EW3

CPU CORE — Page:25 — VCC_CORE

3.3V/5V/12V
5VPCU/3V_ALWAYS
3V_S5/5V_S5
3VSUS/5VSUS — Page:26 — +12V, 5VPCU, 3V_ALWAYS, +3.3V, +5V, 3V_S5, 5V_S5, 3VSUS, 5VSUS

2.5VSUS/+2.5/VTT
MVREF_DM
SMDDR_VTERM — Page:27 — 2.5VSUS, +2.5V, 1.2VCCT, VTT, MVREF_DM, SMDDR_VTERM

1.5V_S5/+1.5V
+1.8V/VGA_CORE — Page:28 — 1.5V_S5, +1.5V, +1.8V, VGA_CORE(+1.25V)

BATTERY CHARGER — Page:29

CLOCK GEN
ICS
ICS950810 — Page:11

CLOCK S/S
***IC91718** — Page:11

Centrino
CELERON-M
INTEL Mobile_479 CPU — Page:2,3

HOST BUS 400MHZ

CLK_SDRAM0~5,
CLK_SDRAM0~5#

DDR-SODIMM1 — Page:9,10
DDR-SODIMM2 — Page:9,10
266MHZ DDR

Montara-GM
82852GM
732 Micro-FCBGA — Page:4,5,6

AGP BUS

***NVIDIA**
NV34M
64M — Page : 23 ~26

EXT_LVDS
EXT_CRT
EXT_TV-OUT

LVDS
RGB
DVO

INT_LVDS
INT_CRT
INT_TV-OUT

CHRONTEL
CH7011A — Page : 13

SWITCH CIRCUIT

CRT — Page:14
LVDS — Page:5
TV-OUT — Page:14

IDE-HDD — Page:15
IDE-ODD — Page:15
ATA 66/100
ATA 66/100

HUB I/F 66(266)MHZ

ICH4-M
82801DBM
421 BGA — Page:7,8

PCI BUS 33MHZ

TI
PCMCIA
PCI1410A — Page:16

MINI-PCI
Wireless LAN
Modem/LAN — Page:19

REALTEK
10/100 LAN
8100CL — Page:12

BOTHHAND
TRANSFORMER
NS0013 — Page:12

RJ45 — Page:12

USB 2.0

AC97

AUDIO CODEC
CONEXANT
20468-31 — Page:17

AMP
MAX9750 — Page:18

MODEM
CONEXANT
20493-21 — Page:17

LPC 33MHZ

NS
KBC(97551) — Page:20

MIC IN — Page:19
SPEAKER — Page:18
LINE OUT — Page:18
RJ11 — Page:12

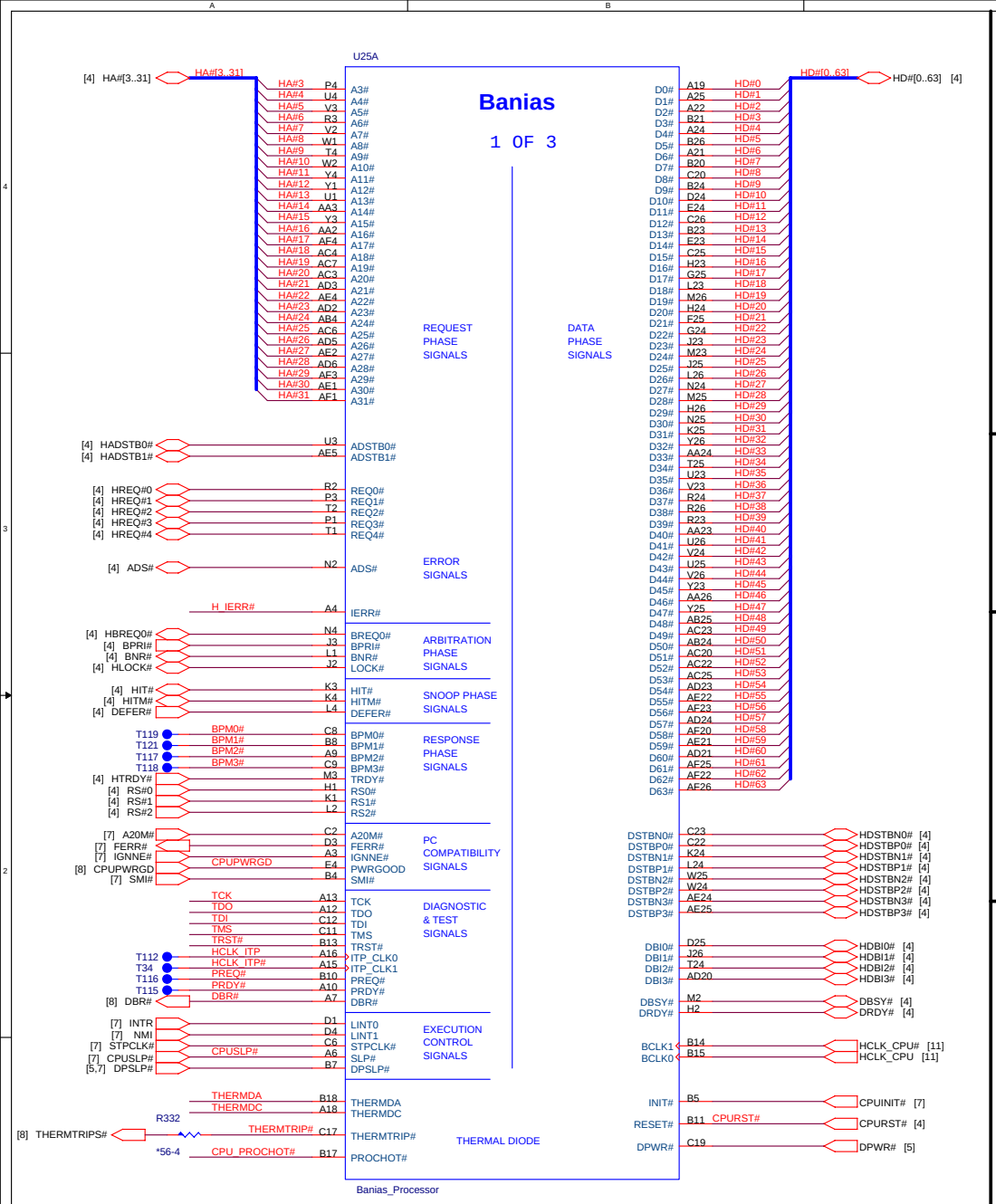
Touchpad — Page:21
Keyboard — Page:21
FLASH — Page:20
FAN — Page:21

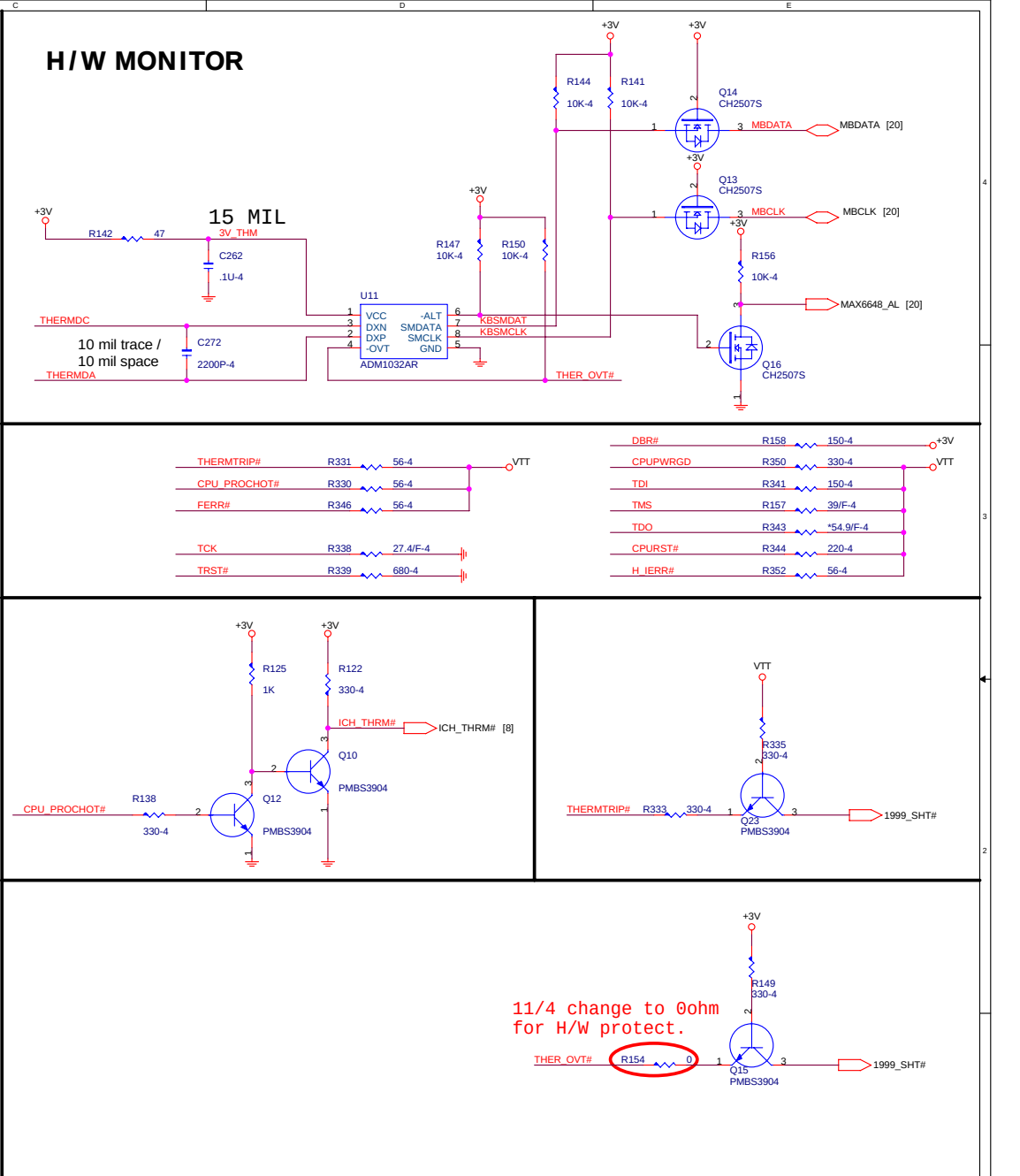
SYSTEM 4 USB PORT — Page:19 — USB2,3,5
MINI-USB — Page: 19 — USB4

PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD18	INTD#	REALTEK LAN
REQ1# / GNT1#	AD20	INTB# , INTC#	MINI-PCI
REQ3# / GNT3#	AD17	INTE#	TI 1410A

PROJECT : EW3
Quanta Computer Inc.

Size	Document Number	Rev
	BLOCK DIAGRAM	C1
Date: Monday, November 08, 2004	Sheet 1 of 30	

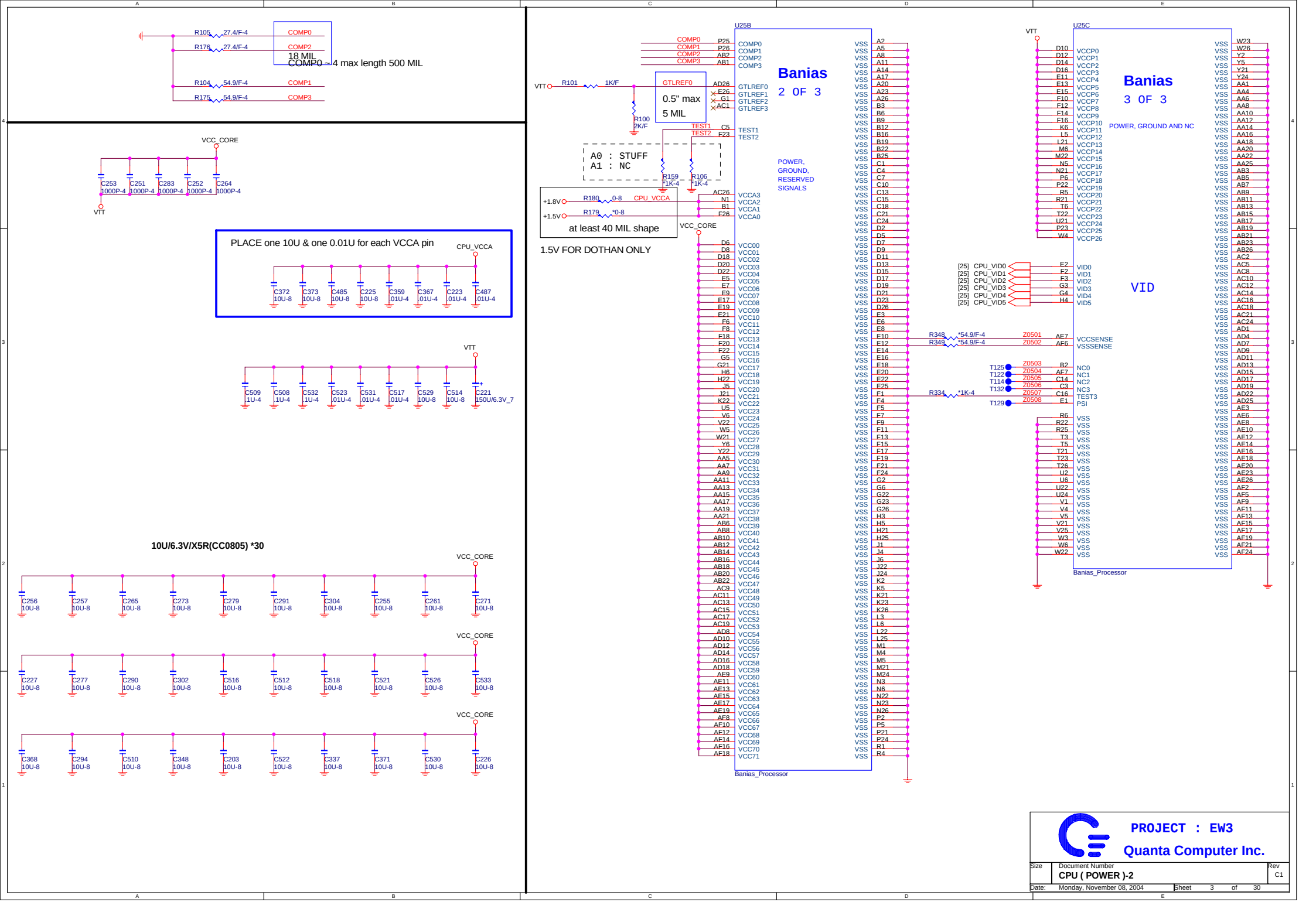




PROJECT : EW3

Quanta Computer Inc.

Size	Document Number	Rev
	CPU (HOST BUS)-1	C1
Date: Monday, November 08, 2004	Sheet 2 of 30	


R105 27.4/F-4 COMP0
R176 27.4/F-4 COMP2
18 MIL
COMP0 ~ 4 max length 500 MIL
R104 54.9/F-4 COMP1
R175 54.9/F-4 COMP3
VCC_CORE
C253 1000P-4
C251 1000P-4
C283 1000P-4
C252 1000P-4
C264 1000P-4
VTT
PLACE one 10U & one 0.01U for each VCCA pin
CPU_VCCA
C372 10U-8
C373 10U-8
C485 10U-8
C225 10U-8
C359 .01U-4
C367 .01U-4
C223 .01U-4
C487 .01U-4
VTT
C509 1U-4
C508 1U-4
C532 1U-4
C523 .01U-4
C531 .01U-4
C517 .01U-4
C529 10U-8
C514 10U-8
C221 150U/6.3V_7
10U/6.3V/X5R(CC0805) *30
VCC_CORE
C256 10U-8
C257 10U-8
C265 10U-8
C273 10U-8
C279 10U-8
C291 10U-8
C304 10U-8
C255 10U-8
C261 10U-8
C271 10U-8
VCC_CORE
C227 10U-8
C277 10U-8
C290 10U-8
C302 10U-8
C516 10U-8
C512 10U-8
C518 10U-8
C521 10U-8
C526 10U-8
C533 10U-8
VCC_CORE
C368 10U-8
C294 10U-8
C510 10U-8
C348 10U-8
C203 10U-8
C522 10U-8
C337 10U-8
C371 10U-8
C530 10U-8
C226 10U-8
U25B
Banias
2 OF 3
COMP0 COMP1 COMP2 COMP3
VTT R101 1K/F
GTLREF0
0.5" max
5 MIL
R100 2K/F
GTLREF0 GTLREF1 GTLREF2 GTLREF3
TEST1 TEST2
A0 : STUFF
A1 : NC
R159 *1K-4
R106 *1K-4
POWER, GROUND, RESERVED SIGNALS
+1.8V R180 0-8 CPU_VCCA
+1.5V R179 *0-8
at least 40 MIL shape
VCC_CORE
1.5V FOR DOTHAN ONLY
VCCA3 VCCA2 VCCA1 VCCA0
VCC00 VCC01 VCC02 VCC03 VCC04 VCC05 VCC06 VCC07 VCC08 VCC09 VCC10 VCC11 VCC12 VCC13 VCC14 VCC15 VCC16 VCC17 VCC18 VCC19 VCC20 VCC21 VCC22 VCC23 VCC24 VCC25 VCC26 VCC27 VCC28 VCC29 VCC30 VCC31 VCC32 VCC33 VCC34 VCC35 VCC36 VCC37 VCC38 VCC39 VCC40 VCC41 VCC42 VCC43 VCC44 VCC45 VCC46 VCC47 VCC48 VCC49 VCC50 VCC51 VCC52 VCC53 VCC54 VCC55 VCC56 VCC57 VCC58 VCC59 VCC60 VCC61 VCC62 VCC63 VCC64 VCC65 VCC66 VCC67 VCC68 VCC69 VCC70 VCC71
VSS
Banias_Processor
U25C
Banias
3 OF 3
POWER, GROUND AND NC
VTT
VCCP0 VCCP1 VCCP2 VCCP3 VCCP4 VCCP5 VCCP6 VCCP7 VCCP8 VCCP9 VCCP10 VCCP11 VCCP12 VCCP13 VCCP14 VCCP15 VCCP16 VCCP17 VCCP18 VCCP19 VCCP20 VCCP21 VCCP22 VCCP23 VCCP24 VCCP25 VCCP26
VID
[25] CPU_VID0
[25] CPU_VID1
[25] CPU_VID2
[25] CPU_VID3
[25] CPU_VID4
[25] CPU_VID5
VID0 VID1 VID2 VID3 VID4 VID5
R348 *54.9/F-4 Z0501
R349 *54.9/F-4 Z0502
VCCSENSE
VSSSENSE
T125 Z0503
T122 Z0504
T114 Z0505
T132 Z0506
Z0507
R334 *1K-4
T129 Z0508
NC0 NC1 NC2 NC3 TEST3 PSI
Banias_Processor
PROJECT : EW3
Quanta Computer Inc.
Size
Document Number
CPU (POWER)-2
Rev
C1
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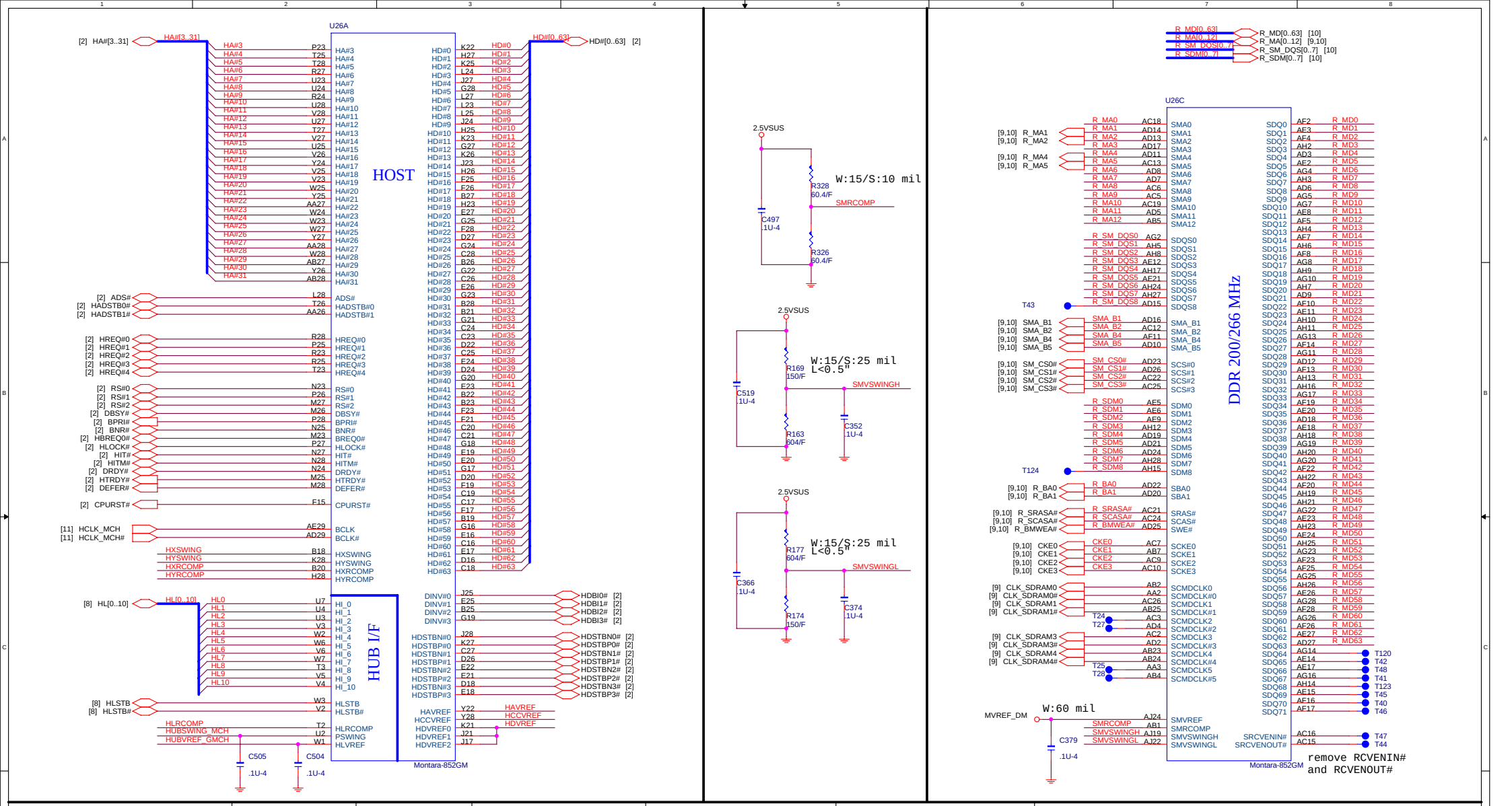
U26A
HOST
HA#[3..31]
HD#[0..63]
ADS#
HADSTB0#
HADSTB1#
HREQ#0
HREQ#1
HREQ#2
HREQ#3
HREQ#4
RS#0
RS#1
RS#2
DBSY#
BPRI#
BNR#
BREQ0#
HLOCK#
HIT#
HITM#
DRDY#
HTRDY#
DEFER#
CPURST#
BCLK
BCLK#
HXSWING
HYSWING
HXRCOMP
HYRCOMP
HL[0..10]
HLSTB
HLSTB#
HLRCOMP
PSWING
HLVREF
HUB I/F
DINV#0
DINV#1
DINV#2
DINV#3
HDSTBN#0
HDSTBP#0
HDSTBN#1
HDSTBP#1
HDSTBN#2
HDSTBP#2
HDSTBN#3
HDSTBP#3
HAVREF
HCCVREF
HDVREF0
HDVREF1
HDVREF2
C505
.1U-4
C504
.1U-4
Montara-852GM
2.5VSUS
R328
60.4/F
W:15/S:10 mil
SMRCOMP
C497
.1U-4
R326
60.4/F
R169
150/F
W:15/S:25 mil
L<0.5"
SMVSWINGH
C519
.1U-4
C352
.1U-4
R163
604/F
R177
604/F
SMVSWINGL
C366
.1U-4
C374
.1U-4
R174
150/F
R_MD[0..63]
R_MA[0..12]
R_SM_DQS[0..7]
R_SDM[0..7]
U26C
DDR 200/266 MHz
SMA0
SMA1
SMA2
SMA3
SMA4
SMA5
SMA6
SMA7
SMA8
SMA9
SMA10
SMA11
SMA12
SDQS0
SDQS1
SDQS2
SDQS3
SDQS4
SDQS5
SDQS6
SDQS7
SDQS8
SMA_B1
SMA_B2
SMA_B4
SMA_B5
SCS#0
SCS#1
SCS#2
SCS#3
SDM0
SDM1
SDM2
SDM3
SDM4
SDM5
SDM6
SDM7
SDM8
SBA0
SBA1
SRAS#
SCAS#
SWE#
SCKE0
SCKE1
SCKE2
SCKE3
SCMDCLK0
SCMDCLK#0
SCMDCLK1
SCMDCLK#1
SCMDCLK2
SCMDCLK#2
SCMDCLK3
SCMDCLK#3
SCMDCLK4
SCMDCLK#4
SCMDCLK5
SCMDCLK#5
SMVREF
SMRCOMP
SMVSWINGH
SMVSWINGL
SDQ0
SDQ1
SDQ2
SDQ3
SDQ4
SDQ5
SDQ6
SDQ7
SDQ8
SDQ9
SDQ10
SDQ11
SDQ12
SDQ13
SDQ14
SDQ15
SDQ16
SDQ17
SDQ18
SDQ19
SDQ20
SDQ21
SDQ22
SDQ23
SDQ24
SDQ25
SDQ26
SDQ27
SDQ28
SDQ29
SDQ30
SDQ31
SDQ32
SDQ33
SDQ34
SDQ35
SDQ36
SDQ37
SDQ38
SDQ39
SDQ40
SDQ41
SDQ42
SDQ43
SDQ44
SDQ45
SDQ46
SDQ47
SDQ48
SDQ49
SDQ50
SDQ51
SDQ52
SDQ53
SDQ54
SDQ55
SDQ56
SDQ57
SDQ58
SDQ59
SDQ60
SDQ61
SDQ62
SDQ63
SDQ64
SDQ65
SDQ66
SDQ67
SDQ68
SDQ69
SDQ70
SDQ71
SRCVENIN#
SRCVENOUT#
T43
T124
T24
T27
T25
T26
T120
T42
T48
T41
T123
T45
T40
T46
T47
T44
MVREF_DM
W:60 mil
C379
.1U-4
Montara-852GM
remove RCVENIN#
and RCVENOUT#
+1.5V
R325
255/F
W:20 mil
0.8V +/- 8%
HUBSWING_MCH
R324
162/F
W:20 mil
0.35V +/- 8%
HUBVREF_GMCH
R323
127/F
C498
.1U-4
C499
.1U-4
C493
.1U-4
VTT
R171
301/F
W:15/S:20 mil
HXSWING
R166
150/F
C345
.1U-4
R360
301/F
W:15/S:20 mil
HYSWING
R361
150/F
C554
.1U-4
1.2VCCT
R327
27.4/F-4
HLRCOMP
W:20 mil
HLRCOMP:
852GM, 27.4/F pull-up to 1.2V
855GM, 27.4/F pull-up to 1.2V
855GME, 37.4/F pull-up to 1.35V
R354
27.4/F-4
HXRCOMP
R357
27.4/F-4
HYRCOMP
W:15/S:20 mil
W:15 mil
L<0.5"
HDVREF
R164
49.9-4
C354
1U/10V
C360
.1U-4
R170
100/F
W:20 mil
HCCVREF
R359
49.9-4
C556
1U/10V
C557
.1U-4
R358
100/F
W:20 mil
HAVREF
R165
49.9-4
C355
1U/10V
C363
.1U-4
R167
100/F
PROJECT : EW3
Quanta Computer Inc.
Size
Document Number
GMCH_A (HOST & DDR)
Rev
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U26B Montara-852GM

DVO

LVDS

DAC

MISC

LCDID2	LCDID1	LCDID0	LCD TYPE	LCD CABLE P/N
0	0	0		
0	0	1		
0	1	0		
0	1	1	14" XGA	DD0ZL1LC000
1	0	0	15" XGA	DD0ZL1LC107
1	0	1	15" SXGA+	DD0ZL1LC204
1	1	0	15.4" WXGA	DD0ZL1LC301
1	1	1	15.4" WSXGA+	DD0ZL1LC409

stuff for DVO

Un-stuff for 852GM

ST2	ST1	ST0	PSB Frequency	Memory Frequency	GFX Core Clock - Low	GFX Core Clock - High
* 0	0	0	400MHz	266MHz	133MHz	200MHz
0	0	1	400MHz	200MHz	100MHz	200MHz
0	1	0	400MHz	200MHz	100MHz	133MHz
0	1	1	400MHz	266MHz	133MHz	266MHz
1	0	0	533MHz	266MHz	133MHz	200MHz
1	0	1	533MHz	266MHz	133MHz	266MHz
1	1	0	533MHz	333MHz	166MHz	266MHz
1	1	1	400MHz	333MHz	166MHz	250MHz

STUFF FOR INT VGA

40.2K/F change to 40.2/F

W:80 mil

W:80 mil

W:15 mil

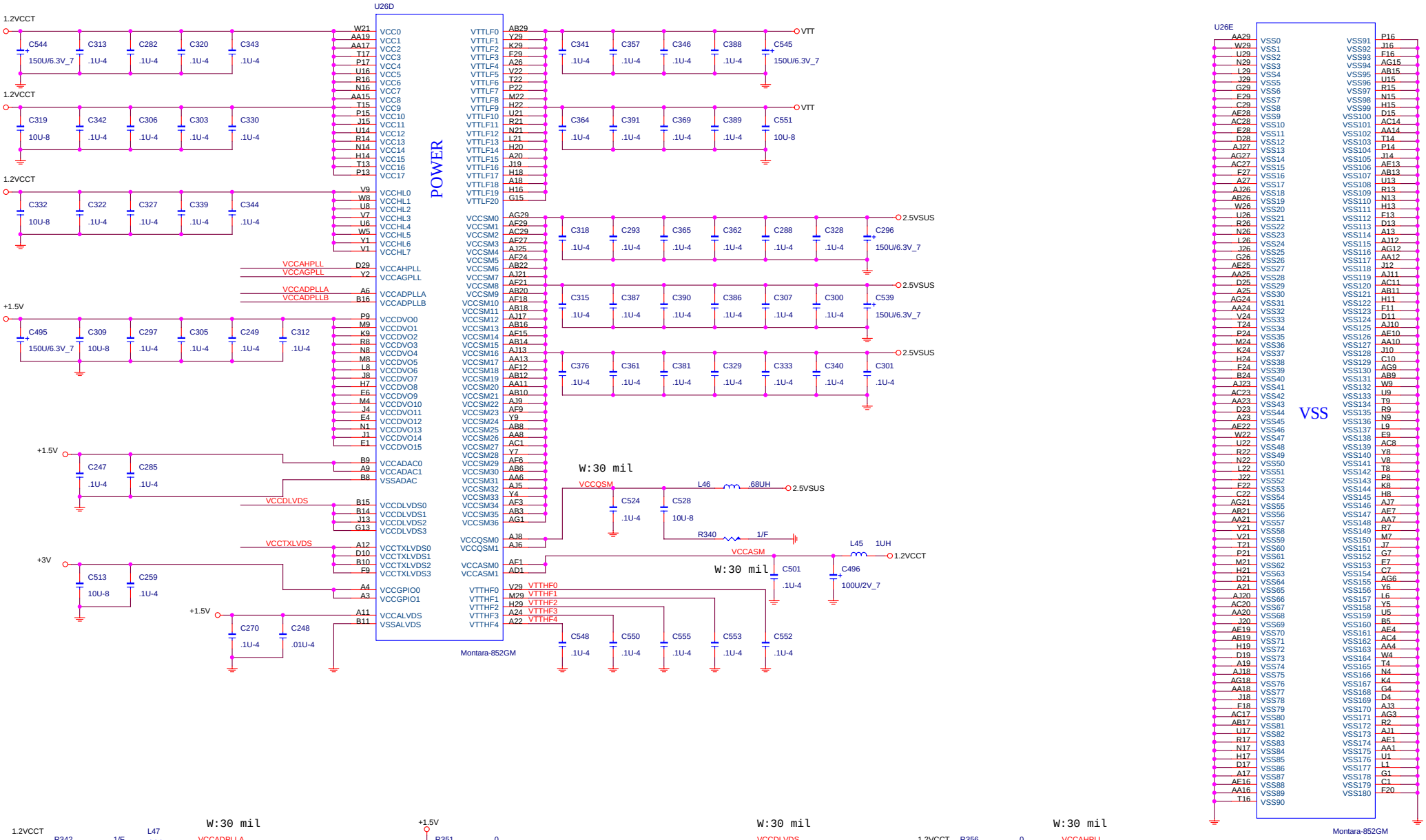
Lid Switch

10/23 change Part for ME

PROJECT : EW3

Quanta Computer Inc.

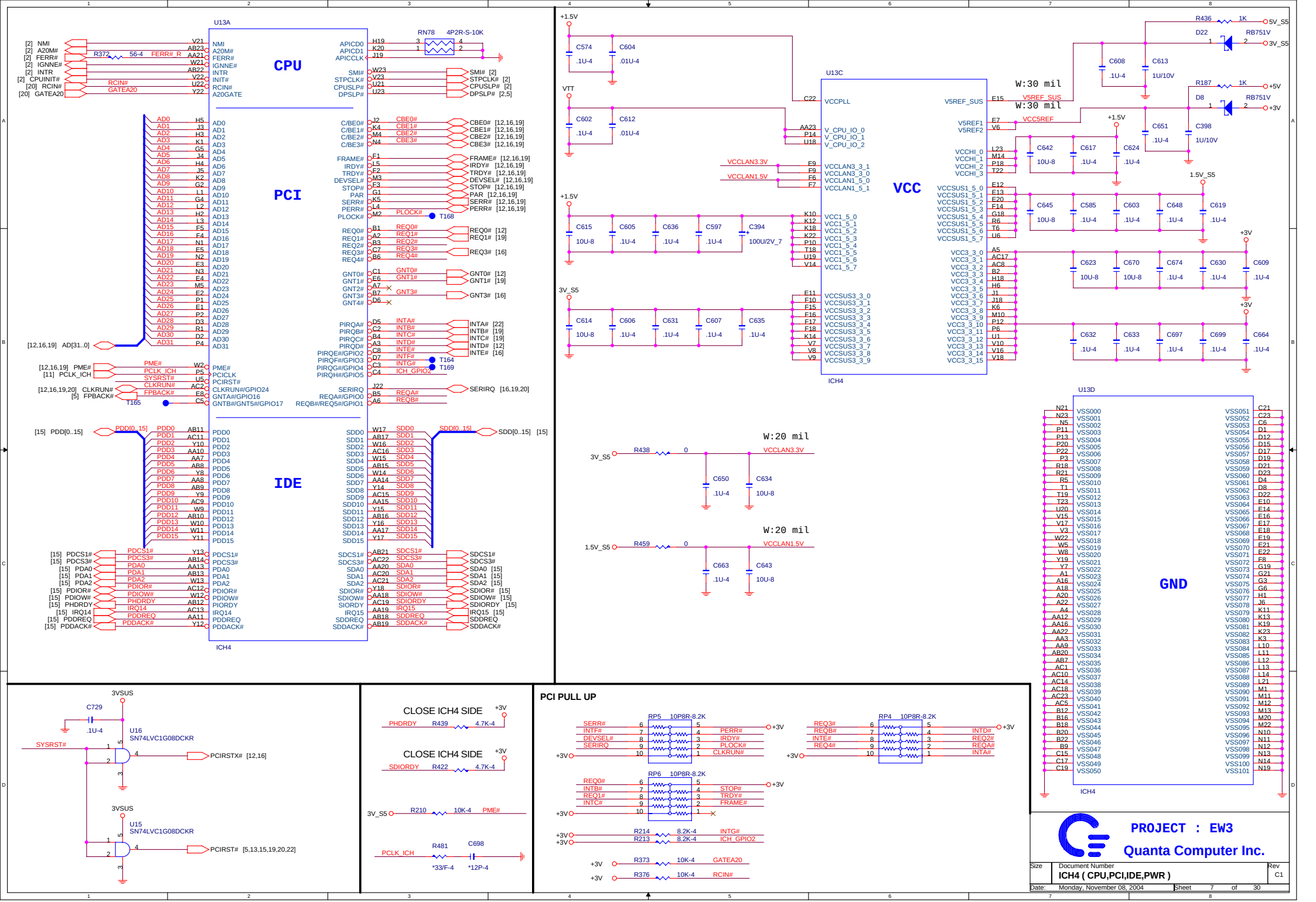
Size	Document Number	Rev
	GMCH_B (DVO & LVDS)	C1
Date: Monday, November 08, 2004	Sheet 5 of 30	



PROJECT : EW3

Quanta Computer Inc.

Size	Document Number	Rev
	GMCH_C (POWER)	C1
Date: Monday, November 08, 2004	Sheet 6 of 30	


U13A
CPU
PCI
IDE
ICH4
RN78 4P2R-S-10K
R372 56-4 FERR#_R
RCIN# GATEA20
[12,16,19] AD[31..0]
[15] PDD[0..15]
[15] PDCS1# [15] PDCS3# [15] PDA0 [15] PDA1 [15] PDA2 [15] PDIOR# [15] PDIOW# [15] PHDRDY [15] IRQ14 [15] PDDREQ [15] PDDACK#
[12,16,19] PME# [11] PCLK_ICH
[12,16,19,20] CLKRUN# [5] FPBACK#
SERIRQ [16,19,20]
INTA# [22] INTB# [19] INTC# [19] INTD# [12] INTE# [16]
CBE0# [12,16,19] CBE1# [12,16,19] CBE2# [12,16,19] CBE3# [12,16,19]
FRAME# [12,16,19] IRDY# [12,16,19] TRDY# [12,16,19] DEVSEL# [12,16,19] STOP# [12,16,19] PAR [12,16,19] SERR# [12,16,19] PERR# [12,16,19]
REQ0# [12] REQ1# [19] REQ3# [16]
GNT0# [12] GNT1# [19] GNT3# [16]
SMI# [2] STPCLK# [2] CPUSLP# [2] DPSLP# [2,5]
U13C
VCC
ICH4
+1.5V
VTT
3V_S5
V5REF_SUS
VCC5REF
W:30 mil
W:20 mil
VCCLAN3.3V
VCCLAN1.5V
1.5V_S5
+3V
+5V
U13D
GND
ICH4
3VSUS
U16 SN74LVC1G08DCKR
PCIRSTX# [12,16]
U15 SN74LVC1G08DCKR
PCIRST# [5,13,15,19,20,22]
CLOSE ICH4 SIDE
PHDRDY R439 4.7K-4
SDIORDY R422 4.7K-4
R210 10K-4 PME#
R481 C698
*33/F-4 *12P-4
PCI PULL UP
RP5 10P8R-8.2K
RP6 10P8R-8.2K
RP4 10P8R-8.2K
R214 8.2K-4 INTG#
R213 8.2K-4 ICH_GPIO2
R373 10K-4 GATEA20
R376 10K-4 RCIN#
PROJECT : EW3
Quanta Computer Inc.
Size
Document Number
ICH4 (CPU,PCI,IDE,PWR)
Rev
C1
Date: Monday, November 08, 2004
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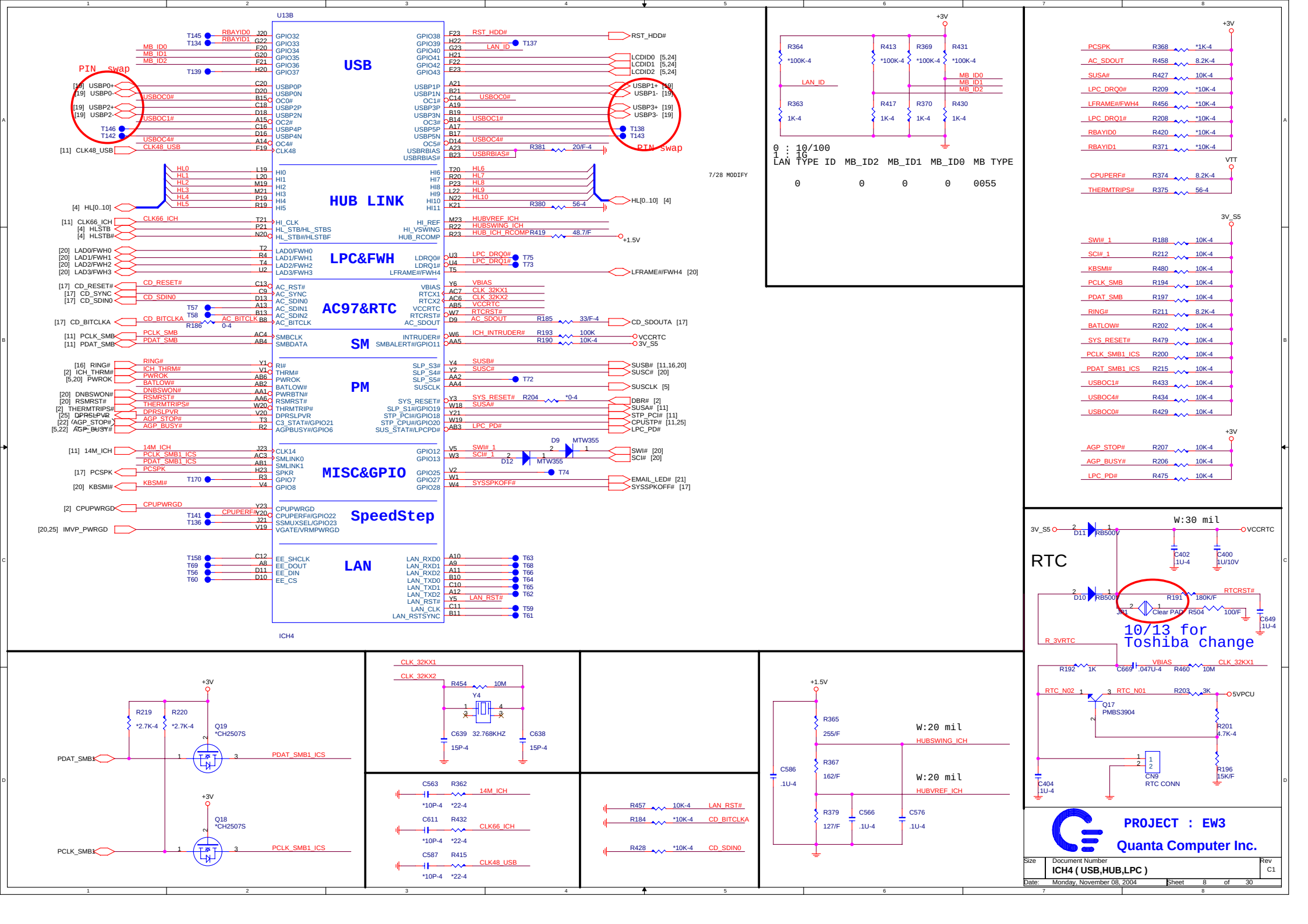
U13B
USB
HUB LINK
LPC&FWH
AC97&RTC
SM
PM
MISC&GPIO
SpeedStep
LAN
ICH4
PIN swap
PIN swap
7/28 MODIFY
RST_HDD#
LAN_ID
LCDID0 [5,24]
LCDID1 [5,24]
LCDID2 [5,24]
USBP1+ [19]
USBP1- [19]
USBP3+ [19]
USBP3- [19]
HL[0..10] [4]
+1.5V
LFRAME#/FWH4 [20]
CD_SDOUTA [17]
VCCRTC
3V_S5
SUSB# [11,16,20]
SUSC# [20]
SUSCLK [5]
DBR# [2]
SUSA# [11]
STP_PCI# [11]
CPUSTP# [11,25]
LPC_PD#
SWI# [20]
SCI# [20]
EMAIL_LED# [21]
SYSSPKOFF# [17]
+3V
0 : 10/100
1 : 1G
LAN TYPE ID MB_ID2 MB_ID1 MB_ID0 MB TYPE
0 0 0 0 0055
VTT
3V_S5
W:30 mil
RTC
10/13 for Toshiba change
W:20 mil
W:20 mil
PROJECT : EW3
Quanta Computer Inc.
Size
Document Number
ICH4 (USB,HUB,LPC)
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C1
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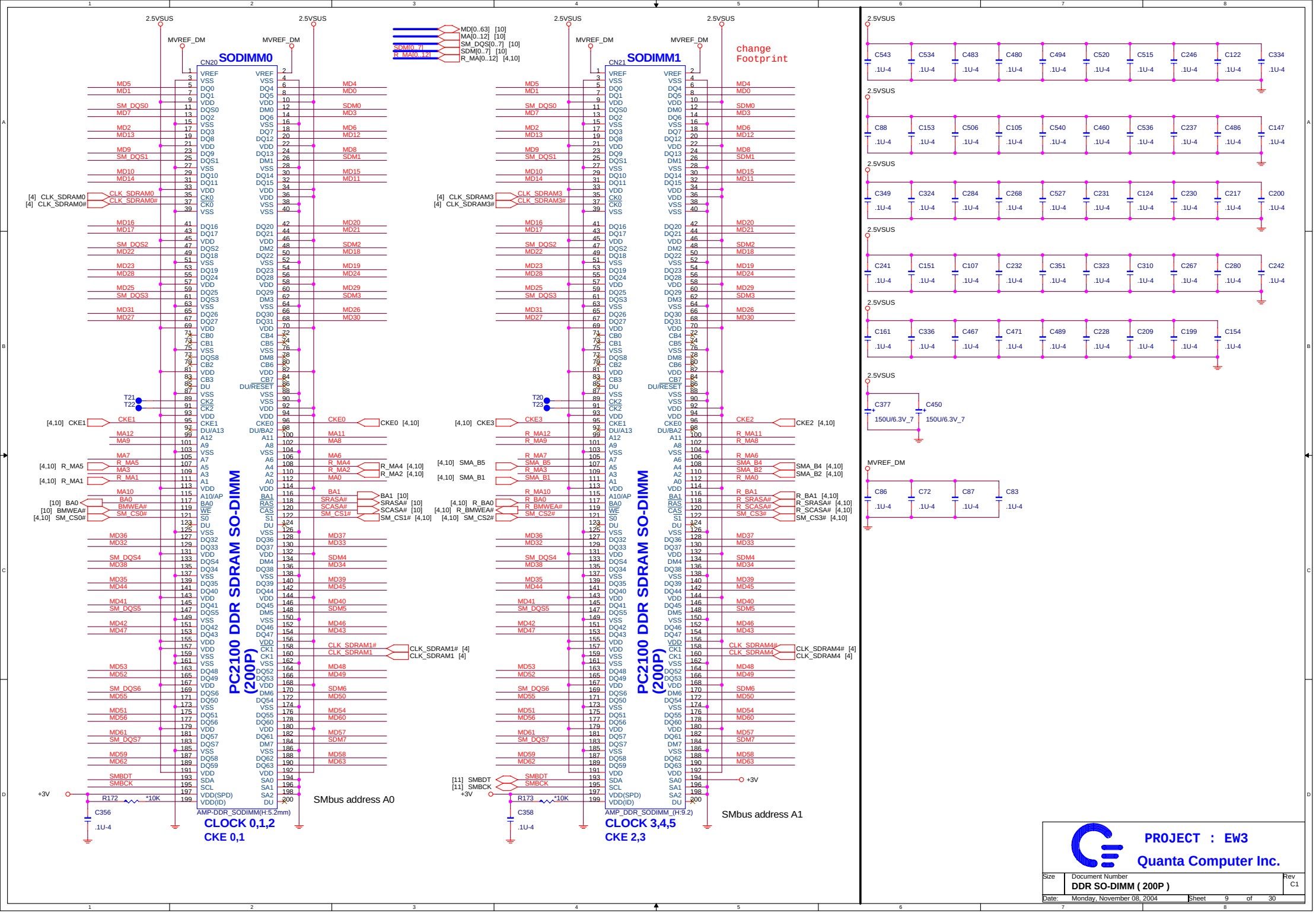
SODIMM0
CN20
PC2100 DDR SDRAM SO-DIMM (200P)
AMP-DDR_SODIMM(H:5.2mm)
CLOCK 0,1,2
CKE 0,1
SMbus address A0
SODIMM1
CN21
change Footprint
AMP_DDR_SODIMM_(H:9.2)
CLOCK 3,4,5
CKE 2,3
SMbus address A1
2.5VSUS
MVREF_DM
C543 C534 C483 C480 C494 C520 C515 C246 C122 C334 .1U-4
C88 C153 C506 C105 C540 C460 C536 C237 C486 C147 .1U-4
C349 C324 C284 C268 C527 C231 C124 C230 C217 C200 .1U-4
C241 C151 C107 C232 C351 C323 C310 C267 C280 C242 .1U-4
C161 C336 C467 C471 C489 C228 C209 C199 C154 .1U-4
C377 150U/6.3V_7
C450 150U/6.3V_7
C86 C72 C87 C83 .1U-4
PROJECT : EW3
Quanta Computer Inc.
Document Number
DDR SO-DIMM (200P)
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SMDDR_VTERM
RN65 8P4R-S-56
MD56 MD57
SM_DQS7 SDM7
MD59 MD58
MD62 MD63
RN66 8P4R-S-56
RN58 8P4R-S-56
MD47 SDM6
MD42 MD54
MD53 MD50
MD52 MD60
RN62 8P4R-S-56
RN54 8P4R-S-56
MD38 MD39
MD44 MD45
MD41 MD40
SM_DQS5 SDM5
RN53 8P4R-S-56
RN10 8P4R-S-56
MD11 MD35
MD10 SM_DQS4
MD14 MD32
MD15 MD36
RN49 8P4R-S-56
RN43 8P4R-S-56
R_MA10 R_BA1
R_BA0 R_SRASA#
R_BMWEA# R_SCASA#
RN44 8P4R-S-56
RN35 8P4R-S-56
CKE3 R_MA6
R_MA12 SMA_B4
R_MA9 SMA_B2
R_MA7 R_MA0
SMA_B4 [4,9]
SMA_B2 [4,9]
RN40 8P4R-S-56
RN26 8P4R-S-56
MD24 R_MA11
MD18 CKE2
MD19 R_MA8
SDM2
RN34 8P4R-S-56
RN29 8P4R-S-56
MD28 MD29
SM_DQS3 SDM3
MD31 MD26
MD27 MD30
RN30 8P4R-S-56
RN27 8P4R-S-56
SM_DQS2 MD37
MD22 MD33
MD23 SDM4
MD25 MD34
RN50 8P4R-S-56
RN6 8P4R-S-56
MD2 MD4
MD13 MD0
MD9 SDM0
SM_DQS1 MD6
RN4 8P4R-S-56
RN3 8P4R-S-56
MD5 MD3
MD1 MD12
SM_DQS0 MD8
MD7 SDM1
RN7 8P4R-S-56
RN57 8P4R-S-56
MD48 SMA_B1
MD49 R_MA3
MD46 MD32
MD43 SMA_B5
SMA_B1 [4,9]
SMA_B5 [4,9]
RN39 8P4R-S-56
RN37 8P4R-S-56
CKE1 SM_CS1#
R_MA4 SM_CS0#
R_MA1
R_MA5
RN45 4P2R-S-56
SM_CS1# [4,9]
SM_CS0# [4,9]
RN15 8P4R-S-56
MD21 SM_CS2#
MD17 SM_CS3#
MD16
MD20
RN47 4P2R-S-56
SM_CS2# [4,9]
SM_CS3# [4,9]
RN63 8P4R-S-56
SM_DQS6 R121 56-4 CKE0
MD55 R124 56-4 R_MA2
MD51
MD61
Damping put BOT,termination put TOP
For terminal R-pack.
SMDDR_VTERM
C314 C308 C193 C243 C335 C162 C235 C311 C258 C134 C89
.1U-4
SMDDR_VTERM
C207 C220 C263 C172 C325 C254 C250 C245 C181 C260 C244
.1U-4
SMDDR_VTERM
C331 C266 C269 C295 C201 C211 C99 C121 C185 C90 C378
.01U-4
150U/6.3V_7
SMDDR_VTERM
C145 C353 C347 C92 C85 C219 C286 C338 C274
.1U-4
SMDDR_VTERM
C224 C129 C321 C239 C350 C125 C287 C278 C114
.1U-4
MD[0..63] MD[0..63] [9]
R_MD[0..63] R_MD[0..63] [4]
MA[0..12] MA[0..12] [9]
R_MA[0..12] R_MA[0..12] [4,9]
SM_DQS[0..7] SM_DQS[0..7] [9]
R_SM_DQS[0..7] R_SM_DQS[0..7] [4]
R_SDM[0..7] R_SDM[0..7] [4]
SDM[0..7] SDM[0..7] [9]
CKE[0..3] CKE[0..3] [4,9]
RN32 8P4R-S-10
RN28 8P4R-S-10
RN25 8P4R-S-10
RN51 8P4R-S-10
RN46 8P4R-S-10
RN68 8P4R-S-10
RN64 8P4R-S-10
RN14 8P4R-S-10
RN61 8P4R-S-10
RN59 8P4R-S-10
RN13 8P4R-S-10
RN8 8P4R-S-10
RN5 8P4R-S-10
RN1 8P4R-S-10
RN56 8P4R-S-10
RN52 8P4R-S-10
RN36 8P4R-S-10
RN33 8P4R-S-10
RN42 8P4R-S-10
[4,9] R_SRASA#
[4,9] R_BMWEA#
[4,9] R_SCASA#
SRASA# [9]
BMWEA# [9]
SCASA# [9]
RN2 4P2R-S-10
RN9 4P2R-S-10
RN22 4P2R-S-10
RN31 4P2R-S-10
RN48 4P2R-S-10
RN55 4P2R-S-10
RN60 4P2R-S-10
RN67 4P2R-S-10
[4,9] R_BA1
[4,9] R_BA0
BA1 [9]
BA0 [9]
RN38 4P2R-S-10
PROJECT : EW3
Quanta Computer Inc.
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DDR TERMINATION
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C1
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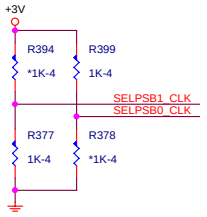
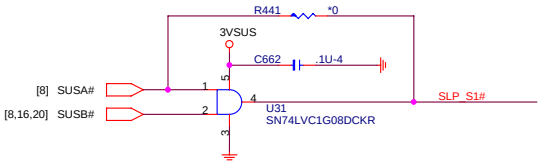
S2	S1	S0	CPU	3V66[0..4]	3V66_5/66IN
1	0	0	66	66IN	66 Input
1	0	1	100	66IN	66 Input
1	1	0	200	66IN	66 Input
1	1	1	133	66IN	66 Input
0	0	0	66	66	66
0	0	1	100	66	66
0	1	0	200	66	66
0	1	1	133	66	66





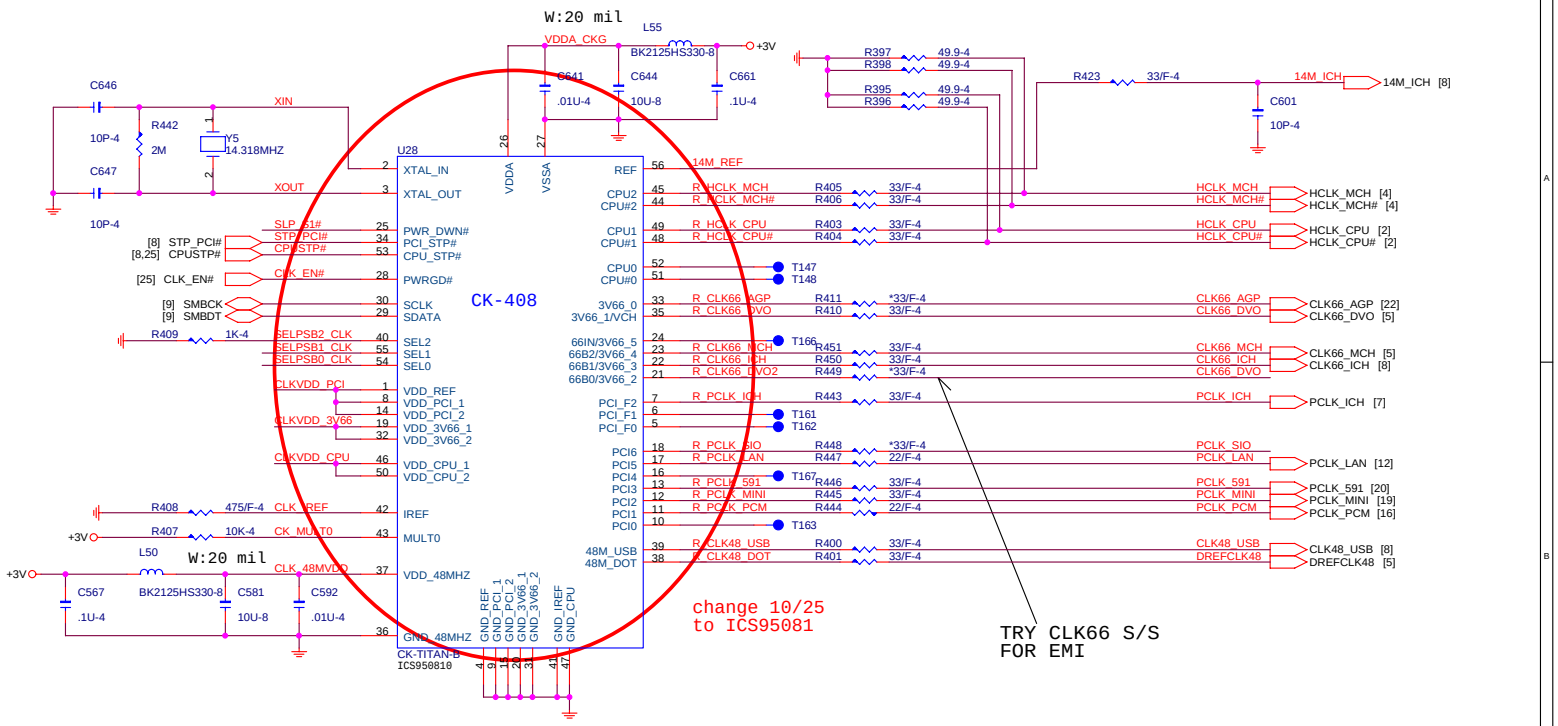
3V66_1/VCH

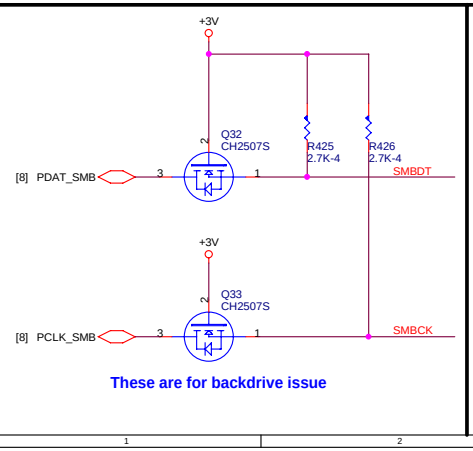
SMBus Byte 0 , Bit 5 = 0	66 MHz	W	S/S
SMBus Byte 0 , Bit 5 = 1	48 MHz	W/O	S/S

Byte 0 , Bit 7 = 0 Disable Spread Spectrum

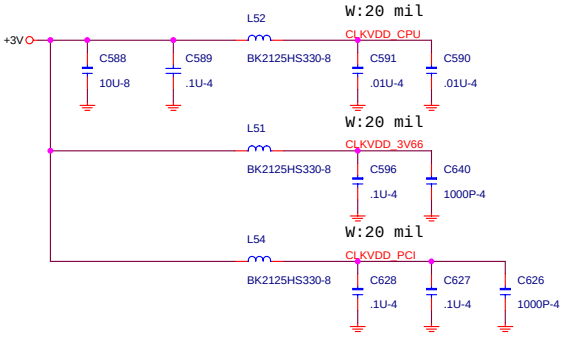
Byte 0 , Bit 7 = 1 Enable Spread Spectrum

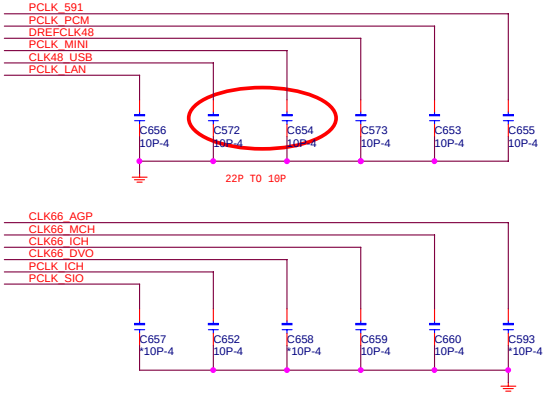
Byte 4 Bit 7	Byte 5 Bit 7	Byte 5 Bit 6	Spread Mode	Spread %
SS2	SS1	SS0		
0	0	0	DOWN	+0.00 , -0.25
0	0	1	DOWN	+0.00 , -0.50
0	1	0	DOWN	+0.00 , -0.75
0	1	1	DOWN	+0.00 , -1.00
1	0	0	CENTER	+0.13 , -0.13
1	0	1	CENTER	+0.25 , -0.25
1	1	0	CENTER	+0.37 , -0.37
1	1	1	CENTER	+0.50 , -1.50

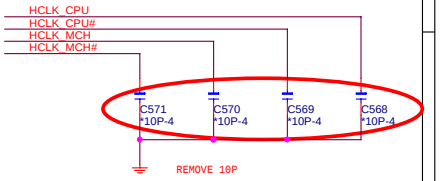




These are for backdrive issue







PROJECT : EW3

Quanta Computer Inc.

Size	Document Number	Rev
	CLOCK GENERATION	C1
Date: Monday, November 08, 2004	Sheet 11 of 30	

ID Select : AD18
Interrupt Pin : INTD#
Request Indicate : REQ0#
Grant Indicate : GNT0#

RTL8110SBL(1G) --- mount R393,R389
RTL8100CL(10/100) --- mount R387,R388

U29

RTL8110SBL/8100CL

RTL8110SBL
VDD33---+3.3V DIGITAL
AVDDH------+3.3V ANALOG
AVDDL-----+2.5V ANALOG
DVDD-----+1.2V DIGITAL
DVDD_A----+1.2V ANALOG

RTL8100CL
VDD33---+3.3V DIGITAL
AVDDL-----+3.3V ANALOG
DVDD-----+2.5V DIGITAL
AVDDH------+2.5V ANALOG

RTL8110SBL(1G)--mount 2.49K
RTL8100CL(10/100)--mount 5.6K

RTL8110SBL(1G)--have mount
RTL8100CL(10/100)--without mount

Near Lan chipset

RTL8110SBL(1G)--without mount
RTL8100CL(10/100)--have mount

RTL8110SBL(1G)--have mount
RTL8100CL(10/100)--without mount

TRANSFORMER GSN5008 FOR GIGA-LAN

U18
*GSN5008

C911 .1u for 10/100
.01u for Giga

RTL8110SBL(1G)--have mount
RTL8100CL(10/100)--without mount

RTL8100CL(10/100)--have mount
Near RJ45 connector.

B PCB : Ad for Toshiba
request --- 10/13

C PCB : Near Lan connector
chznge to TOP ---- 11/5

TRANSFORMER NS681686 FOR 10/100

U19
NS681686

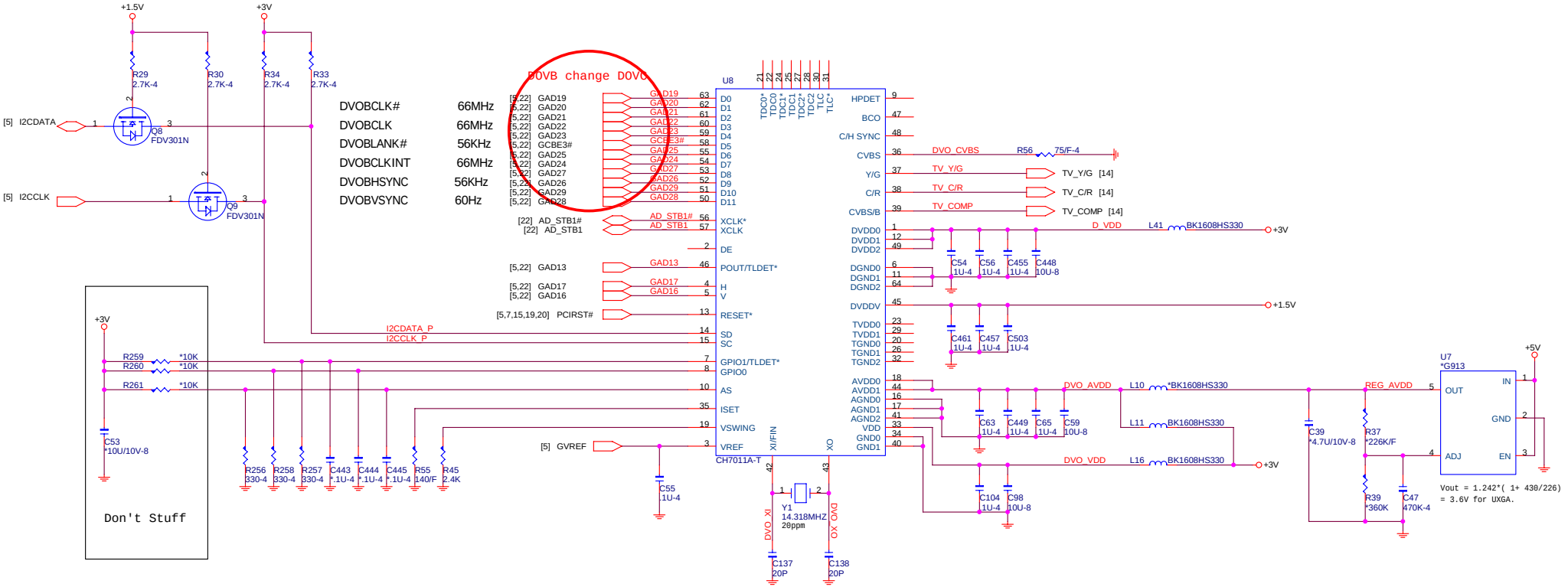
CN1
FOXCONN_JM34F23-P2053

CN2
ACES-MDC

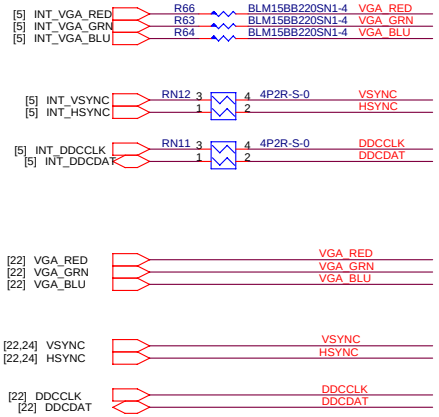
U30
93C46-3GR

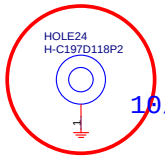
PROJECT : EW3
Quanta Computer Inc.

Size	Document Number	Rev
	LAN RTL8110SBL/8100CL	C1
Date: Monday, November 08, 2004	Sheet 12 of 30	

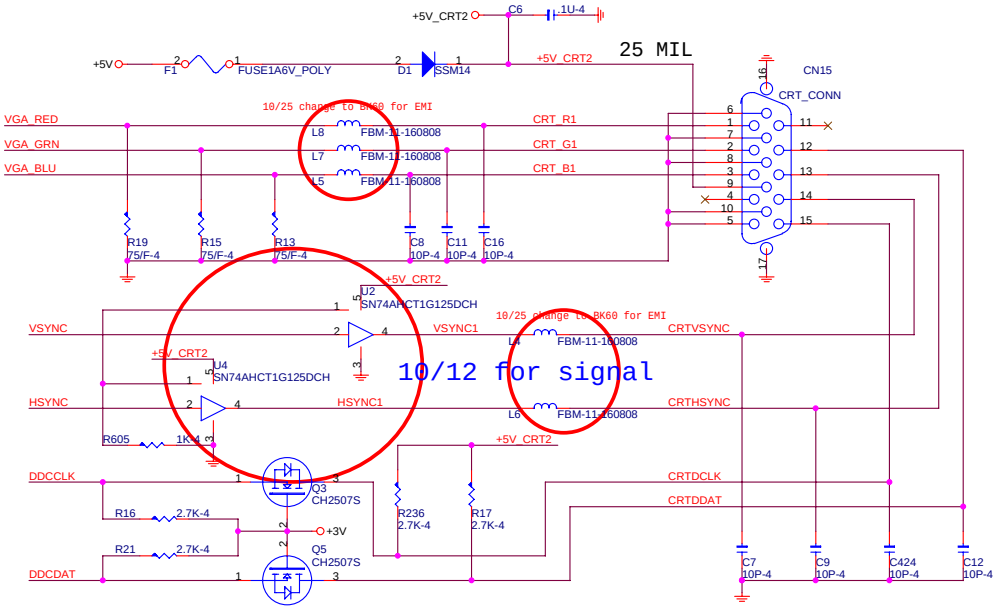

+1.5V
+3V
R29 2.7K-4
R30 2.7K-4
R34 2.7K-4
R33 2.7K-4
[5] I2CDATA
[5] I2CCLK
Q8 FDV301N
Q9 FDV301N
DVOB change DVO
DVOBCLK# 66MHz
DVOBCLK 66MHz
DVOBLANK# 56KHz
DVOBCLKINT 66MHz
DVOBHSYNC 56KHz
DVOBVSYNC 60Hz
U8
CH7011A-T
I2CDATA_P
I2CCLK_P
[5] GVREF
[22] AD_STB1#
[22] AD_STB1
[5,22] GAD13
[5,22] GAD17
[5,22] GAD16
[5,7,15,19,20] PCIRST#
DVO_CVBS
TV_Y/G [14]
TV_C/R [14]
TV_COMP [14]
D_VDD
L41 BK1608HS330
+3V
+1.5V
DVO_AVDD
DVO_VDD
L10 *BK1608HS330
L11 BK1608HS330
L16 BK1608HS330
REG_AVDD
U7 *G913
+5V
Vout = 1.242*(1+ 430/226)
= 3.6V for UXGA.
Y1 14.318MHZ 20ppm
Don't Stuff
PROJECT : EW3
Quanta Computer Inc.
DVO CH7011A & RJ45-11 CON
Monday, November 08, 2004
Sheet 13 of 30

CRT PORT

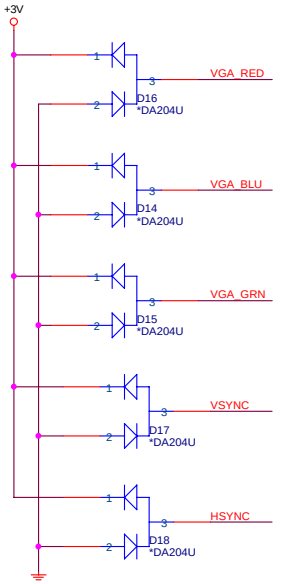




10/13 for ME



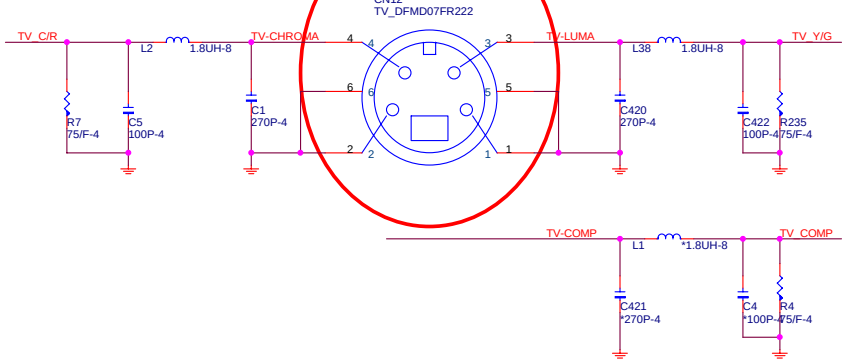
10/12 for signal

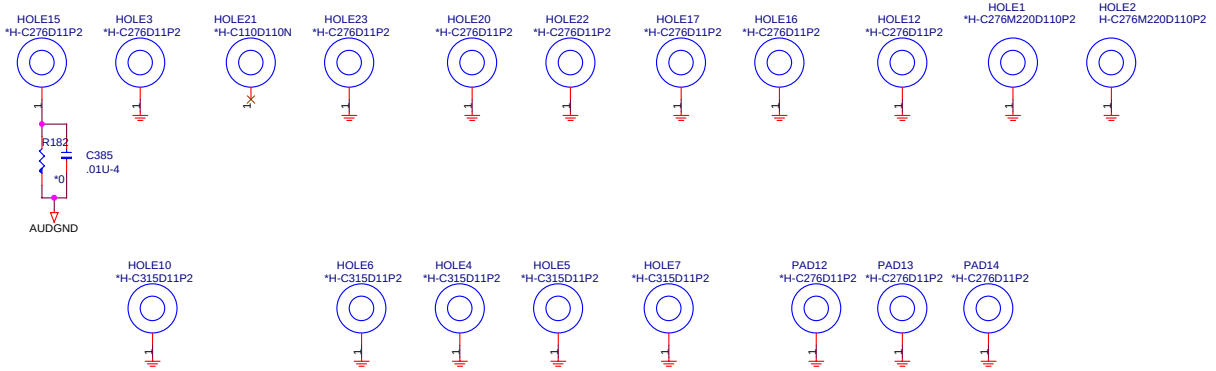


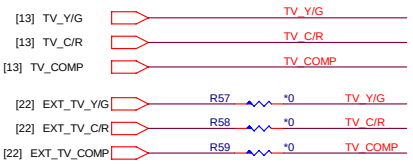
FOR M/B HOLE

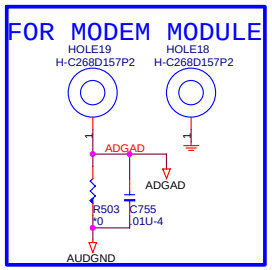
10/8 Spec change

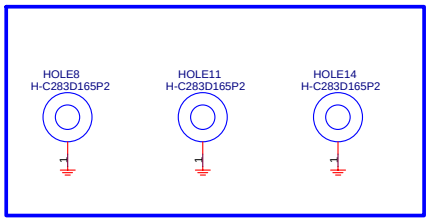
S-VIDEO



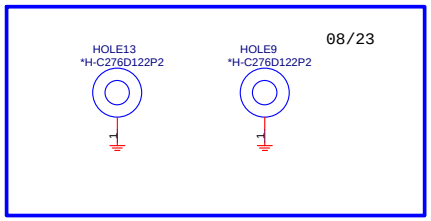








FOR CPU HEATSINK



NEAR NORTHBRIDGE

PROJECT : EW3

Quanta Computer Inc.

Size	Document Number	Rev
	CRT & HOLES	C1
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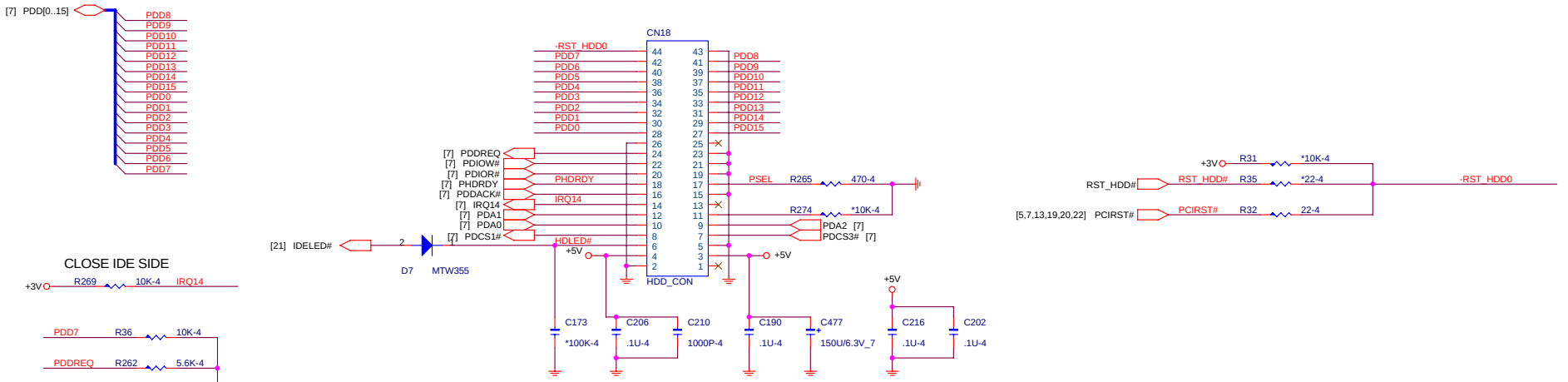
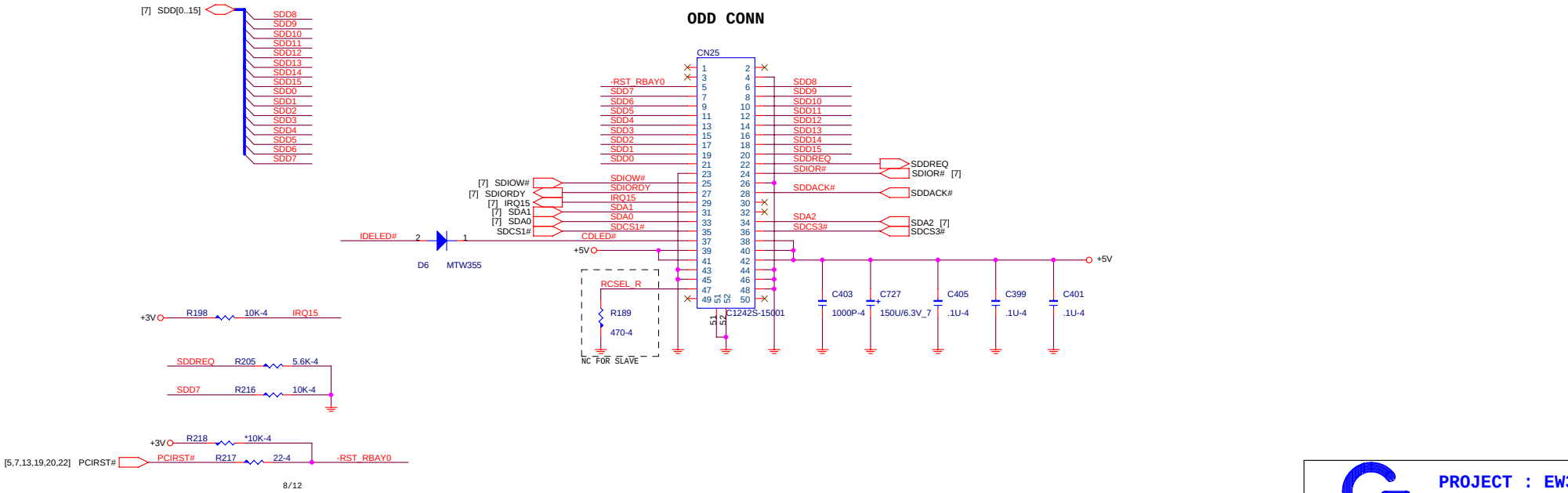
HDD CONN



ODD CONN



8/12

PROJECT : EW3		
Quanta Computer Inc.		
Size	Document Number: HDD & CDROM	Rev: C1
Date: Monday, November 08, 2004	Sheet 15 of 30	

ID Select : AD17
Interrupt Pin : INTE#
Request Indicate : REQ3#
Grant Indicate : GNT3#

CARDBUS SLOT

U36
PCI1410A

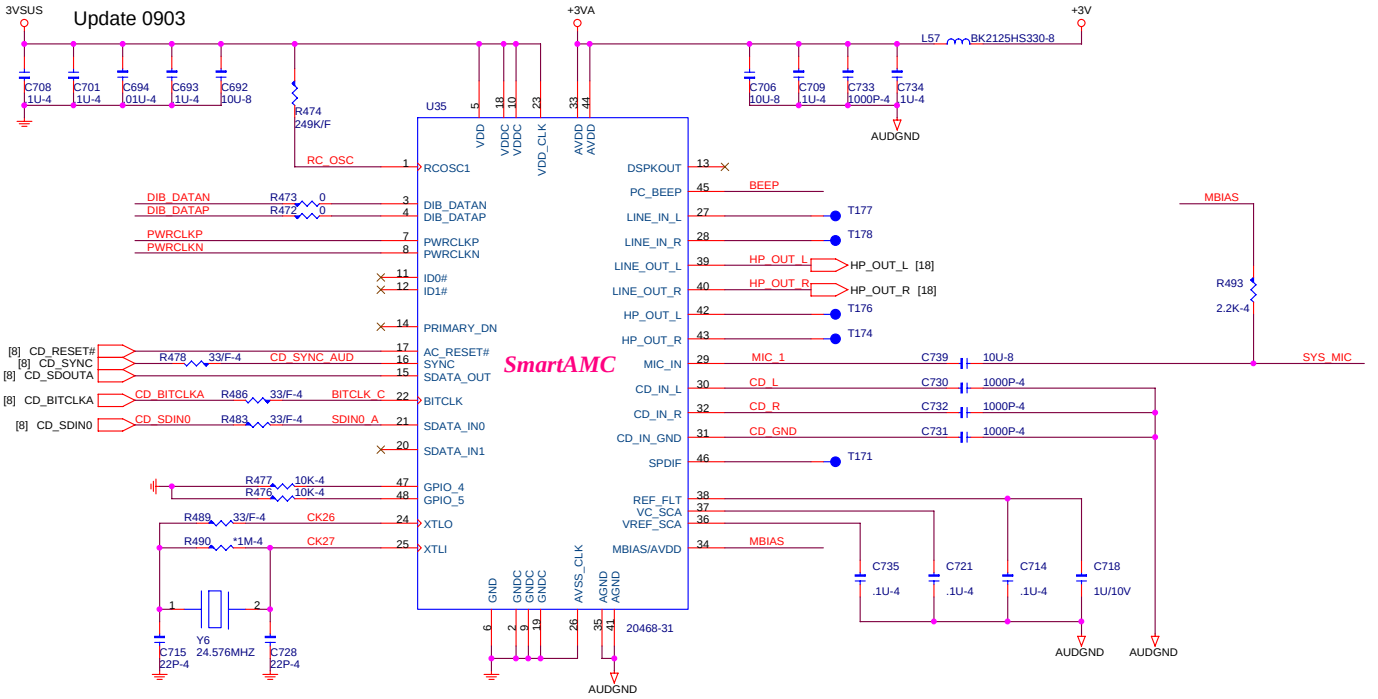
U34
TPS2211A

Near TPS2211A

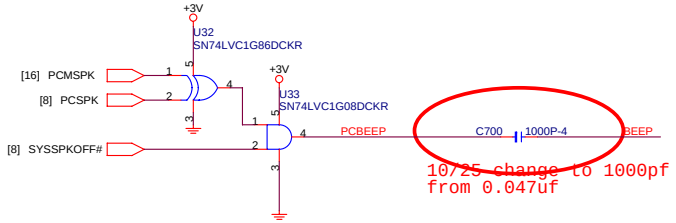
Near Chipset

Near Slot

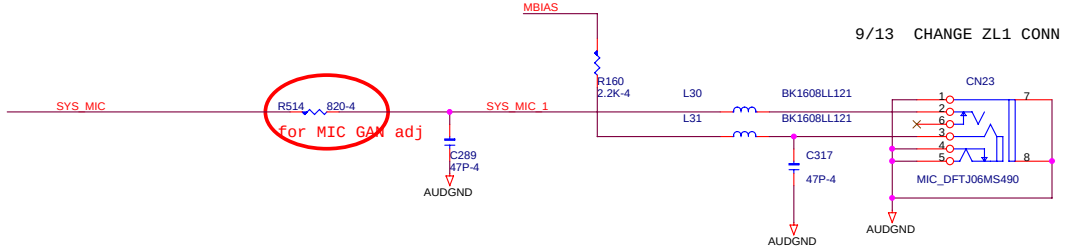
delay 10ms at least



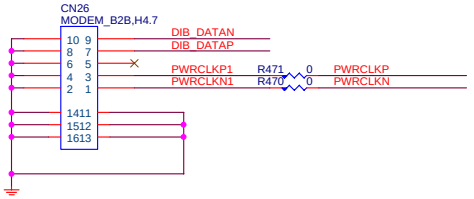
BEEP



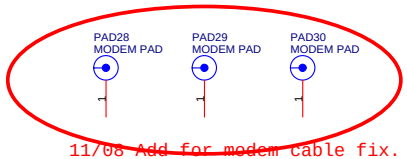
MIC



MODEM



9/3 ADD MODEM Connect

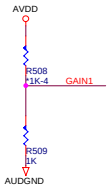


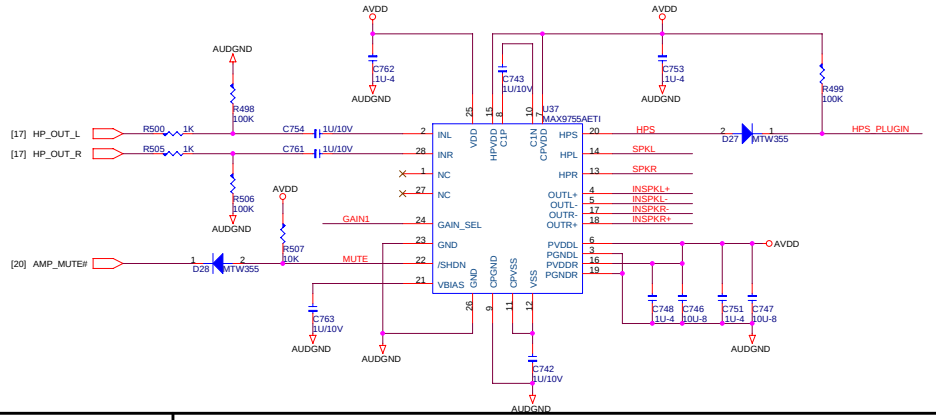
PROJECT : EW3

Quanta Computer Inc.

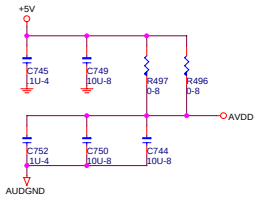
Size	Document Number	Rev
	CODEC & LINE IN & MIC	C1
Date: Monday, November 08, 2004	Sheet 17 of 30	

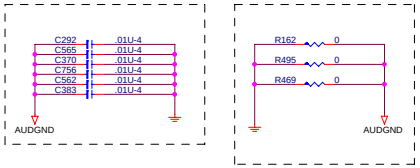
GAIN1	SPKR MODE	HP MODE
0	10.5	3
1	9	0

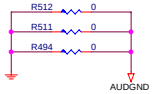




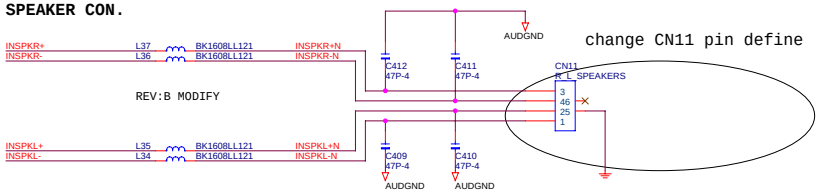
AMP POWER





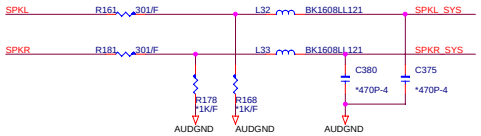


SPEAKER CON.



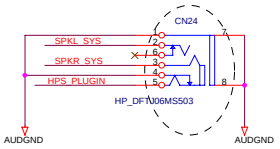
change CN11 pin define

LINE-OUT



9/13 CHANGE ZL1 CONN

LINE OUT



PROJECT : EW3

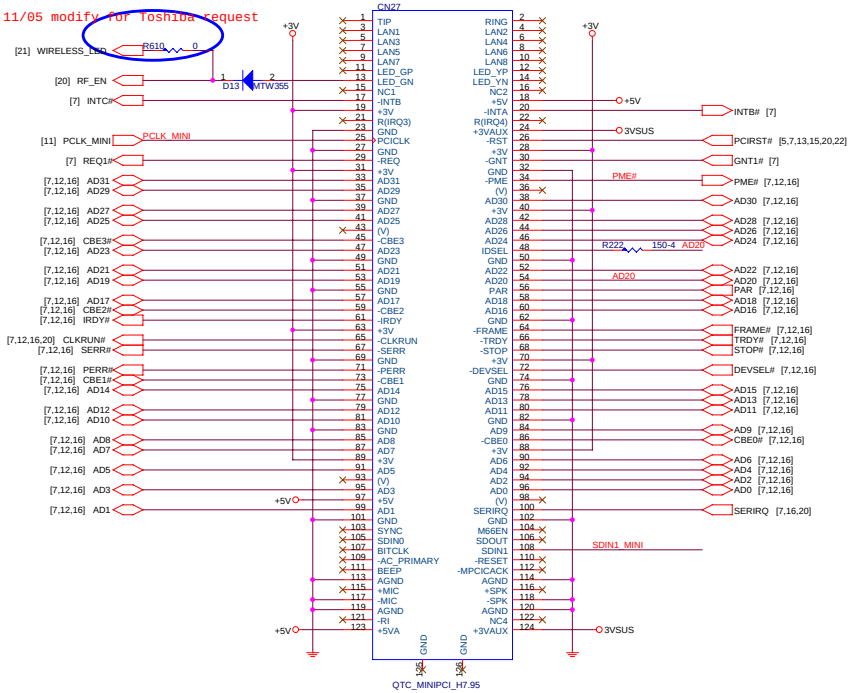
Quanta Computer Inc.

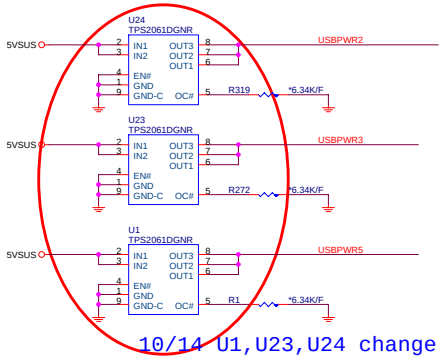
Size	Document Number	Rev
	AUDIO AMP	C1
Date: Monday, November 08, 2004	Sheet 18 of 30	

ID Select : AD20
Interrupt Pin : INTB# , INTC#
Request Indicate : REQ1#
Grant Indicate : GNT1#

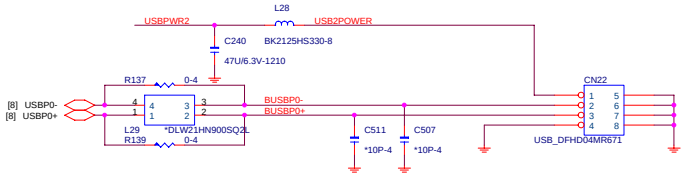
MINI-PCI

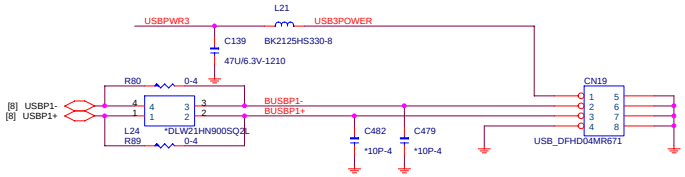
11/05 modify for Toshiba request

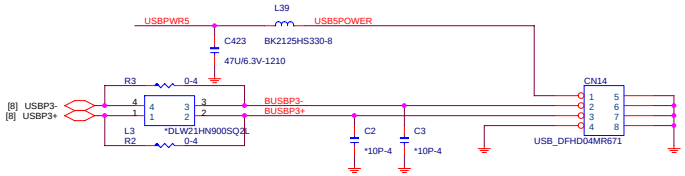


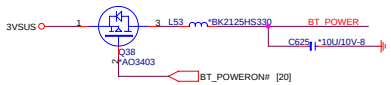


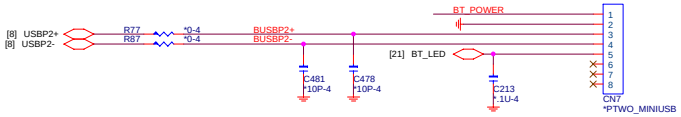
10/14 U1,U23,U24 change to TPS2061.











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	MINI PCI,USB	C1
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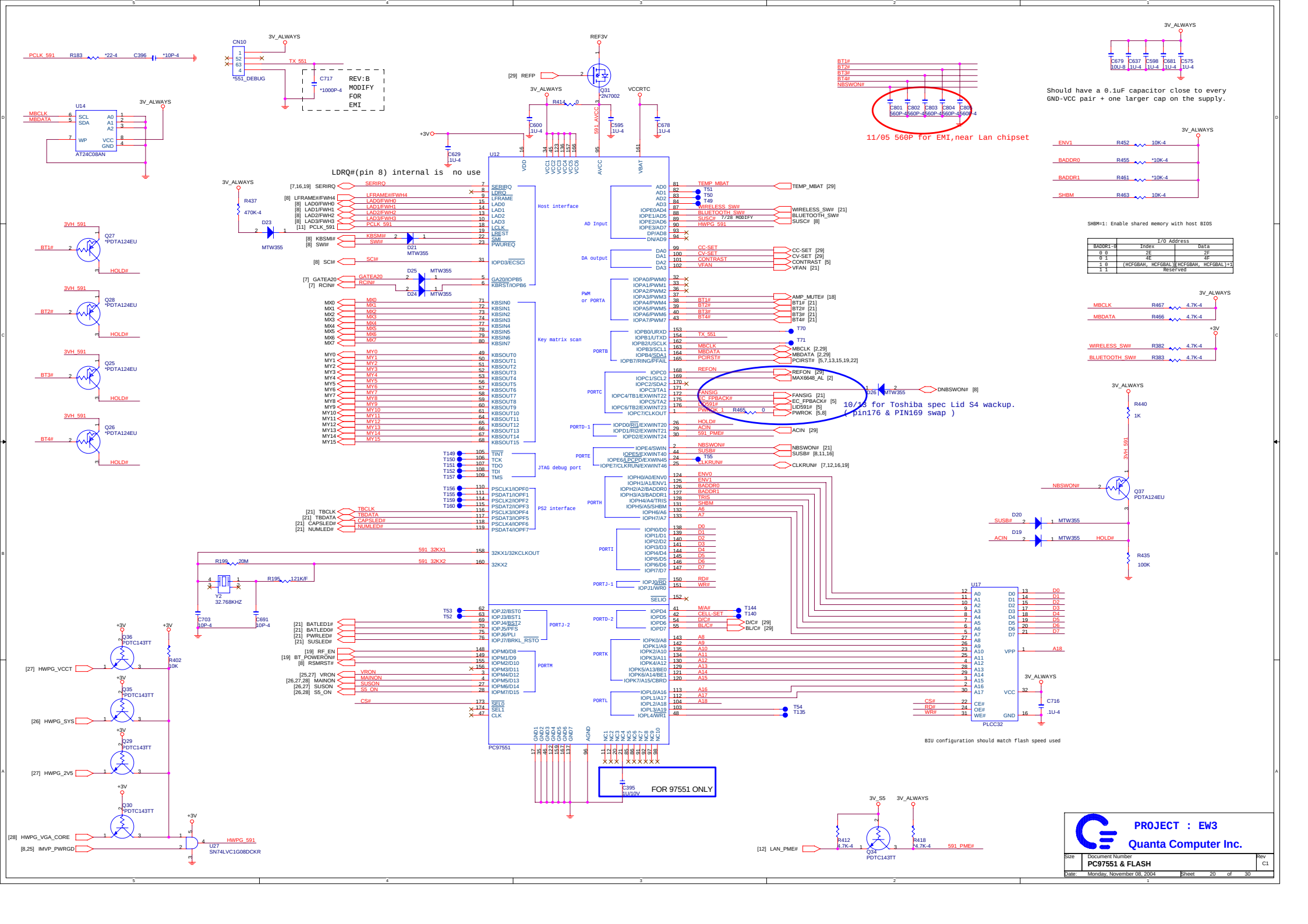
LDRQ#(pin 8) internal is no use
REV:B MODIFY FOR EMI
11/05 560P for EMI,near Lan chipset
Should have a 0.1uF capacitor close to every GND-VCC pair + one larger cap on the supply.
10/13 for Toshiba spec Lid S4 wackup. (pin176 & PIN169 swap)
FOR 97551 ONLY
SHBM=1: Enable shared memory with host BIOS
I/O Address
BADDR1-0 | Index | Data
0 0 | 2E | 2F
0 1 | 4E | 4F
1 0 | (HCFGBAH, HCFGBAL)(HCFGBAH, HCFGBAL)+1
1 1 | Reserved
BIU configuration should match flash speed used
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PC97551 & FLASH
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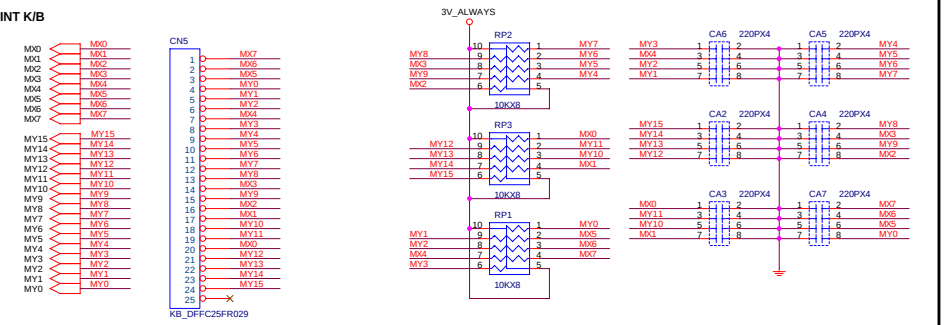
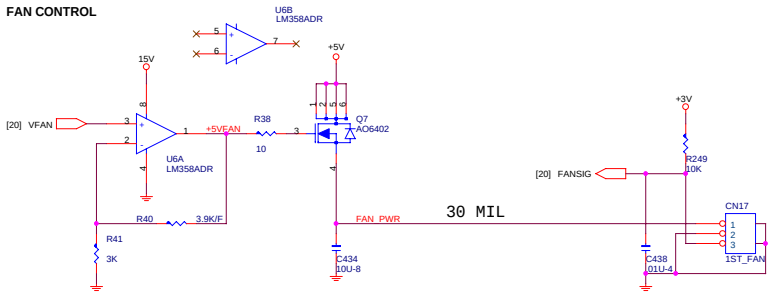
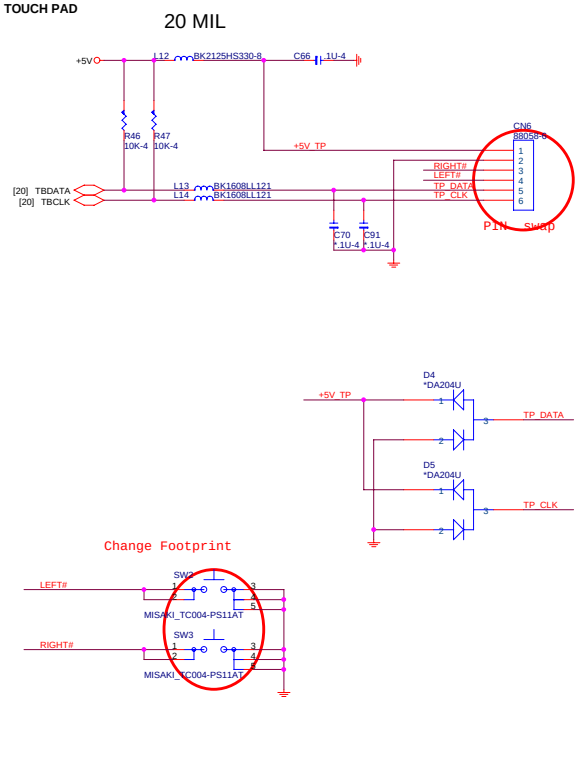
INT K/B



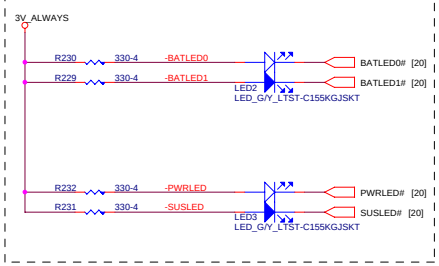
FAN CONTROL

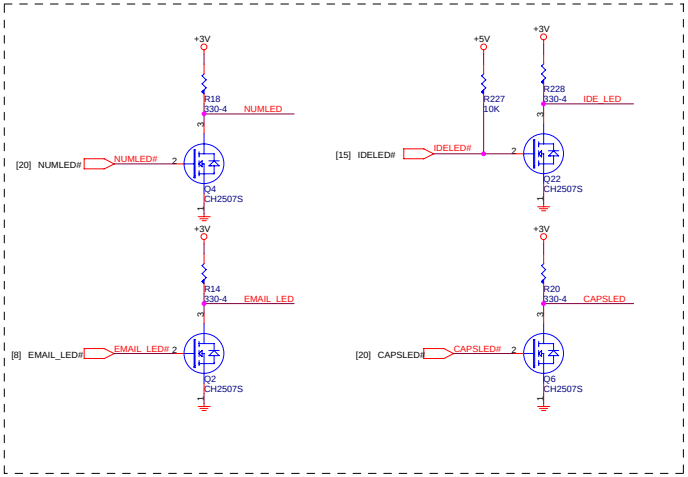


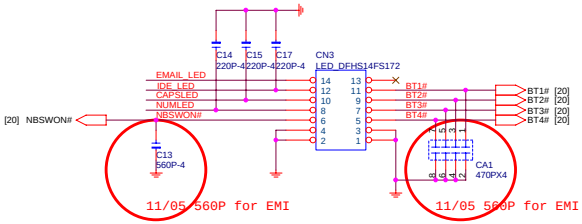
TOUCH PAD

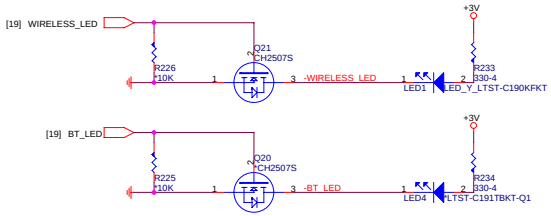


SWITCH









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Size	Document Number	Rev
	T/P,FAN,SWITCH,LED,K/B	C1
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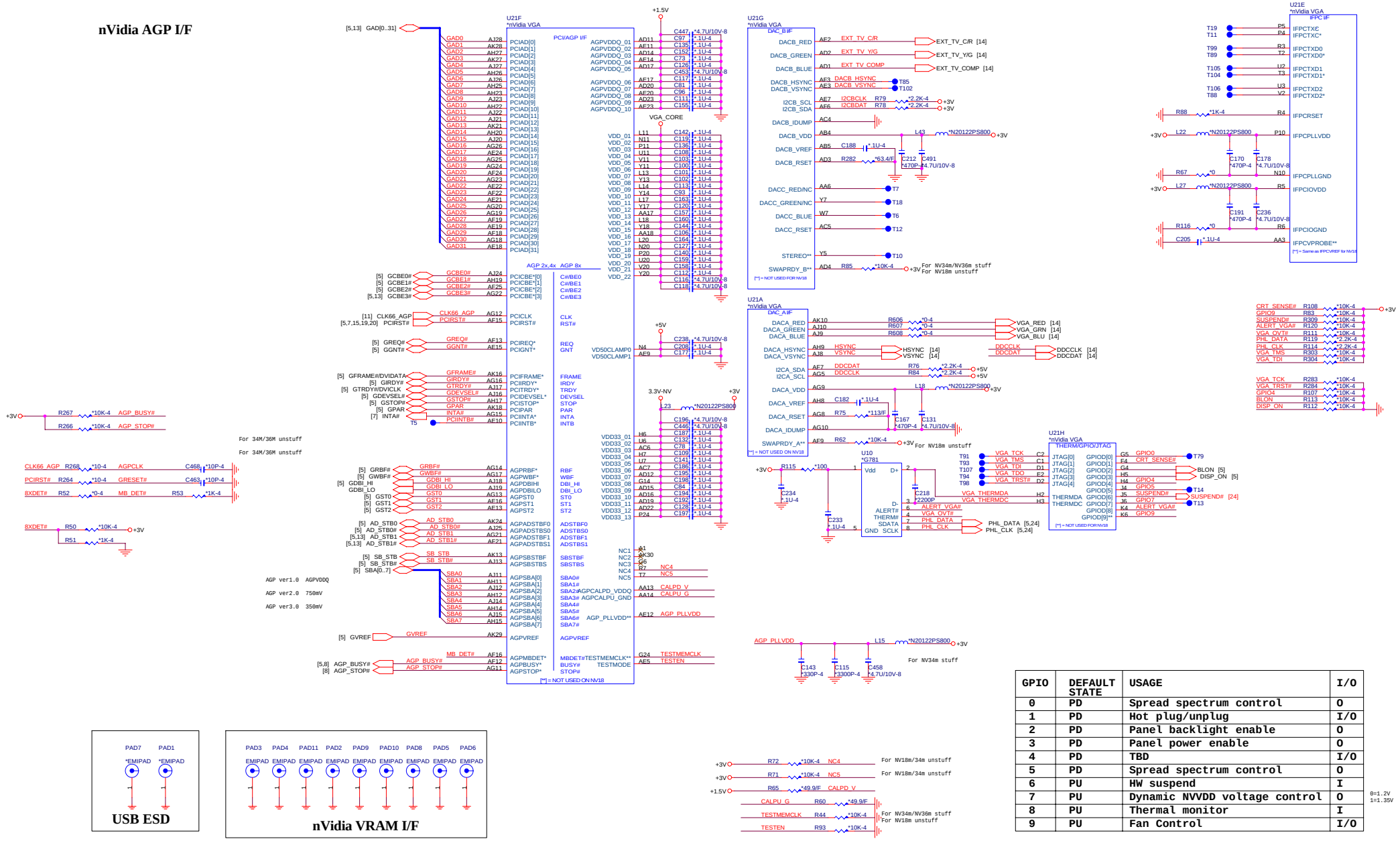
nVidia AGP I/F



GPIO	DEFAULT STATE	USAGE	I/O
0	PD	Spread spectrum control	O
1	PD	Hot plug/unplug	I/O
2	PD	Panel backlight enable	O
3	PD	Panel power enable	O
4	PD	TBD	I/O
5	PD	Spread spectrum control	O
6	PU	HW suspend	I
7	PU	Dynamic NVVDD voltage control	O
8	PU	Thermal monitor	I
9	PU	Fan Control	I/O

0=1.2V
1=1.35V

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Quanta Computer Inc.

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	nVidia AGP I/F	C1
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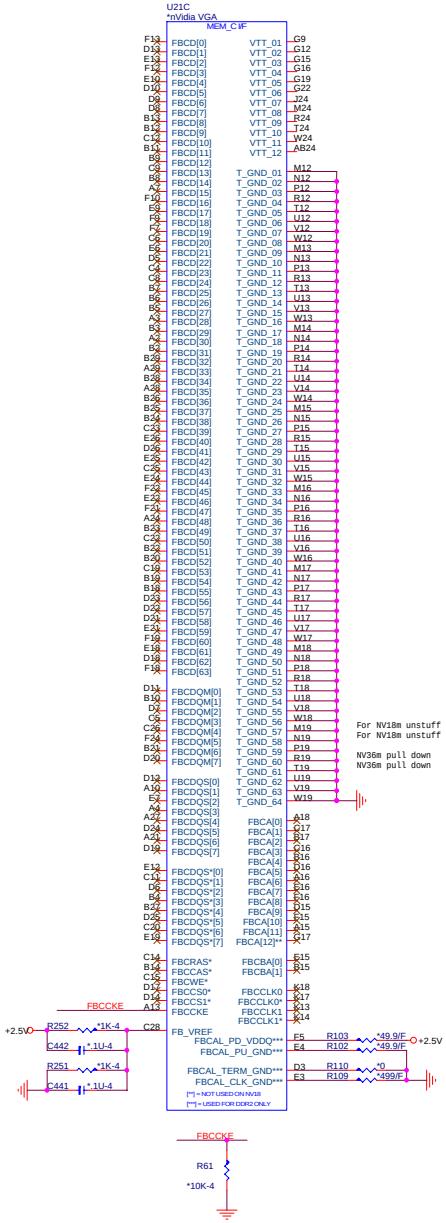
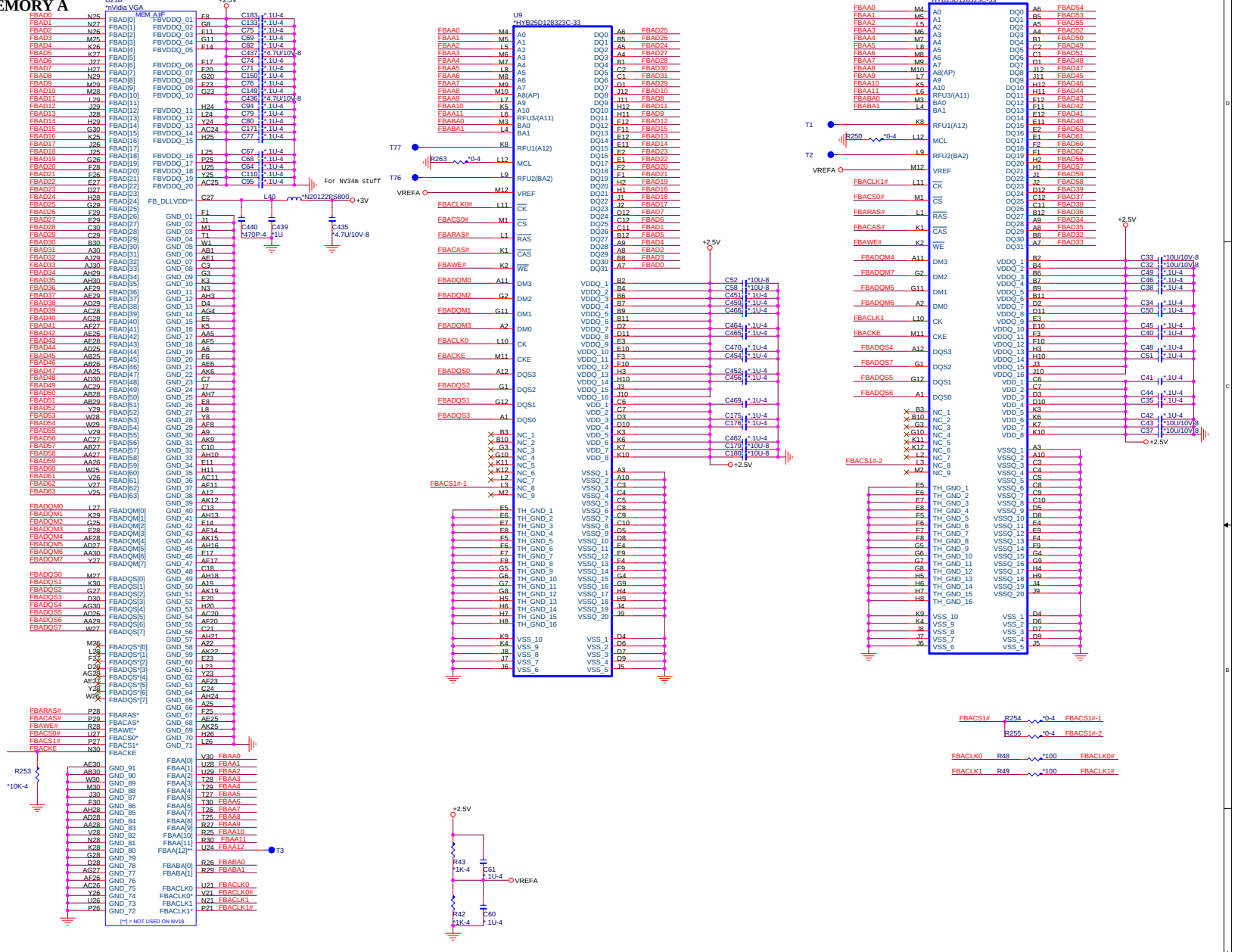
nVidia MEMORY B



nVidia MEMORY A



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	nVidia MEMORY	C1
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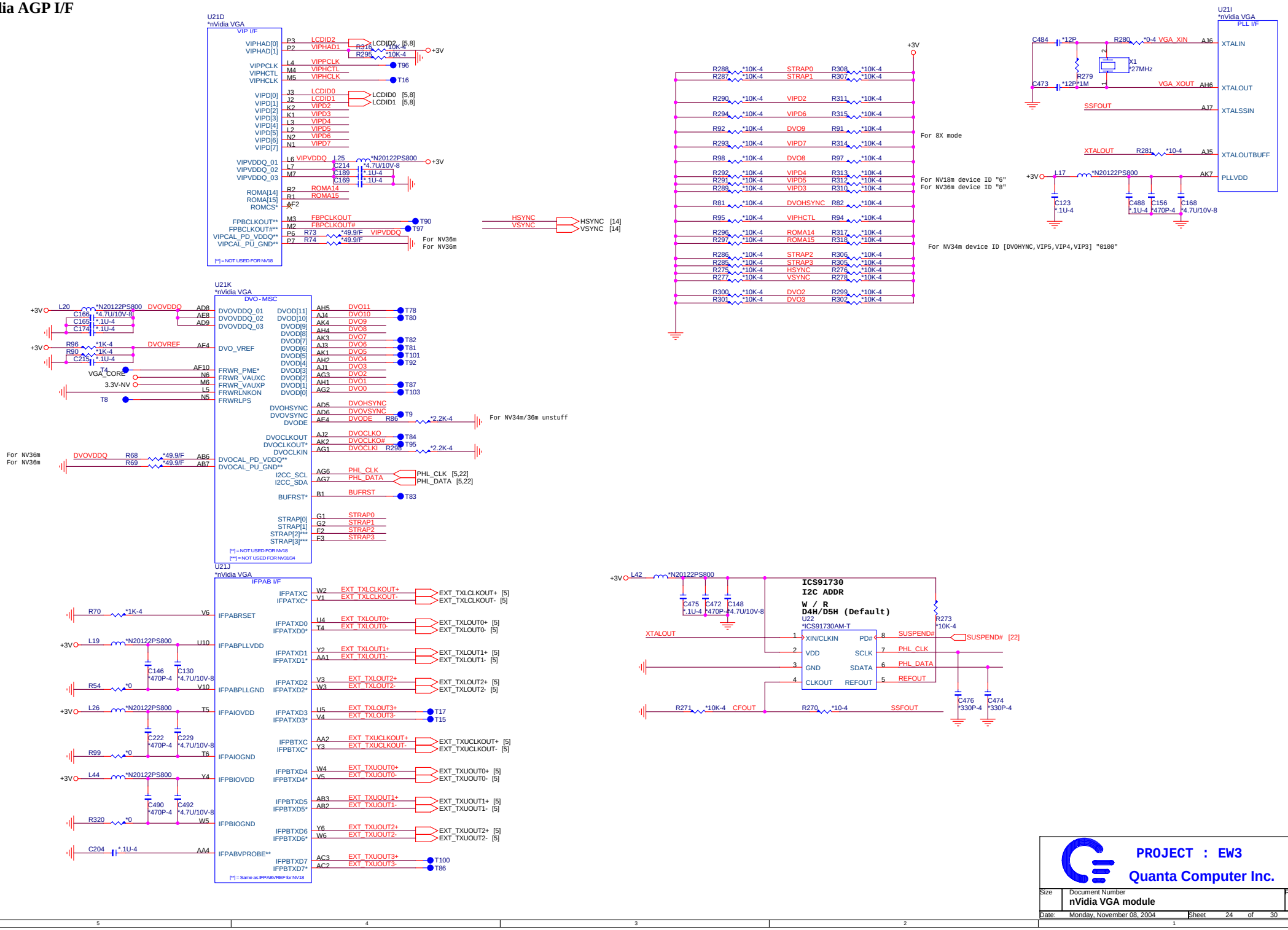
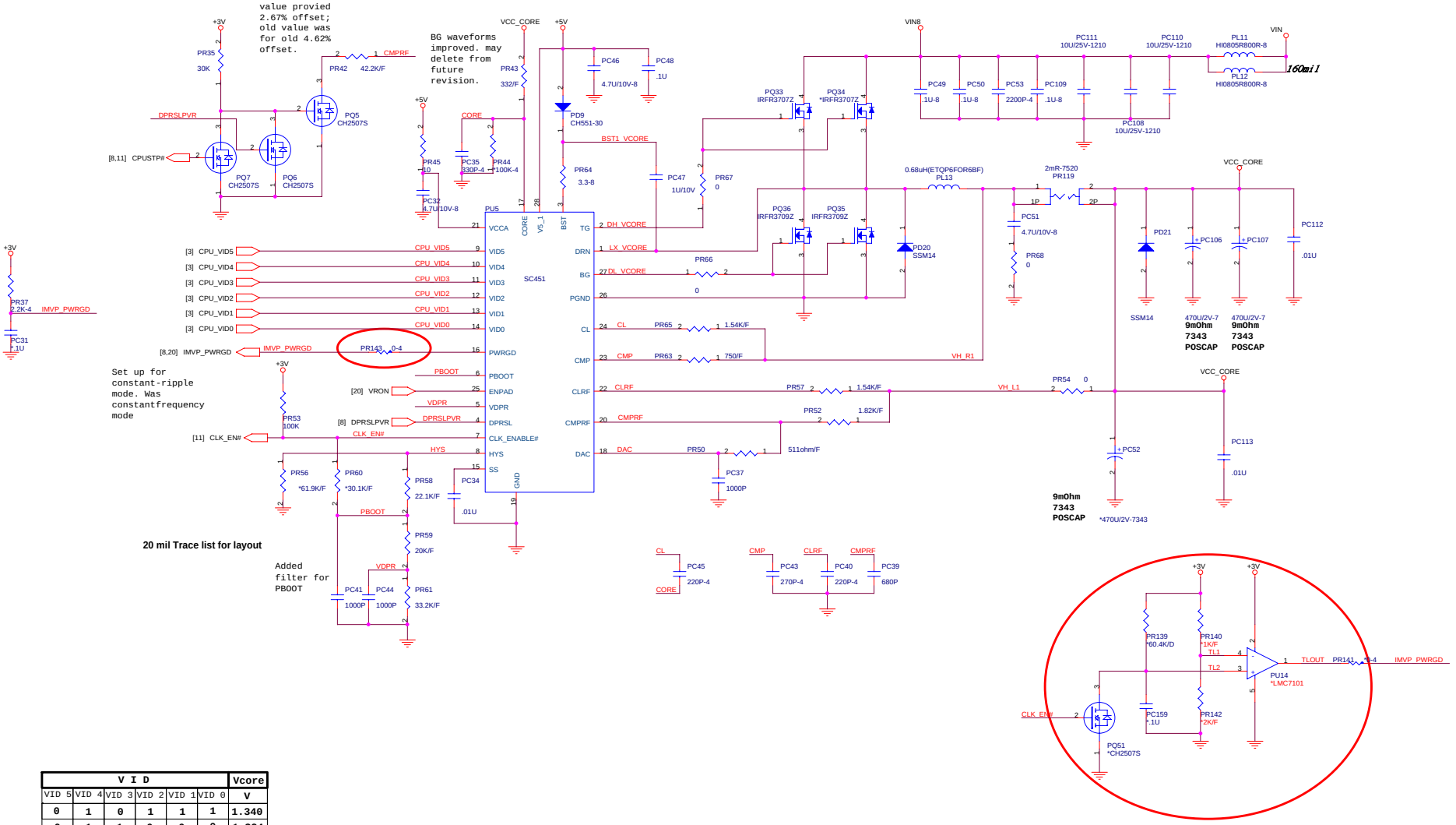
nVidia AGP I/F





V I D						Vcore
VID 5	VID 4	VID 3	VID 2	VID 1	VID 0	V
0	1	0	1	1	1	1.340
0	1	1	0	0	0	1.324
0	1	1	0	1	0	1.292
0	1	1	1	0	0	1.260
0	1	1	1	0	1	1.244
0	1	1	1	1	1	1.212
1	0	0	0	0	1	1.180
1	0	0	0	1	1	1.148
1	0	0	1	1	0	1.100
1	0	1	0	0	1	1.052
1	0	1	0	1	1	1.020
1	0	1	1	1	0	0.972
1	1	0	0	0	0	0.940

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Size	Document Number	Rev
	CPU CORE (SC451)	C1
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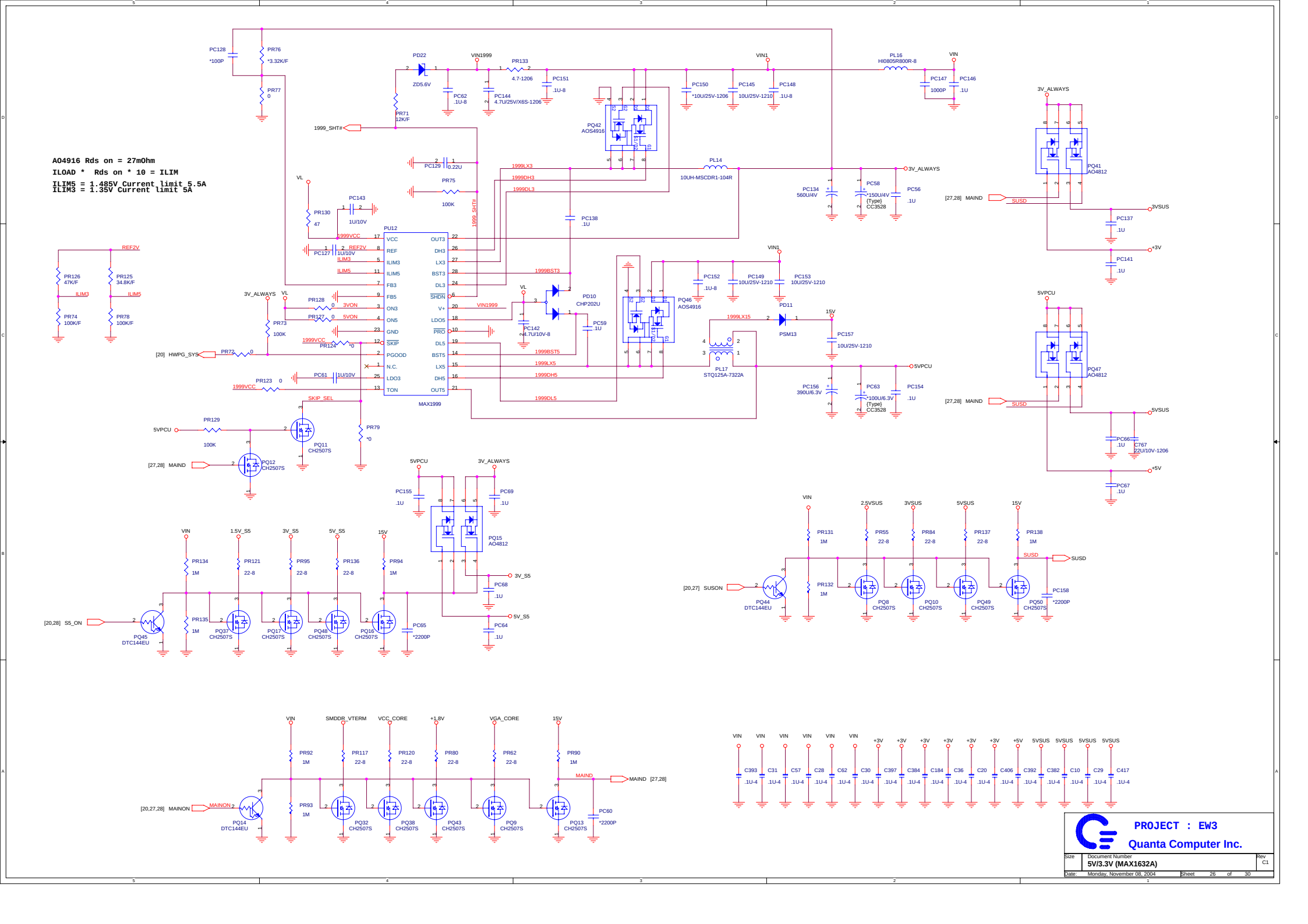
AO4916 Rds on = 27mOhm
ILOAD * Rds on * 10 = ILIM
ILIM5 = 1.485V Current limit 5.5A
ILIM3 = 1.35V Current limit 5A
MAX1999
PU12
PQ42 AOS4916
PQ46 AOS4916
PQ41 AO4812
PQ47 AO4812
PQ15 AO4812
PL14 10UH-MSCDR1-104R
PL16 HI0805R800R-8
PL17 STQ125A-7322A
PD10 CHP202U
PD11 PSM13
PD22 ZD5.6V
PQ11 CH2507S
PQ12 CH2507S
PQ44 DTC144EU
PQ45 DTC144EU
PQ14 DTC144EU
PQ8 CH2507S
PQ9 CH2507S
PQ10 CH2507S
PQ13 CH2507S
PQ16 CH2507S
PQ17 CH2507S
PQ32 CH2507S
PQ37 CH2507S
PQ38 CH2507S
PQ43 CH2507S
PQ48 CH2507S
PQ49 CH2507S
PQ50 CH2507S
1999_SHT#
1999VCC
1999LX3
1999DH3
1999DL3
1999BST3
1999LX15
1999BST5
1999LX5
1999DH5
1999DL5
VIN1999
SKIP_SEL
ILIM3
ILIM5
REF2V
3V_ALWAYS
5VPCU
3VSUS
5VSUS
+3V
+5V
15V
SUSD
MAIND
SUSON
S5_ON
MAINON
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5V/3.3V (MAX1632A)
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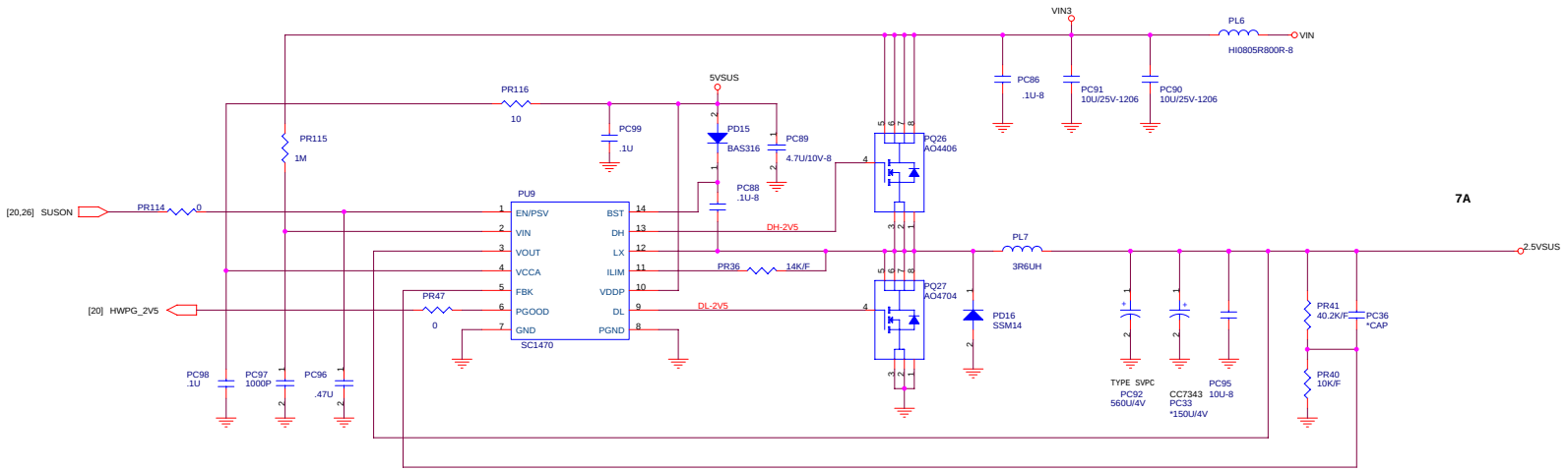

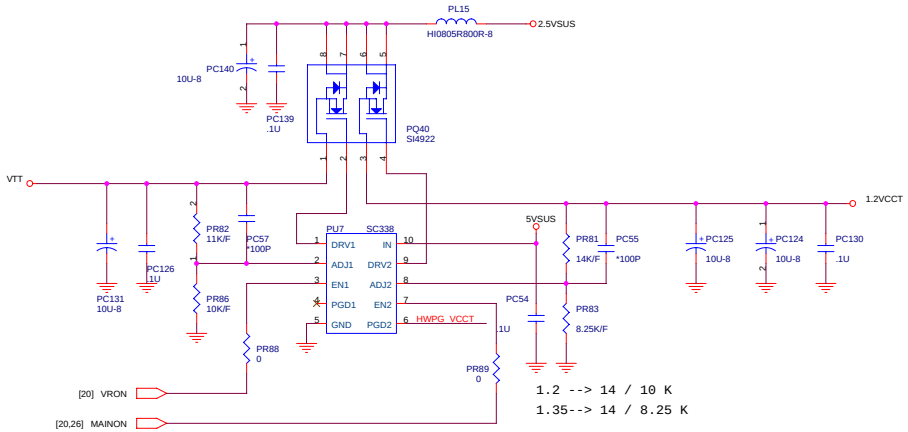

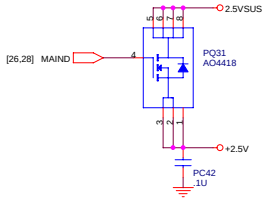

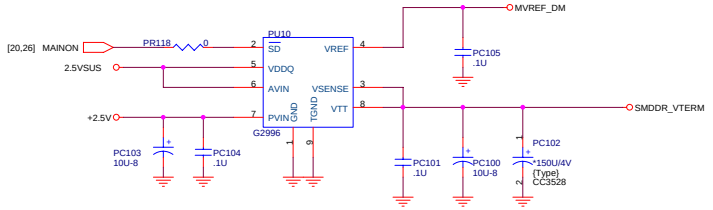

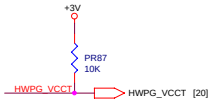

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Size	Document Number	Rev
	2.5VSUS / +1.25TERM	C1
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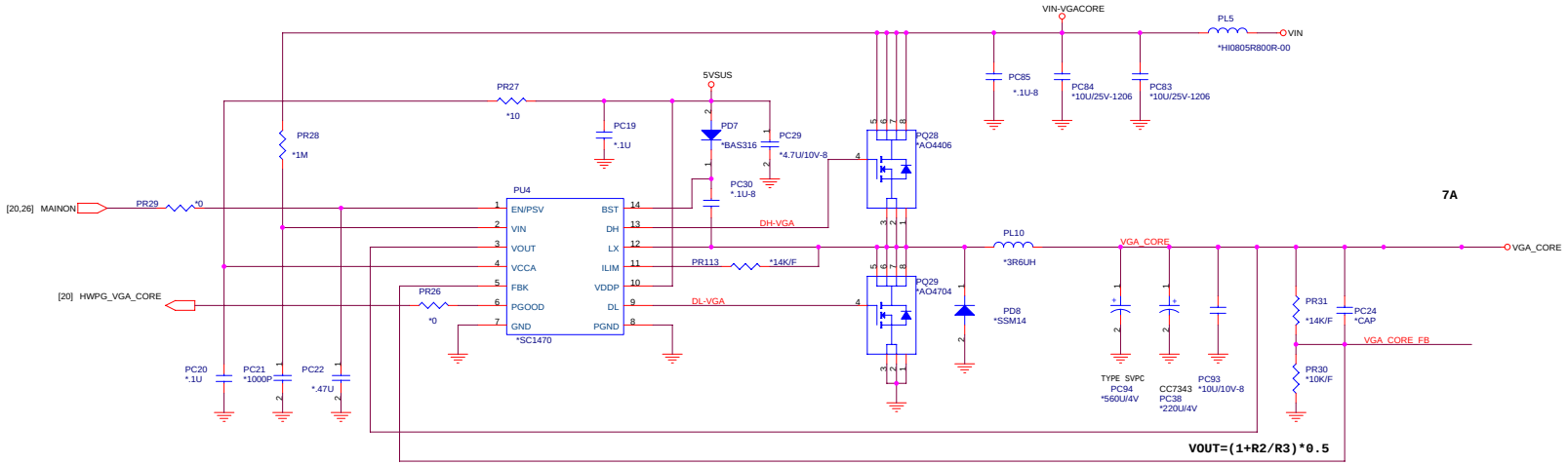

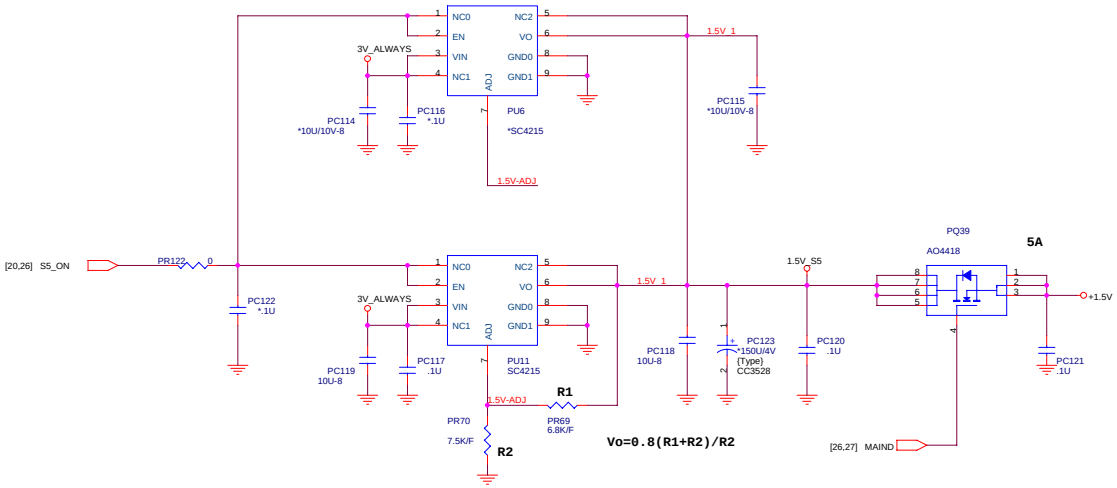

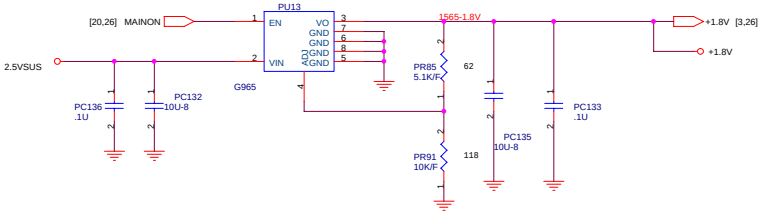

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	+1.5V / CPUIO	C1
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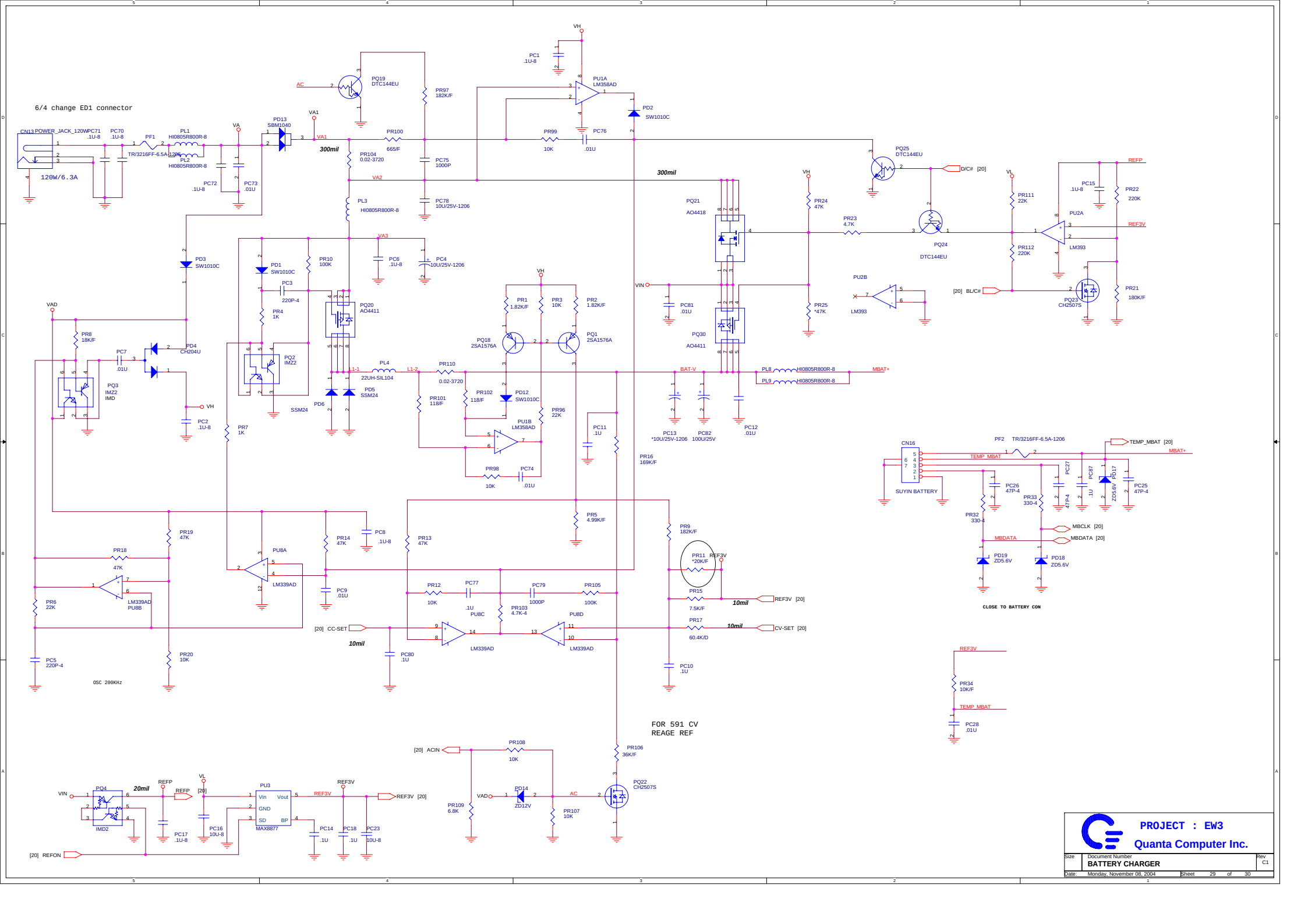

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Quanta Computer Inc.		
Size	Document Number: BATTERY CHARGER	Rev: C1
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DATE_VER.	MODIFIED BY	CHANGE LIST
09/08_REVA1		First Version
09/14_REVA2	for Toshiba spec change for Toshiba spec change for Toshiba spec change	(1) Page 21 del buletooth function switch. (2) Page 21 update led circuit. (3) Add RTC clear jump.
09/17_REVA3	for Toshiba spec change for Toshiba spec change for Toshiba spec change	(1) G781 change to ADM1032AR. (2) THER_OVT# net change to 1999_SHT#. (3) USB Port current change to 1A.
09/21_REVA4	for Toshiba change for Toshiba add	(1) GND_LAN_CHASIS change to GND. (2) MIC JACK add net to MIBIAS.
10/06_REVB1	EE design issue ME issue EE design issue EE design issue EE design issue EE design issue EE design issue MIC gain adj ME issue Power design issue	(1) Page5 & Page13 change CH7011A DVO source to DVOC from DVOB, R148 & R145 mount 1K, R140 change to 40.2 Ohm from 40.2K Ohm. (2) Page5 CN4 change footprint & swap pin. (3) Page8 change USB port singal to USB0~3 from USB2~5. (4) page8 SW4 pin1 & pin3 swap. (5) Page12 RJ45&RJ11 connector footprint change. (6) Page12 Y3 footprint change. (7) Page15 CN18 change footprint & swap pin. (8) Page17 add R514 for MIC GAIN adj. (9) Page21 CN6 pin change to 6~1 from 1~6. (10) Page25~29 modify for Power. ###Changer function: 1. PR17 CHANGE TO 60.4K/D.....CS36043D905 2. PR99 CHANGE TO 7.5K/F.....CS27503F909 3. PC76 CHANGE TO 1000P..... CH21006K917 4. PC9 CHANGE TO 4700P..... CH24706K911 5. PR11 CHANGE TO NC 6. PL4 CHANGE TO 10UH..... CV01044MZ18 ###CPU OCP function: 1. PR65 , PR57 CHANGE TO 1.2K/F.....CS21203F901 2. PR64 CHANGE TO 0.....CS00004JA07 ###2.5VSUS OCP function: 1. PR57 CHANGE TO 1.2K/F.....CS21203F901 2. PC36 CHANGE TO 100P.....CH11006J901 ###1.2VCC VOLTAGE REF: 1. PR83 CHANGE TO 10K/F.....CS31003F906 ###5VPCU RIPPLE 1. PC63 CHANGE TO 10U/25V.....CH61004M3E5 ###Shortage item: 1. PU13 CHANGE TO SC1565.....AL001565003 2. PU8 CHANGE TO LM339AD.....AL0M339M003 3. PD11 CHANGE TO 05FA20.....BC05FA20Z01 4 PD22 , PD17 , PD18 , PD19 CHANGE TO ZD5.6V....BDRLZ56BZ05 5. PD4 CHANGE TO ZD12V.....BDRLZ12BZ05
10/08_REVB2	for Toshiba Spec change	(1) Page14 S-Video change to 4Pin from 7Pin. (CN12)
10/13_REVB3	for Toshiba change for Toshiba spec add for Toshiba spec add for ME request	(1) Page8 clear switch change to jump pad.(del SW4 add JP1) (2) Page12 add 75ohm termination for RJ45 not use pin. (add R601~R604) (3) Page20 add Q10,R606 for lid S4 wackup. (4) Page14 add HOLE24 for ME
10/14_REVB4	for 5VSUS drop.	(1) Page19 Del R1,R272,R319 and U1,U23,U24 change to TI TPS2061.
11/05_REVC1	for H/W protect for Toshiba wireless LED spec for modem cable for EMI for EMI for Lan transformer EMI for Lan waveform overshot	(1) Page2 change R154 to 0ohm for H/W protect. (2) Page19 modify wireless-led trace. (3) Page15 add pad28~30. (4) Page20 add C801~C805-560pf. (5) Page21 add C13-560pf, CA1-470pf*4. (6) Page12 U19 change to NS681686 from NS681680. (7) Page12 move R245,R246,R241,R242 close to Lan chip.

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	CHANGE LIST	C1
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