# R410 Montevina Block Diagram

01

**PCB STACK UP**
**8L**

- LAYER 1 : TOP
- LAYER 2 : GND
- LAYER 3 : IN1
- LAYER 4 : IN2
- LAYER 5 : VCC
- LAYER 6 : IN3
- LAYER 7 : GND
- LAYER 8 : BOT

CPU CORE(ISL6266A)

CPU Penryn
478P (uPGA)/35W
P4-P5

CPU THERMAL SENSOR

14.318MHz

CLOCK GEN
SLG8SP568/
ICS9LPRS393(QFN68)
P3

CLK_CPU_BCLK, CLK_CPU_BCLK#
CLK_MCH_BCLK, CLK_MCH_BCLK#
DREFCLK, DREFCLK#
DREFSSCLK, DREFSSCLK#

FSB 667/800/1066

VCCP +1.8V AND GMCH
1.05V(RT8204)
P37

NORTH BRIDGE
Cantiga
GL40/GM45
P6-P10

DDRIII-SODIMM1
DDRIII-SODIMM2
P11-P12
DDRIII 800/1066 MT/s

DDR III (TPS51116REGR)
1.5VSUS/SMDDR_VTERM
/SMDDR_VREF
P36

Display Port P19
P17
SW
CRT P17
CRT Dock P33
Dual Link
LCD CONN P18

AC-DC
Battery
DC-DC

Dock P33
USB I/F
VGA I/F
RJ45
Dock Ctrl

DMI LINK

32.768KHz

SOUTH BRIDGE
ICH-9M
P13-P16

USB2.0

USB2.0 Ports X3 P20&P24
USB+eSATA Port X1 P24
BlueTooth CON. P26
Fingerprint CON. P20
IN DAUGHTER BOARD
Camera CON. P18
USB Dock P33
WWAN Socket P29

SATA - HDD
SATA0 300MB
P24
SATA - CD-ROM
SATA1 300MB

SYSTEM DISCHARGE P34

PCI-E

X2 Mini PCI-E Card X 2 (WLAN/ WiMAX) P22
X1 LAN (10/100/1000) RTL8111DL /RTL8103EL P22
X1 PCI Express Card Socket P28
X1 Card-Reader Controller JMB385 P20
Memory CardReader 7-in-1
IN DAUGHTER BOARD

SIM Card Socket P20

SPI
SPI EEPROM(ITPM) P31

Azalia
AUDIO CODEC (ALC269Q) P21

SYSTEM POWER(ISL6237) P38
SYSTEM CHARGER(ISL88731A) P35

32.768KHz
LPC

Discrete TPM P27

EC (ITE) (IT8502E/JX) P32

Keyboard Touch Pad P25
G-SENSOR(LIS244ALTR) P27

Internal Digital Array MIC. P21
Internal Speakers. P21

P23 SW 25MHZ
RJ45 CON. P22
RJ45 Dock P33

HEADPHONE /MIC COMBO JACK P21

FAN P25
EC EEPROM P32

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|---|---|---|
| Custom | Block Diagram | 1A |
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02

## Power States

| POWER PLANE | VOLTAGE | PAGE | DESCRIPTION | CONTROL SIGNAL | ACTIVE IN |
|---|---|---|---|---|---|
| VIN | 10V~+19V | 18,33,34,35,36,37,38,39 | MAIN POWER | | S0~S5 |
| +3VRTC | +3.0V~+3.3V | 13,16,32 | RTC | | S0~S5 |
| 3VPCU | +3.3V | 13,18,22,24,30,32,33,34,36,37 | 8051 POWER | | S0~S5 |
| 5VPCU | +5V | 30,33,34,35,36,37,38 | LCD/CHARGE POWER | | S0~S5 |
| +15V | +15V | 18,26,33,37 | LARGE POWER | 5VPCU | S0~S5 |
| LANVCC | +3.3V | 22,33 | LAN POWER | LAN_ON | |
| 5VSUS | +5V | 18,30,33,38 | SLP_S5# CTRLD POWER | SUSON | |
| 3VSUS | +3.3V | 14,15,27,28,29,32,33,38 | SLP_S5# CTRLD POWER | SUSON | |
| 1.8VSUS | +1.8V | 10,33,36 | | SUSON | |
| 1.5VSUS | +1.5V | 07,09,10,11,12,33,35 | SODIMM POWER CALISTOGA/ICH8 POWER | SUSON | |
| SMDDR_VREF_DIMM | +0.75V | 11,12 | SODIMM POWER | | |
| +5V | +5V | 16,17,18,19,21,23,24,25,32,33,34 | SLP_S3# CTRLD POWER | MAINON | |
| +3V | +3.3V | 03,05,07,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38 | SLP_S3# CTRLD POWER | MAINON | |
| +1.5V | +1.5V | 05,10,13,14,15,16,21,27,28,29,35 | CALISTOGA/ICH8 POWER | MAINON | |
| +1.05V | +1.05V | 03,04,05,06,07,09,10,13,16,33,36,38 | CPU/CALISTOGA/ICH8 POWER | MAINON | |
| VCC_CORE | +0.7V~+1.77V | 04,05,33,38 | CPU CORE POWER | VRON | |
| LCDVCC | +3.3V | 18 | LCD Power | INT_DISP_ON | |
| +5VHDD | +5V | 23 | HDD Power | MAINON | |
| MBATV | +10V~+17V | 32,34 | MAIN BATTERY | D/C# | |

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|---|---|---|
| B | FRON TPAGE | 1A |

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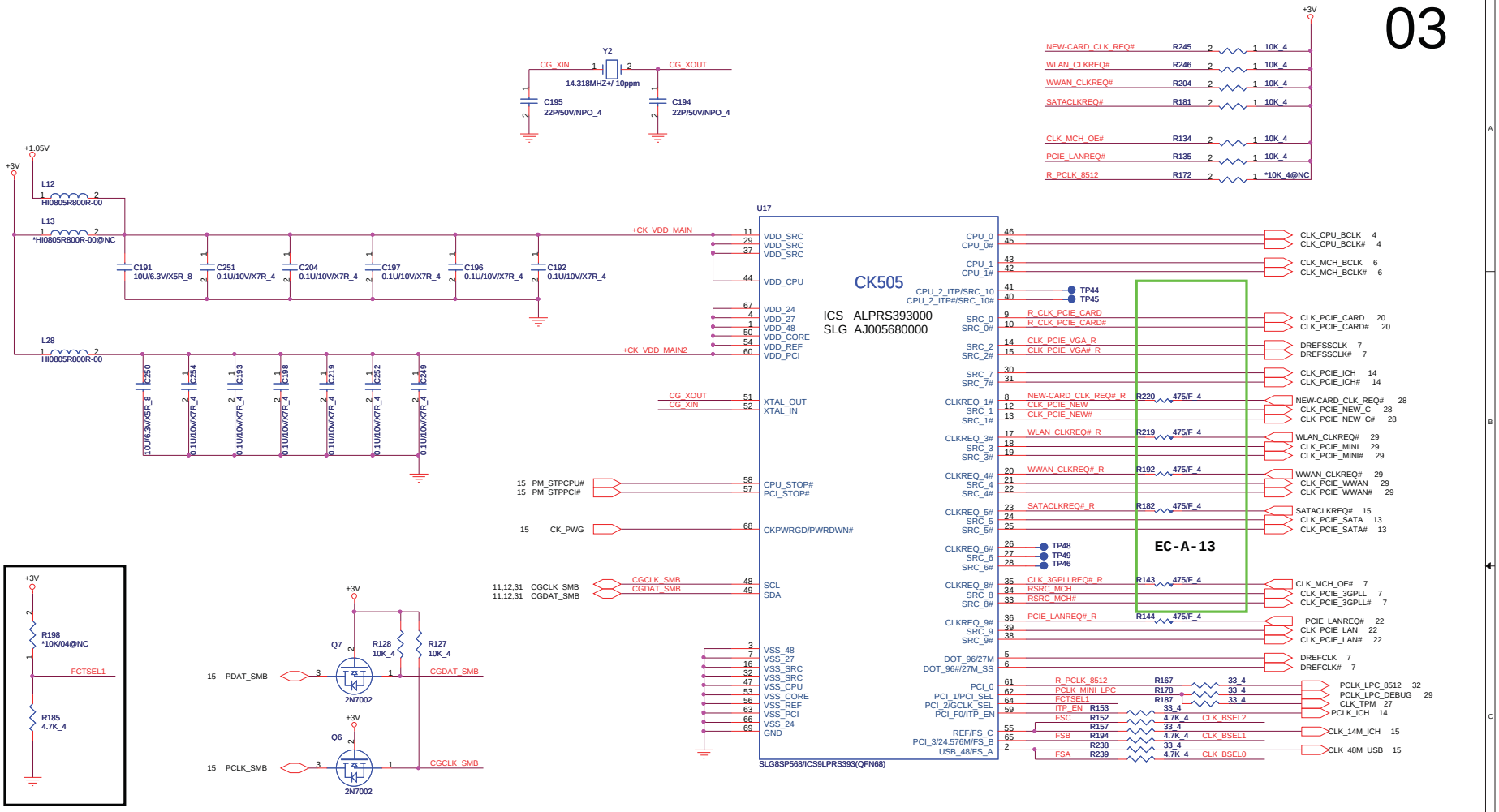
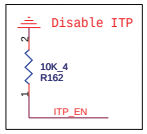
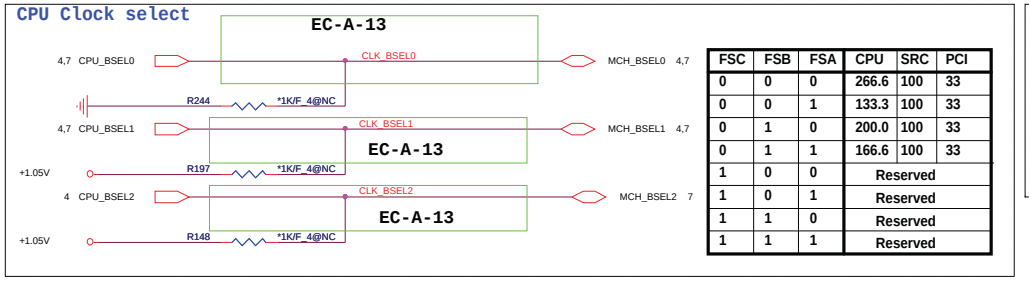


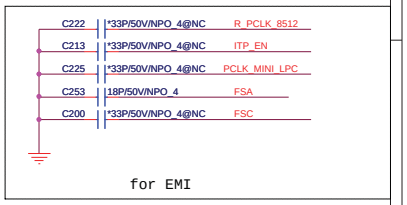

**GCLK_SEL = FCTSEL1**

| FCTSEL1 (PIN64) | PIN5 | PIN6 |
|---|---|---|
| 0 | DOT96 | DOT96# |
| 1 | 27Mout-NSS | 27Mout-SS |




| FSC | FSB | FSA | CPU | SRC | PCI |
|---|---|---|---|---|---|
| 0 | 0 | 0 | 266.6 | 100 | 33 |
| 0 | 0 | 1 | 133.3 | 100 | 33 |
| 0 | 1 | 0 | 200.0 | 100 | 33 |
| 0 | 1 | 1 | 166.6 | 100 | 33 |
| 1 | 0 | 0 | Reserved | | |
| 1 | 0 | 1 | Reserved | | |
| 1 | 1 | 0 | Reserved | | |
| 1 | 1 | 1 | Reserved | | |

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| Custom | CLOCK_GEN(SLG8SP568) | 1A |

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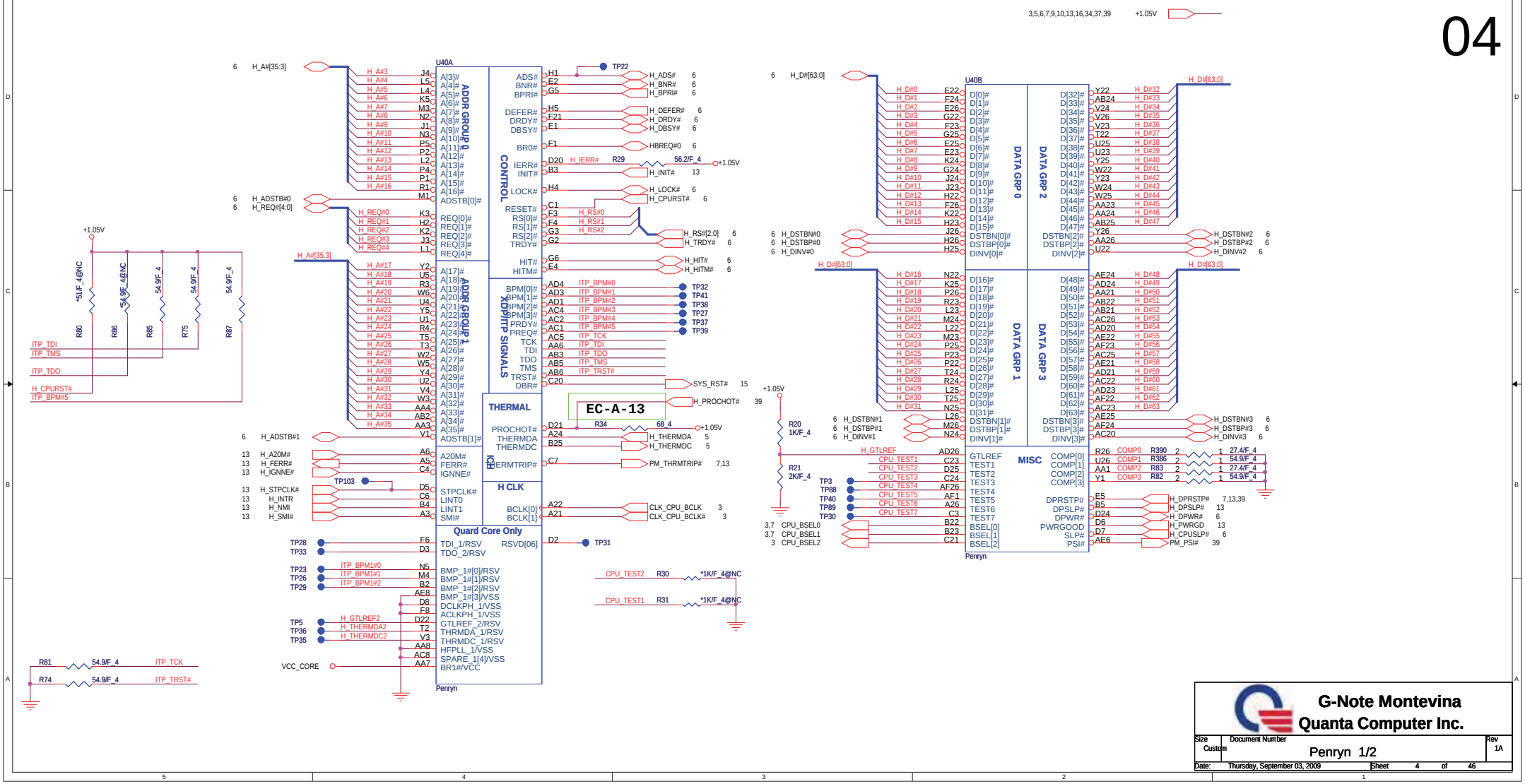
04
U40A
U40B
ADDR GROUP 0
ADDR GROUP 1
CONTROL
DATA GRP 0
DATA GRP 1
DATA GRP 2
DATA GRP 3
MISC
THERMAL
H CLK
Quard Core Only
EC-A-13
Penryn
H_A#[35:3]
H_ADSTB#0
H_REQ#[4:0]
H_ADSTB#1
H_D#[63:0]
+1.05V
TP22
TP103
TP28
TP33
TP23
TP26
TP29
TP5
TP36
TP35
TP3
TP88
TP40
TP89
TP30
TP31
TP32
TP41
TP38
TP27
TP37
TP39
R80
R86
R85
R75
R87
R81
R74
R34
R29
R30
R31
R20
R21
ITP_TDI
ITP_TMS
ITP_TDO
H_CPURST#
ITP_BPM#5
ITP_TCK
ITP_TRST#
H_GTLREF2
H_THERMDA2
H_THERMDC2
VCC_CORE
H_GTLREF
CPU_TEST1
CPU_TEST2
CPU_TEST3
CPU_TEST4
CPU_TEST5
CPU_TEST6
CPU_TEST7
CPU_BSEL0
CPU_BSEL1
CPU_BSEL2
H_A20M#
H_FERR#
H_IGNNE#
H_STPCLK#
H_INTR
H_NMI
H_SMI#
H_ADS#
H_BNR#
H_BPRI#
H_DEFER#
H_DRDY#
H_DBSY#
HBREQ#0
H_IERR#
H_INIT#
H_LOCK#
H_CPURST#
H_RS#0
H_RS#1
H_RS#2
H_RS#[2:0]
H_TRDY#
H_HIT#
H_HITM#
ITP_BPM#0
ITP_BPM#1
ITP_BPM#2
ITP_BPM#3
ITP_BPM#4
ITP_BPM#5
SYS_RST#
H_PROCHOT#
H_THERMDA
H_THERMDC
PM_THRMTRIP#
CLK_CPU_BCLK
CLK_CPU_BCLK#
H_DSTBN#0
H_DSTBP#0
H_DINV#0
H_DSTBN#1
H_DSTBP#1
H_DINV#1
H_DSTBN#2
H_DSTBP#2
H_DINV#2
H_DSTBN#3
H_DSTBP#3
H_DINV#3
COMP0
COMP1
COMP2
COMP3
H_DPRSTP#
H_DPSLP#
H_DPWR#
H_PWRGD
H_CPUSLP#
PM_PSI#
G-Note Montevina
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Penryn 1/2
Size
Custom
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1A
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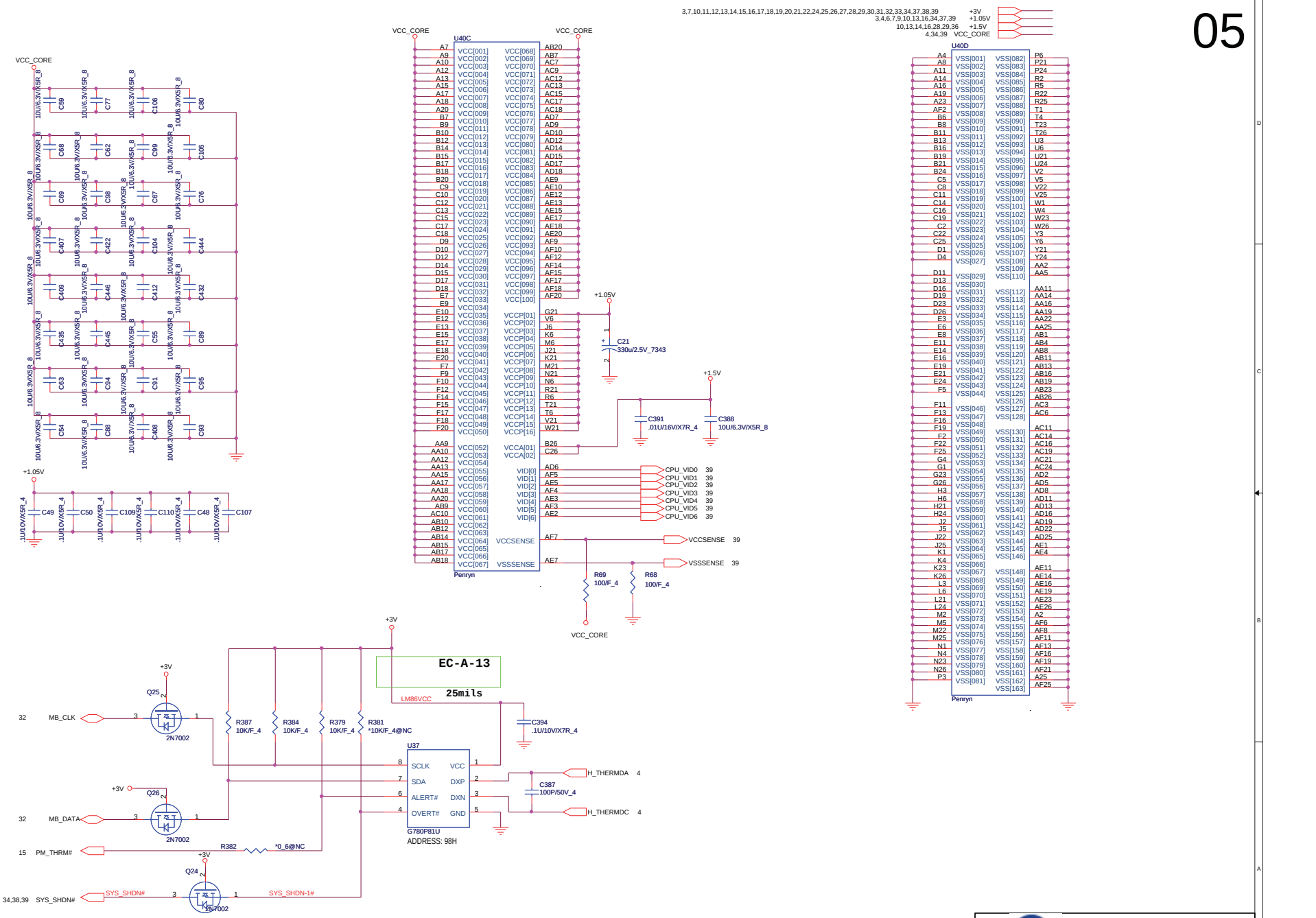
05
VCC_CORE
U40C
Penryn
+1.05V
C21
330u/2.5V_7343
+1.5V
C391
.01U/16V/X7R_4
C388
10U/6.3V/X5R_8
CPU_VID0 39
CPU_VID1 39
CPU_VID2 39
CPU_VID3 39
CPU_VID4 39
CPU_VID5 39
CPU_VID6 39
VCCSENSE 39
VSSSENSE 39
R69
100/F_4
R68
100/F_4
3,7,10,11,12,13,14,15,16,17,18,19,20,21,22,24,25,26,27,28,29,30,31,32,33,34,37,38,39 +3V
3,4,6,7,9,10,13,16,34,37,39 +1.05V
10,13,14,16,28,29,36 +1.5V
4,34,39 VCC_CORE
U40D
Penryn
EC-A-13
25mils
LM86VCC
C394
.1U/10V/X7R_4
U37
G780P81U
ADDRESS: 98H
H_THERMDA 4
H_THERMDC 4
C387
100P/50V_4
32 MB_CLK
32 MB_DATA
15 PM_THRM#
34,38,39 SYS_SHDN#
SYS_SHDN-1#
R387
10K/F_4
R384
10K/F_4
R379
10K/F_4
R381
*10K/F_4@NC
R382
*0_6@NC
Q25
Q26
Q24
2N7002
G-Note Montevina
Quanta Computer Inc.
Size
Custom
Document Number
Penryn & TH Monitor 2/2
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1A
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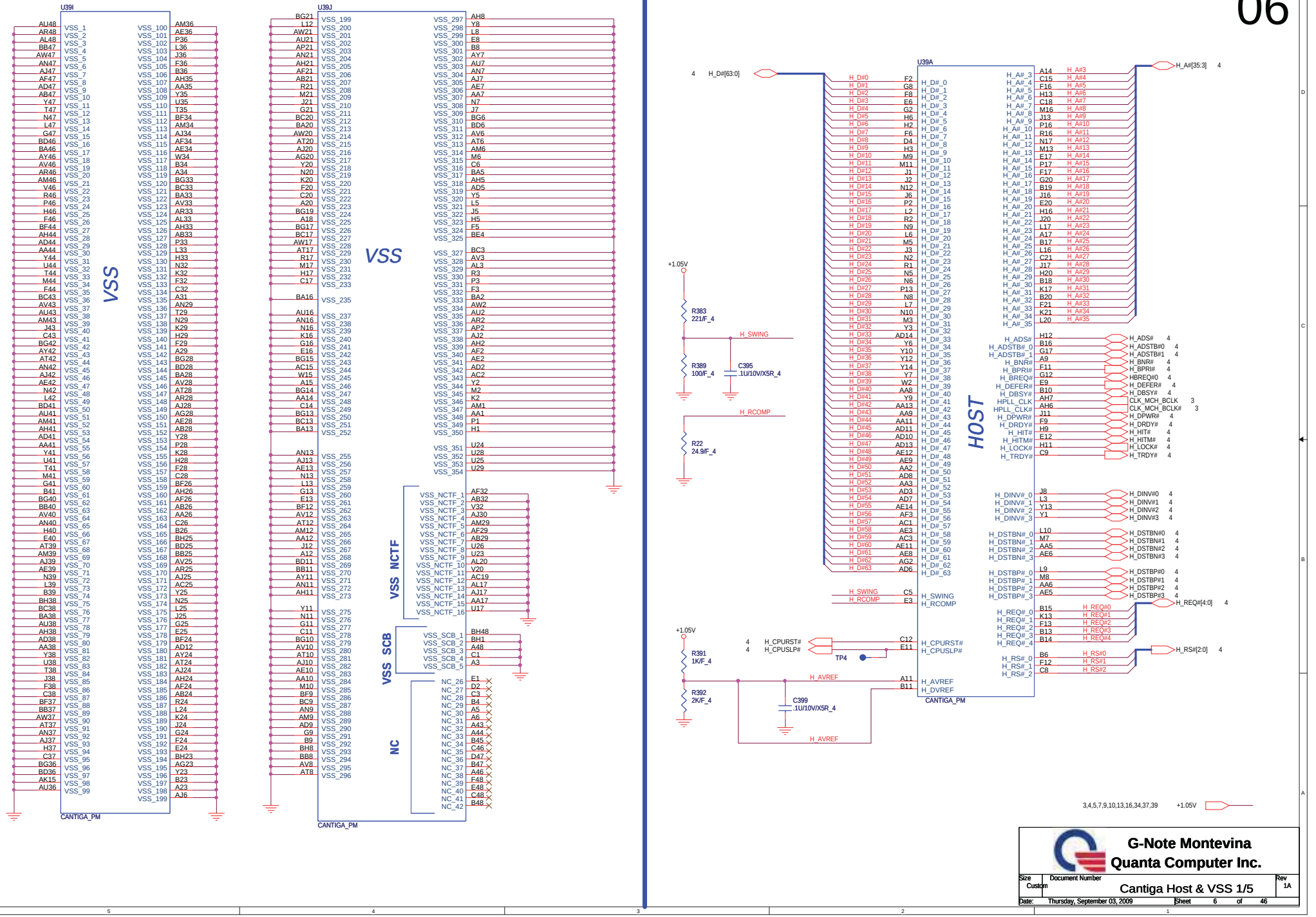
06
U39I
VSS
CANTIGA_PM
U39J
VSS
VSS NCTF
VSS SCB
NC
CANTIGA_PM
U39A
HOST
CANTIGA_PM
H_D#[63:0]
H_A#[35:3]
H_REQ#[4:0]
H_RS#[2:0]
+1.05V
R383 221/F_4
R389 100/F_4
C395 .1U/10V/X5R_4
H_SWING
H_RCOMP
R22 24.9/F_4
R391 1K/F_4
R392 2K/F_4
C399 .1U/10V/X5R_4
H_AVREF
TP4
H_CPURST#
H_CPUSLP#
3,4,5,7,9,10,13,16,34,37,39
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Cantiga Host & VSS 1/5
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MCH_CFG_5 DMIx2 selection

Low: DMIx2
High: DMIx4 (Default)

MCH_CFG_16 FSB Dynamic ODT

Low: Dynamic ODT disabled
High: Dynamic ODT enabled (Default)

MCH_CFG_9 PCI Express Graphic Lane

Low: Reverse Lane
High: Normal operation(Default)

MCH_CFG_19 DMI Lane Reversal

Low: Normal (Default)
High: Lane Reversed

MCH_CFG_6 iTPM Host Interface

Low: iTPM Host Interface enabled
High: iTPM Host Interface disabled (Default)

MCH_CFG_7 Intel (R) Management Engine Crypto

Low = Intel Management Engine Crypto Transport Layer Security (TLS) cipher suite with no confidentiality
High = Intel Management Engine Crypto TLS cipher suite with confidentiality (default)

MCH_CFG_10 PCIe Lookback Enable

Low: Enabled
High: Disabled (Default)

MCH_CFG_12/13 XOR/ALLZ/CLOCK Un-gating

| MCH_CFG_13 | MCH_CFG_12 | Configuration |
|---|---|---|
| 0 | 0 | Reserved |
| 1 | 0 | XOR Mode enabled |
| 0 | 1 | All-Z Mode enabled |
| 1 | 1 | Normal operation (Default) |

| | Local Flat Panel (LFP) Present Strap (L_DDC_DATA) | DP/HDMI Present Strap (DDPC_CTRLDATA) | SDVO Present Strap (SDVO_CTRLDATA) | Digital Display Port/PCI Express Concurrent Strap (CFG20) |
|---|---|---|---|---|
| DP/HDMI Port-B enabled | Low | Low | High | Low |

EC-A-13

EC-A-09

EC-A-13

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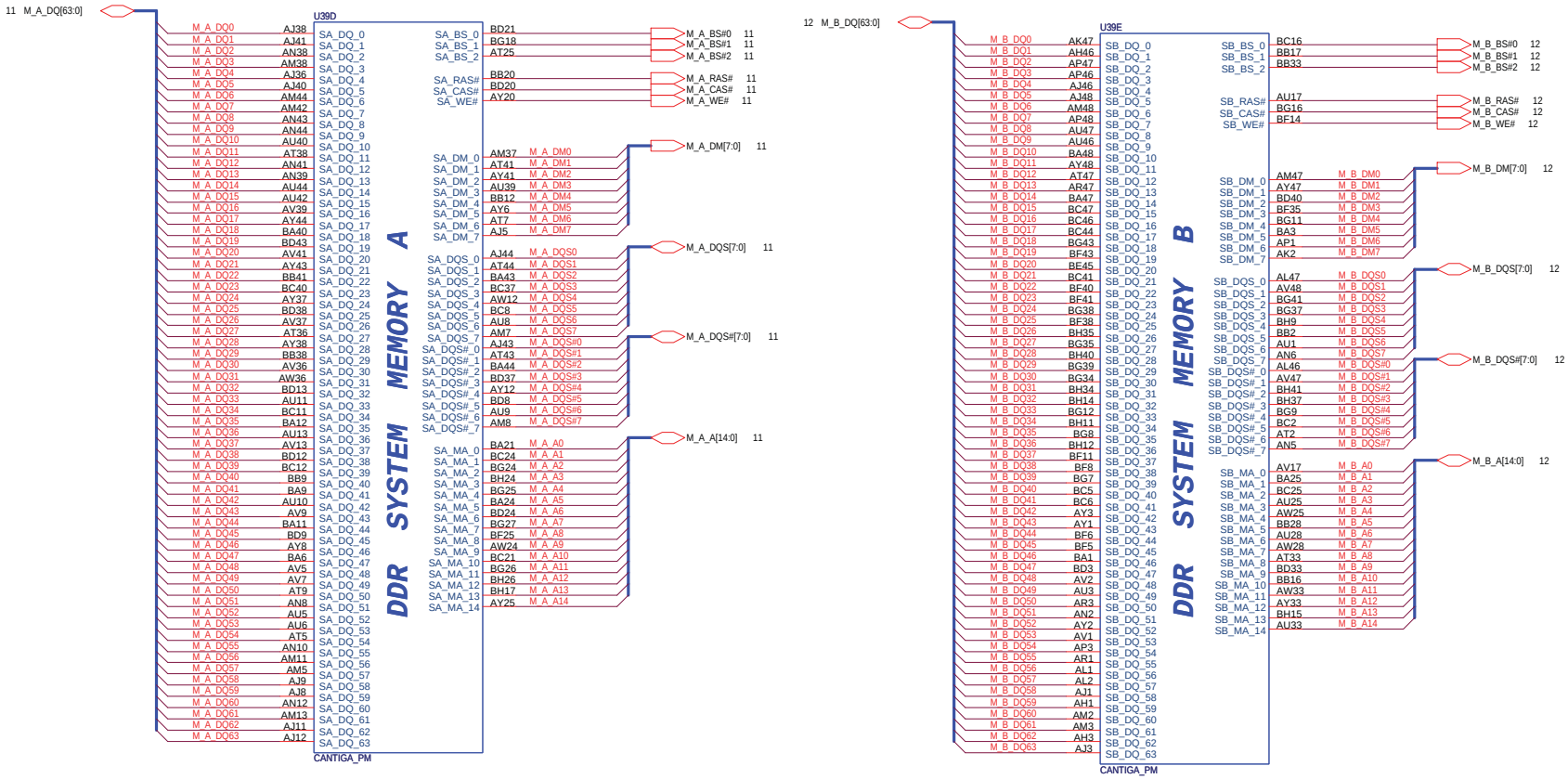


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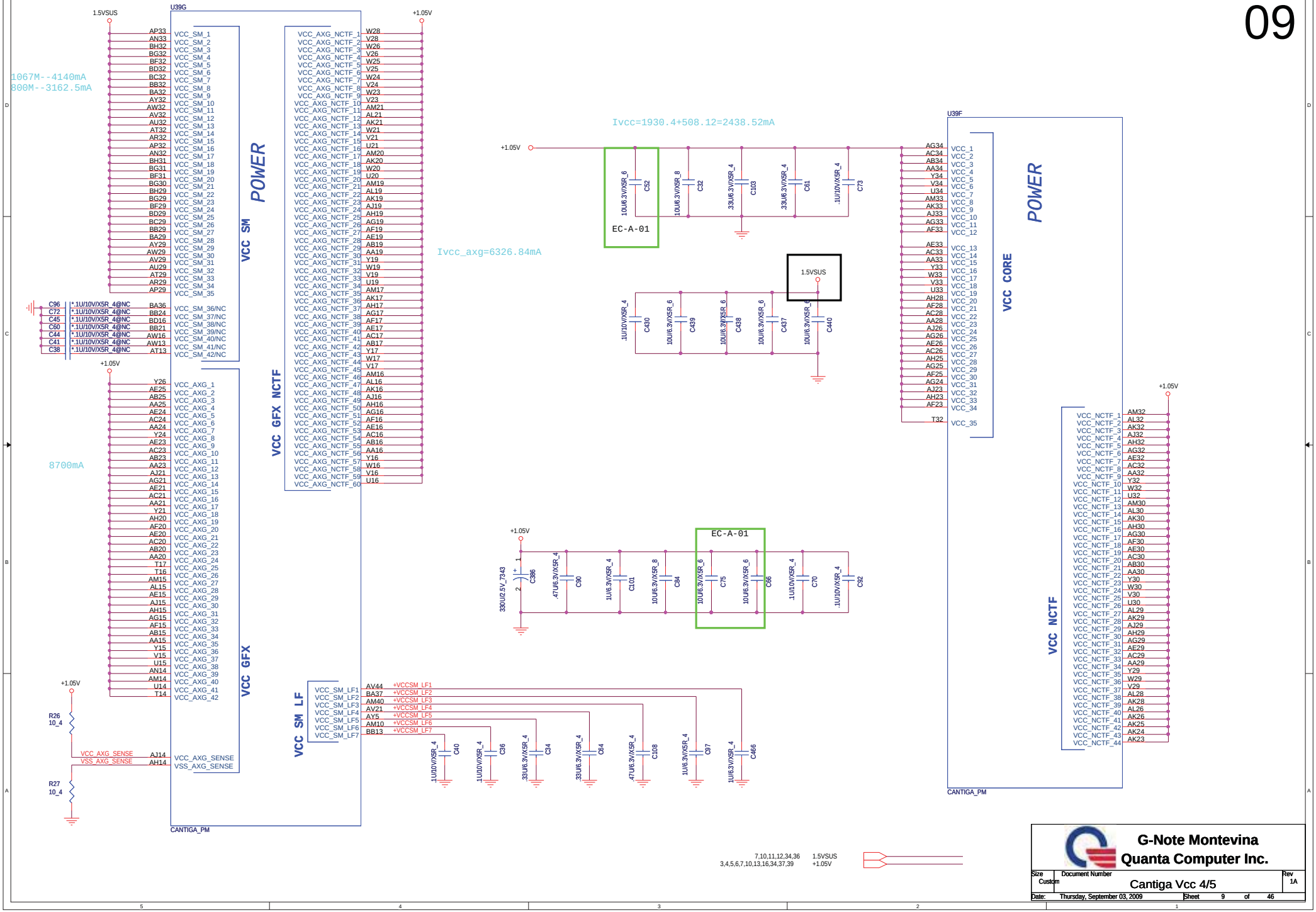
U39G
1.5VSUS
+1.05V
1067M--4140mA
800M--3162.5mA
VCC_SM_1 VCC_SM_2 VCC_SM_3 VCC_SM_4 VCC_SM_5 VCC_SM_6 VCC_SM_7 VCC_SM_8 VCC_SM_9 VCC_SM_10 VCC_SM_11 VCC_SM_12 VCC_SM_13 VCC_SM_14 VCC_SM_15 VCC_SM_16 VCC_SM_17 VCC_SM_18 VCC_SM_19 VCC_SM_20 VCC_SM_21 VCC_SM_22 VCC_SM_23 VCC_SM_24 VCC_SM_25 VCC_SM_26 VCC_SM_27 VCC_SM_28 VCC_SM_29 VCC_SM_30 VCC_SM_31 VCC_SM_32 VCC_SM_33 VCC_SM_34 VCC_SM_35
VCC SM POWER
C96 C72 C45 C60 C44 C41 C38 *.1U/10V/X5R_4@NC
VCC_SM_36/NC VCC_SM_37/NC VCC_SM_38/NC VCC_SM_39/NC VCC_SM_40/NC VCC_SM_41/NC VCC_SM_42/NC
8700mA
VCC_AXG_1 VCC_AXG_2 VCC_AXG_3 VCC_AXG_4 VCC_AXG_5 VCC_AXG_6 VCC_AXG_7 VCC_AXG_8 VCC_AXG_9 VCC_AXG_10 VCC_AXG_11 VCC_AXG_12 VCC_AXG_13 VCC_AXG_14 VCC_AXG_15 VCC_AXG_16 VCC_AXG_17 VCC_AXG_18 VCC_AXG_19 VCC_AXG_20 VCC_AXG_21 VCC_AXG_22 VCC_AXG_23 VCC_AXG_24 VCC_AXG_25 VCC_AXG_26 VCC_AXG_27 VCC_AXG_28 VCC_AXG_29 VCC_AXG_30 VCC_AXG_31 VCC_AXG_32 VCC_AXG_33 VCC_AXG_34 VCC_AXG_35 VCC_AXG_36 VCC_AXG_37 VCC_AXG_38 VCC_AXG_39 VCC_AXG_40 VCC_AXG_41 VCC_AXG_42
VCC GFX
VCC_AXG_NCTF_1 ... VCC_AXG_NCTF_60
VCC GFX NCTF
Ivcc_axg=6326.84mA
VCC_SM_LF1 VCC_SM_LF2 VCC_SM_LF3 VCC_SM_LF4 VCC_SM_LF5 VCC_SM_LF6 VCC_SM_LF7
+VCCSM_LF1 +VCCSM_LF2 +VCCSM_LF3 +VCCSM_LF4 +VCCSM_LF5 +VCCSM_LF6 +VCCSM_LF7
VCC SM LF
R26 10_4
R27 10_4
VCC_AXG_SENSE VSS_AXG_SENSE
VCC_AXG_SENSE VSS_AXG_SENSE
CANTIGA_PM
Ivcc=1930.4+508.12=2438.52mA
EC-A-01
U39F
VCC_1 ... VCC_35
VCC CORE POWER
VCC_NCTF_1 ... VCC_NCTF_44
VCC NCTF
CANTIGA_PM
7,10,11,12,34,36 1.5VSUS
3,4,5,6,7,10,13,16,34,37,39 +1.05V
G-Note Montevina
Quanta Computer Inc.
Size Custom
Document Number
Cantiga Vcc 4/5
Rev 1A
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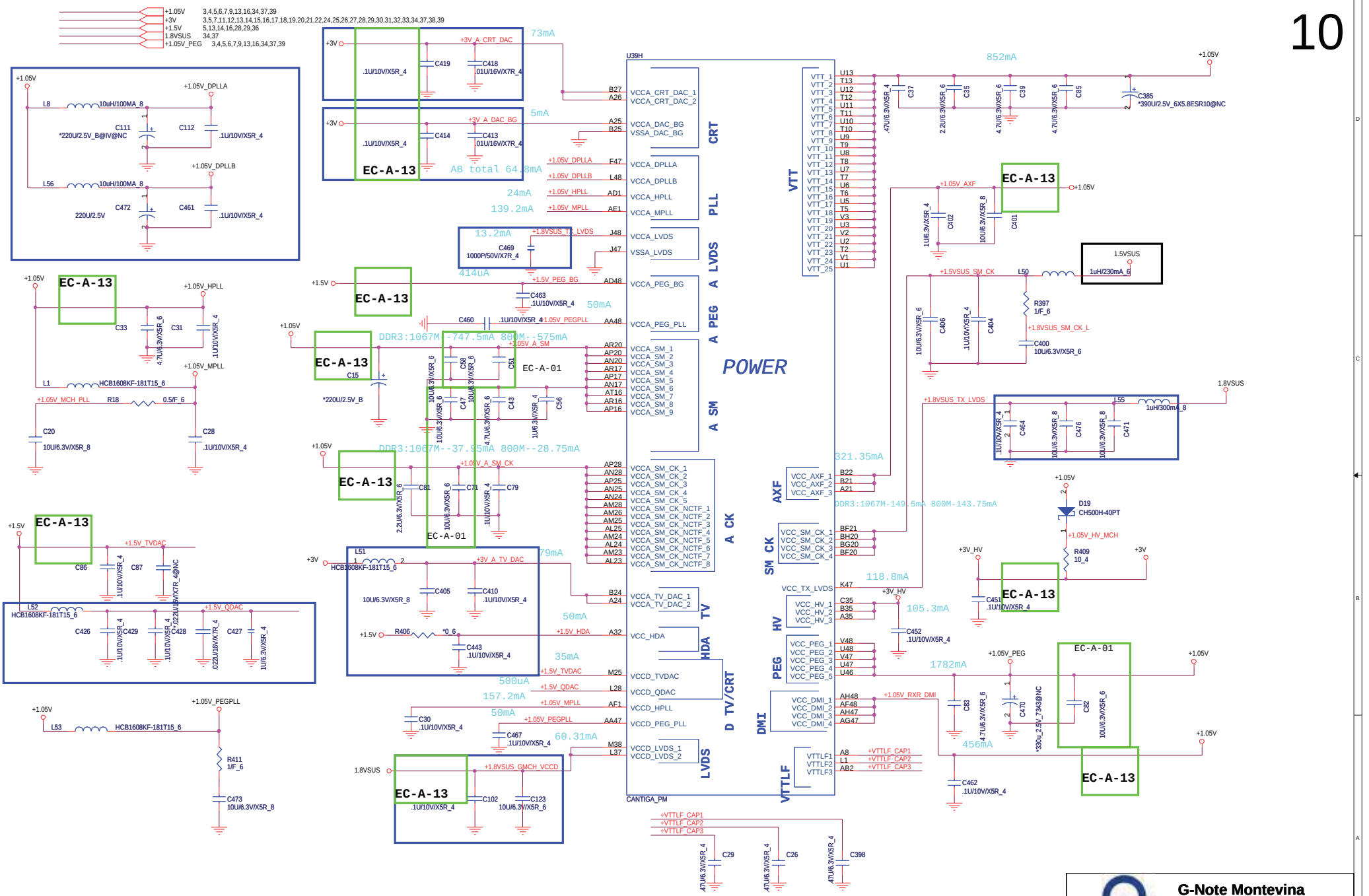
+1.05V 3,4,5,6,7,9,13,16,34,37,39
+3V 3,5,7,11,12,13,14,15,16,17,18,19,20,21,22,24,25,26,27,28,29,30,31,32,33,34,37,38,39
+1.5V 5,13,14,16,28,29,36
1.8VSUS 34,37
+1.05V_PEG 3,4,5,6,7,9,13,16,34,37,39
POWER
U39H
CANTIGA_PM
CRT
PLL
LVDS
A PEG
A SM
A CK
TV
HDA
D TV/CRT
VTT
AXF
SM CK
HV
PEG
DMI
VTTLF
EC-A-13
EC-A-01
852mA
321.35mA
118.8mA
105.3mA
1782mA
456mA
73mA
5mA
AB total 64.8mA
24mA
139.2mA
13.2mA
414uA
50mA
DDR3:1067M--747.5mA 800M--575mA
DDR3:1067M--37.95mA 800M--28.75mA
DDR3:1067M-149.5mA 800M-143.75mA
79mA
35mA
500uA
157.2mA
60.31mA
1.5VSUS
1uH/230mA_6
1.8VSUS
1uH/300mA_8
D19
CH500H-40PT
+1.05V_HV_MCH
R409
10_4
Cantiga Power 5/5
G-Note Montevina
Quanta Computer Inc.
Size Custom
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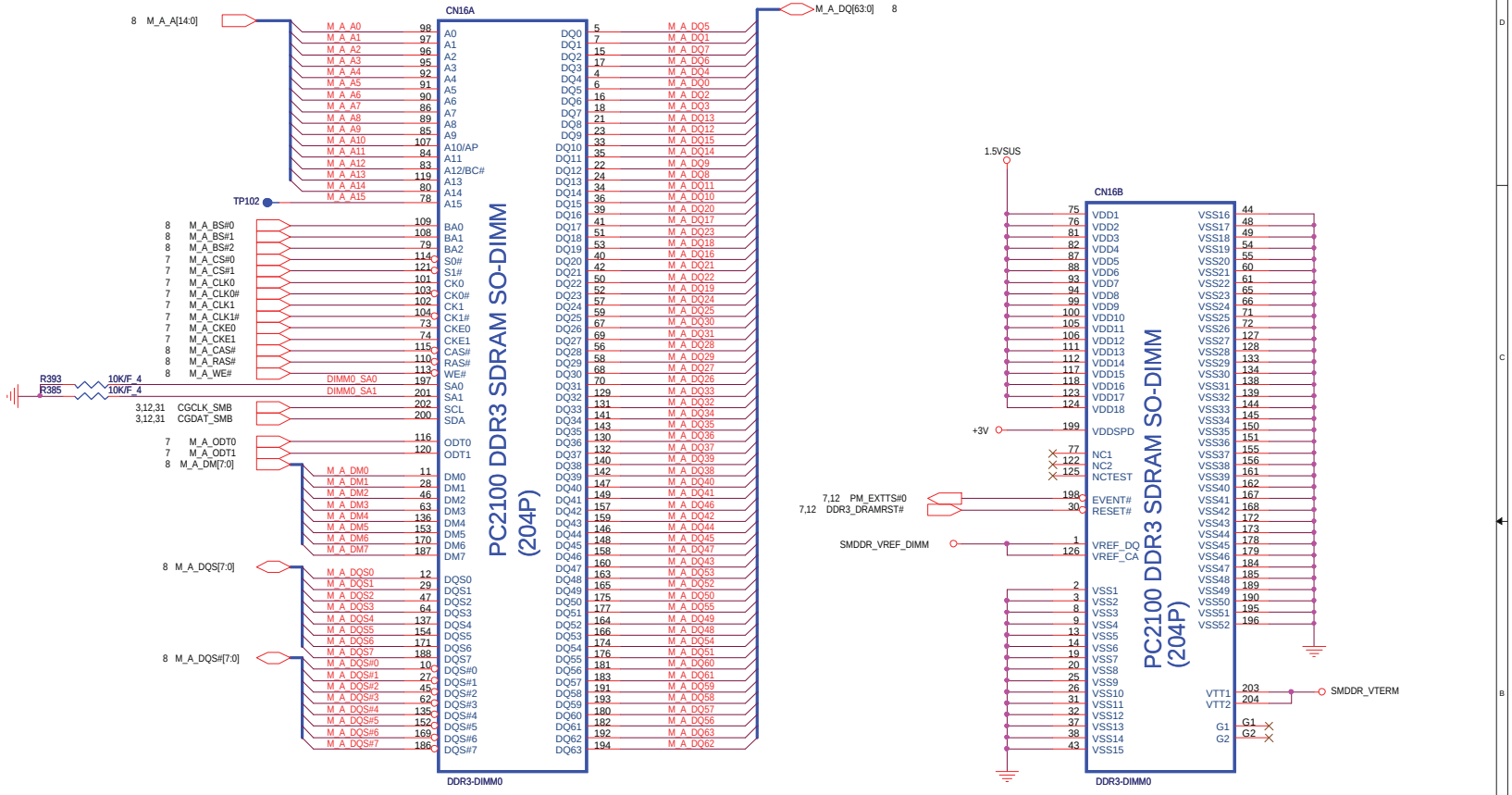


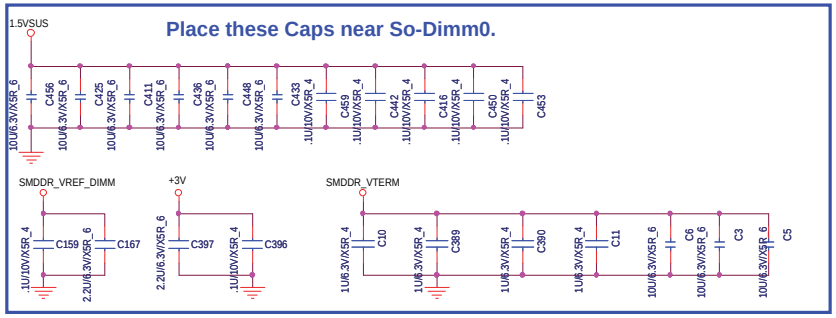


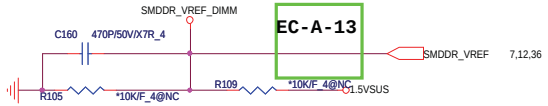


| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
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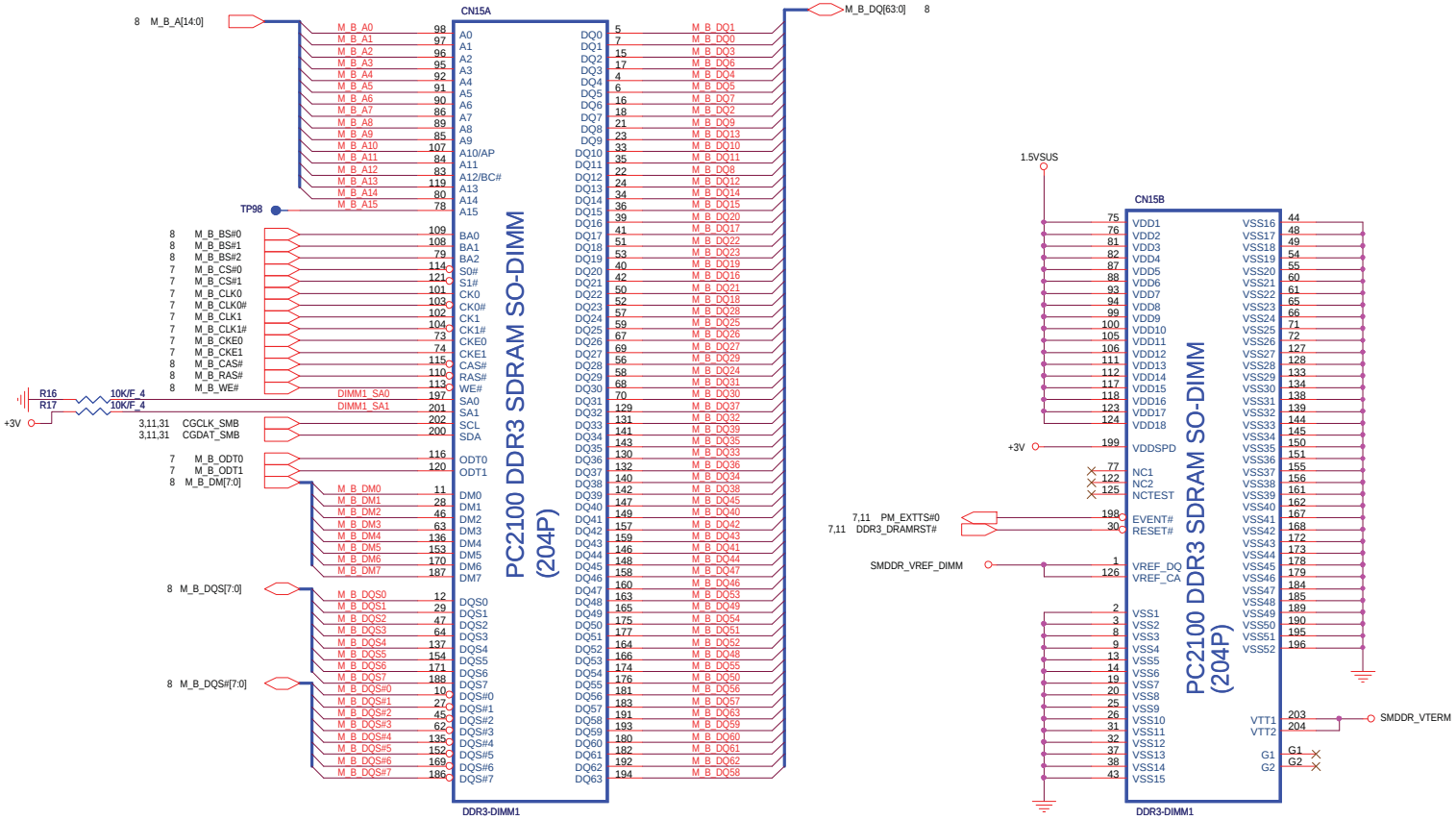
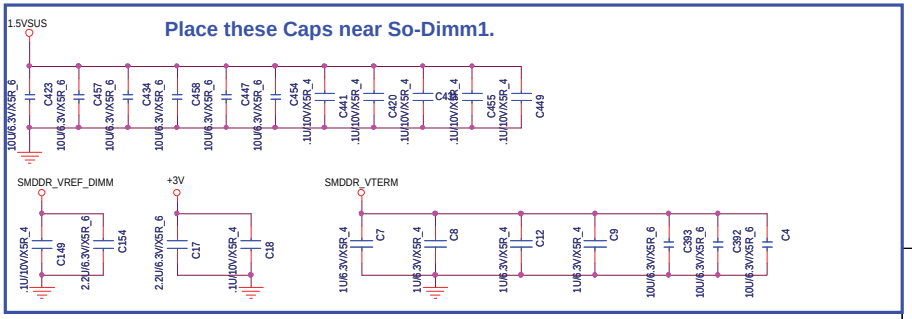
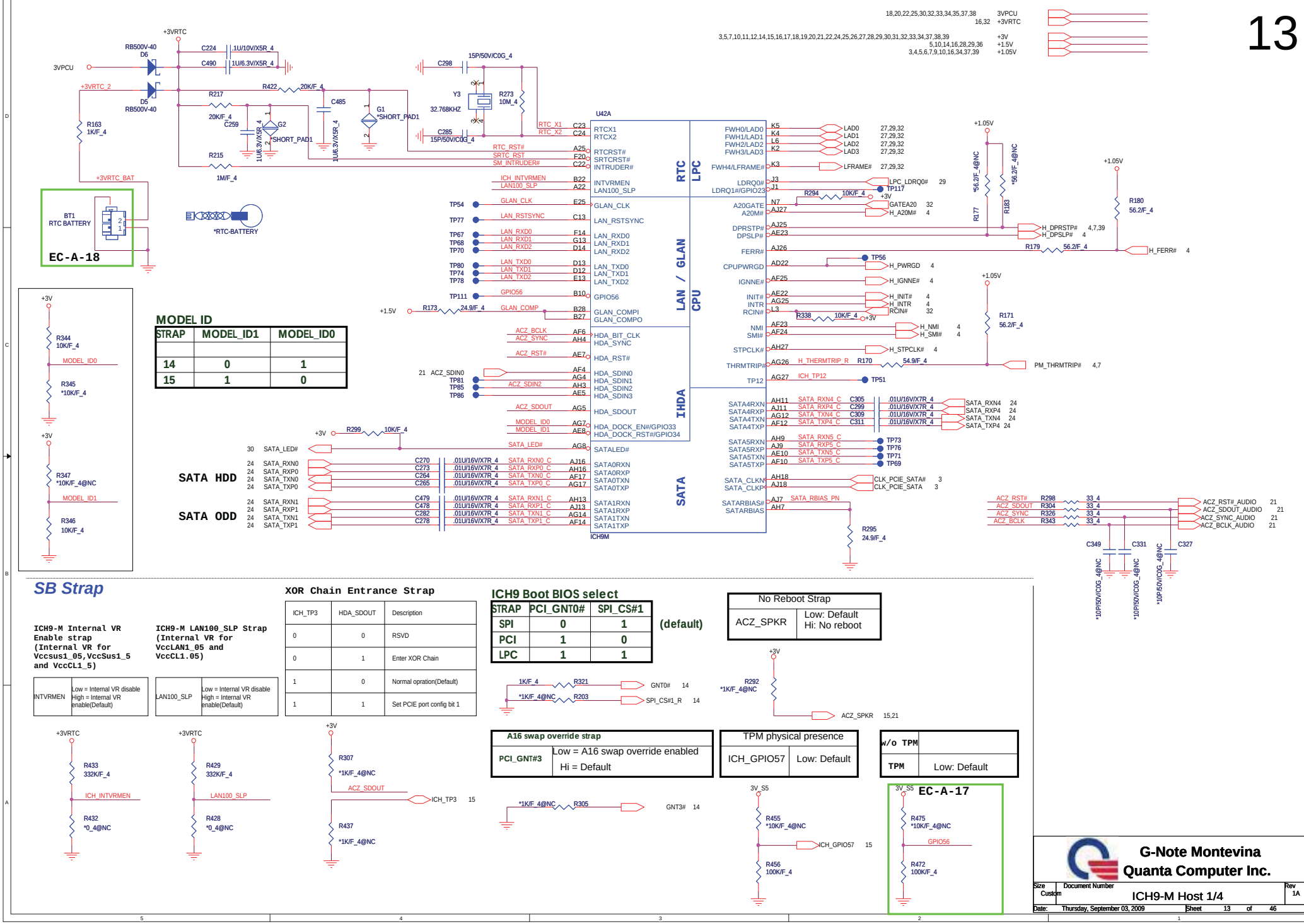



G-Note Montevina
Quanta Computer Inc.

| Size | Document Number | Rev |
|---|---|---|
| Custom | DDR3 DIMM-1(H=9.2) | 1A |
| Date: Thursday, September 03, 2009 | Sheet 12 of 46 | |




## MODEL ID

| STRAP | MODEL_ID1 | MODEL_ID0 |
|---|---|---|
| | | |
| 14 | 0 | 1 |
| 15 | 1 | 0 |

## SB Strap

**ICH9-M Internal VR Enable strap (Internal VR for Vccsus1_05,VccSus1_5 and VccCL1_5)**

| | |
|---|---|
| INTVRMEN | Low = Internal VR disable<br>High = Internal VR enable(Default) |

**ICH9-M LAN100_SLP Strap (Internal VR for VccLAN1_05 and VccCL1.05)**

| | |
|---|---|
| LAN100_SLP | Low = Internal VR disable<br>High = Internal VR enable(Default) |

**XOR Chain Entrance Strap**

| ICH_TP3 | HDA_SDOUT | Description |
|---|---|---|
| 0 | 0 | RSVD |
| 0 | 1 | Enter XOR Chain |
| 1 | 0 | Normal opration(Default) |
| 1 | 1 | Set PCIE port config bit 1 |

**ICH9 Boot BIOS select**

| STRAP | PCI_GNT0# | SPI_CS#1 | |
|---|---|---|---|
| SPI | 0 | 1 | (default) |
| PCI | 1 | 0 | |
| LPC | 1 | 1 | |

| No Reboot Strap | |
|---|---|
| ACZ_SPKR | Low: Default<br>Hi: No reboot |

| A16 swap override strap | |
|---|---|
| PCI_GNT#3 | Low = A16 swap override enabled<br>Hi = Default |

| TPM physical presence | |
|---|---|
| ICH_GPIO57 | Low: Default |

| w/o TPM | |
|---|---|
| TPM | Low: Default |

**G-Note Montevina**
**Quanta Computer Inc.**

| Size | Document Number | Rev |
|---|---|---|
| Custom | ICH9-M Host 1/4 | 1A |

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5,10,13,16,28,29,36 +1.5V
3,5,7,10,11,12,13,15,16,17,18,19,20,21,22,24,25,26,27,28,29,30,31,32,33,34,37,38,39 +3V
15,20,28,32,34,36,39 3VSUS

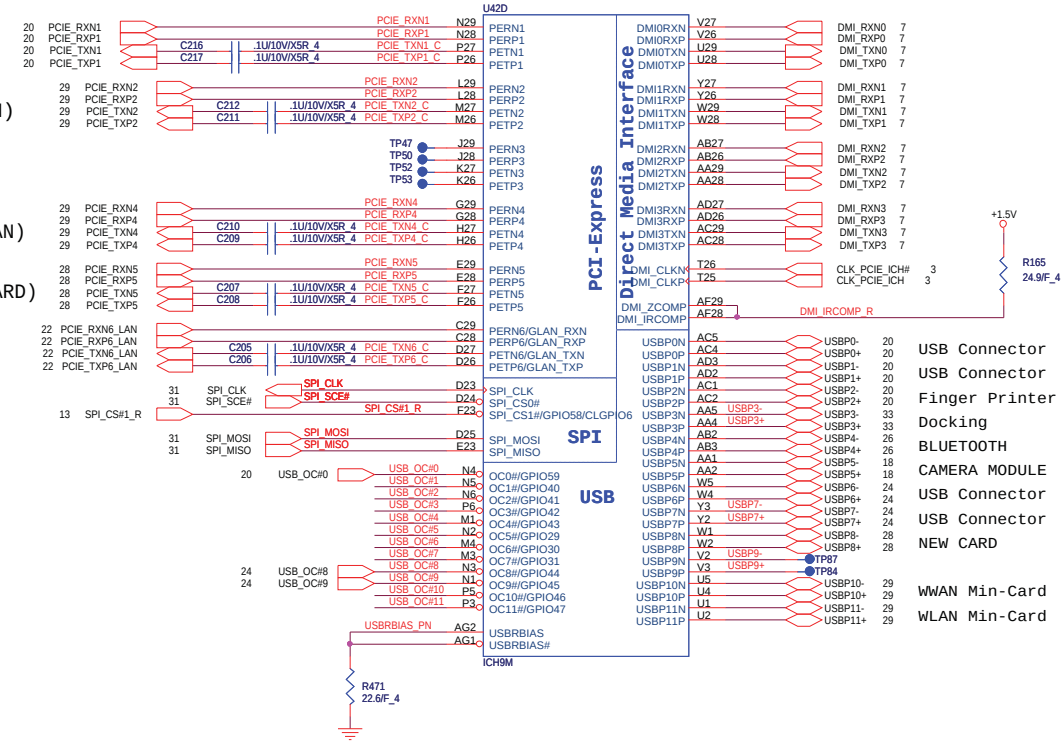
**CARD-READER**

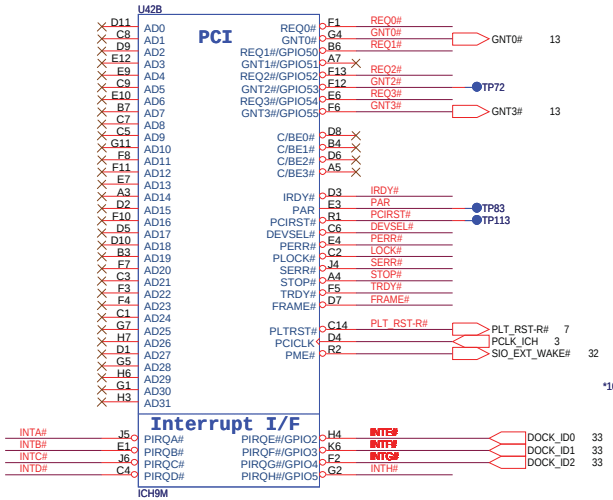
EXPRESS CARD (WWAN)

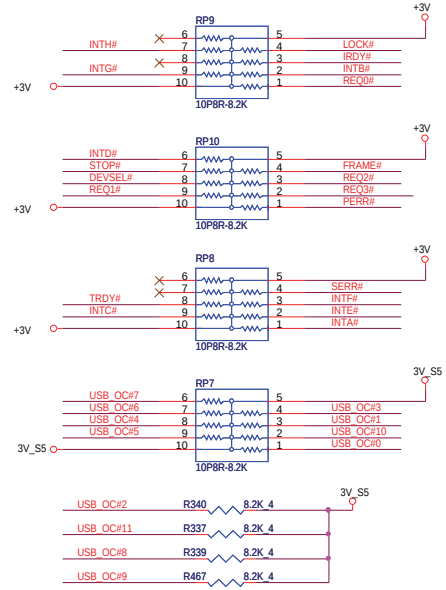
MINI CARD PCI-E(WLAN)

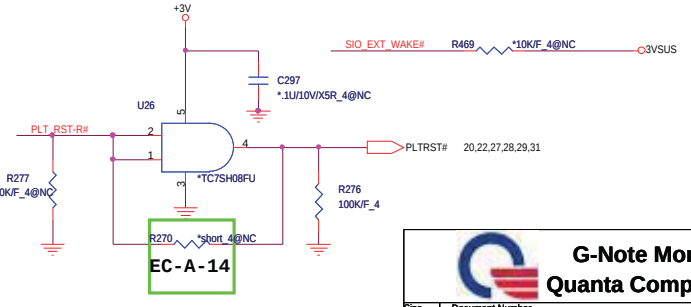
Express Card(NEW CARD)

PCIE-LAN



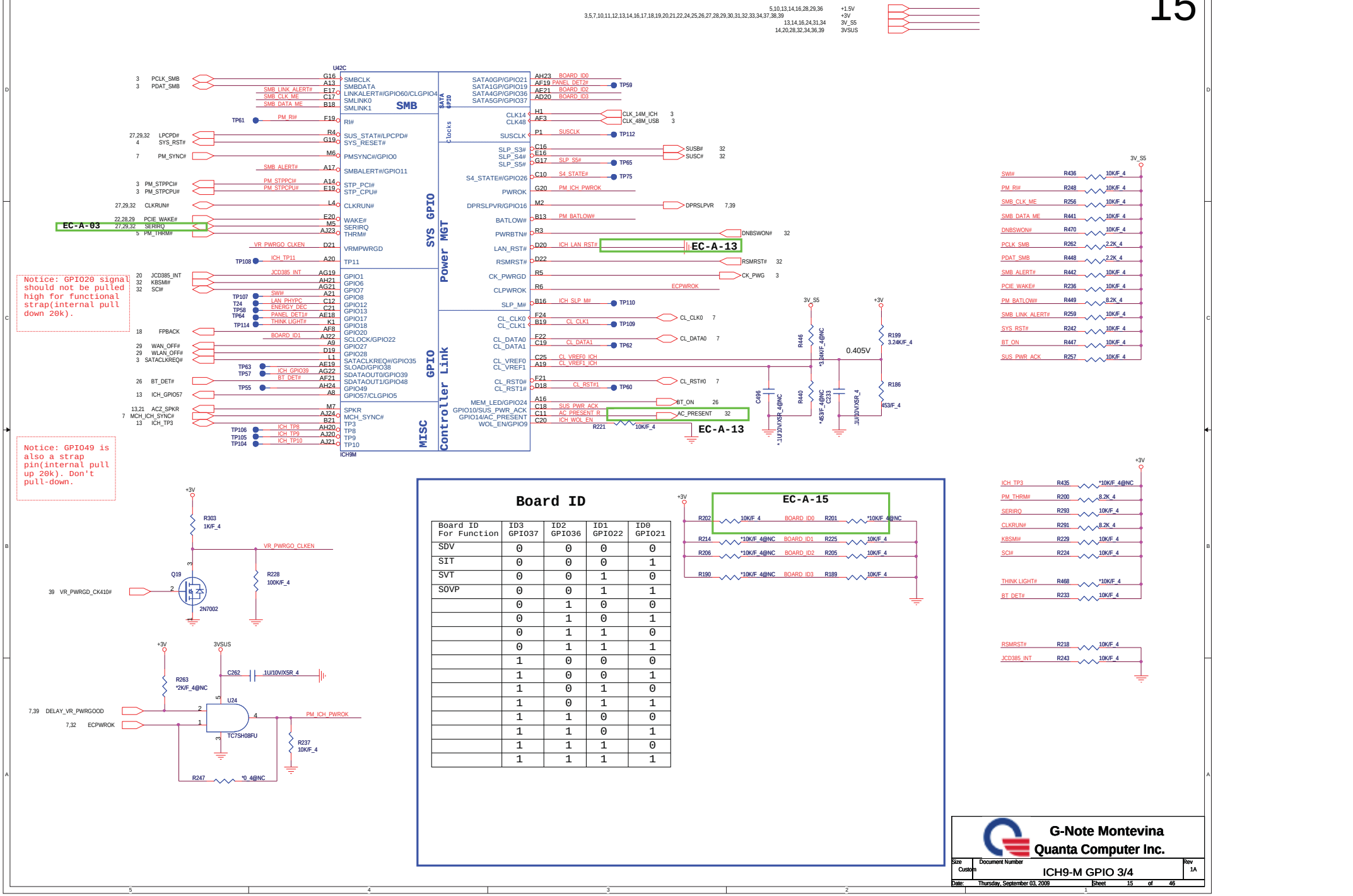



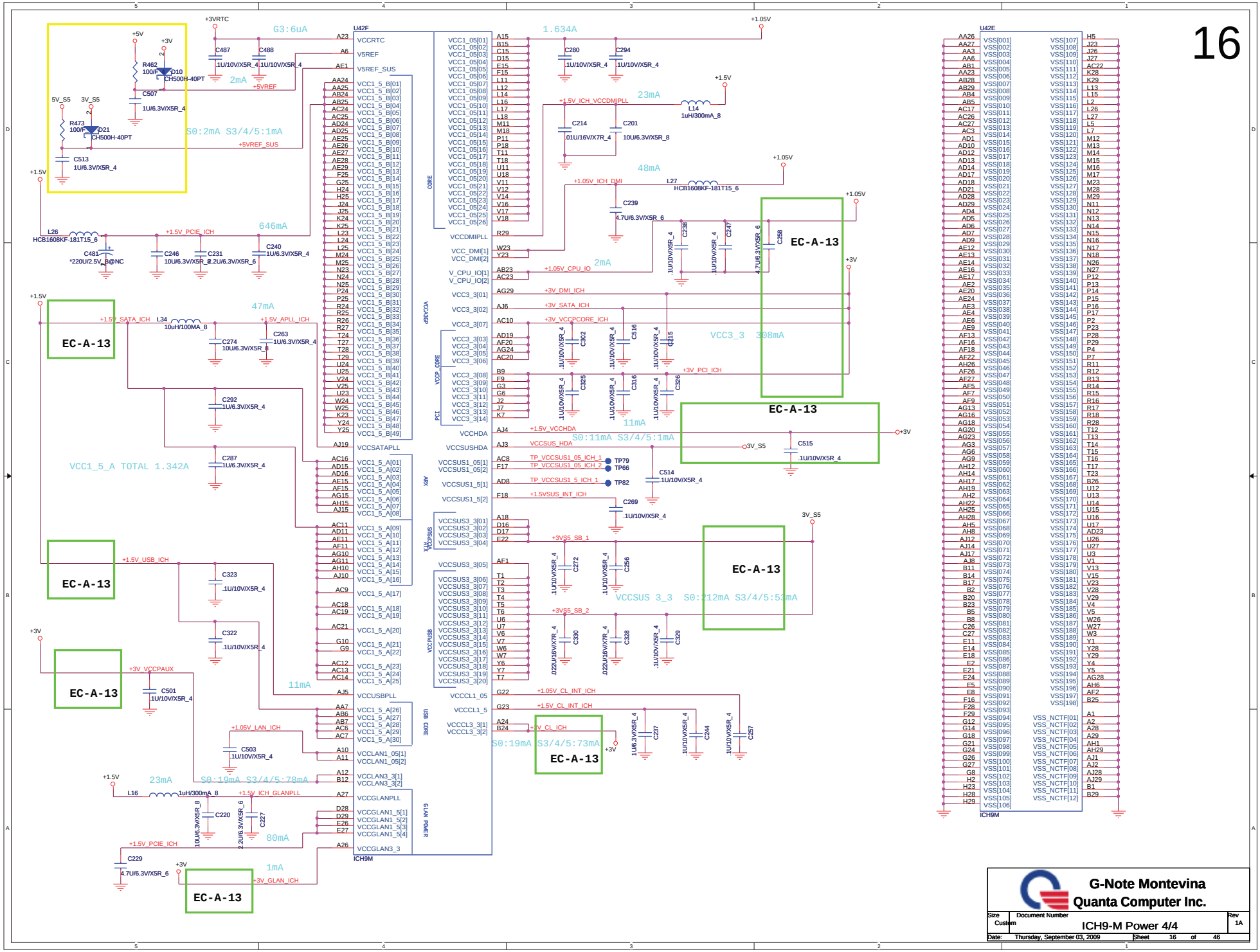




**G-Note Montevina**
**Quanta Computer Inc.**

| Size | Document Number | Rev |
|---|---|---|
| Custom | ICH9-M PCIE 2/4 | 1A |
| Date: Thursday, September 03, 2009 | Sheet 14 of 46 | |


U42C
SMB
SYS GPIO
Power MGT
GPIO
Controller Link
MISC
ICH9M
EC-A-03
EC-A-13
EC-A-13
EC-A-15
Notice: GPIO20 signal should not be pulled high for functional strap(internal pull down 20k).
Notice: GPIO49 is also a strap pin(internal pull up 20k). Don't pull-down.
Board ID
Board ID For Function | ID3 GPIO37 | ID2 GPIO36 | ID1 GPIO22 | ID0 GPIO21
SDV | 0 | 0 | 0 | 0
SIT | 0 | 0 | 0 | 1
SVT | 0 | 0 | 1 | 0
SOVP | 0 | 0 | 1 | 1
| 0 | 1 | 0 | 0
| 0 | 1 | 0 | 1
| 0 | 1 | 1 | 0
| 0 | 1 | 1 | 1
| 1 | 0 | 0 | 0
| 1 | 0 | 0 | 1
| 1 | 0 | 1 | 0
| 1 | 0 | 1 | 1
| 1 | 1 | 0 | 0
| 1 | 1 | 0 | 1
| 1 | 1 | 1 | 0
| 1 | 1 | 1 | 1
G-Note Montevina
Quanta Computer Inc.
ICH9-M GPIO 3/4
Size Custom
Document Number
Rev 1A
Date: Thursday, September 03, 2009
Sheet 15 of 46


U42F
ICH9M
U42E
ICH9M
EC-A-13
EC-A-13
EC-A-13
EC-A-13
EC-A-13
EC-A-13
EC-A-13
VCC1_5_A TOTAL 1.342A
VCCSUS 3_3 S0:212mA S3/4/5:53mA
S0:2mA S3/4/5:1mA
S0:11mA S3/4/5:1mA
S0:19mA S3/4/5:73mA
S0:19mA S3/4/5:78mA
G-Note Montevina
Quanta Computer Inc.
ICH9-M Power 4/4
Size: Custom
Document Number
Rev: 1A
Date: Thursday, September 03, 2009
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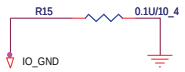
# CRT PORT

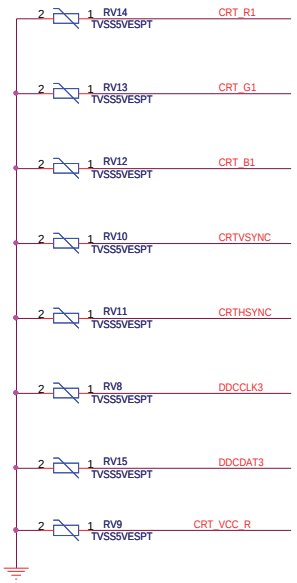


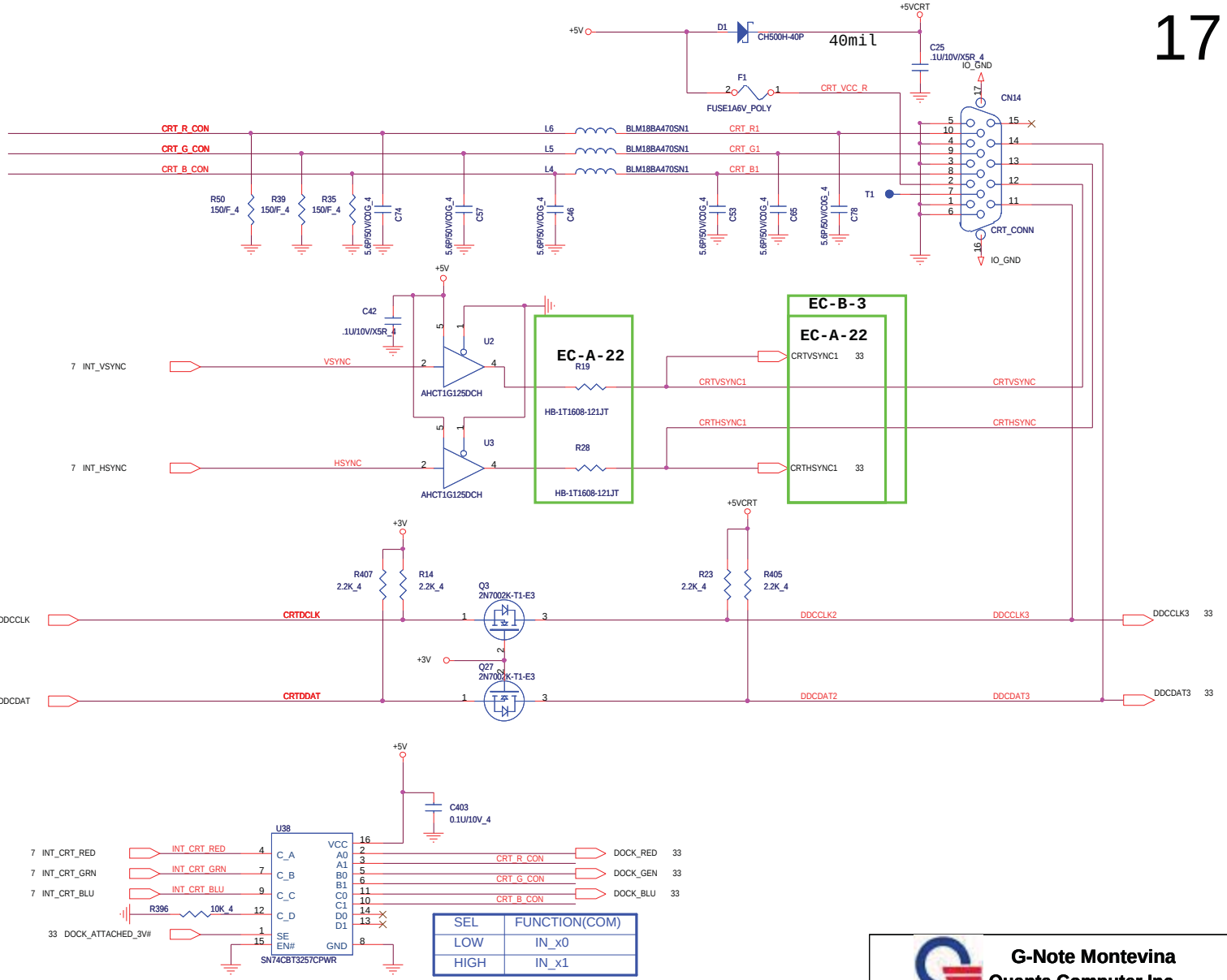
## EMI




## ESD PROTECTION

close CRT connector



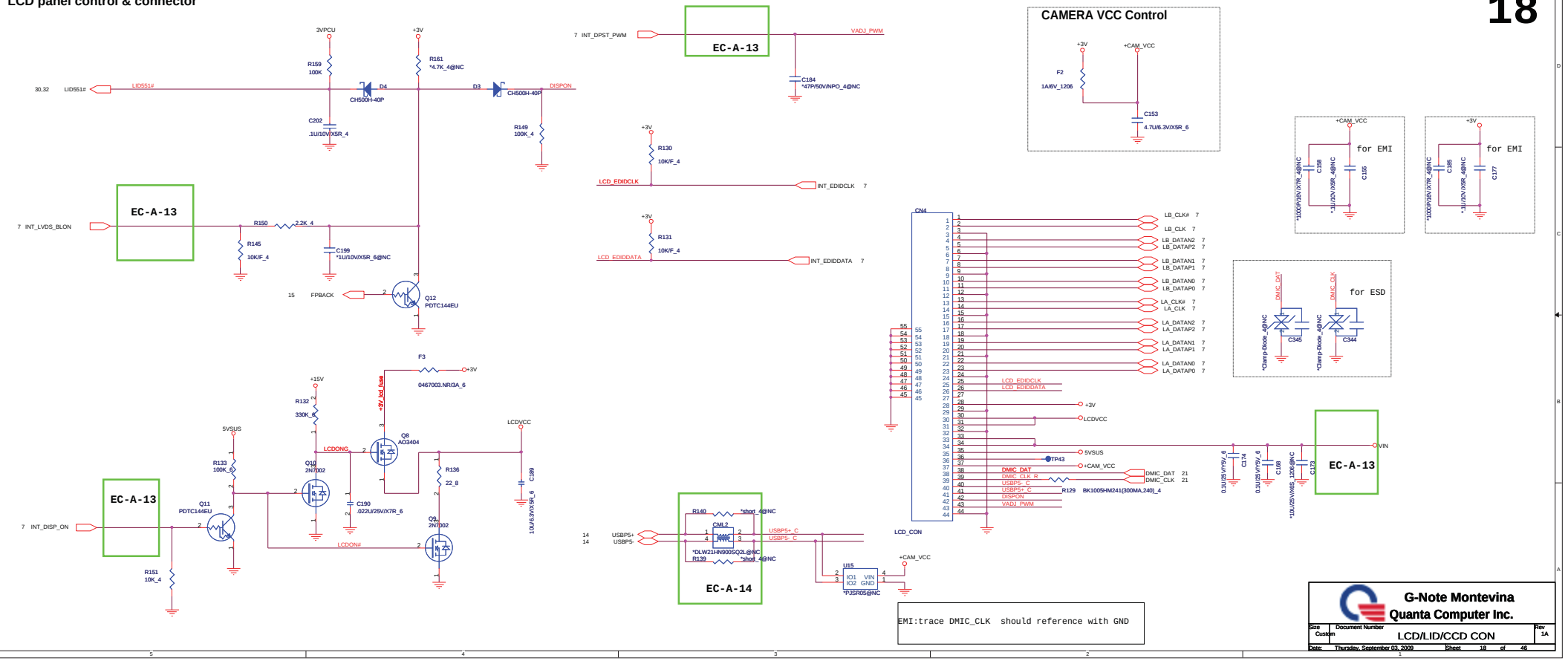




| SEL | FUNCTION(COM) |
|---|---|
| LOW | IN_x0 |
| HIGH | IN_x1 |

**G-Note Montevina**
**Quanta Computer Inc.**

| Size | Document Number | Rev |
|---|---|---|
| Custom | CRT CON | 1A |
| Date: Thursday, September 03, 2009 | Sheet 17 of 46 | |

## LCD panel control & connector



# Display Port



**Reserve For EMI**

7 DP_LANE3_N
7 DP_LANE3_P
DP_LANE3_N
DP_LANE3_P
DP_LANE3_N_R
DP_LANE3_P_R

7 DP_LANE2_N
7 DP_LANE2_P
DP_LANE2_N
DP_LANE2_P
DP_LANE2_N_R
DP_LANE2_P_R

7 DP_LANE1_N
7 DP_LANE1_P
DP_LANE1_N
DP_LANE1_P
DP_LANE1_N_R
DP_LANE1_P_R

7 DP_LANE0_N
7 DP_LANE0_P
DP_LANE0_N
DP_LANE0_P
DP_LANE0_N_R
DP_LANE0_P_R

+3V_DP
7 DP_HPD
DP_HPD
EXT_AUX_SINK_N
EXT_AUX_SINK_P
R174 1M/F_6
R184 1M/F_6 AUX_EN#
CN20
PWR
PWR_RET
HPD
AUXN
GND
AUXP
GND
MODE
LANE_3N
GND
LANE_3P
LANE_2N
GND
LANE_2P
LANE_1N
GND
LANE_1P
LANE_0N
GND
LANE_0P
GND
GND
GND
GND
3V11211-NBVBA-7H
DIP TYPE
IO_GND

**EMI**

R138 0.1U/10V_4
R73 0.1U/10V_4
IO_GND

*CM1225@NC
U19
U23
U16

**Reserve For ESD**
**Close connector**

+3V
R240 100K_4
R230 100K_4
AUX_SINK_P_R
AUX_SINK_N_R
EXT_AUX_SINK_P
EXT_AUX_SINK_N

+5V
+3V
C255 0.1U/10V_4
R154 2.2K_4
R155 2.2K_4
U20
C_A
C_B
C_C
C_D
SE
EN#
VCC
A0
A1
B0
B1
C0
C1
D0
D1
GND
AUX_EN#
SN74CBT3257CPWR
C230 0.1U/25V/Y5V_6
AUX_SINK_P 7
SDVO_CTRLCLK 7
AUX_SINK_N 7
SDVO_CTRLDATA 7

**EC-A-10**

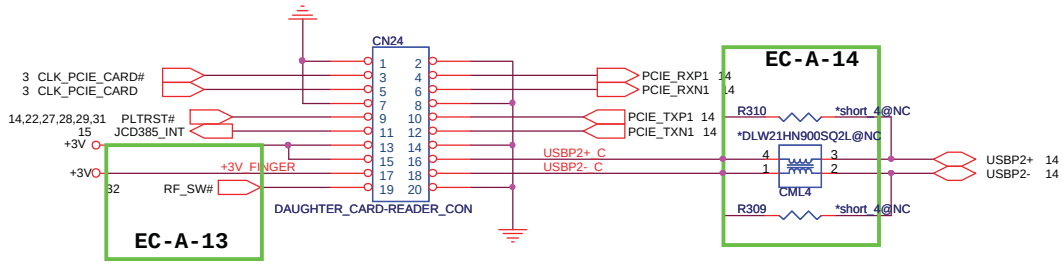
+3V
F4
FUSE1A6V_POLY
Q13
2N7002K-T1-E3
+3V_DP
C236 0.1U/25V/Y5V_6
C235 10U/6.3V/X5R_6
32,33,34,36,37 MAINON

Default : Low : Display port
High : Dongle attache(covert to SVI)

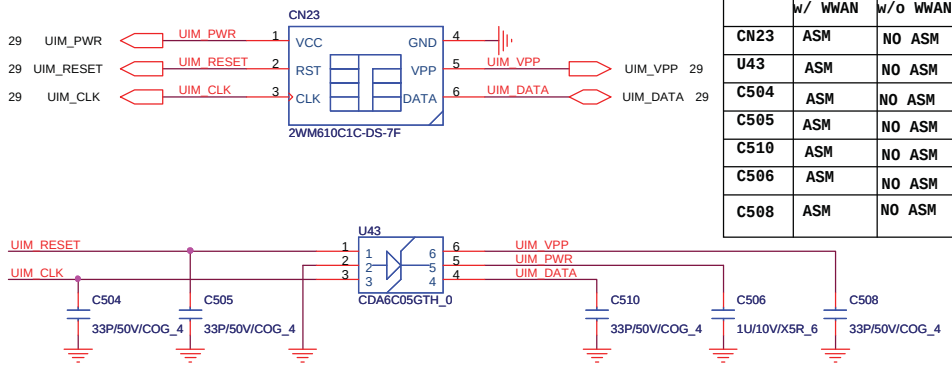
**G-Note Montevina**
**Quanta Computer Inc.**

| Size | Document Number | Rev |
|---|---|---|
| Custom | Display Port | 1A |
| Date: Thursday, September 03, 2009 | Sheet 19 of 46 | |

# WIRE TO BOARD CONN CARD READER & FINGERPRINT

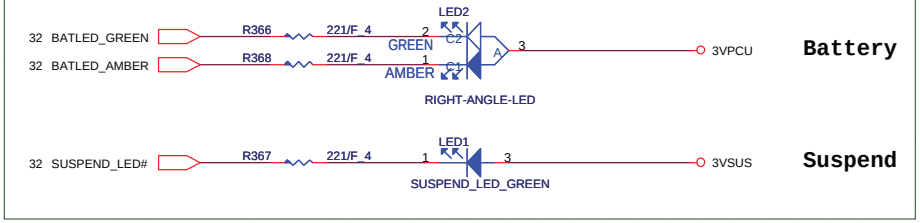


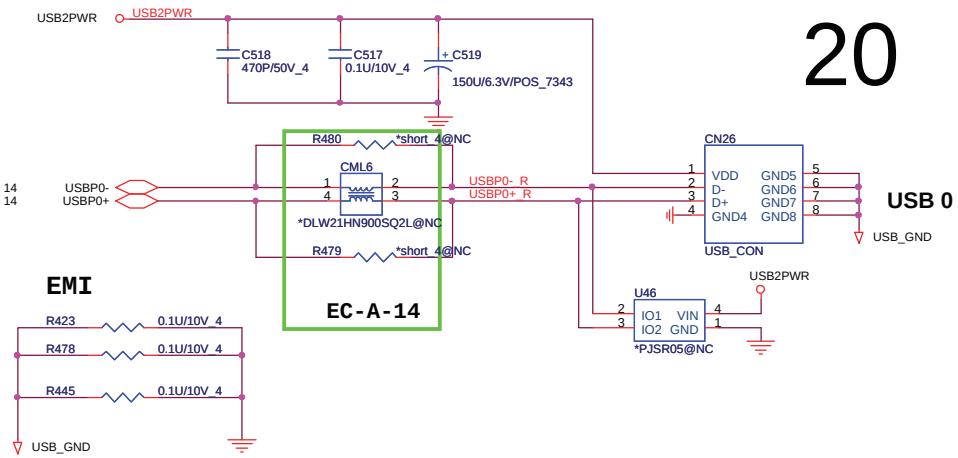

## SIM Card CONN

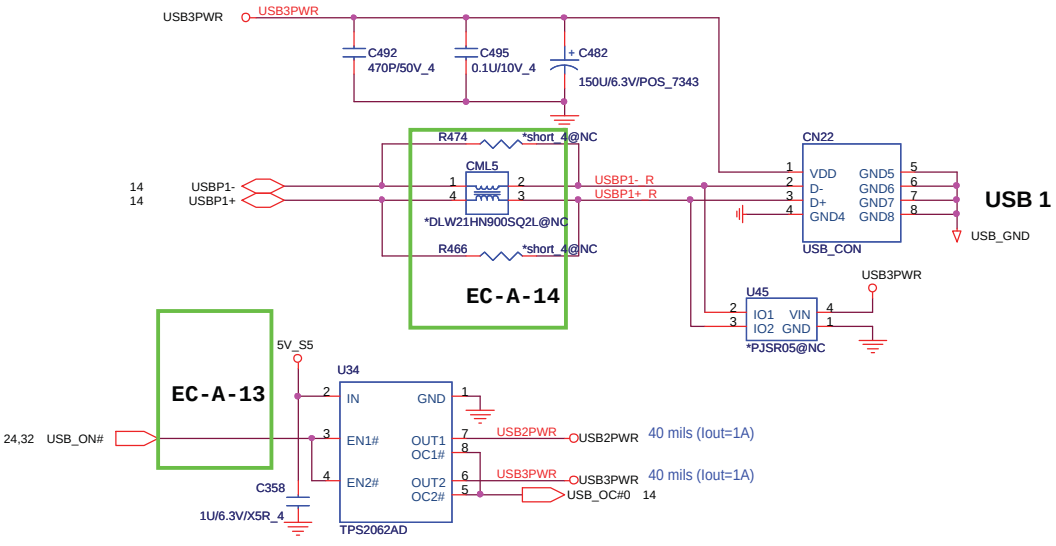



| | GM45 | GL40 |
|---|---|---|
| | w/ WWAN | w/o WWAN |
| CN23 | ASM | NO ASM |
| U43 | ASM | NO ASM |
| C504 | ASM | NO ASM |
| C505 | ASM | NO ASM |
| C510 | ASM | NO ASM |
| C506 | ASM | NO ASM |
| C508 | ASM | NO ASM |

## FRONT LEDs

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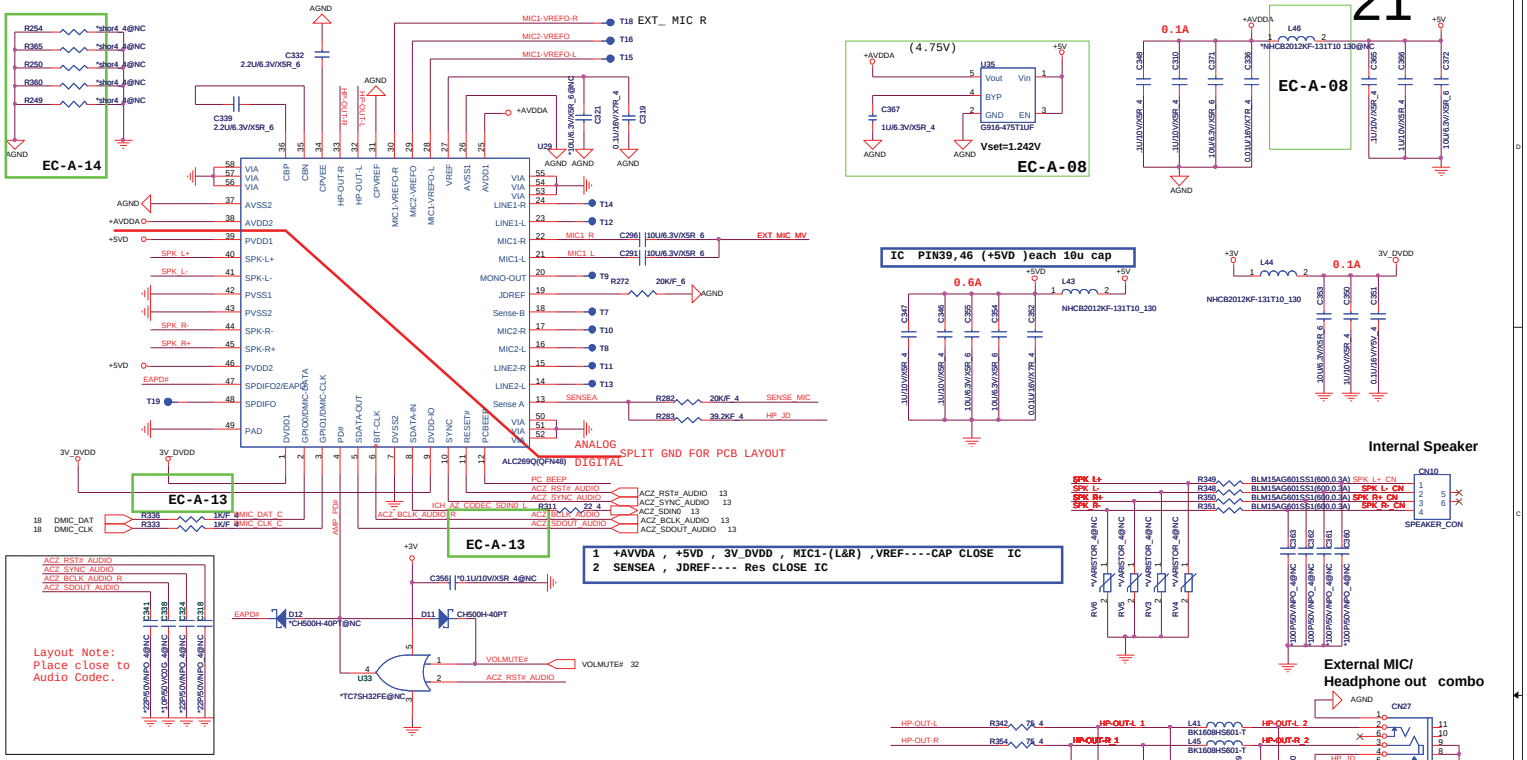
PROJECT :G NOTE
Quanta Computer Inc.

| Size | Document Number | Rev |
|---|---|---|
| Custom | USB X2/SIM_CARD/LEDs/RF | 1A |
| Date: Thursday, September 03, 2009 | Sheet 20 of 46 | |

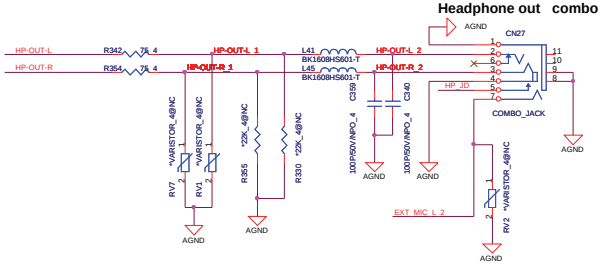
## HDAudio Codec



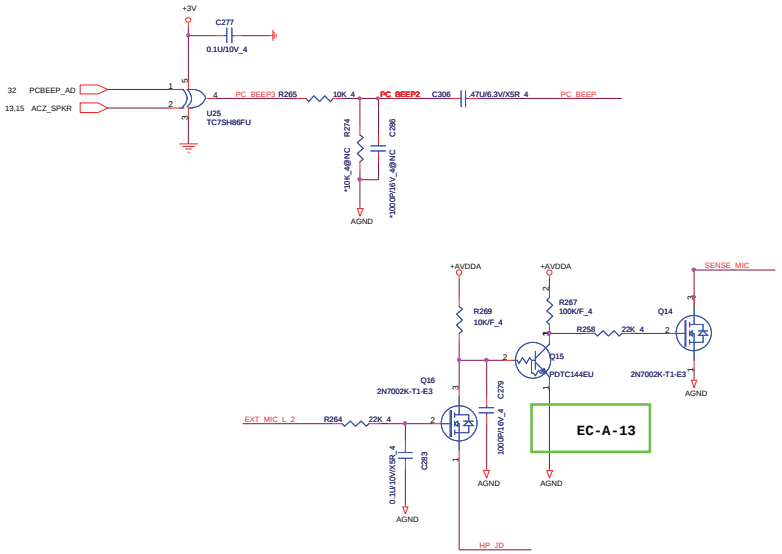

## Internal Speaker



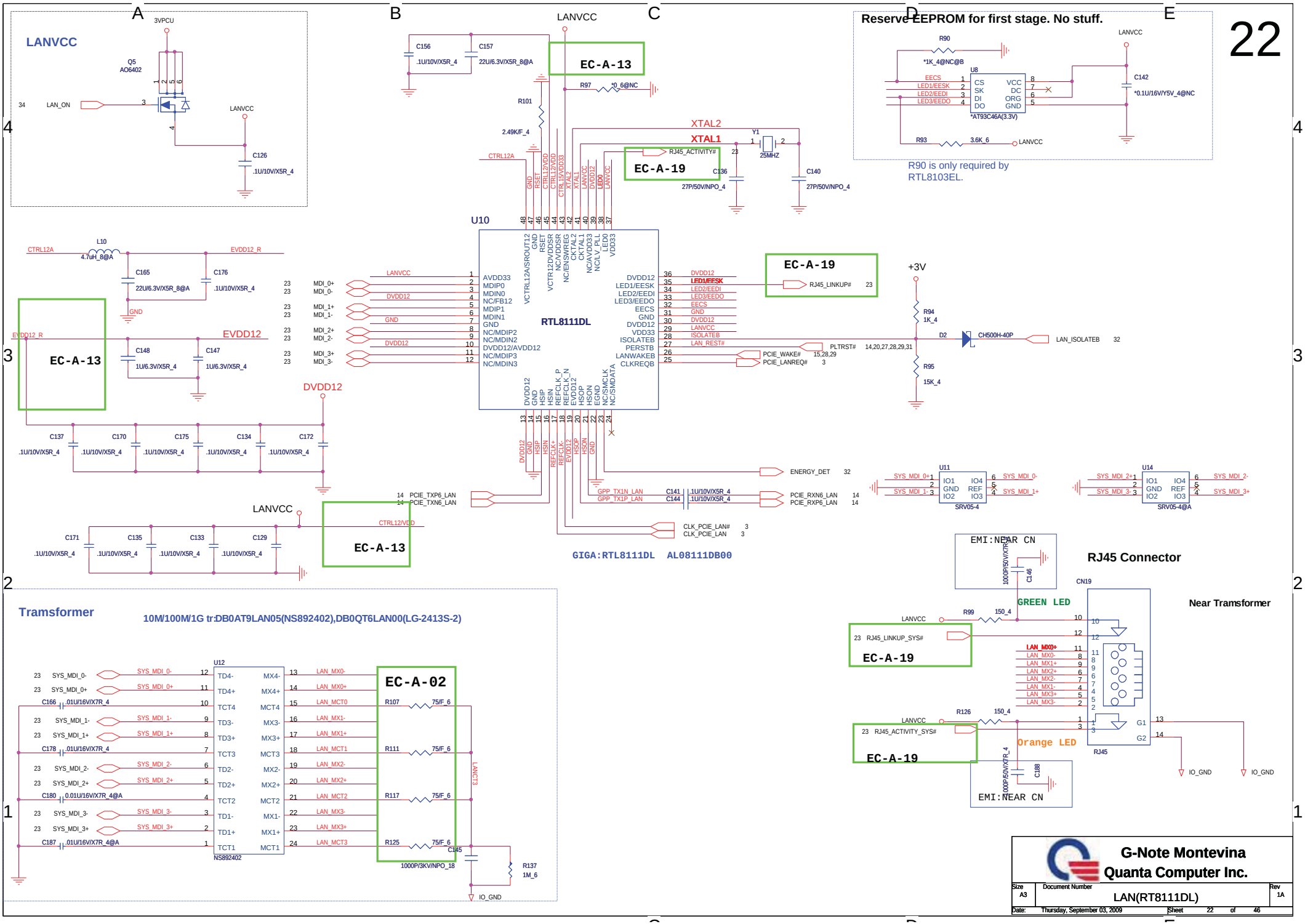

## External MIC/ Headphone out combo




## PC BEEP Control




| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: Custom | Document Number: AUDIO CODEC(ALC269Q) | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 21 of 46 | |


LANVCC
3VPCU
Q5
AO6402
LAN_ON
C126
.1U/10V/X5R_4
C156
C157
22U/6.3V/X5R_8@A
EC-A-13
R97
*0_6@NC
R101
2.49K/F_4
XTAL2
XTAL1
Y1
25MHZ
EC-A-19
RJ45_ACTIVITY#
C136
27P/50V/NPO_4
C140
U10
RTL8111DL
L10
4.7uH_8@A
C165
C176
C148
C147
1U/6.3V/X5R_4
EVDD12
DVDD12
C137
C170
C175
C134
C172
C171
C135
C133
C129
RJ45_LINKUP#
+3V
R94
1K_4
R95
15K_4
D2
CH500H-40P
LAN_ISOLATEB
PCIE_WAKE#
PCIE_LANREQ#
PLTRST#
ENERGY_DET
GPP_TX1N_LAN
GPP_TX1P_LAN
PCIE_RXN6_LAN
PCIE_RXP6_LAN
CLK_PCIE_LAN#
CLK_PCIE_LAN
U11
U14
SRV05-4
SRV05-4@A
GIGA:RTL8111DL AL08111DB00
Reserve EEPROM for first stage. No stuff.
R90
*1K_4@NC@B
U8
*AT93C46A(3.3V)
R93
3.6K_6
C142
*0.1U/16V/Y5V_4@NC
R90 is only required by RTL8103EL.
Tramsformer
10M/100M/1G tr:DB0AT9LAN05(NS892402),DB0QT6LAN00(LG-2413S-2)
U12
NS892402
EC-A-02
R107
R111
R117
R125
75/F_6
1000P/3KV/NPO_18
R137
1M_6
IO_GND
EMI:NEAR CN
C146
RJ45 Connector
Near Tramsformer
CN19
GREEN LED
Orange LED
R99
R126
150_4
RJ45_LINKUP_SYS#
RJ45_ACTIVITY_SYS#
RJ45
C188
G-Note Montevina
Quanta Computer Inc.
Size A3
Document Number
LAN(RT8111DL)
Rev 1A
Date: Thursday, September 03, 2009
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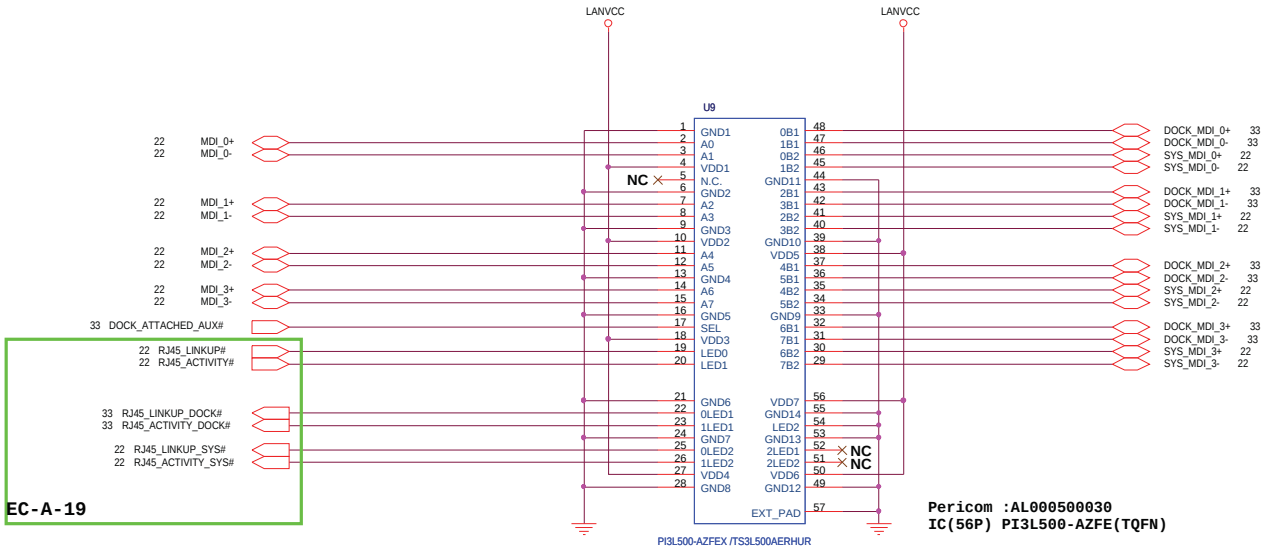
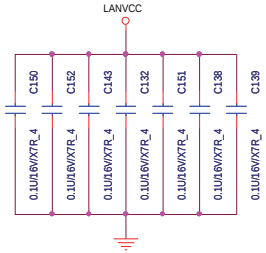



Pericom :AL000500030
IC(56P) PI3L500-AZFE(TQFN)

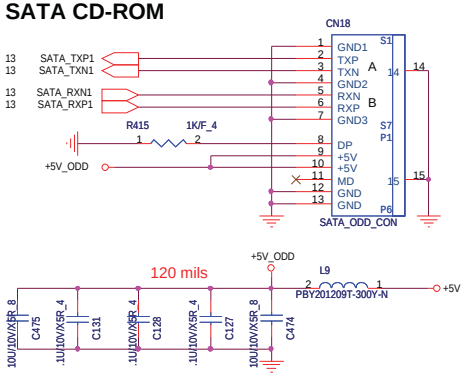
TI:AL03L500019
IC OTHER(56P) TS3L500AERHUR(TQFN)



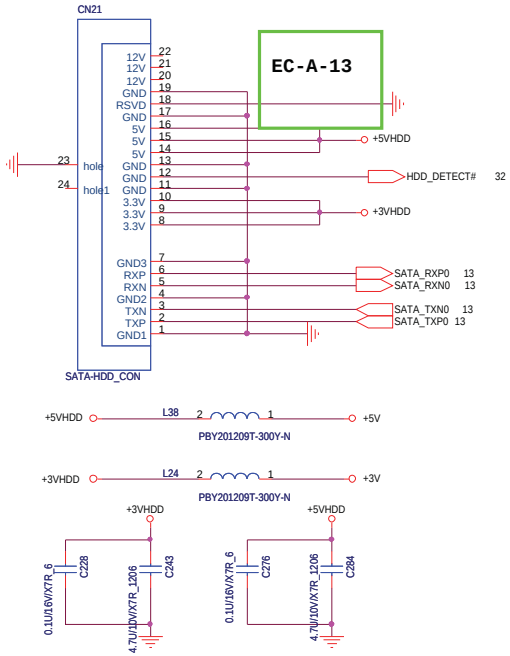

PROJECT :G NOTE
Quanta Computer Inc.

| Size | Document Number | Rev |
|---|---|---|
| Custom | LAN SW | 1A |
| Date: Thursday, September 03, 2009 | Sheet 23 of 46 | |

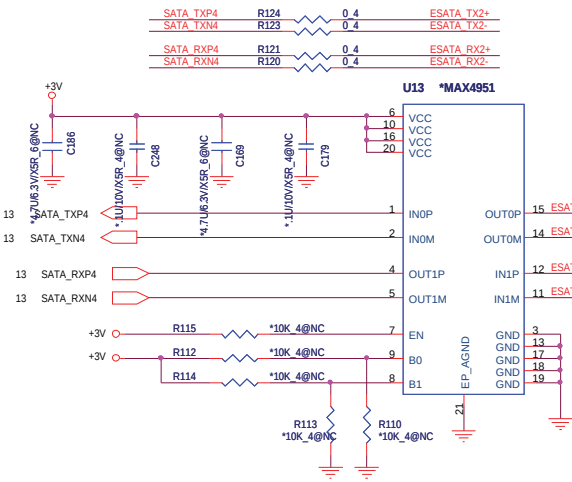
## SATA CD-ROM




## SATA-HDD



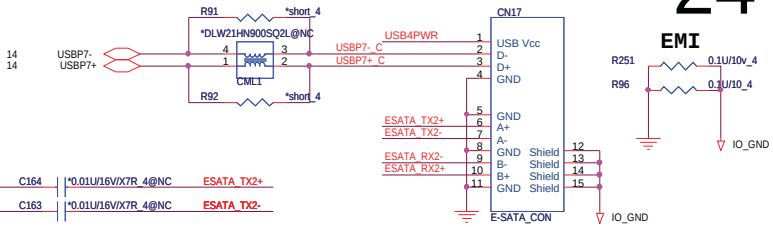

## E-SATA RE-DRIVER




### E-SATA RE-DRIVER table

| EN | BC | B1 | FUNCTION |
|---|---|---|---|
| 0 | x | x | Standby |
| 1 | 0 | 0 | Standard SATA Output |
| 1 | 1 | 0 | Ch 0 Boost Output |
| 1 | 0 | 1 | Ch 1 Boost Output |
| 1 | 1 | 1 | Ch 0,1 Boost Output |

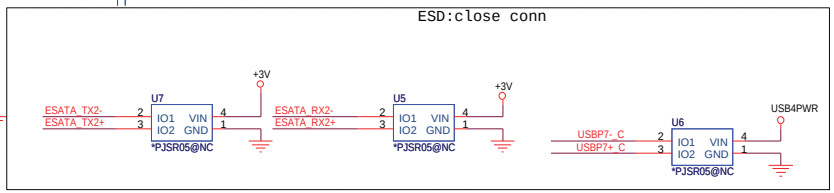
## eSATA PORT

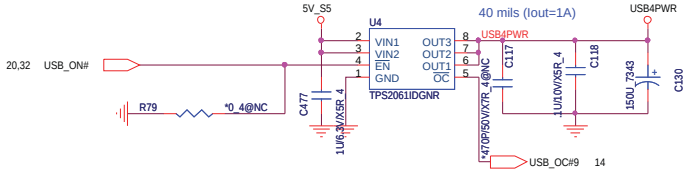



## EMI

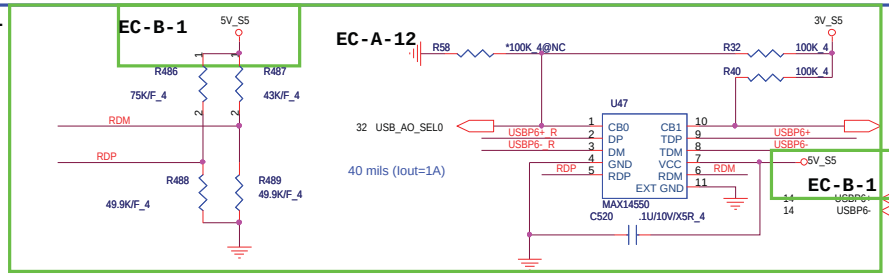



ESD:close conn

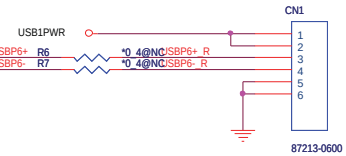


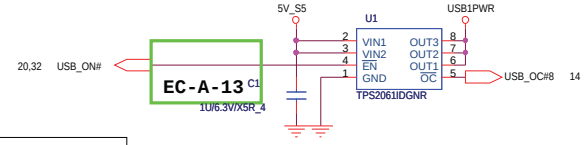




## USB x1




## REAR_USB/B connector




### AUO3: Always on USB Ver.3 table

| | AUO3 Support | AUO3 No Support |
|---|---|---|
| U47 | ASM | No ASM |
| R32,R40 | ASM | No ASM |
| R6,R7 | No ASM | ASM |
| R58 | No ASM | ASM |

| | INT | EXT (default) |
|---|---|---|
| R486 | No ASM | 75k |
| R488 | 0 | 49.9k |
| R487 | No ASM | 43k |
| R489 | No ASM | 49.9k |

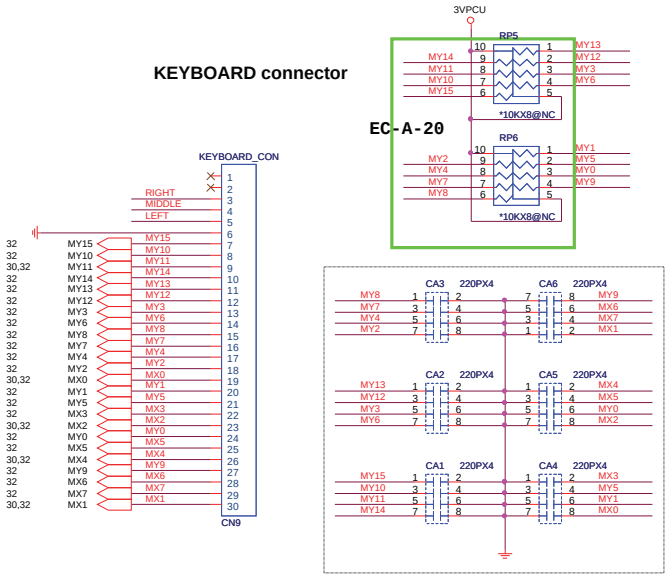
| # | 0 | 1 | function |
|---|---|---|---|
| | 0 | 0 | auto detection |
| | 0 | 1 | Force Black berry mode |
| | 1 | 0 | Force Ext. circuit mode |
| | 1 | 1 | Path through mode (Default) |

**G-Note Montevina**
**Quanta Computer Inc.**

| Size | Document Number | Rev |
|---|---|---|
| Custom | SATA HDD/ ODD/ eSATA/USB | 1A |
| Date: Thursday, September 03, 2009 | Sheet 24 of 46 | |

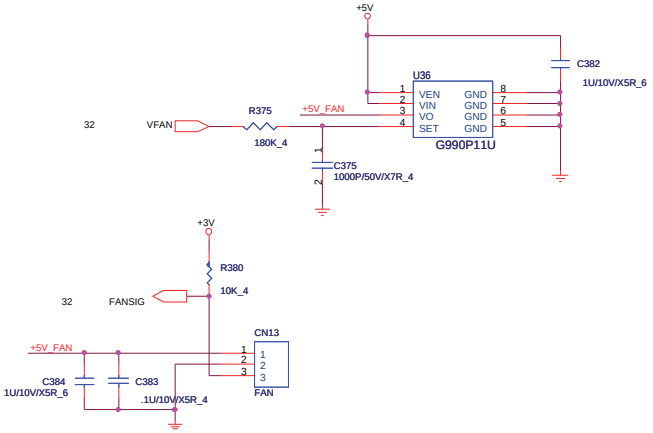
## FAN, K/B, T/P & Track Point

### KEYBOARD connector

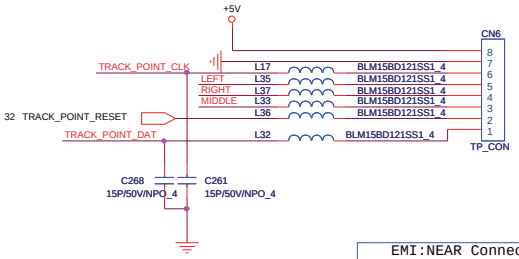



For EMI request

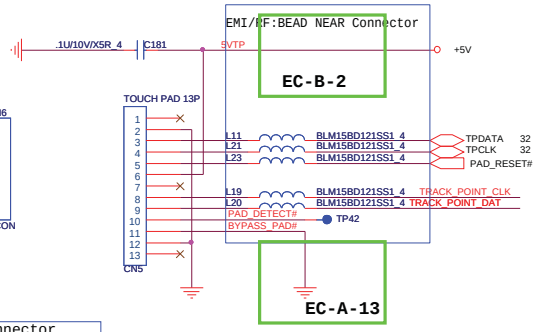
## FAN Controller

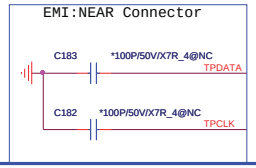



## TRACK POINT



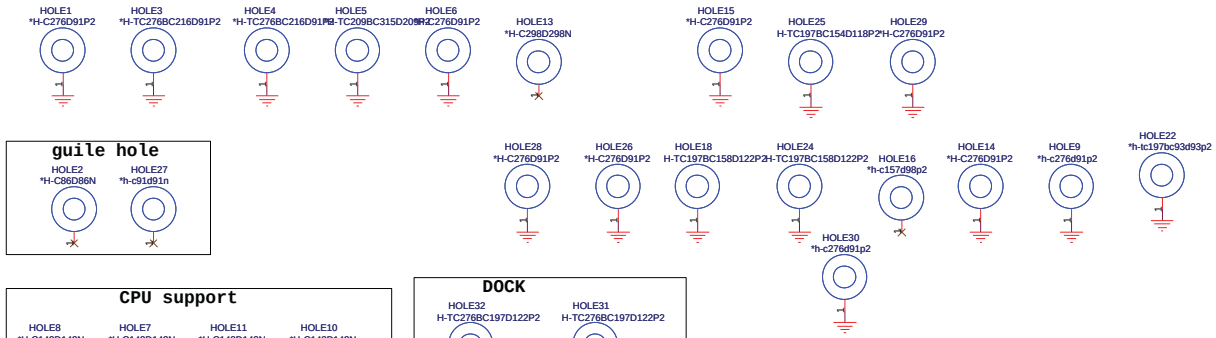

## TOUCH PAD



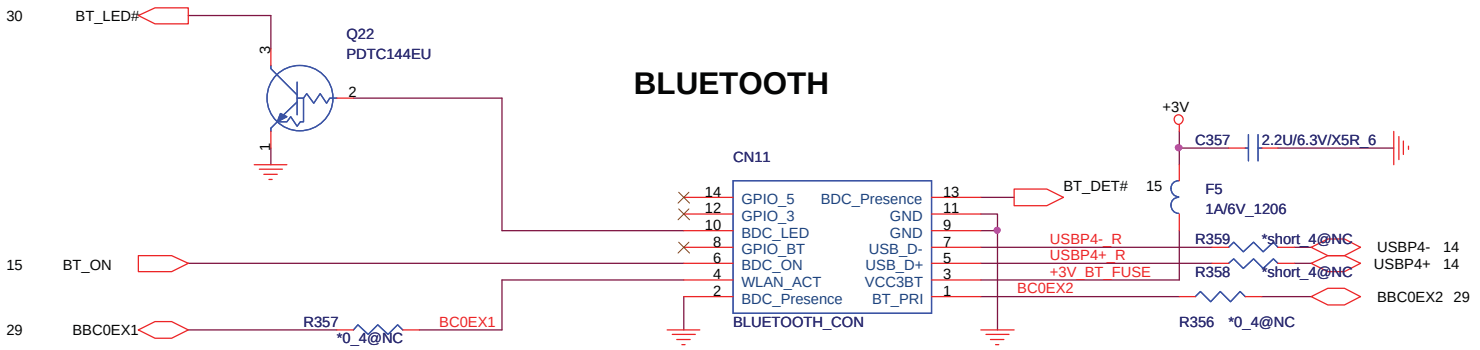





## SCREW HOLE/GNDPAD



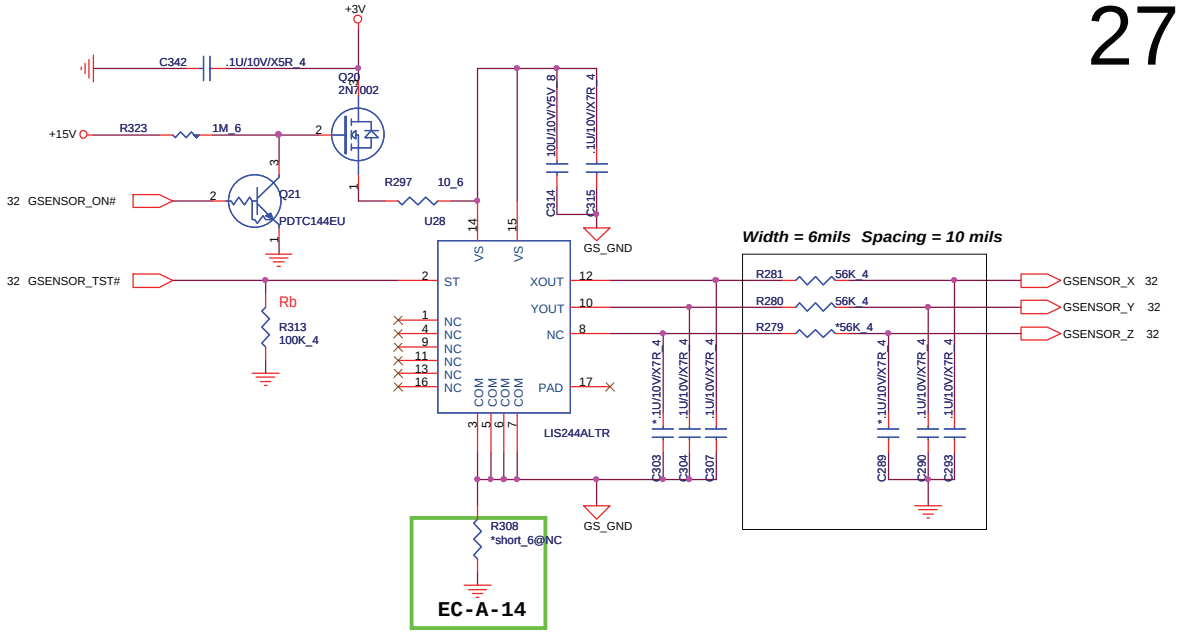

| | |
|---|---|
| Company | G-Note Montevina<br>Quanta Computer Inc. |
| Size / Custom | Document Number: KB/TP/FAN/SCREW HOLE |
| Rev | 1A |
| Date | Thursday, September 03, 2009 |
| Sheet | 25 of 46 |



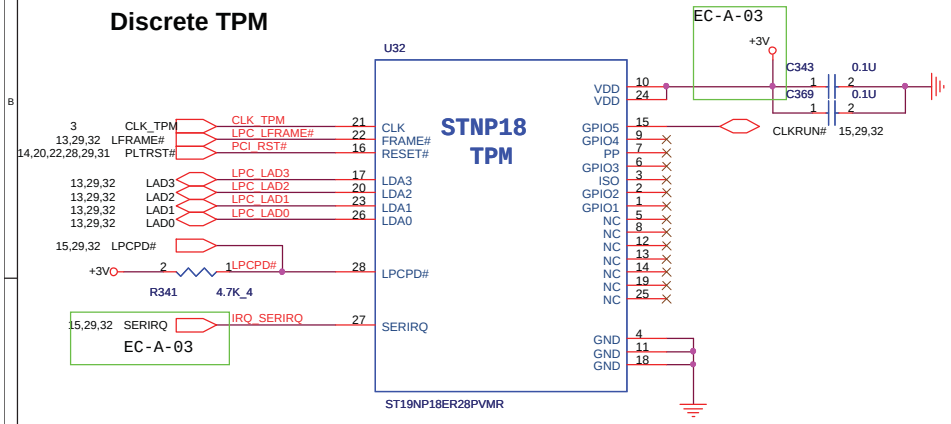

| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: Custom | Document Number: Buletooth Conn | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 26 of 46 | |

## G-SENSOR (2-Axial)

27




## Discrete TPM

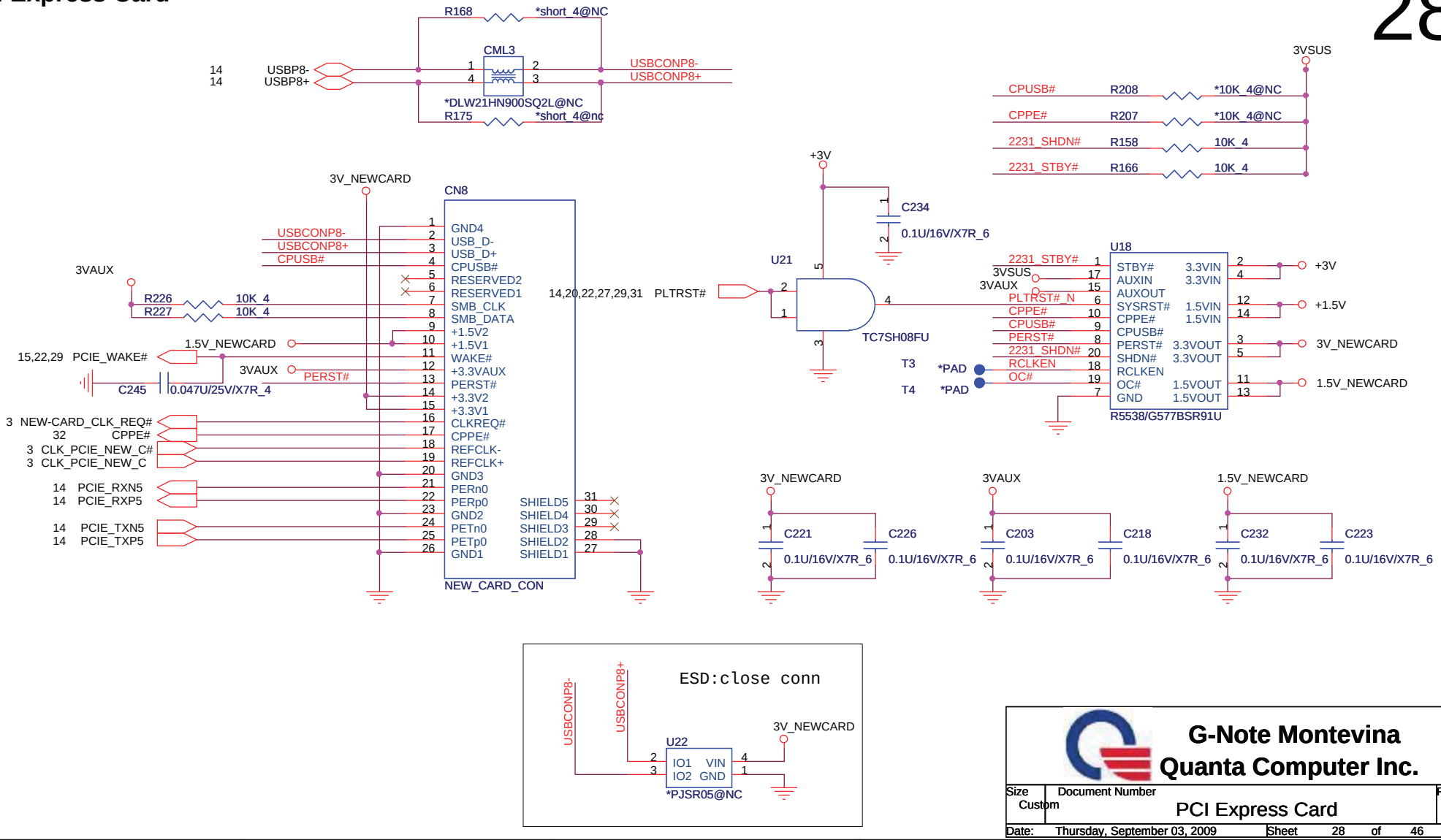



supplier P/N:ST19NP18ER28PVMR
Quanta P/N:AL19NP18K13
F/P:tssop28-6_4-65-1_2h

| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: Custom | Document Number: G-SENSOR/Discrete TPM | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 27 of 46 | |

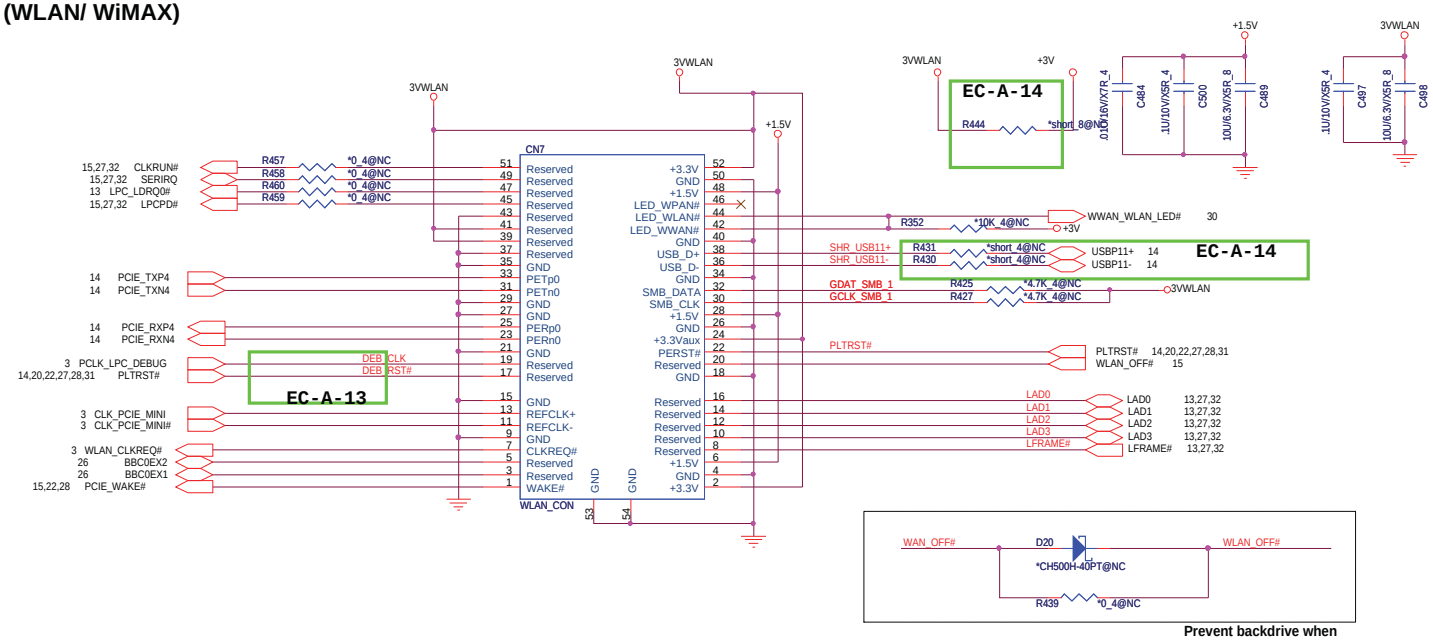
# PCI Express Card

28



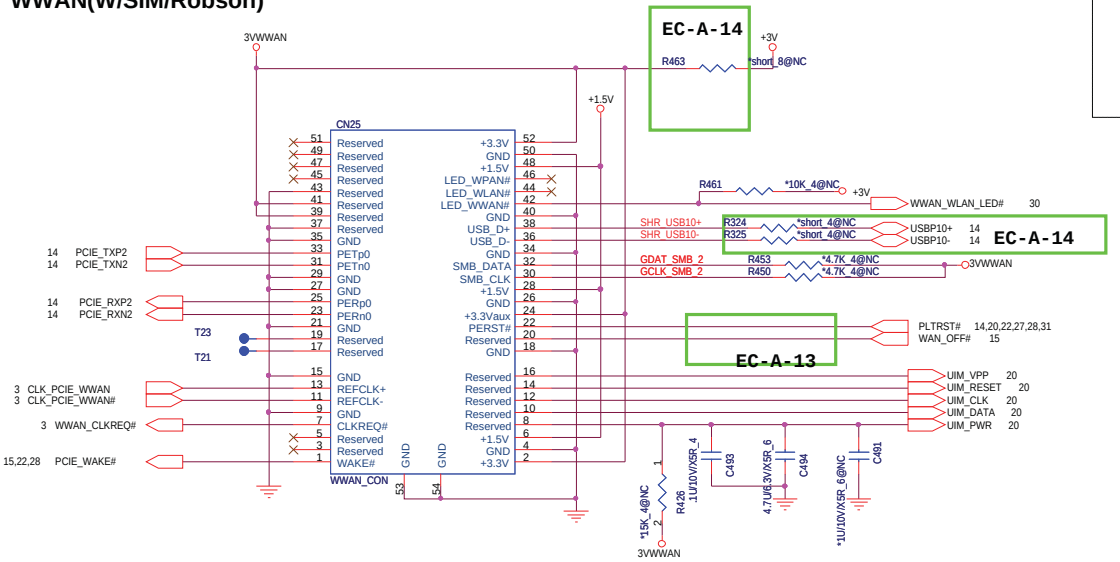

| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: Custom | Document Number: PCI Express Card | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 28 of 46 | |

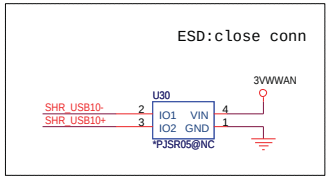
## Mini PCI-E Card (F2)
## (WLAN/ WiMAX)

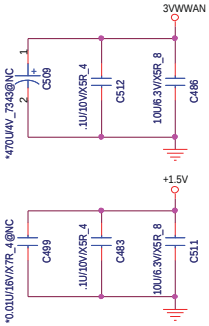



Prevent backdrive when
WoW is enabled.

## Mini PCI-E Card (F1)
## WWAN(W/SIM/Robson)




| | GM45 | GL40 |
|---|---|---|
| | w/ WWAN | w/o WWAN |
| CN25 | ASM | NO ASM |
| C493 | ASM | NO ASM |
| C494 | ASM | NO ASM |
| C483 | ASM | NO ASM |
| C512 | ASM | NO ASM |
| C486 | ASM | NO ASM |
| C511 | ASM | NO ASM |

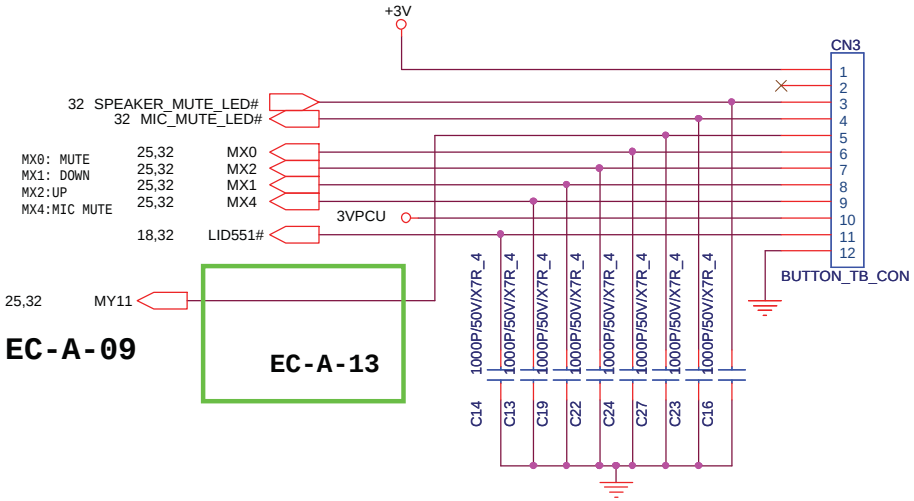
G-Note Montevina
Quanta Computer Inc.

| Size | Document Number | Rev |
|---|---|---|
| Custom | WLAN & WWAN Slot | 1A |
| Date: Thursday, September 03, 2009 | Sheet 29 of 46 | |

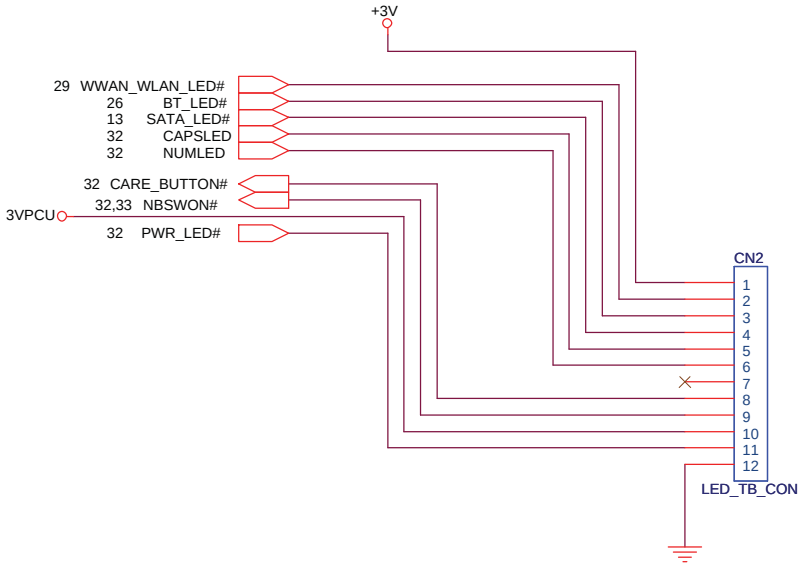
# Daughter Boards for LEDs & Ports



## FFC TO KBD LEFT SIDE CONNECTOR




## FFC TO LED RIGHT SIDE CONNECTOR

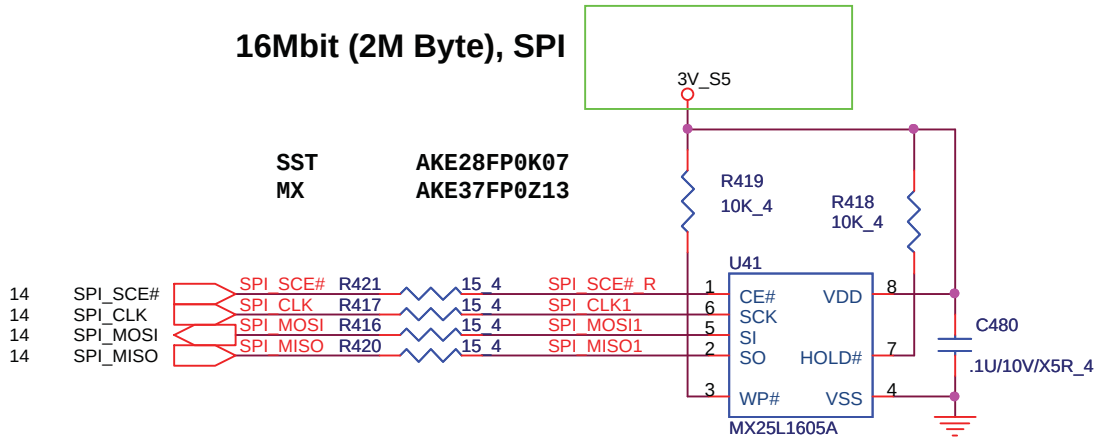



**G-Note Montevina**
**Quanta Computer Inc.**

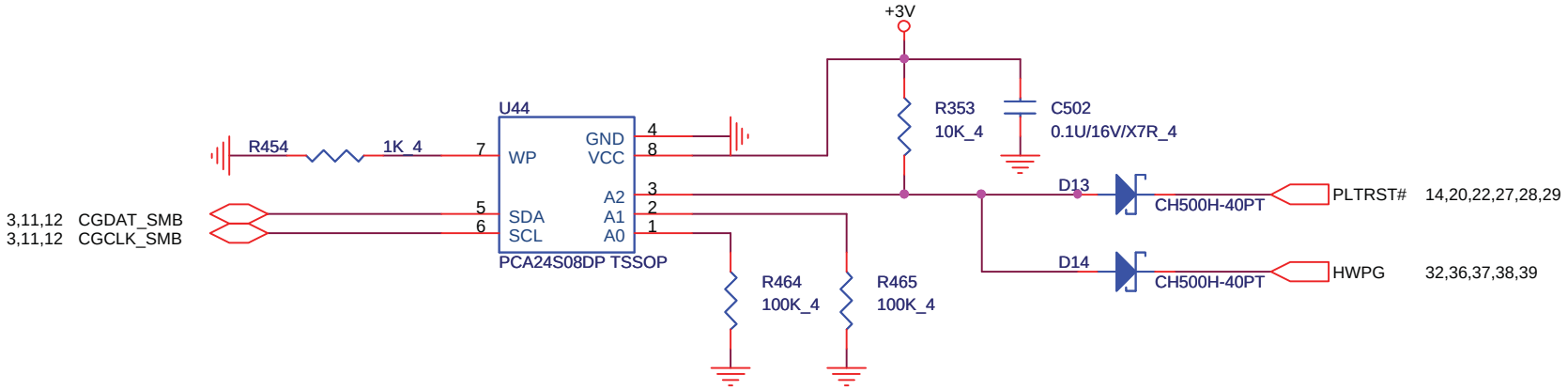
| Size | Document Number | Rev |
|---|---|---|
| Custom | Daughter Boards | 1A |
| Date: Thursday, September 03, 2009 | Sheet 30 of 46 | |

# SPI EEPROM

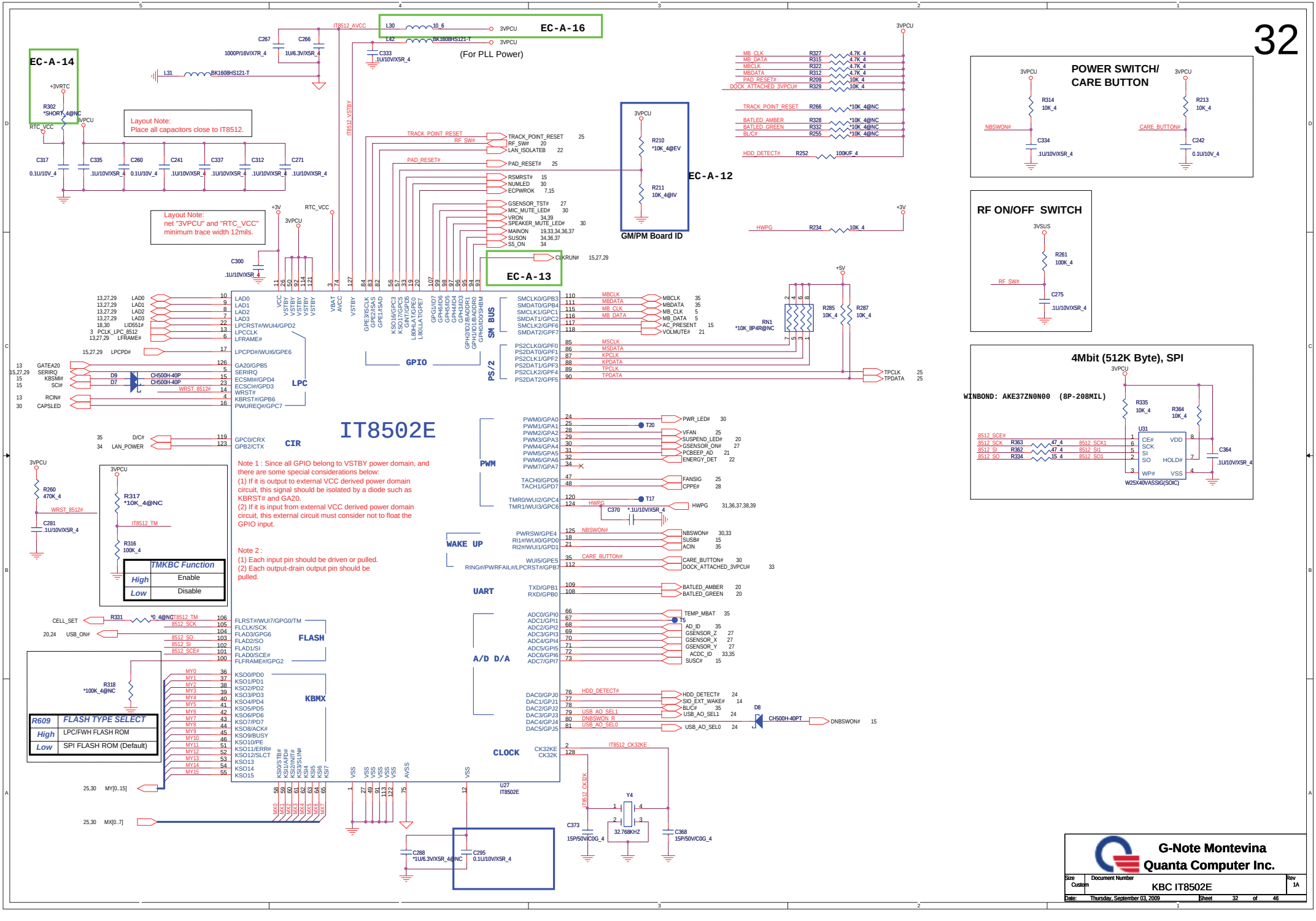
## 16Mbit (2M Byte), SPI




# RFID EEPROM

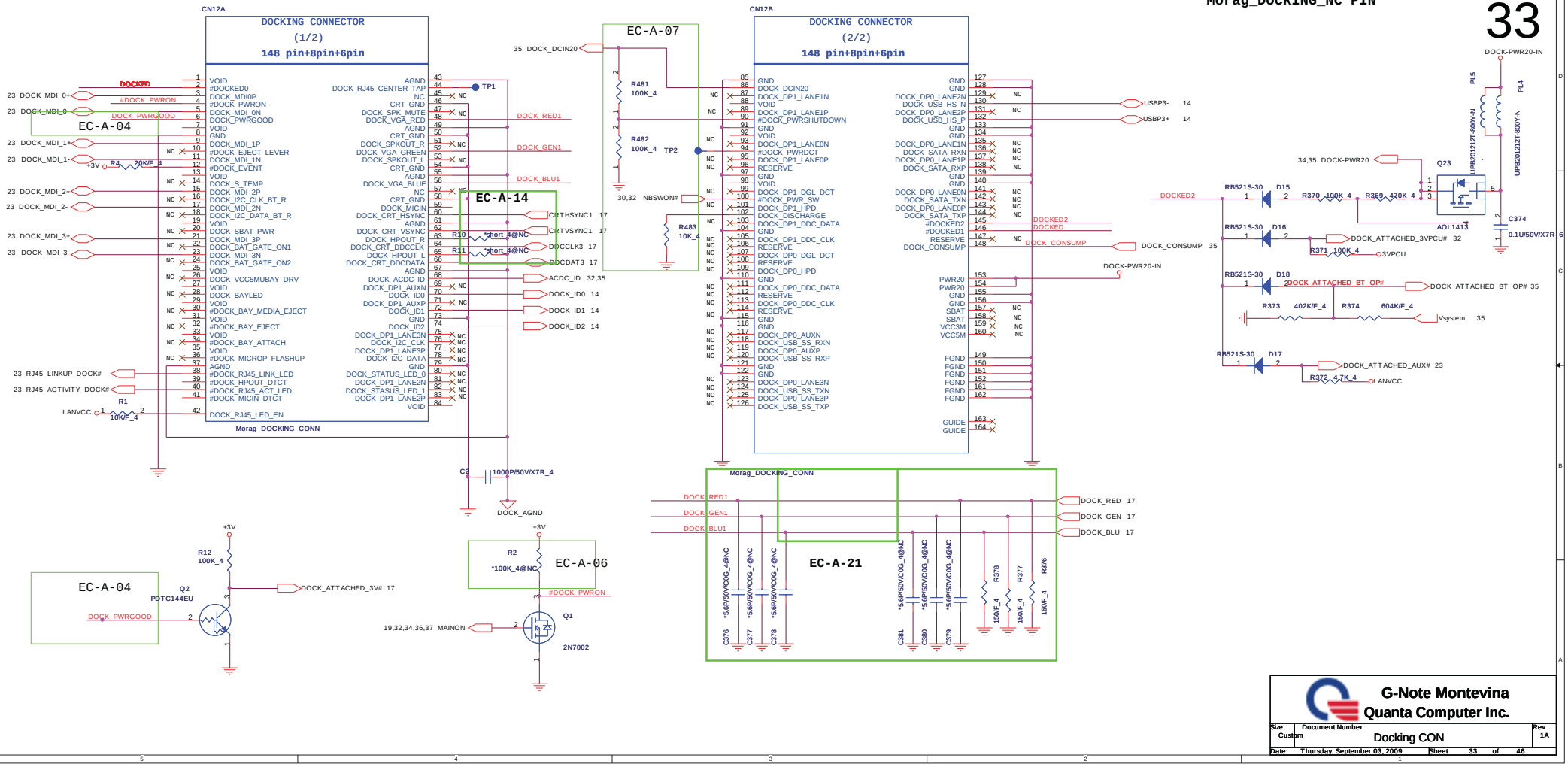



| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: A | Document Number: RFID&ITPM EEPROM | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 31 of 46 | |


EC-A-14
EC-A-16
(For PLL Power)
EC-A-12
GM/PM Board ID
EC-A-13
Layout Note:
Place all capacitors close to IT8512.
Layout Note:
net "3VPCU" and "RTC_VCC"
minimum trace width 12mils.
IT8502E
GPIO
LPC
SM BUS
PS/2
CIR
PWM
WAKE UP
UART
A/D D/A
FLASH
KBMX
CLOCK
Note 1 : Since all GPIO belong to VSTBY power domain, and there are some special considerations below:
(1) If it is output to external VCC derived power domain circuit, this signal should be isolated by a diode such as KBRST# and GA20.
(2) If it is input from external VCC derived power domain circuit, this external circuit must consider not to float the GPIO input.
Note 2 :
(1) Each input pin should be driven or pulled.
(2) Each output-drain output pin should be pulled.
TMKBC Function
High Enable
Low Disable
R609 FLASH TYPE SELECT
High LPC/FWH FLASH ROM
Low SPI FLASH ROM (Default)
POWER SWITCH/ CARE BUTTON
RF ON/OFF SWITCH
4Mbit (512K Byte), SPI
WINBOND: AKE37ZN0N00 (8P-208MIL)
W25X40VASSIG(SOIC)
G-Note Montevina
Quanta Computer Inc.
KBC IT8502E
Size Custom
Document Number
Rev 1A
Date: Thursday, September 03, 2009
Sheet 32 of 46

# Morag_DOCKING_NC PIN

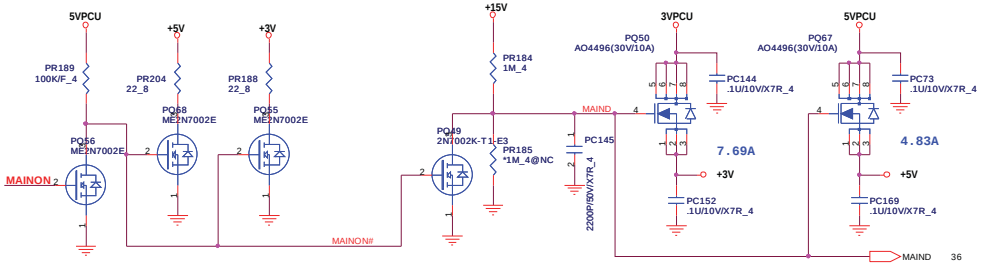
33



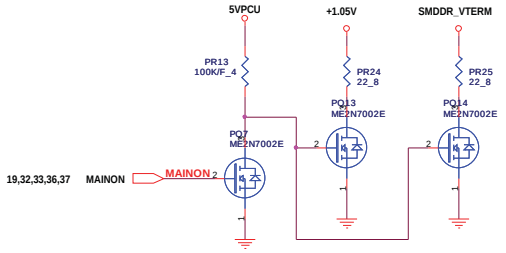

| | | | |
|---|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | | |
| Size: Custom | Document Number: Docking CON | | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 33 of 46 | | |

# DISCHARGE

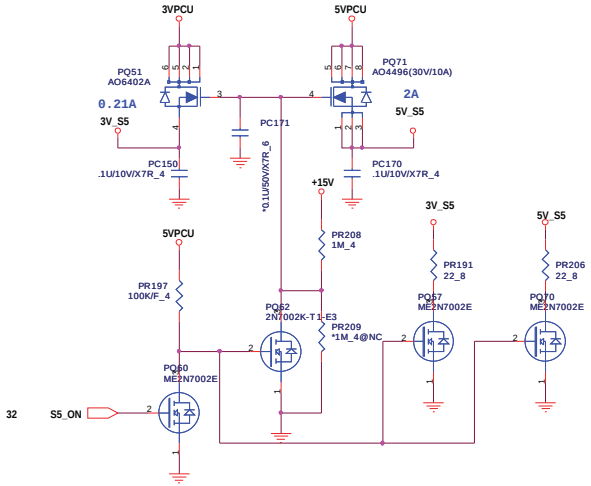
## +3V, +5V



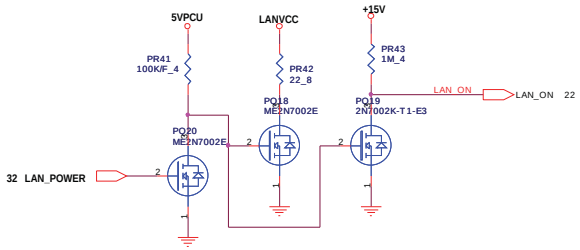

## +1.05V, SMDDR_VTERM



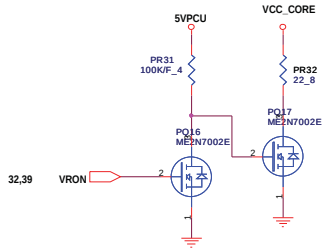

## 3V_S5, 5V_S5

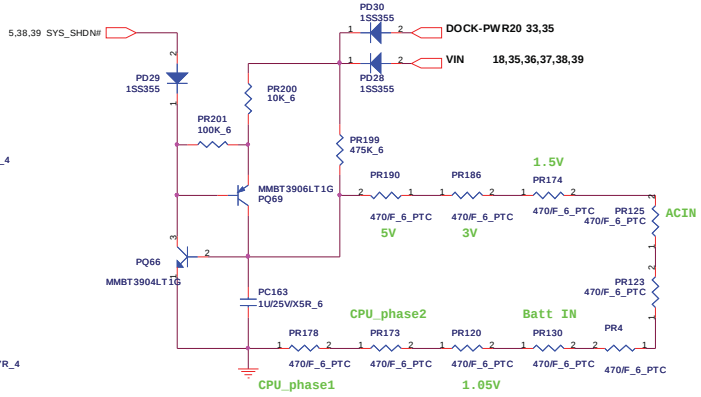



## LANVCC

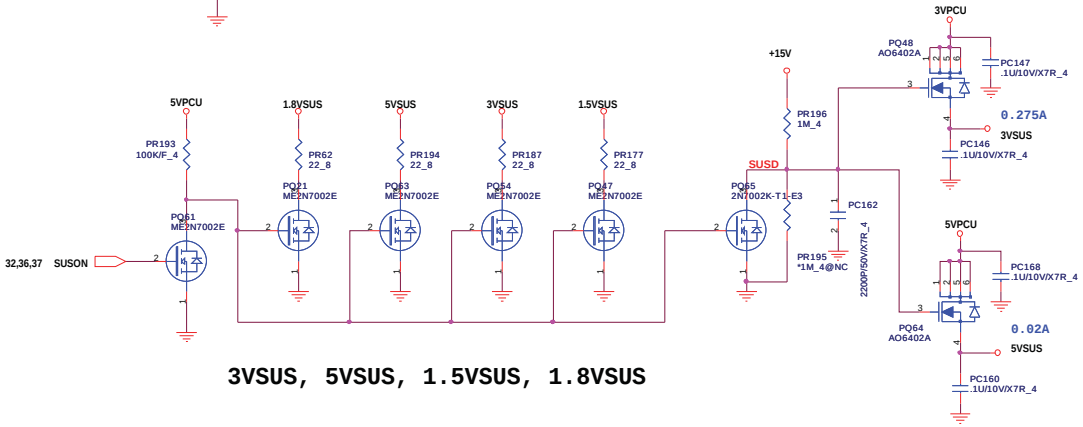



## VCC_CORE



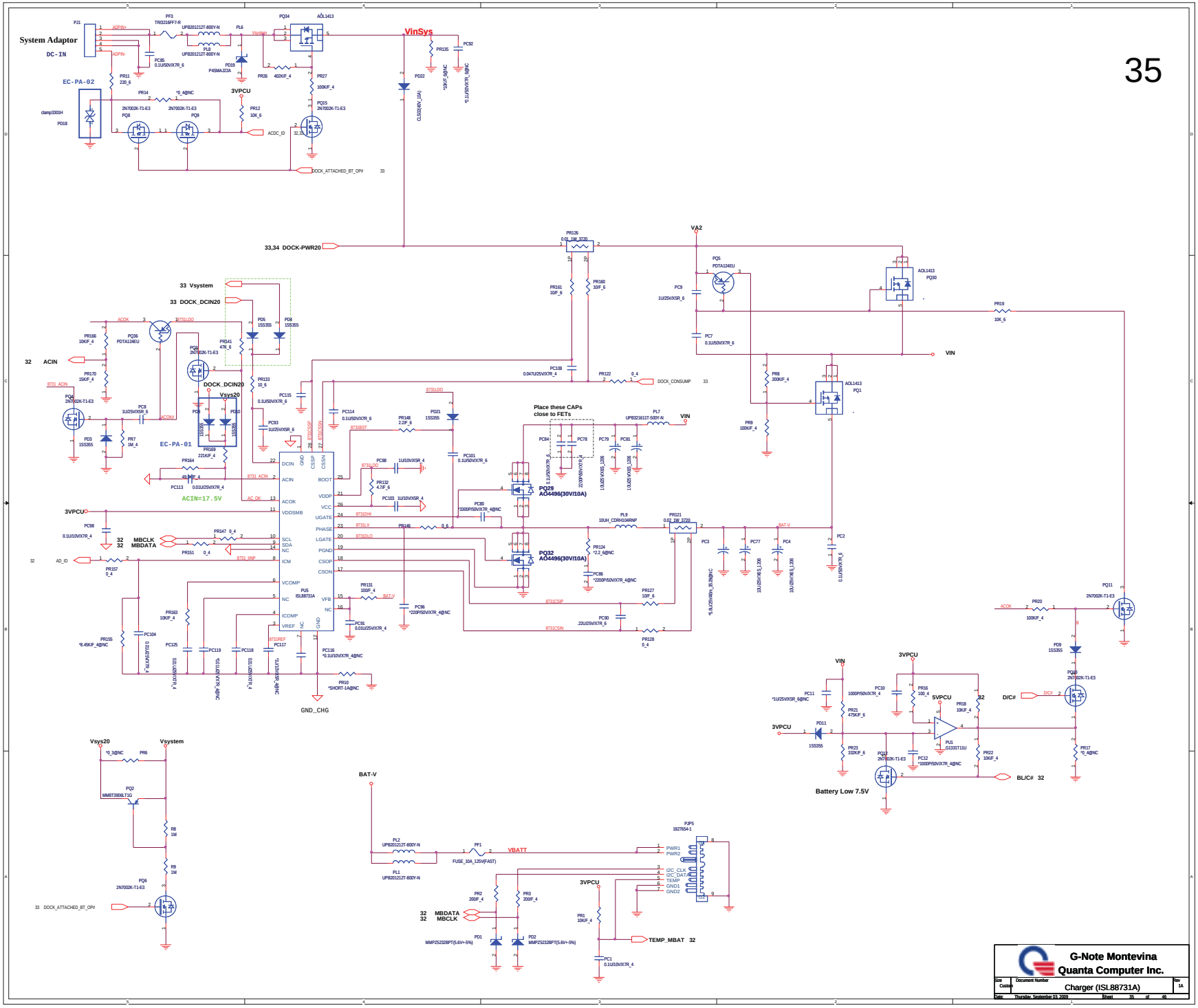



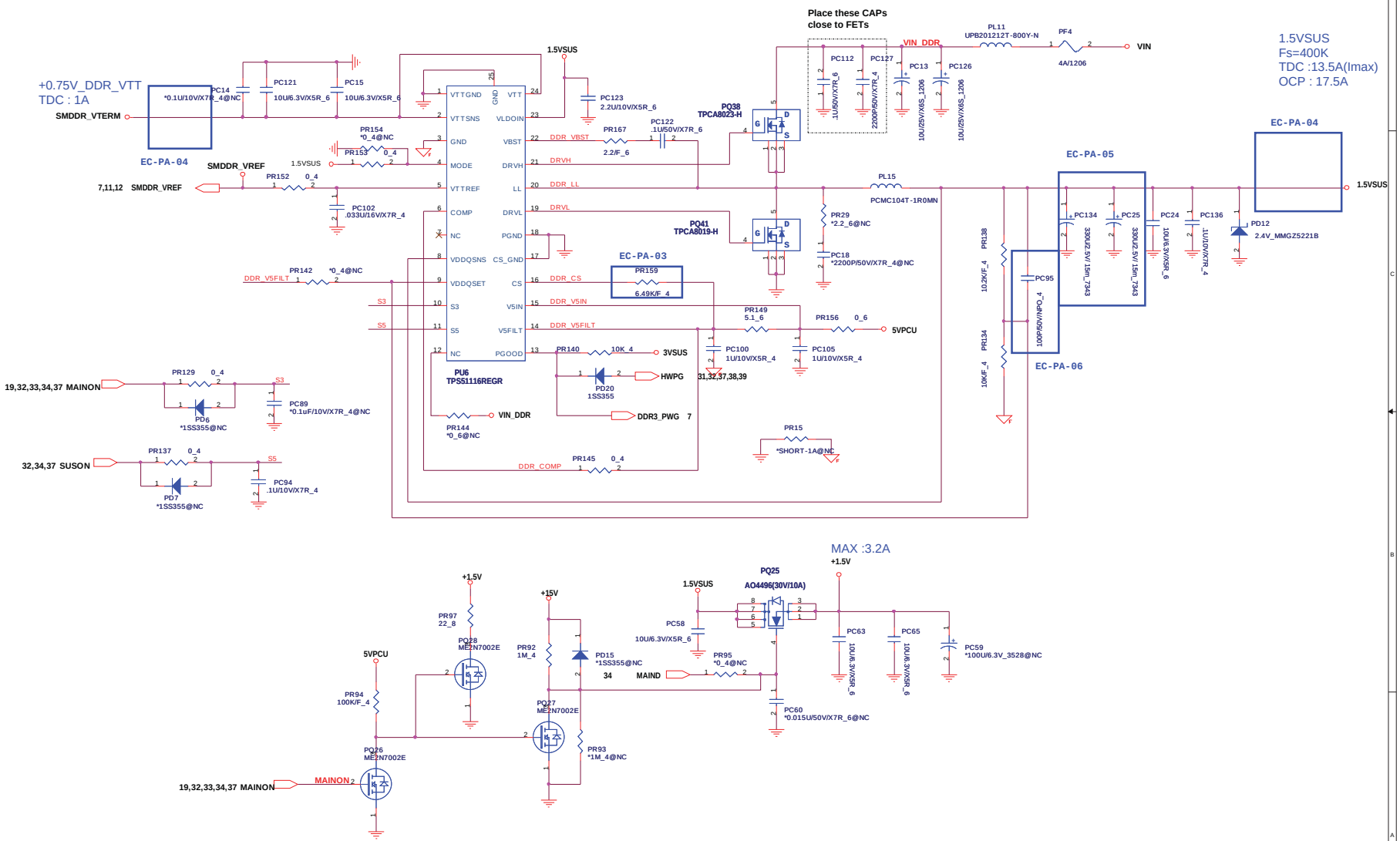

## 3VSUS, 5VSUS, 1.5VSUS, 1.8VSUS

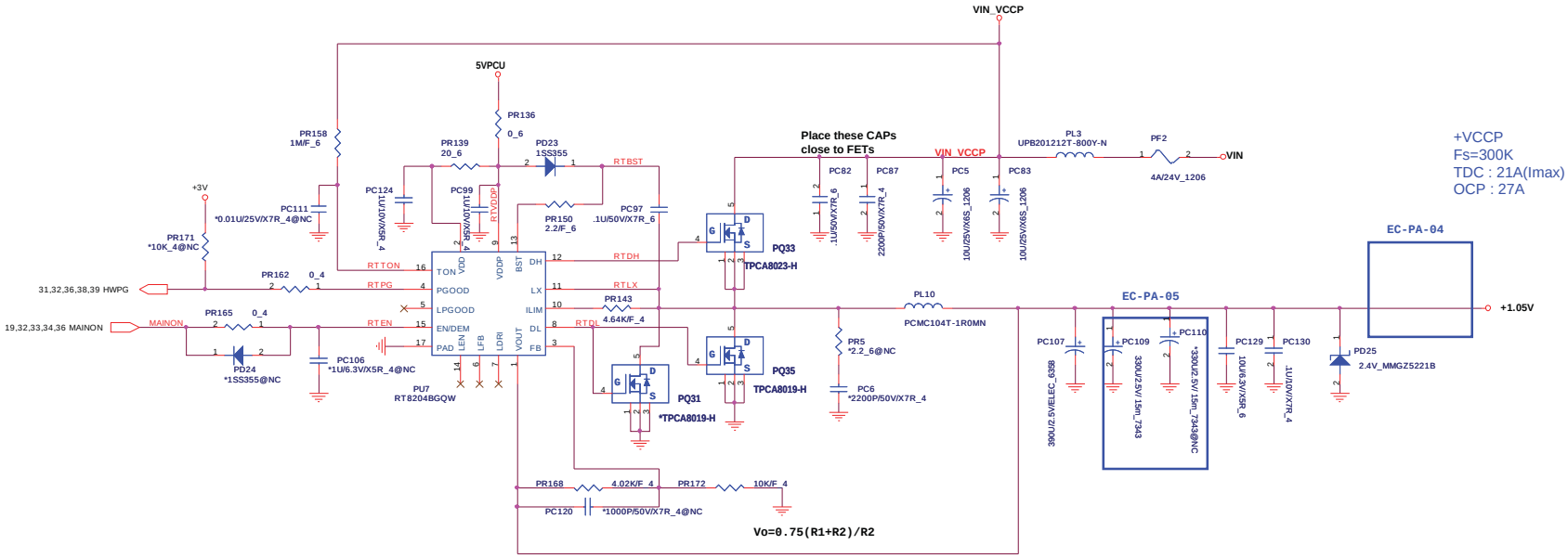


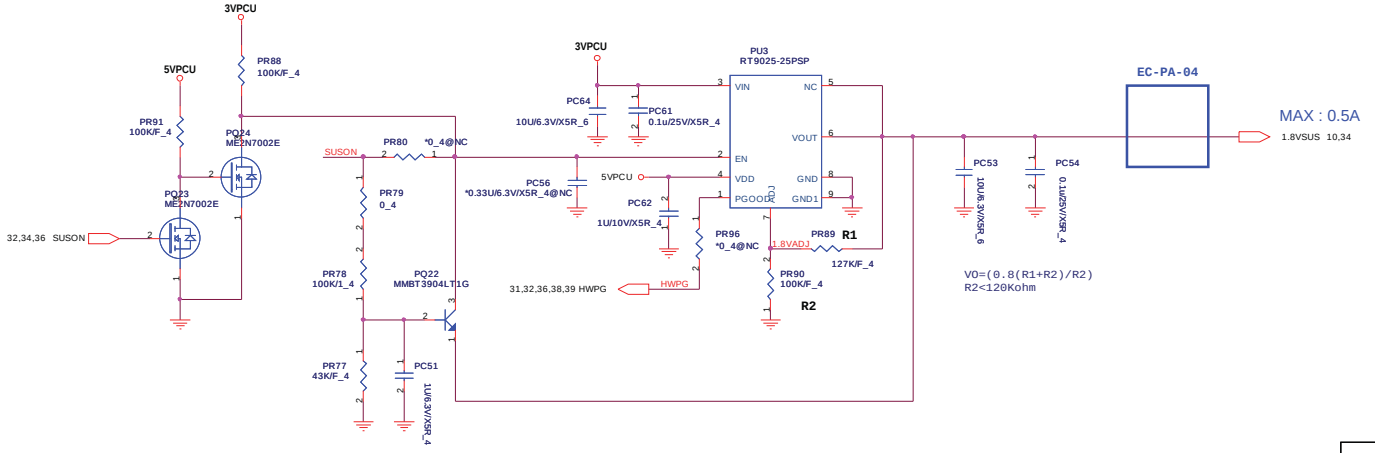

G-Note Montevina
Quanta Computer Inc.

| Size | Document Number | Rev |
|---|---|---|
| Custom | Discharge | 1A |
| Date: Thursday, September 03, 2009 | Sheet 34 of 46 | |

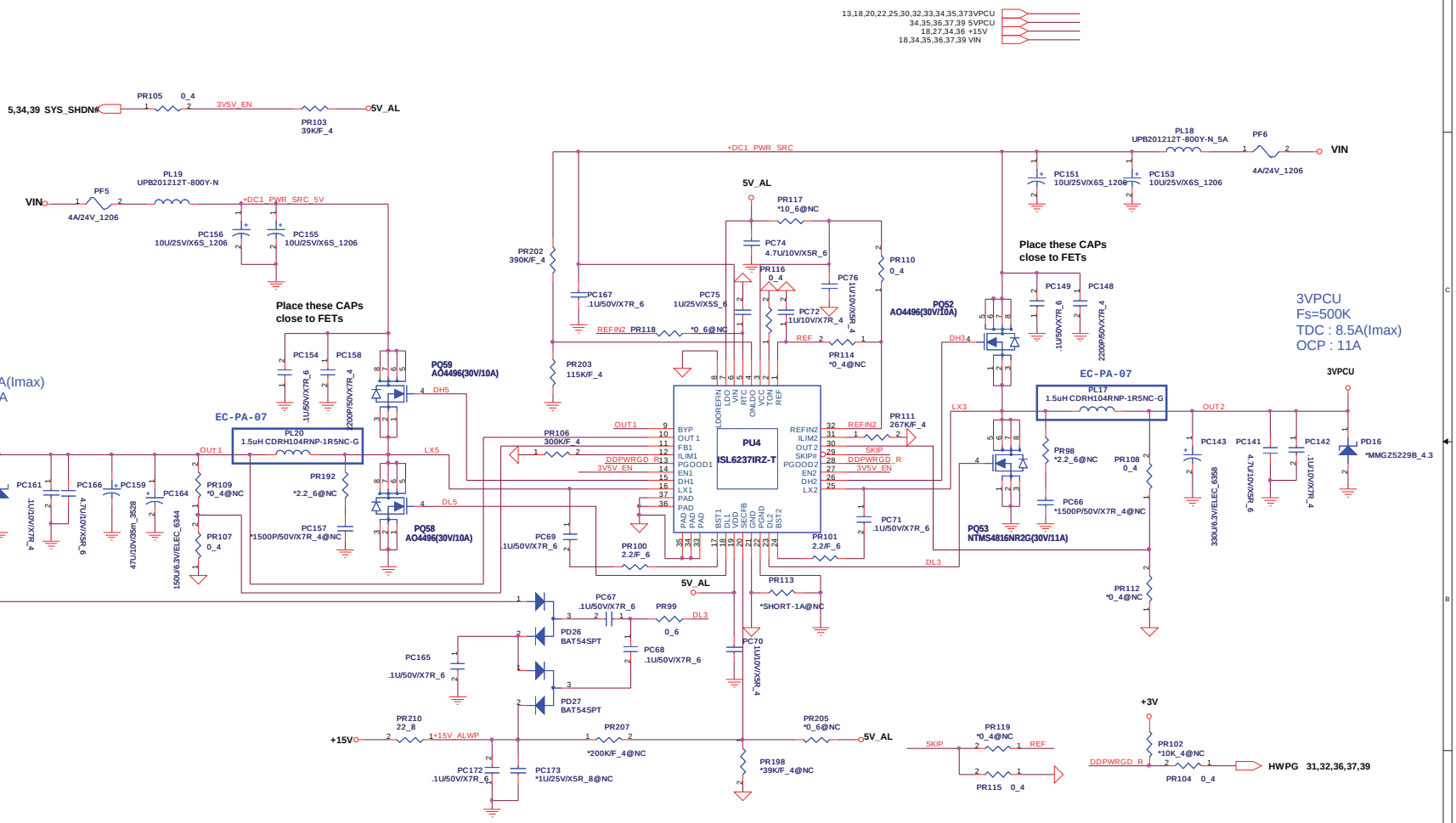

System Adaptor
DC-IN
EC-PA-02
VinSys
3VPCU
33,34 DOCK-PWR20
VA2
VIN
33 Vsystem
33 DOCK_DCIN20
32 ACIN
DOCK_DCIN20
Vsys20
EC-PA-01
ACIN=17.5V
Place these CAPs close to FETs
PQ29 AO4496(30V/10A)
PQ32 AO4496(30V/10A)
PU5 ISL88731A
32 MBCLK
32 MBDATA
GND_CHG
BAT-V
VBATT
FUSE_10A_125V(FAST)
TEMP_MBAT 32
Battery Low 7.5V
BL/C# 32
D/C# 32
G-Note Montevina
Quanta Computer Inc.
Charger (ISL88731A)
Thursday, September 03, 2009


Place these CAPs close to FETs
+0.75V_DDR_VTT
TDC : 1A
SMDDR_VTERM
EC-PA-04
SMDDR_VREF
1.5VSUS
7,11,12 SMDDR_VREF
PU6
TPS51116REGR
VTTGND
VTTSNS
GND
MODE
VTTREF
COMP
NC
VDDQSNS
VDDQSET
S3
S5
NC
VTT
VLDOIN
DDR_VBST
DRVH
LL
DRVL
PGND
CS_GND
CS
V5IN
V5FILT
PGOOD
DDR_CS
DDR_V5IN
DDR_V5FILT
DDR_COMP
VIN_DDR
PQ38
TPCA8023-H
PQ41
TPCA8019-H
PL11
UPB201212T-800Y-N
PF4
4A/1206
VIN
PL15
PCMC104T-1R0MN
EC-PA-03
EC-PA-05
EC-PA-06
PD12
2.4V_MMGZ5221B
5VPCU
3VSUS
HWPG
DDR3_PWG 7
19,32,33,34,37 MAINON
32,34,37 SUSON
PD6
*1SS355@NC
PD7
*1SS355@NC
PR159
6.49K/F_4
PR15
*SHORT-1A@NC
1.5VSUS
Fs=400K
TDC :13.5A(Imax)
OCP : 17.5A
MAX :3.2A
+1.5V
+15V
PQ25
AO4496(30V/10A)
PQ28
ME2N7002E
PQ27
ME2N7002E
PQ26
ME2N7002E
PD15
*1SS355@NC
MAIND
MAINON
PR94
100K/F_4
PR92
1M_4
PR93
*1M_4@NC
PR97
22_8
PR95
*0_4@NC
PC58
10U/6.3V/X5R_6
PC60
*0.015U/50V/X7R_6@NC
PC59
*100U/6.3V_3528@NC
G-Note Montevina
Quanta Computer Inc.
Size Custom
Document Number
DDR3 (TPS51116REGR)
Rev 1A
Date: Thursday, September 03, 2009
Sheet 36 of 46

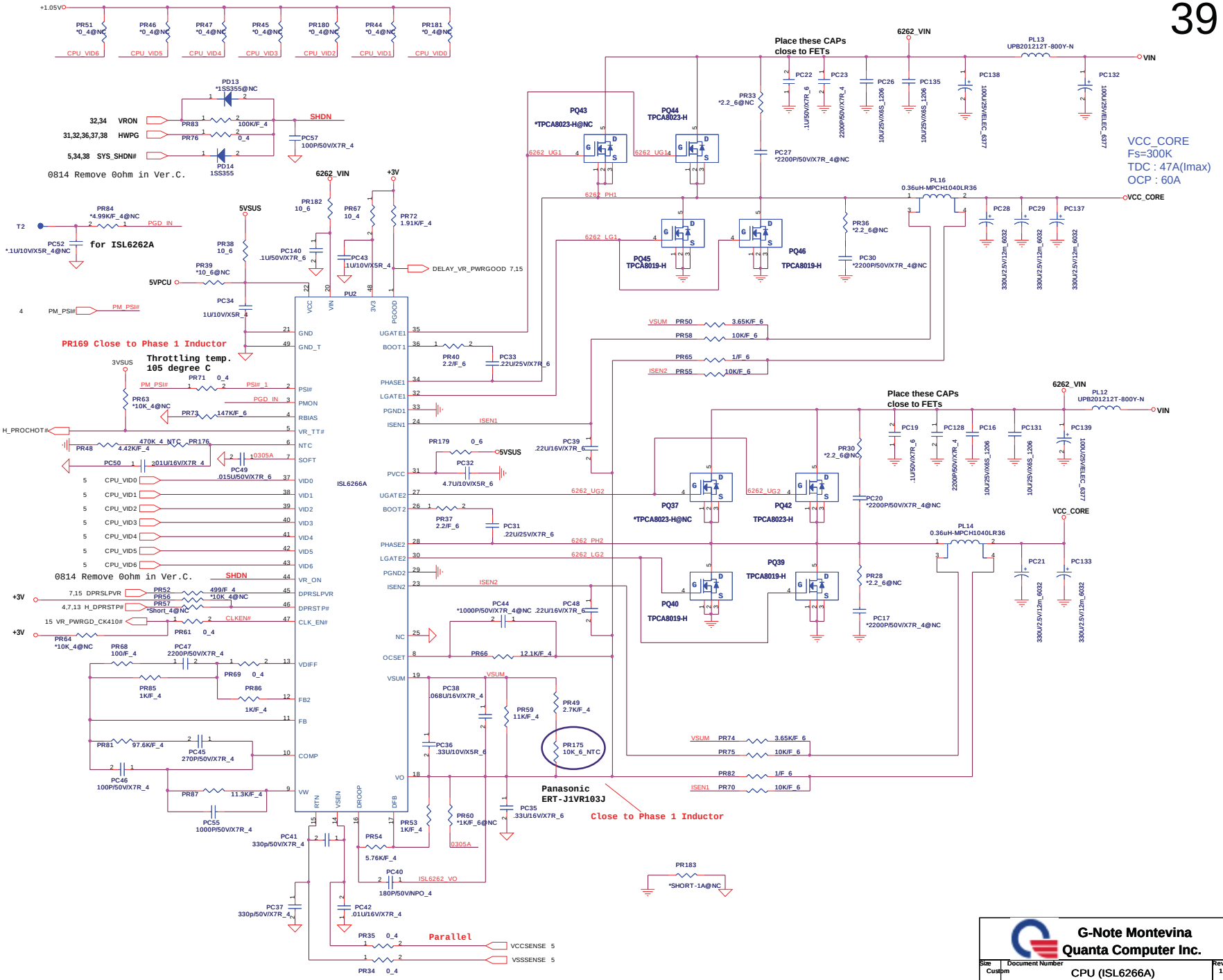


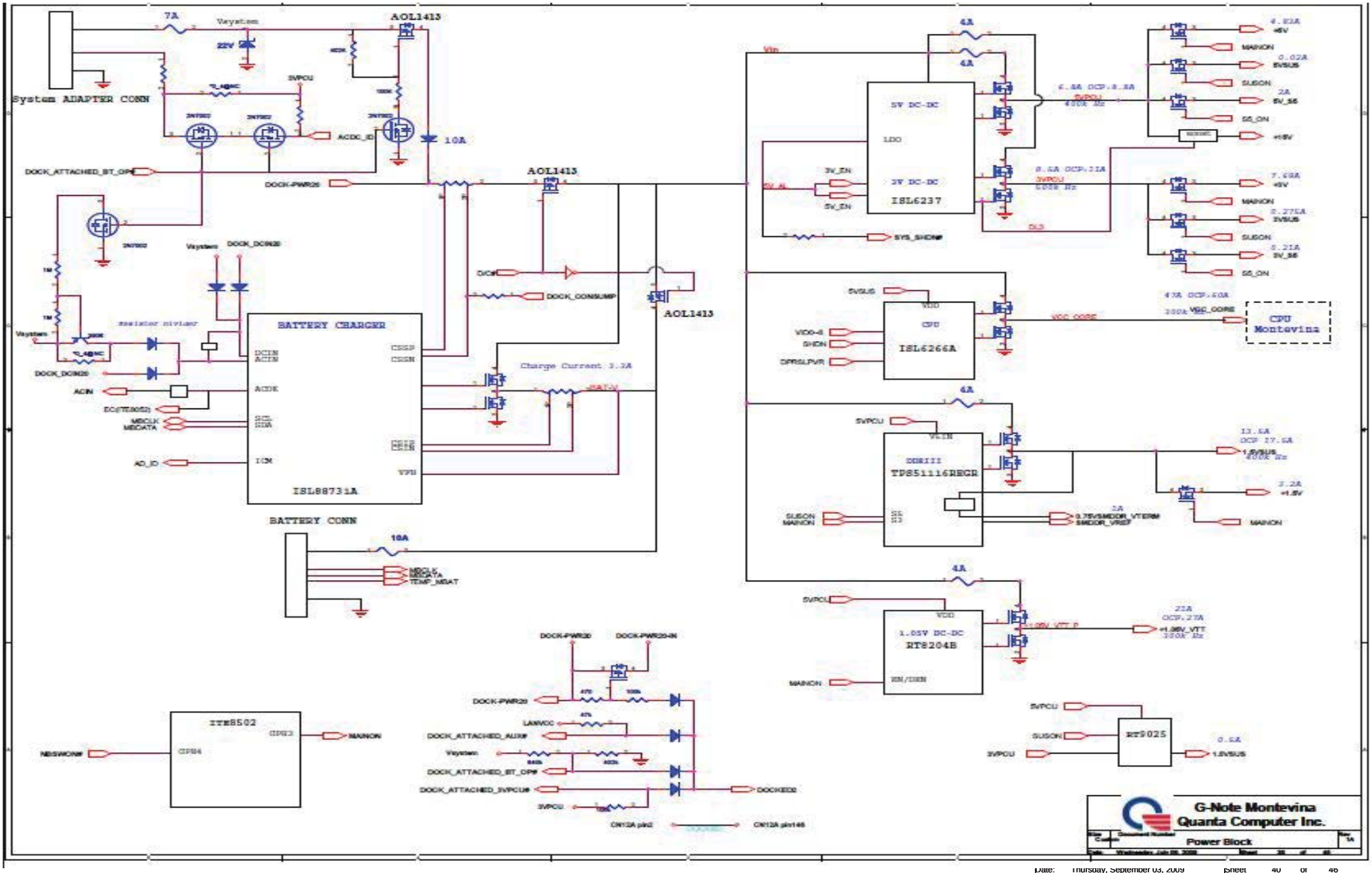

| | | |
|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | |
| Size: Custom | Document Number: 1.0V / 1.5V (RT8204) | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 37 of 46 | |

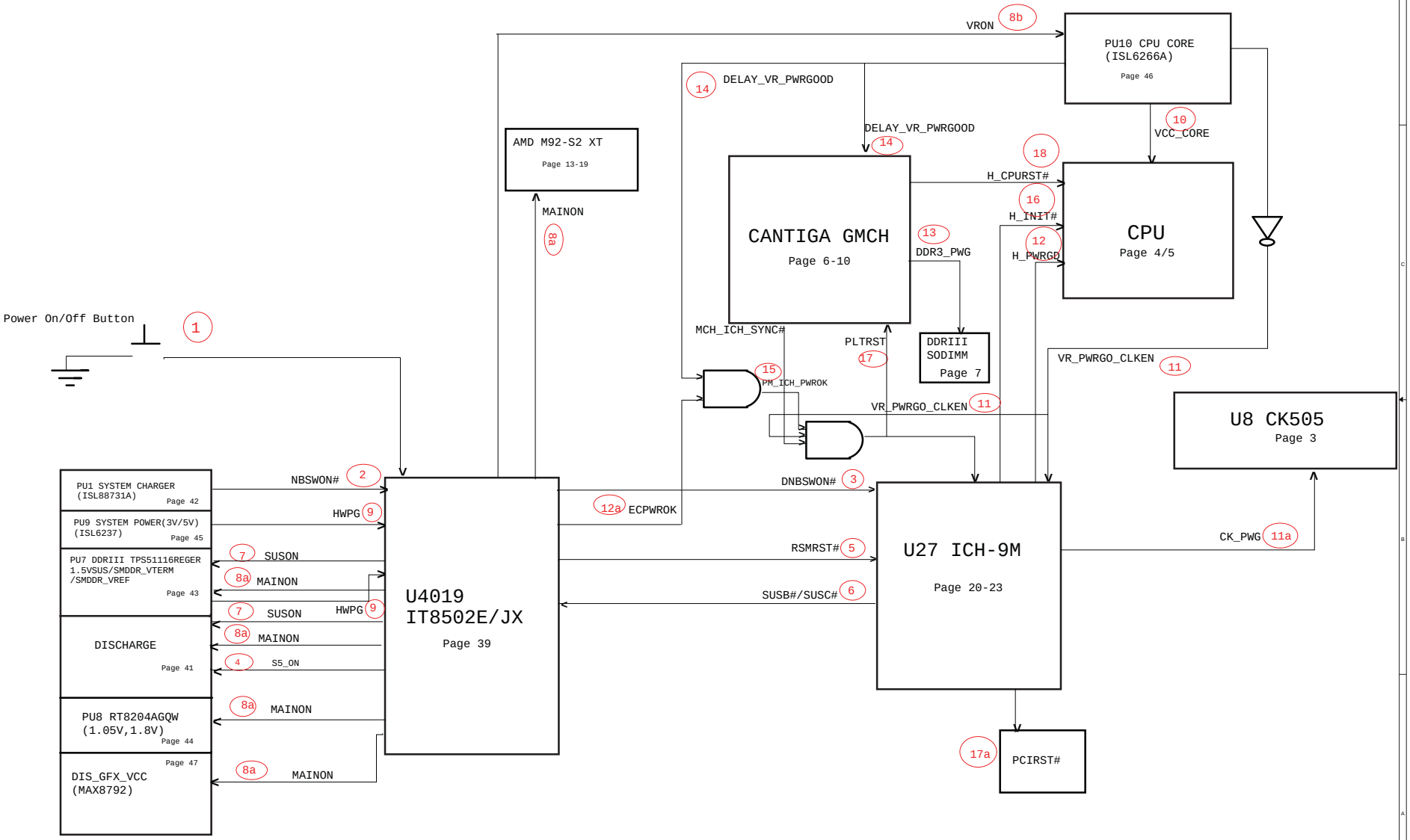



| | | | |
|---|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | | |
| Size: Custom | Document Number: 3V/5V (ISL6237) | | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 38 of 46 | | |




| | | | |
|---|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | | |
| Size: Custom | Document Number: CPU (ISL6266A) | | Rev: 1A |
| Date: Thursday, September 03, 2009 | Sheet 39 of 46 | | |


System ADAPTER CONN
AOL1413
AOL1413
AOL1413
BATTERY CHARGER
ISL88731A
BATTERY CONN
Charge Current 3.2A
5V DC-DC
ISL6237
3V DC-DC
CPU
ISL6266A
CPU Montevina
DDRIII
TPS51116RGR
1.05V DC-DC
RT8204B
RT9025
ITE8502
Vin
SYS_SHDN#
VCC_CORE
1.8VSUS
1.5V
1.05V_VTT
1.8VSUS
DOCKED2
G-Note Montevina
Quanta Computer Inc.
Power Block




| | | | |
|---|---|---|---|
| G-Note Montevina<br>Quanta Computer Inc. | | | |
| Size | Document Number | Power Sequence Block | Rev 1A |
| Date: Thursday, September 03, 2009 | | Sheet 41 of 46 | |

## Revision History

| Revision | Date | Phase | Change List | Release Schematic Date | Release Gerber File Date |
|---|---|---|---|---|---|
| 1A | | DV | Initial release | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

## Schematic Value Explanation Description :

### RESISTOR

| Value | F | 4 | 6 | 8 | 12 | 1210 | * | Description |
|---|---|---|---|---|---|---|---|---|
| *1K/F_4@NC | 1% | 0402 (1005 ) | | | | | DE POP | 1K ohm 1% SMD 0402 package and DE POP |
| 1K_6 | 5% | | 0603 (1608 ) | | | | POP | 1K ohm 5% SMD 0603 package and POP |
| 1K_8 | 5% | | | 0805 (2125 ) | | | POP | 1K ohm 5% SMD 0805 package and POP |
| 1K_12 | 5% | | | | 1206 (3216 ) | | POP | 1K ohm 5% SMD 1206 package and POP |
| 1K_1210 | 5% | | | | | 1210 (3225 ) | POP | 1K ohm 5% SMD 1210 package and POP |

### CAPACITOR

| Value | Voltage | Material | 6 | | | | * | Description |
|---|---|---|---|---|---|---|---|---|
| *0.1U/10V/X5R_4@NC | 10V | X5R | 0402 (1005 ) | | | | DE POP | 0.1UF 10V X5R SMD 0402 package DE POP |
| 1U/25V/X7R_6 | 25V | X7R | 0603 (1608 ) | | | | POP | 0.1UF 25V X7R SMD 0603 package POP |
| | | | | | | | | |

## G NOTE SKU TABLE

| Location | Model ID 14'' | Model ID 15'' | |
|---|---|---|---|
| R344 | ASM | No ASM | |
| R345 | No ASM | ASM | |
| R346 | ASM | No ASM | |
| R347 | No ASM | ASM | |
| | GM45 W/ WWAN | GL40 W/o WWAN | |
| CN23 | ASM | No ASM | |
| U43 | ASM | No ASM | |
| C504 | ASM | No ASM | |
| C505 | ASM | No ASM | |
| C506 | ASM | No ASM | |
| C508 | ASM | No ASM | |
| C510 | ASM | No ASM | |
| CN25 | ASM | No ASM | |
| C493 | ASM | No ASM | |
| C494 | ASM | No ASM | |
| C483 | ASM | No ASM | |
| C512 | ASM | No ASM | |
| C486 | ASM | No ASM | |
| C511 | ASM | No ASM | |
| | AUO3: Always on USB Ver.3 table | | |
| | AUO3 Support | AUO3 No Support | |
| U47 | ASM | No ASM | |
| R32,R40 | ASM | No ASM | |
| R6,R7 | No ASM | ASM | |
| R58 | No ASM | ASM | |
| | Discrete TPM | w/o Discrete TPM | |
| R475 | No ASM | ASM | |
| R472 | ASM | No ASM | |
| U32,C343,C369 ,R341 | ASM | No ASM | |

## G NOTE SKU TABLE

| Location | | | | | Page |
|---|---|---|---|---|---|
| | | | | | |

| stage | EC NO. | Page | Location | description |
|---|---|---|---|---|
| | EC-A-01 | 9,10 | C47,C51,C58,C71,C82,C75,C66,C52 | change to 0603 For height limit |
| | EC-A-02 | 22 | r107,r111,r117,r125 | change to 0603 for hi po |
| | EC-A-03 | 27 | | SERIRQ,+3v connect to correct |
| | EC-A-04 | 33 | del R3,R13 | DOCK_PWRGOOD(active high) for crt switch |
| | EC-A-05 | 21 | Q17 | change footprint (P mos) |
| | EC-A-06 | 33 | R2 | R2 no asm, dock site already pull up |
| | EC-A-07 | 33 | R481,R482,R483 | DOCK_PWR20-IN do not trun on when AC Adapter(at Dock) plugged. Dock#102(D/C#) pin is not low at default.---r483<br>No power at 5V_AL--r481,r482 |
| | EC-A-08 | 21 | U35,L46,C367 | mic noise issue |
| | EC-A-09 | 7 | R43,R44 | R43,R44 no asm for display port(port B) |
| | EC-A-10 | 19 | | SDVO,AUX swap |
| | EC-A-11 | 31 | | change SPI rom power plane to 3v_S5(EC Chei-ho) |
| | EC-A-12 | 24 | removed R6,R7 Add U47,C520,R32,R40 R488 use 0ohm | usb switch circuit |
| | EC-A-13 | | 3:R222,R235,R196,R195,141,R142 RP1,RP2,RP3,RP4<br>4:R32 5:R388 7:R414,R61,R64<br>10:R401,R400,L2,R58,R88,R40,R28,R412,L54,R408,R395<br>11:R108 15:R301 R232<br>16:R268,R289,R452 R191 R424 R253<br>R472 R475 R476 R290 R477 R164 R223 R288<br>18: R147 R122 R146 R106<br>20: R451 R361 21: R320 R306 R278<br>22: R104 R102 R100 R98<br>23: R271 R5 25: R119 29: R438 R434 R443<br>30: R19 32: R319 | 0ohm no asm(reserved(,r121,r120,r123,r124) |
| | EC-A-14 | | 14: R270 18: R139 R140 19:R216 R212 R193 R188 R176<br>R160 R156 R169 R241 R231<br>20:R310 R309 R479 R480 R474 R466<br>21:R254 R265 R250 28:R360 R249 R168 R175<br>R430 R431 R444 R463 R324 R325 32 R302 33: R10 R11<br>26:R358 R359 | 0ohm use short pad |
| | EC-A-15 | 15 | R201,R202 | change Board ID to SIT R201-->no ASM,R202--> ASM |
| | EC-A-16 | 32 | L30 | change to 10ohm for GC2/3 g-sensor issue |

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|---|---|---|
| B | EC list | 1A |

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| stage | EC NO. | Page | Location | description |
|---|---|---|---|---|
| | EC-A-17 | 13 | R472 | add TPM strap |
| | EC-A-18 | 13 | BT1 | change right footprint for smt |
| | EC-A-19 | 22,23 | | correct act/ link singal name |
| | EC-A-20 | 25 | RP5,RP6 | RP5,RP6 no asm by EC command |
| | EC-A-21 | 33 | L47,L48,L49 ,C376,C377,C378,C379,C380,C381 ,R376,R377,R378 | L47,L48,L49 use 0ohm C376,C377,C378,C379,C380,C381 no ASM intel spec filter should be add in dock station R376,R377,R378 ASM(150ohm) |
| | EC-A-22 | 17 | R19,R28,L3,L7 | H/Vsync Overshoot at Tf Vmax=1.5V issue L3,L7 use 0ohm R19,R28 use bead |
| | EC-B-1 | 24 | | AUO3 :U47 change power plane to 5v_S5 |
| | EC-B-2 | | L57 | power combustion fail,EMI OK REMOVED |
| | EC-B-3 | | del L3,L7,L47,L48,L49 | 0 ohm del |

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|---|---|---|
| B | EC list | 1A |

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| EC NO. | PG. | DATE | PART REFERENCE | DESCRIPTION |
|---|---|---|---|---|
| EC-PA-01 | 35 | 7/23 | PD8,PD10 | Change to 1SS355 for improve leakage current |
| EC-PA-02 | 35 | 7/23 | PD18 | Reverse PD18 |
| EC-PA-03 | 36 | 7/23 | PR159 | Change to 6.49k for OCP |
| EC-PA-04 | 36,37 | 7/23 | PJP1,PJP2,PJP3,PJP4,PJP6,PJP7 | Delete default open |
| EC-PA-05 | 36,37 | 7/23 | PC25,PC134,PC109,PC110 | Changefrom 330U/2V/9mohm to 330U/2.5V/15mohm for ESR |
| EC-PA-06 | 36 | 7/23 | PC95 | Add 100p for feedback stability |
| EC-PA-07 | 38 | 7/23 | PL17,PL20 | Change to CV-15A0MZ00 for epoxy |

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|---|---|---|
| A | Revision & Schematic Value Description | 1A |
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