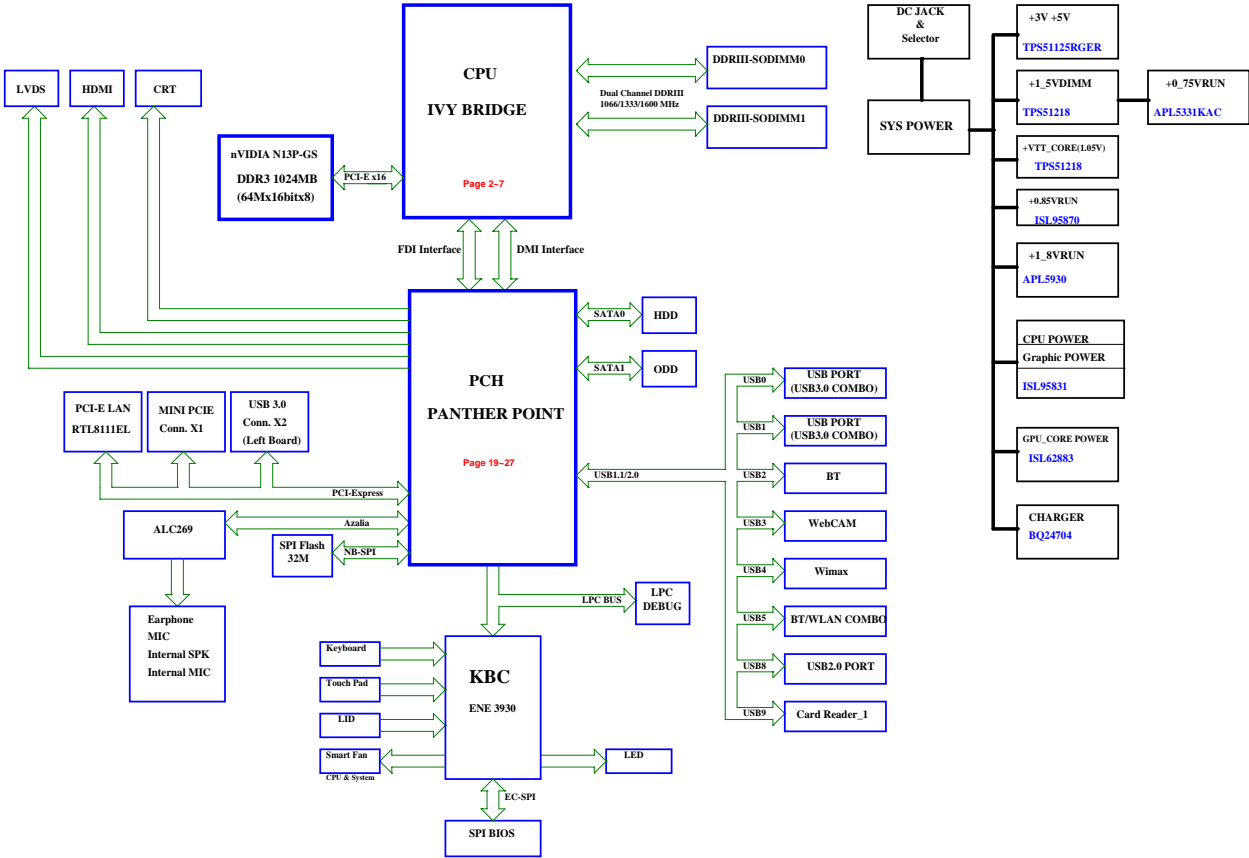
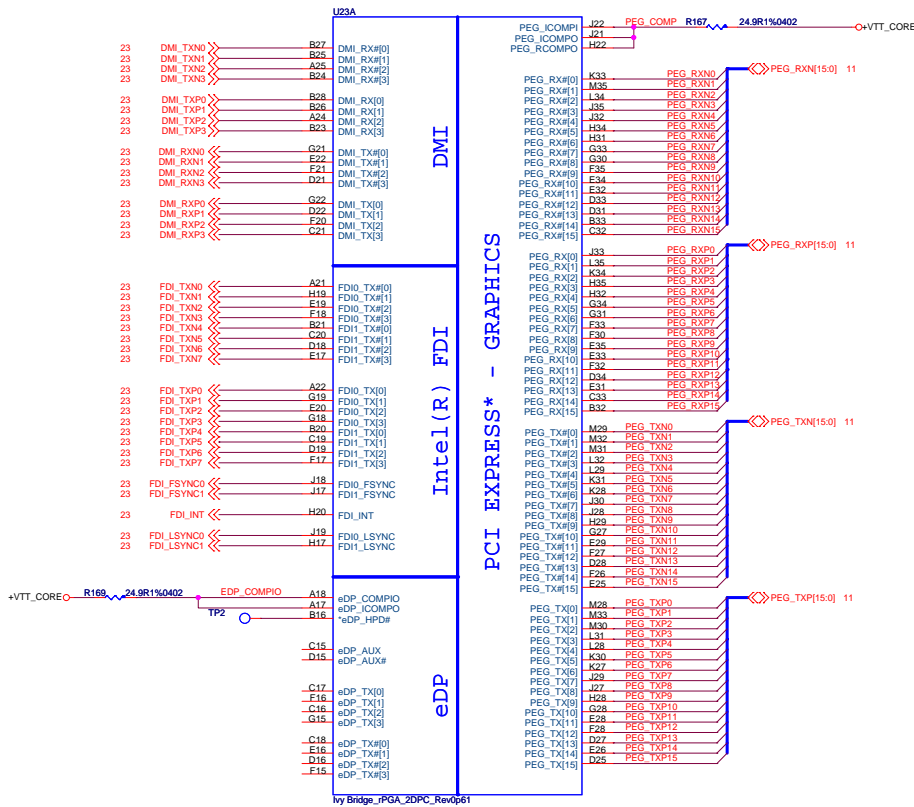


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45	[B] AUDIO/CONN
46	[B] USB3.0
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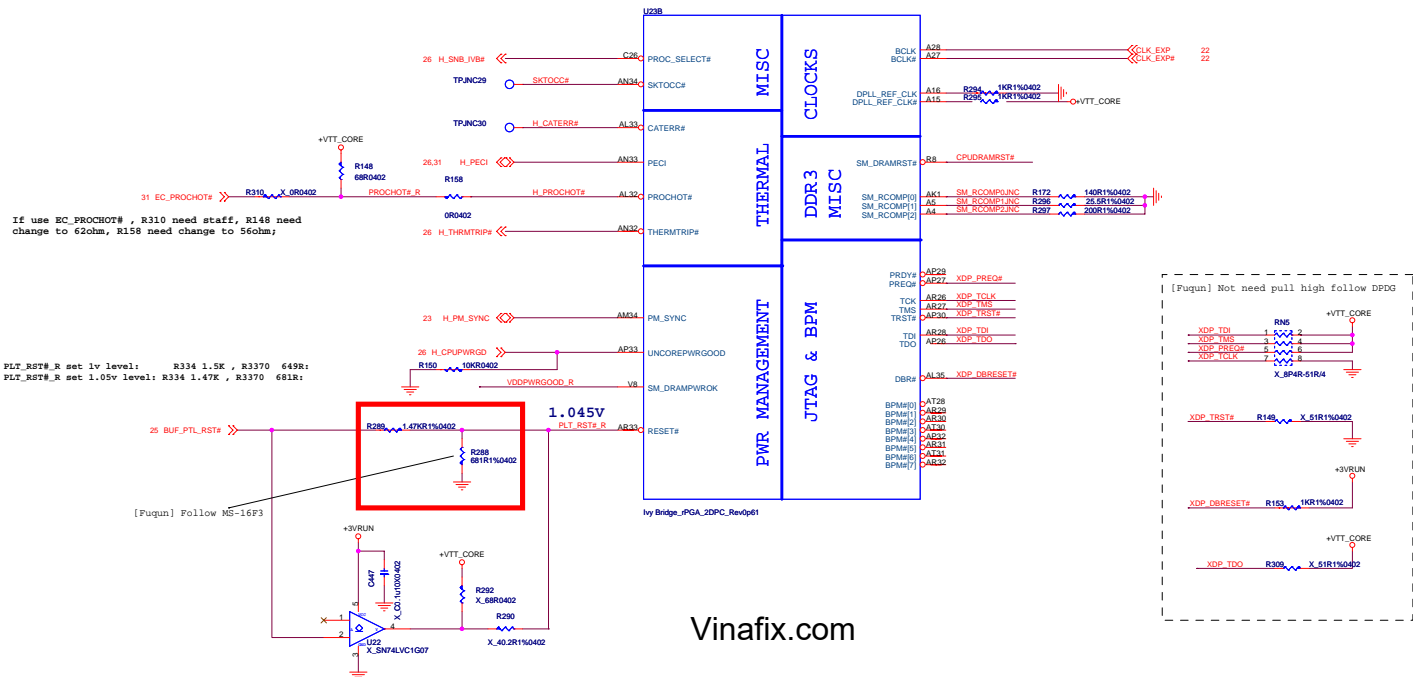


IVY BRIDGE PROCESSOR (HOST)

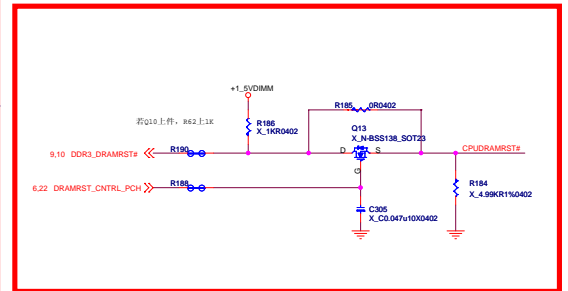
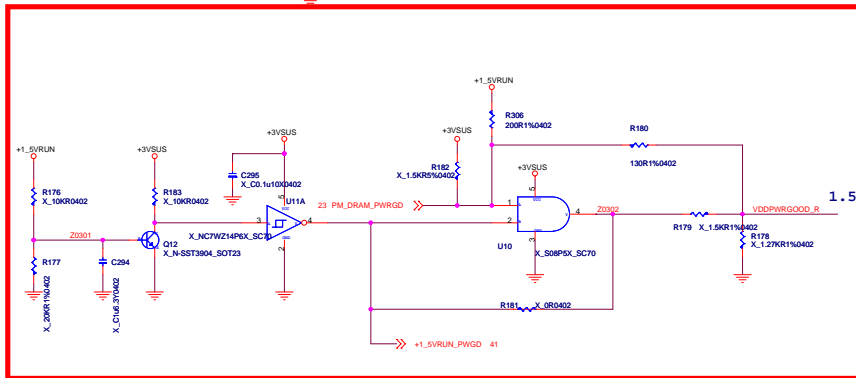


Title		
PROCESSOR-1 (HOST BUS)		
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B	MS-1755	1.0
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IVY BRIDGE PROCESSOR (CLK,MISC,JTAG)

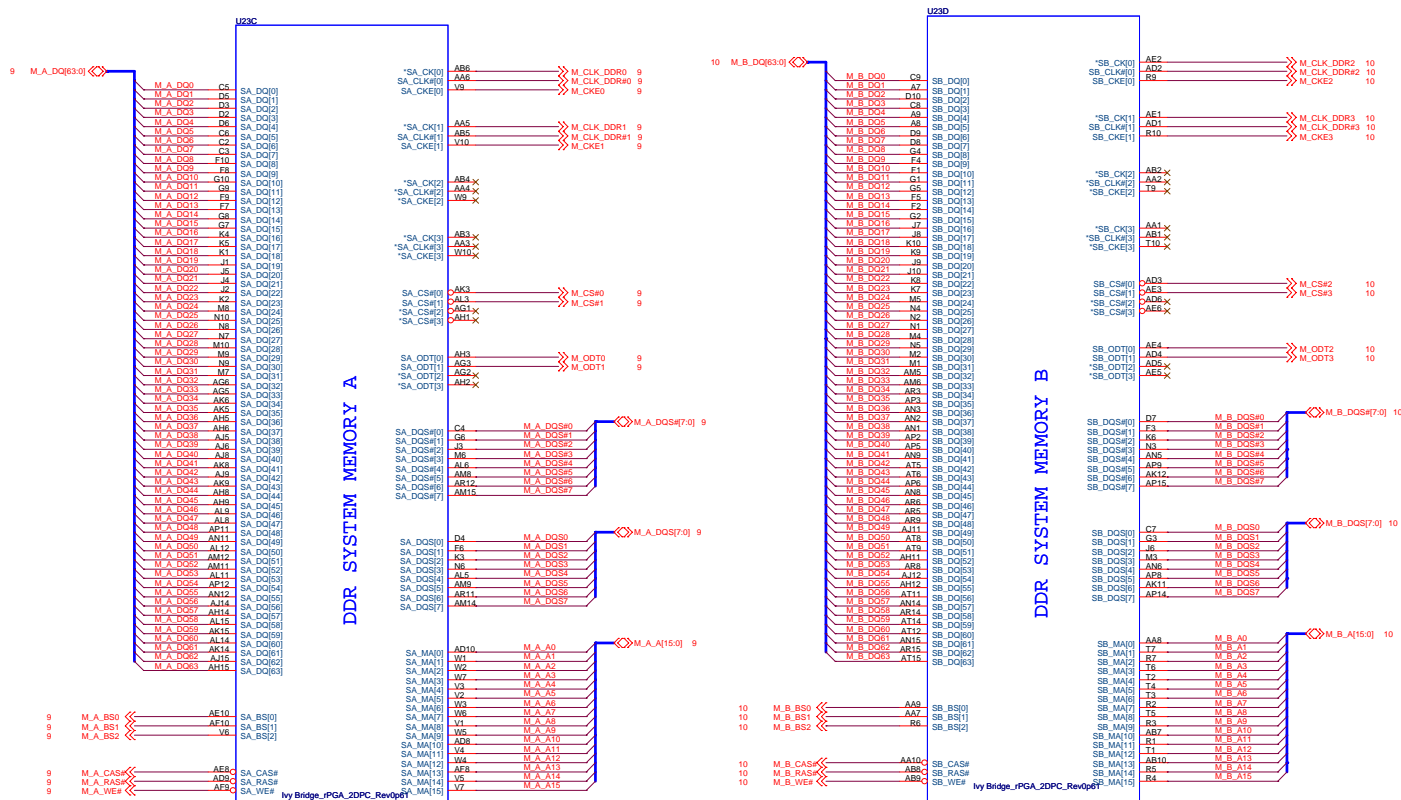


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PROCESSOR-2 (MISC)			
Size	Document Number	Rev	
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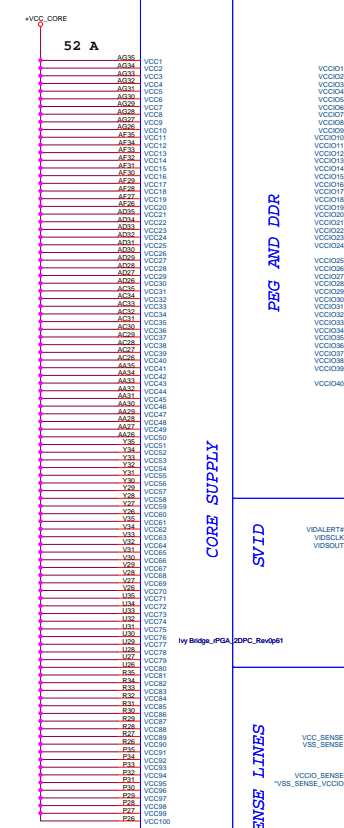
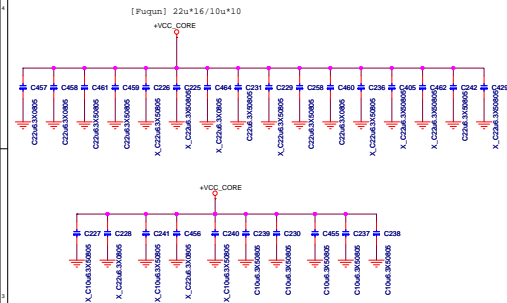
IVY BRIDGE PROCESSOR (DDR3)



IVY BRIDGE PROCESSOR (POWER)

[Purgen] 0.3-1.52V
[Purgen] 45W----94A
35W----52A

POWER

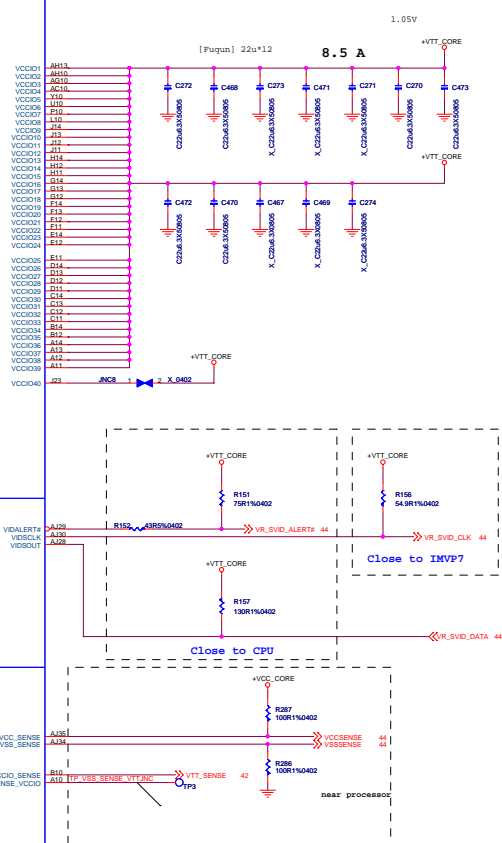


PEG AND DDR

CORE SUPPLY

SVID

SENSE LINES

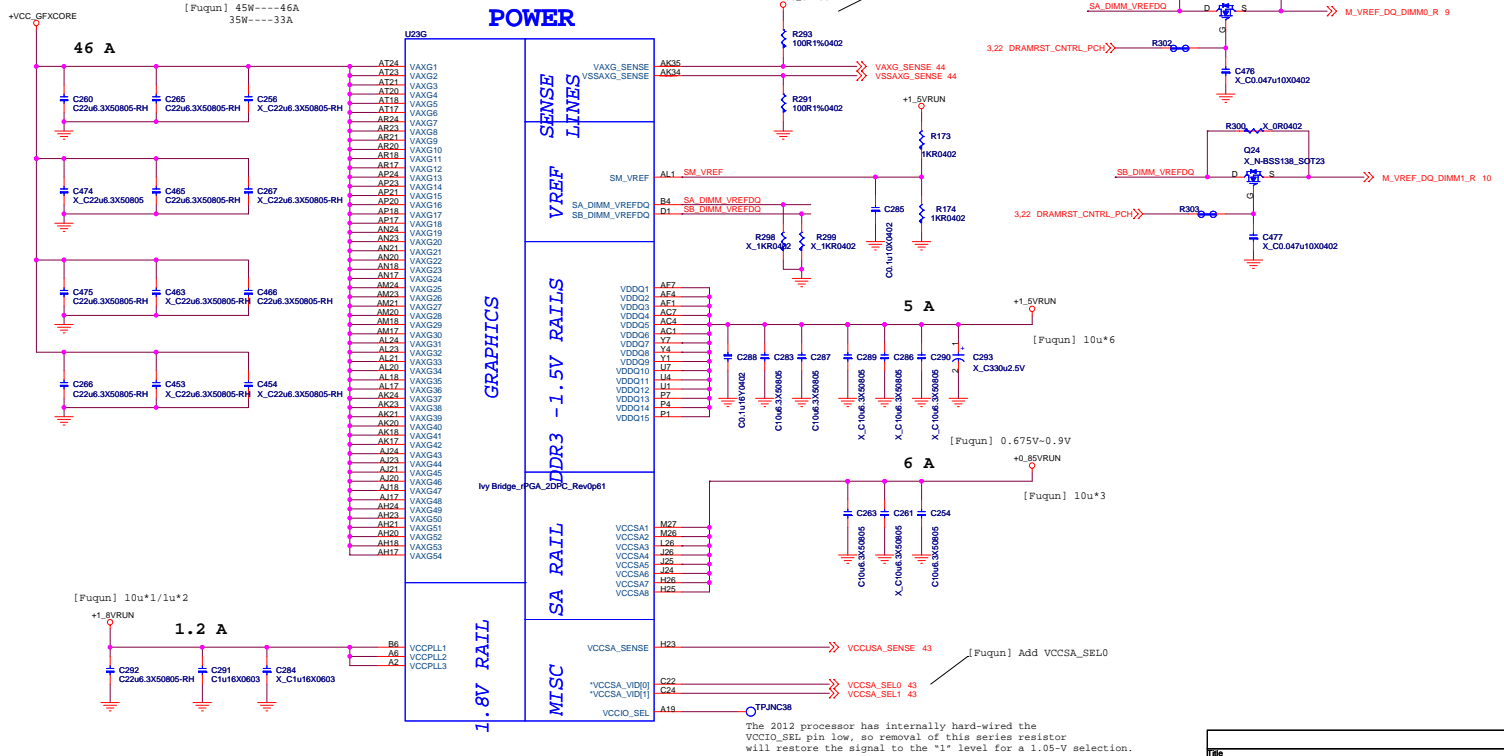


PROCESSOR-4 (POWER)			
Rev	Document Number	Rev	Rev
C	MS-1755		1.0
Date: 13 Nov 2011			

IVY BRIDGE PROCESSOR (GRAPHICS POWER)

```
[Fuqun] 22u*12           [Fuqun] 0V~1.52V
+VCC_GFXCORE             [Fuqun] 45W---46A
                          35W---33A
```

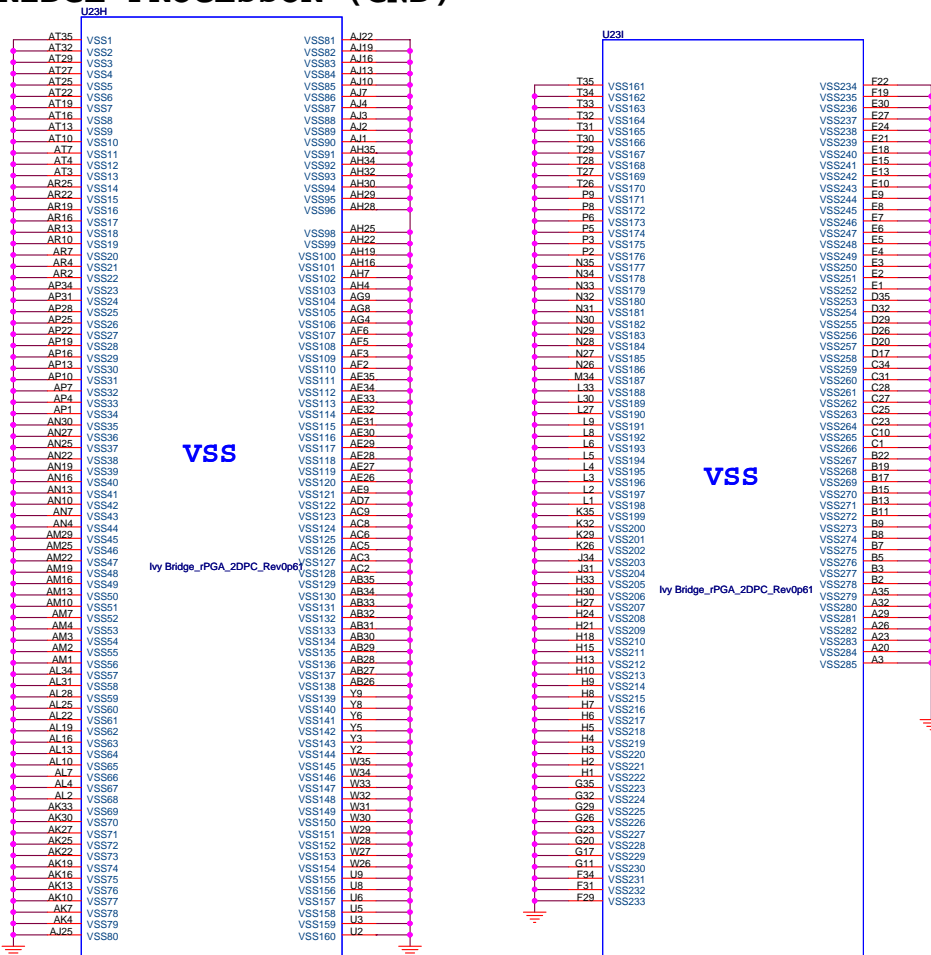
PPDG Recommend 100R



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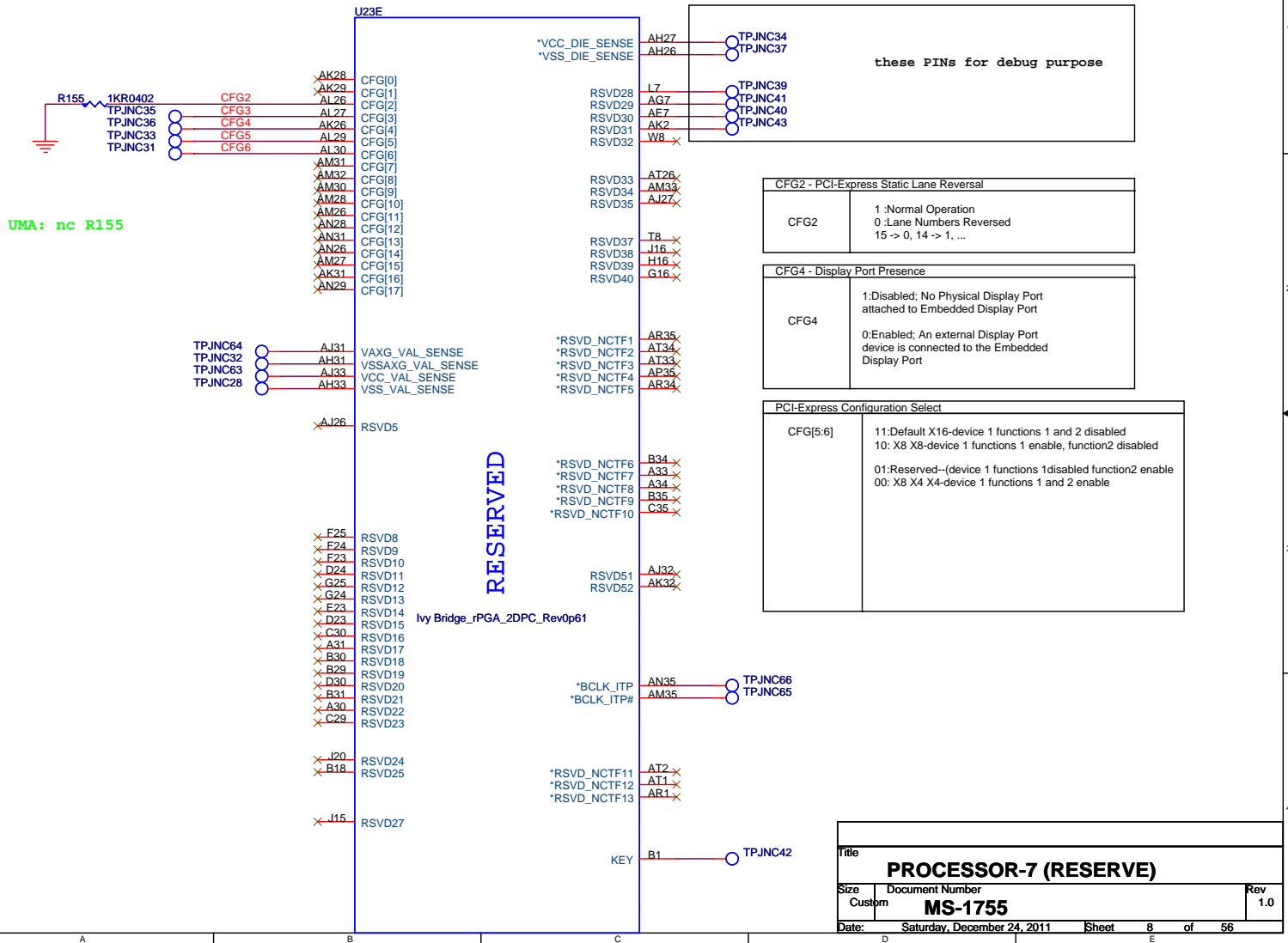
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PROCESSOR-5 (GRAPHICS POWER)			
Size	Document Number	Rev	
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IVY BRIDGE PROCESSOR (GND)

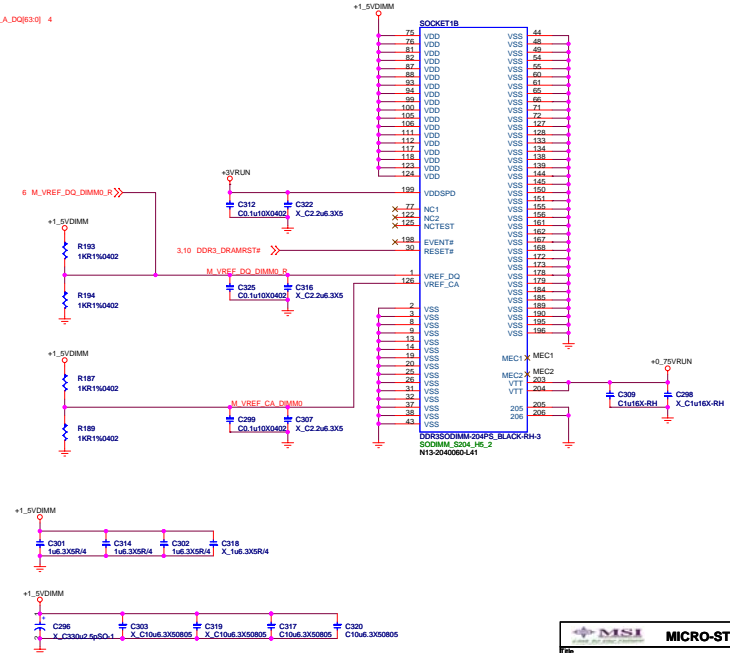
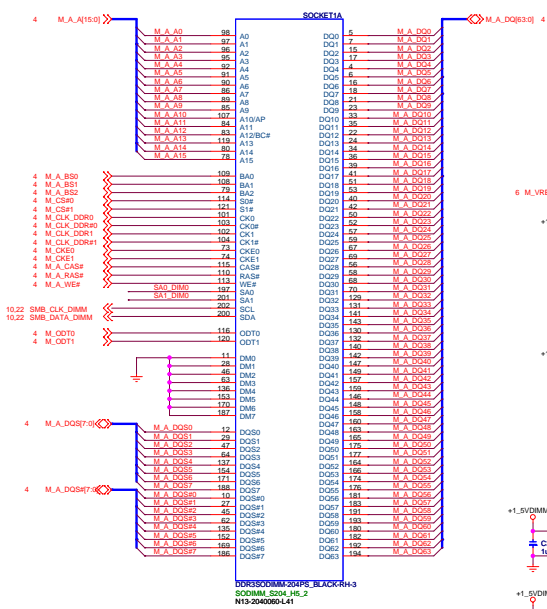



Title			
PROCESSOR-6 (GND)			
Size	Document Number	Rev	
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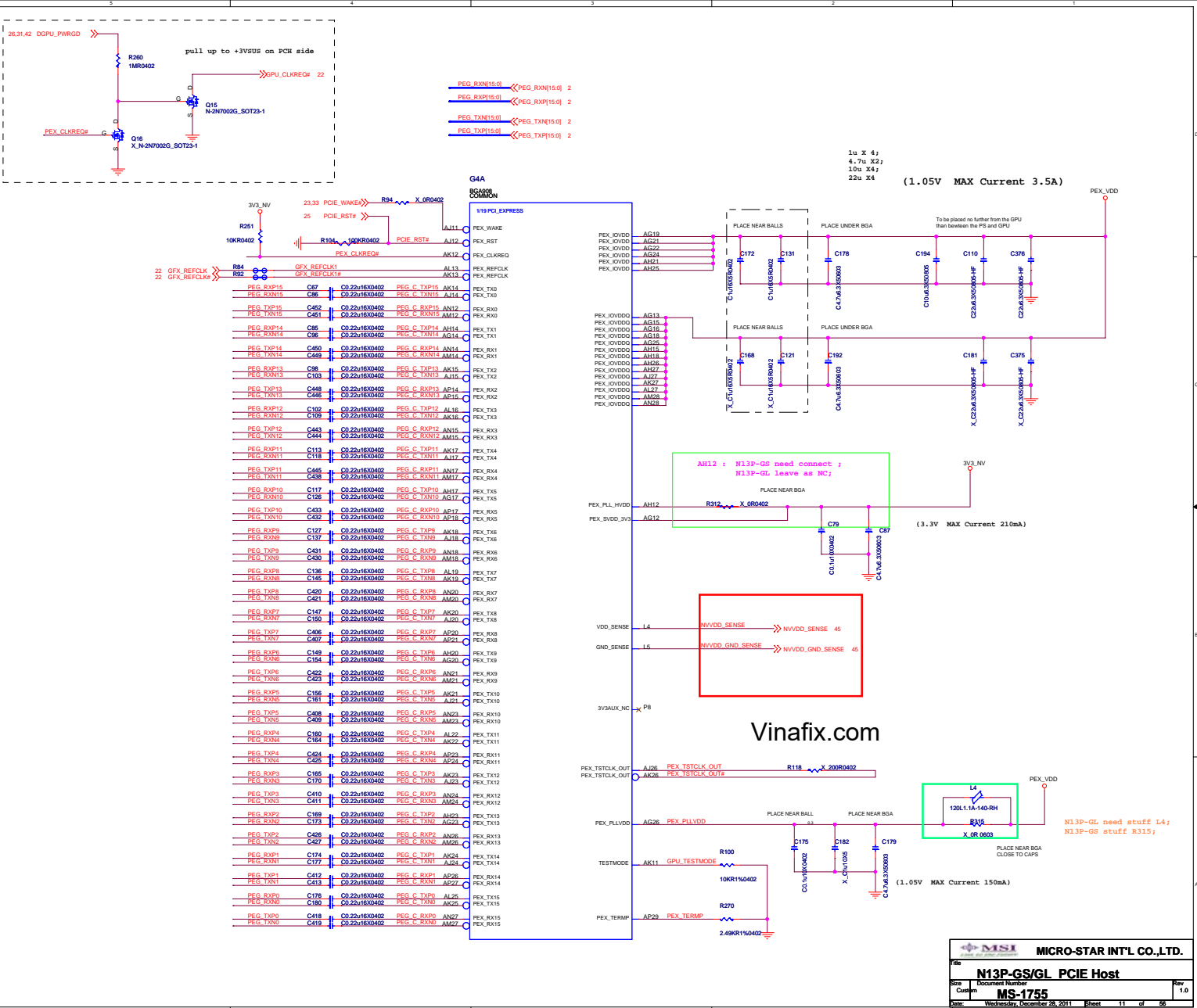
IVY BRIDGE PROCESSOR (RESERVED)



SODIMM#A



 MICRO-STAR INT'L CO.,LTD.	
File	
DDR3 SODIMMO	
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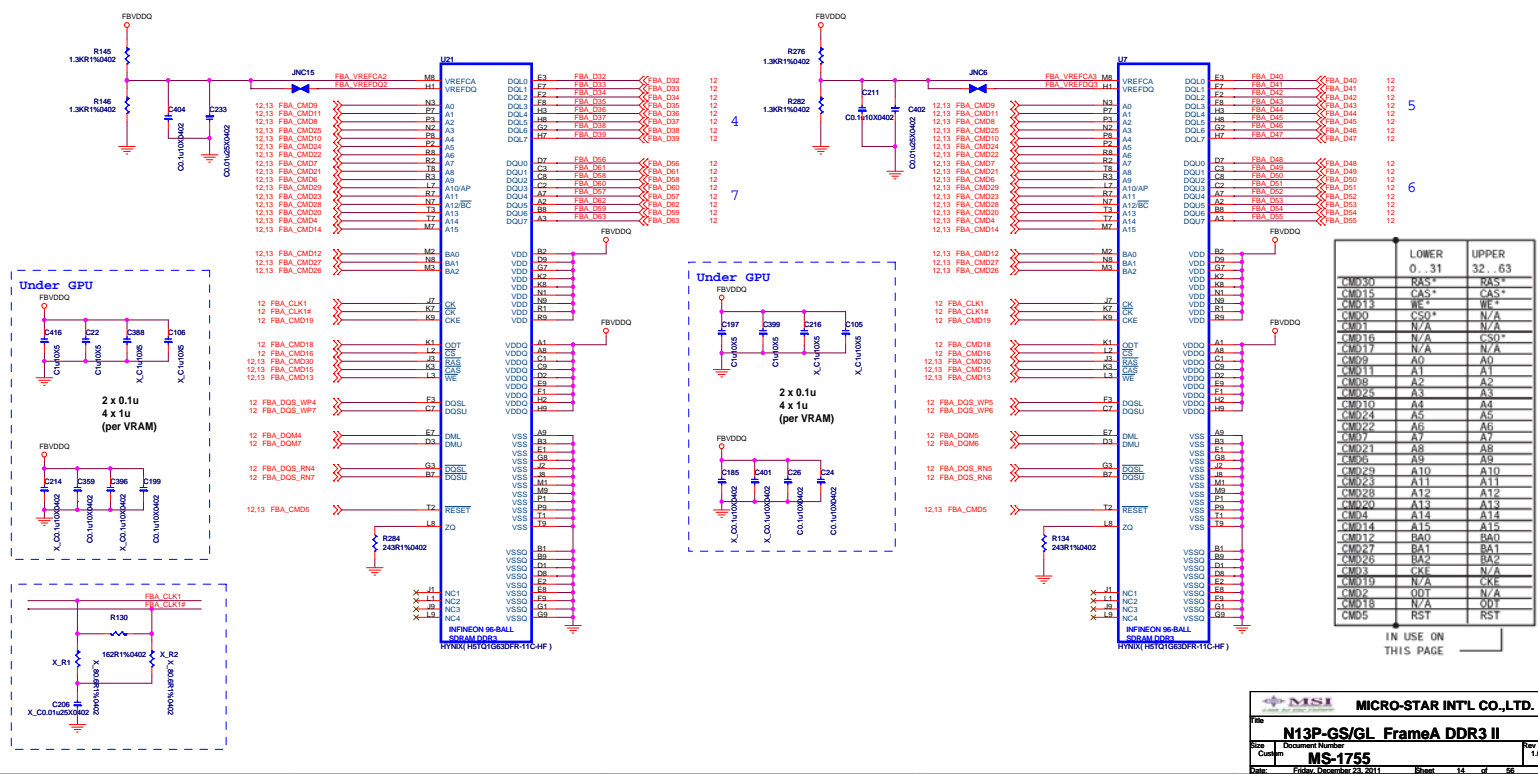


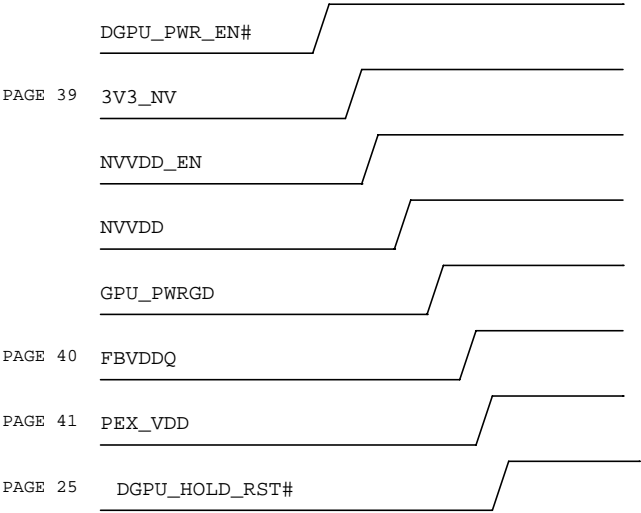
[illegible]

	LOWER 0 . 31	UPPER 32 . . 63
CM030	RAS* ^a	RAS*
CM035	CAS*	CAS*
CM013	WE*	WE*
CM010	CSO*	N/A
CM011	N/A	N/A
CM016	N/A	CSO*
CM017	N/A	N/A
CM009	A0	A0
CM011	A1	A1
CM008	A2	A2
CM025	A3	A3
CM010	A4	A4
CM024	A5	A5
CM022	A6	A6
CM007	A7	A7
CM021	A8	A8
CM006	A9	A9
CM029	A10	A10
CM023	A11	A11
CM028	A12	A12
CM020	A13	A13
CM024	A14	A14
CM014	A15	A15
CM012	BA0	BA0
CM027	BA1	BA1
CM026	BA2	BA2
CM033	CKE	N/A
CM039	N/A	CKE
CM021	ODT	N/A
CM018	N/A	ODT
CM005	RST	RST


IN USE ON
THIS PAGE

Memory Upper Partition A

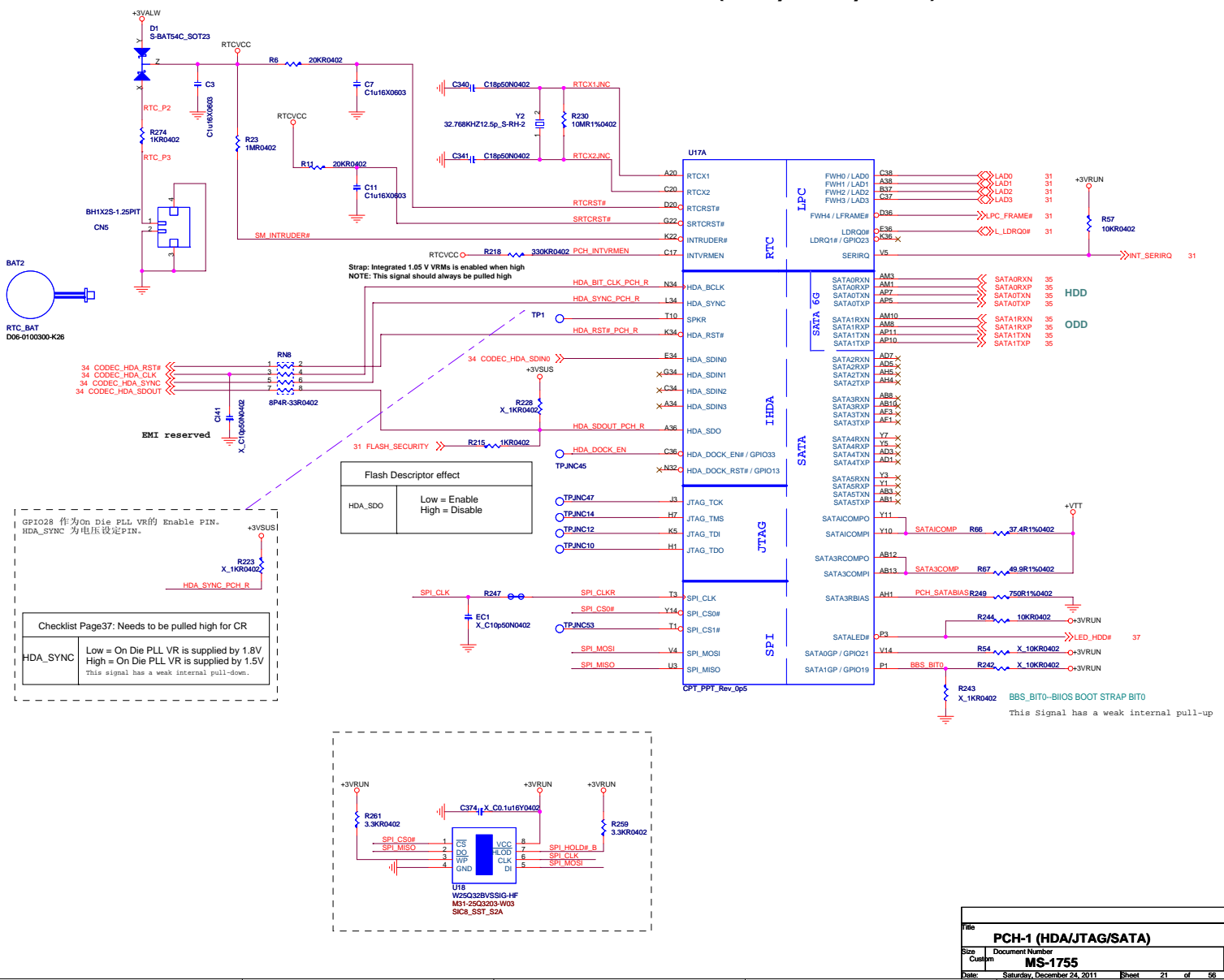




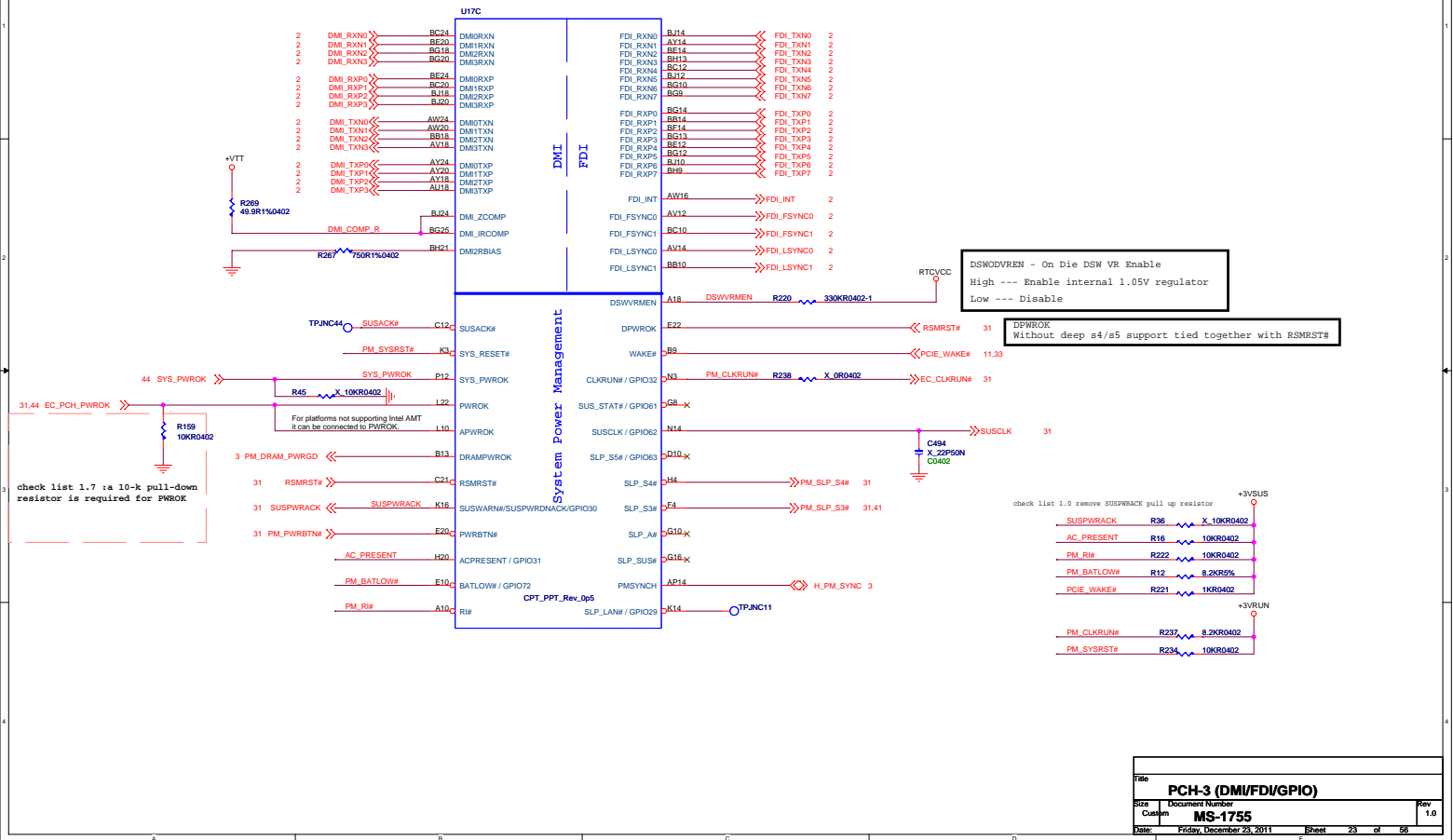
GPU Power Sequence

 MSI <small>MADE IN TAIWAN</small>		MICRO-STAR INT'L CO.,LTD.	
Title			
N13P-GS Power Sequence			
Size A	Document Number MS-1755		Rev 1.0
Date:	Friday, December 23, 2011	Sheet 20 of 56	
D		E	

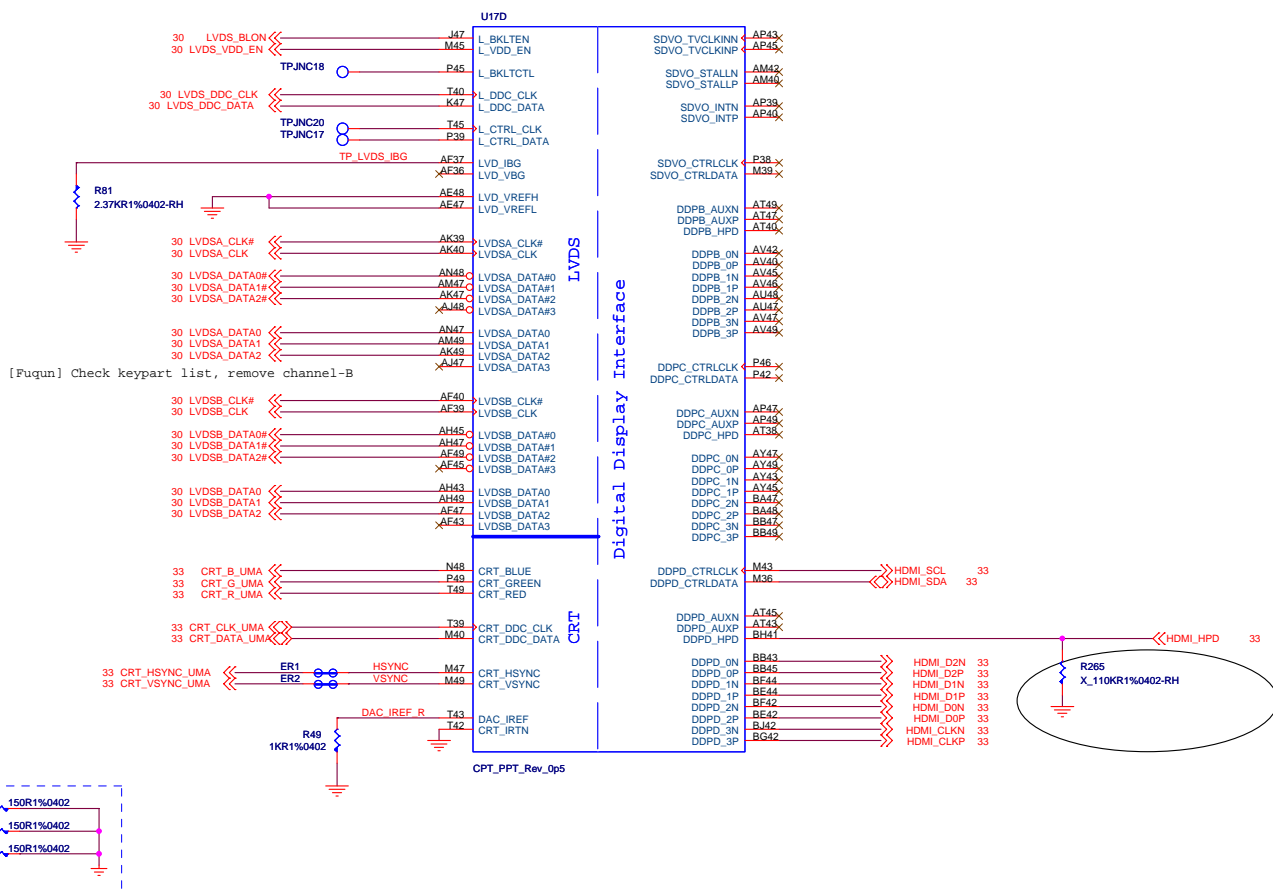
PANTHER POINT (HDA,JTAG,SATA)



PANTHER POINT (DMI,FDI,GPIO)

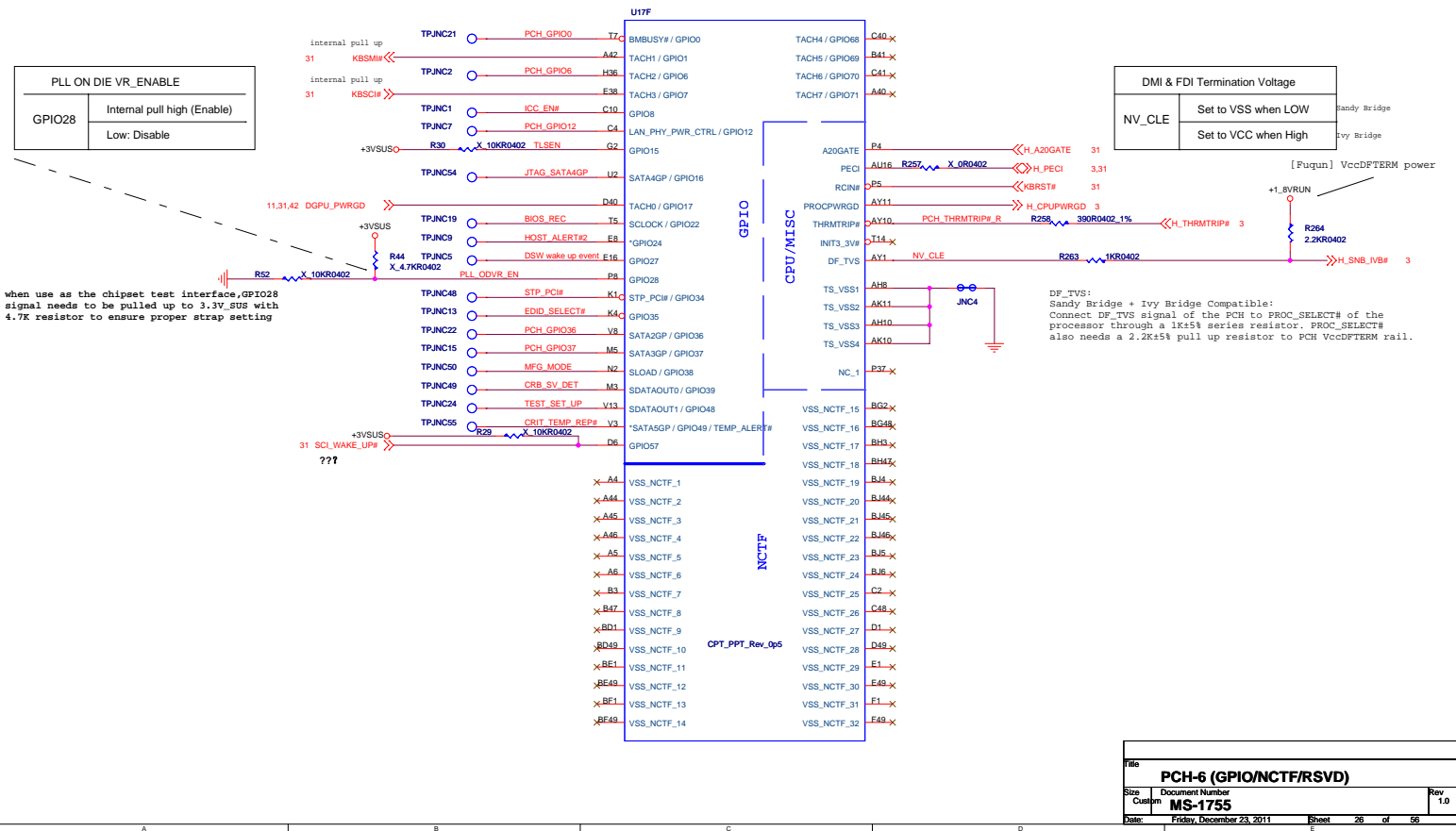


PANTHER POINT (LVDS,DDI)

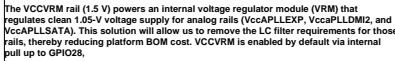


Title			
PCH-4 (LVDS/DDI)			
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PANTHER POINT (GPIO,NCTF,RSVD)



U17G	POWER



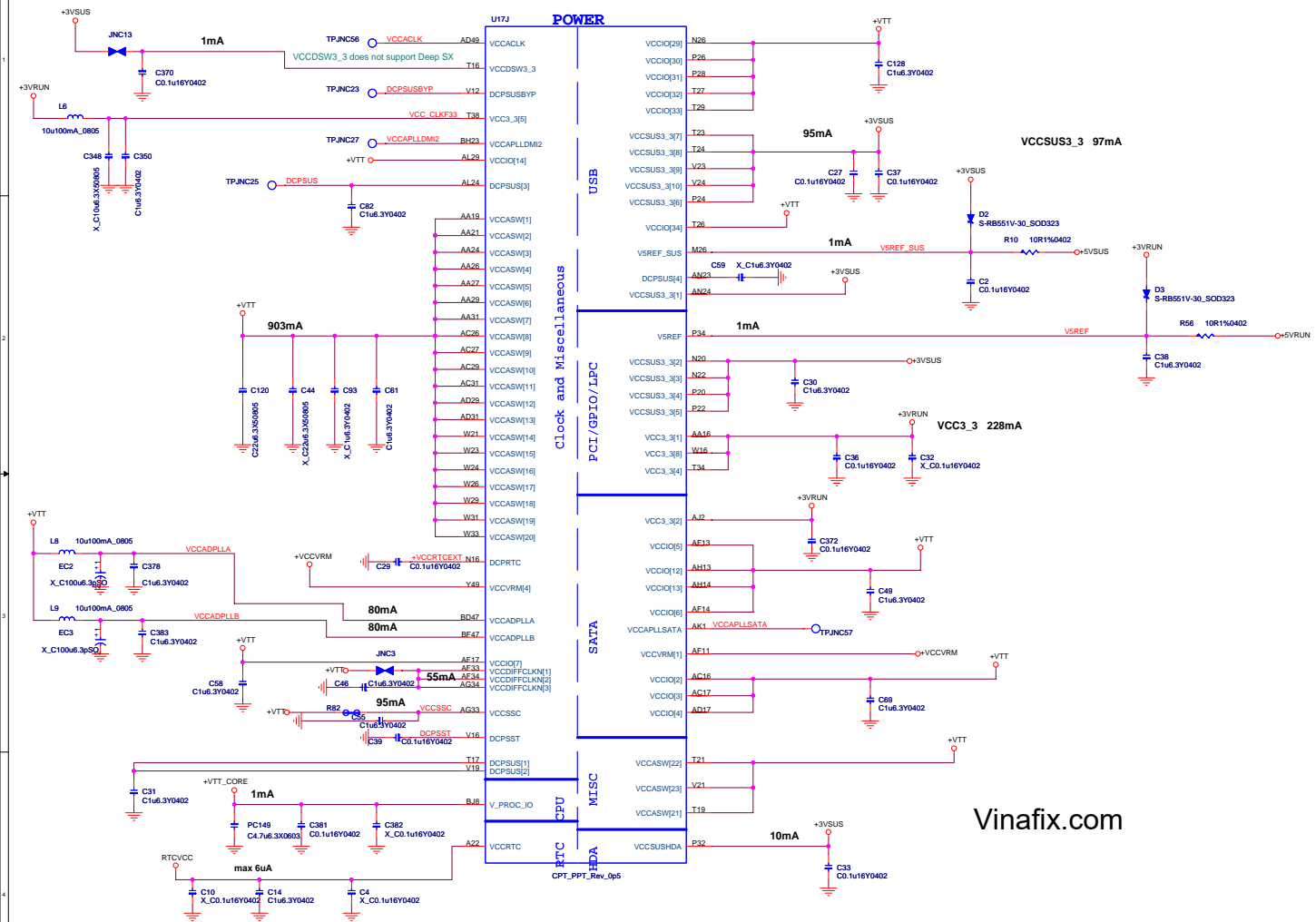
Checklist Page37: Needs to be pulled high for CR

Checklist Page37: Needs to be pulled high for CR

DA_SYNC Low = On Die PLL VR is supplied by 1.8V
High = On Die PLL VR is supplied by 1.5V
This signal has a weak internal pull-down.

Title			
PCH-7 (POWER)			
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PANTHER POINT (POWER)



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Title			
PCH-8 (POWER)			
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PANTHER Point (GND)

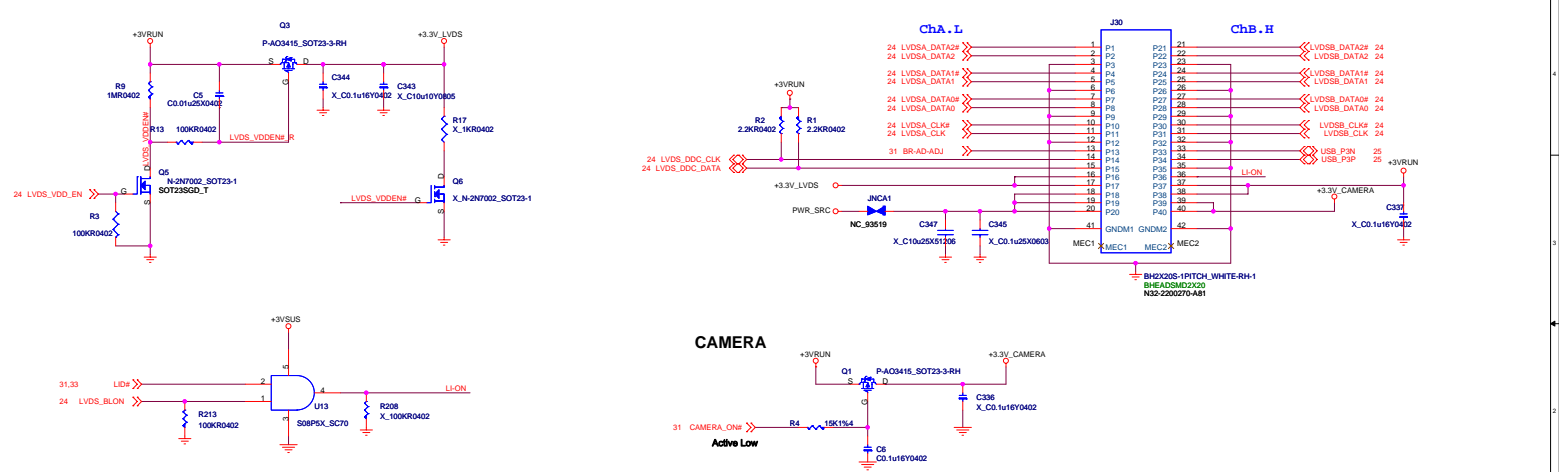
U17H			
HS	VSS[0]		
AA12	VSS[1]	VSS[80]	AK38
AA2	VSS[2]		
AA3	VSS[3]	VSS[81]	AK4
AA3	VSS[4]	VSS[82]	AK42
AA3	VSS[5]	VSS[83]	AK46
AB1	VSS[6]	VSS[84]	AK5
AB1	VSS[7]	VSS[85]	AL16
AB4	VSS[8]	VSS[86]	AL17
AB4	VSS[9]	VSS[87]	AL19
AB4	VSS[10]	VSS[88]	AL21
AB5	VSS[11]	VSS[89]	AL23
AB7	VSS[12]	VSS[90]	AL25
AC19	VSS[13]	VSS[91]	AL27
AC2	VSS[14]	VSS[92]	AL31
AC2	VSS[15]	VSS[93]	AL33
AC3	VSS[16]	VSS[94]	AL34
AC3	VSS[17]	VSS[95]	AL46
AC4	VSS[18]	VSS[96]	AM11
AC4	VSS[19]	VSS[97]	AM14
AD1	VSS[20]	VSS[98]	AM38
AD1	VSS[21]	VSS[99]	AM39
AD1	VSS[22]	VSS[100]	AM43
AD1	VSS[23]	VSS[101]	AM5
AD1	VSS[24]	VSS[102]	AM6
AD2	VSS[25]	VSS[103]	AM7
AD2	VSS[26]	VSS[104]	AN2
AD3	VSS[27]	VSS[105]	AN29
AD3	VSS[28]	VSS[106]	AN3
AD3	VSS[29]	VSS[107]	AN31
AD3	VSS[30]	VSS[108]	AN3
AD3	VSS[31]	VSS[109]	AP12
AD3	VSS[32]	VSS[110]	AP15
AD3	VSS[33]	VSS[111]	AP28
AD4	VSS[34]	VSS[112]	AP30
AD4	VSS[35]	VSS[113]	AP32
AD4	VSS[36]	VSS[114]	AP38
AD4	VSS[37]	VSS[115]	AP4
AD4	VSS[38]	VSS[116]	AP42
AD4	VSS[39]	VSS[117]	AP46
AD4	VSS[40]	VSS[118]	AP8
AE2	VSS[41]	VSS[119]	AR48
AE2	VSS[42]	VSS[120]	AT11
AE2	VSS[43]	VSS[121]	AT13
AE2	VSS[44]	VSS[122]	AT15
AD14	VSS[45]	VSS[123]	AT16
AD16	VSS[46]	VSS[124]	AT22
AD16	VSS[47]	VSS[125]	AT26
AD16	VSS[48]	VSS[126]	AT29
AD16	VSS[49]	VSS[127]	AT30
AD16	VSS[50]	VSS[128]	AT32
AD16	VSS[51]	VSS[129]	AT34
AD16	VSS[52]	VSS[130]	AT38
AD16	VSS[53]	VSS[131]	AT44
AD16	VSS[54]	VSS[132]	AT46
AD16	VSS[55]	VSS[133]	AT4
AD16	VSS[56]	VSS[134]	AT24
AD16	VSS[57]	VSS[135]	AT30
AD16	VSS[58]	VSS[136]	AV16
AD16	VSS[59]	VSS[137]	AV20
AD16	VSS[60]	VSS[138]	AV24
AD16	VSS[61]	VSS[139]	AV30
AD16	VSS[62]	VSS[140]	AV4
AD16	VSS[63]	VSS[141]	AV44
AD16	VSS[64]	VSS[142]	AV8
AD16	VSS[65]	VSS[143]	AW14
AD16	VSS[66]	VSS[144]	AW18
AD16	VSS[67]	VSS[145]	AW2
AD16	VSS[68]	VSS[146]	AW22
AD16	VSS[69]	VSS[147]	AW26
AD16	VSS[70]	VSS[148]	AW28
AD16	VSS[71]	VSS[149]	AW32
AD16	VSS[72]	VSS[150]	AW34
AD16	VSS[73]	VSS[151]	AW36
AD16	VSS[74]	VSS[152]	AW40
AD16	VSS[75]	VSS[153]	AW46
AD16	VSS[76]	VSS[154]	AW48
AD16	VSS[77]	VSS[155]	AV11
AD16	VSS[78]	VSS[156]	AV12
AD16	VSS[79]	VSS[157]	AV22
AD16	VSS[80]	VSS[158]	AV28

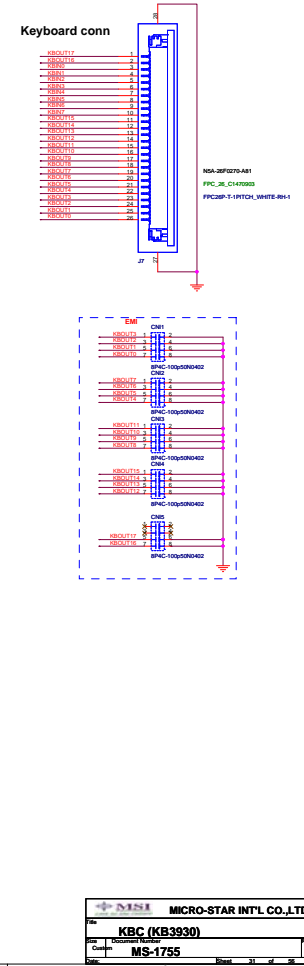
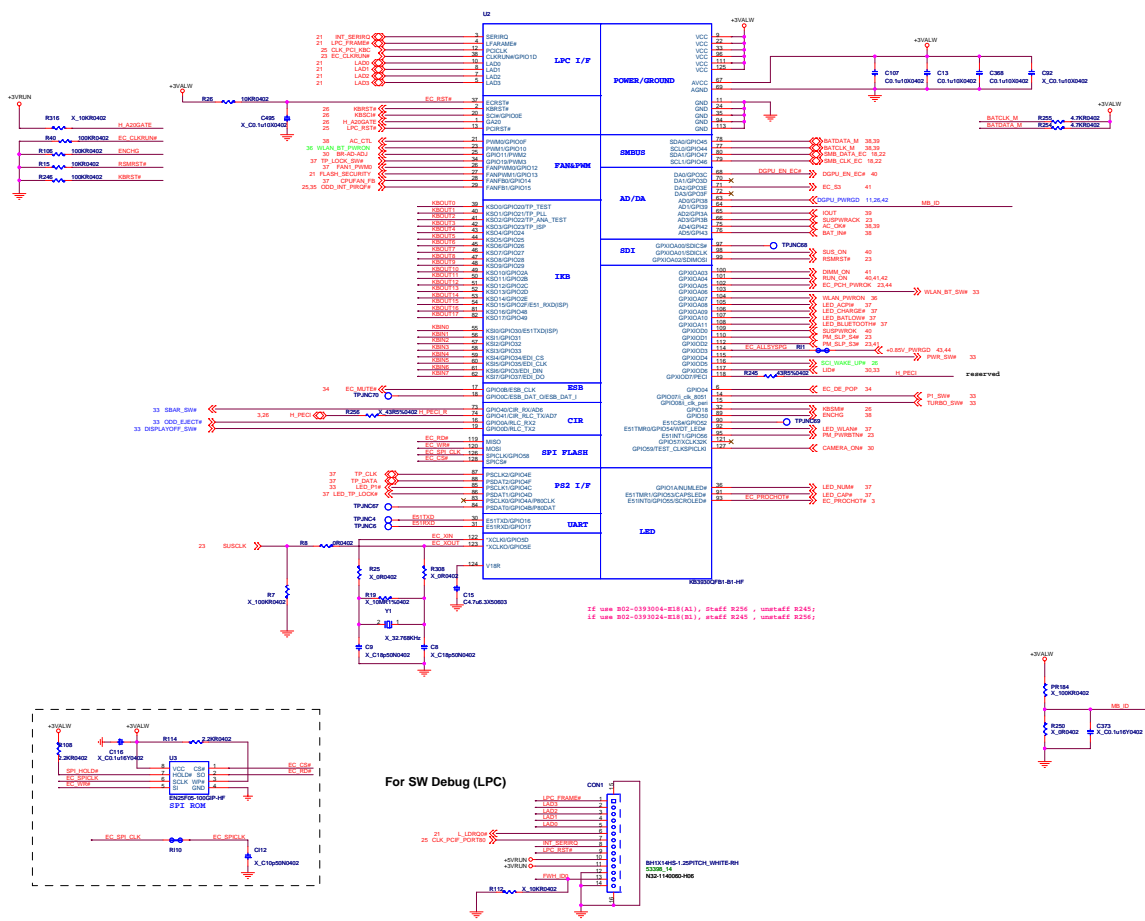
CPT_PPT_Rev_0p5

U17I			
AY4	VSS[159]	VSS[299]	H46
AY42	VSS[160]	VSS[300]	K18
AY46	VSS[161]	VSS[301]	K28
AY8	VSS[162]	VSS[302]	K39
B11	VSS[163]	VSS[303]	K46
B15	VSS[164]	VSS[304]	K7
B19	VSS[165]	VSS[305]	L18
B23	VSS[166]	VSS[306]	L2
B27	VSS[167]	VSS[307]	L20
B31	VSS[168]	VSS[308]	L28
B35	VSS[169]	VSS[309]	L36
B39	VSS[170]	VSS[310]	L46
B7	VSS[171]	VSS[311]	L6
B12	VSS[172]	VSS[312]	M12
B16	VSS[173]	VSS[313]	M18
B20	VSS[174]	VSS[314]	M22
B24	VSS[175]	VSS[315]	M24
B28	VSS[176]	VSS[316]	M26
B32	VSS[177]	VSS[317]	M30
B36	VSS[178]	VSS[318]	M32
B40	VSS[179]	VSS[319]	M34
B44	VSS[180]	VSS[320]	M36
B48	VSS[181]	VSS[321]	M38
B52	VSS[182]	VSS[322]	M40
B56	VSS[183]	VSS[323]	M42
B60	VSS[184]	VSS[324]	M44
B64	VSS[185]	VSS[325]	M46
B68	VSS[186]	VSS[326]	M48
B72	VSS[187]	VSS[327]	M50
B76	VSS[188]	VSS[328]	M52
B80	VSS[189]	VSS[329]	M54
B84	VSS[190]	VSS[330]	M56
B88	VSS[191]	VSS[331]	M58
B92	VSS[192]	VSS[332]	M60
B96	VSS[193]	VSS[333]	M62
B100	VSS[194]	VSS[334]	M64
B104	VSS[195]	VSS[335]	M66
B108	VSS[196]	VSS[336]	M68
B112	VSS[197]	VSS[337]	M70
B116	VSS[198]	VSS[338]	M72
B120	VSS[199]	VSS[339]	M74
B124	VSS[200]	VSS[340]	M76
B128	VSS[201]	VSS[341]	M78
B132	VSS[202]	VSS[342]	M80
B136	VSS[203]	VSS[343]	M82
B140	VSS[204]	VSS[344]	M84
B144	VSS[205]	VSS[345]	M86
B148	VSS[206]	VSS[346]	M88
B152	VSS[207]	VSS[347]	M90
B156	VSS[208]	VSS[348]	M92
B160	VSS[209]	VSS[349]	M94
B164	VSS[210]	VSS[350]	M96
B168	VSS[211]	VSS[351]	M98
B172	VSS[212]	VSS[352]	M100
B176	VSS[213]	VSS[353]	M102
B180	VSS[214]	VSS[354]	M104
B184	VSS[215]	VSS[355]	M106
B188	VSS[216]	VSS[356]	M108
B192	VSS[217]	VSS[357]	M110
B196	VSS[218]	VSS[358]	M112
B200	VSS[219]	VSS[359]	M114
B204	VSS[220]	VSS[360]	M116
B208	VSS[221]	VSS[361]	M118
B212	VSS[222]	VSS[362]	M120
B216	VSS[223]	VSS[363]	M122
B220	VSS[224]	VSS[364]	M124
B224	VSS[225]	VSS[365]	M126
B228	VSS[226]	VSS[366]	M128
B232	VSS[227]	VSS[367]	M130
B236	VSS[228]	VSS[368]	M132
B240	VSS[229]	VSS[369]	M134
B244	VSS[230]	VSS[370]	M136
B248	VSS[231]	VSS[371]	M138
B252	VSS[232]	VSS[372]	M140
B256	VSS[233]	VSS[373]	M142
B260	VSS[234]	VSS[374]	M144
B264	VSS[235]	VSS[375]	M146
B268	VSS[236]	VSS[376]	M148
B272	VSS[237]	VSS[377]	M150
B276	VSS[238]	VSS[378]	M152
B280	VSS[239]	VSS[379]	M154
B284	VSS[240]	VSS[380]	M156
B288	VSS[241]	VSS[381]	M158
B292	VSS[242]	VSS[382]	M160
B296	VSS[243]	VSS[383]	M162
B300	VSS[244]	VSS[384]	M164
B304	VSS[245]	VSS[385]	M166
B308	VSS[246]	VSS[386]	M168
B312	VSS[247]	VSS[387]	M170
B316	VSS[248]	VSS[388]	M172
B320	VSS[249]	VSS[389]	M174
B324	VSS[250]	VSS[390]	M176
B328	VSS[251]	VSS[391]	M178
B332	VSS[252]	VSS[392]	M180
B336	VSS[253]	VSS[393]	M182
B340	VSS[254]	VSS[394]	M184
B344	VSS[255]	VSS[395]	M186
B348	VSS[256]	VSS[396]	M188
B352	VSS[257]	VSS[397]	M190
B356	VSS[258]	VSS[398]	M192

CPT_PPT_Rev_0p5

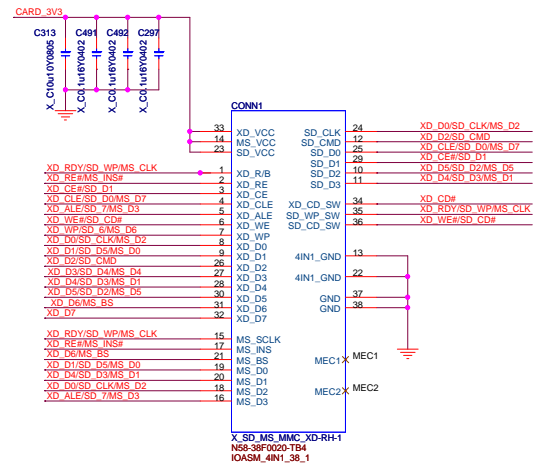
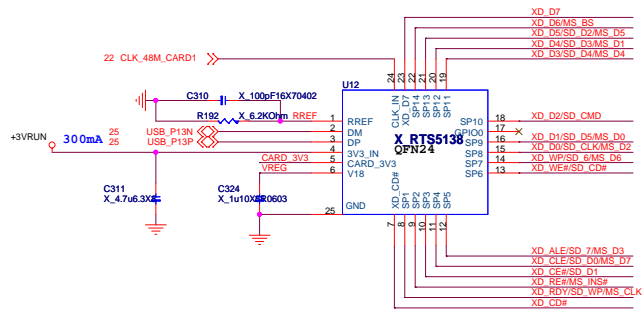
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PCH-9 (GND)			
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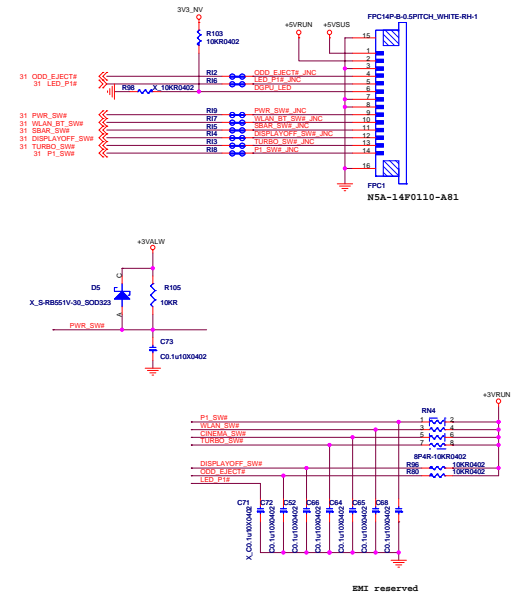


Card Reader controller RTS5138

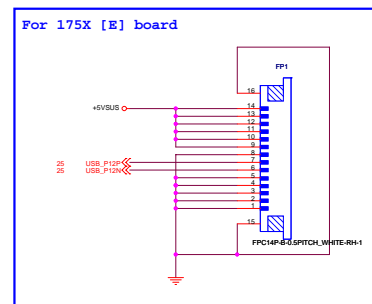
CFG for 16GX



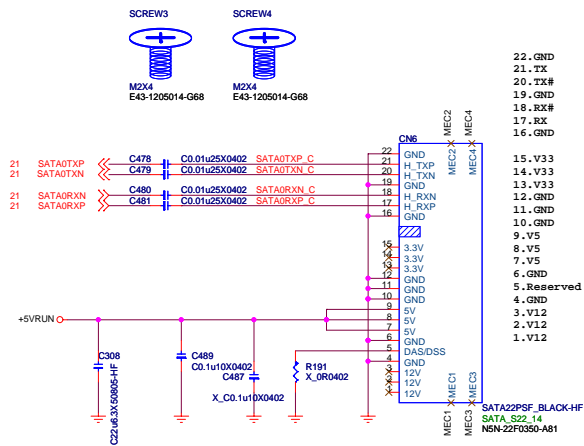
[C] board



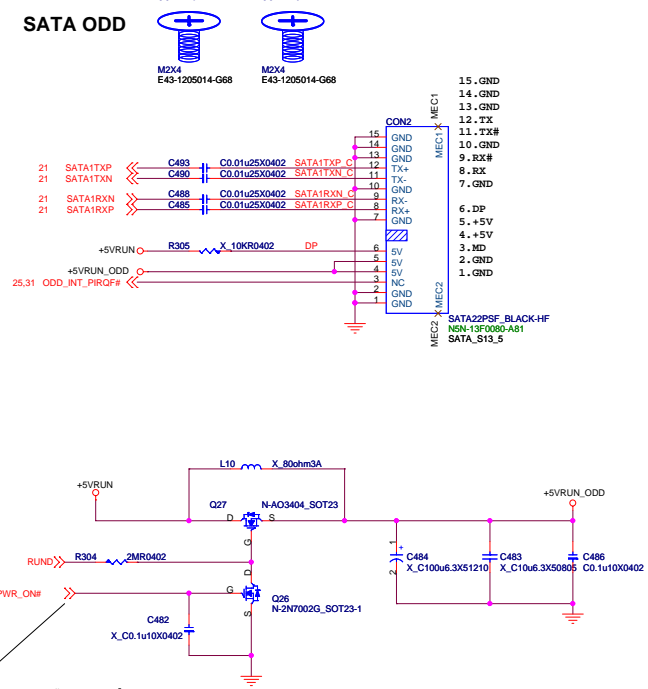
teknisi indonesia



SATA HDD

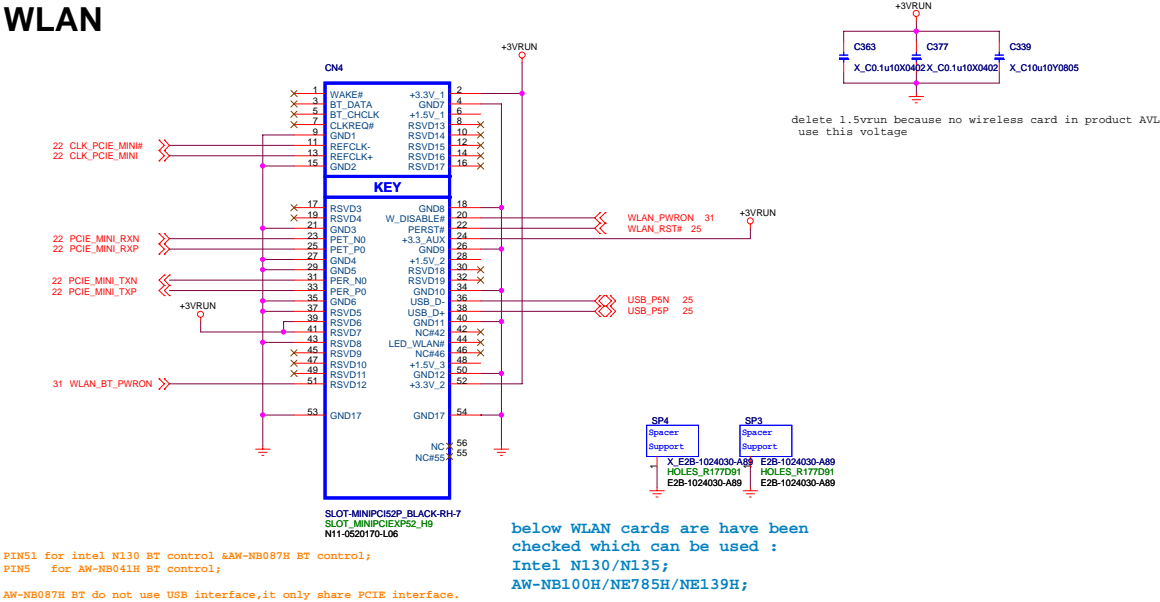


SATA ODD



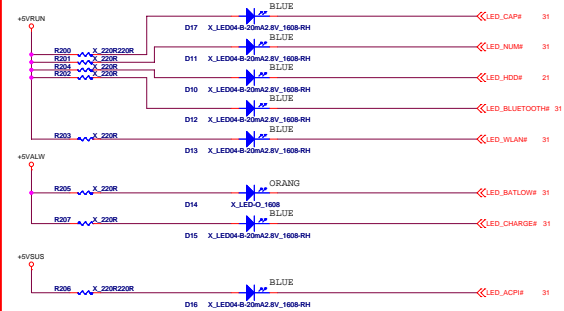
[Puqun] EC control change to PCH control

WLAN

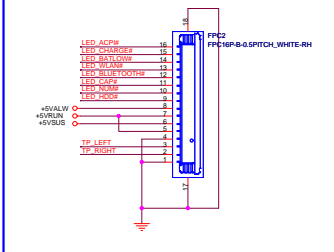


LED

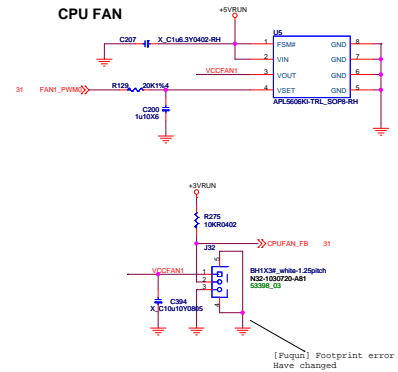
For 16GX



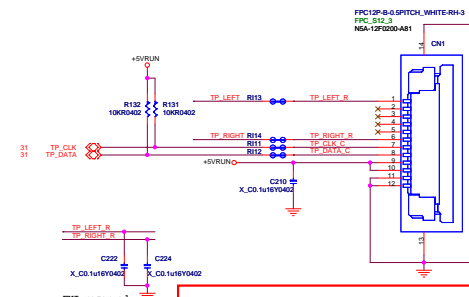
For 175X [D] board



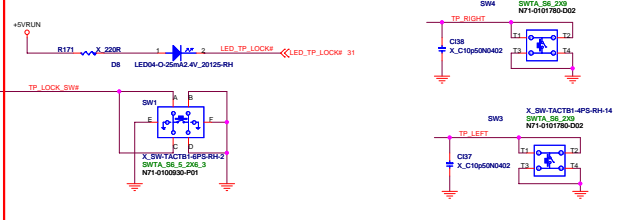
CPU FAN



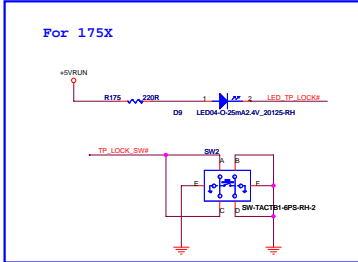
Touch Pad



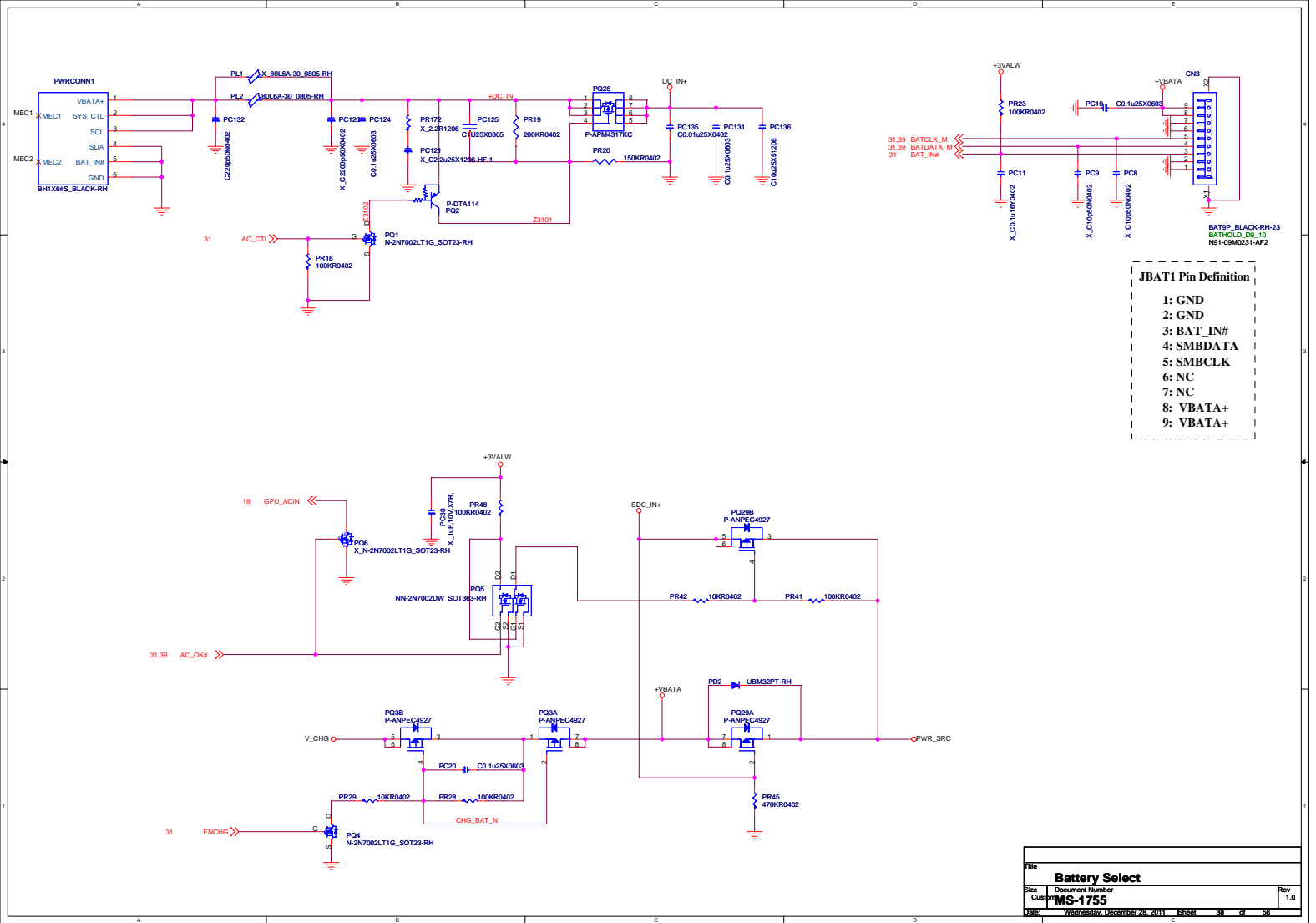
For 16GX



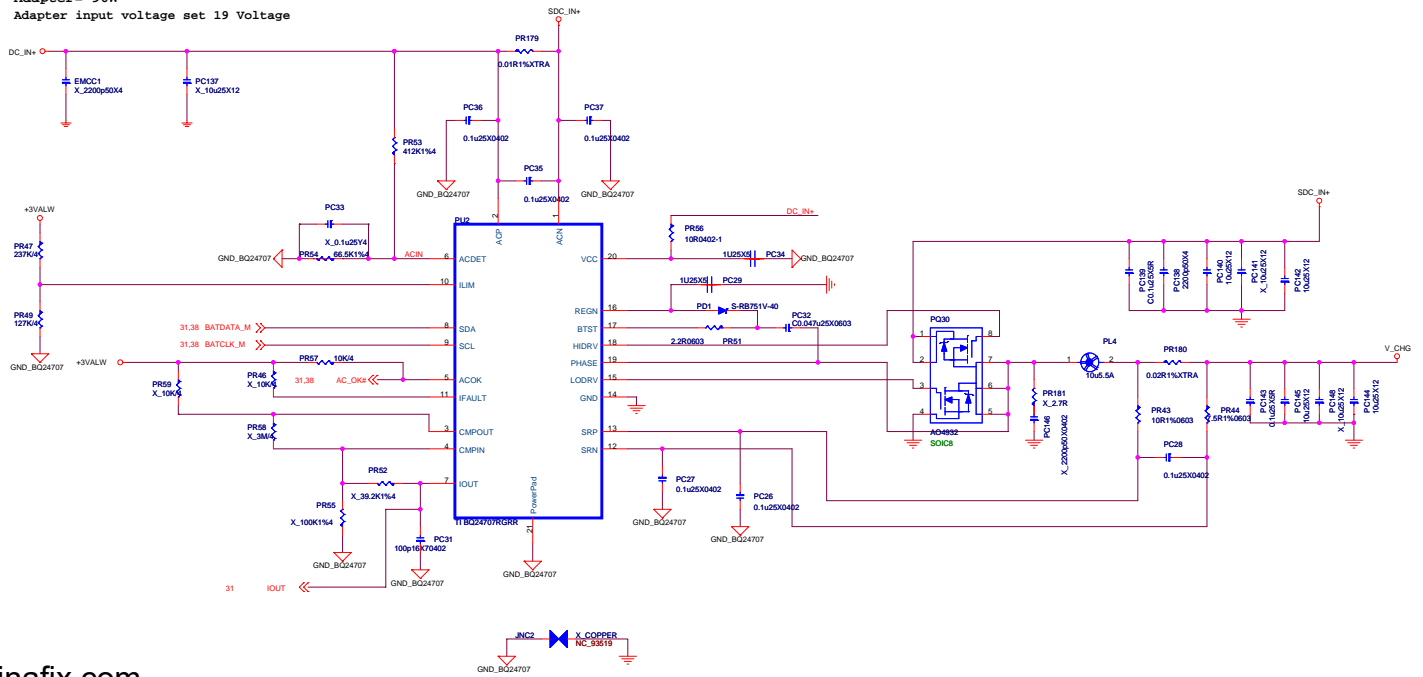
For 175X



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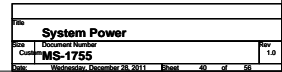
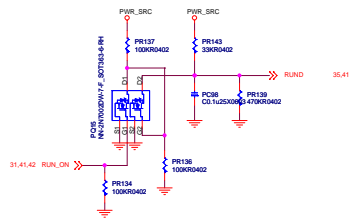


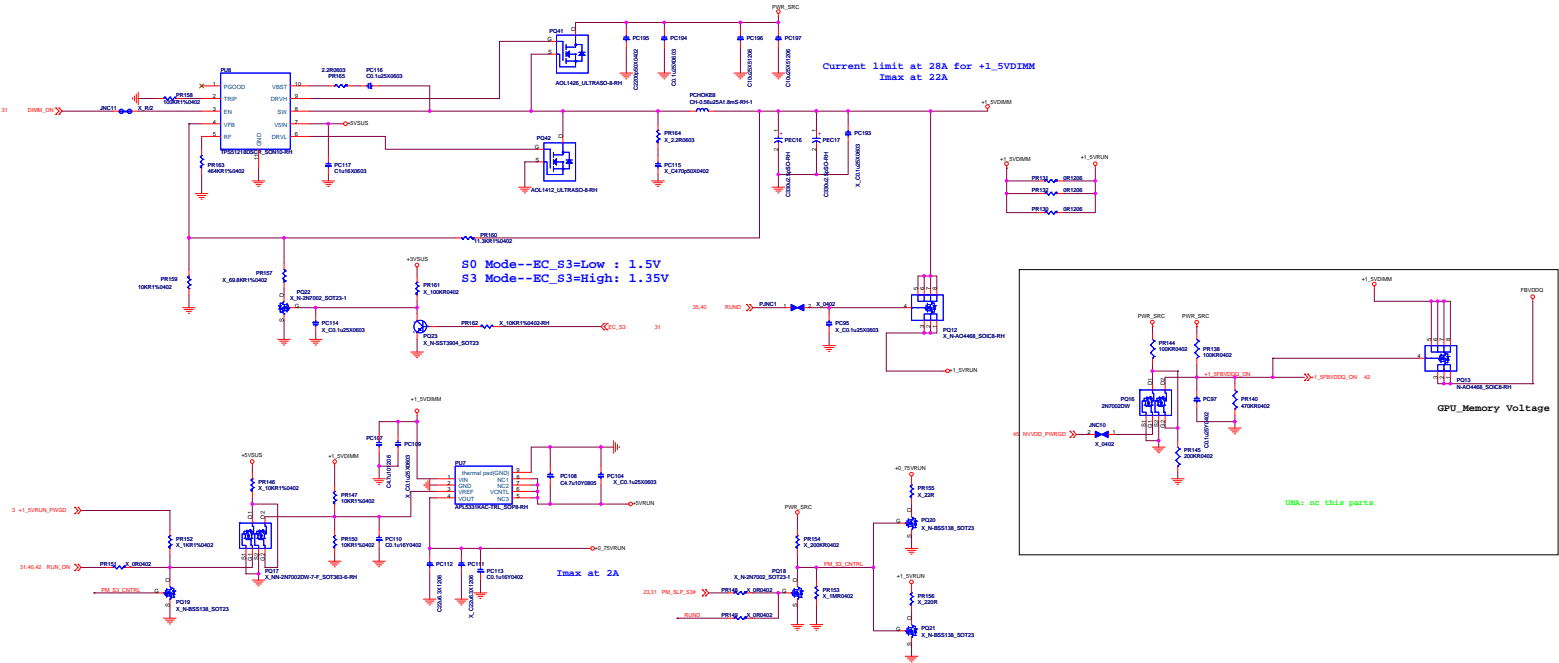
Adapter= 90W
 Adapter input voltage set 19 Voltage



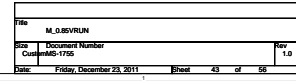
Vinafix.com

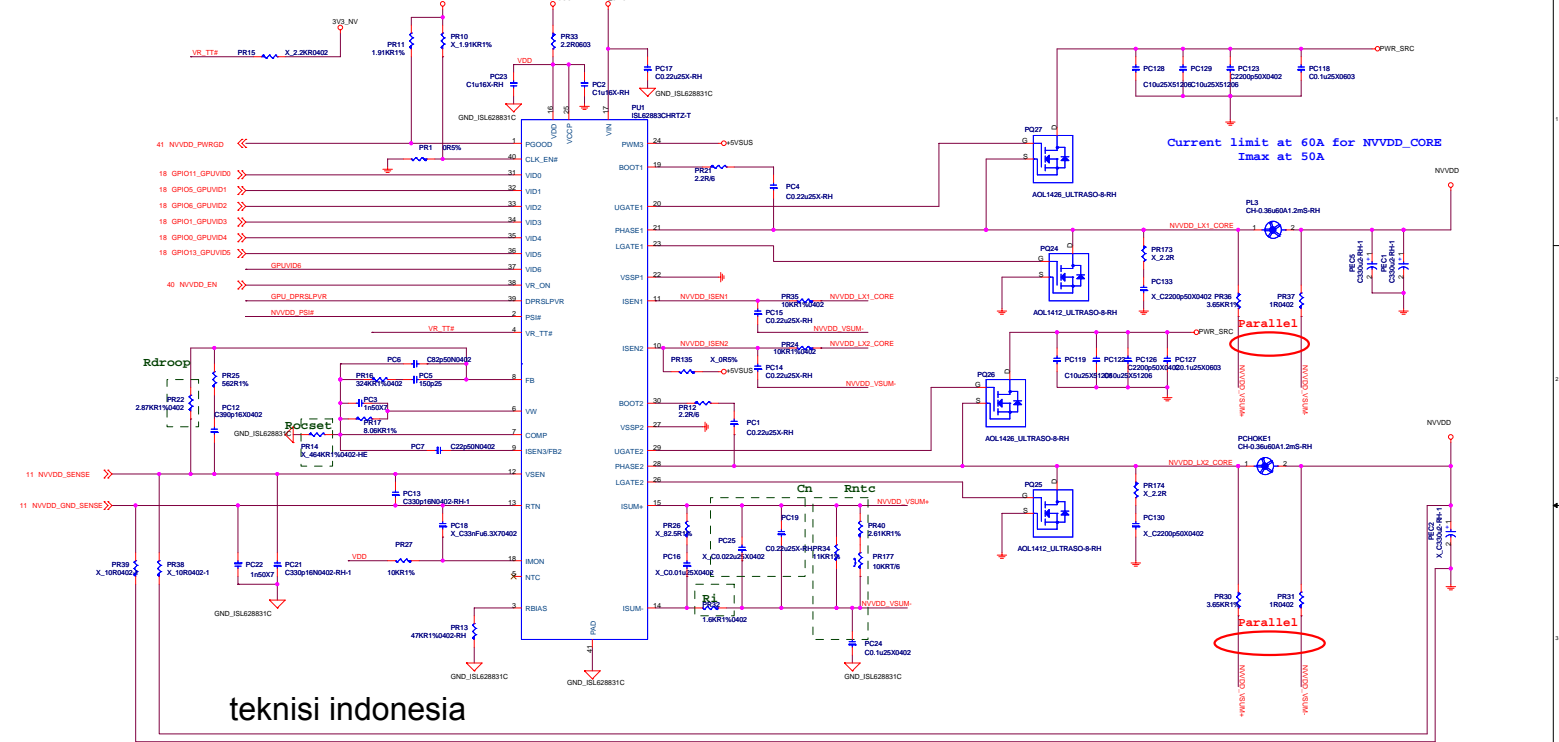
MSI MICRO-STAR INT'L CO.,LTD.			
Charger			
File	Document Number	Rev	
MS-1755		1.0	
Friday, December 23, 2011 Sheet 39 of 56			



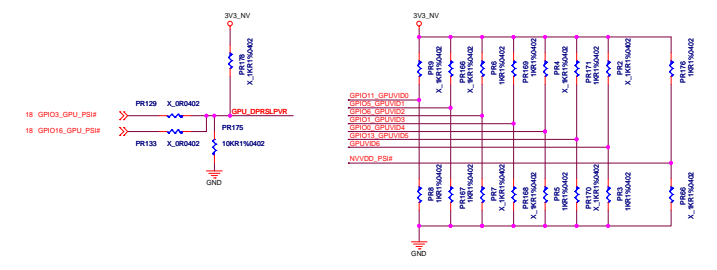


DIMM 1.5VRUN	
MS-1755	1.5V





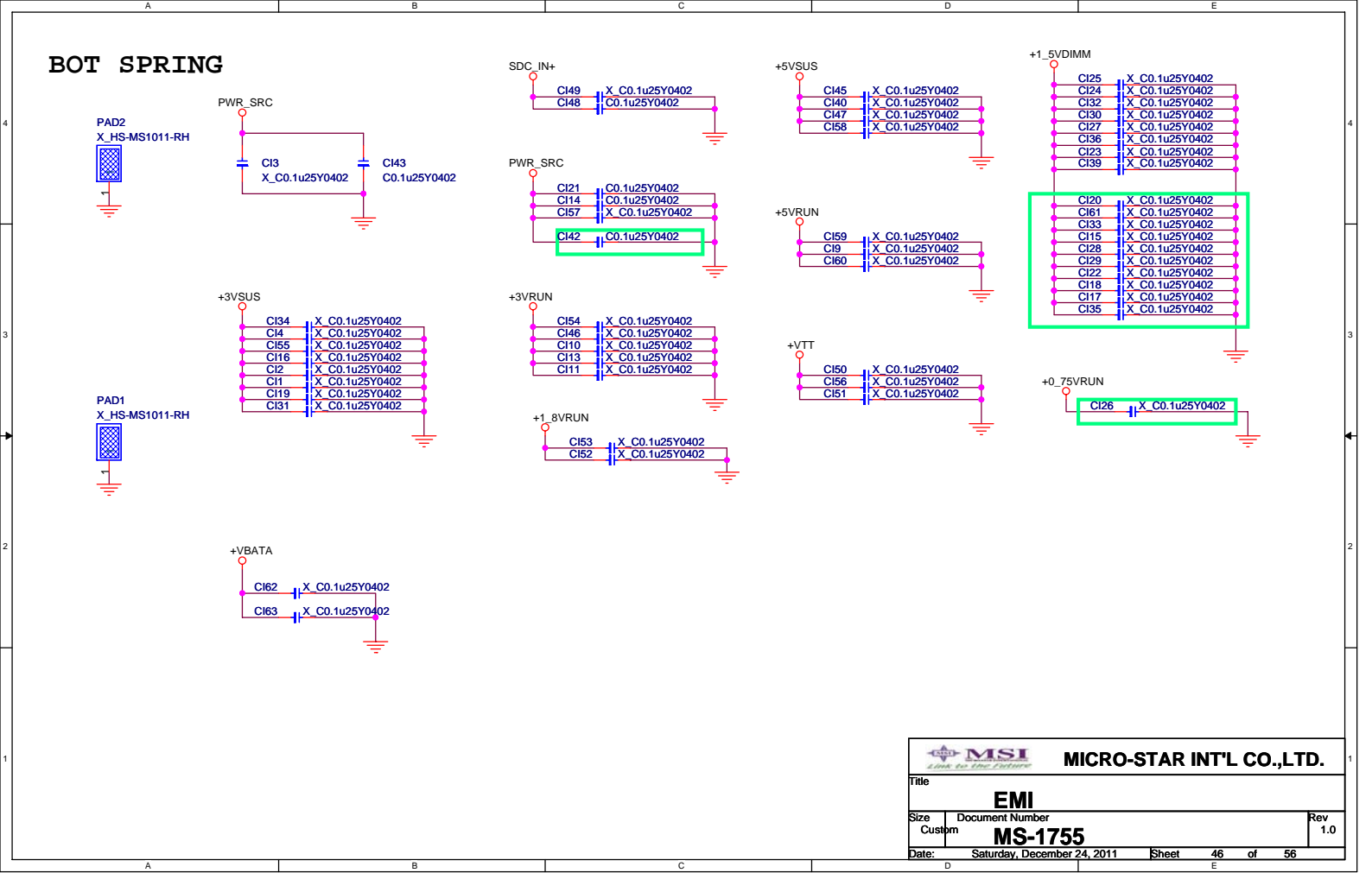
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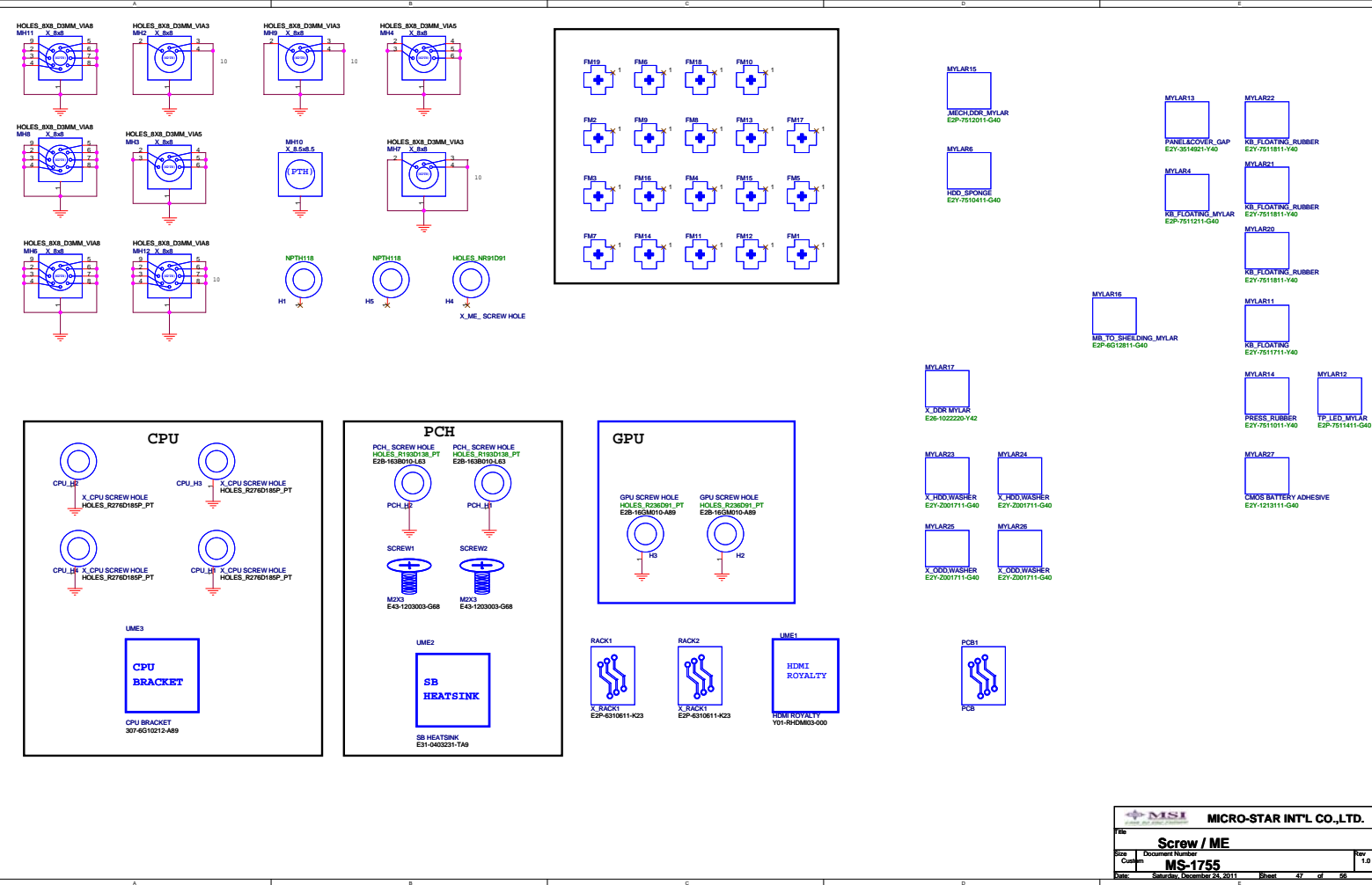
VID 6--0: 0110000
boot voltage set as 0.9000V for N13P-GS;
VID 6--0: 0101100
boot voltage set as 0.9500V for N13P-GL;

MICRO-STAR INT'L CO.,LTD.	
File	DGPU Power
Rev	1.0
Comp	MS-1755
Date	2011.12.24
Draw	45
at	56

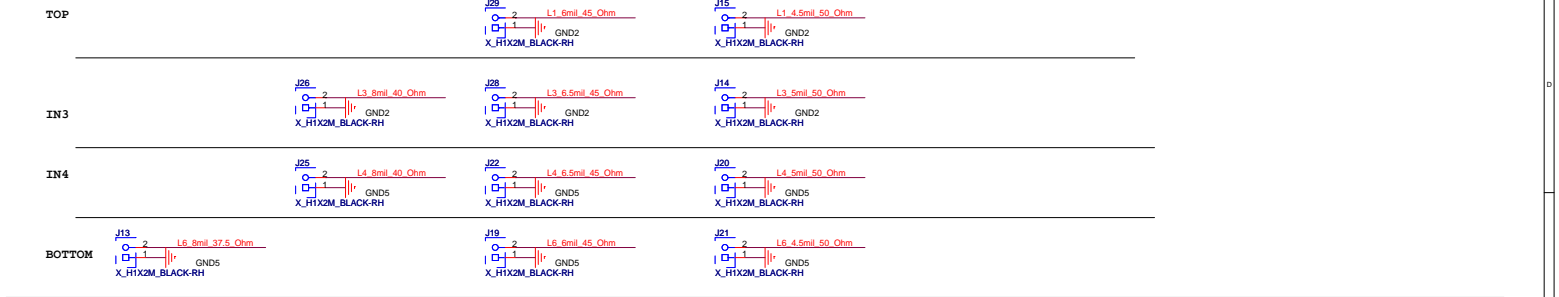
BOT SPRING



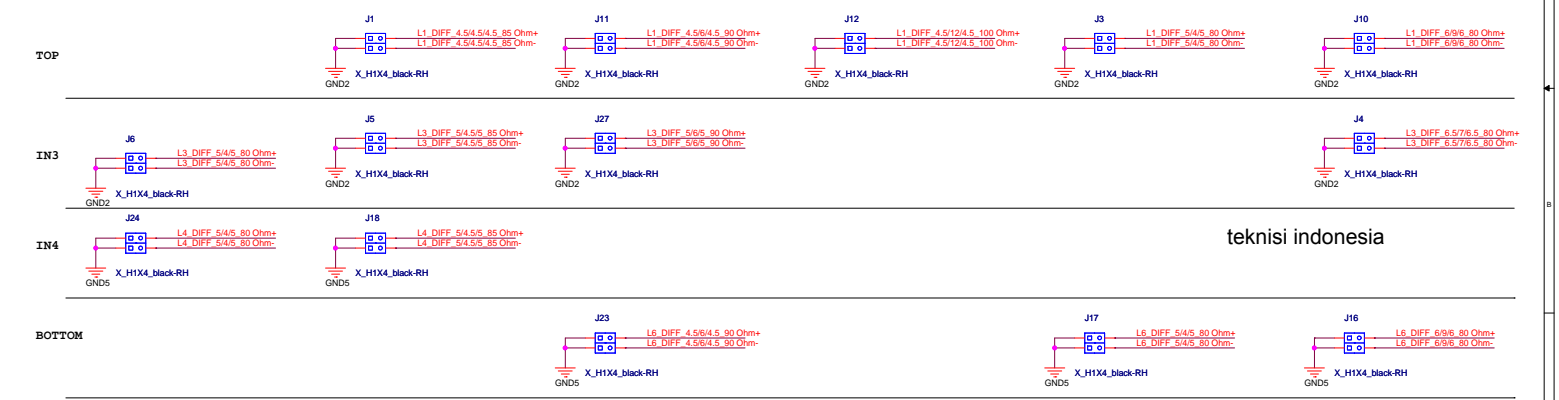
 MSI <i>Leading the World in Technology</i>		MICRO-STAR INT'L CO.,LTD.	
Title			
EMI			
Size	Document Number		Rev
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Single-end



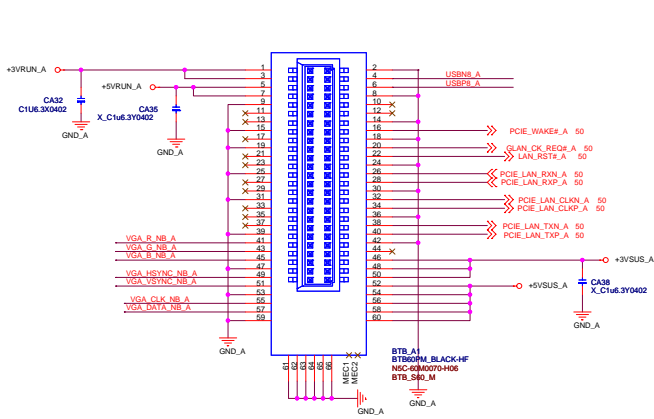
Differential signal



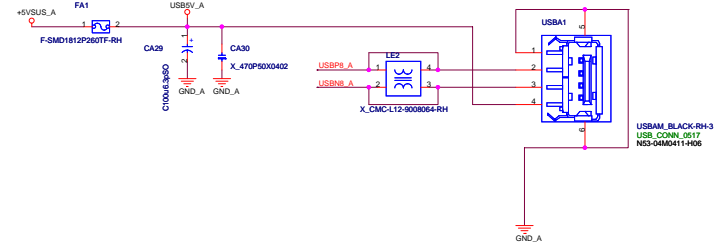
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Impedance			1.0
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Cusum	MMS-1755		
Date:	Friday, December 23, 2011	Sheet	48 of 56

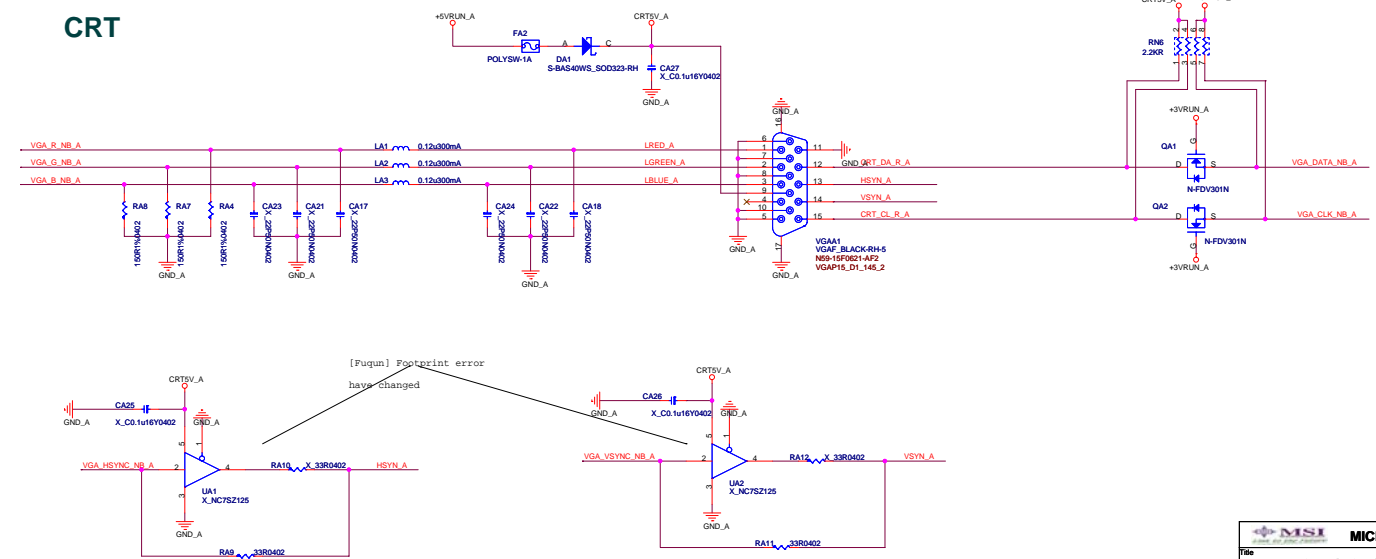
60PIN BTB I/O Connector(VGA, LAN, USB)

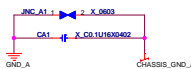
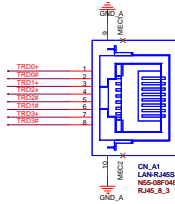
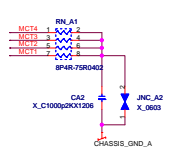
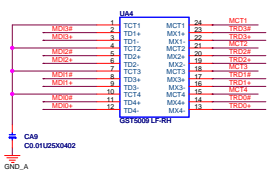
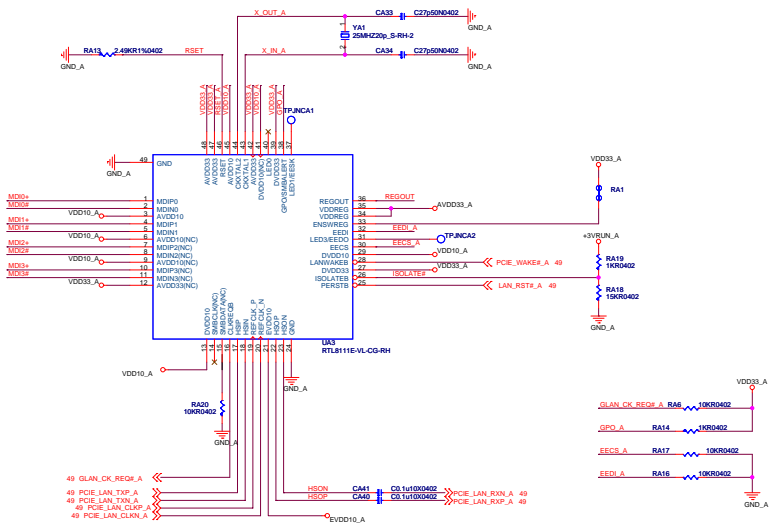
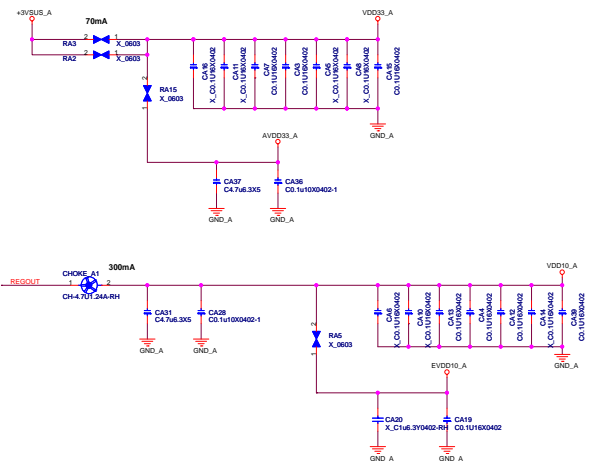


USB



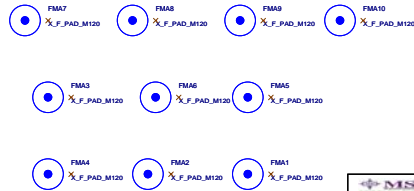
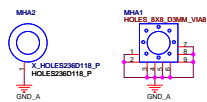
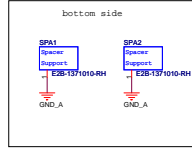
CRT



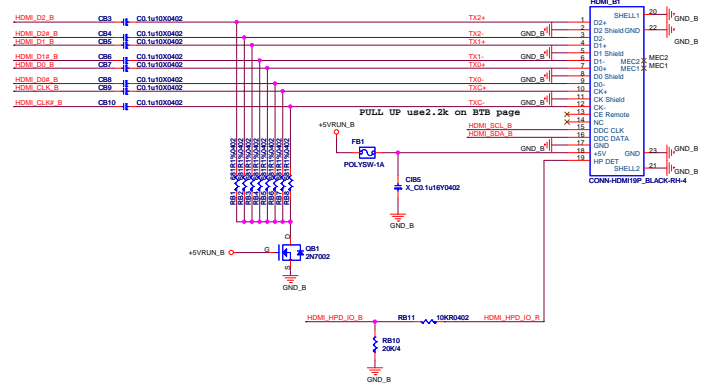
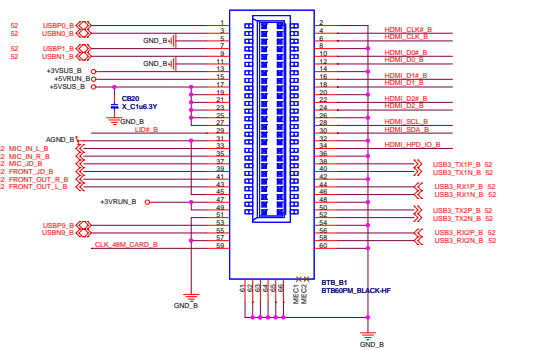


BTB STANDOFF

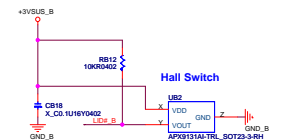
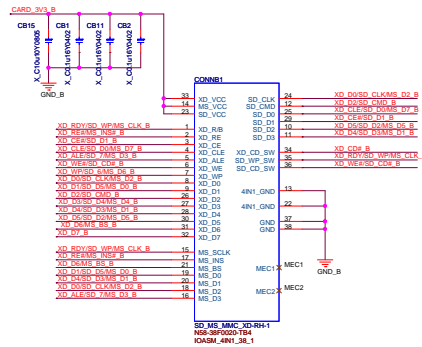
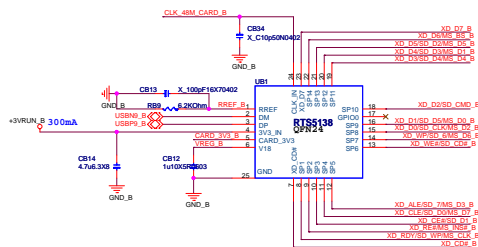
SCREW HOLE



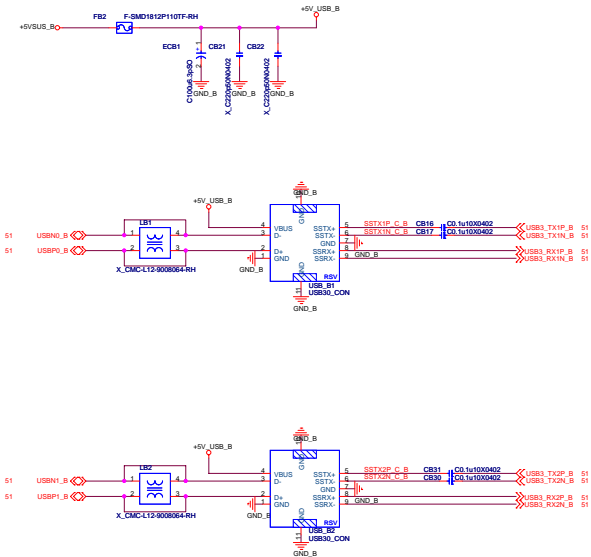
HDMI



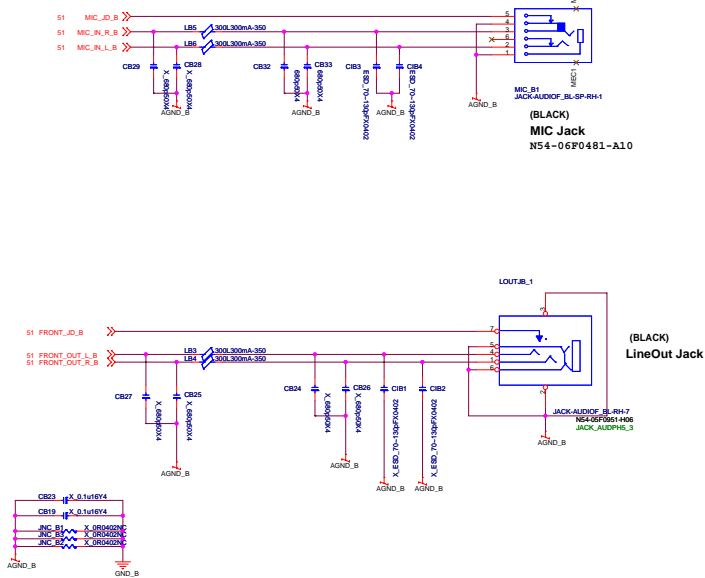
LID



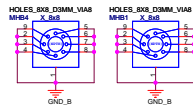
USB



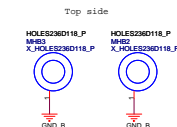
Audio Jack



SCREW HOLE

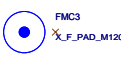
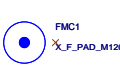
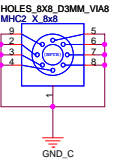
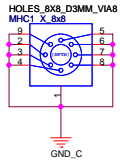
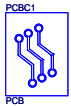
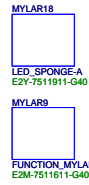
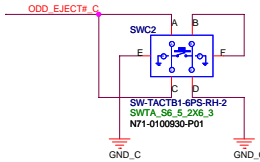
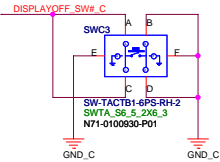
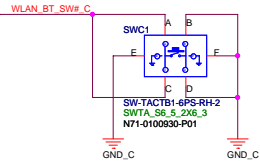
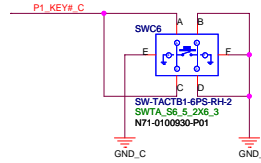
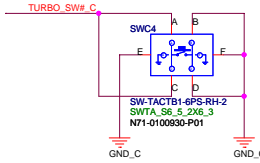
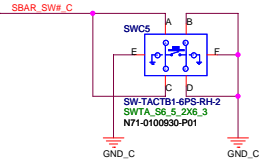
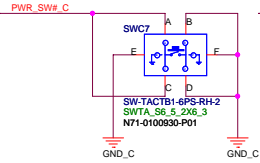
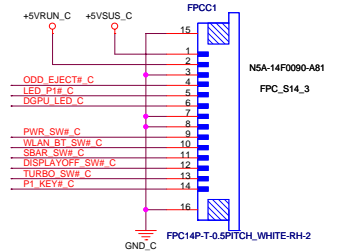
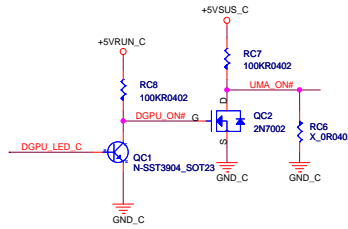
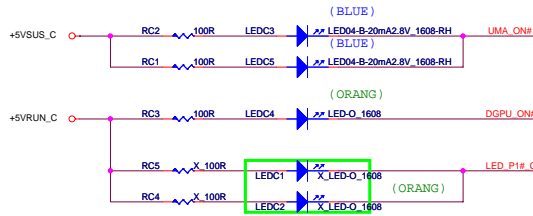


BTB STANDOFF



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[B] Audio, USB3.0		Document Number	
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RC7 connection change from
+5V_{RUN_C} to +5V_{SUS_C} in 0B Ver .



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[C] PWR_SW/LED Launch Board	
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