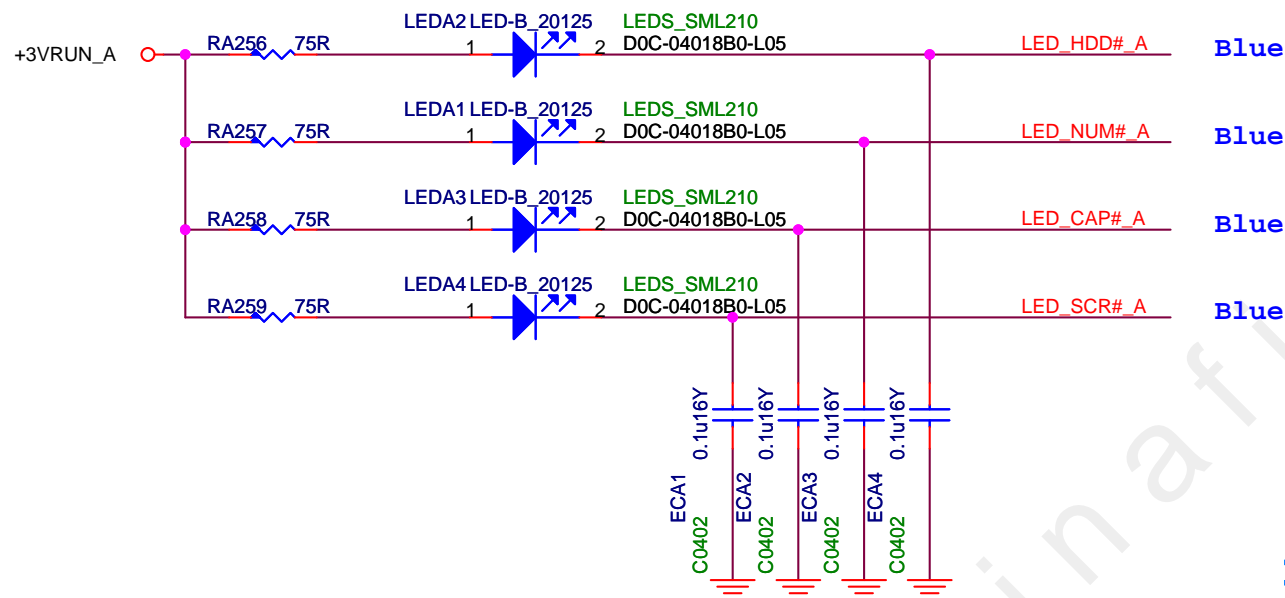
FM1
X_FIDUCIAL



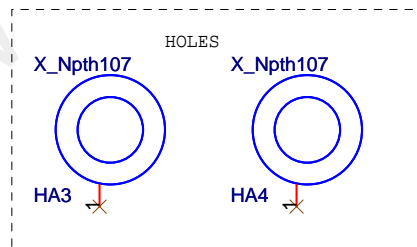
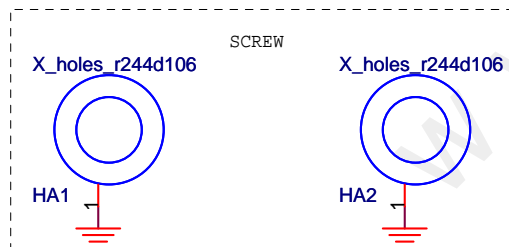
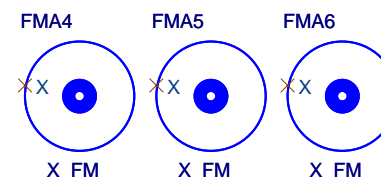
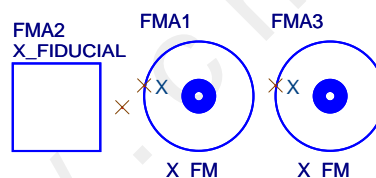
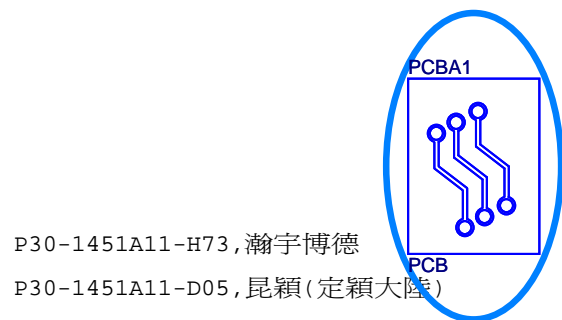
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G0 to S0 Power-Up Timing





for CHANNEL



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