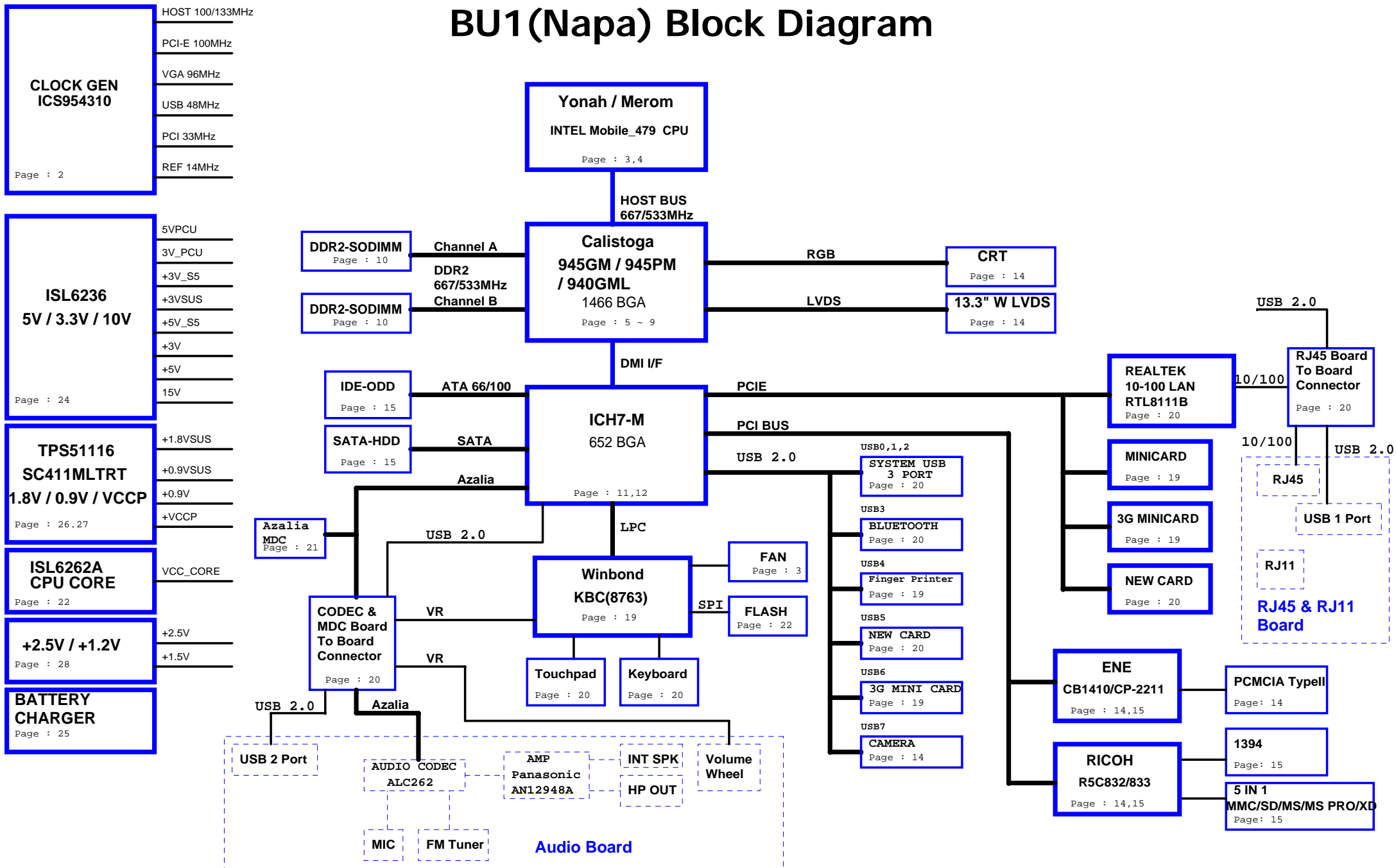
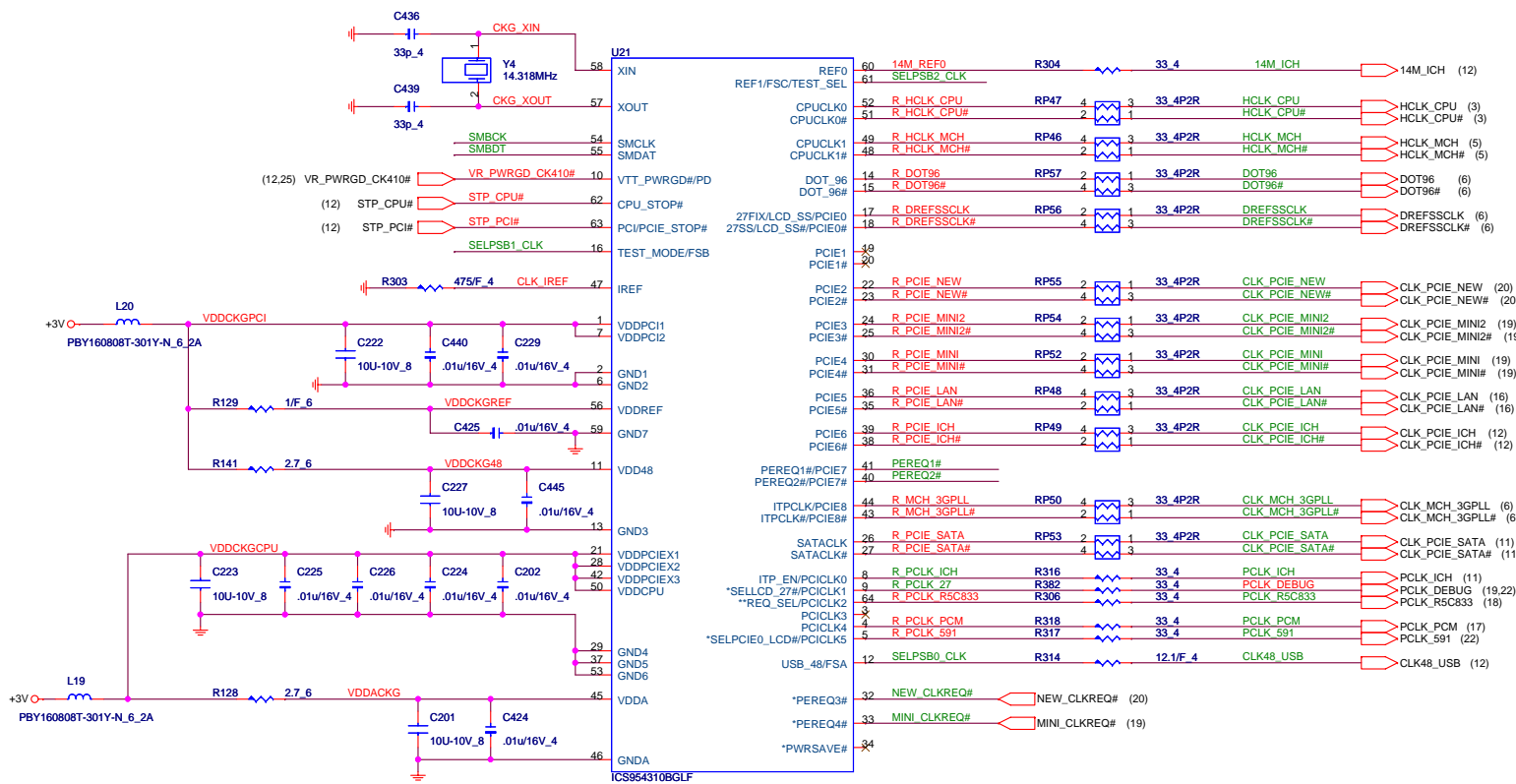


BU1 (Napa) Block Diagram



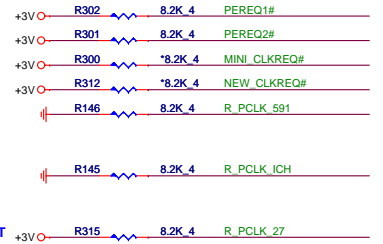
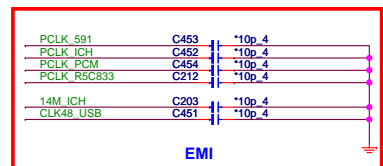
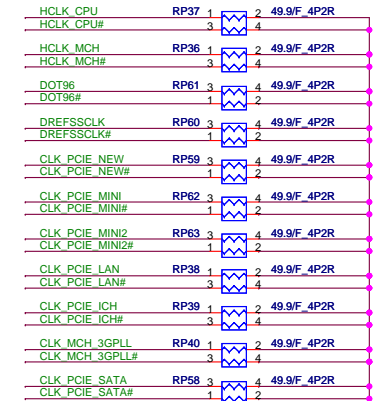
PCI ROUTING TABLE	IDSEL	INTERRUPT	DEVICE
REQ0# / GNT0#	AD17	INTA#,INTB#	Card Reader Controller
REQ1# / GNT1#	AD20	INTC#	Card Bus Controller

CLOCK GENERATOR



```
PEREQ1# --> PCIE0 & PCIE6
PEREQ2# --> PCIE1 & PCIE8
PEREQ3# --> PCIE2 & PCIE4
PEREQ4# --> PCIE3 & PCIE5 & PCIE7
```

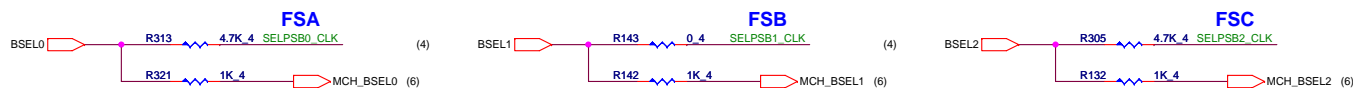
SMBUS Address : D2 (Read) , D3 (Write)



LCD / PCI SELECT
0: LCD 1: PCI

ITP/SRC7 SELECT
0: SRC7 1: ITP

```
SELLCD_27# SELECT
0: 27MSS 1: LCD
CLK
```

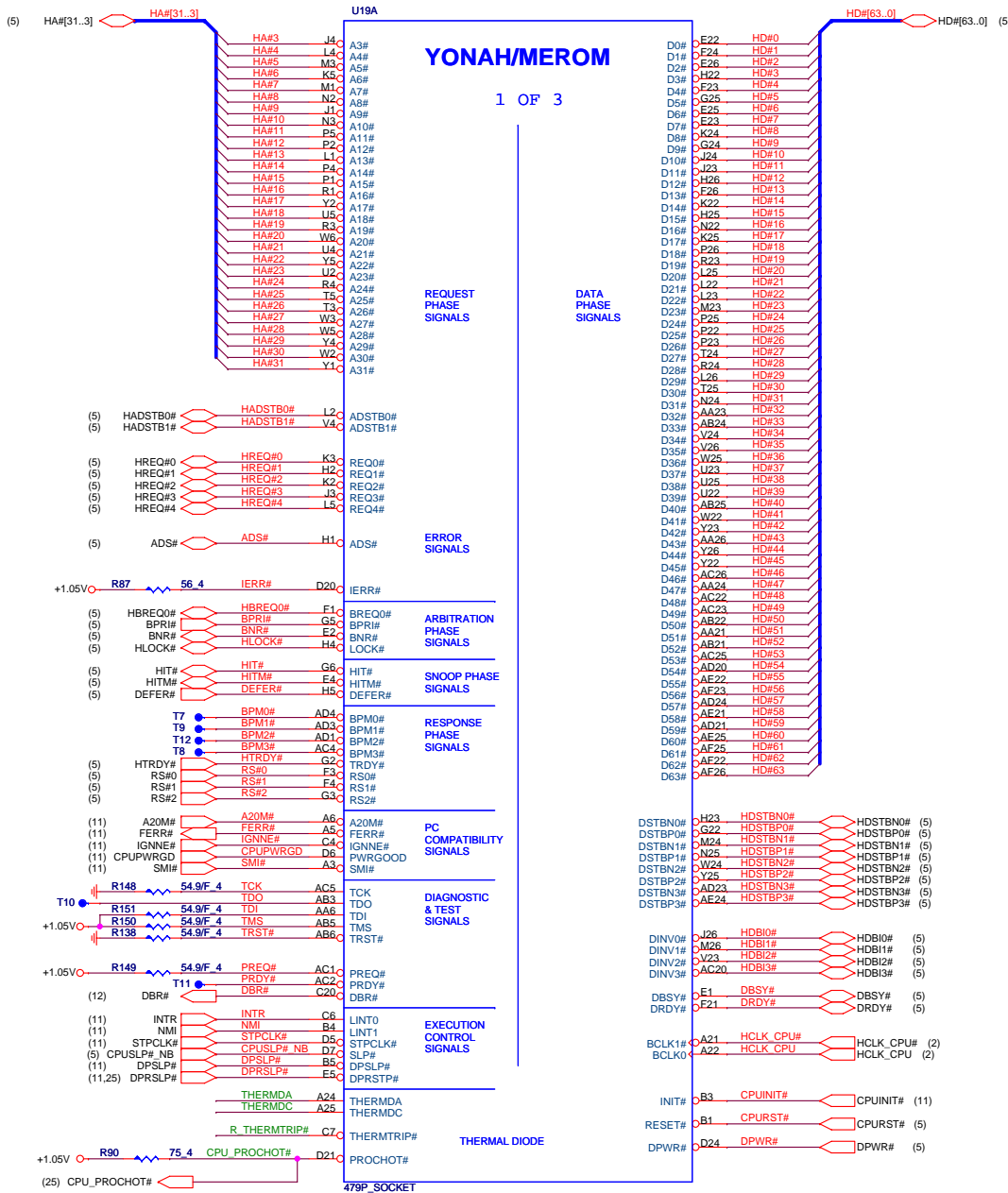


FSB SETTING					
FSC	FSB	FSA	CPU	PCIE	PC
0	0	0	266	100	33
0	0	1	133	100	33
0	1	0	200	100	33
0	1	1	166	100	33
1	0	0	333	100	33
1	0	1	100	100	33
1	1	0	400	100	33
1	1	1	200	100	33



PROJECT : BU1(NAPA)
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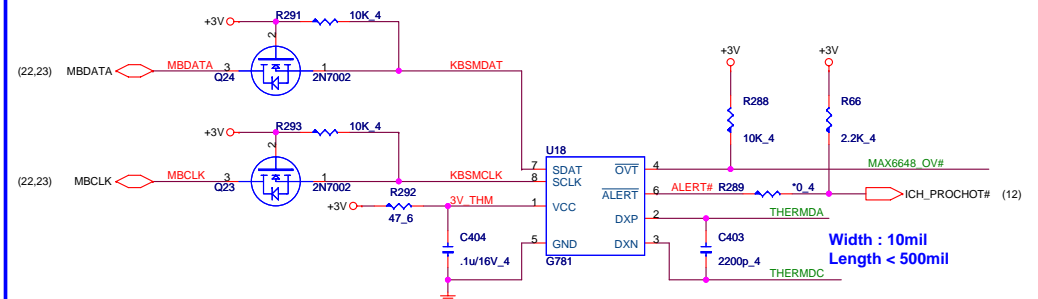
Size	Document Number CLOCK GENERATOR	Rev 1C
Date:	Thursday, March 29, 2007	Sheet 2 of 28



CPU

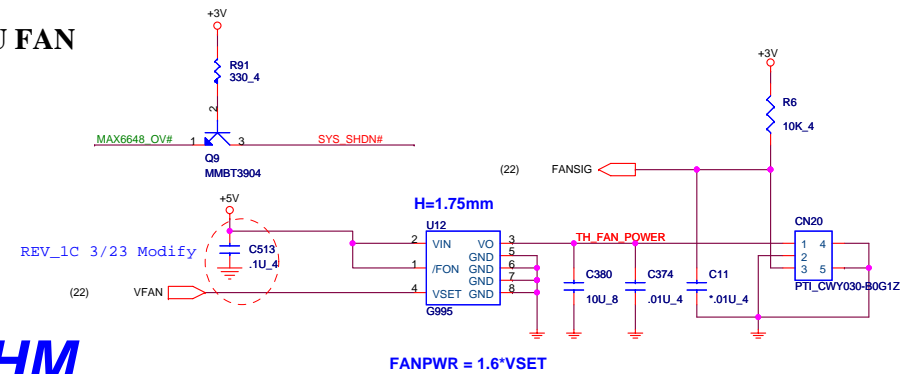
PROCHOT# Active: CPU reached it's max. safe operating temp
Thermtrip# Active: CPU junction temp exceeds 125 degree

SMBUS Address : 98



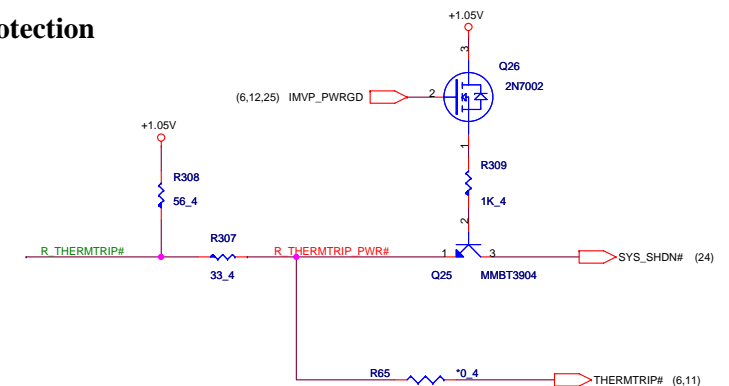
THM

CPU FAN



THM

125 Degree Protection



PROJECT : BU1(NAPA)
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Size	Document Number	Rev
	CPU (HOST) / FAN	1C
Date:	Friday, March 30, 2007	Sheet 3 of 28

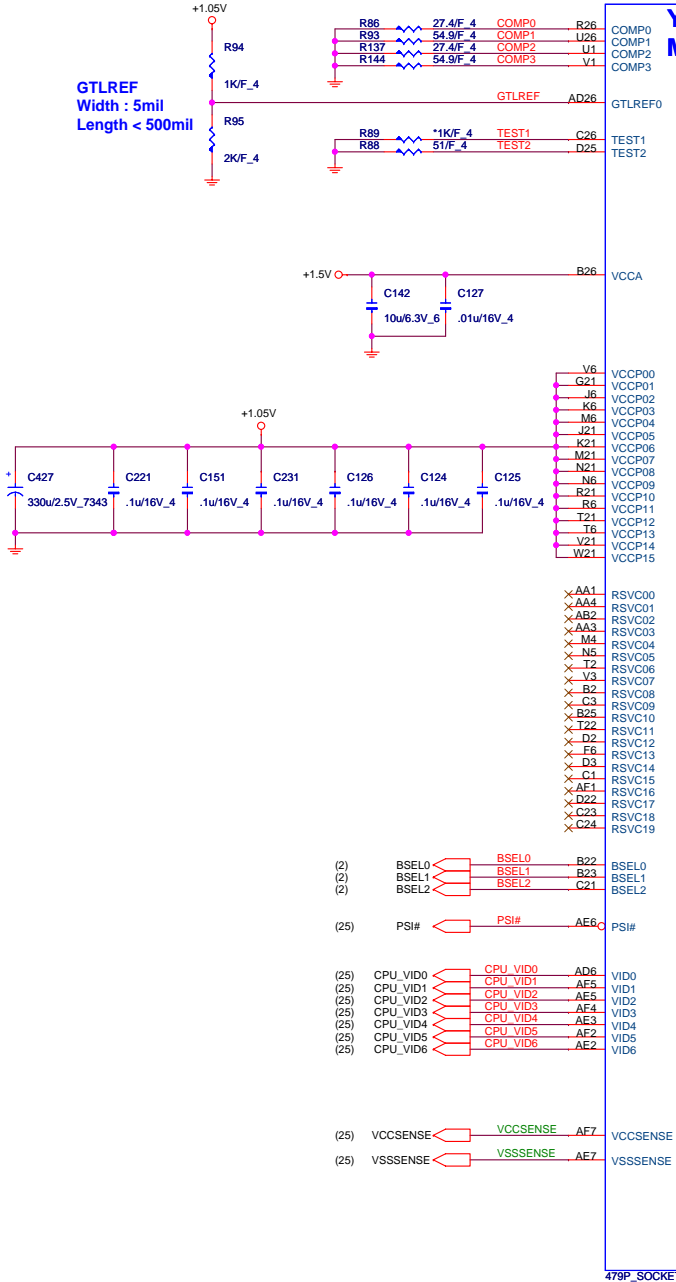
CPU

COMP0 - COMP3
Width : 200mil
Length < 500mil

YONAH/
MEROM

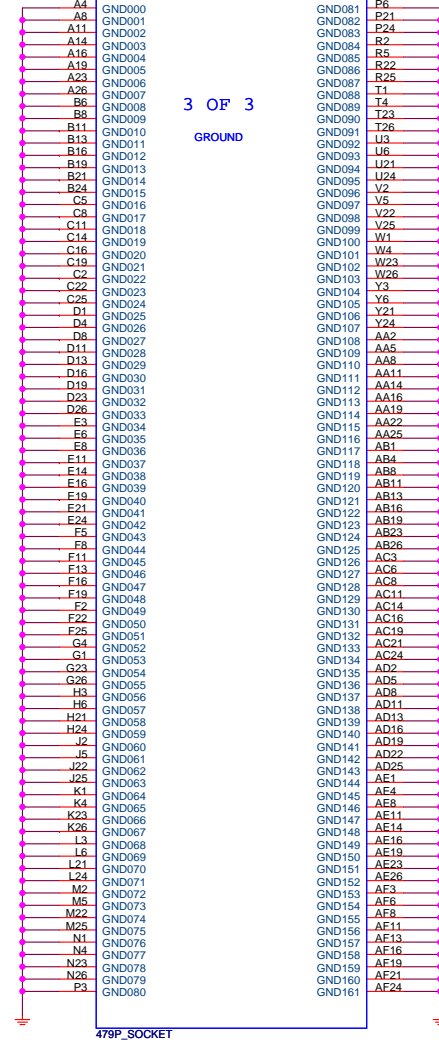
2 OF 3
POWER,
RESERVED
SIGNALS

GTLREF
Width : 5mil
Length < 500mil



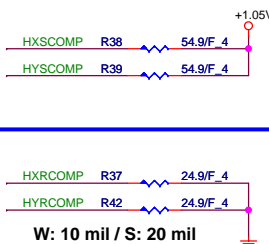
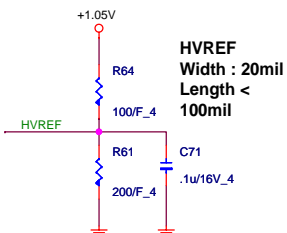
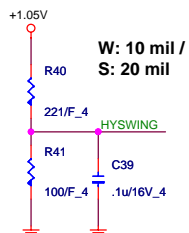
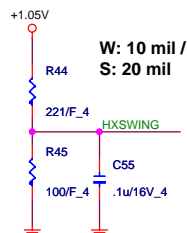
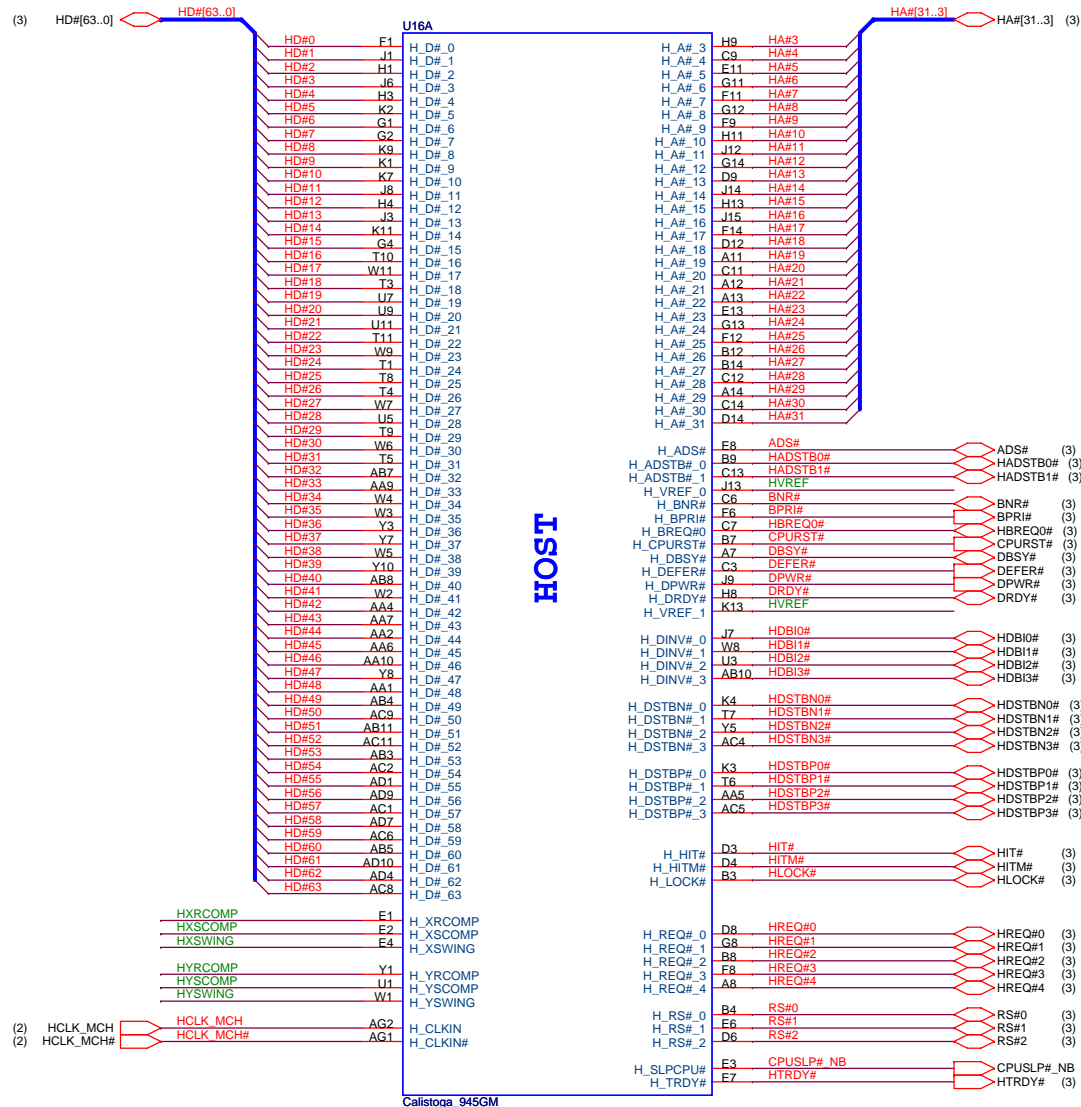
YONAH/MEROM

3 OF 3
GROUND

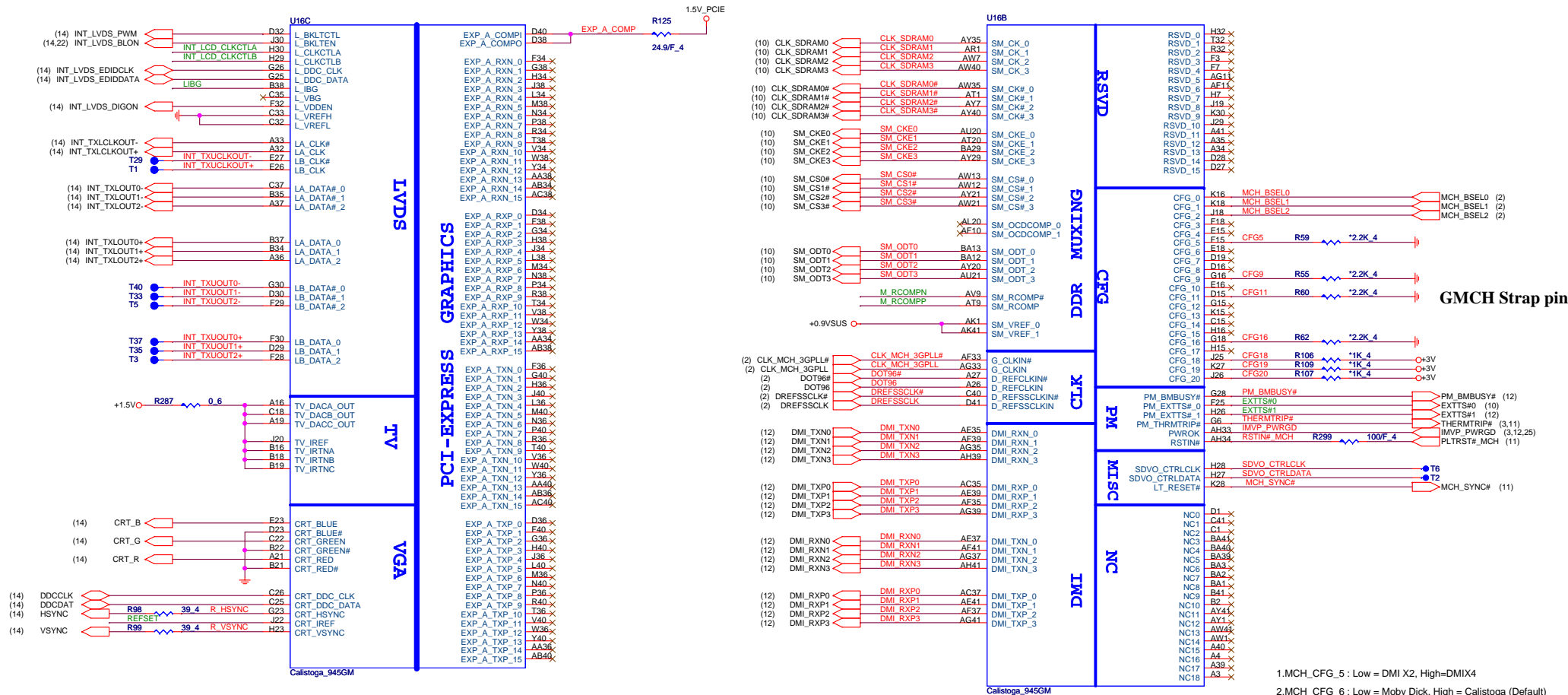


PROJECT : BU1(NAPA)
Quanta Computer Inc.

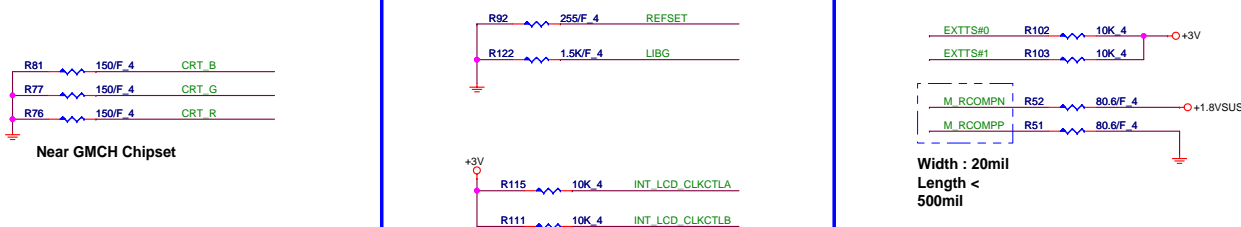
Size	Document Number	Rev
	CPU (POWER/GND)	1C
Date:	Thursday, March 29, 2007	Sheet 4 of 28



PROJECT : BU1(NAPA)
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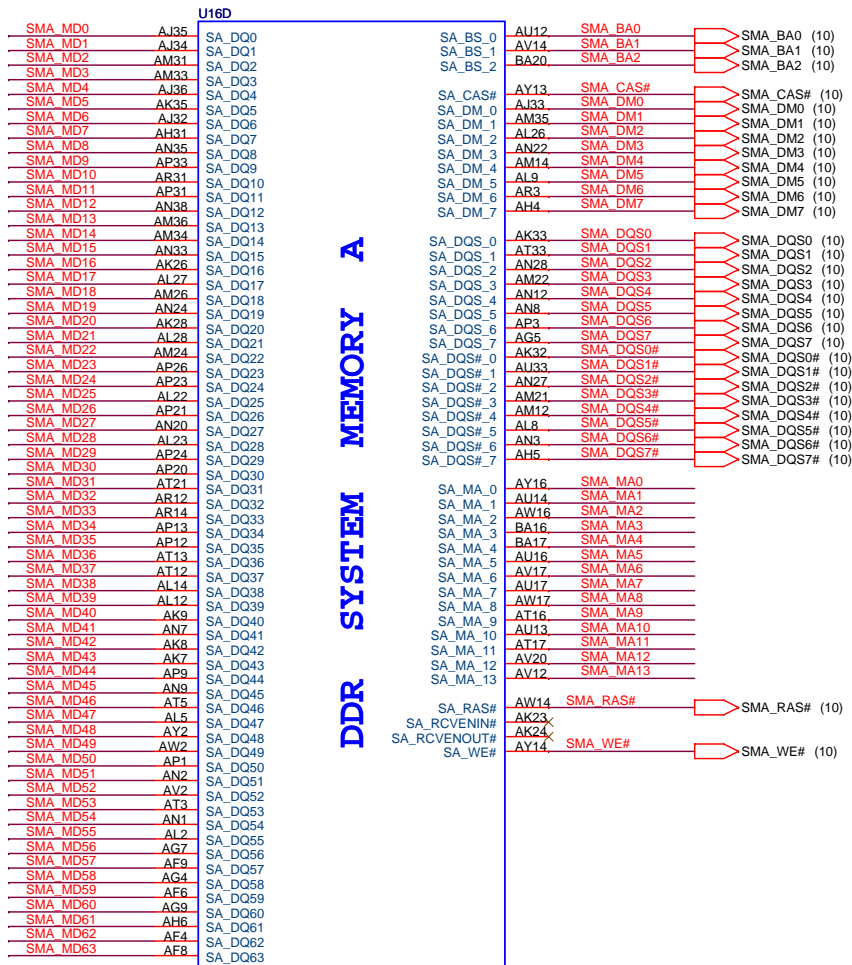
CLG

- 1.MCH_CFG_5 : Low = DMI X2, High=DMIX4
- 2.MCH_CFG_6 : Low = Moby Dick, High = Calistoga (Default)
- 3.MCH_CFG_7 : Low = RSVD, High = Mobile CPU
- 4.MCH_CFG_9 PCI Exp Graphics Lane: Low =Reverse lane ,High=Normal
- 5.MCH_CFG_10 Host PLL VCC Select: Low=Reserved, High=Mobility
- 6.MCH_CFG_11: PSB 4x Enable : Low=RSVD, High=Calistoga.
- 7.MCH_CFG_16 FSB Dymnic ODT: Low = Dynamic ODT Disabled,
High= Dynamic ODT Enabled.
- 8.MCH_CFG_18 VCC Select: LOW=1.05V, High=1.5V
- 9.MCH_CFG_19 DMI Lane Reversal:Low=Normal,High=Lanes Reversed.
- 10.MCH_CFG_20 PCIE Backward interoperability mode:
Low= only SDVO or PCIE x1 is operational (defaults) ,
High=SDVO and PCIE x1 are operation simultaneously via the PEG port.



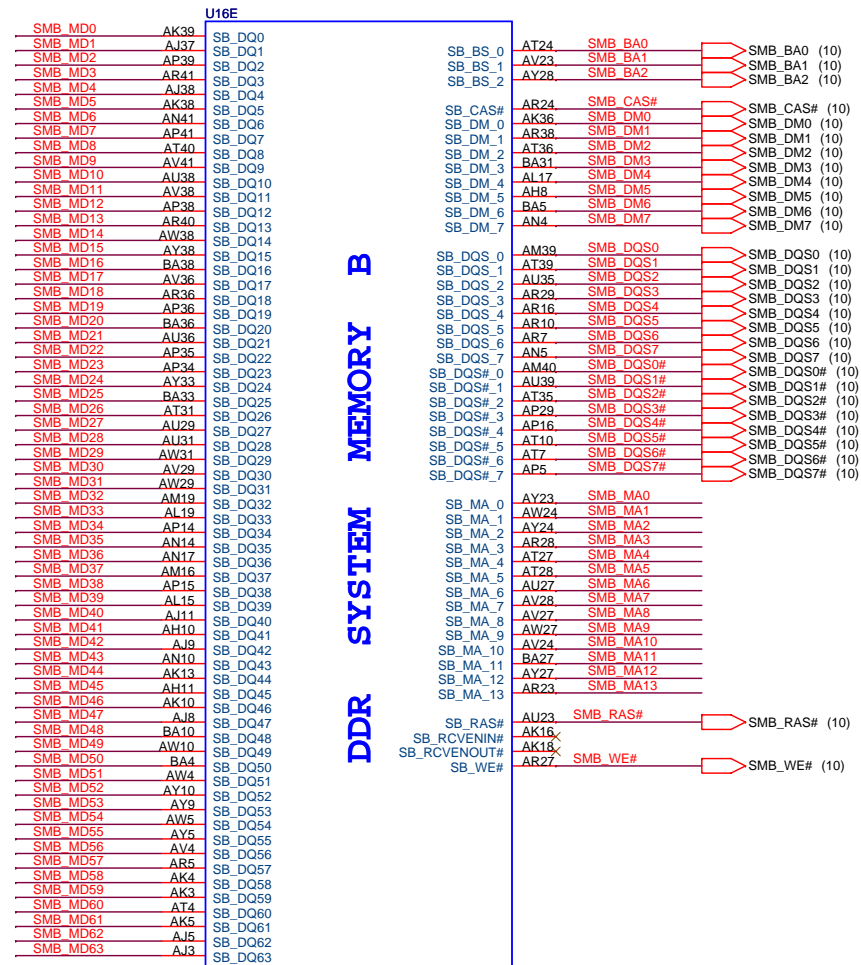
PROJECT : BU1(NAPA)
Quanta Computer Inc.

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	GMCH DMI & VEDIO	10
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SMA_MD[63..0] → SMA_MD[63..0] (10)

SMA_MA[13..0] → SMA_MA[13..0] (10)



SMB_MD[63..0] → SMB_MD[63..0] (10)

SMB_MA[13..0] → SMB_MA[13..0] (10)



PROJECT : BU1(NAPA)
Quanta Computer Inc.



PROJECT : BU1(NAPA)
Quanta Computer Inc.

Size	Document Number GMCH (POWER/NCTF)	Rev 10
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The diagram illustrates the pinout and electrical connections for a DDR2 SO-DIMM socket. It is divided into two main sections, A and B, representing the two sides of the module. Each section shows a top view of the module with pins numbered 1 through 40. The top view includes various signal lines, power planes, and component labels such as capacitors (C217, C215, C216, C214) and resistors (R18, R14, R17, R13). The bottom view shows the module's footprint with labels for SMA, SMB, and SMD pins, as well as power and ground connections. The diagram also includes a legend for the pin types and a note about the module's revision (REV_1C 3/23).

DDR2 SO-DIMM SOCKET

Section A (Left):

- Power:** +1.8VSSUS, +0.9VSSUS, +1.8VSSUS.
- Capacitors:** C217 (2.2u6.3V 6), C215 (1u/16V 4).
- Resistors:** R18 (10K 4), R14 (10K 4).
- Pinout:** SMA MD1, SMA MD5, SMA DQS0#, SMA DQS0, SMA MD2, SMA MD8, SMA MD9, SMA DQS1#, SMA DQS1, SMA MD11, SMA MD15, SMA MD17, SMA MD21, SMA DQS2#, SMA DQS2, SMA MD23, SMA MD19, SMA MD25, SMA DM3, SMA MA12, SMA MA9, SMA MA8, SMA MA5, SMA MA3, SMA MA1, SMA BA0, SMA WE#, SMA CAS#, SMA CS1#, SMA ODT1, SMA MD37, SMA MD32, SMA DQS4#, SMA DQS4, SMA MD38, SMA MD35, SMA MD41, SMA MD40, SMA DM5, SMA MD42, SMA MD46, SMA MD49, SMA MD48, SMA DQS6#, SMA DQS6, SMA MD50, SMA MD51, SMA MD60, SMA MD56, SMA DM7, SMA MD62, SMA MD58, SMBDT, SMBCK, +3V.
- Labels:** PC4800_DDR2_9.2MM_REV, CLOCK 0,1,2, CKE 0,1, SMbus address A0.

Section B (Right):

- Power:** +1.8VSSUS, +0.9VSSUS, +1.8VSSUS.
- Capacitors:** C216 (2.2u6.3V 6), C214 (1u/16V 4).
- Resistors:** R17 (10K 4), R13 (10K 4).
- Pinout:** SMB MD1, SMB MD5, SMB DQS0#, SMB DQS0, SMB MD2, SMB MD8, SMB MD9, SMB DQS1#, SMB DQS1, SMB MD11, SMB MD15, SMB MD17, SMB MD21, SMB DQS2#, SMB DQS2, SMB MD22, SMB MD19, SMB MD24, SMB MD26, SMB DM3, SMB MA12, SMB MA9, SMB MA8, SMB MA5, SMB MA3, SMB MA1, SMB BA0, SMB WE#, SMB CAS#, SMB CS3#, SMB ODT3, SMB MD37, SMB MD36, SMB DQS4#, SMB DQS4, SMB MD39, SMB MD35, SMB MD40, SMB MD41, SMB DM5, SMB MD43, SMB MD47, SMB MD48, SMB MD53, SMB DQS6#, SMB DQS6, SMB MD50, SMB MD55, SMB MD60, SMB MD56, SMB DM7, SMB MD59, SMB MD58, SMBDT, SMBCK, +3V.
- Labels:** PC4800_DDR2_5.2MM_REV, CLOCK 3,4,5, CKE 2,3, SMbus address A1.

Legend:

- (?) SMA_MD[63..0]
- (?) SMA_MA[13..0]
- (?) SMB_MD[63..0]
- (?) SMB_MA[13..0]

Revision: REV_1C 3/23 Modify SO-DIMM Footprint

DDR2 TERMINATOR

+0.9V

SMB_MA4	RP26	1	2	56 4P2R	RP21	1	2	56 4P2R	SMA_BA0
SMB_MA2	RP23	3	4	56 4P2R	RP30	3	4	56 4P2R	SMA_MA10
SMB_MA3	RP23	1	2	56 4P2R	RP30	1	2	56 4P2R	SMA_MA11
SMB_MA1	RP15	3	4	56 4P2R	RP24	3	4	56 4P2R	SMA_MA6
SMB_MA13	RP15	1	2	56 4P2R	RP24	1	2	56 4P2R	SMA_MA1
SMB_RAS#	RP28	3	4	56 4P2R	RP27	3	4	56 4P2R	SMA_MA3
SMB_MA7	RP28	1	2	56 4P2R	RP27	1	2	56 4P2R	SMA_MA2
SMB_MA11	RP25	3	4	56 4P2R	RP32	3	4	56 4P2R	SMA_MA4
SMB_MA8	RP25	1	2	56 4P2R	RP32	1	2	56 4P2R	SMA_MA8
SMB_MA5	RP19	3	4	56 4P2R	RP34	3	4	56 4P2R	SMA_BA2
SMB_MA10	RP19	1	2	56 4P2R	RP34	1	2	56 4P2R	SMA_MA12
SMB_WE#	RP31	3	4	56 4P2R	RP29	3	4	56 4P2R	SMA_MA7
SMB_MA12	RP31	1	2	56 4P2R	RP29	1	2	56 4P2R	SMA_MA5
SMB_MA9	RP33	3	4	56 4P2R	RP18	3	4	56 4P2R	SMA_BA1
SMB_MA6	RP33	1	2	56 4P2R	RP18	1	2	56 4P2R	SMA_MA13
SMB_BA2	RP20	3	4	56 4P2R	RP22	3	4	56 4P2R	SMA_MA0
SMB_BA1	RP20	1	2	56 4P2R	RP22	1	2	56 4P2R	SMA_RAS#
SMB_MA0	RP16	3	4	56 4P2R	RP17	3	4	56 4P2R	SMA_CAS#
SMB_BA0	RP16	1	2	56 4P2R	RP17	1	2	56 4P2R	SMA_WE#
SMB_CAS#									

SM_CKE0	R82	56 4	R54	56 4	SM_CS#
SM_CKE1	R84	56 4	R54	56 4	SM_CS1#
SM_CKE2	R79	56 4	R49	56 4	SM_CS2#
SM_CKE3	R80	56 4	R46	56 4	SM_CS3#
SM_ODT0	R58	56 4	R56	56 4	SM_ODT2
SM_ODT1	R48	56 4	R47	56 4	SM_ODT3

TERMINATOR DECOUPLING CAPACITOR

+0.9V

C98 .1u/16V_4 C85 .1u/16V_4 C128 .1u/16V_4 C73 .1u/16V_4 C70 .1u/16V_4 C123 .1u/16V_4 C114 .1u/16V_4 C50 .1u/16V_4 C51 .1u/16V_4

+0.9V

C75 .1u/16V_4 C84 .1u/16V_4 C47 .1u/16V_4 C69 .1u/16V_4 C109 .1u/16V_4 C118 .1u/16V_4 C46 .1u/16V_4 C67 .1u/16V_4 C61 .1u/16V_4

+0.9V

C66 .1u/16V_4 C52 .1u/16V_4 C132 .1u/16V_4 C131 .1u/16V_4 C45 .1u/16V_4 C57 .1u/16V_4 C58 .1u/16V_4 C62 .1u/16V_4 C144 100u6.3V_3528

CLOSE SO-DIMM SOCKET CAPACITORS

+1.8VVSUS

C405 *100u6.3V_3528 C54 .1u/16V_4 C68 .1u/16V_4 C397 .1u/16V_4 C390 .1u/16V_4 C402 2.2u/6.3V_6

C389 2.2u/6.3V_6 C399 2.2u/6.3V_6 C74 2.2u/6.3V_6 C395 2.2u/6.3V_6

CLOSE SO-DIMM SOCKET CAPACITORS

+1.8VVSUS

C393 *100u6.3V_3528 C119 .1u/16V_4 C401 .1u/16V_4 C392 .1u/16V_4 C64 .1u/16V_4 C396 2.2u/6.3V_6

C387 2.2u/6.3V_6 C92 2.2u/6.3V_6 C391 2.2u/6.3V_6 C388 2.2u/6.3V_6

PROJECT : BU1(NAPA)
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	DDR SO-DIMM(200P)	1C
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TERMINATOR DECOUPLING CAPACITOR

The image displays three circuit diagrams illustrating different termination capacitor configurations for a 100u6.3V_3528 component. Each diagram shows a series of capacitors connected between a +0.9V source and ground. The capacitors are labeled with values like .1u/16V_4. The third diagram includes a note '100u6.3V_3528' next to capacitor C144.

Diagram 1 (Top): Shows a series of capacitors C98, C85, C128, C73, C70, C123, C114, C50, and C51. The capacitors are connected in series between a +0.9V source and ground. The capacitors are labeled with values like .1u/16V_4.

Diagram 2 (Middle): Shows a series of capacitors C75, C84, C47, C69, C109, C118, C46, C67, and C61. The capacitors are connected in series between a +0.9V source and ground. The capacitors are labeled with values like .1u/16V_4.

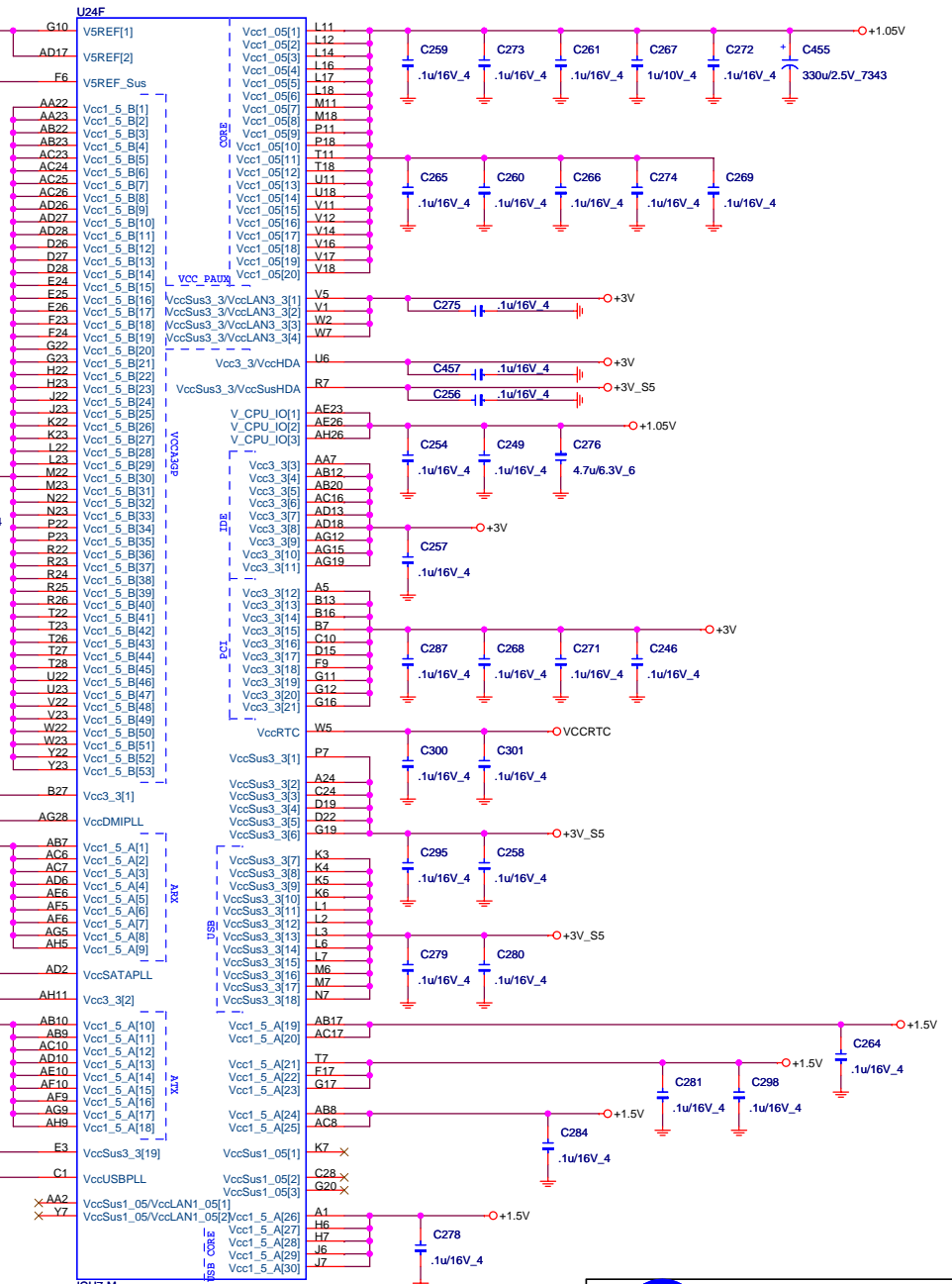
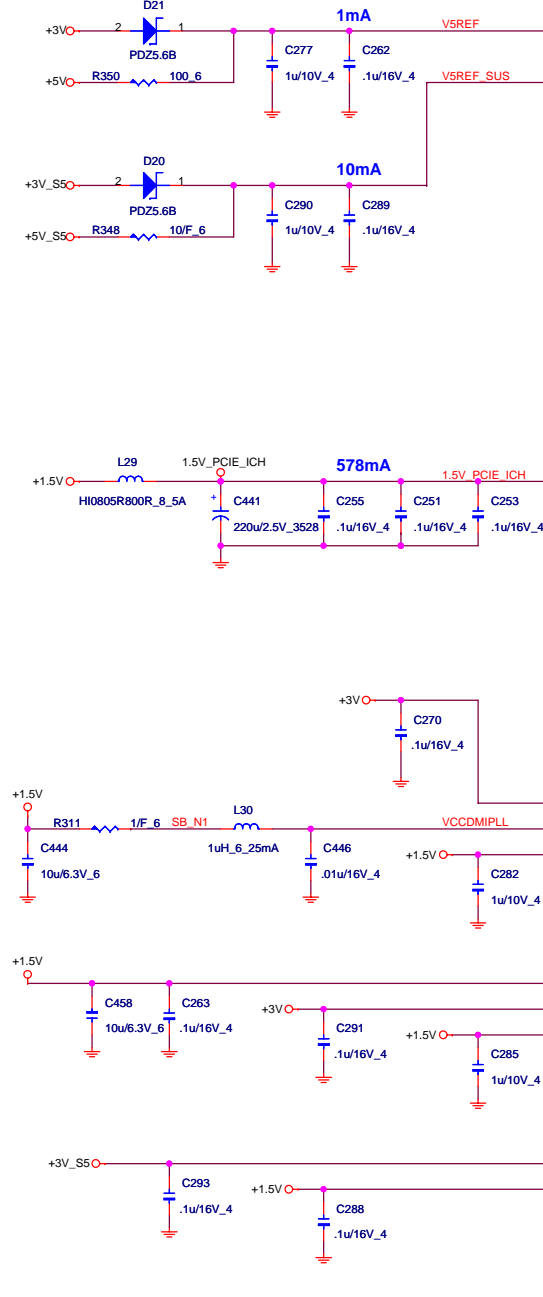
Diagram 3 (Bottom): Shows a series of capacitors C66, C52, C132, C131, C45, C57, C58, C62, and C144. The capacitors are connected in series between a +0.9V source and ground. The capacitors are labeled with values like .1u/16V_4. A note '100u6.3V_3528' is present next to capacitor C144.

CLOSE SO-DIMM SOCKET CAPACITORS

CLOSE SO-DIMM SOCKET CAPACITORS



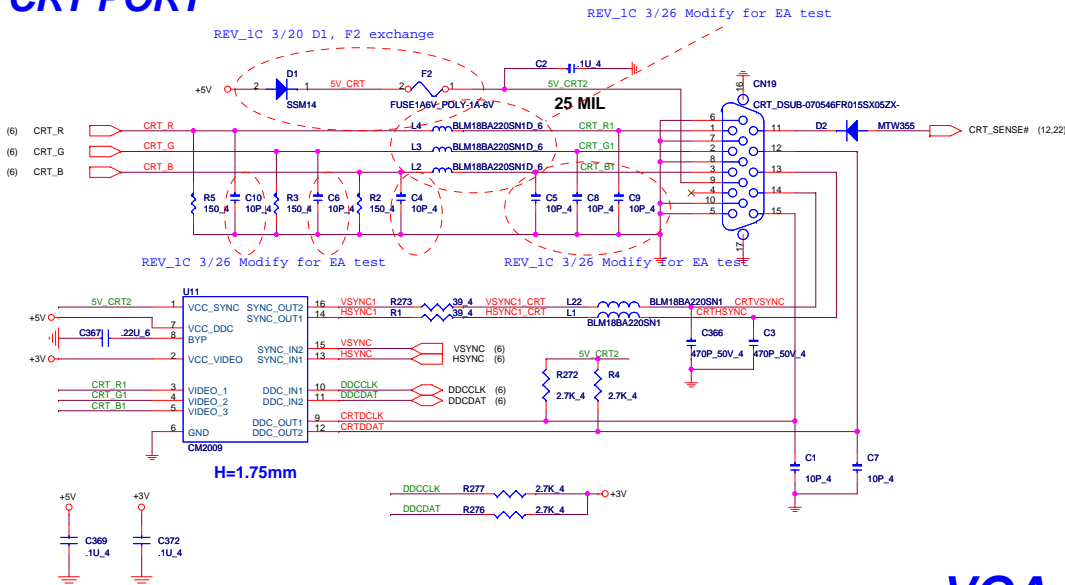
U24E		
A4	VSS[1]	P28
A23	VSS[2]	R1
B1	VSS[3]	R11
B8	VSS[100]	R12
B11	VSS[4]	R13
B14	VSS[5]	R14
B17	VSS[6]	R15
B20	VSS[7]	R16
B26	VSS[8]	R17
B28	VSS[9]	R18
C2	VSS[10]	T6
C6	VSS[12]	T12
C27	VSS[13]	T13
D10	VSS[14]	T14
D13	VSS[15]	T15
D18	VSS[16]	T16
D21	VSS[17]	T17
D24	VSS[18]	T18
E1	VSS[19]	T19
E2	VSS[20]	T20
E4	VSS[21]	T21
E8	VSS[22]	T22
F15	VSS[23]	T23
F3	VSS[24]	T24
F4	VSS[25]	T25
F5	VSS[26]	T26
F12	VSS[27]	T27
F27	VSS[28]	T28
G1	VSS[29]	T29
G2	VSS[30]	T30
G5	VSS[31]	T31
G6	VSS[32]	T32
G9	VSS[33]	T33
G14	VSS[34]	T34
G18	VSS[35]	T35
G21	VSS[36]	T36
G24	VSS[37]	T37
G25	VSS[38]	T38
G26	VSS[39]	T39
H3	VSS[40]	T40
H4	VSS[41]	T41
H27	VSS[42]	T42
H28	VSS[43]	T43
J1	VSS[44]	T44
J2	VSS[45]	T45
J5	VSS[46]	T46
J24	VSS[47]	T47
J25	VSS[48]	T48
J26	VSS[49]	T49
K24	VSS[50]	T50
K27	VSS[51]	T51
K28	VSS[52]	T52
L13	VSS[53]	T53
L15	VSS[54]	T54
L24	VSS[55]	T55
L25	VSS[56]	T56
L26	VSS[57]	T57
M3	VSS[58]	T58
M4	VSS[59]	T59
M5	VSS[60]	T60
M12	VSS[61]	T61
M13	VSS[62]	T62
M14	VSS[63]	T63
M15	VSS[64]	T64
M16	VSS[65]	T65
M17	VSS[66]	T66
M24	VSS[67]	T67
M27	VSS[68]	T68
M28	VSS[69]	T69
N1	VSS[70]	T70
N2	VSS[71]	T71
N5	VSS[72]	T72
N6	VSS[73]	T73
N11	VSS[74]	T74
N12	VSS[75]	T75
N13	VSS[76]	T76
N14	VSS[77]	T77
N15	VSS[78]	T78
N16	VSS[79]	T79
N17	VSS[80]	T80
N18	VSS[81]	T81
N24	VSS[82]	T82
N25	VSS[83]	T83
N26	VSS[84]	T84
P3	VSS[85]	T85
P4	VSS[86]	T86
P12	VSS[87]	T87
P13	VSS[88]	T88
P14	VSS[89]	T89
P15	VSS[90]	T90
P16	VSS[91]	T91
P17	VSS[92]	T92
P24	VSS[93]	T93
P27	VSS[94]	T94
P28	VSS[95]	T95
P29	VSS[96]	T96
P30	VSS[97]	T97



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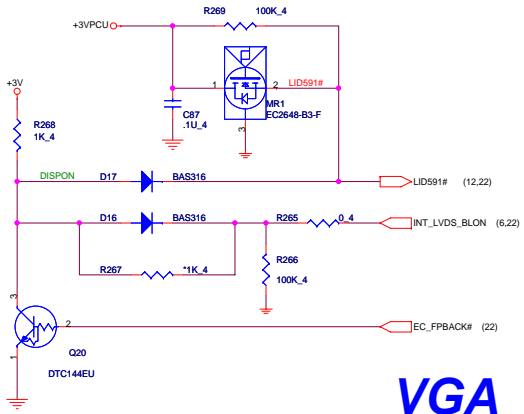
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	ICH7 (POWER)	1C
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CRT PORT



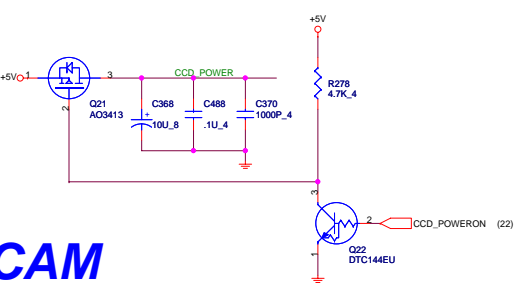
VGA

LID SWITCH

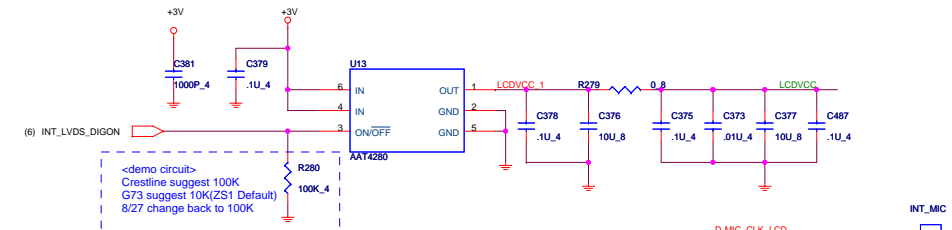


VGA

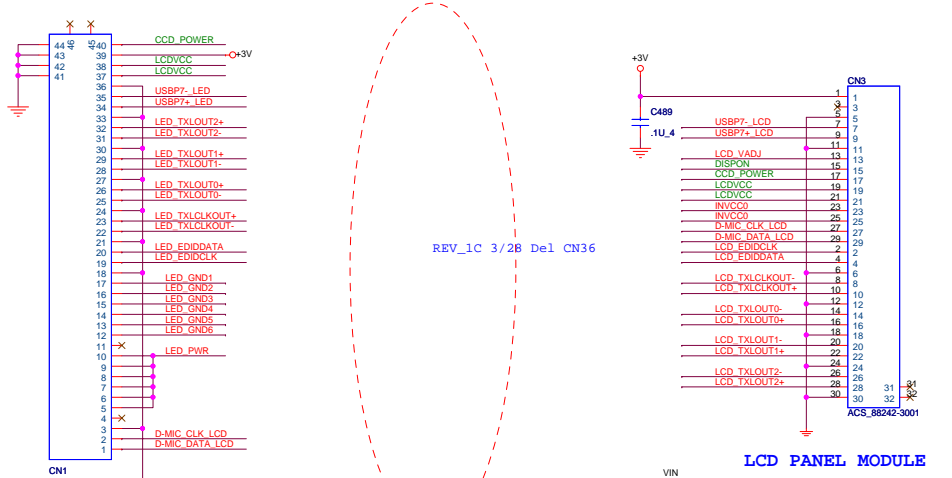
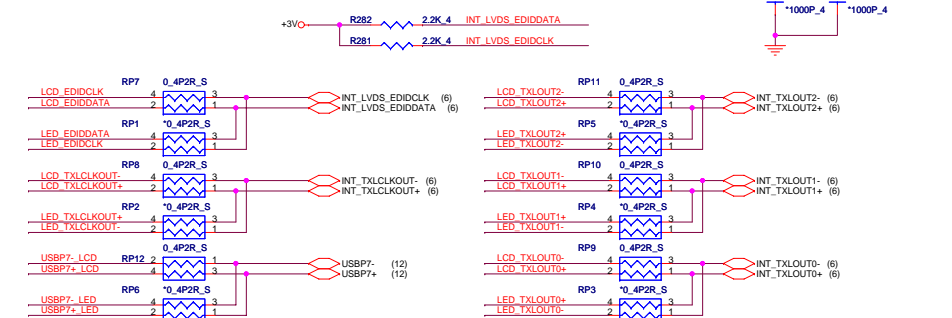
CAMERA MODULE Power



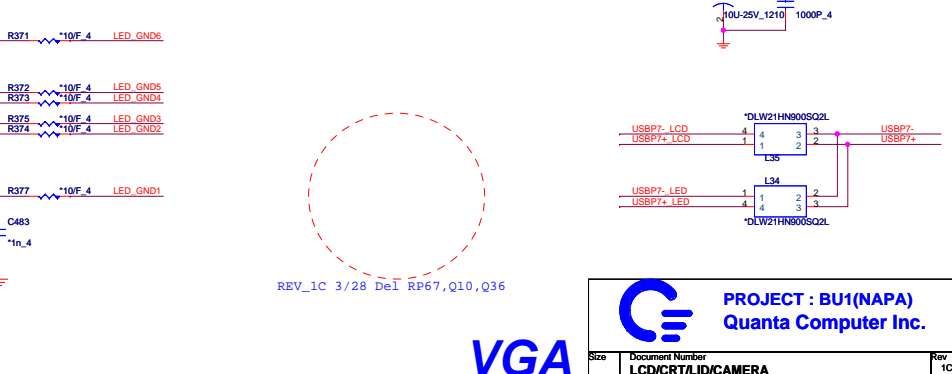
CAM



LCD/LED TYPE CONNECTOR



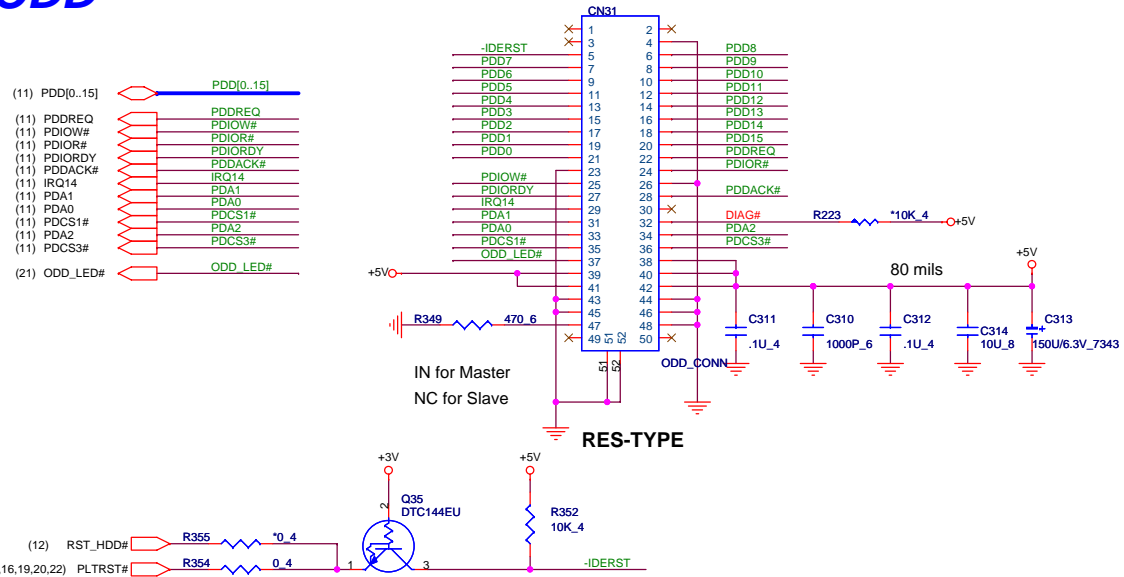
TOSHIBA LED PANEL MODULE



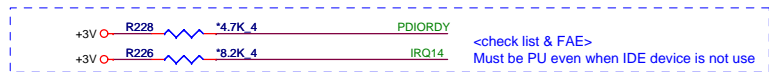
LCD PANEL MODULE

VGA

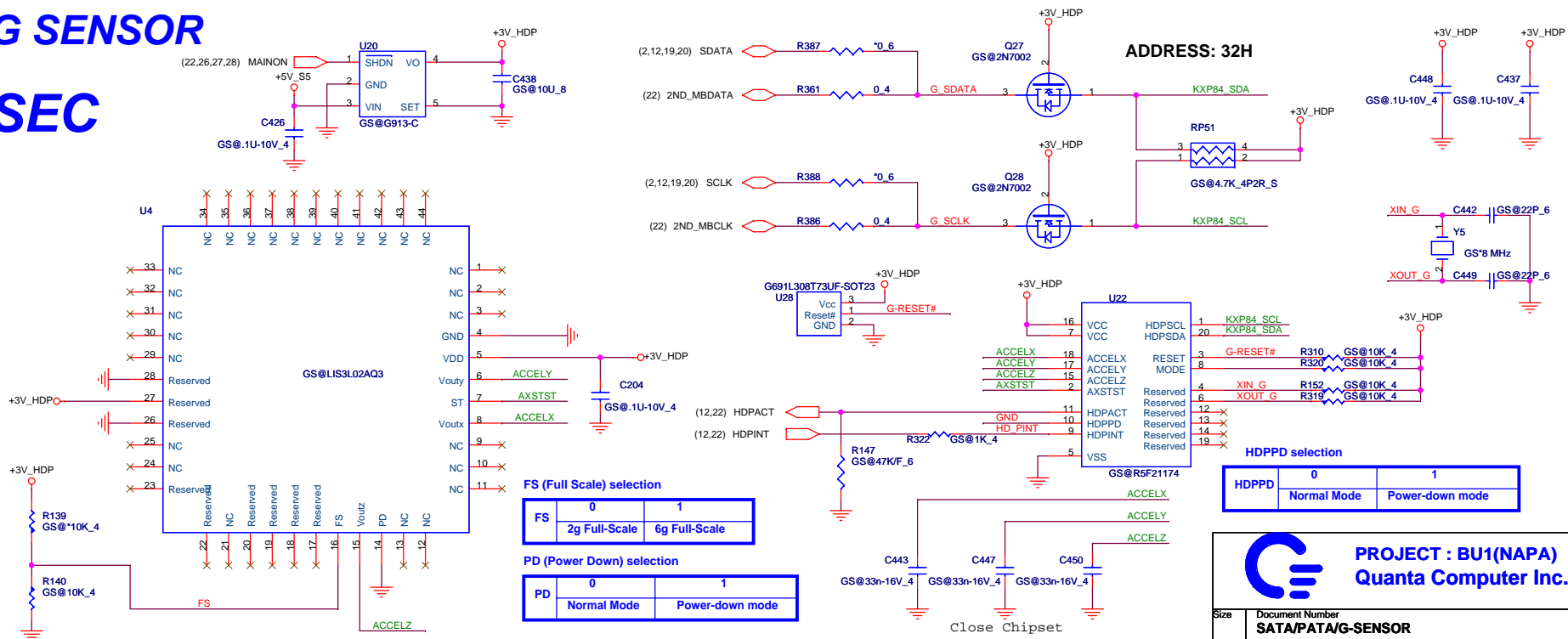
ODD



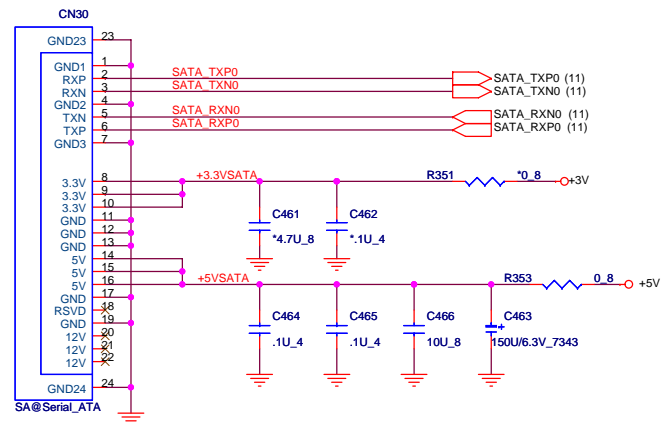
IDE



G SENSOR
(22,26)
SEC



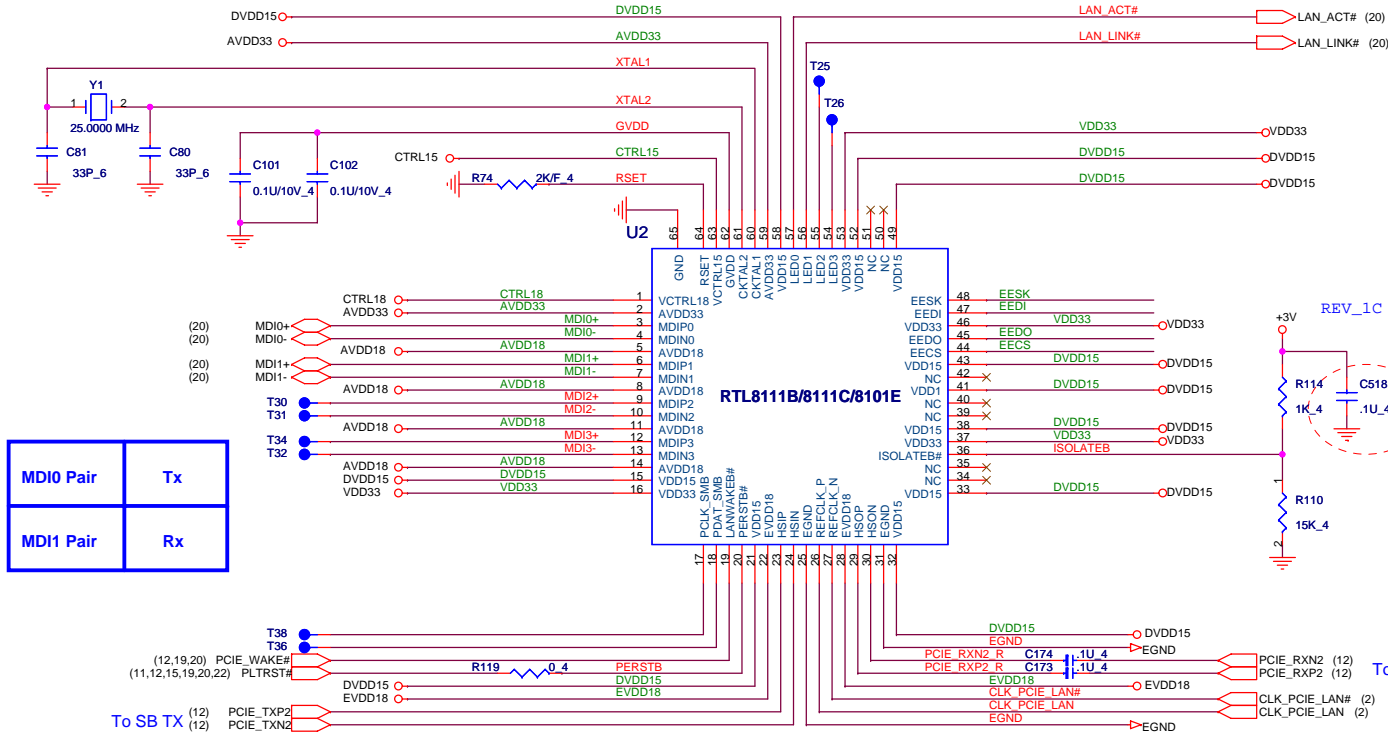
SATA HDD



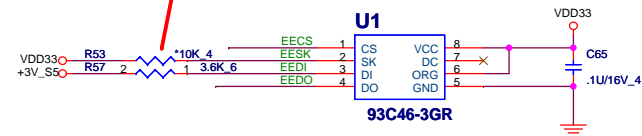
IDE

MDIO Pair	Tx
MDI1 Pair	Rx

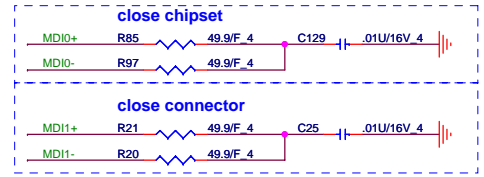
LAN



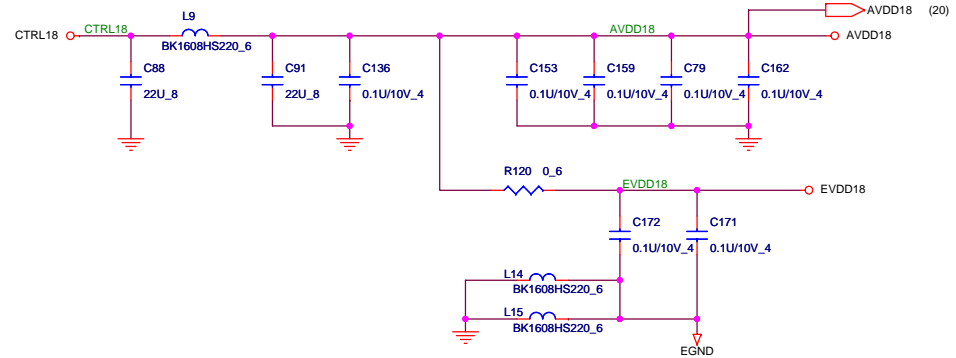
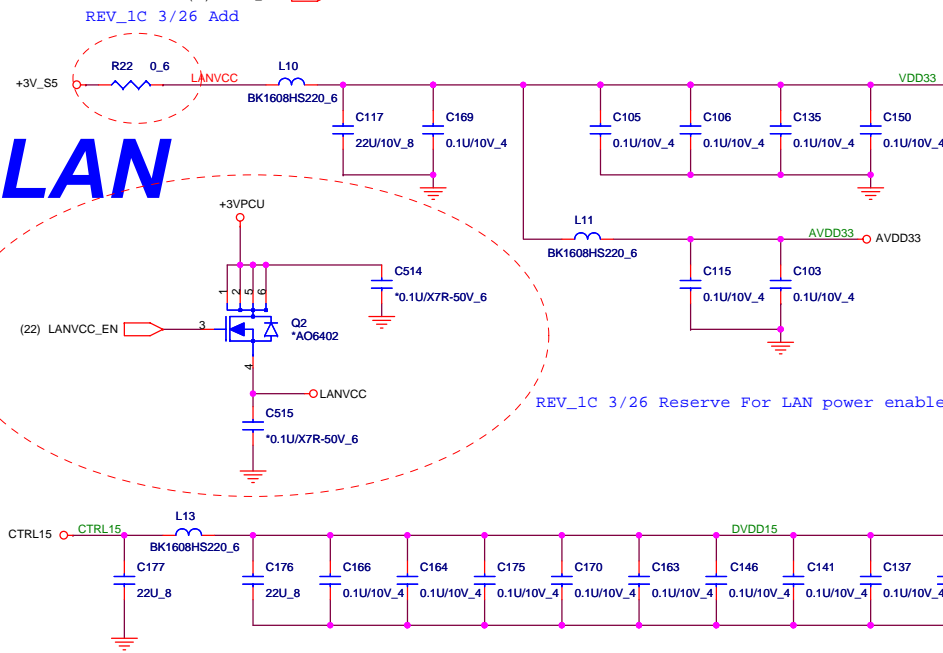
93C56: STUFF
93C46: NOSTUFF

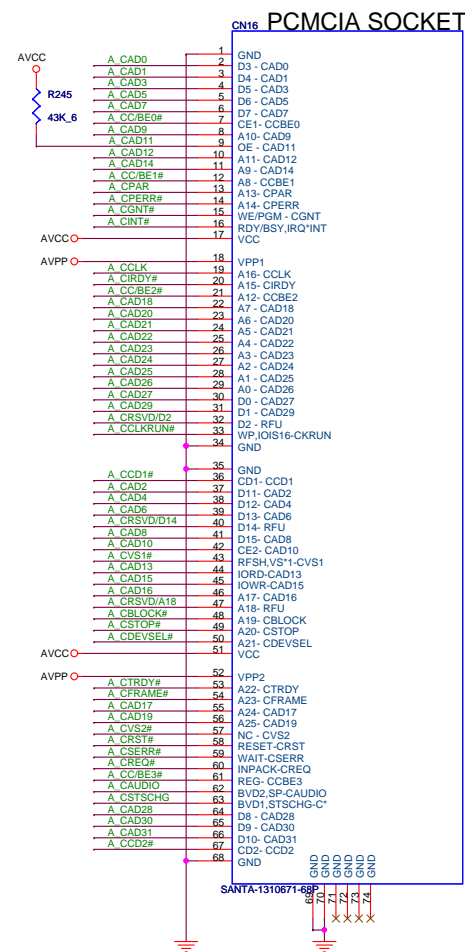
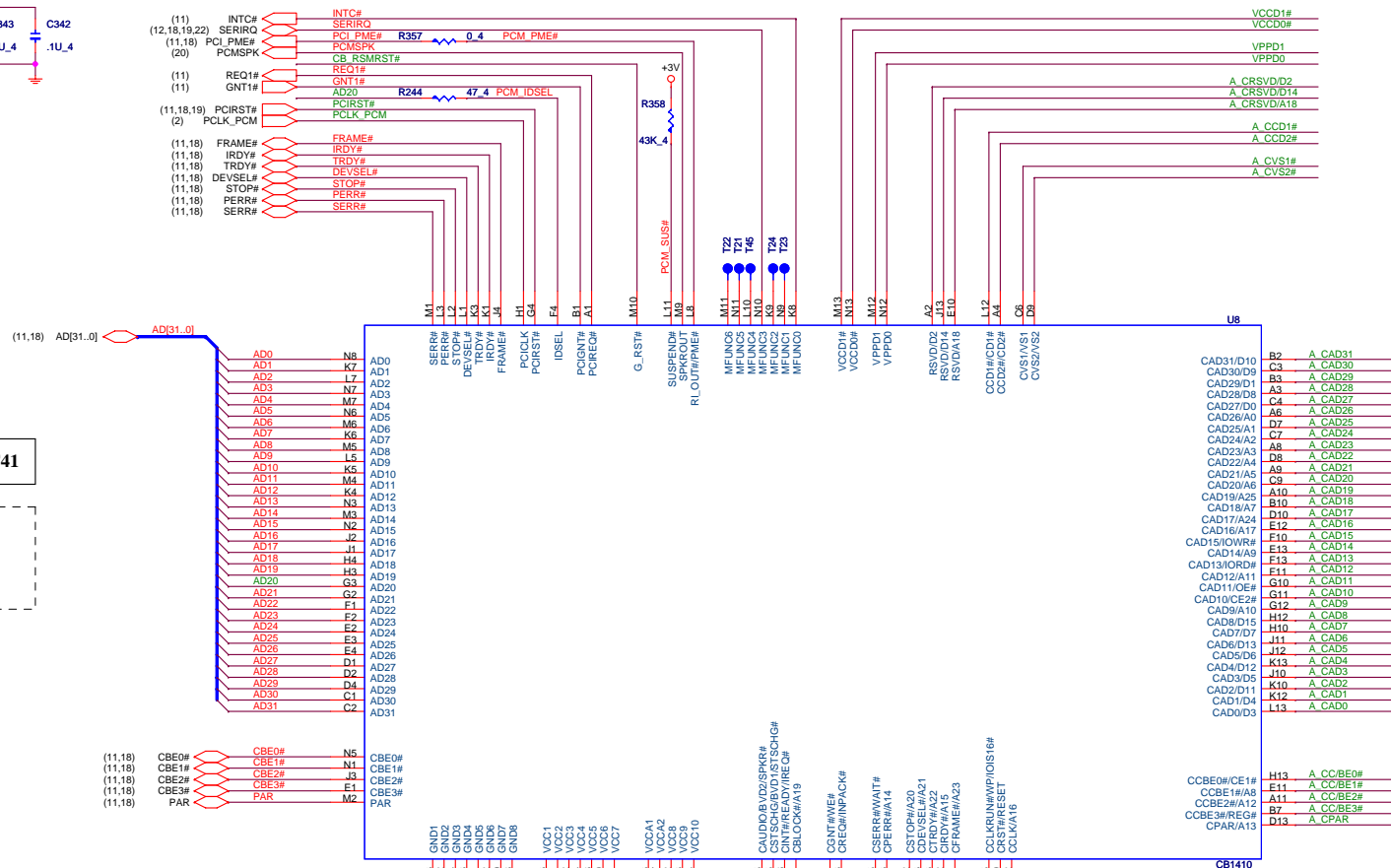
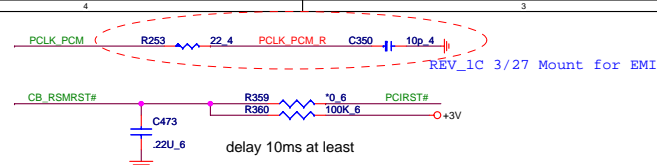
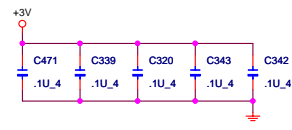


REV_1C 3/27 Add for EMI requirement

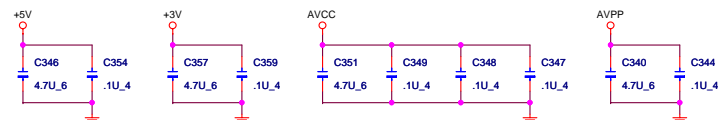
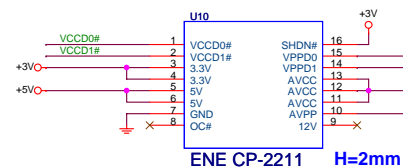


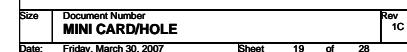
To SB RX

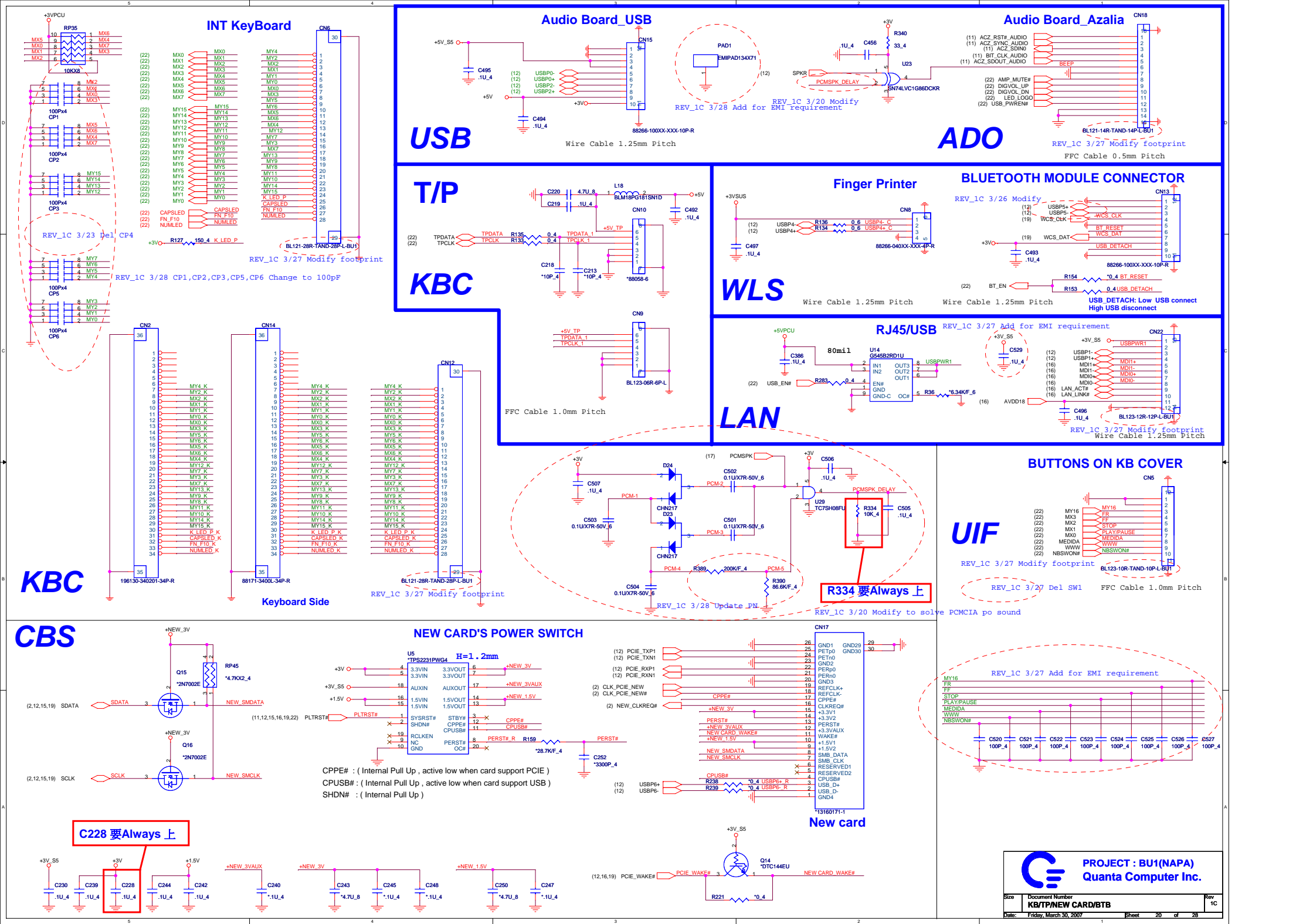


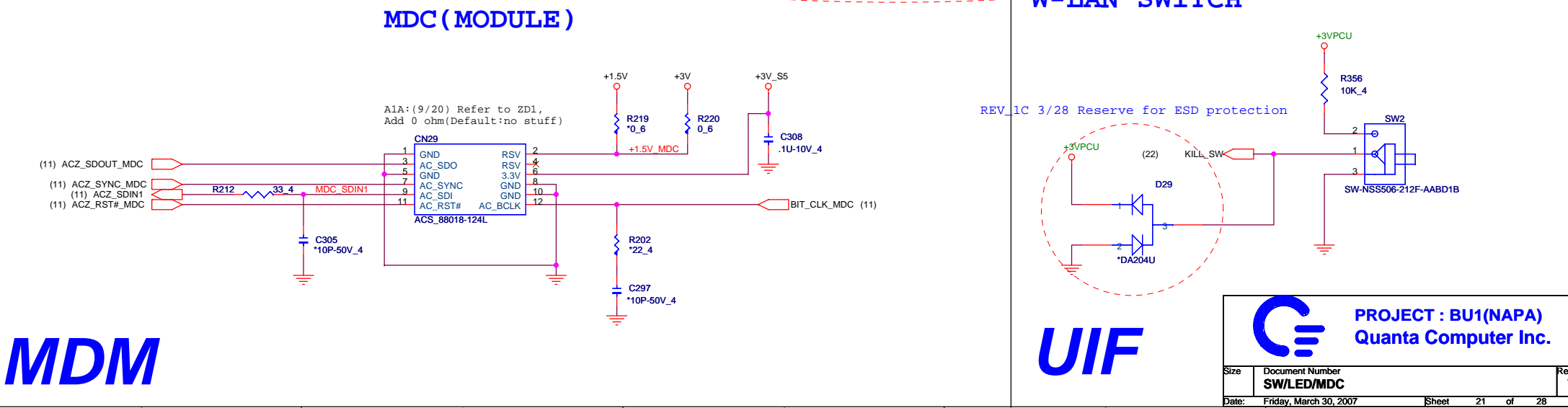
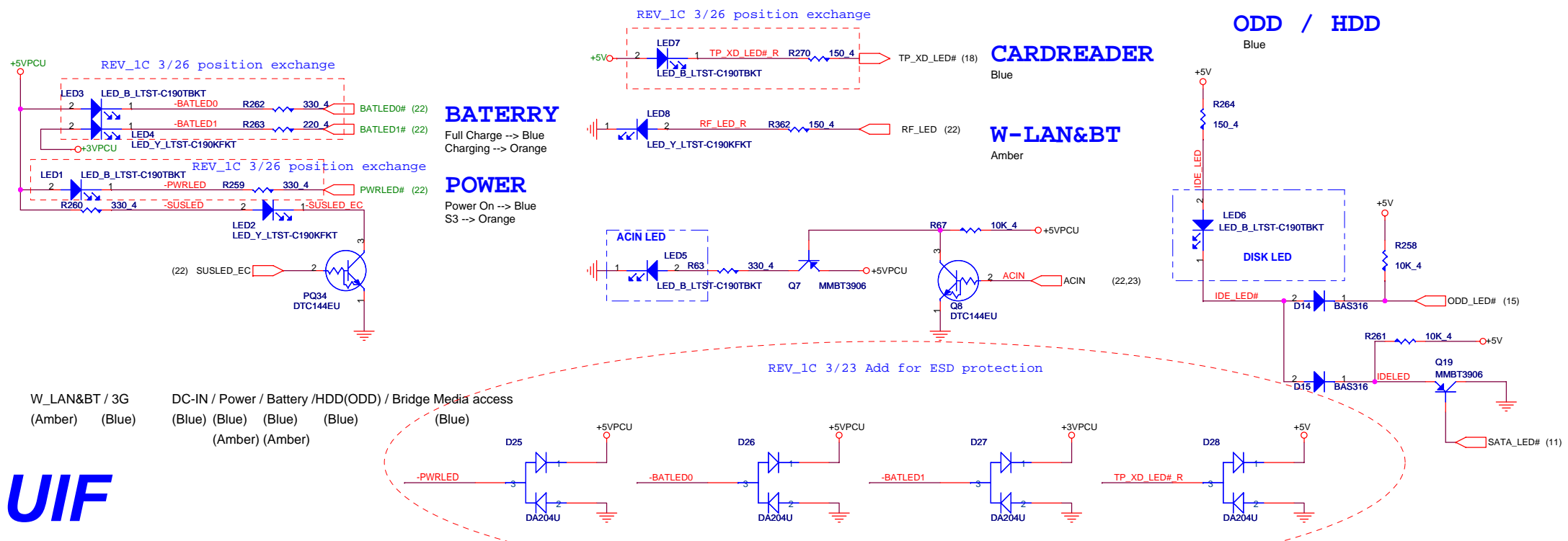


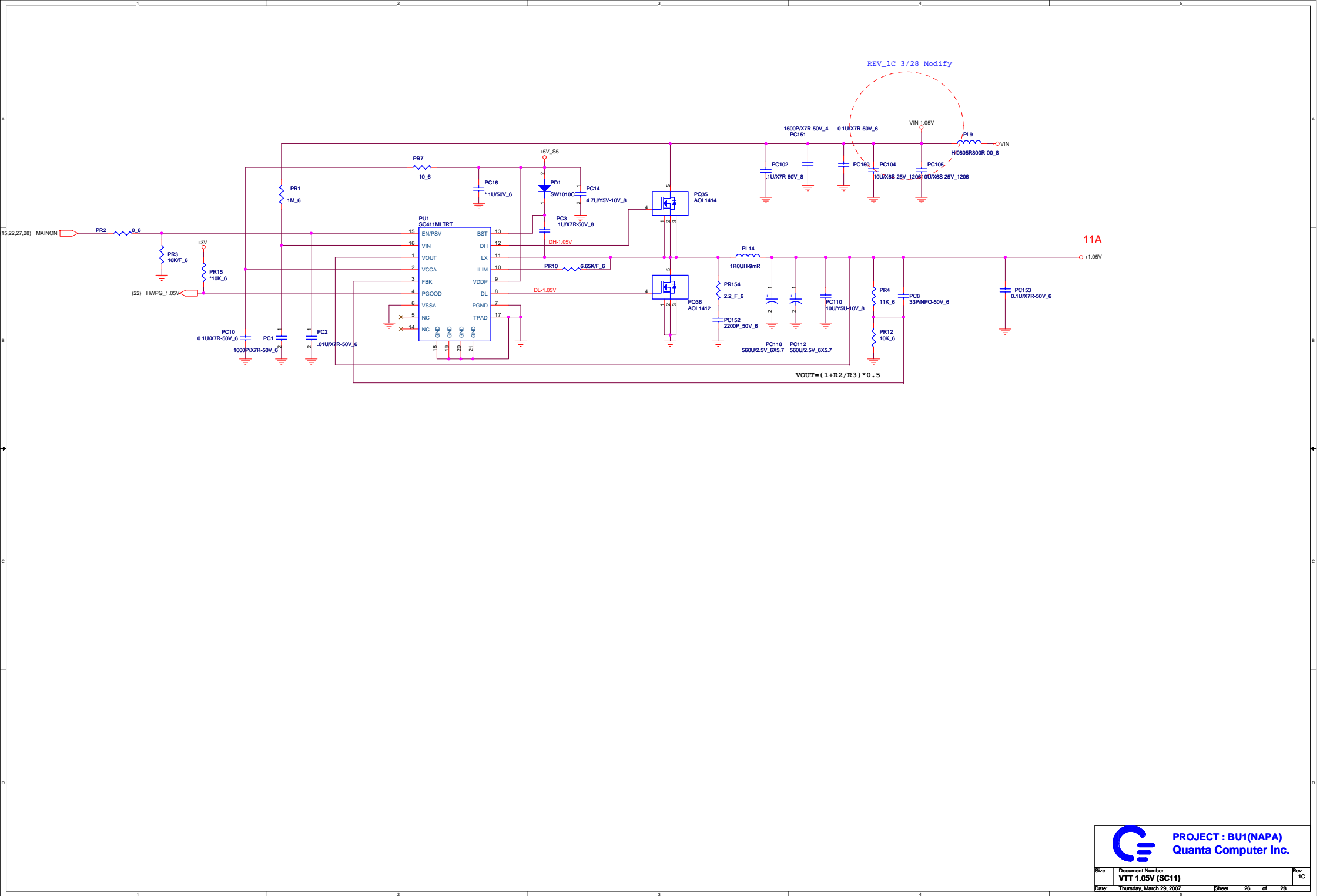
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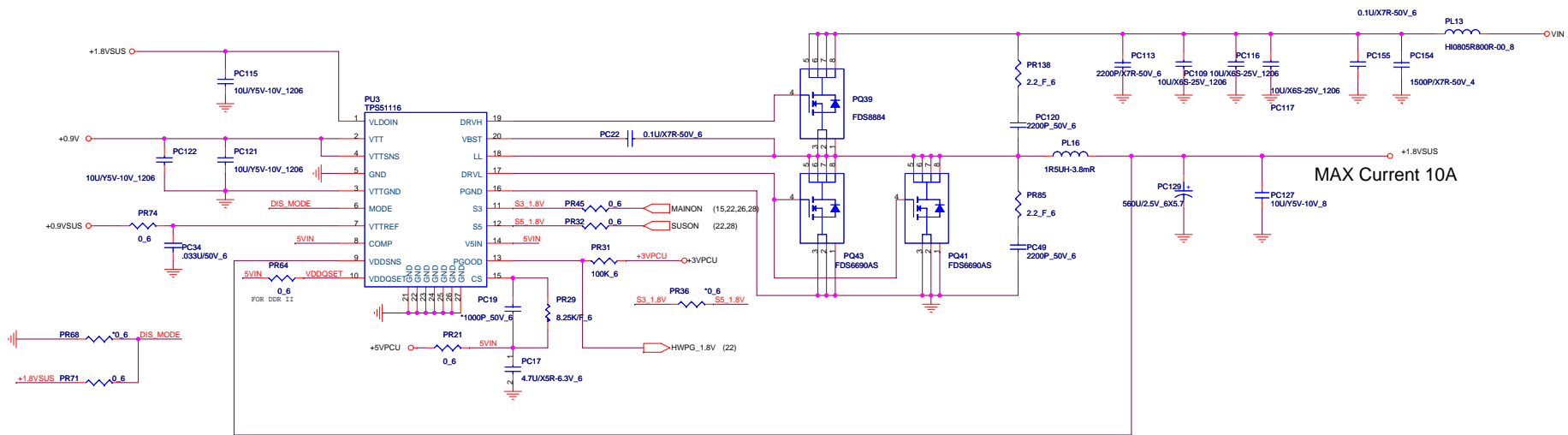


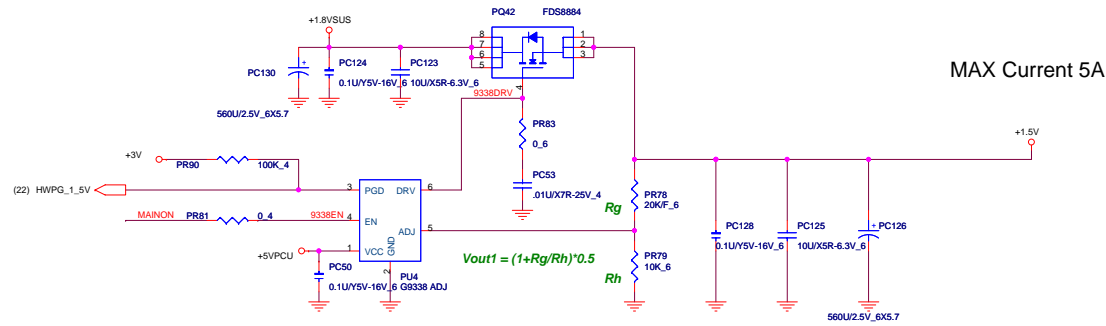




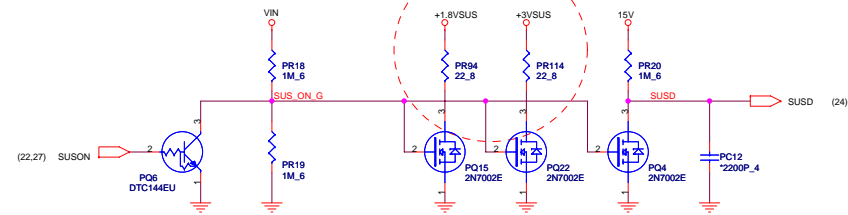




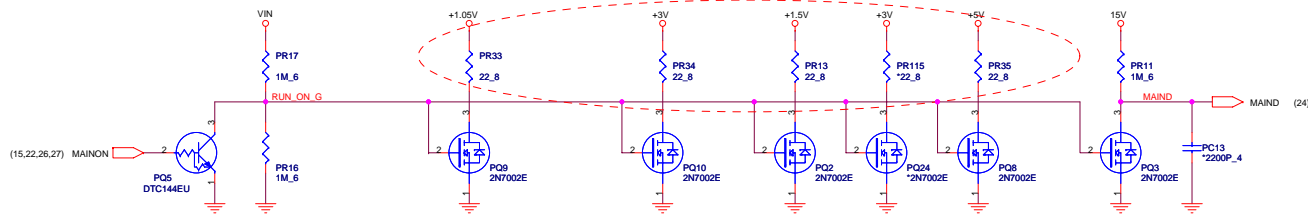




REV_1C 3/28 Modify



REV_1C 3/28 Modify



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