

Model Name: GA-H77TN-CC

SHEET	TITLE
01	COVER SHEET
02	BLOCK DIAGRAM
03	POWER SEQUENCE
04	Processor HOST
05	Processor DDRIII
06	Processor PWR
07	Processor GND
08	DDRIII CHANNEL A & B
09	MINI PCIE ,eDP
10	HDMI, VGA CON
11	PCH DMI, PCI, PCIE, USB
12	PCH HOST,LPC, SPI, PM, HDA
13	PCH HOST, SATA
14	PCH NVRAM, FDI, DISPLAY
15	PCH CLK BUFFER AND CLK GEN
16	PCH PWR,GND
17	SIO IT8773 &FRONT PANEL
18	FRONT & REAL USB
19	VCC_CORE & AXG
20	SWITCH POWER
21	LINNER POWER
22	FAN CONTROL
23	HDA CODEC ALC887
24	AUDIO JACK
25	RTL8111E-VL/RTL8105E-H
26	USB30 ASM1042
27	REALTEK RTD2136

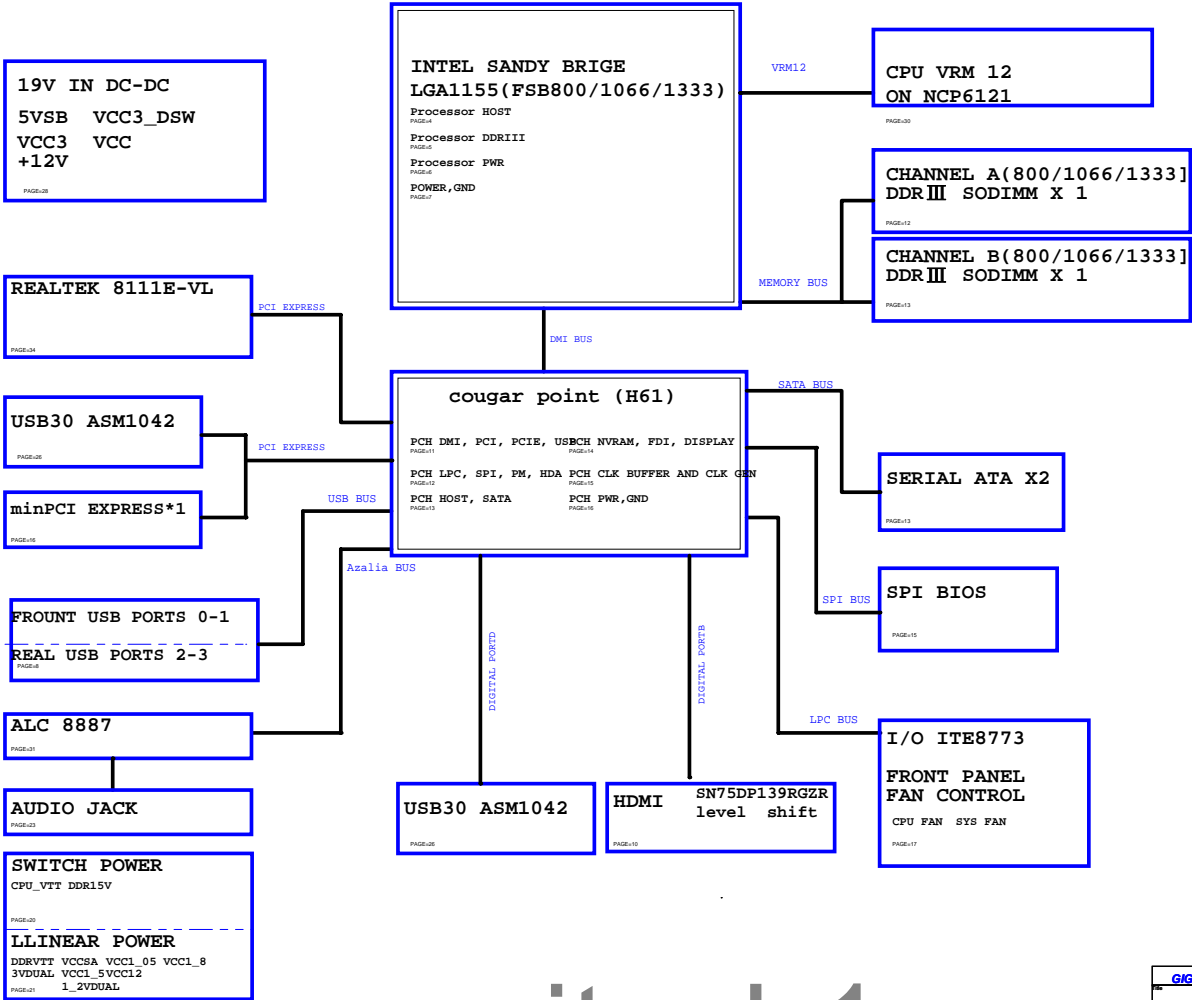
Revision 1.0

SHEET	TITLE
28	19V-IN DC to DC
29	BOM & PCB MODIFY HISTORY
30	
31	
32	
33	

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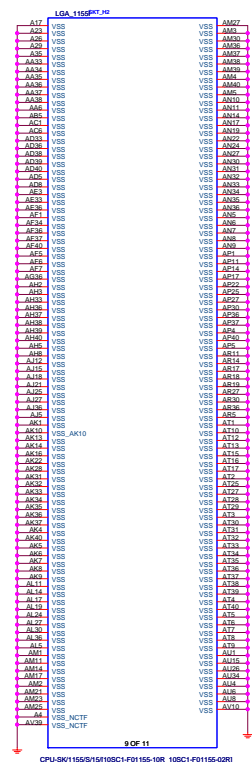
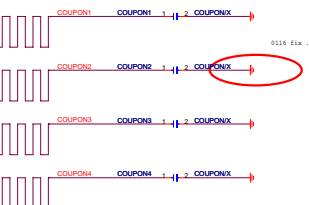
GIGABYTE TECHNOLOGIES, INC.			
Cover Sheet			
Rev C	Document Number GA-H77TN-CC	Rev 0.2	
Date: Friday, January 11, 2013			

BLOCK DIAGRAM



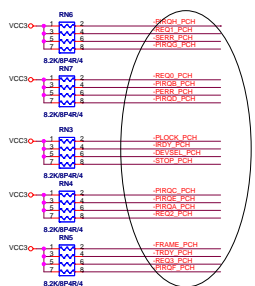
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GIGABYTE TECHNOLOGIES, INC.		
POWER SEQUENCE		
Doc Number	GA-H77TN-CC	
Rev	02	
Date	Friday, January 11, 2013	Sheet 3 of 32

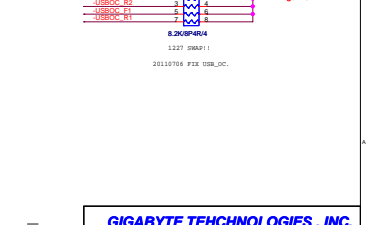
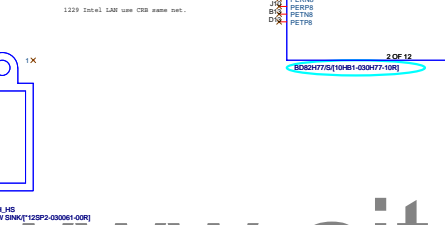
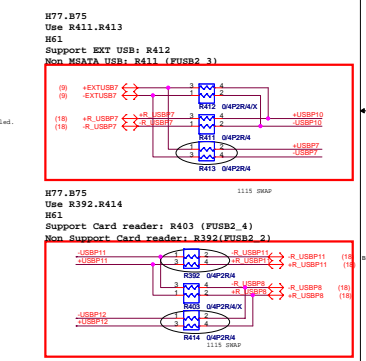
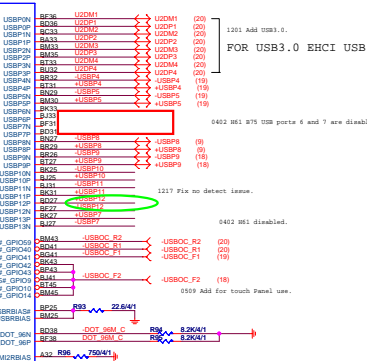
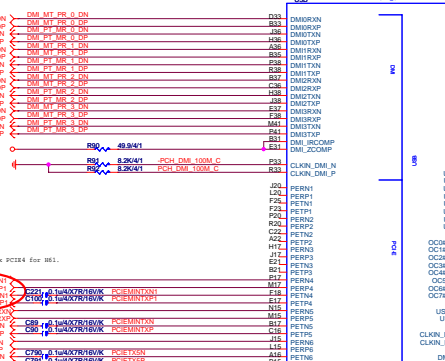
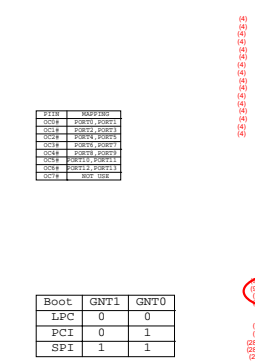
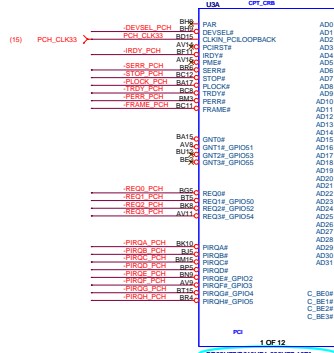


Internal weak pull high
and disable after PCIRST# de-assert

1227 Maho Bay PDG1.7 Unuse can't be share.



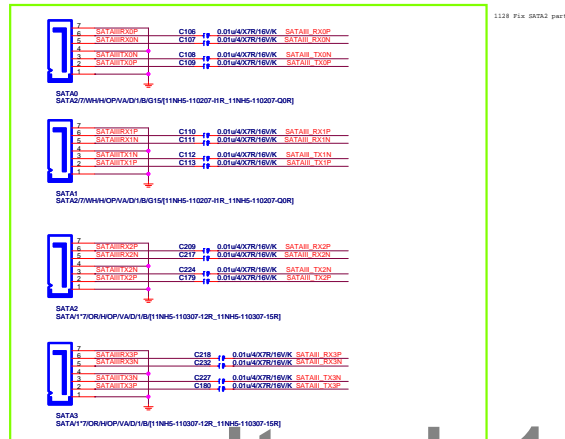
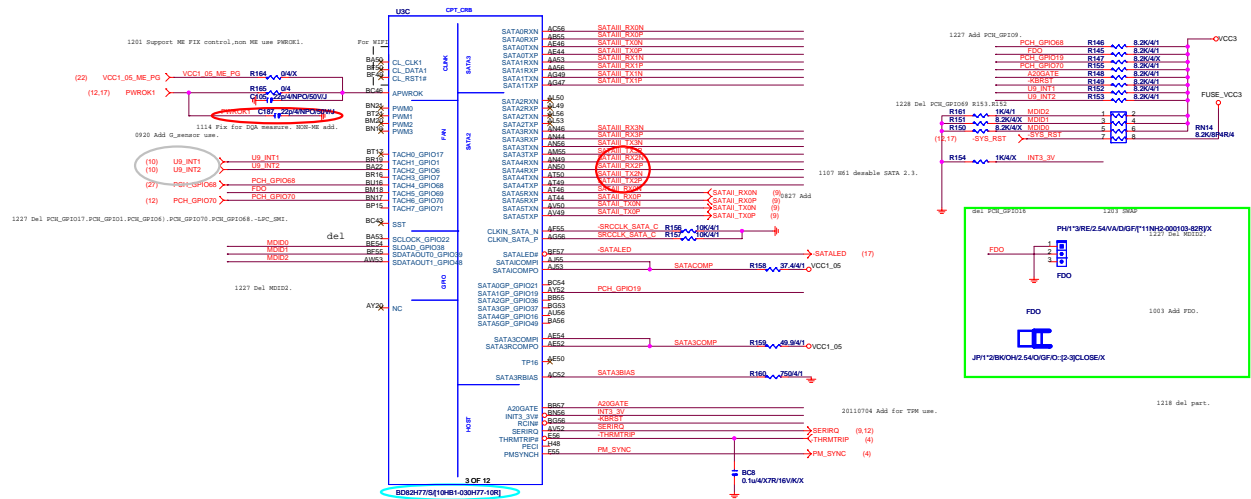
0910 Fix .

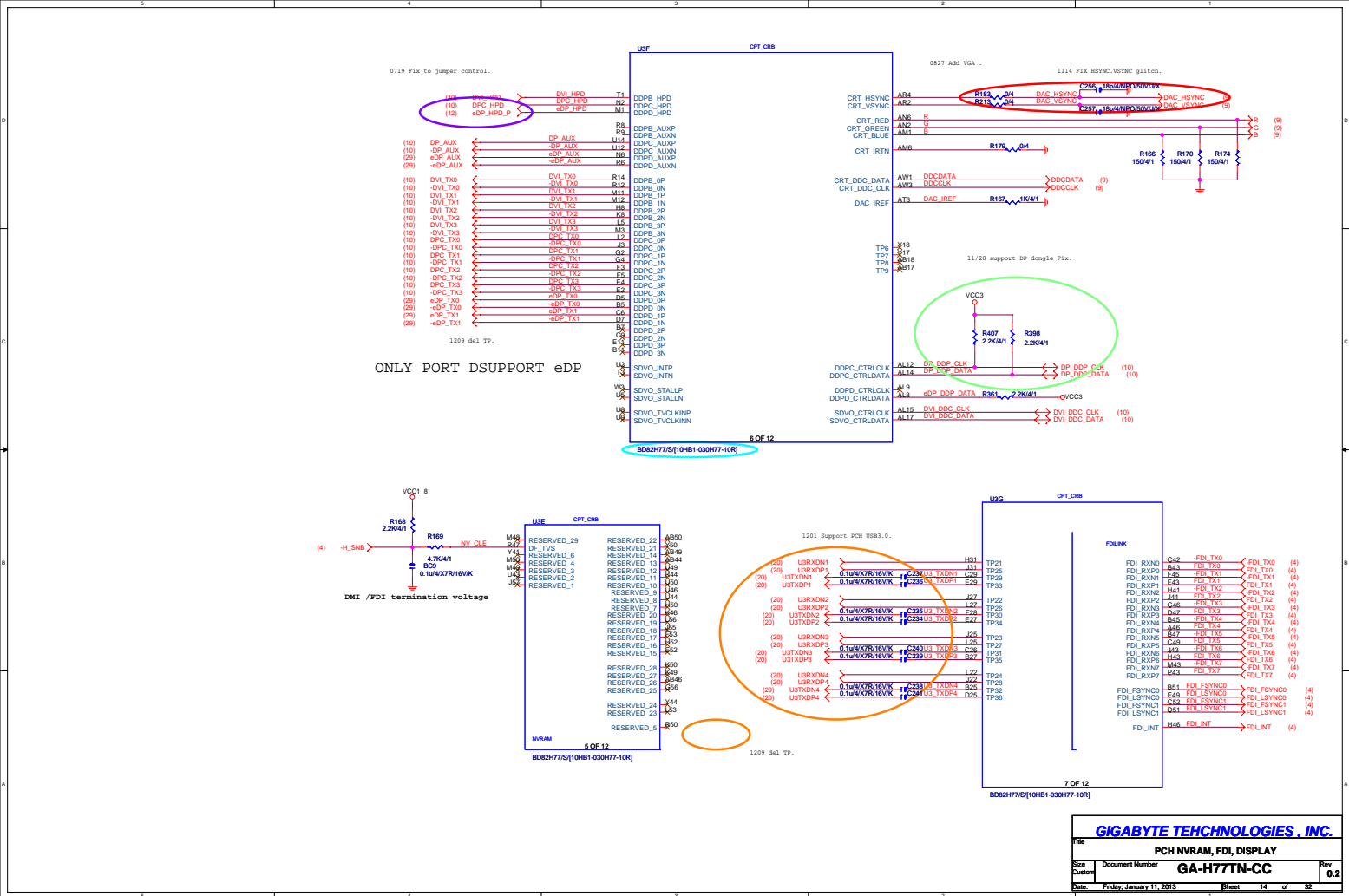


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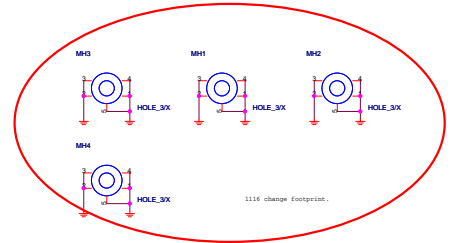
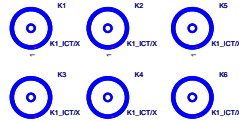
1229 No external pull up/down resistors required. Signals driven by PCI







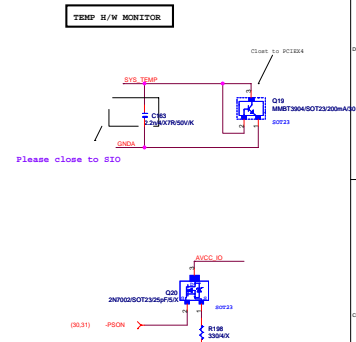
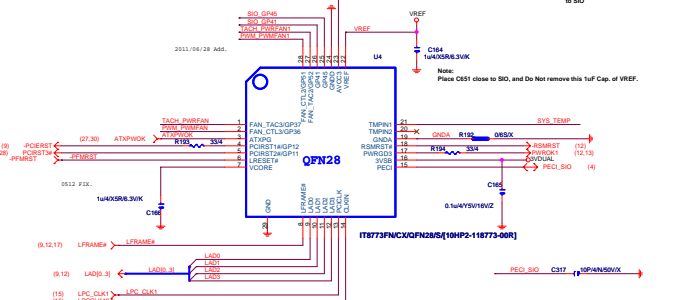
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Symbol	value	Description
JP4	1	K3 power sequence function is disabled
Pin126	0	K3 power sequence function is enabled
JP3 & JP5	11	The default value of EC Index 15h16h17h is 80h
Pin124 & 46	10	The default value of EC Index 15h16h17h is Fh(Fn(An off))
	01	The default value of EC Index 15h16h17h is 00h(Fn full speed)
	00	The default value of EC Index 15h16h17h is 40h
JP2	1	Disable WDT to reset PWROK
Pin122	0	Enable WDT to reset PWROK

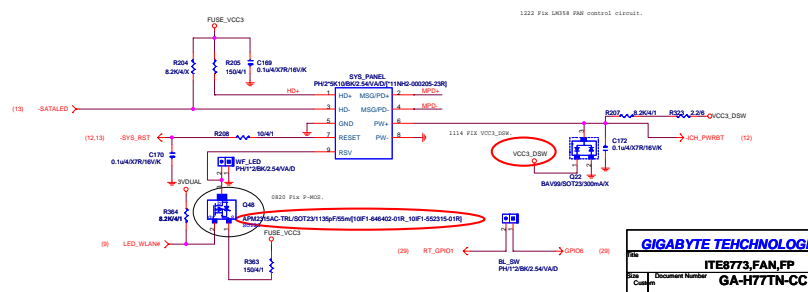
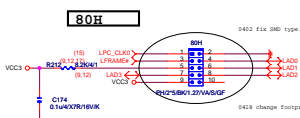
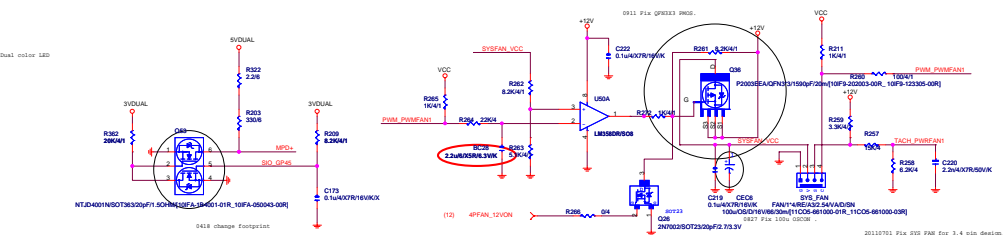
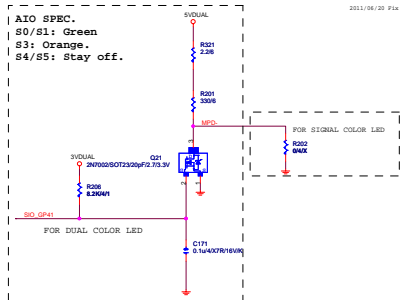
Pin 5, Pin 32, pull high to 3.3VSB. Pin33 pull high to VCCH.

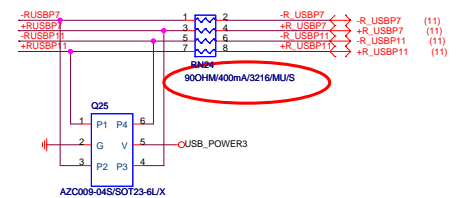
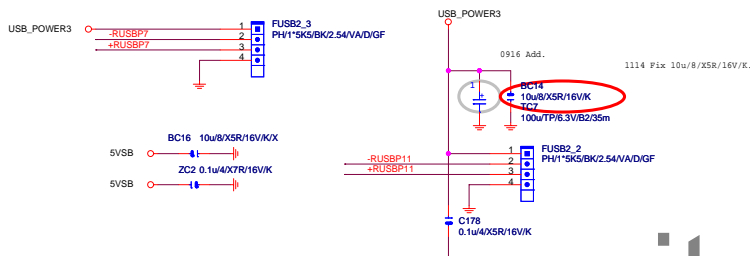
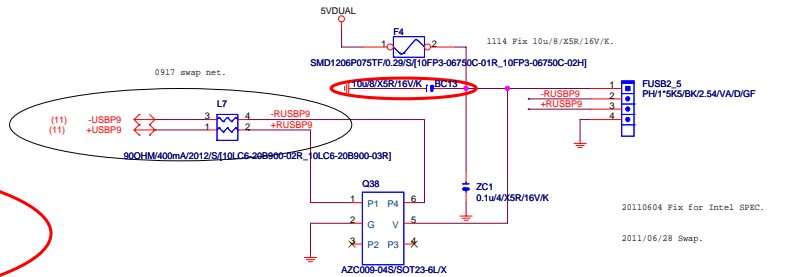
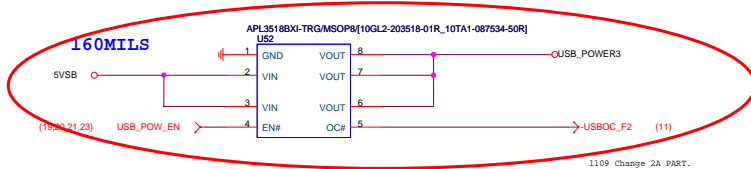
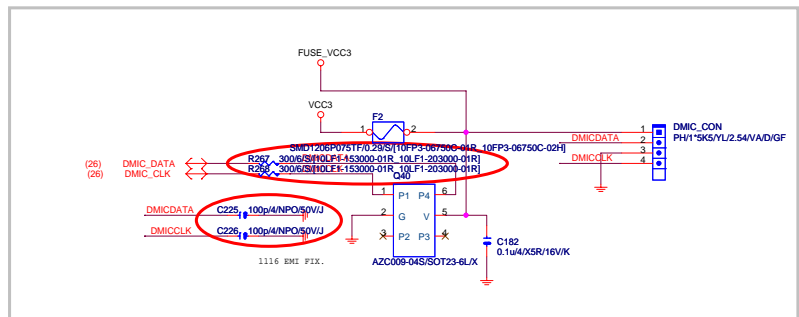
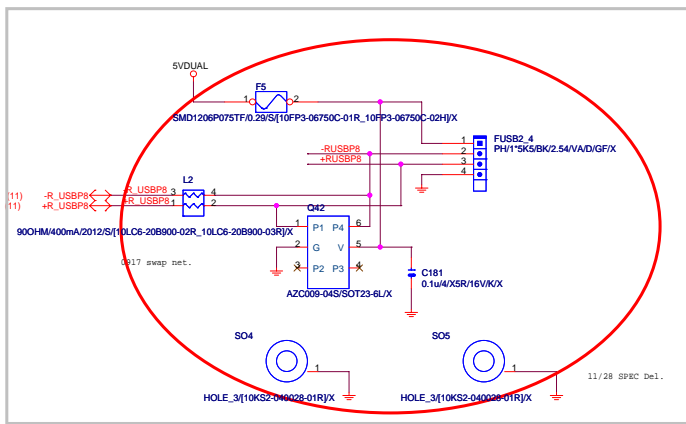


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| AIO SPEC.
| S0/S1: Gr
| S3: Orang
| S4/S5: St

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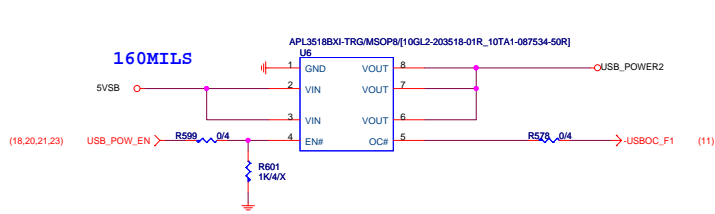




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FRONT & REAL USB		
Size	Document Number	Rev
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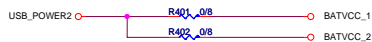


MODE SWITCH

FROM PCH

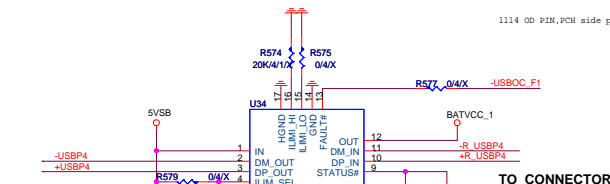
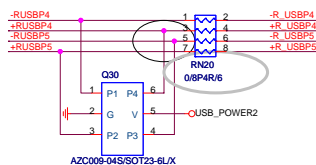


CON.



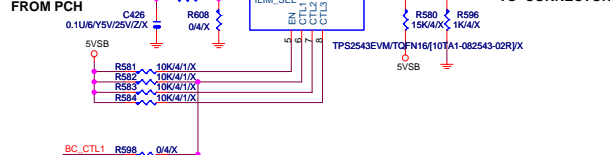
USB MODE	R404.R406.R401.R402
CHARGER MODE	U34.U35

	CTL1	CTL2	CTL3	ILIM_SEL	MODE
S0	1	1	1	1	CDP, load detection
S3	0	1	1	1	Auto mode, no load detection
S4.S5(non ERP)	0	1	1	1	Auto mode, no load detection



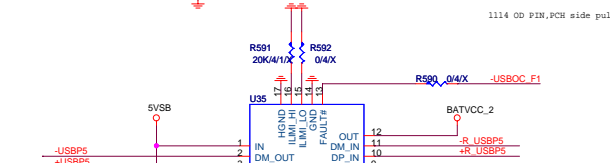
1114 OD PIN,PCH side pull high.

FROM PCH TO CONNECTOR

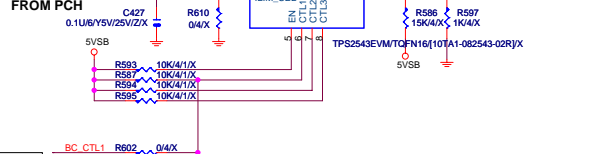


1113 Remove control.

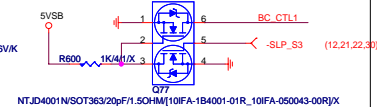
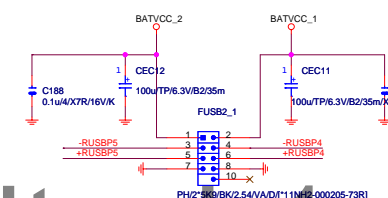
1114 OD PIN,PCH side pull high.



FROM PCH TO CONNECTOR



1113 Remove control.



NTJD4001N/SOT363/20pF/1.50NM/10FA-184001-01R_10FA-050043-00RJX

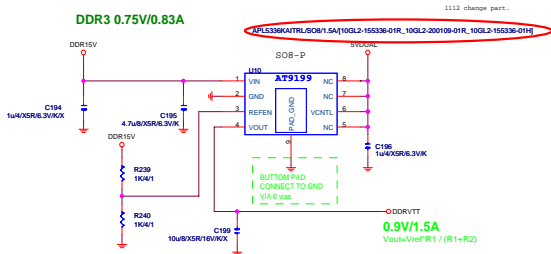
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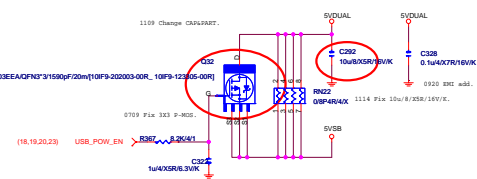
F_USB CHARGER			
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DDRVTT

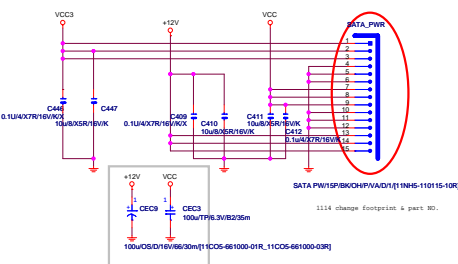
DDR3 0.75V/0.83A



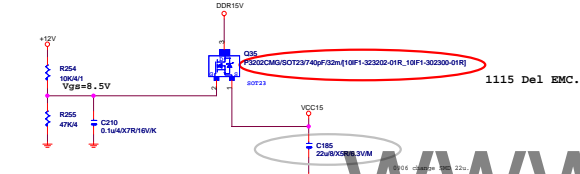
5VDUAL



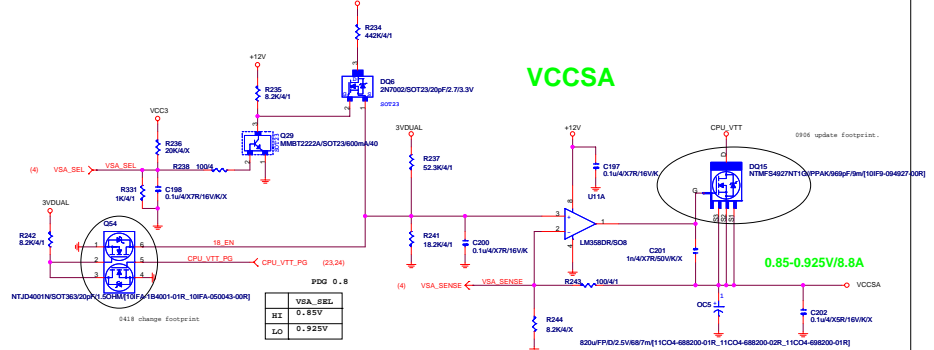
POWER CONNECTOR



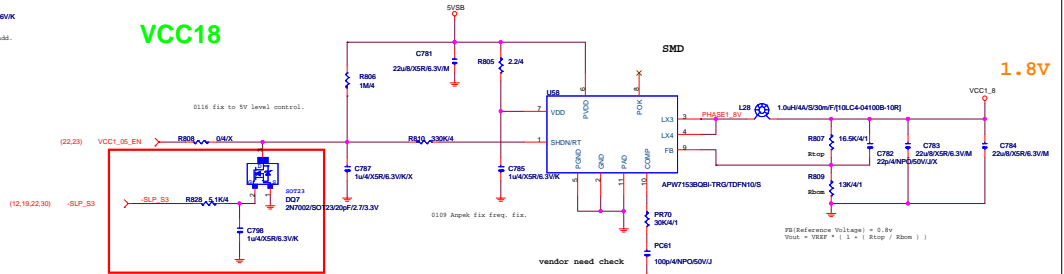
VCC15&VCC12



VCCSA



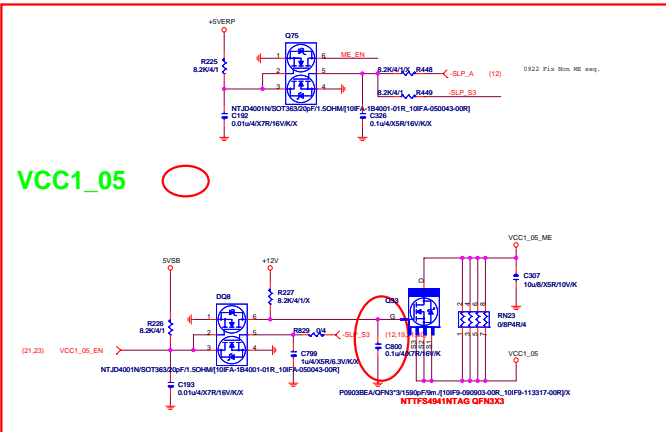
VCC18



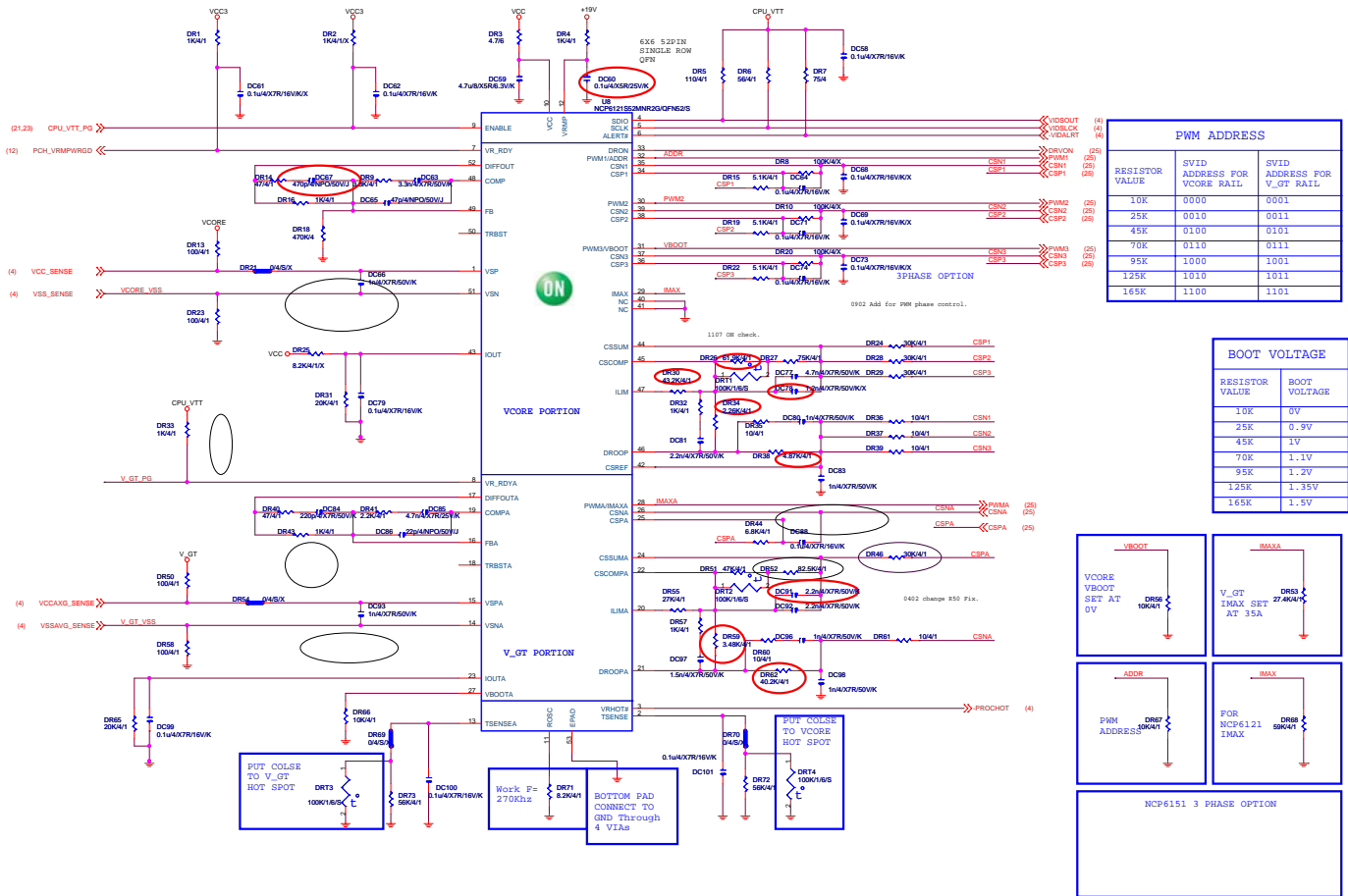
1.8V

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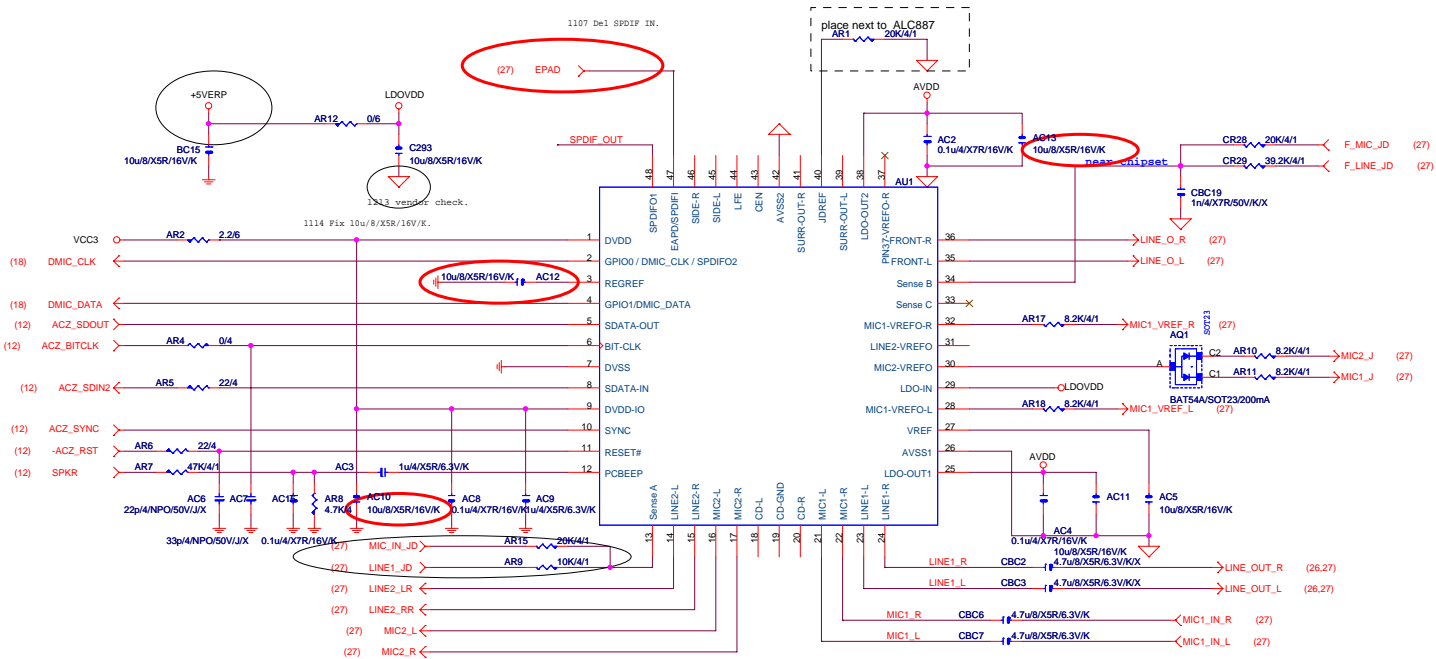
GIGABYTE			
Rev	LINER-POWER-1		
Docu	GA-H77N-CC		
Date	Feb, 2013	Rev	2.2



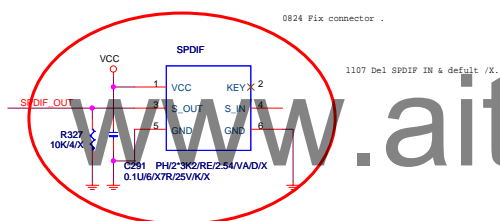
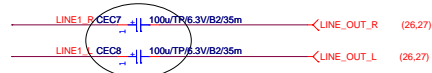
Intel SugarBay VR12 POWER CKT - 4+1 PHASE



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ALC887-VD2-GR/LQFP48/S/[10HP5-368870-30R]



GIGABYTE TECHNOLOGIES, INC.

Title				ALC887-VD			
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Custom	GA-H77TN-CC						1.0
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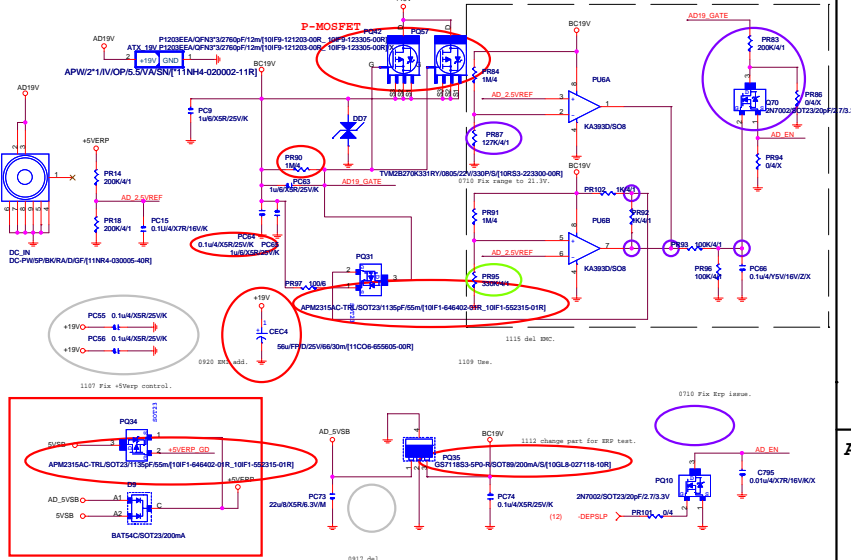
GIGABYTE TECHNOLOGIES, INC.			
Title: RTL8111E & RTL8105			
Size C	Document Number GA-H77TN-CC		Rev 1.0
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1206 Garry: change for RTL2136 control.

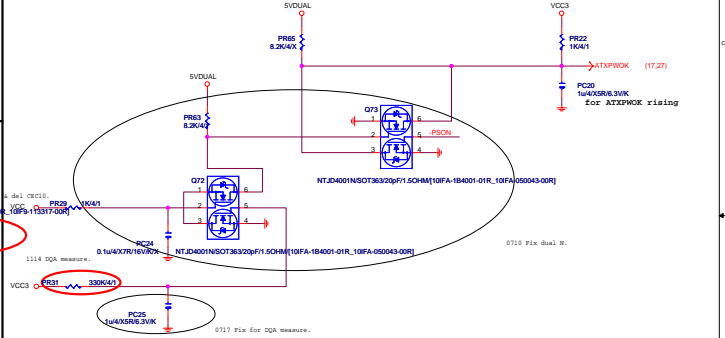


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Size	Document Number	Rev	
	GA-H77TN-CC	1.0	
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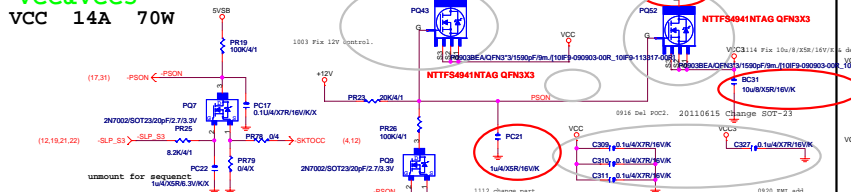
AD19V



ATX PPOWER GOOD

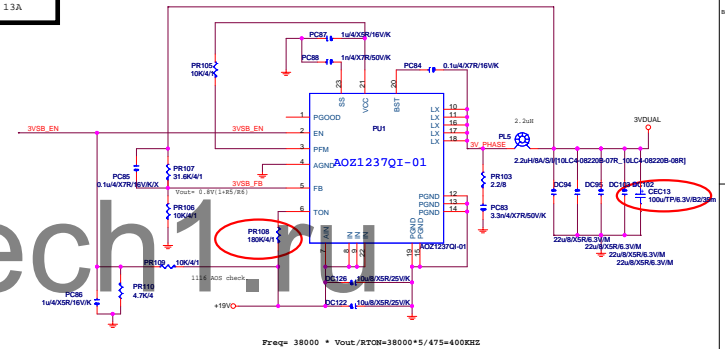
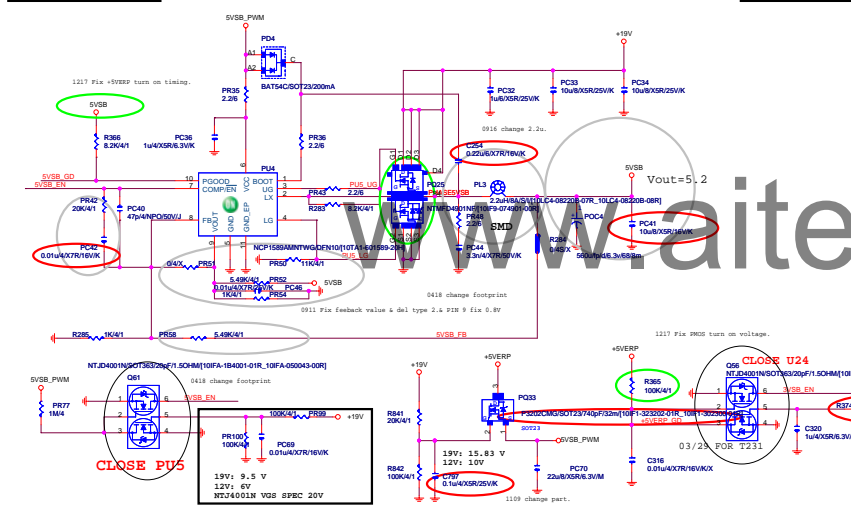


VCC&VCC3



5VSB
Voltage level : 5V
Max current : 13A

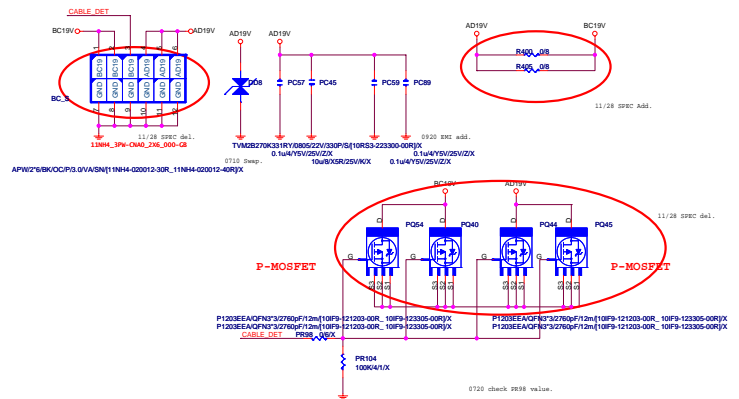
VCC3_DSW
Voltage level : 3.3V
Max current : 13A



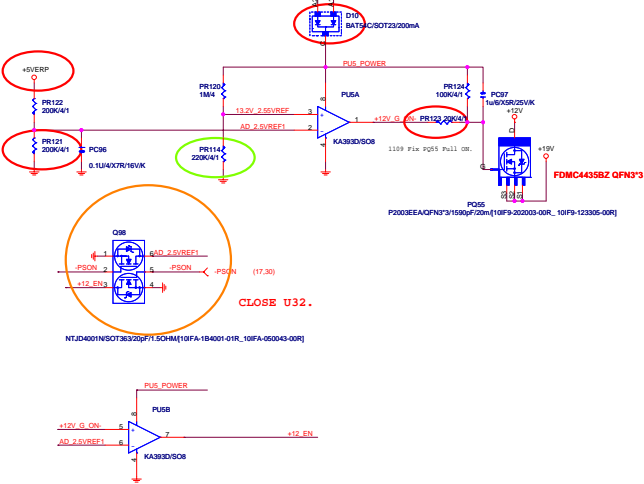
GIGABYTE TECHNI			
19V IN DC-DC			
File	Document Number	GA-H77TN-CC	Rev 1.0
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PWRCON

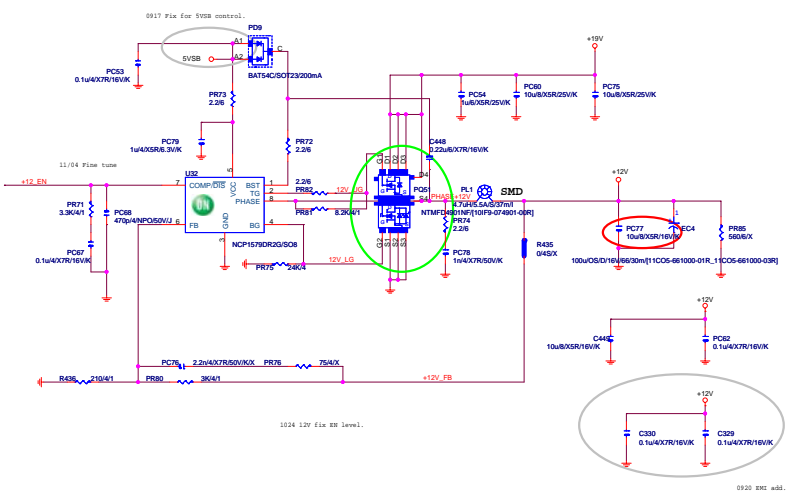
0922 update OK battery pin define.



+12V Control



+12V



Version:0.1

[illegible][illegible]