

Block Diagram

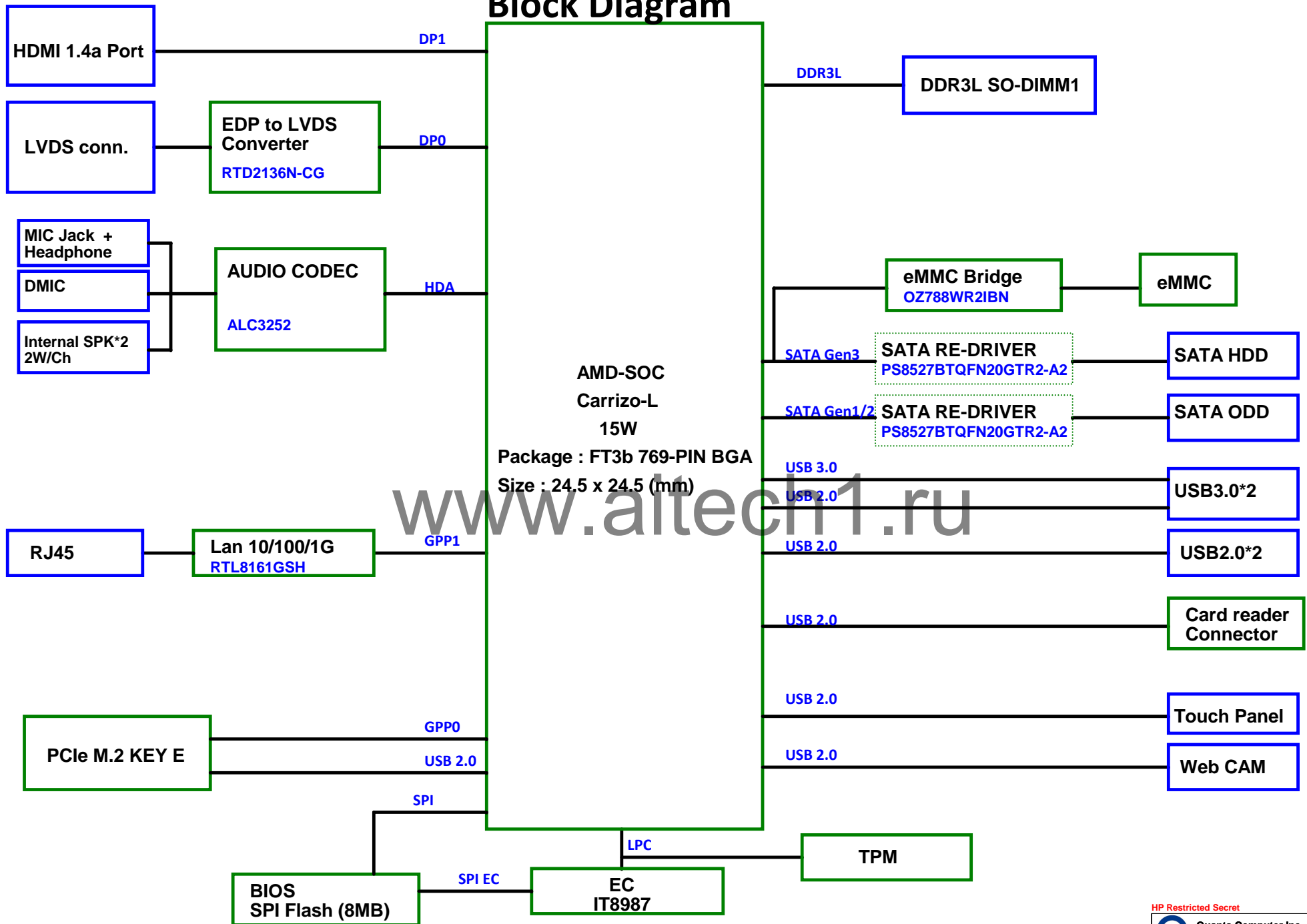


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POWER PLANE	VOLTAGE	CONTROL SIGNAL	Power States ACTIVE IN
+VIN	+19V		Always
+1.5V_RTC	+1.5V		Always
+3V	+3.3V	MAIN_ON1	S0
+3V_S5	+3.3V	S5_ON	S0-S5
+3V_ALW	+3.3V	AC/DC Insert enable	Always (LDO)
+5V	+5V	MAIN_ON1	S0
+5V_S5	+5V	S5_ON	S0-S5
+5V_ALW	+5V	AC/DC Insert enable	Always (LDO)
+3V_WLAN_P	+3.3V	WLAN_ON	S0-S5
+3V_LAN	+3.3V	LAN_PWR_ON	S0-S5
+VDDQ	+1.35V	S3_ON	S0-S3
+1.8V_S5	+1.8V	S5_ON	S0-S5
+1.8V	+1.8V	MAIN_ON2	S0
+1.5V_S5	+1.5V	S5_ON	S0-S5
+VDDP_S5	+0.95V	S5_ON	S0-S5
+VDDP	+0.95V	S0_ON1_D	S0
CPU_CORE	~	VRON	S0
NB_CORE	~	VRON	S0
+12V	+12V	MAIN_ON1	S0
+0.65V_DDR_VTT	+0.65V	S3_ON	S3
+1V	+1V	MAIN_ON2	S0
+1.5V	+1.5V	+1.5V_S0_3	S0

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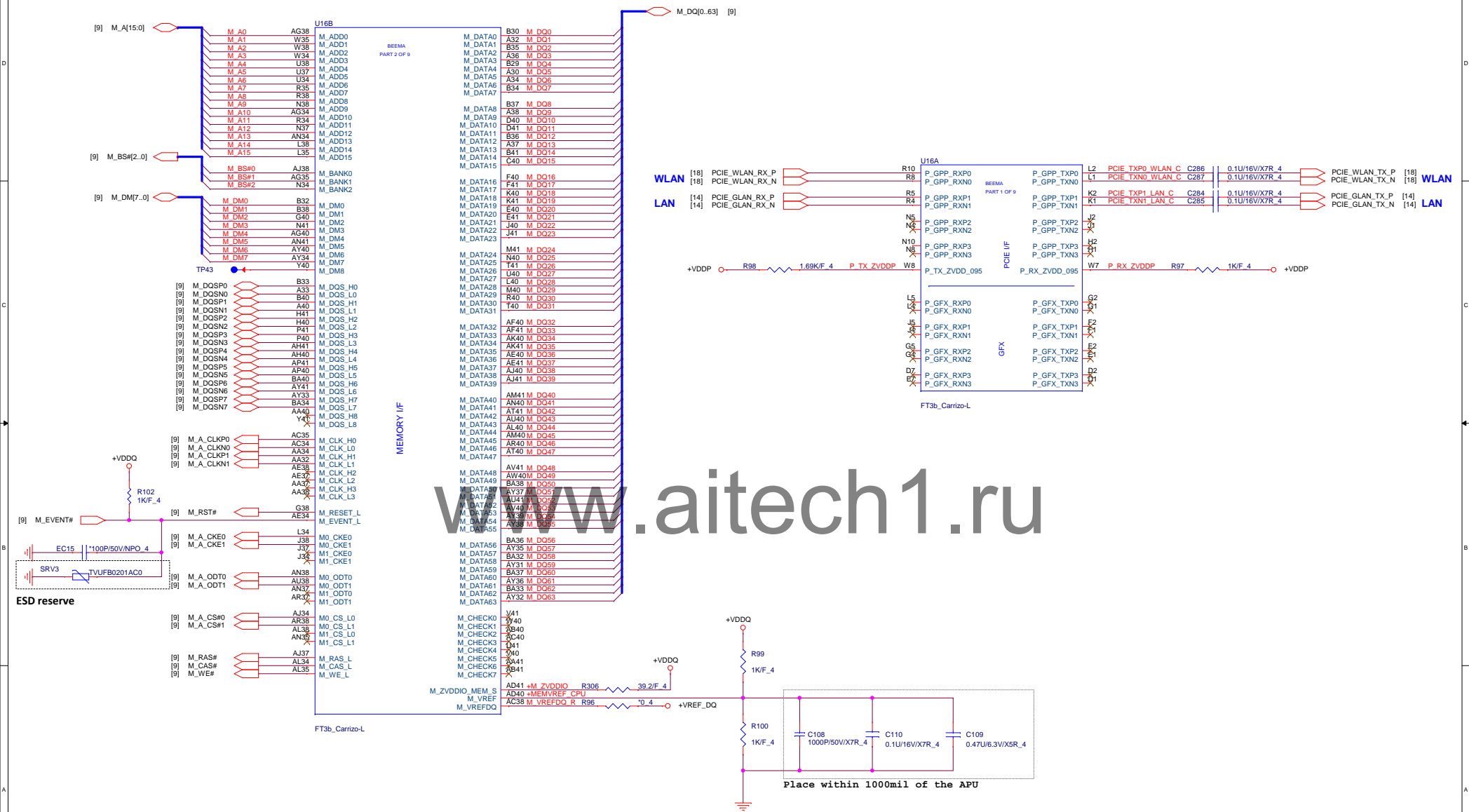
Schematic "Value" Definition

Pavilion AMD Platform Bali		DB/SI/PV Stage			MP	
By Value format	Description	Auto BOM Control	Bali-HDD	Bali-eMMC	Bali-HDD	Bali-eMMC
XX	Install	V	V	V	V	V
*XX	Non-Install	V				
SATA@XX	Install SATA HDD (include 2.5";3.5"HDD)	V	V		V	
EMMC@XX	Install EMMC	V		V		V
PROTO@XX	Install in pre-production only	V	V	V		
MP@XX	Install in MP only	V			V	V

***Board ID by manual control

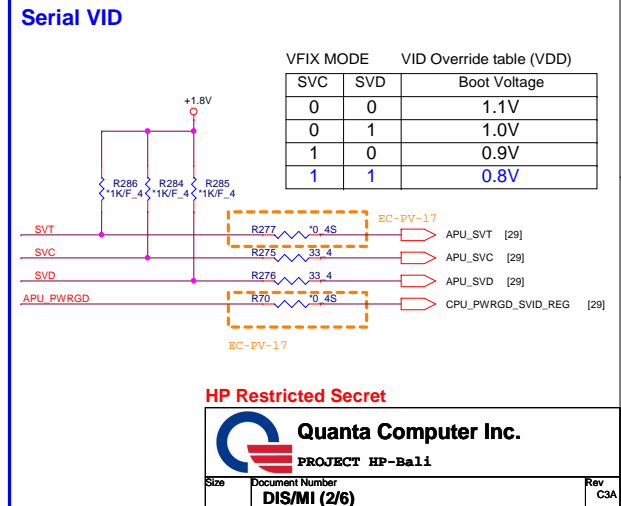
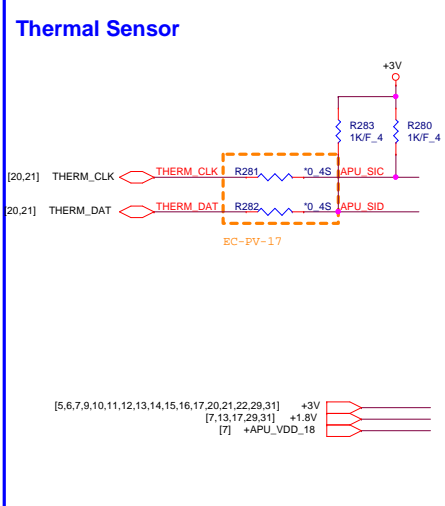
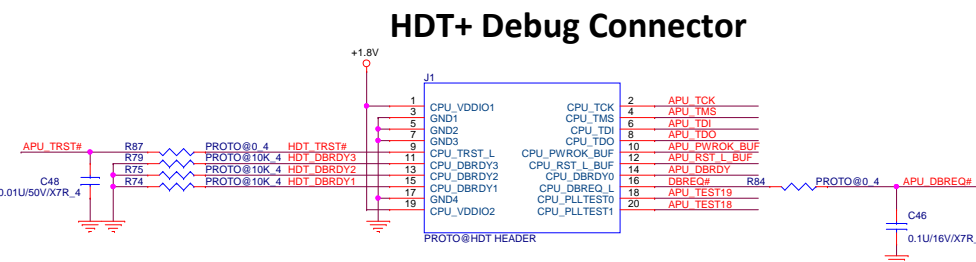
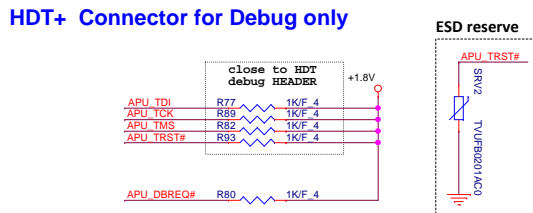
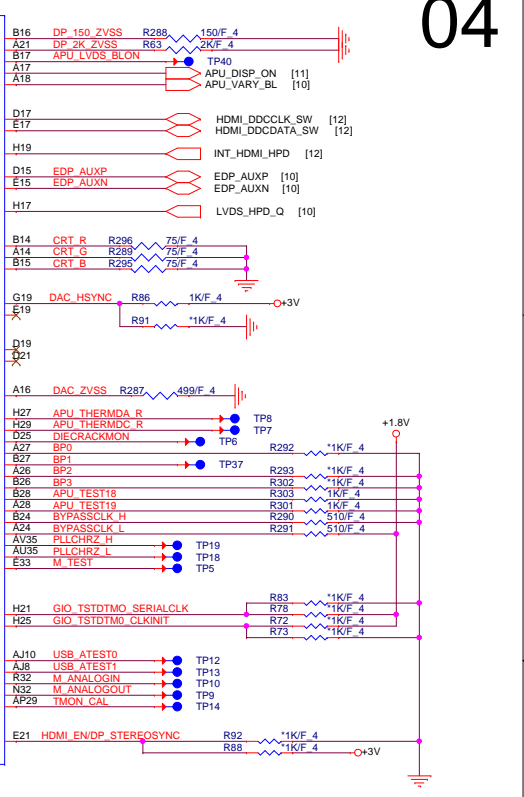
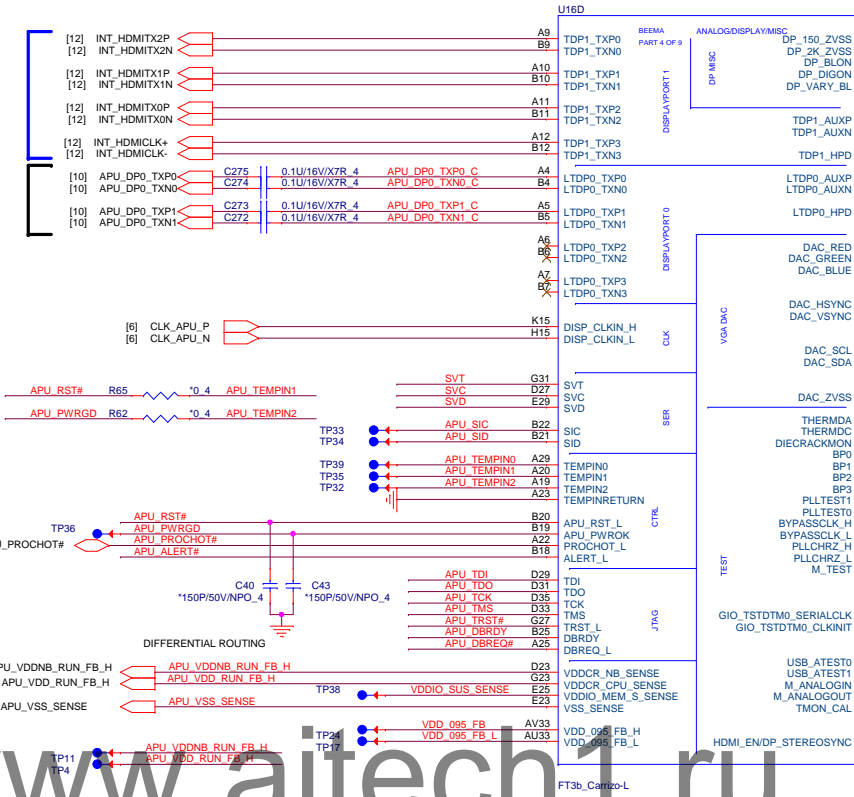
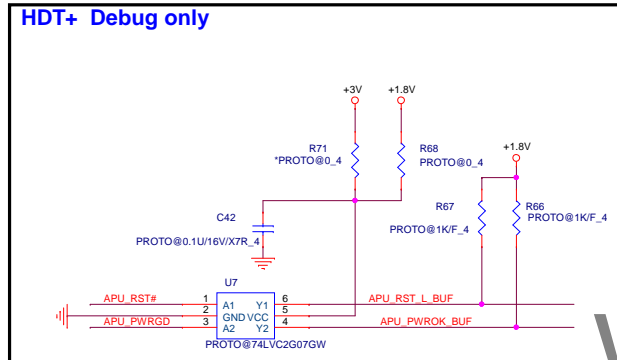
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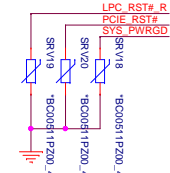
[7,9,19,25] +VDDQ
[6,7,31,32] +VDDP
[9] +VREF_DQ



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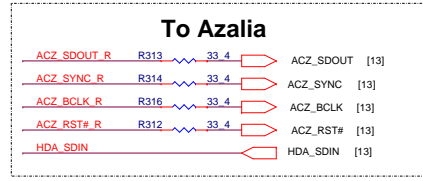
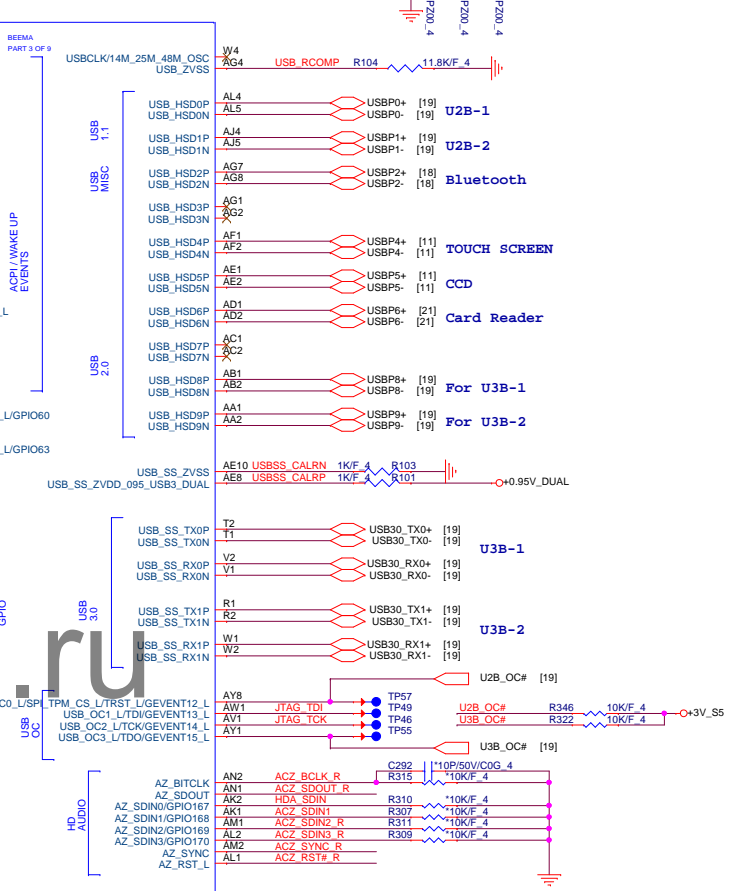
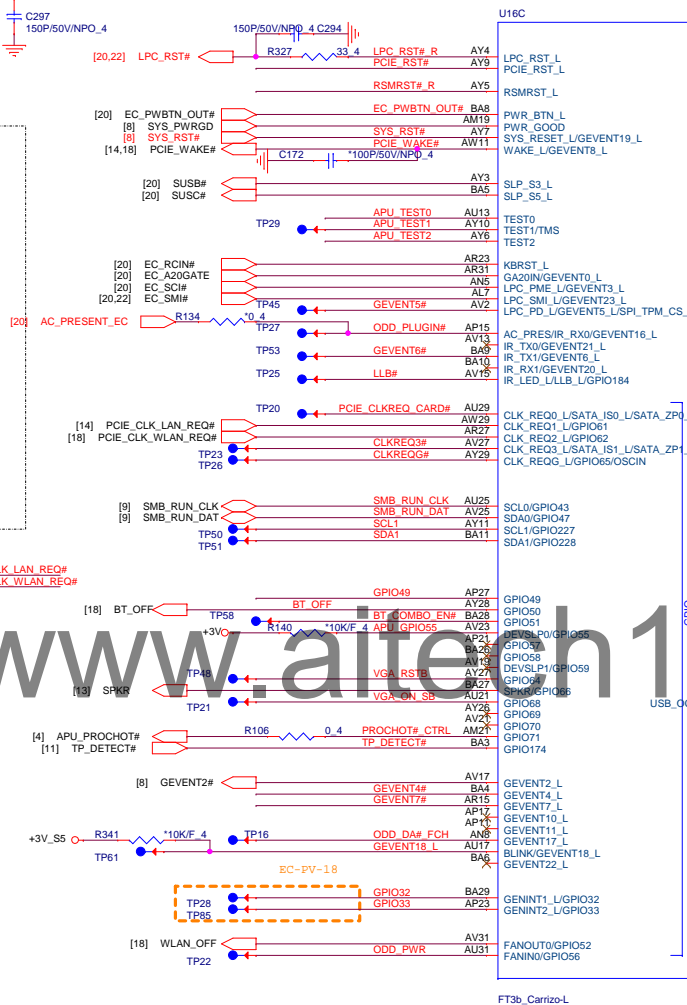
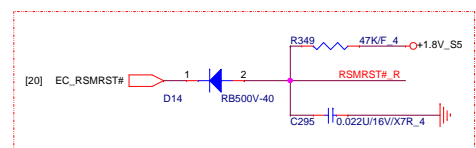
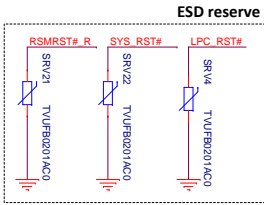
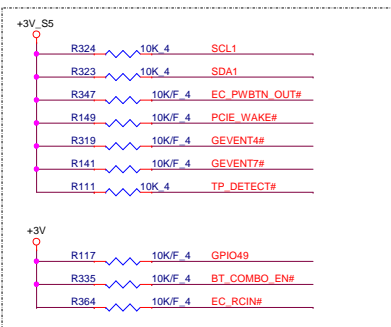
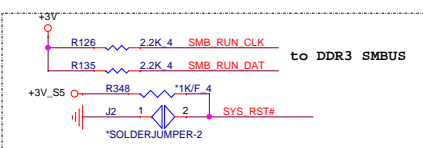
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PROJECT HP-Bali		
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	MEM/PCIE (1/6)	C3A
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NC, no install by default

TEST2	TEST1	TEST0	Description
0	0	0	FCH TAP accessible from APU when TAPEN is asserted FCH JTAG pins are overloaded for multiple functions, in this configuration the FCH JTAG are used as non-JTAG pins
0	0	1	Reserved
0	1	X	Reserved
1	TMS	0	FCH JTAG multi-function pins are configured as JTAG pins, in this configuration the FCH TAP can be accessed from FCH JTAG pins
1	TMS	1	Use on ATE only Yuba JTAG enabled



[5,7,8,11,14,17,18,20,22,23,24,25,26,27,28,31]	+3V _{SS}
[4,5,7,9,10,11,12,13,14,15,16,17,20,21,22,29,31]	+3V
[3,7,31,32]	+VDDP



SATA HDD

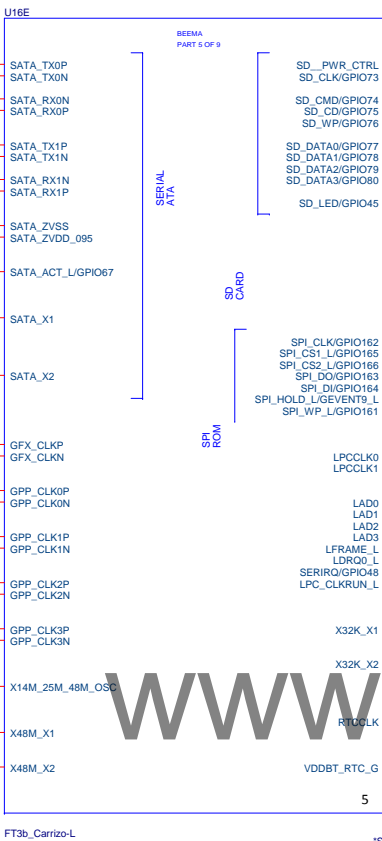


SATA ODD

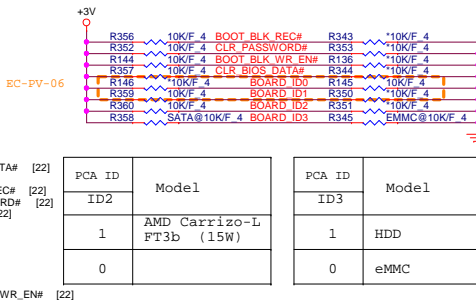
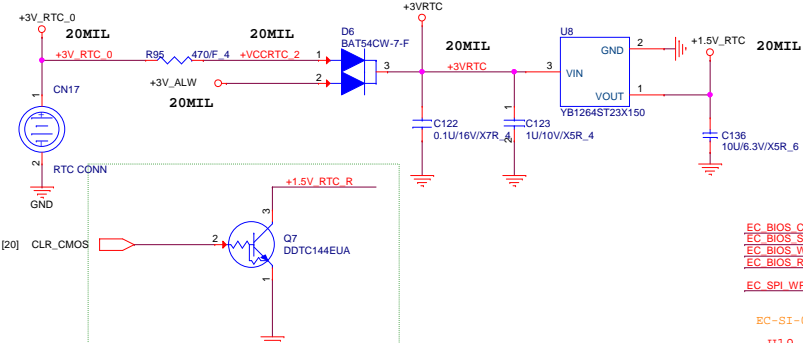
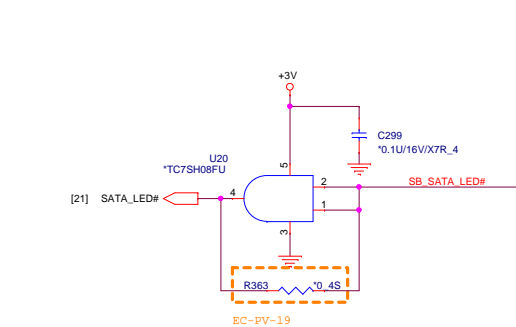
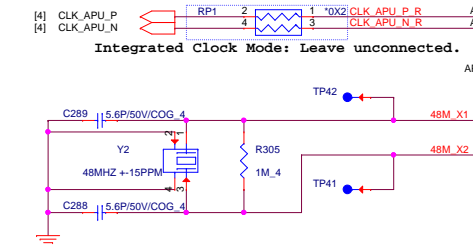


Use with external clock generator only

Integrated Clock Mode:
Leave unconnected.



Integrated Clock Mode: Leave unconnected.

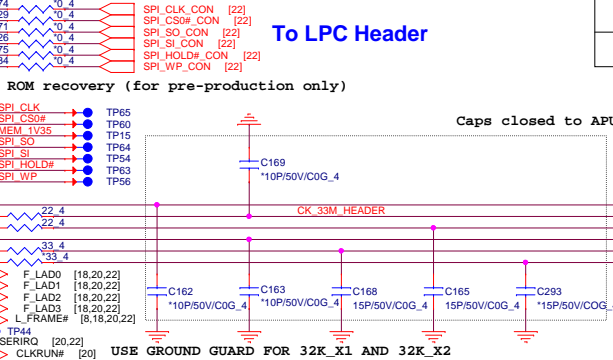


PCA ID	Model
ID2	
1	AMD Carrizo-L FT3b (15W)
0	

PCA ID	Model
ID3	
1	HDD
0	eMMC

To LPC Header

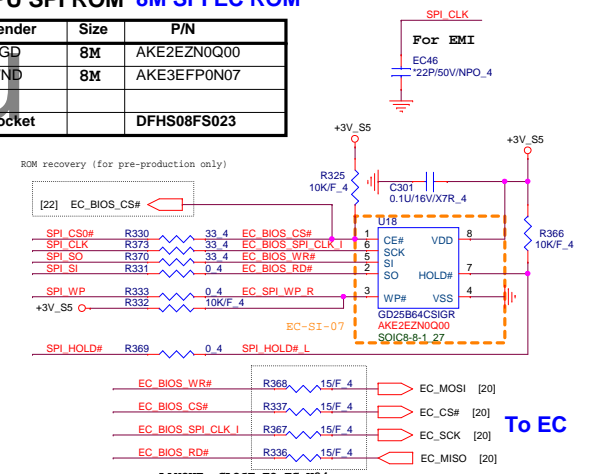
Caps closed to APU



USE GROUND GUARD FOR 32K_X1 AND 32K_X

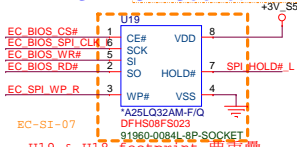
APU SPI ROM 8M SPI EC ROM

Vender	Size	P/N
GGD	8M	AKE2EZNOQ00
WND	8M	AKE3EFP0N07
Socket		DFHS08FS023



To EC

SPI ROM Socket



91960-0084L-8P-SOCKET

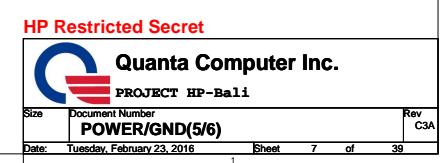
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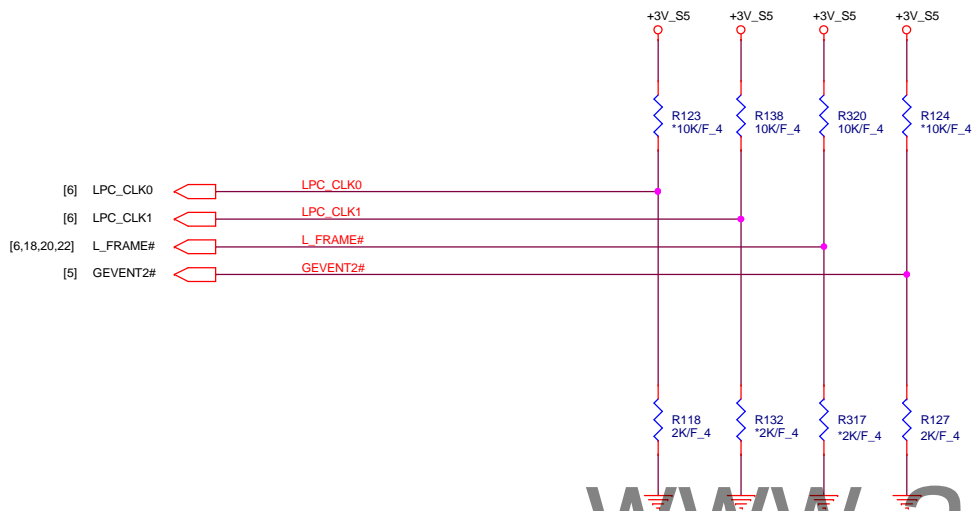
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	SATA/CLK (4/6)	
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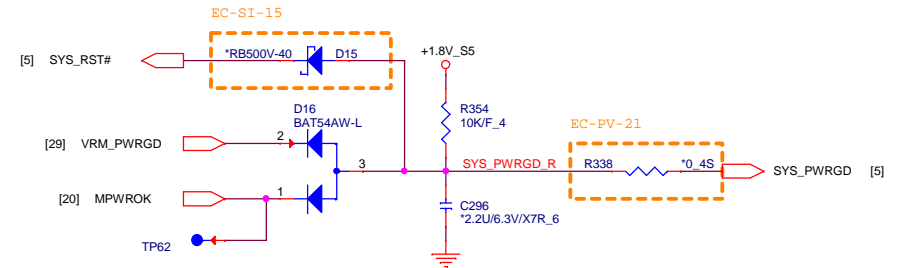


STRAPS PINS

OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.




SYS_PWRGD



REQUIRED STRAPS

	LPC_CLK0	LPC_CLK1	LFRAME#	GEVENT2#
PULL HIGH	BOOT FAIL TIMER ENABLED	CLKGEN ENABLED DEFAULT	SPI ROM DEFAULT	1.8V SPI ROM
PULL LOW	BOOT FAIL TIMER DISABLED DEFAULT	CLKGEN DISABLED	LPC ROM	3.3V SPI ROM DEFAULT

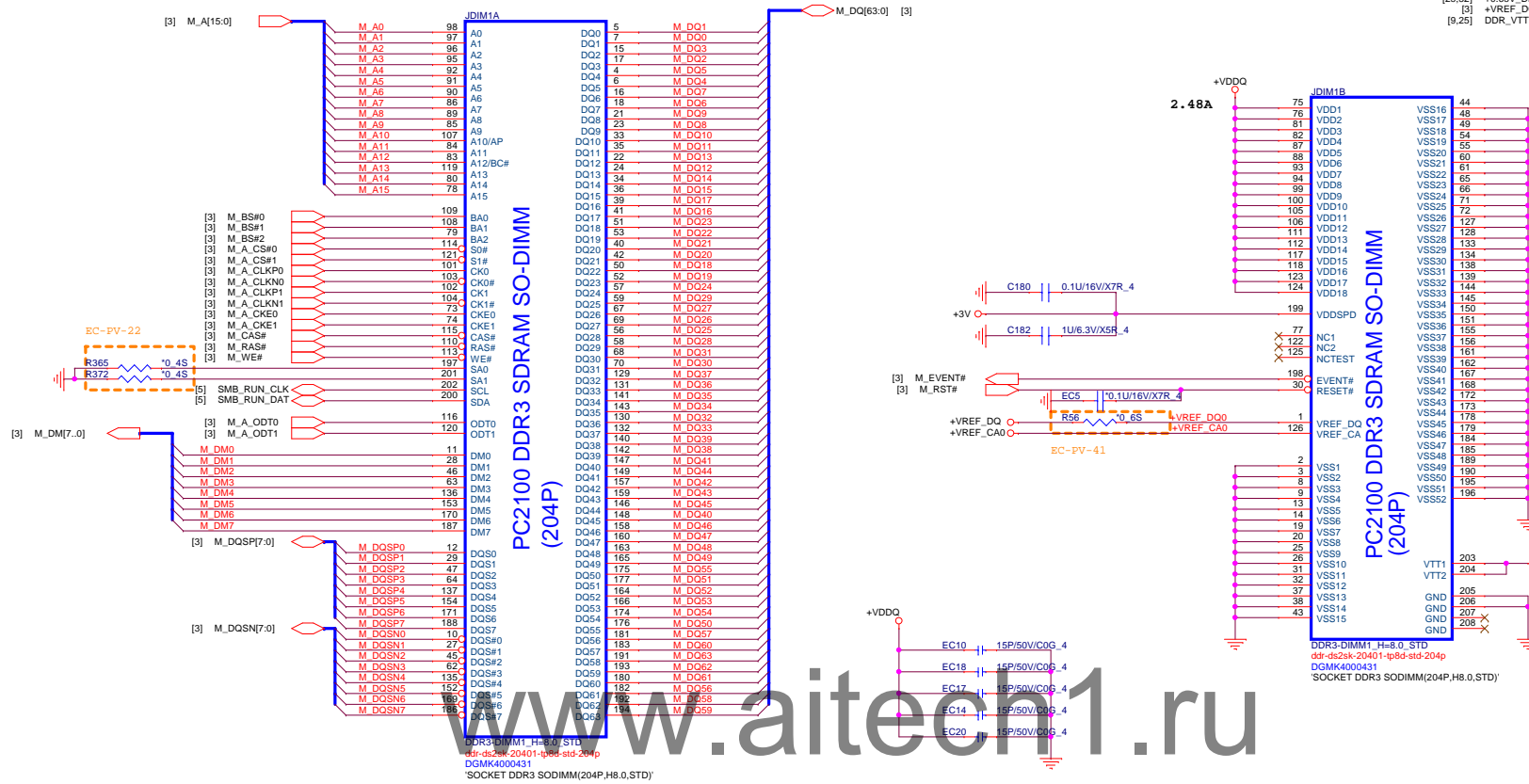
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 Quanta Computer Inc. PROJECT HP-Bali		Rev C3A
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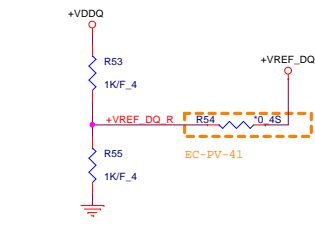
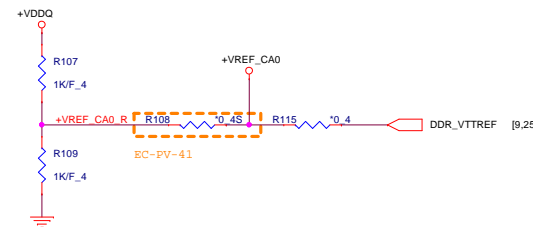
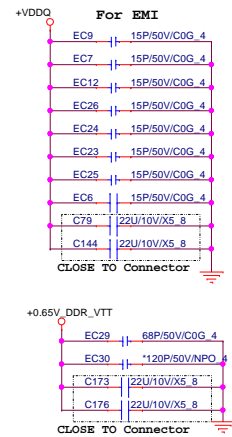
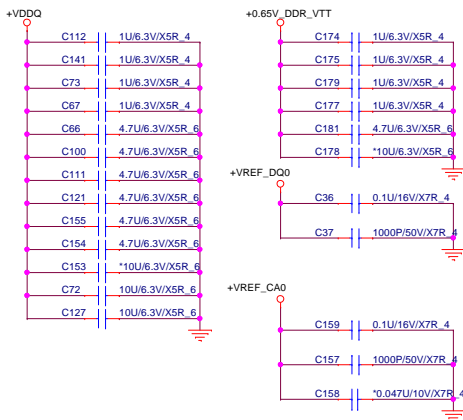
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[4,5,6,7,10,11,12,13,14,15,16,17,20,21,22,29,31]
[3,7,19,25]
[25,32]
[3]
[9,25]

+VDDQ
+0.65V_DDR_VTT
+VREF_DQ
DDR_VTTREF



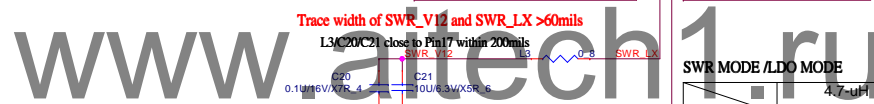
Place these Caps near So-Dimm0.



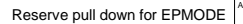
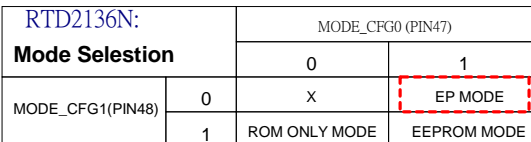
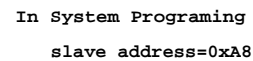
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Size: Document Number: **DDR3L DIMM0-STD (H=8)** Rev: C3A
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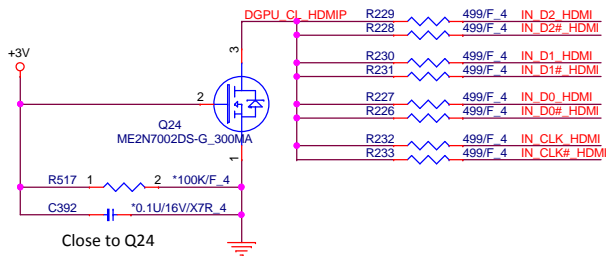
SWR MODE /LDO MODE		
	4.7-μH	0 Ohm
SWR_182mW	Connect	NC
LDO_357mW	NC	Connect



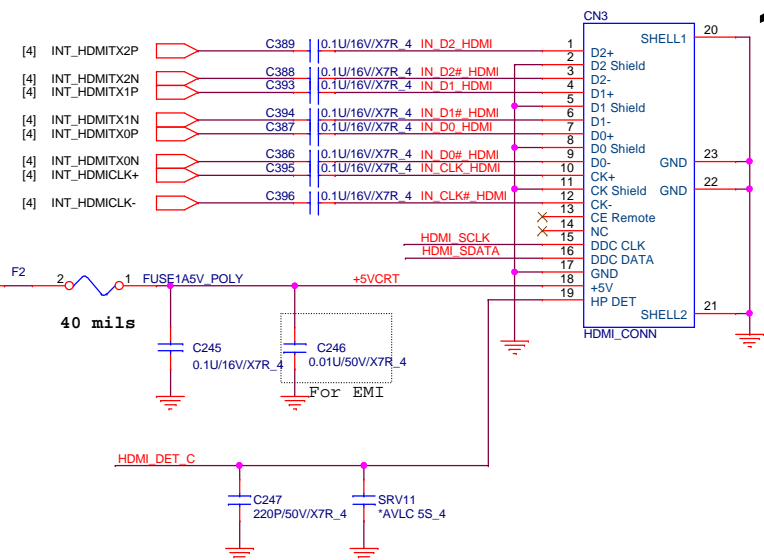
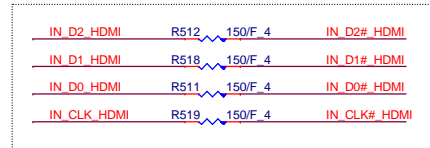
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1

HDMI CONN

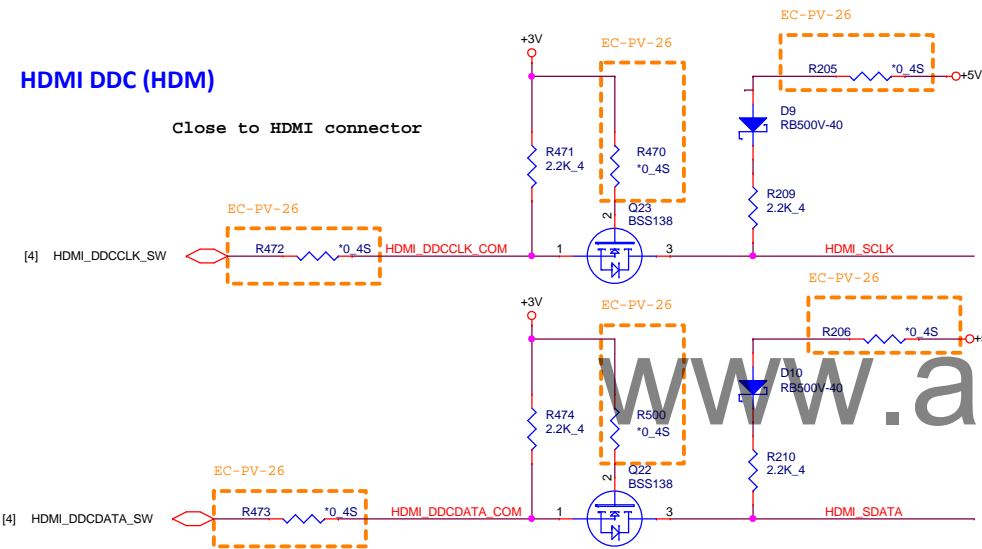


For EMI



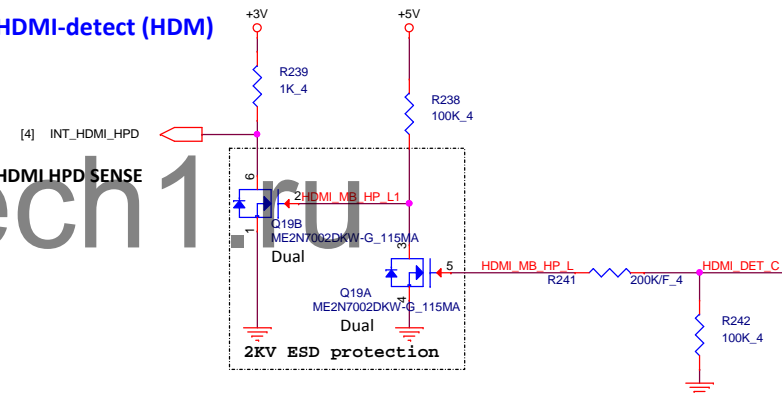
HDMI DDC (HDM)

Close to HDMI connector

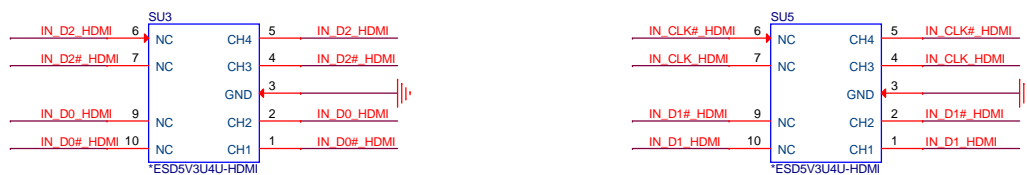


HDMI-detect (HDM)

HDMI HPD SENSE

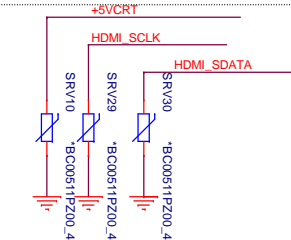


For ESD



Layout note: Place close to HDMI Conn

[4,5,6,7,9,10,11,13,14,15,16,17,20,21,22,29,31]
[11,13,18,19,21,23,31,32]

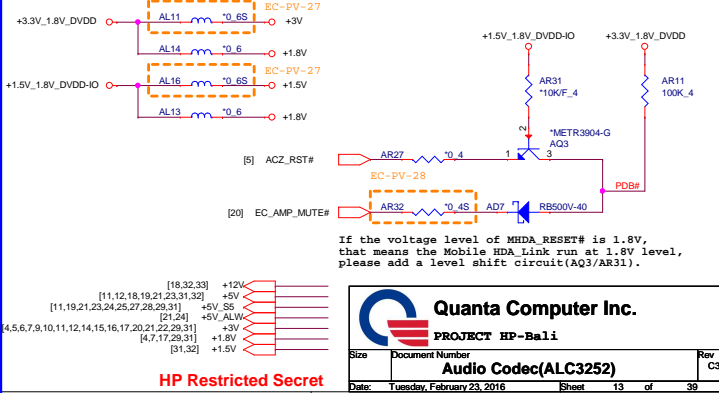
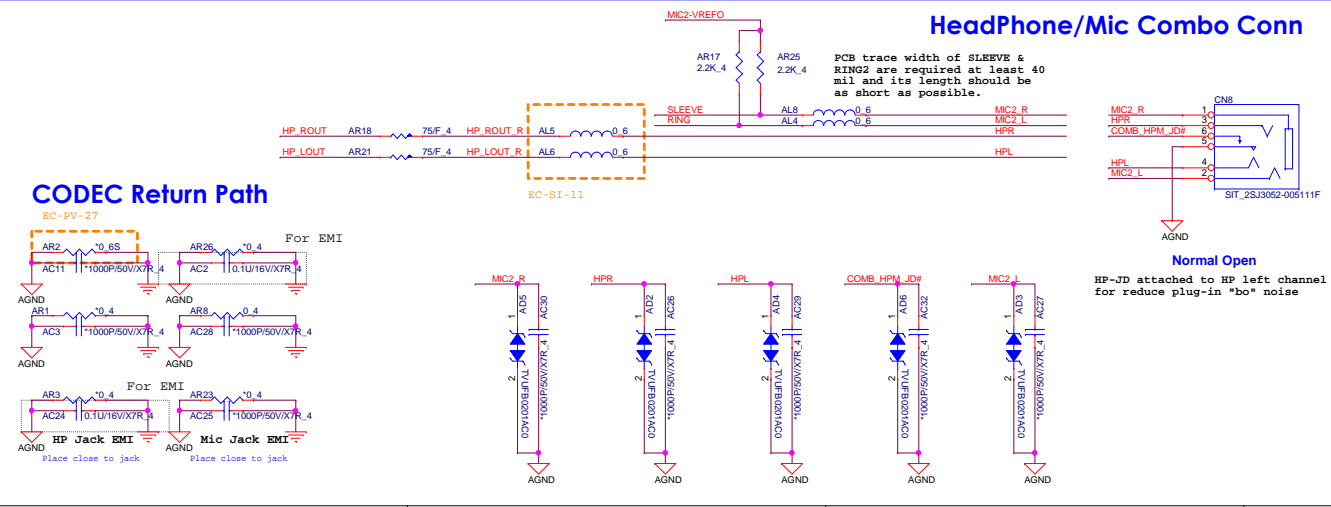
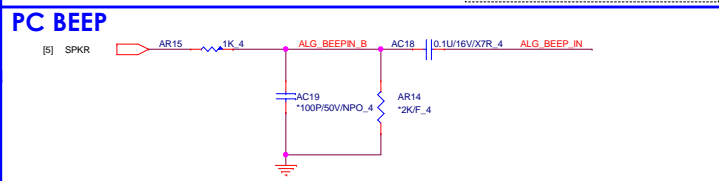
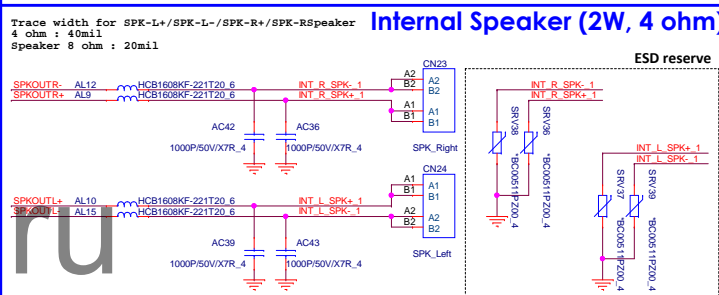
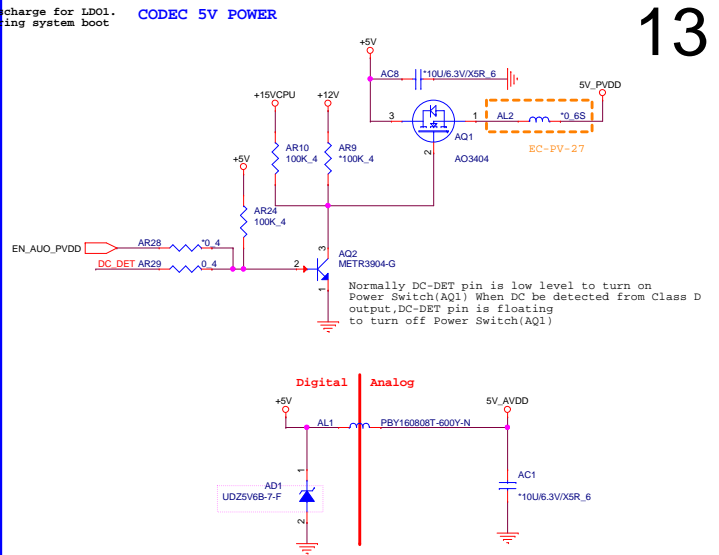
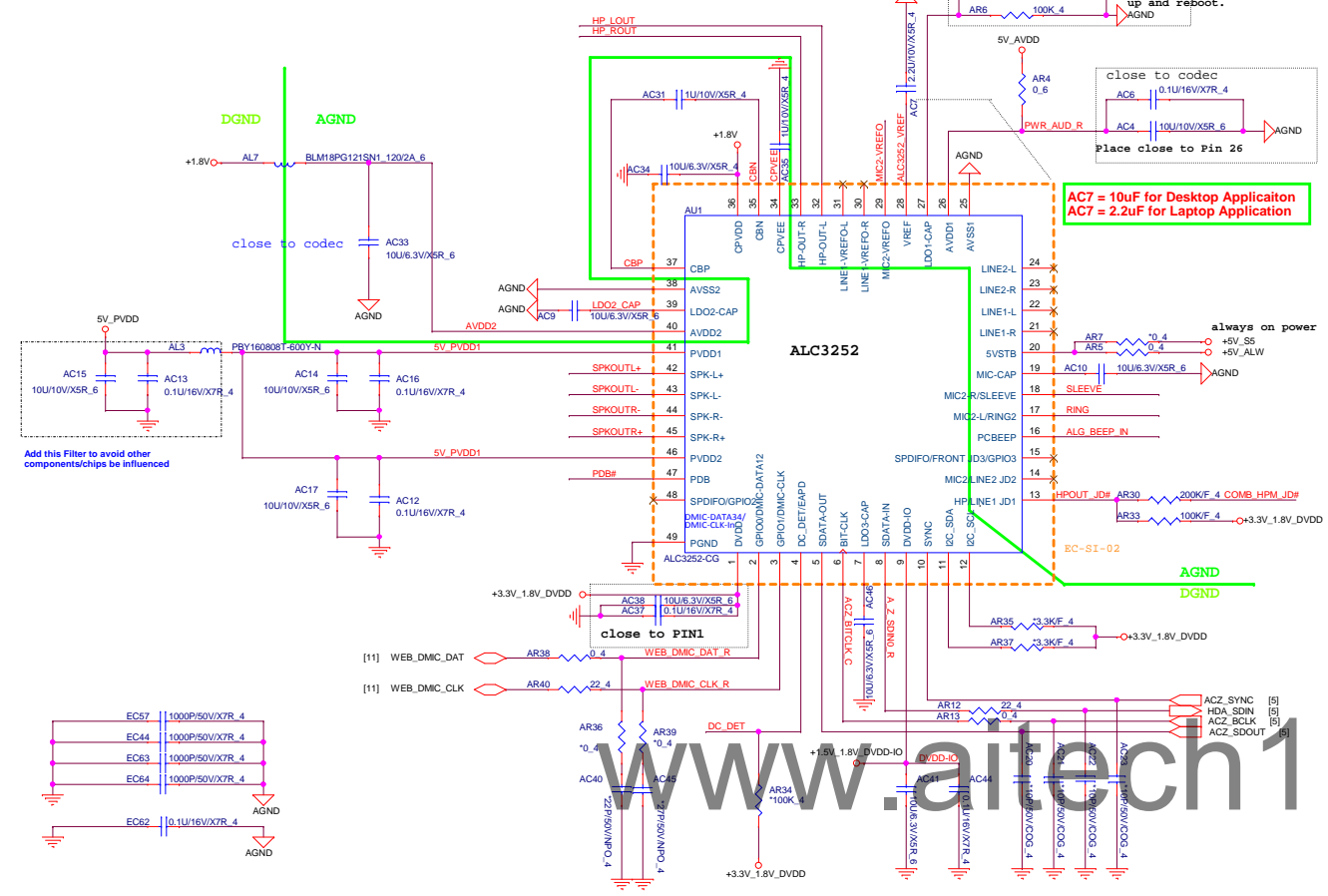


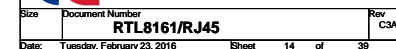
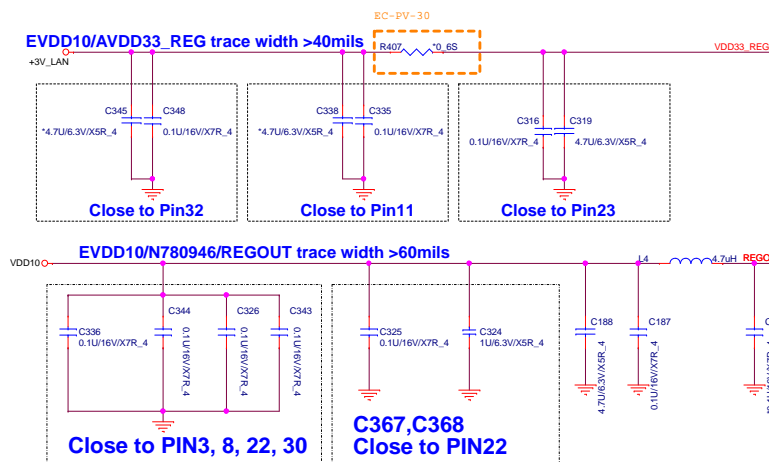
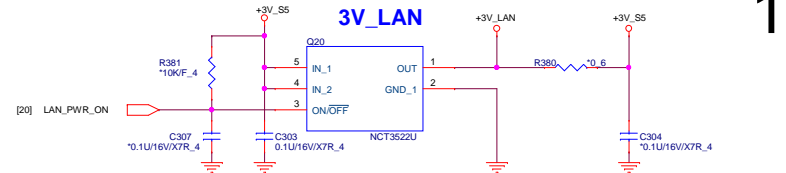
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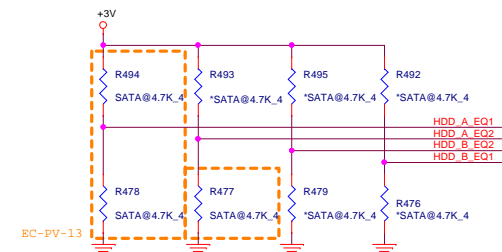
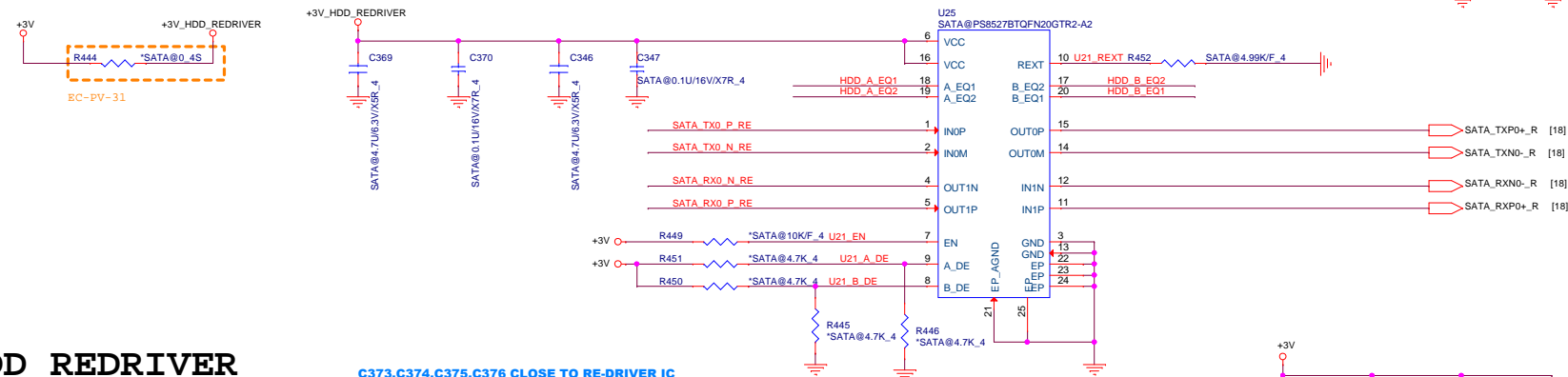
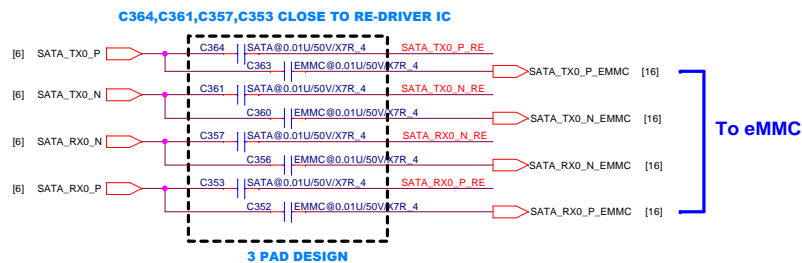




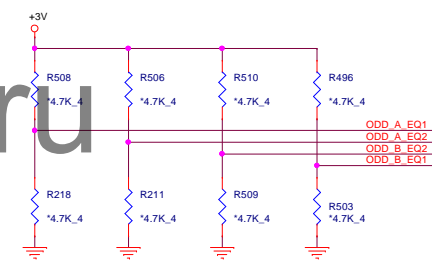
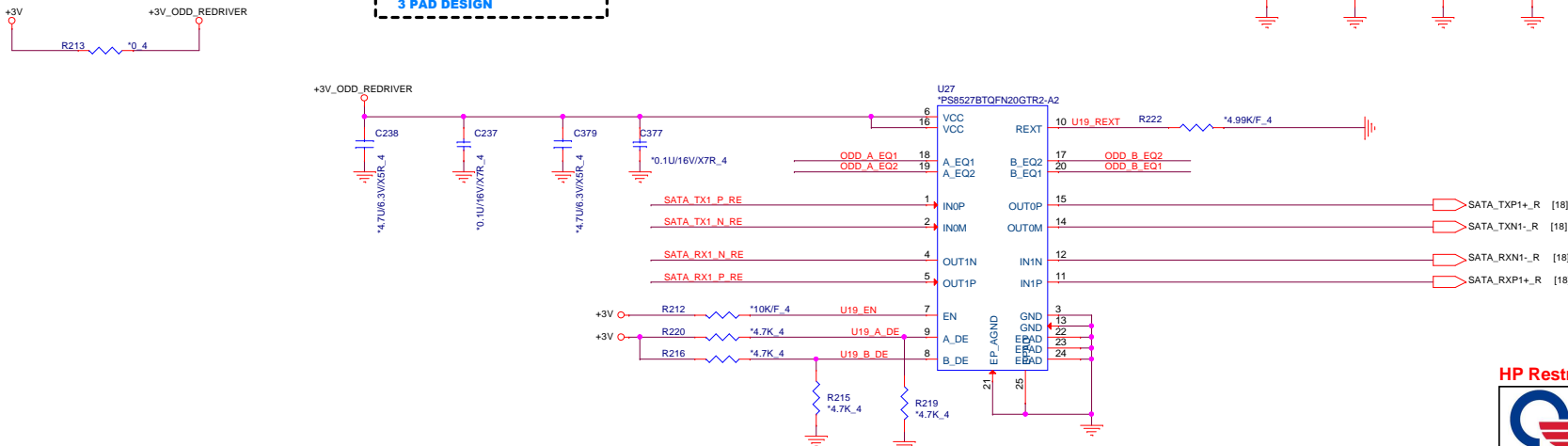
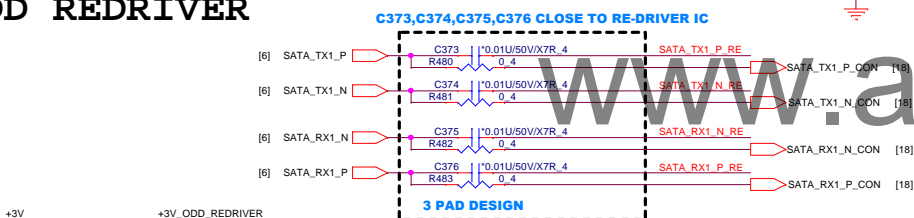
HDD REDRIVER

[4,5,6,7,9,10,11,12,13,14,16,17,20,21,22,29,31] +3V

15



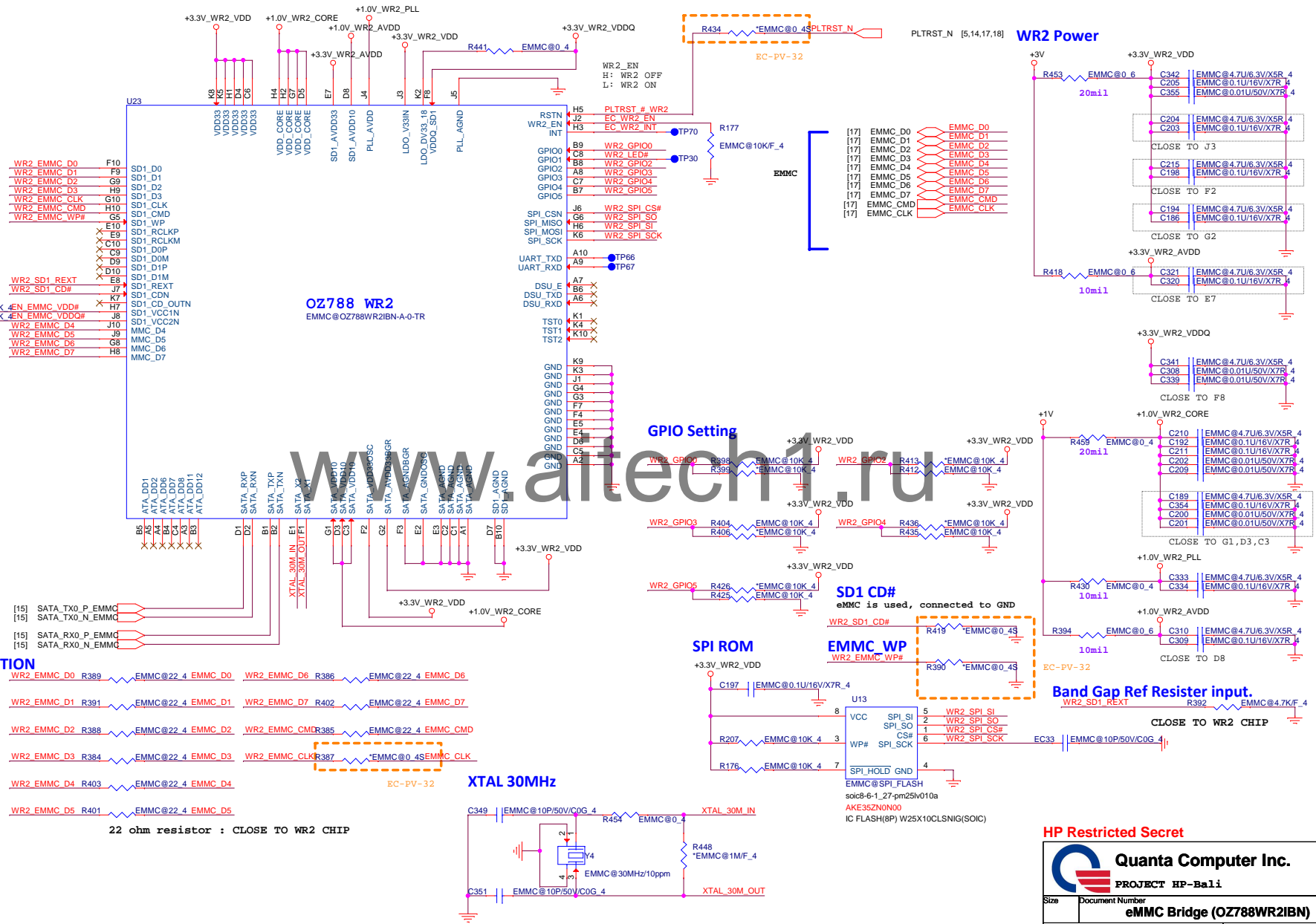
ODD REDRIVER

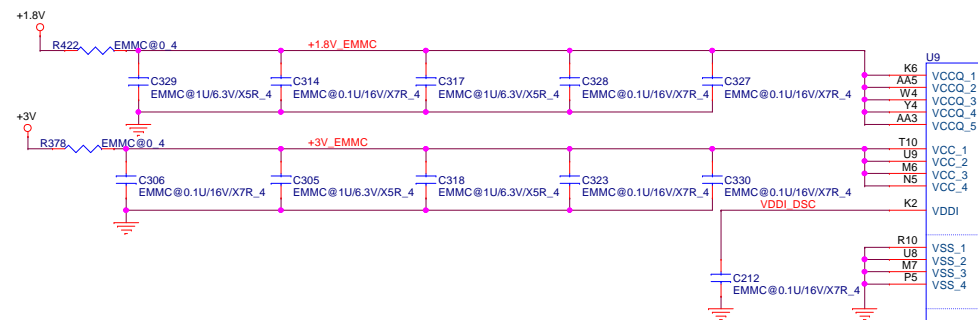


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	SATA RE-DEIVER	C3A
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EC-SI-09

Vendor	Vendor P/N	Quanta P/N
HYNIX 32G	H26M64208EMR	AKE3SZ-TW10
Samsung 32G	KLMBG2JENB-B041	AKE3SZ0T502

Default

R152 *EMMC@0.4 eMMC_NC11

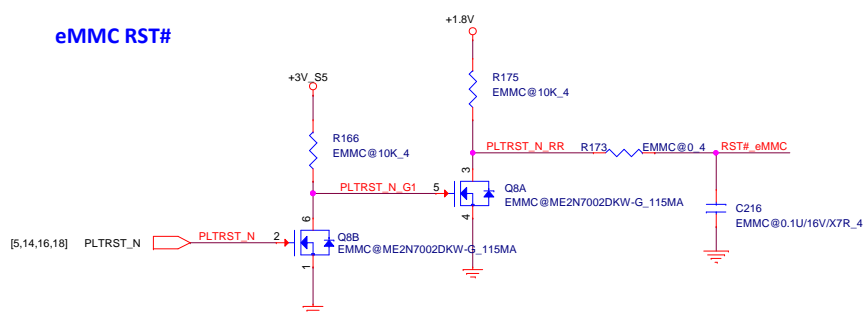
Power

Signals

GND

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eMMC RST#



A1_Index	NC.1	NC.70	NC.138
A4	NC.2	NC.71	NC.139
A6	NC.3	NC.72	NC.140
A9	NC.4	NC.73	NC.141
B2	NC.5	NC.74	NC.142
B3	NC.6	NC.75	NC.143
D1	NC.7	NC.76	NC.144
D14	NC.8	NC.77	NC.145
H1	NC.9	NC.78	NC.146
H2	NC.10	NC.79	NC.147
H6	NC.11	NC.80	NC.148
H7	NC.12	NC.81	NC.149
H8	NC.13	NC.82	NC.150
H9	NC.14	NC.83	NC.151
H10	NC.15	NC.84	NC.152
H11	NC.16	NC.85	NC.153
H12	NC.17	NC.86	NC.154
H13	NC.18	NC.87	NC.155
H14	NC.19	NC.88	NC.156
J1	NC.20	NC.89	NC.157
J7	NC.21	NC.90	NC.158
J8	NC.22	NC.91	NC.159
J9	NC.23	NC.92	NC.160
J10	NC.24	NC.93	NC.161
J11	NC.25	NC.94	NC.162
J12	NC.26	NC.95	NC.163
J13	NC.27	NC.96	NC.164
J14	NC.28	NC.97	NC.165
K1	NC.29	NC.98	NC.166
K5	NC.30	NC.99	NC.167
K7	NC.31	NC.100	NC.168
K8	NC.32	NC.101	NC.169
K9	NC.33	NC.102	NC.170
K10	NC.34	NC.103	NC.171
K11	NC.35	NC.104	NC.172
K12	NC.36	NC.105	NC.173
K13	NC.37	NC.106	NC.174
K14	NC.38	NC.107	NC.175
L1	NC.39	NC.108	NC.176
L2	NC.40	NC.109	NC.177
L3	NC.41	NC.110	NC.178
L12	NC.42	NC.111	NC.179
L13	NC.43	NC.112	NC.180
L14	NC.44	NC.113	NC.181
M1	NC.45	NC.114	NC.182
M2	NC.46	NC.115	NC.183
M3	NC.47	NC.116	NC.184
M5	NC.48	NC.117	NC.185
M8	NC.49	NC.118	NC.186
M9	NC.50	NC.119	NC.187
M10	NC.51	NC.120	NC.188
M12	NC.52	NC.121	NC.189
M13	NC.53	NC.122	NC.190
M14	NC.54	NC.123	NC.191
N1	NC.55	NC.124	NC.192
N2	NC.56	NC.125	NC.193
N3	NC.57	NC.126	NC.194
N10	NC.58	NC.127	NC.195
N12	NC.59	NC.128	NC.196
N13	NC.60	NC.129	NC.197
N14	NC.61	NC.130	NC.198
P1	NC.62	NC.131	NC.199
P2	NC.63	NC.132	NC.200
P3	NC.64	NC.133	NC.201
P10	NC.65	NC.134	NC.202
P12	NC.66	NC.135	NC.203
P13	NC.67	NC.136	NC.204
P14	NC.68	NC.137	NC.205
	NC.69	NC.138	NC.206

EMMC@H26M64208EMR
fdbg169-samsung-kmbog0000e-0_5a

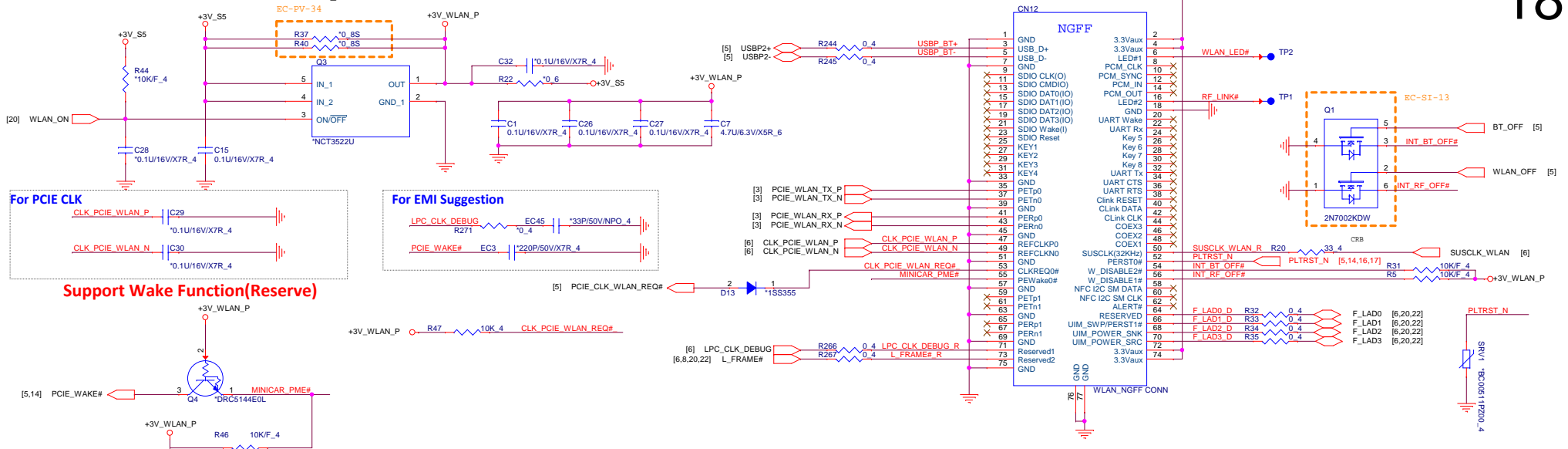
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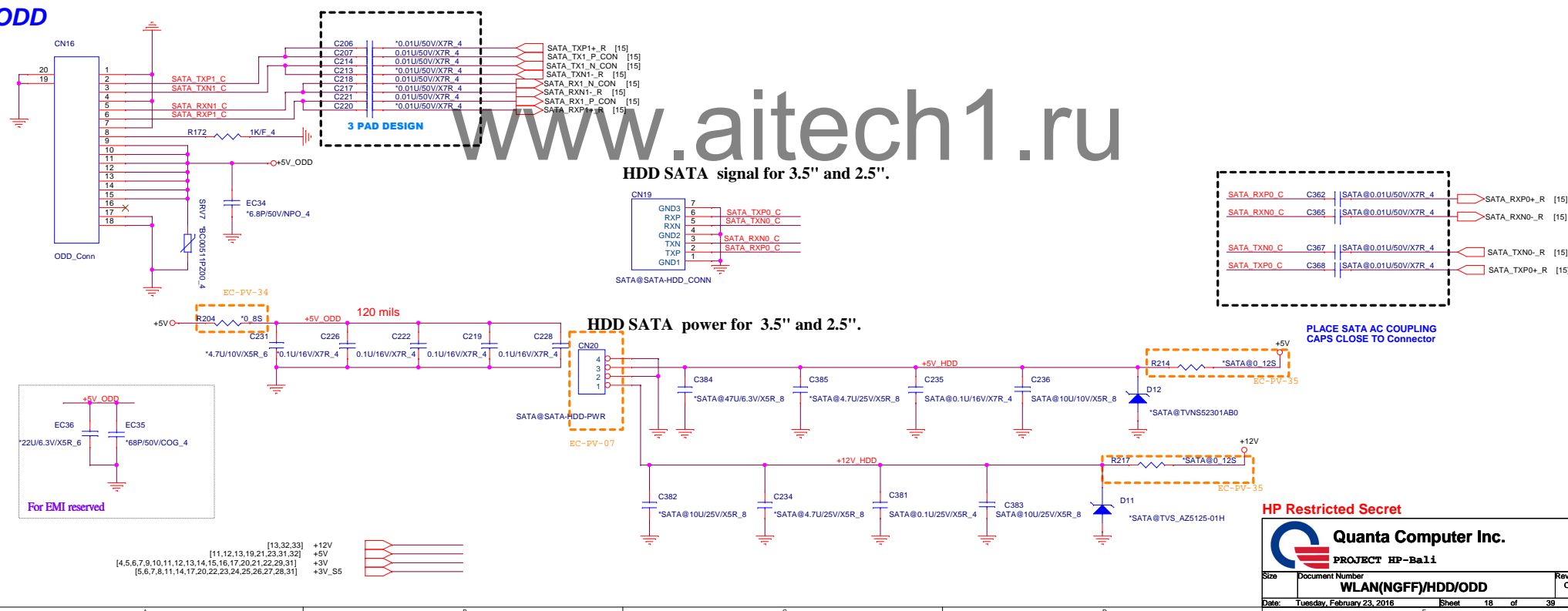
Size	Document Number	Rev
	eMMC	C3A
Date:	Tuesday, February 23, 2016	Sheet 17 of 39

Mini Card WLAN/BT(Optional) PCIe M.2_power(S5)

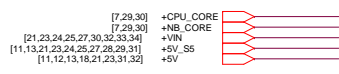
18



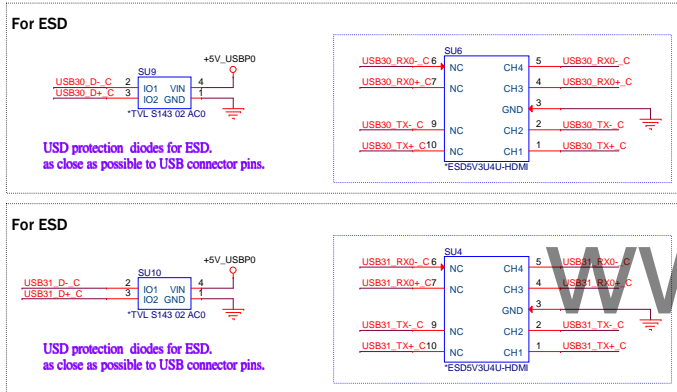
ODD



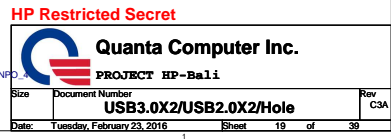
USB 2.0/3.0 Combo

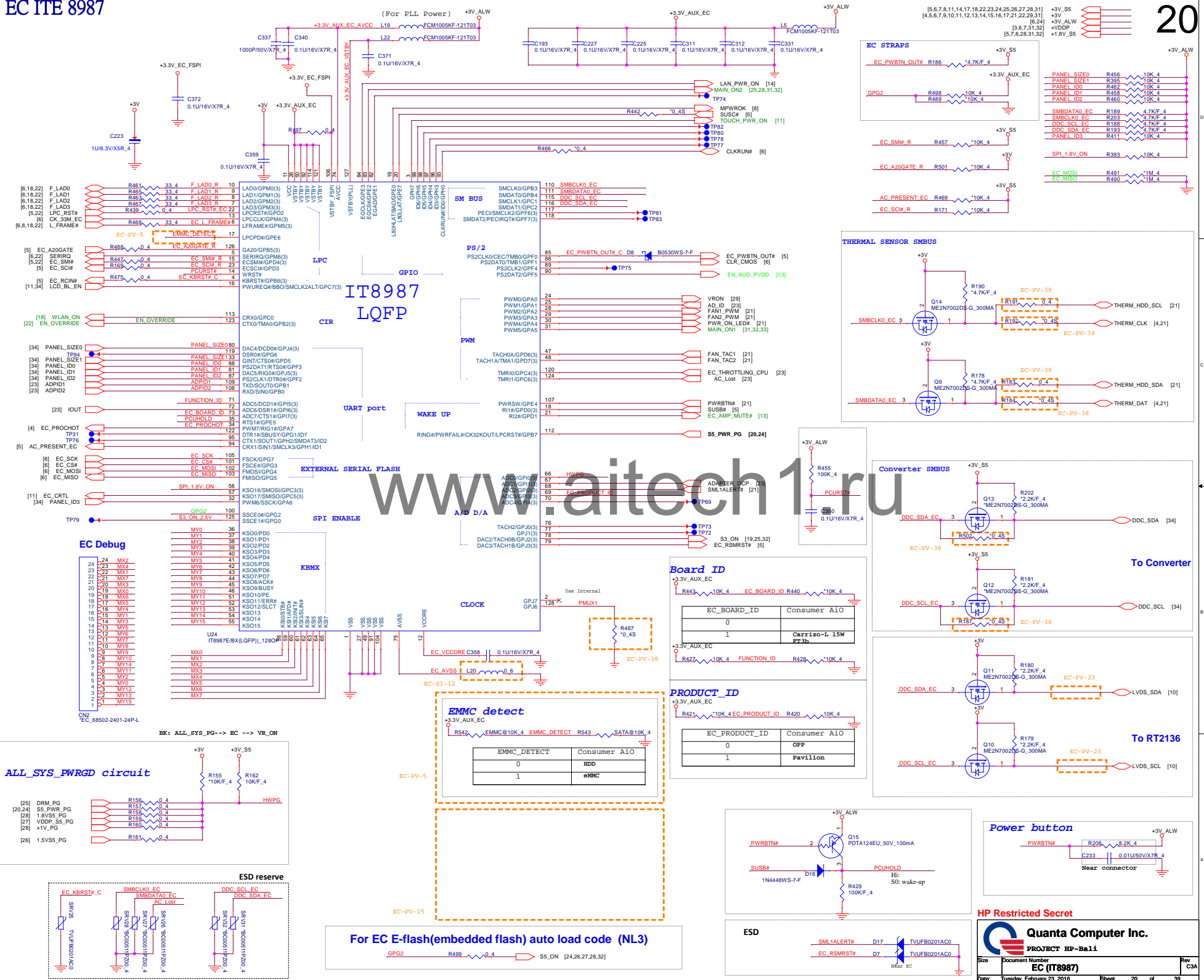


USB 2.0/3.0 Combo

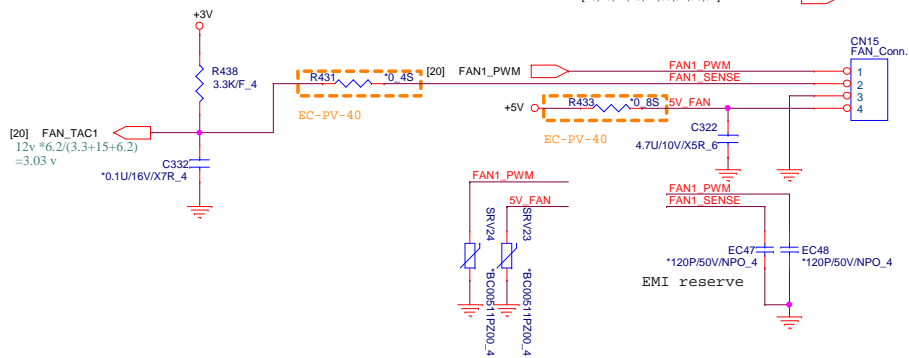


CPU x4 (need to mount nut)

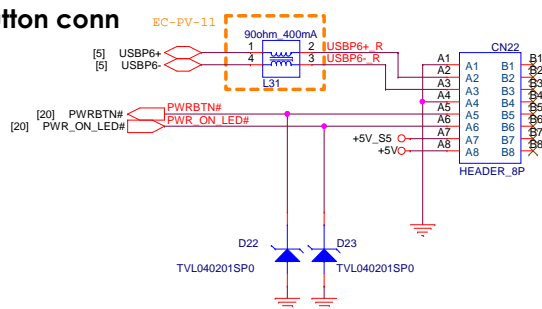
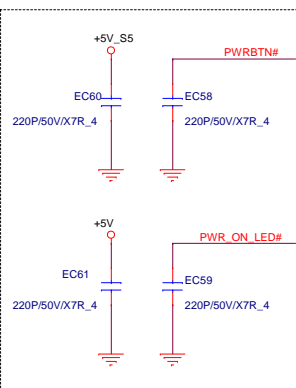
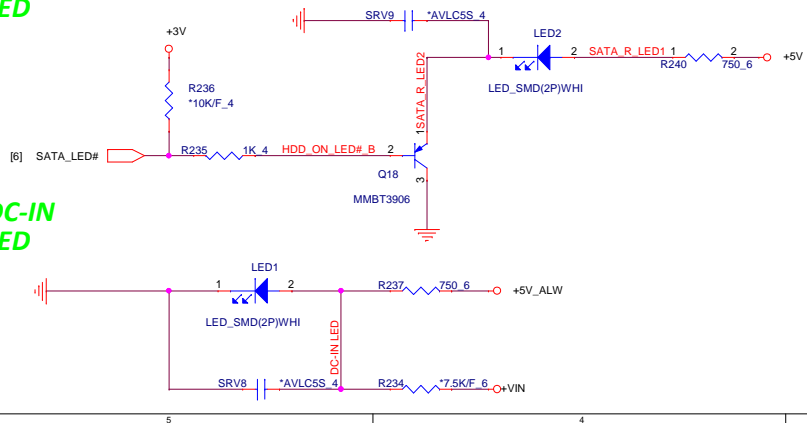




[4,5,6,7,9,10,11,12,13,14,15,16,17,20,22,29,31]	+3V	
[11,12,13,18,19,23,31,32]	+5V	
[11,13,19,23,24,25,27,28,29,31]	+5V_S5	
[13,24]	+5V_ALW	
[19,23,24,25,27,30,32,33,34]	+VIN	

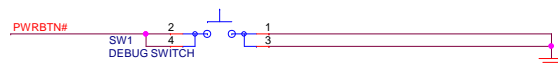
[illegible]

**SATA
LED**

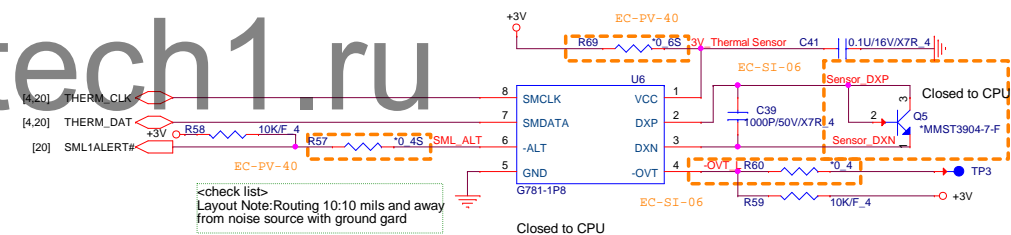


21

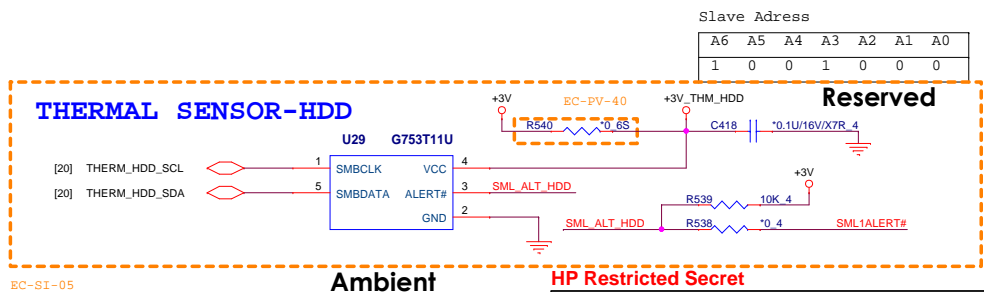
SW1 For Debug.MP will remove it.



THERMAL SENSOR



THERMAL SENSOR-HDD



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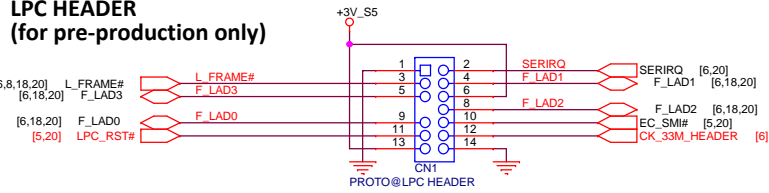
Size	Document Number Thermal/FAN/LEDs/Card/SW	Rev C3
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LPC HEADER (for pre-production only)

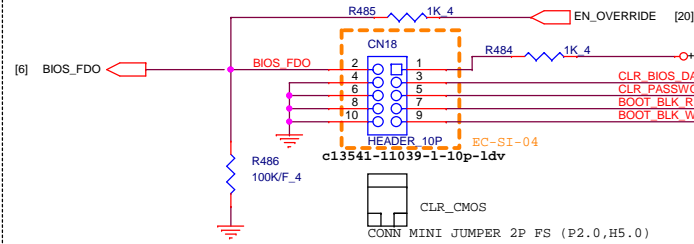
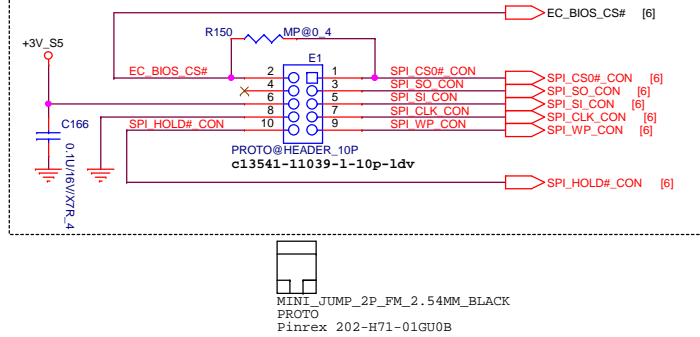
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[4,5,6,7,9,10,11,12,13,14,15,16,17,20,21,29,31]

+3V_S5
+3V

22



ROM recovery (for pre-production only)

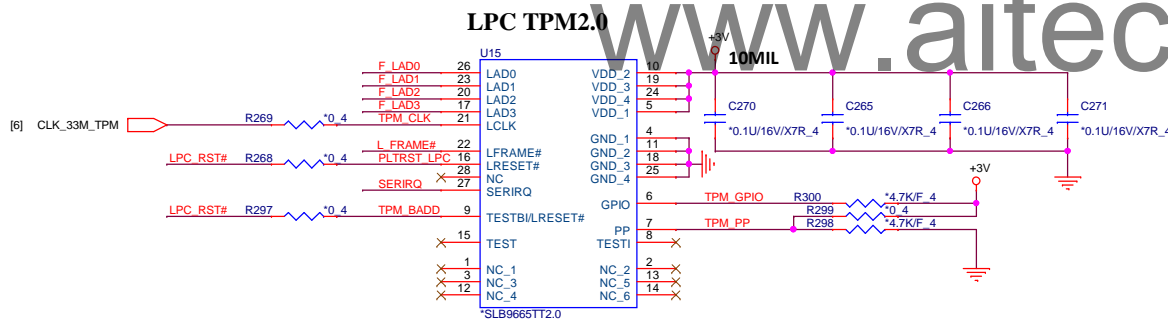


CLR_CMOS

Jumper	Pre-production	Production
BOOT_BLK Recovery	X	X
BOOT_BLK Enable	O	X

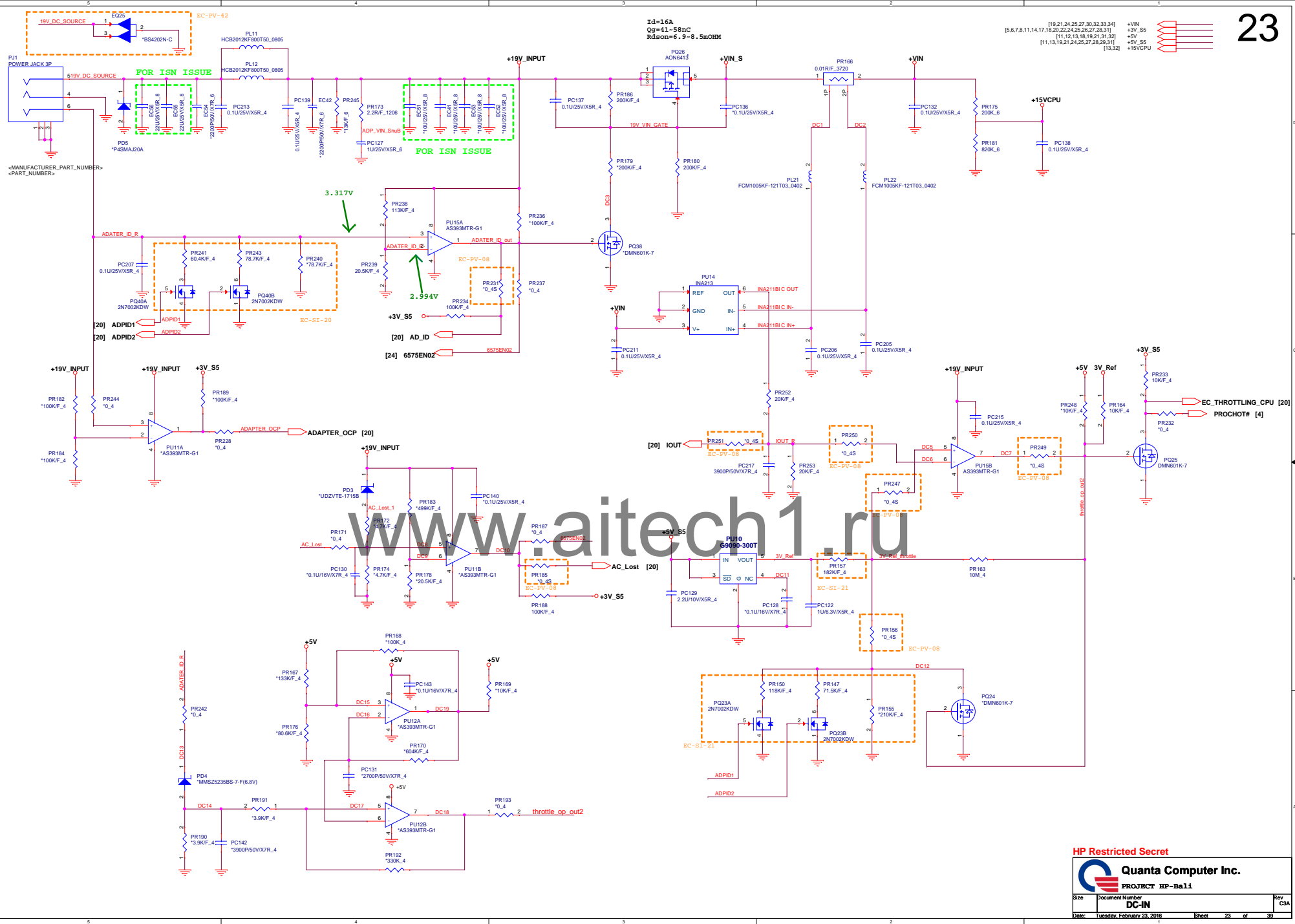
Jumper	Type
Pop	CLR_BIOS_DAT
Pop	CLR_PASSWD
Pop	BOOT_BLK Recovery
Pop	BOOT_BLK Enable

TPM2.0



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		Rev C3A
Quanta Computer Inc. PROJECT HP-Bali		
Size	Document Number	
TPM 2.0 / LPCHeader		
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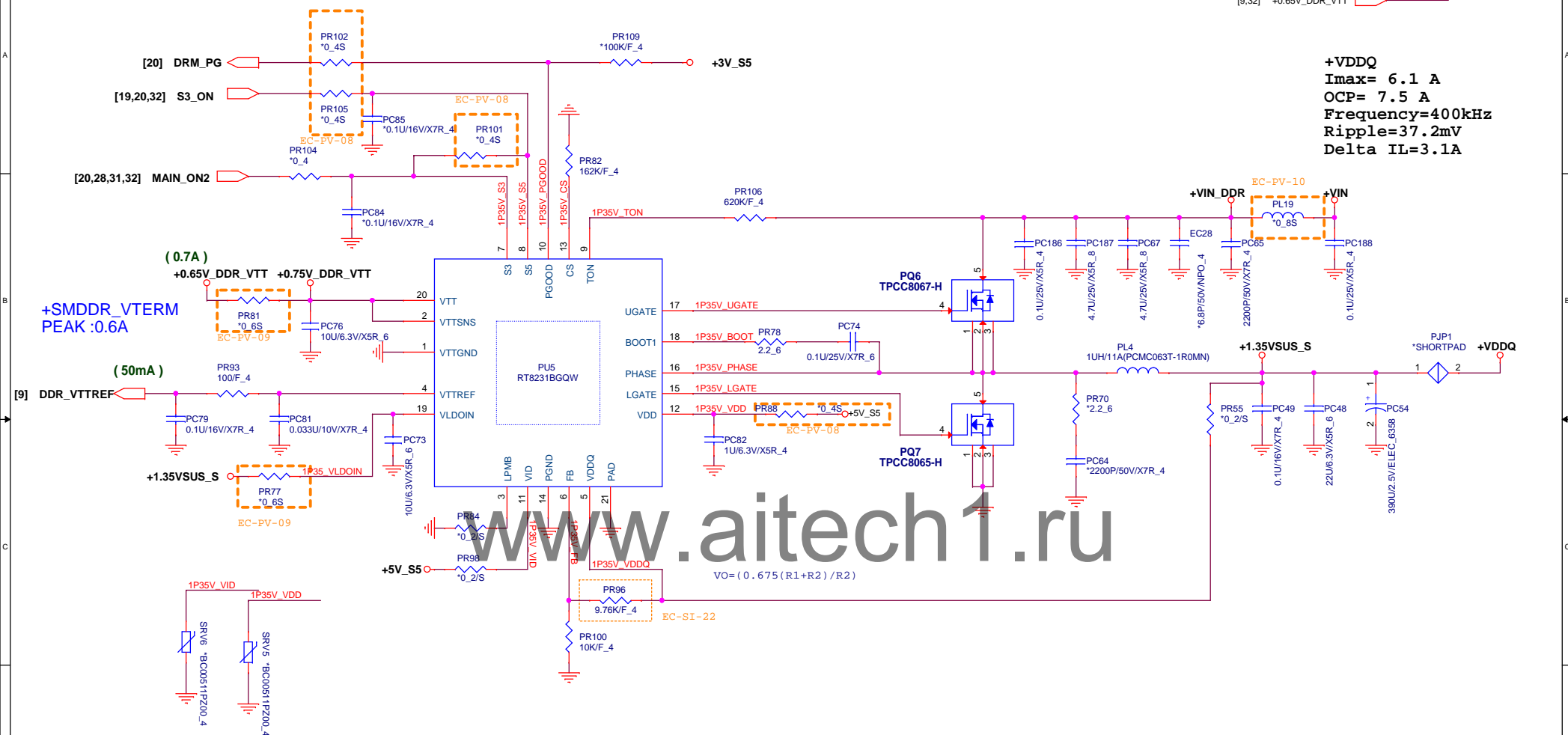


MOSFET	Package	ID (Ta=25°C)	Rds_on_max
TPCC8065-H	DFN3x3	13A	14.5m
TPCC8062-H	DFN3x3	27A	7.1m


EN0	ENC	REF	VREG3	VREG5	SMPS1	SMPS2
LOW	LOW	OFF	OFF	OFF	OFF	OFF
> 2.4V	LOW	ON	ON	ON	OFF	OFF
> 2.4V	> 2.4V	ON	ON	ON	ON	ON

[19,21,23,24,27,30,32,33,34] +VIN
[3,7,9,19] +VDDQ
[5,6,7,8,11,14,17,18,20,22,23,24,26,27,28,31] +3V_S5
[11,13,19,21,23,24,27,28,29,31] +5V_S5
[9,32] +0.65V_DDR_VTT

+VDDQ
Imax= 6.1 A
OCP= 7.5 A
Frequency=400kHz
Ripple=37.2mV
Delta IL=3.1A

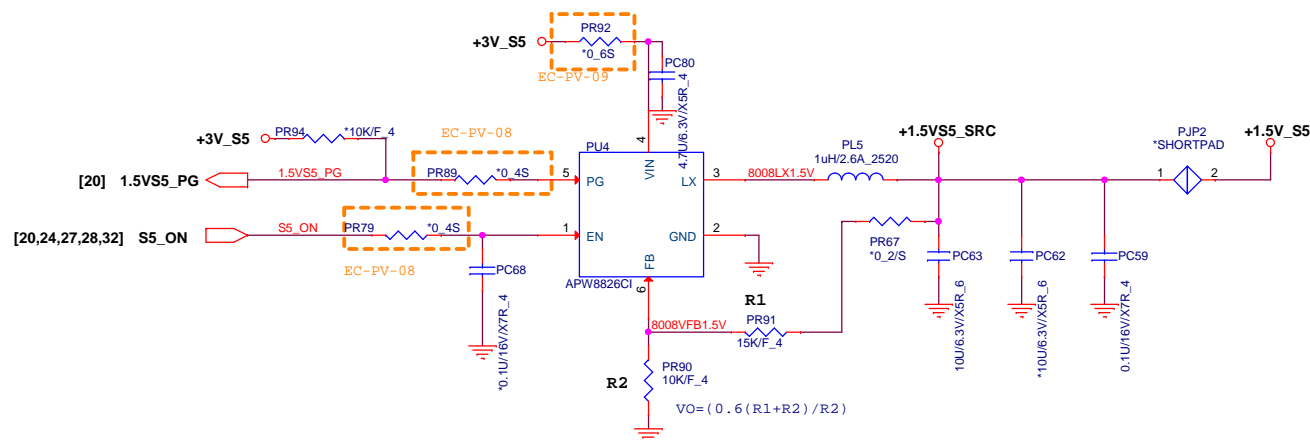
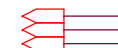


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		Quanta Computer Inc.	
		PROJECT HP-Bali	
Size	Document Number	+VDDQ (RT8231B)	
Date	Tuesday, February 23, 2016	Sheet	25 of 39

[5,6,7,8,11,14,17,18,20,22,23,24,25,27,28,31]
 [11,13,19,21,23,24,25,27,28,29,31]
 [19,21,23,24,25,27,30,32,33,34]


+3V_S5
 +5V_S5
 +VIN



+1.5V_S5
I_{max} = 0.3 A
OCP = 2 A
Frequency = 1.5 MHz
Ripple = 5.5 mV
Delta IL = 0.5 A

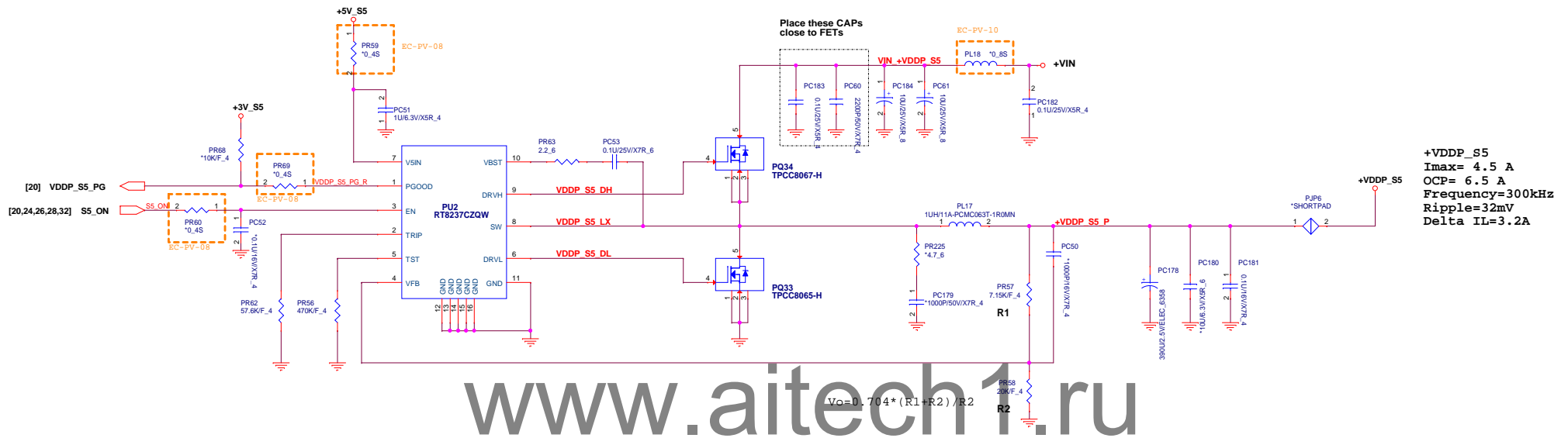
www.aitech1.ru

HP Restricted Secret

 Quanta Computer Inc. PROJECT HP-Bali		Rev
		C3A
Size	Document Number	
	+1.5V_S5 (APW8826CI)	
Date:	Tuesday, February 23, 2016	Sheet 26 of 39

[5,6,7,8,11,14,17,18,20,22,23,24,25,26,28,31]
[11,13,19,21,23,24,25,28,29,31]
[19,21,23,24,25,30,32,33,34]
[7,31,32]

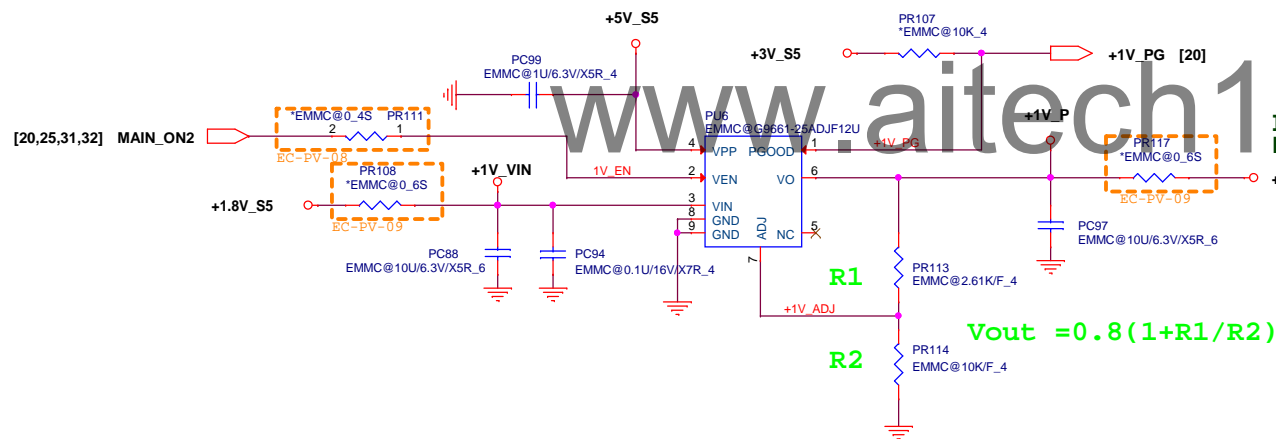
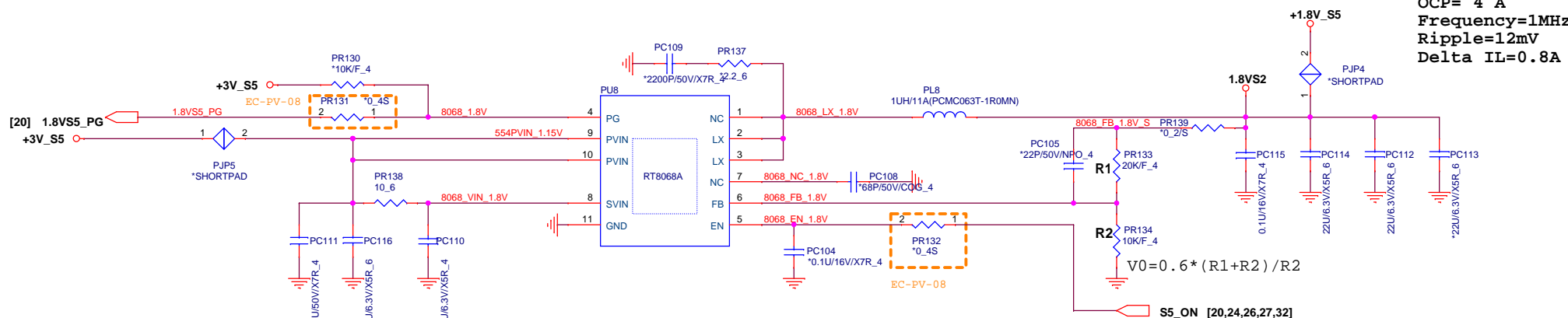
+3V_S5
+5V_S5
+VIN
+VDDP_S5




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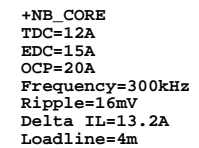
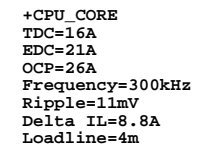
HP Restricted Secret

+1.8V_S5
 $I_{max} = 2.5 \text{ A}$
 $OCP = 4 \text{ A}$
 $\text{Frequency} = 1\text{MHz}$
 $\text{Ripple} = 12\text{mV}$
 $\Delta IL = 0.8\text{A}$

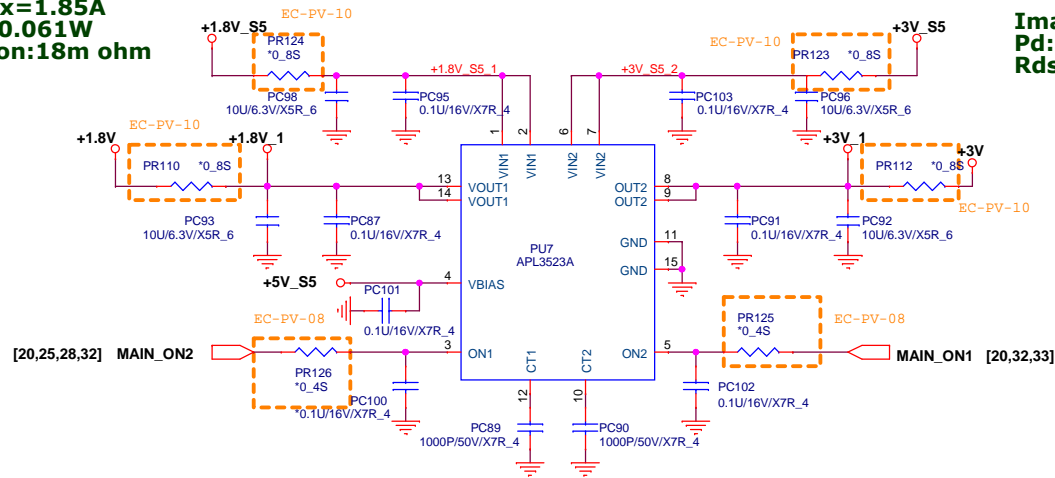


HP Restricted Secret

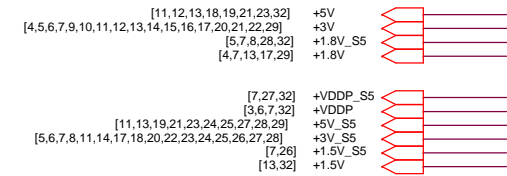
 Quanta Computer Inc. PROJECT HP-Bali		Size	Document Number	Rev
			+1.8V_S5 / +1V	C3A
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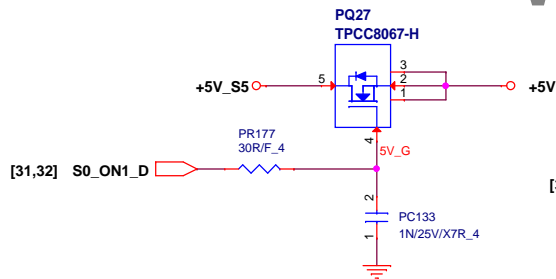
$I_{max}=1.85A$
 $P_d: 0.061W$
 $R_{dson}:18m\ ohm$



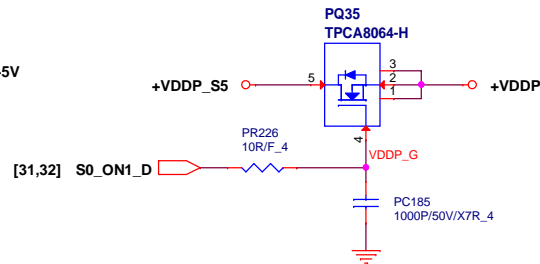
$I_{max}=2.85A$
 $P_d: 0.146W$
 $R_{dson}:18m\ ohm$



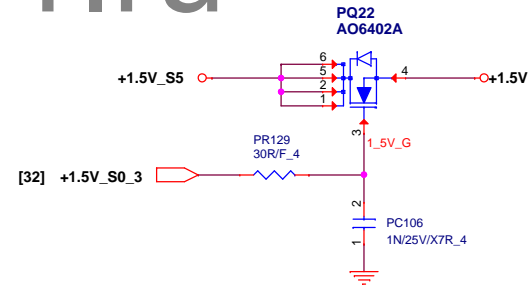
TPCC8067-H
 $R_{dson}=20m@10V\ V_{gs}$
 $I_{max}=7A$
 $P_d: 0.98W$




TPCA8064-H
 $R_{dson}=6m@10V\ V_{gs}$
 $I_{max}=4A$
 $P_d: 0.096W$



AO6402A
 $R_{dson}=24m@10V\ V_{gs}$
 $I_{max}=0.2A$
 $P_d: 0.001W$

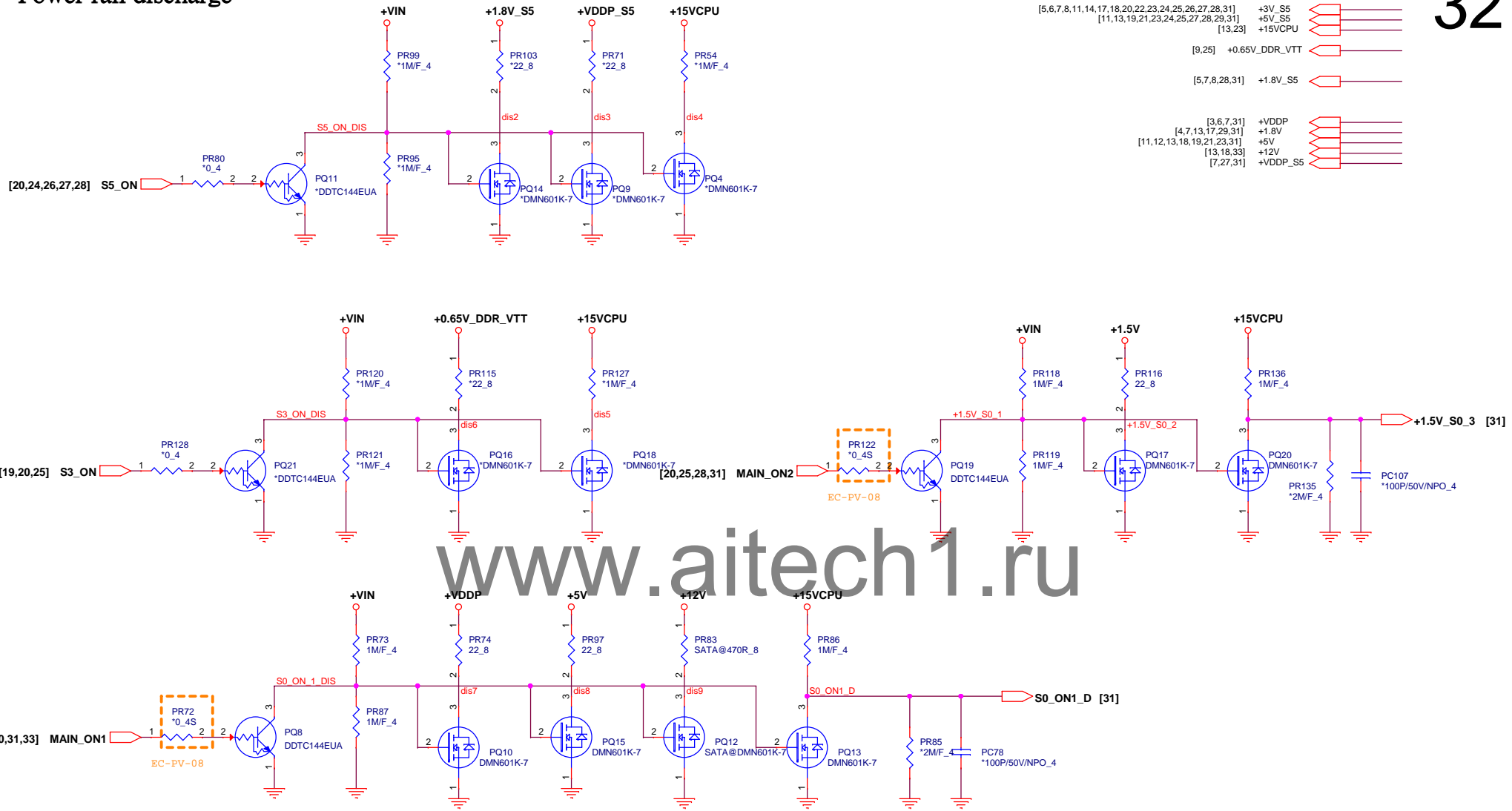


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 Quanta Computer Inc. PROJECT HP-Bali		Size	Document Number	Rev
			Load Switch	C3A
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Power rail discharge

32

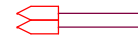


HP Restricted Secret

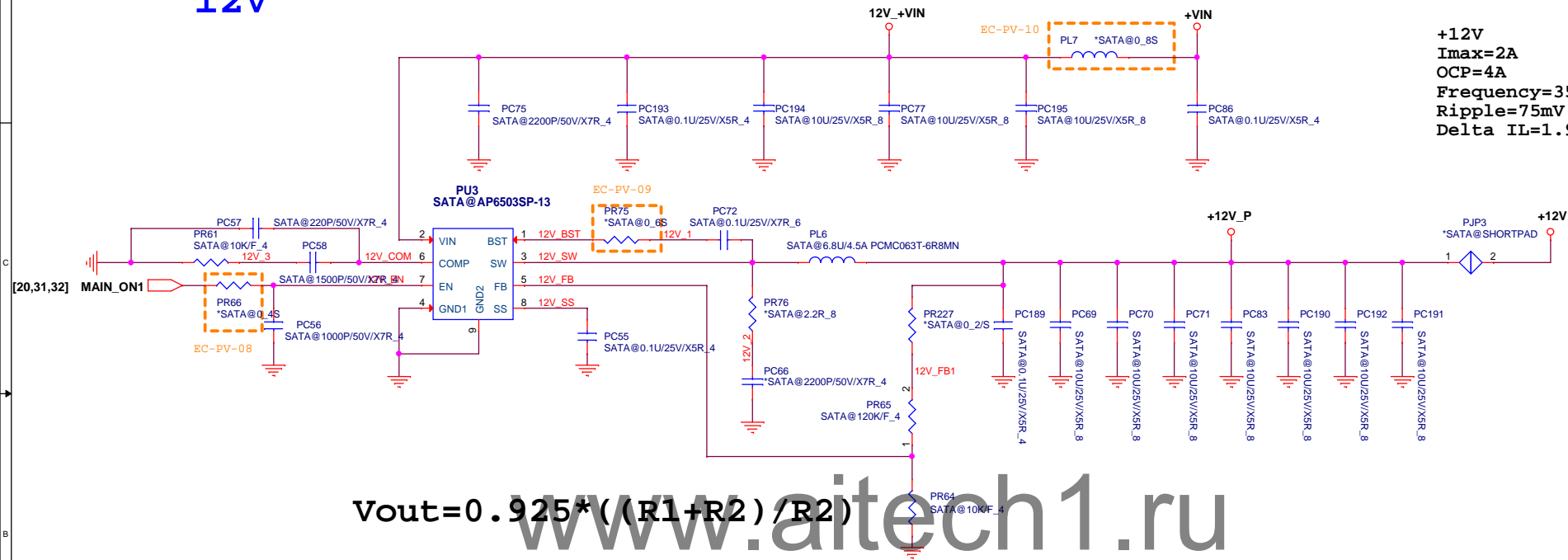
Quanta Computer Inc.
PROJECT HP-Bali

Size	Document Number	Rev
	Discharge	C3A
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12V

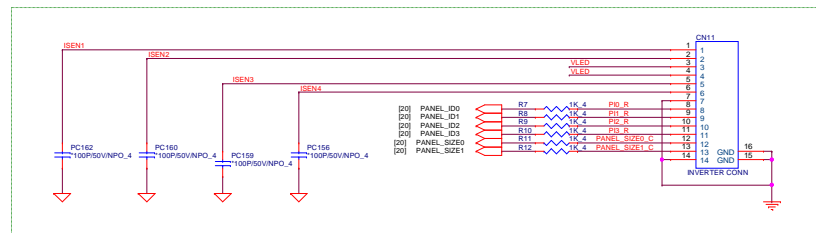
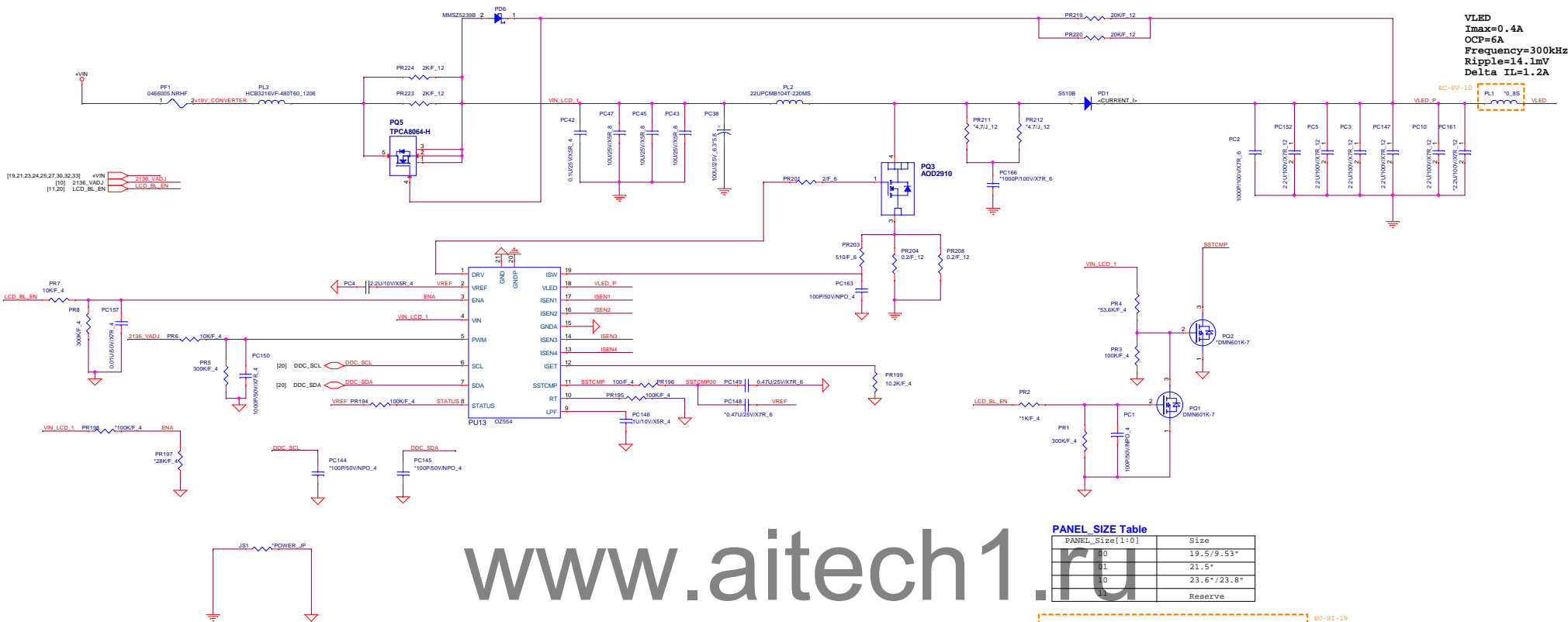
[19,21,23,24,25,27,30,32,34] +VIN
[13,18,32] +12V

+12V
 $I_{max}=2A$
 $OCP=4A$
 $Frequency=357kHz$
 $Ripple=75mV$
 $\Delta IL=1.9A$



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 Quanta Computer Inc. PROJECT HP-Bali		Rev
		C3A
Size	Document Number	+12V
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PANEL_SIZE Table

PANEL_Size[1:0]	Size
00	19.5"/9.53"
01	21.5"
10	23.6"/23.8"
11	Reserve

19.45"/9.53" PANEL_ID Table

PANEL_ID[3:0]	Panel model
1111	No Connect
1110	INX M195FGR-L20_CK
1101	AUG M195RTN01.0 HD+
1100	LGD LM195WD1-TLA1 HD+
1011	INX M200HJ-L20_FHD
1010	Reserve

21.5" PANEL_ID Table

PANEL_ID[3:0]	Panel model
1111	No Connect
1110	INX M215HJX-L38_FHD eDP
1101	SDC LTM215HL01_FHD
1100	LGD LM215WF3-SLN1_FHD
1011	Reserve

23.6"/23.8" PANEL_ID Table

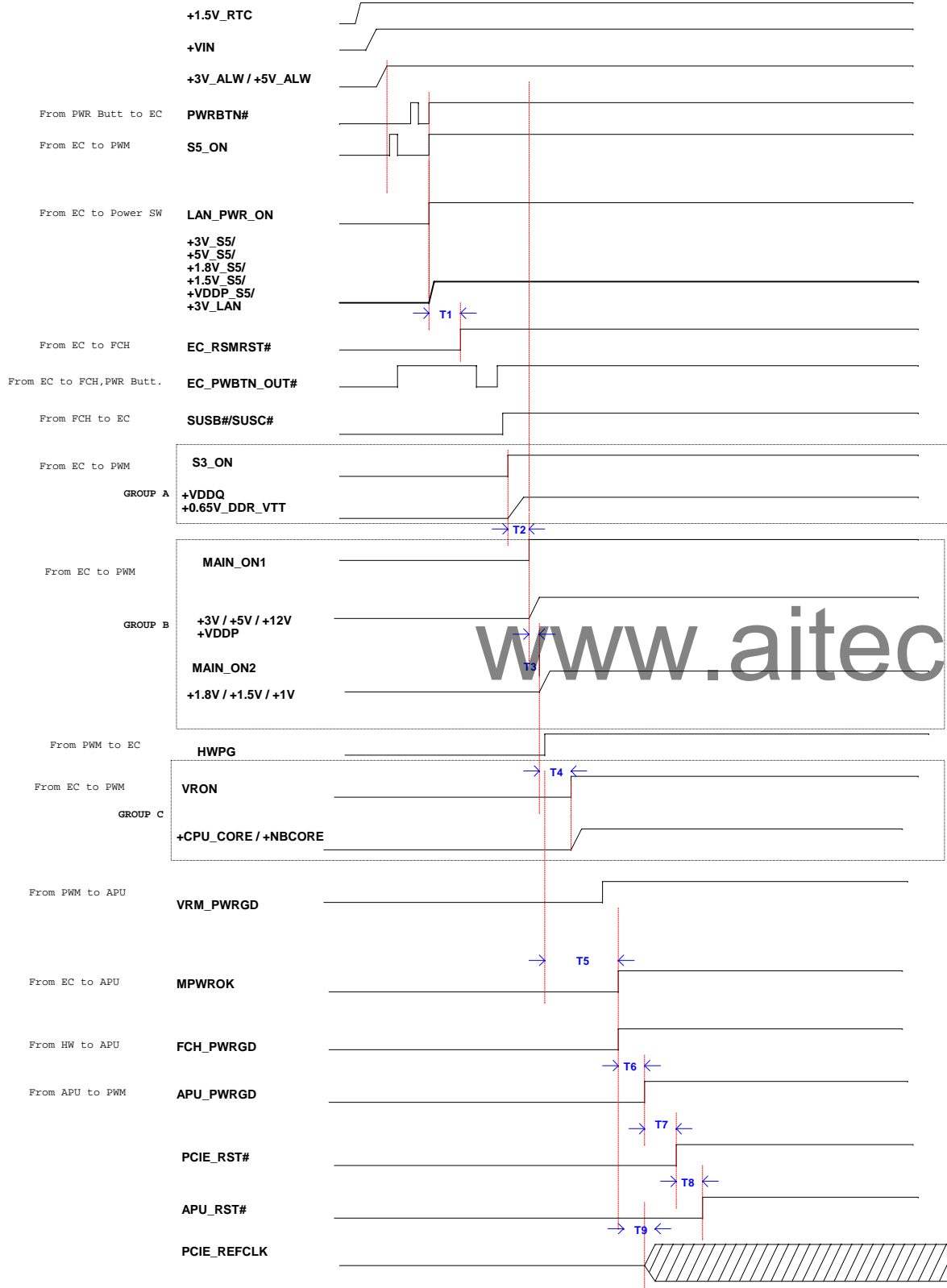
PANEL_ID[3:0]	Panel model
1111	No Connect
1110	INX M236HJX-L58_FHD eDP
1101	AUG M238HAN01.0_FHD
1100	LGD LM238WF1-SLE1_FHD
1011	SDC LTM238HL02_FHD
1010	Reserve

Panel_ID[3:0] = 1111 & Panel_Size[1:0] = 11 is reserved for cabling detection by "No connection".

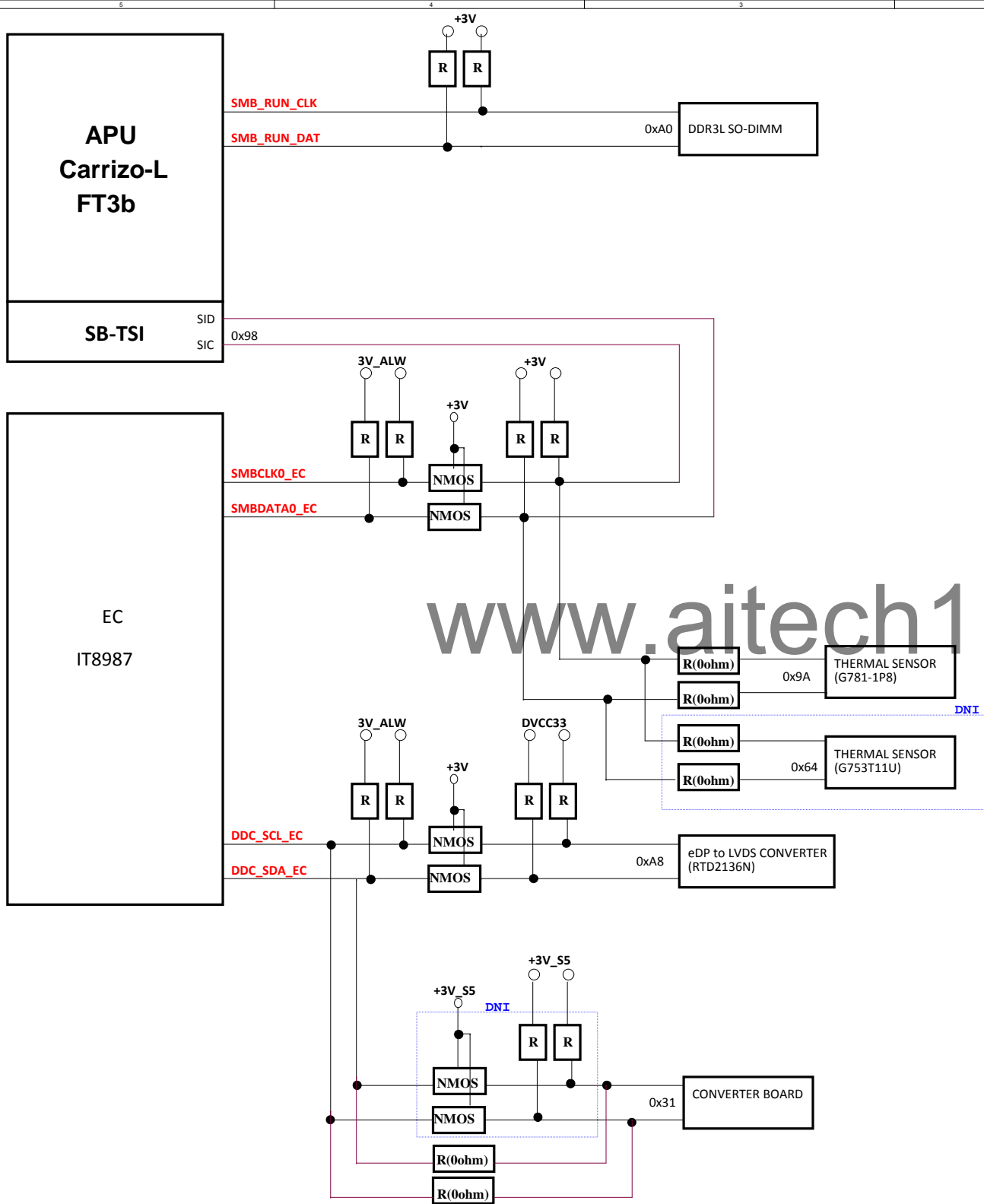
HP Restricted Secret

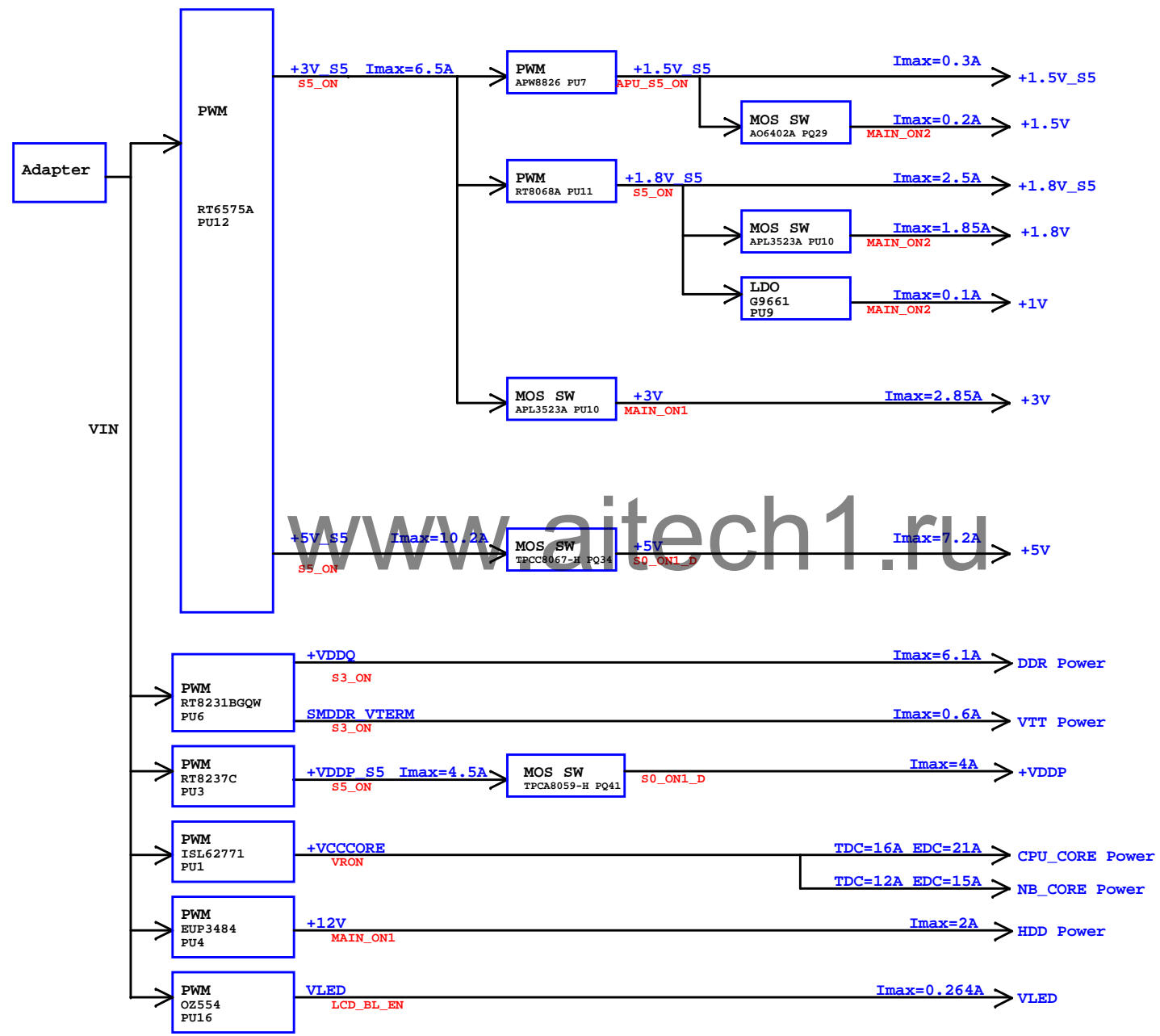
Quanta Computer Inc.
 PROJECT HP-Bali
 Converter(OZ554)

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System Power Sequence	
EC Control:	
T1: S5_ON TO EC_RSMRST# = 20ms	
T2: S3_ON TO MAIN_ON1 = 10ms	
T3: MAIN_ON1 TO MAIN_ON2 = 1ms	
T4: MAIN_ON2 TO VRON = 10ms	
T5: HWPG TO MPWROK = 99ms	
Timing spec:	
T1 Spec: 10ms min	
Power Up Spec:	
Group A > Group B > Group C	
T6: FCH_PWRGD TO APU_PWRGD = 108.6-118.6 ms	
T7: APU_PWRGD TO PCIE_RST# = 114.2-124.2 ms	
T8: PCIE_RST# TO APU_RST# = 111.9-121.9 ms	
T9: FCH_PWRGD TO PCIE_REFCLK = 37.6-47.6 ms	






[illegible]

Blai EE Schematic SI to PV version

EC #	Page	Description	Part Affected
EC-PV-01	30	+CPU_CORE Add PC220, PC224, PC218, PC219, PC221, PC222, PC223, PC232, PC233 ,PR24 for Stardust test.	PC220, PC224, PC218, PC219, PC221, PC222, PC223, PC232, PC233, PR24
EC-PV-02	29,30	+NB_CORE Stuff PC35, Add PC231, PC225, PC227, PC228, PC229, PC230 for Stardust test.	PC35, PC231, PC225, PC227, PC228, PC229, PC230
EC-PV-03	6	Y3 change Quanta P/N to BG3327680A8.	Y3
EC-PV-04	11	Add R541 and R544 for Touch screen.	R541, R544
EC-PV-05	20	Add R542, R543 for eMMC detect.	R542, R543
EC-PV-06	6	Stuff R145 and unStuff R146 for Board ID0, Stuff R359 and unStuff R350 for Board ID1	R145, R146, R359, R350
EC-PV-07	18	Change CN20 footprint.	CN20
EC-PV-08	23~34	Change footprint R0402 0R to S0402 shortpad.	
EC-PV-09	23~34	Change footprint R0603 0R to S0603 shortpad.	
EC-PV-10	23~34	Change footprint R0805 0R to S0805 shortpad.	
EC-PV-11	21	Remove R531, R536 and Stuff L31 for EMI.	L31
EC-PV-12	11	Remove R278, R279.	
EC-PV-13	15	Stuff R477, R478, R494 for SATA redriver vendor suggest.	R477, R478, R494
EC-PV-14	5	U17 pin3 change connect to GND, pin5 change connect to +3V_S5.	U17
EC-PV-15	20	Remove EC share ROM R432, R383, R379, R377, R405, U21, R376, C302.	
EC-PV-16	19	Add H22 for EMI.	H22
EC-PV-17	4	R70, R81, R281, R282, R277 change footprint R0402 0R to S0402 shortpad.	R70, R81, R281, R282, R277
EC-PV-18	5	R361 change footprint R0402 0R to S0402 shortpad.	R361
EC-PV-19	6	R363 change footprint R0402 0R to S0402 shortpad.	R363
EC-PV-20	5	Remove R121, R122, Add TP85 .	TP85
EC-PV-21	8	R338 change footprint R0402 0R to S0402 shortpad.	R338
EC-PV-22	9	R365, R372 change footprint R0402 0R to S0402 shortpad.	R365, R372
EC-PV-23	20	Remove R182, R185.	
EC-PV-24	10	Unstuff R30, R43	R30, R43
EC-PV-25	11	R270, R272 change to CX301T03000	R270, R272
EC-PV-26	12	R205, R206, R470, R472, R473, R500 change footprint R0402 0R to S0402 shortpad.	R205, R206, R470, R472, R473, R500
EC-PV-27	13	AL11, AL16, AL2, AR2 change footprint R0603 0R to S0603 shortpad.	AL11, AL16, AL2, AR2
EC-PV-28	13	AR32 change footprint change footprint R0402 0R to S0402 shortpad.	AR32
EC-PV-29	14	R521, R520 change footprint change footprint R0805 0R to S0805 shortpad.	R521, R520
EC-PV-30	14	R407 change footprint change footprint R0603 0R to S0603 shortpad.	R407
EC-PV-31	15	R444 change footprint change footprint R0402 0R to S0402 shortpad.	R444
EC-PV-32	16	R434, R419, R390, R387 change footprint change footprint R0402 0R to S0402 shortpad.	R434, R419, R390, R387
EC-PV-33	17	R408, R167, R164, R154, R168, R165, R163, R153, R151 change footprint change footprint R0402 0R to S0402 shortpad.	R408, R167, R164, R154, R168, R165, R163, R153, R151
EC-PV-34	18	R37, R40, R204 change footprint change footprint R0805 0R to S0805 shortpad.	R37, R40, R204
EC-PV-35	18	R214, R217 change footprint change footprint R1206 0R to S1206 shortpad.	R214, R217
EC-PV-36	19	Remove R527, R528, R529, R530, R533, R532, R534, R535	
EC-PV-37	19	AR16, AR22, AR19, AR20 change footprint change footprint R0402 0R to S0402 shortpad.	AR16, AR22, AR19, AR20
EC-PV-38	20	R487, R502, R187, R192, R184 change footprint change footprint R0402 0R to S0402 shortpad.	R487, R502, R187, R192, R184
EC-PV-39	20	Stuff R191, R183 for HDD ambient sensor.	R191, R183
EC-PV-40	21	R431, R433, R507,R505, R540, R57, R69 change footprint change footprint to shortpad.	R431, R433, R507,R505, R540, R57, R69
EC-PV-41	9	R54, R56, R108 change footprint change footprint to shortpad.	R54, R56, R108
EC-PV-42	39	Reserve EQ25 for EMC.	EQ25
EC-PV-43	14	Add R545, R546 for EMC.	R545, R546
EC-PV-44	19	H1, H5, H9 change footprint and add H23 for EMC.	

HP Restricted Secret

 Quanta Computer Inc. PROJECT HP-Bali		
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