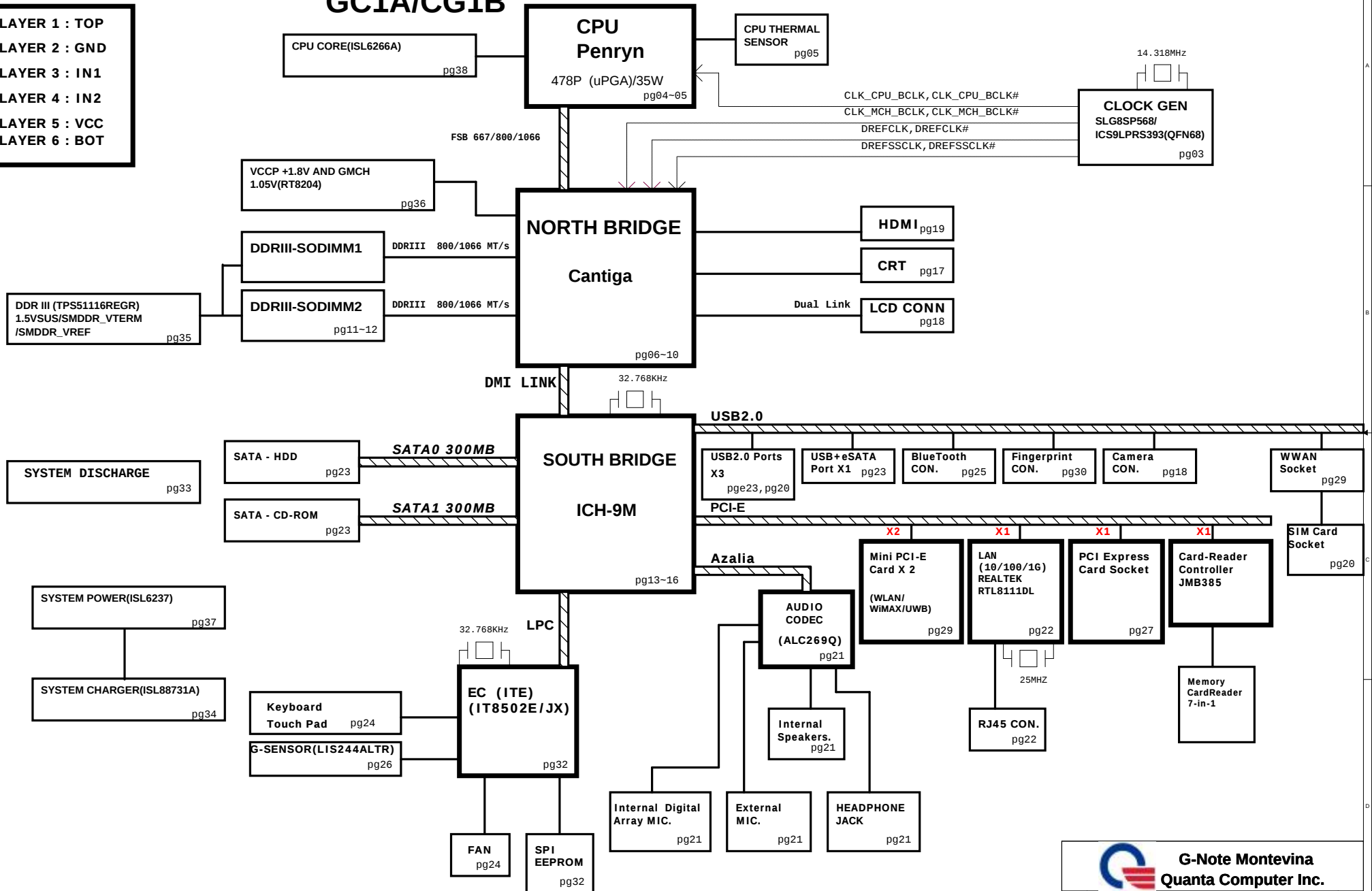


**PCB STACK UP
6L**

LAYER 1 : TOP
LAYER 2 : GND
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : BOT

G-Note Montevina Block Diagram GC1A/CG1B

01



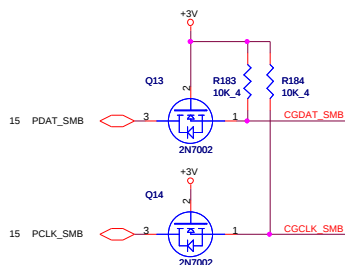
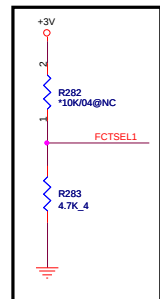
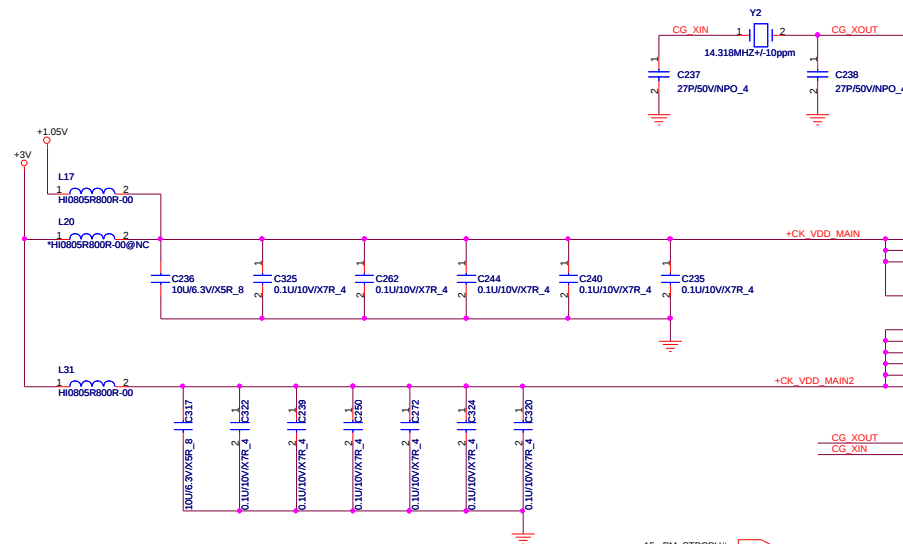
Power States

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#	



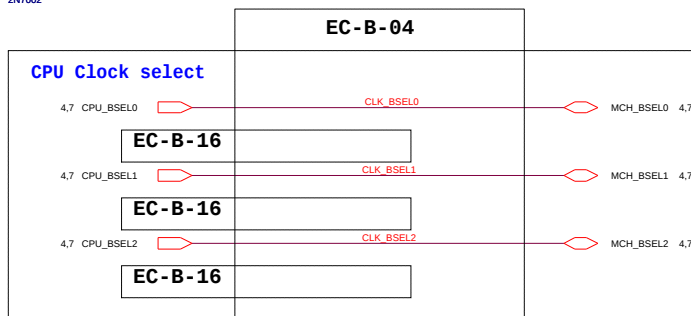
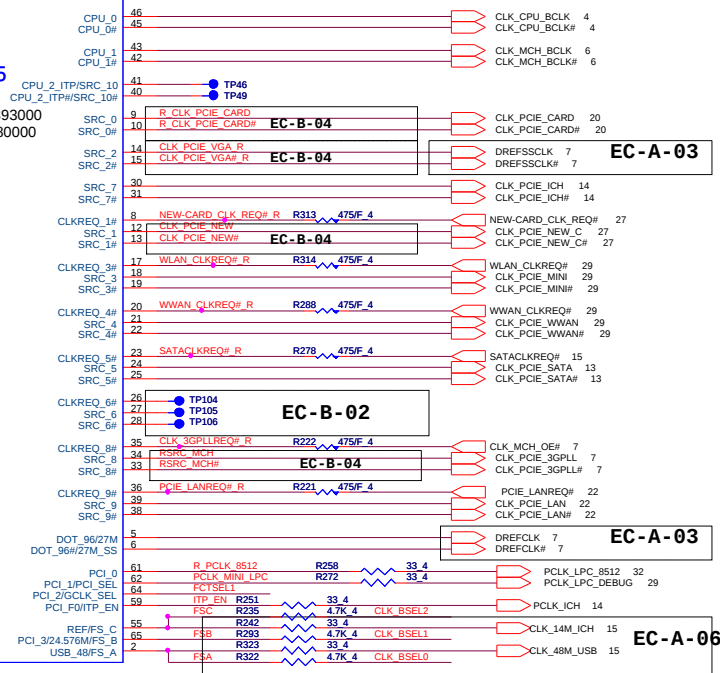
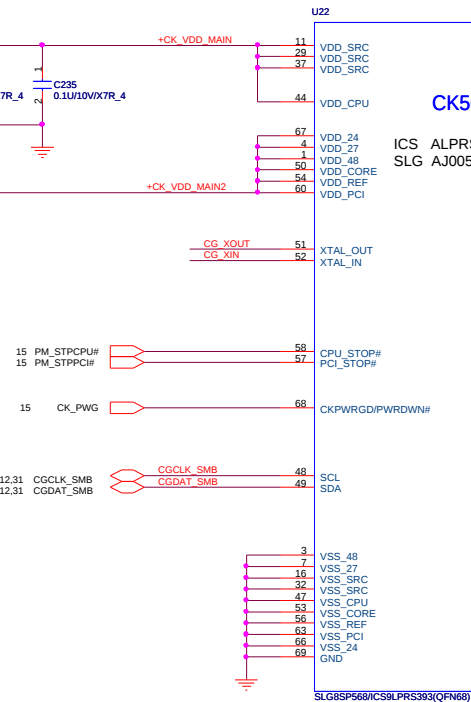
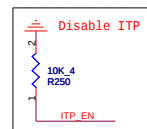
G-Note Montevina
Quanta Computer Inc.

Size B	Document Number	Rev 2A
	FRON TPAGE	
Date: Tuesday, April 14, 2009	Sheet 2 of 41	

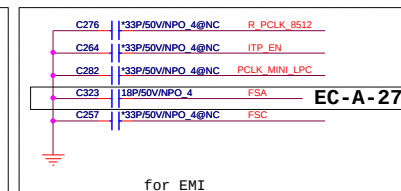


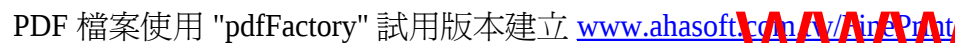
GCLK_SEL = FCTSEL1

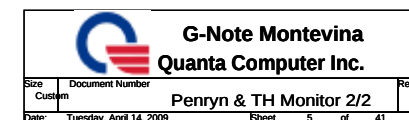
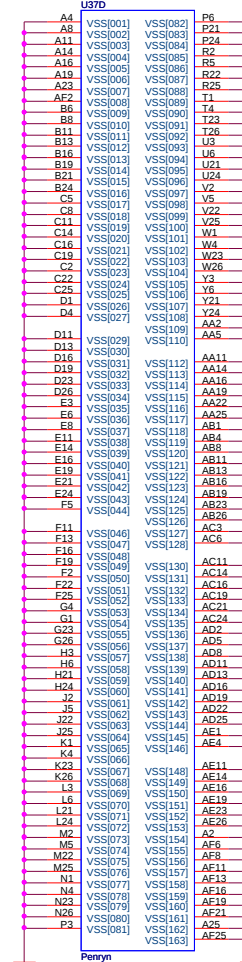
FCTSEL1 (PIN64)	PIN5	PIN6
0	DOT96	DOT96#
1	27Mout-NSS	27Mout-SS

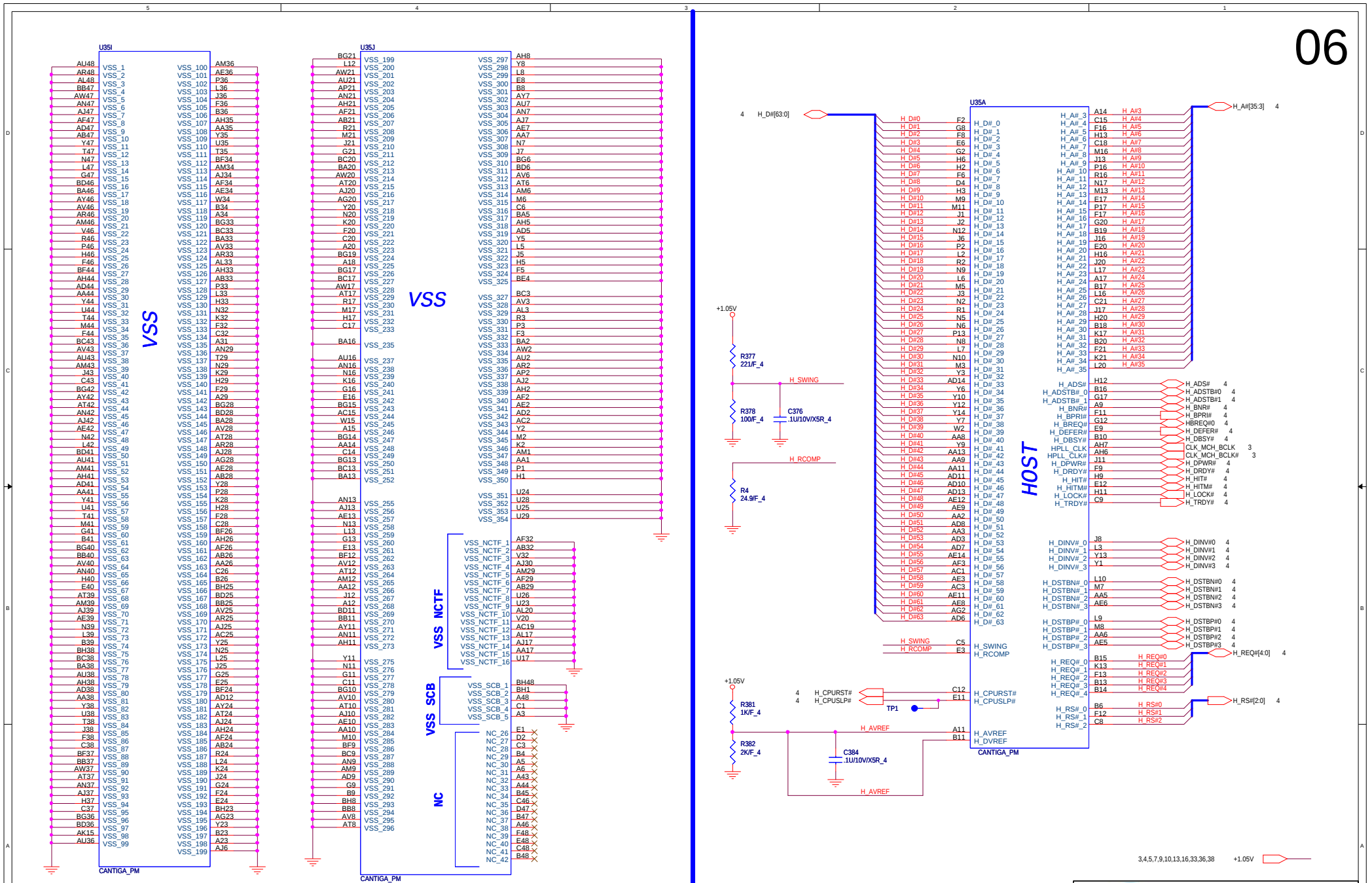


FSC	FSB	FSA	CPU	SRC	PCI
0	0	0	266.6	100	33
0	0	1	133.3	100	33
0	1	0	200.0	100	33
0	1	1	166.6	100	33
1	0	0	Reserved		
1	0	1	Reserved		
1	1	0	Reserved		
1	1	1	Reserved		









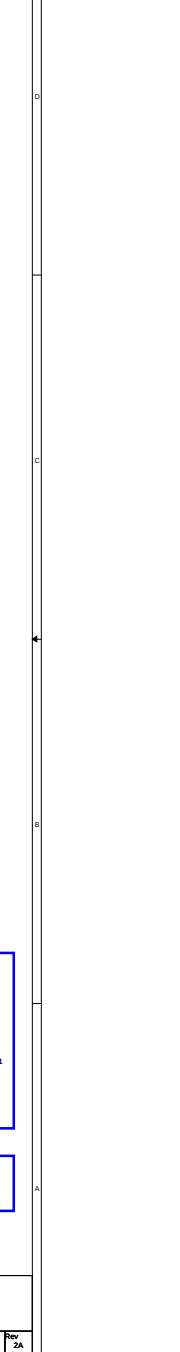
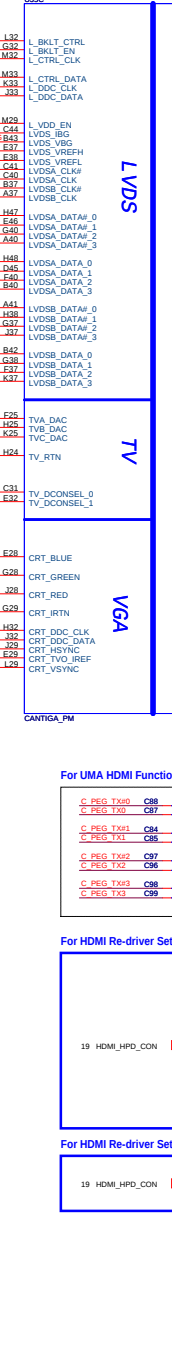
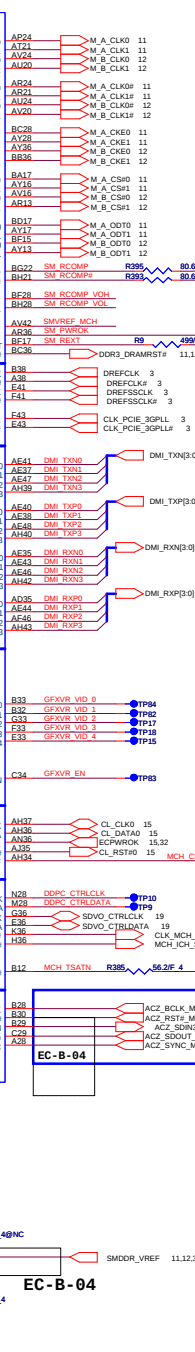
3,4,5,7,9,10,13,16,33,36,38

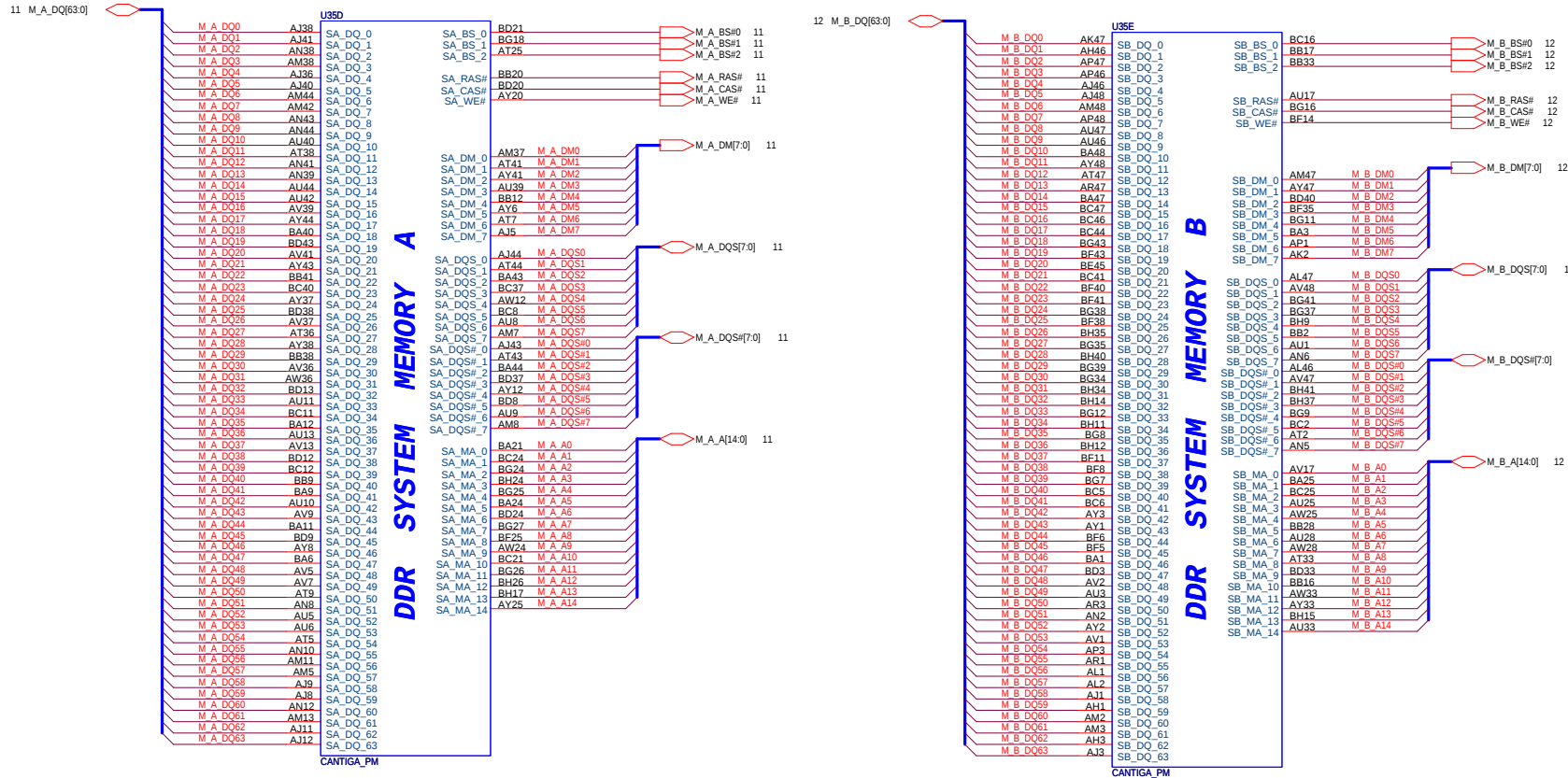
+1.05V

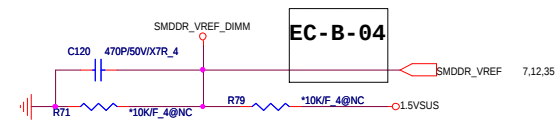
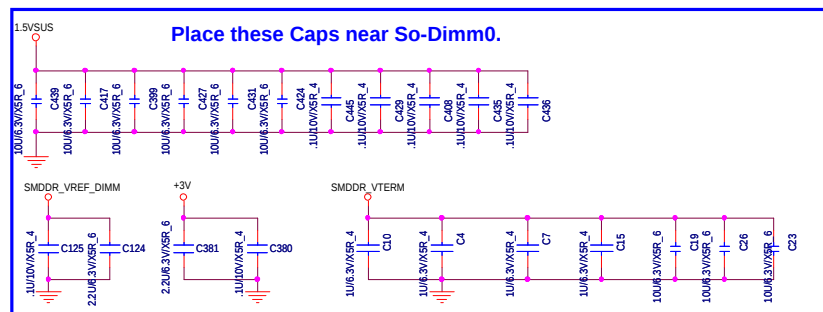
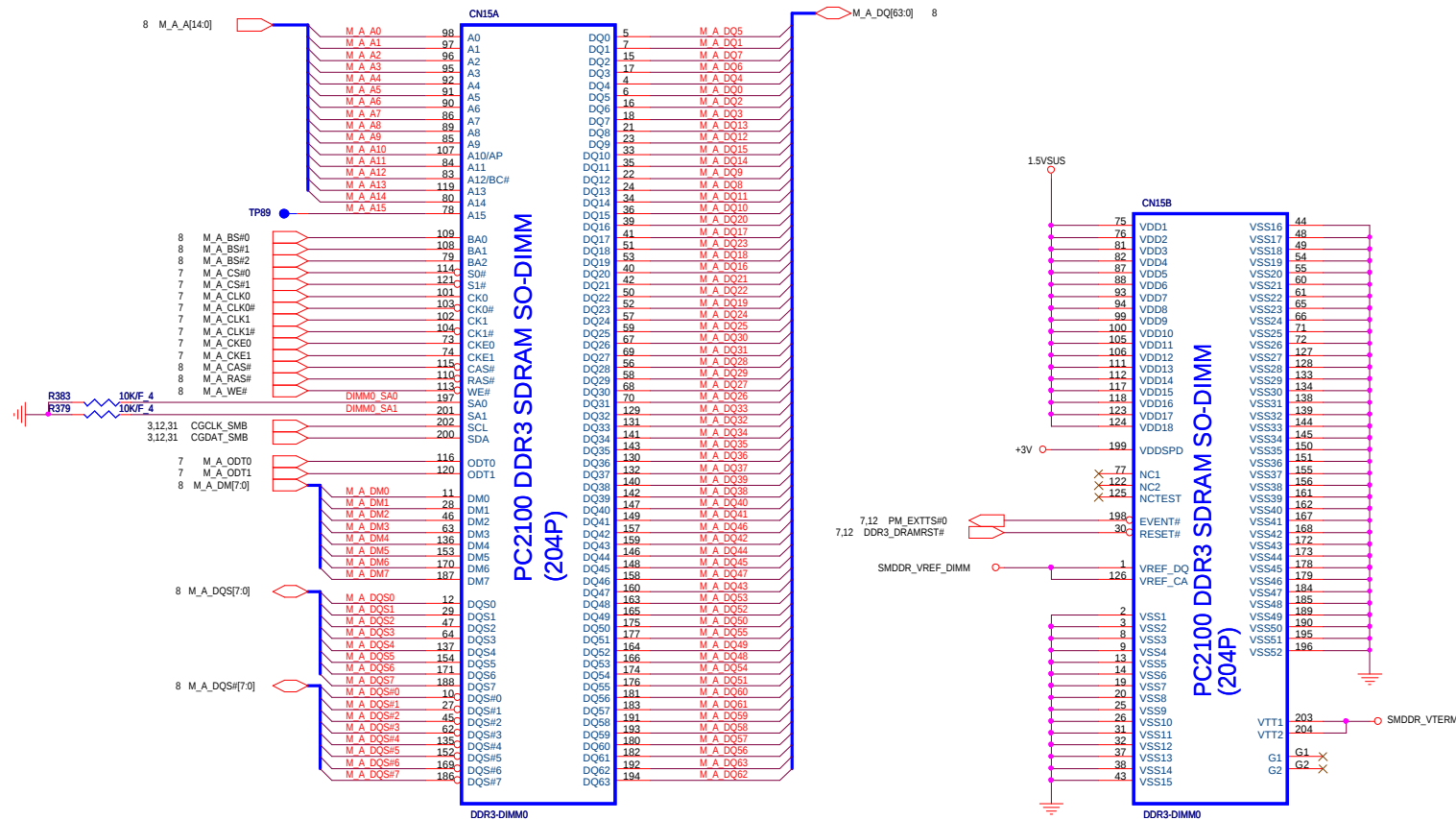


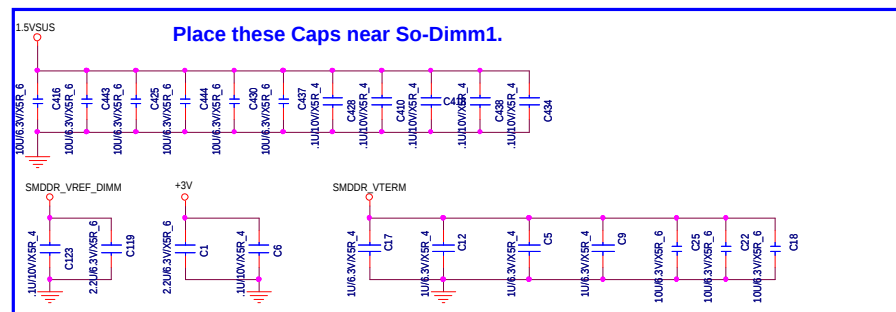
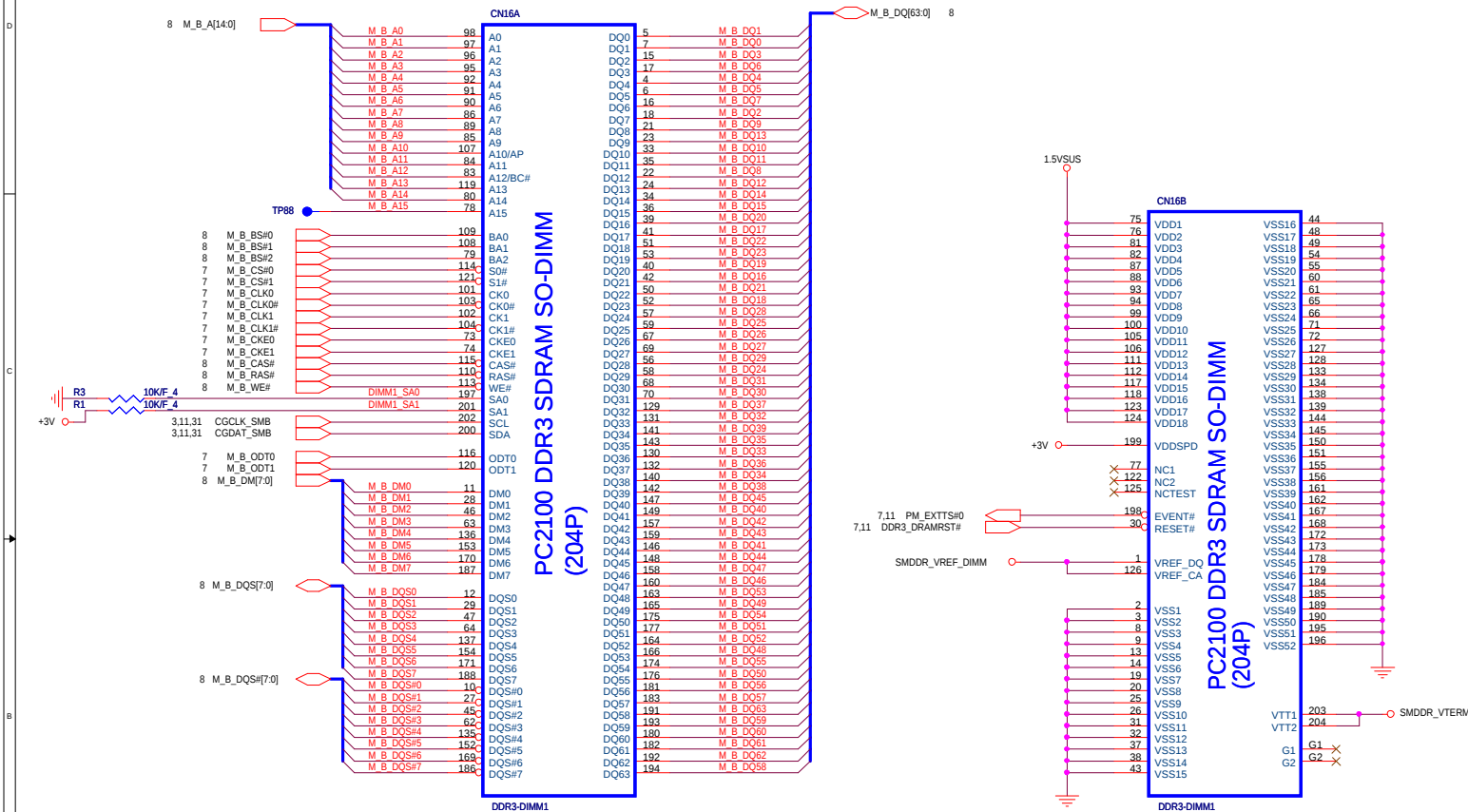
G-Note Montevina
Quanta Computer Inc.

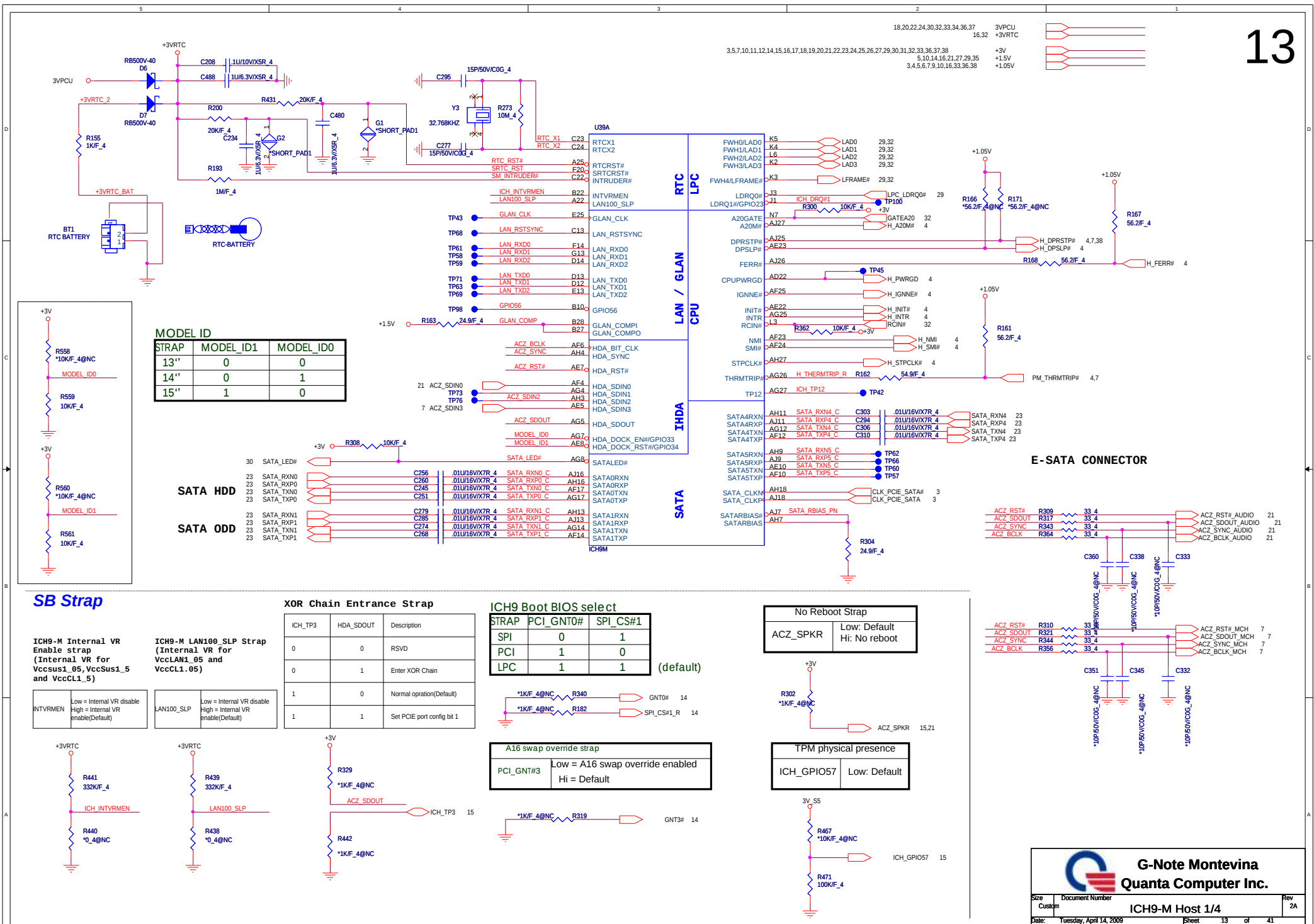
Size	Document Number	Rev
Custom	Cantiga Host & VSS 1/5	2A
Date:	Tuesday, April 14, 2009	Sheet 6 of 41











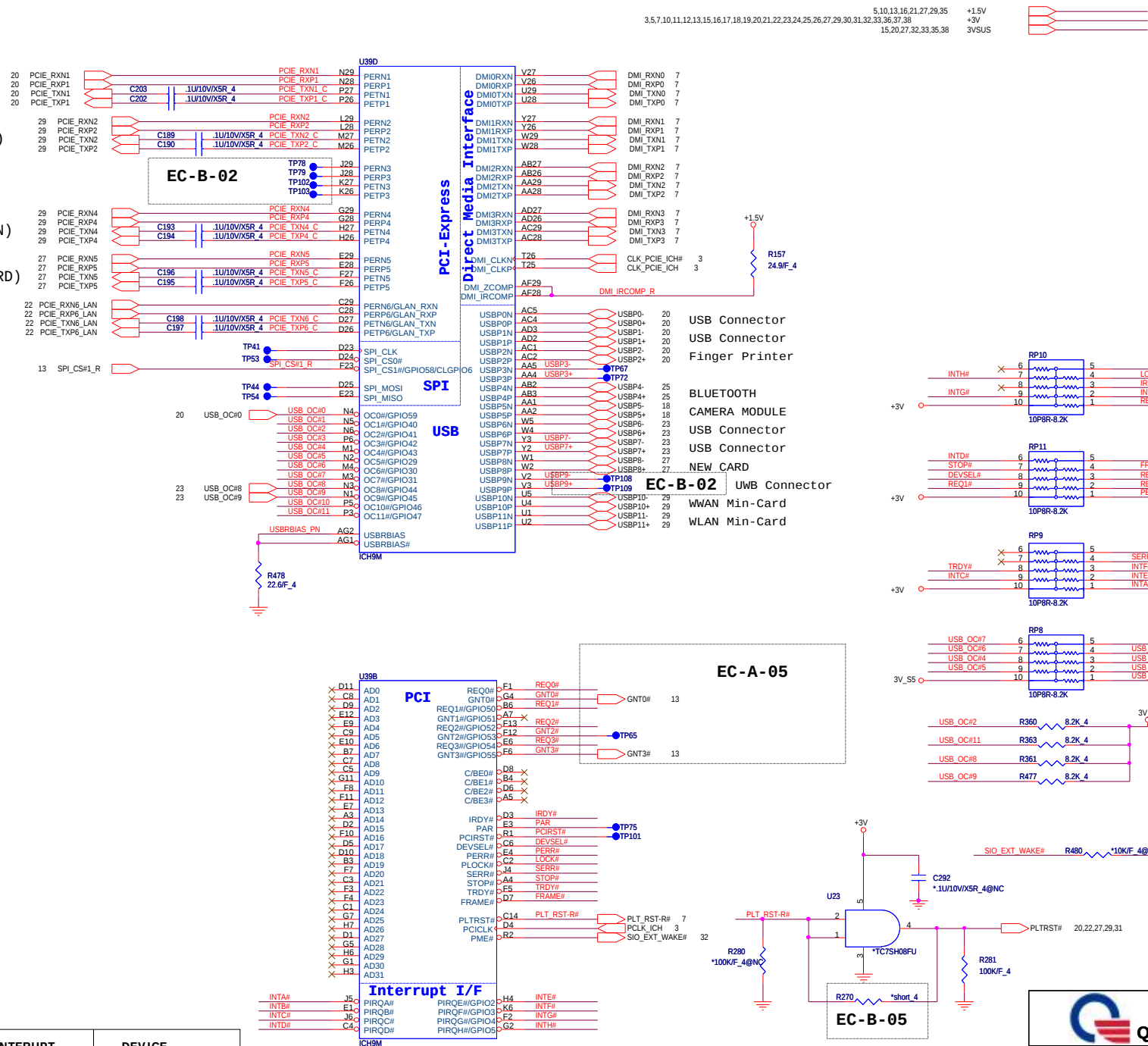
CARD-READER

EXPRESS CARD (WWAN)

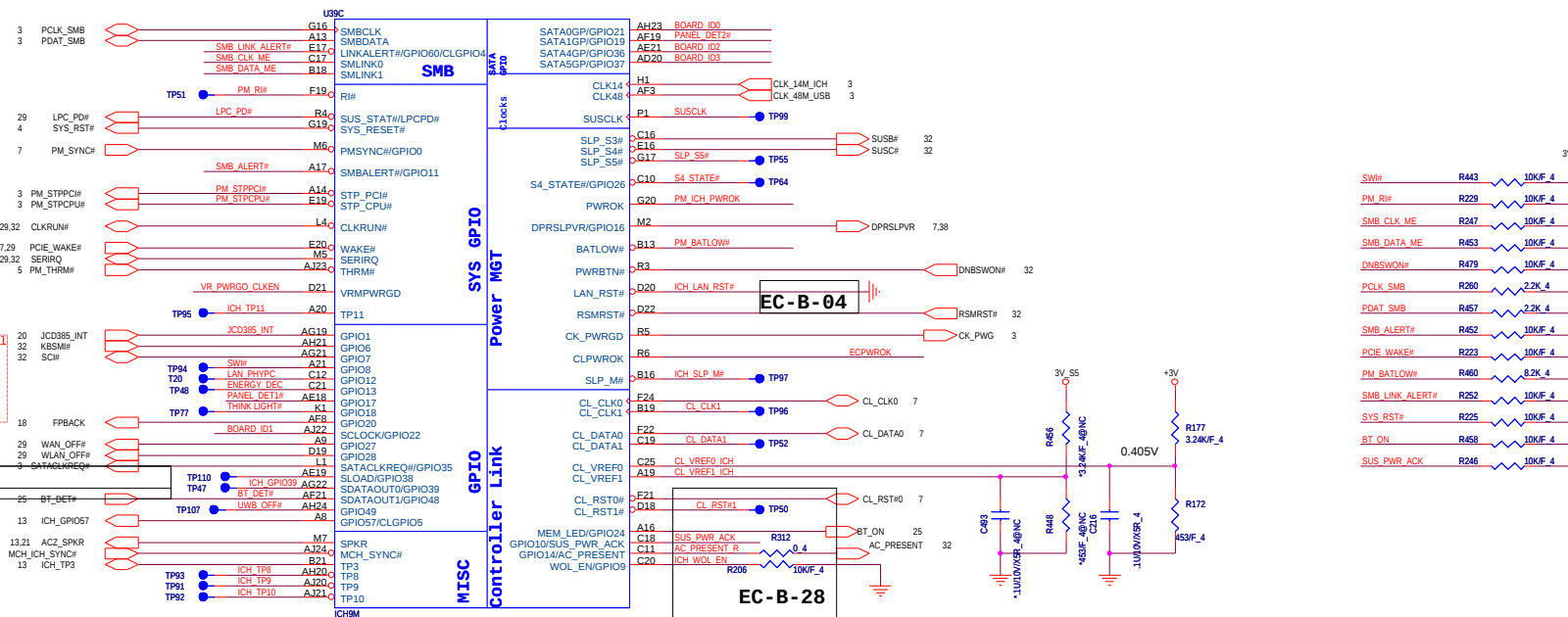
MINI CARD PCI-E(WLAN)

Express Card(NEW CARD)

PCI-E-LAN



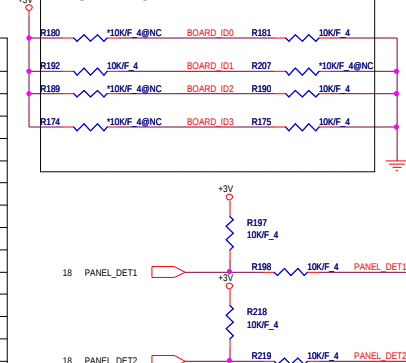
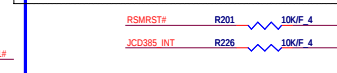
PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD21	INTE#, F#, G#	RICOH R5C847



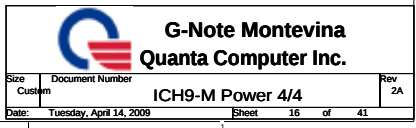
Board ID

Board ID For Function	ID3 GPIO37	ID2 GPIO36	ID1 GPIO22	ID0 GPIO21
SDV	0	0	0	0
SIV	0	0	0	1
SIT	0	0	1	0
SVT	0	0	1	1
SOVP	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

EC-B-10

EC-A-05
EC-B-22

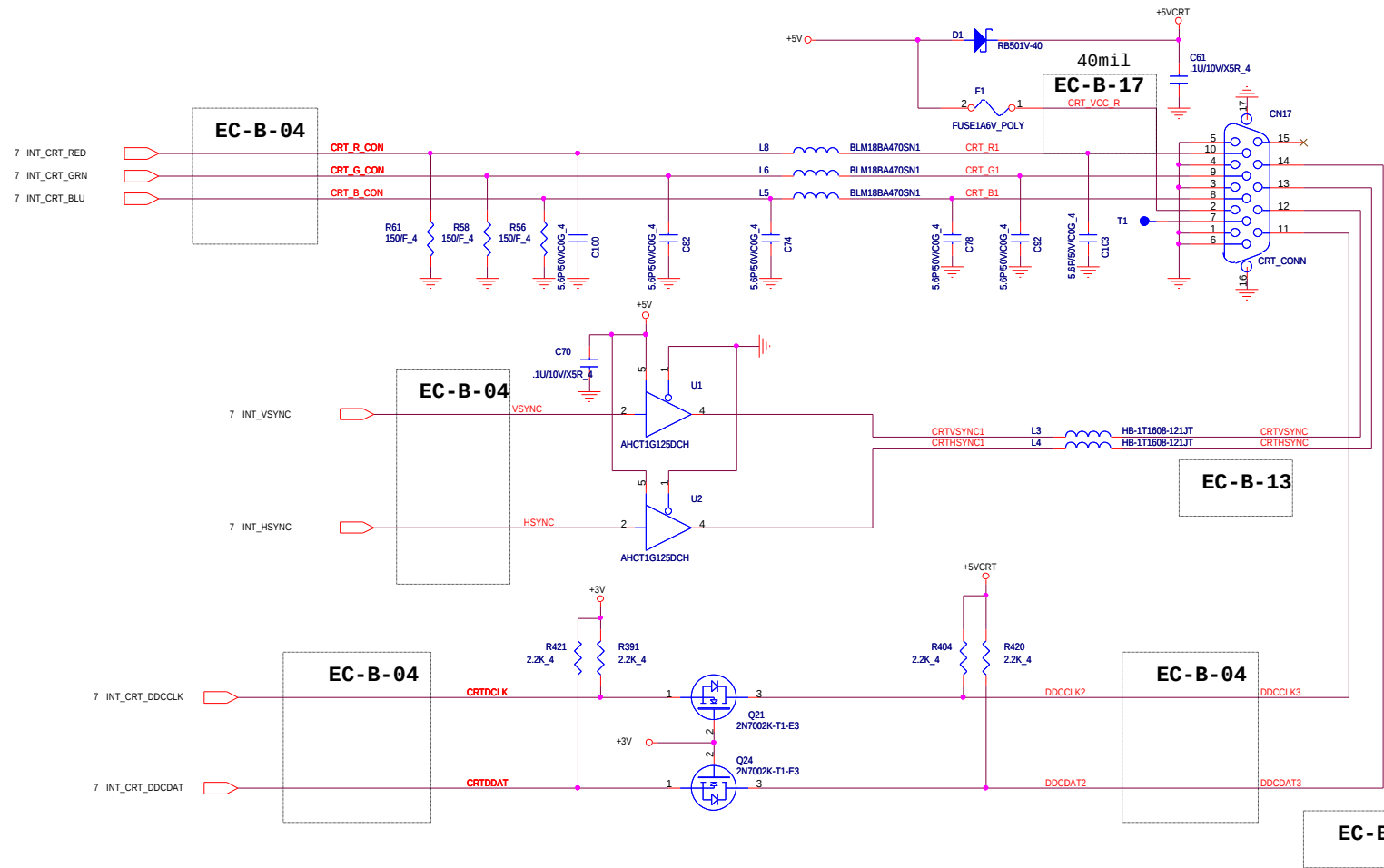
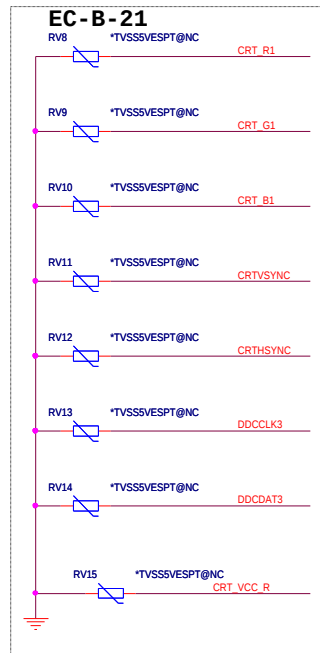
Model ID	PANEL_DET2 GPIO19	PANEL_DET1 GPIO17
13"	0	0
14"	0	1
15"	1	0
Default	1	1



CRT PORT

17

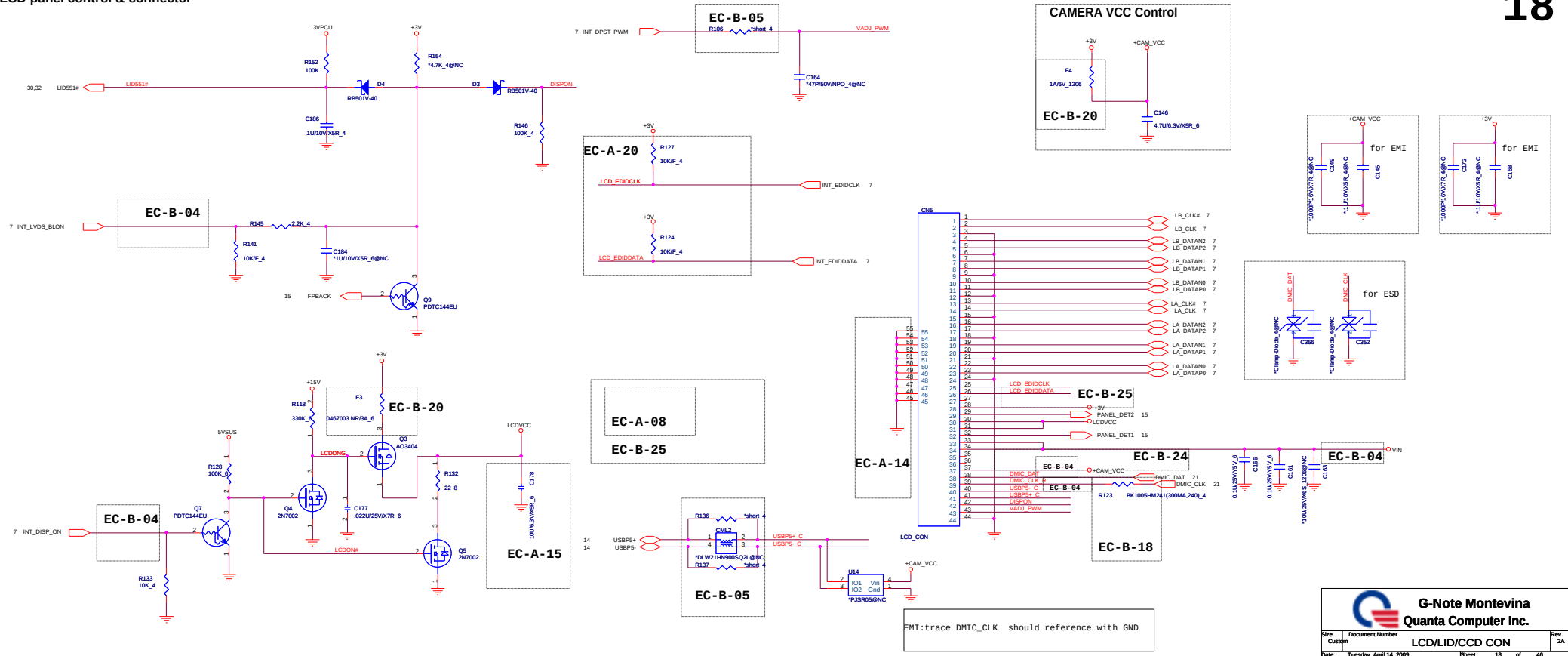
ESD PROTECTION close CRT connector



G-Note Montevina
Quanta Computer Inc.

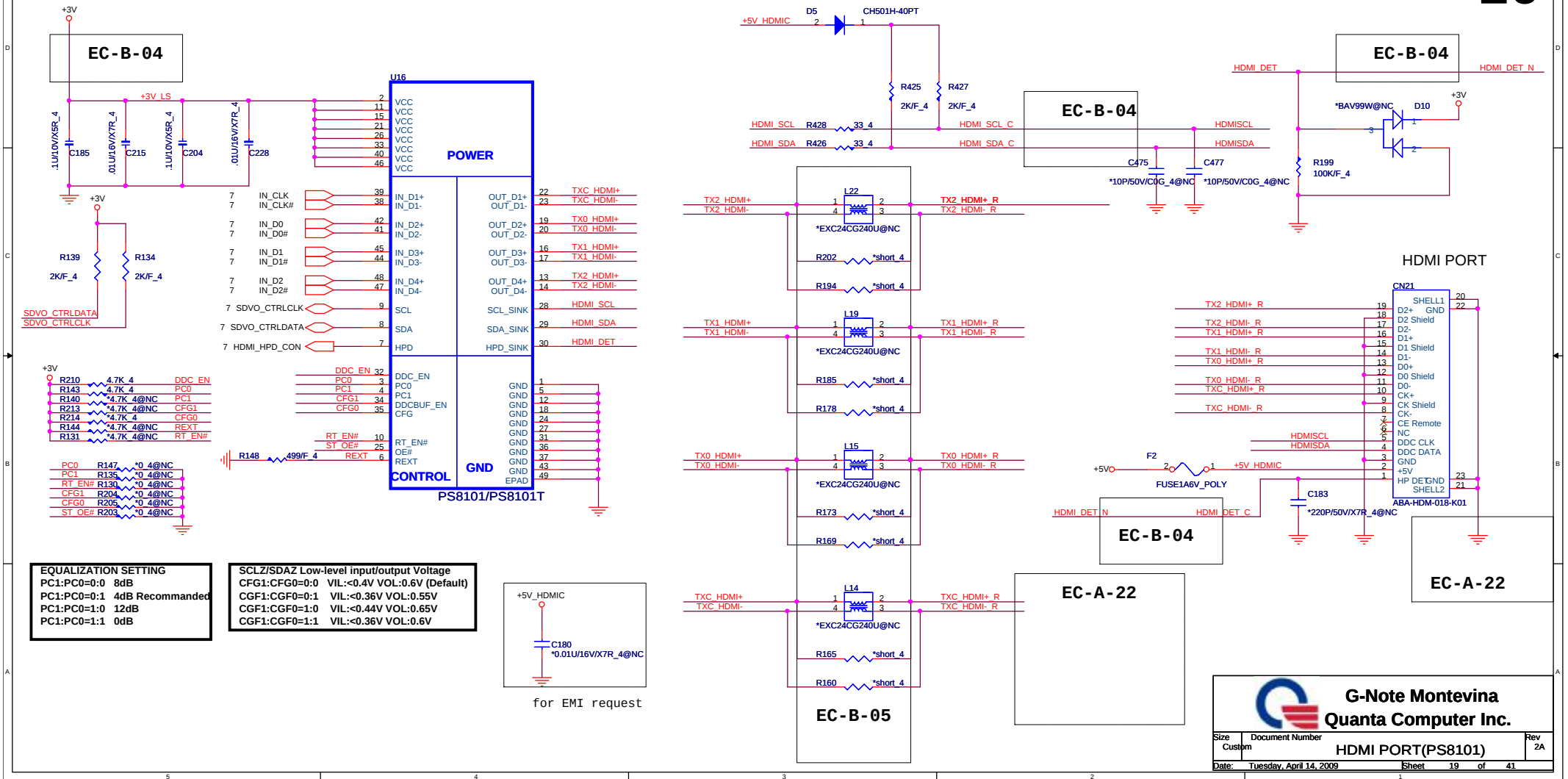
Size Custom	Document Number CRT CON	Rev 2A
Date: Tuesday, April 14, 2009	Sheet 17	of 41

LCD panel control & connector

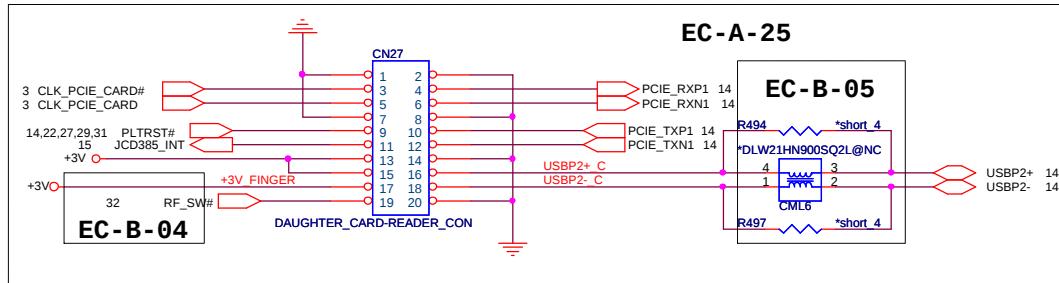


HDMI Level shifter & Port

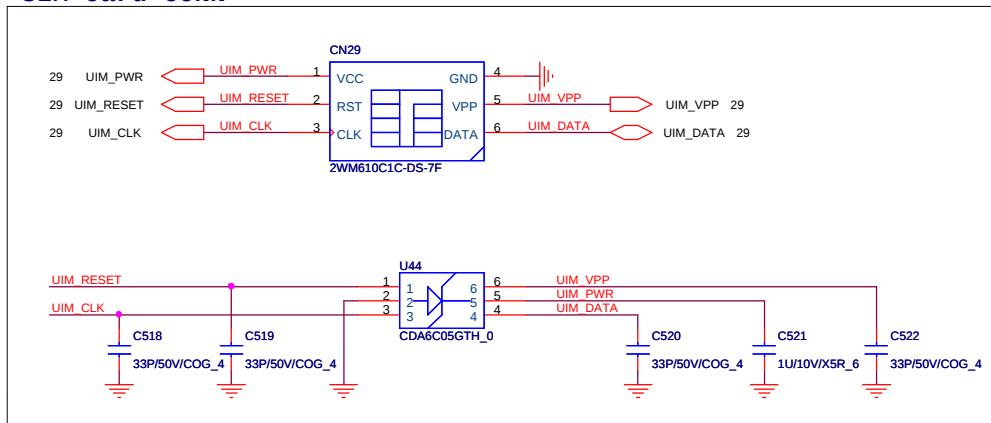
19



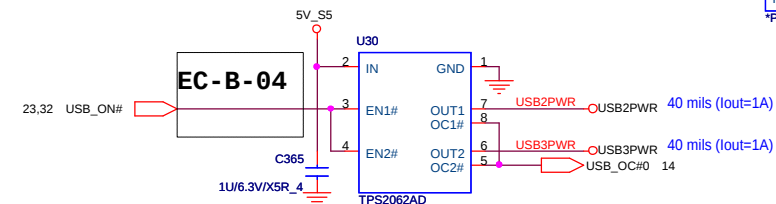
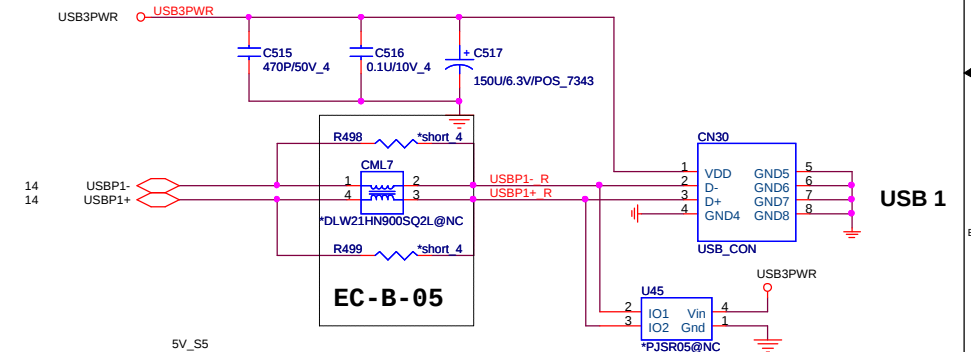
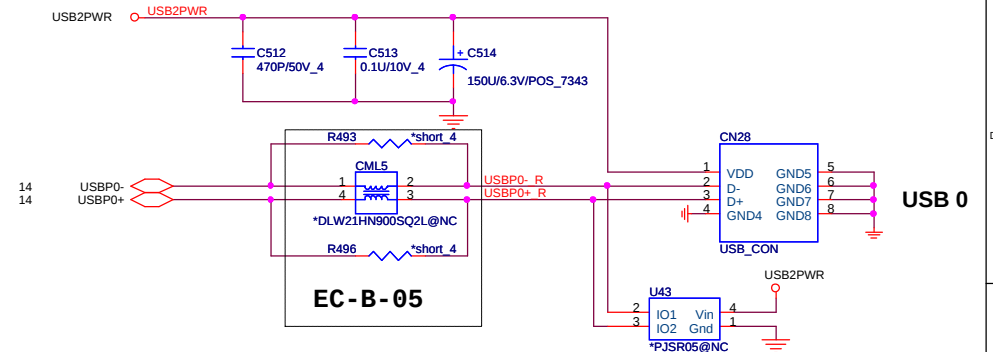
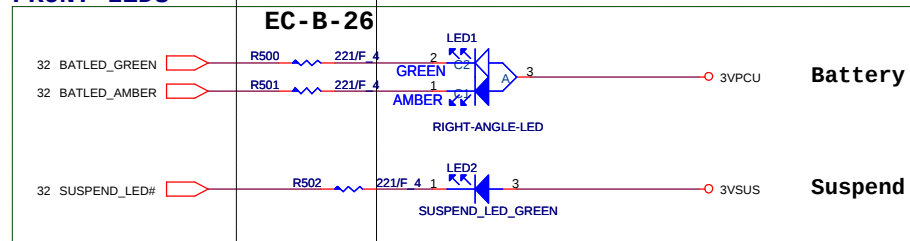
WIRE TO BOARD CONN CARD READER & FINGERPRINT



SIM Card CONN



FRONT LEDs

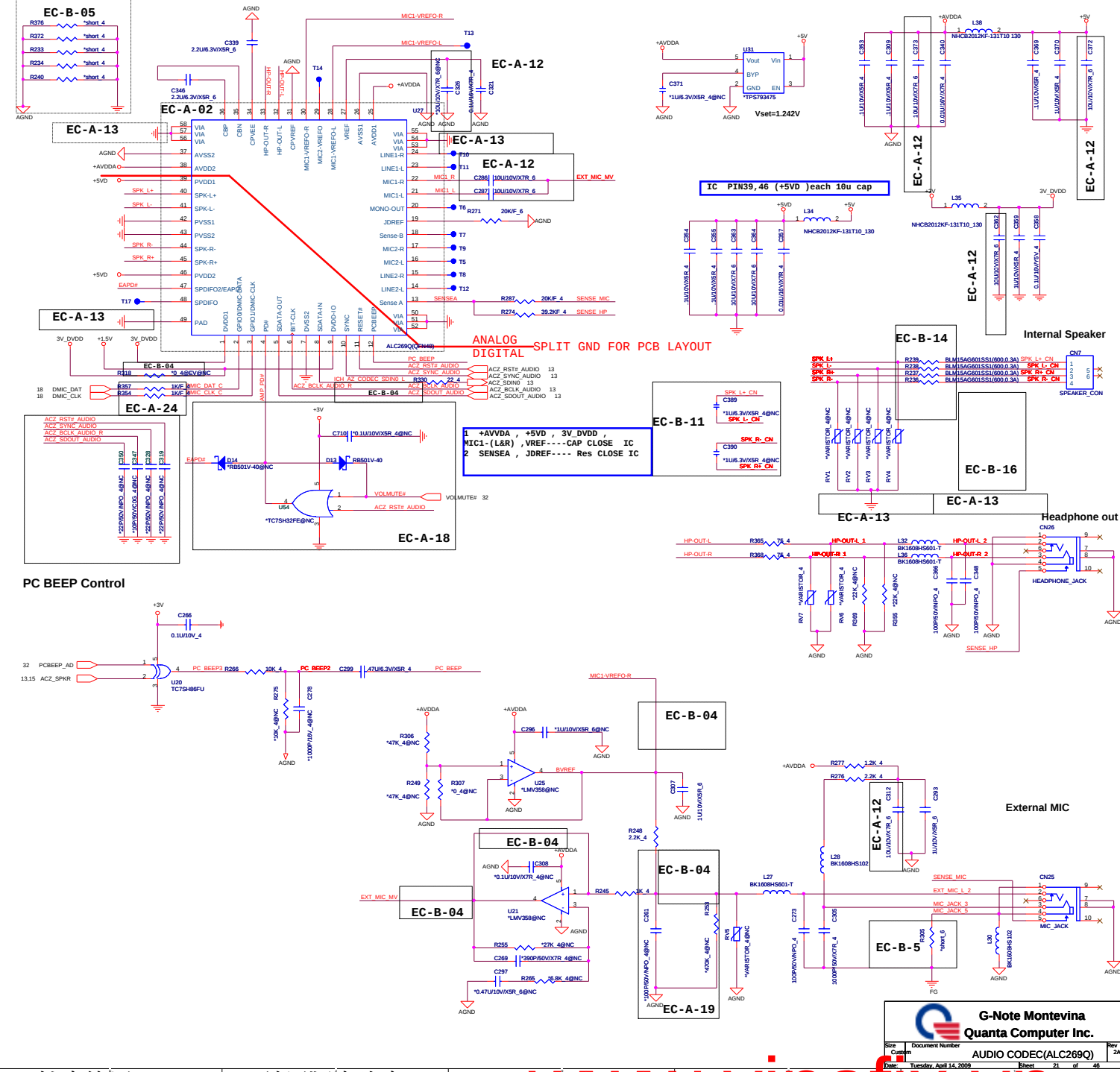


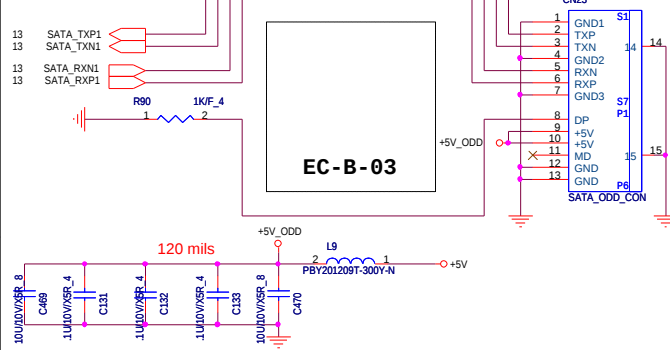
PROJECT : G NOTE
Quanta Computer Inc.

Size Custom Document Number USB X2/SIM_CARD/LEDs/RF Rev 2A

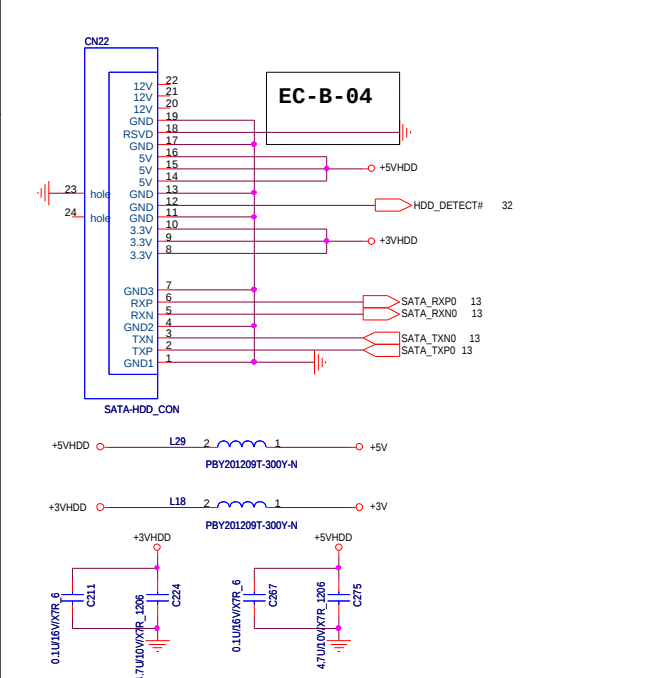
Date: Tuesday, April 14, 2009 Sheet 20 of 46

HD Audio Codec

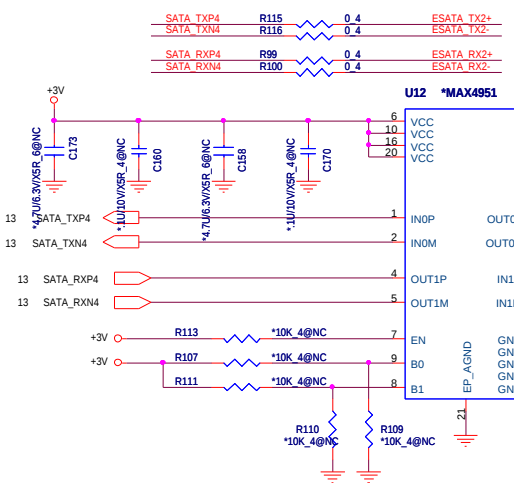




SATA-HDD

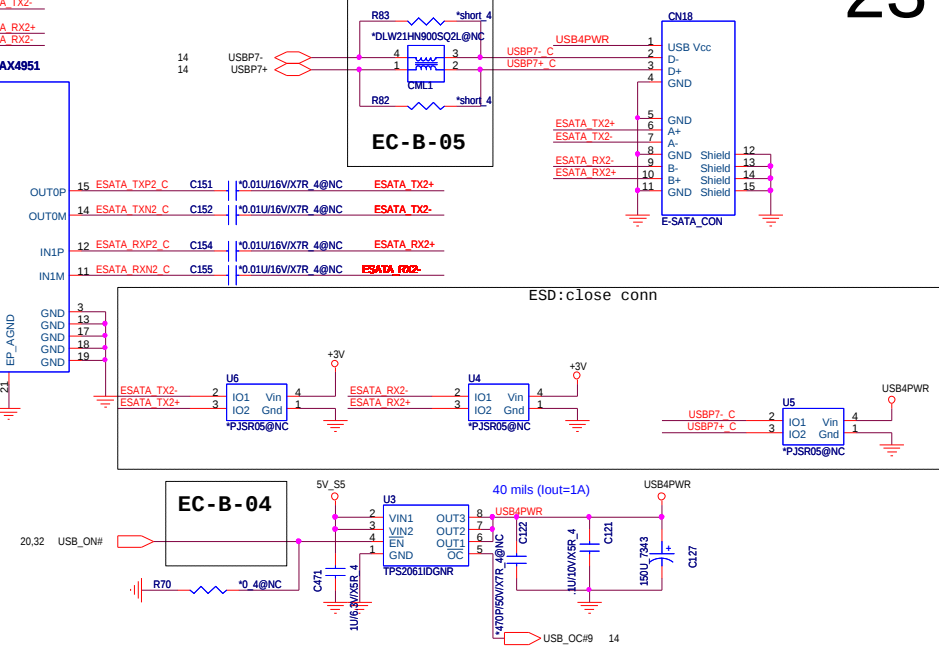


E-SATA RE-DRIVER

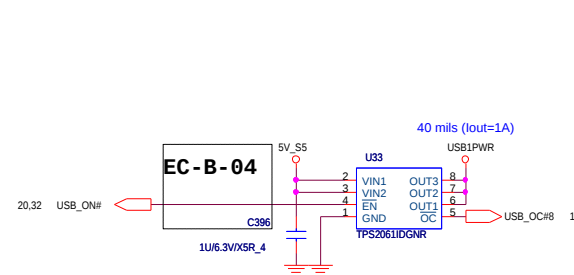


EN	BO	B1	FUNCTION
0	x	x	Standby
1	0	0	Standard SATA Output
1	1	0	Ch 0 Boost Output
1	0	1	Ch 1 Boost Output
1	1	1	Ch 0, 1 Boost Output

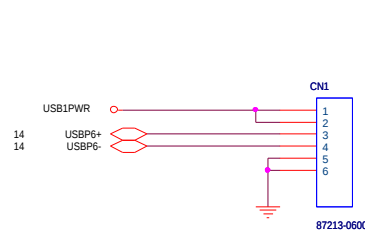
eSATA PORT



USB x1

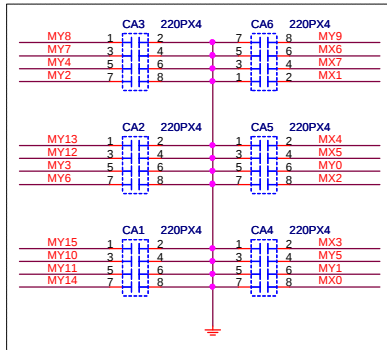
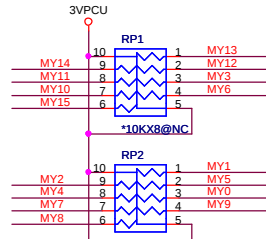
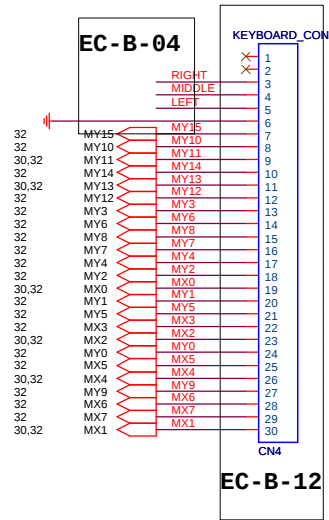


REAR_USB/B connector



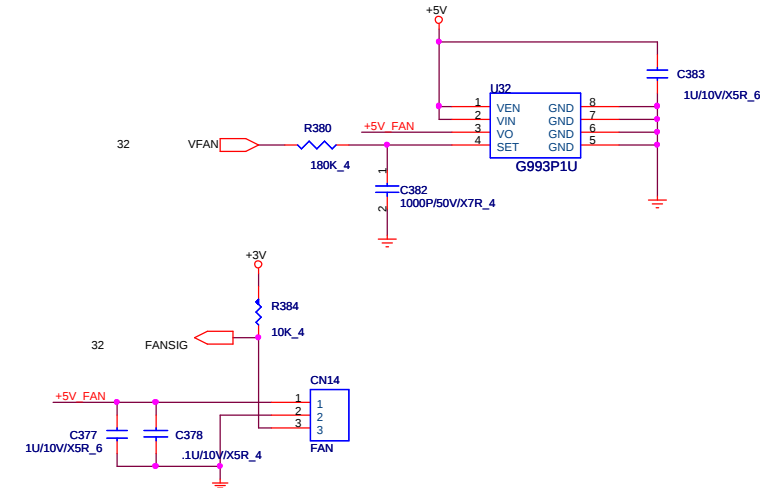
FAN, K/B, T/P & Track Point

KEYBOARD connector

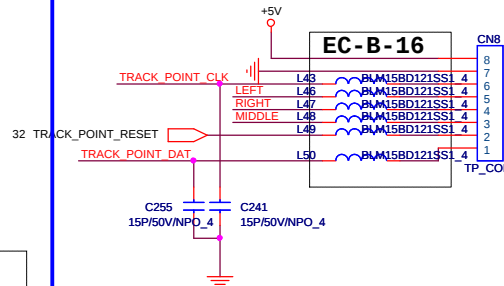


For EMI request

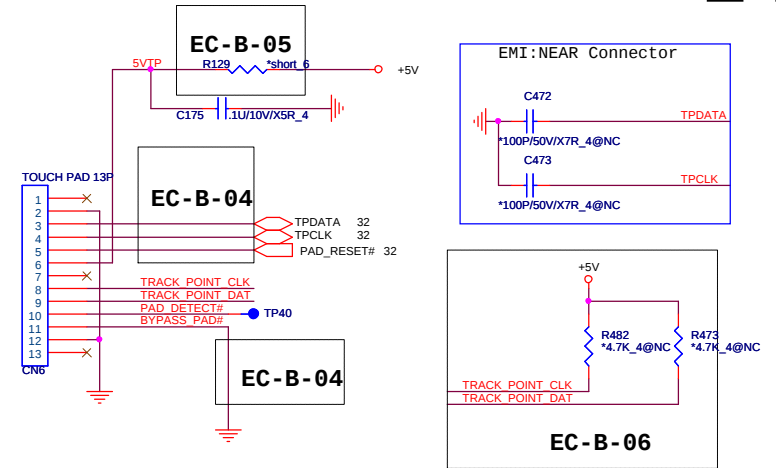
FAN Controller



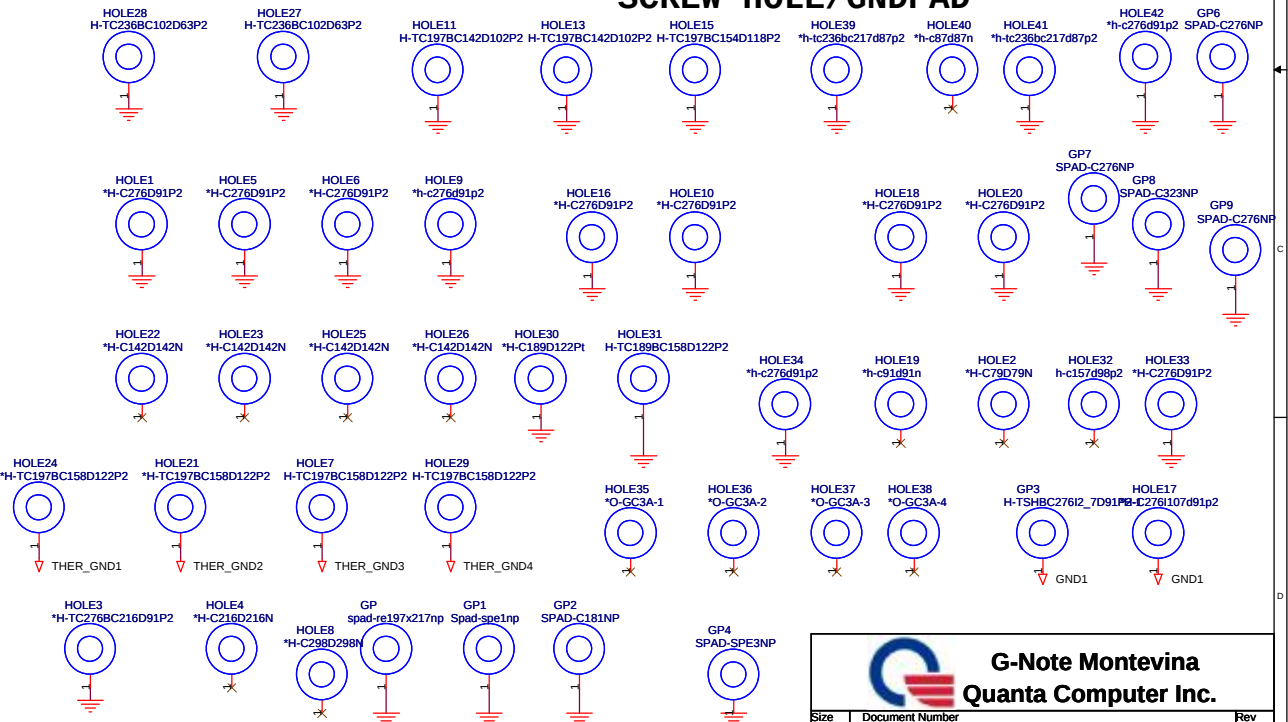
TRACK POINT



TOUCH PAD



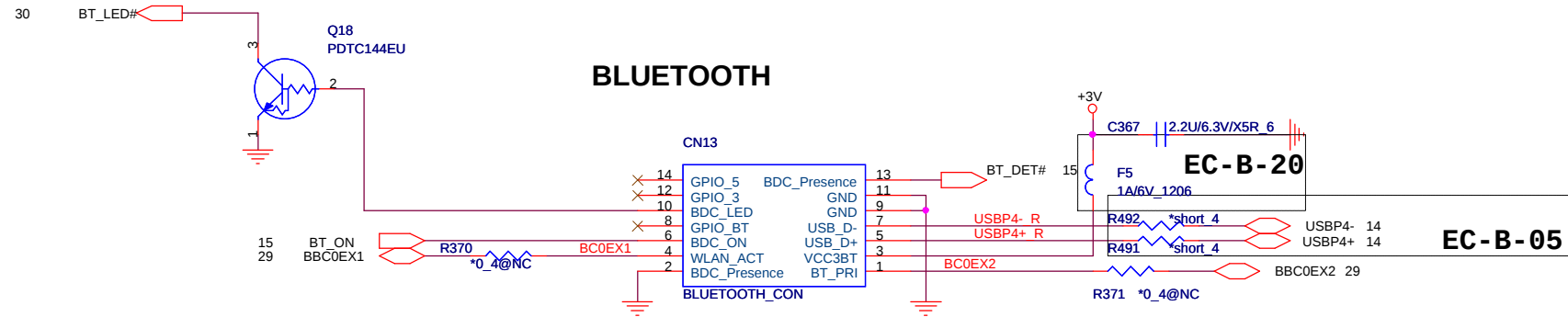
SCREW HOLE/GNDPAD



G-Note Montevina
Quanta Computer Inc.

Size: Custom Document Number: KB/TP/FAN/SCREW HOLE Rev: 2A

Date: Tuesday, April 14, 2009 Sheet: 24 of 46

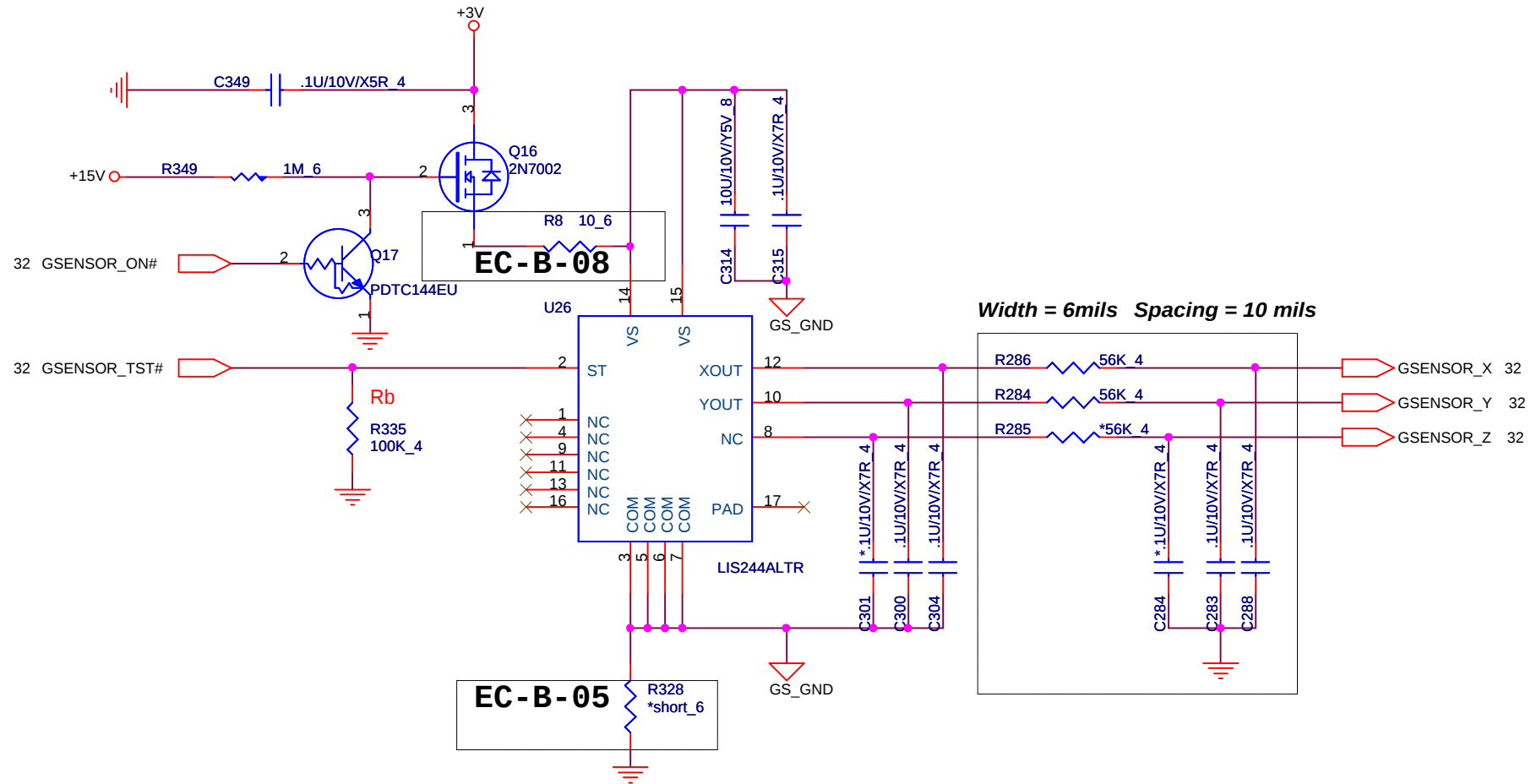


G-Note Montevina
Quanta Computer Inc.

Size Custom	Document Number Buletooth Conn	Rev 2A
Date: Tuesday, April 14, 2009	Sheet 25 of 41	

G-SENSOR (2-Axial)

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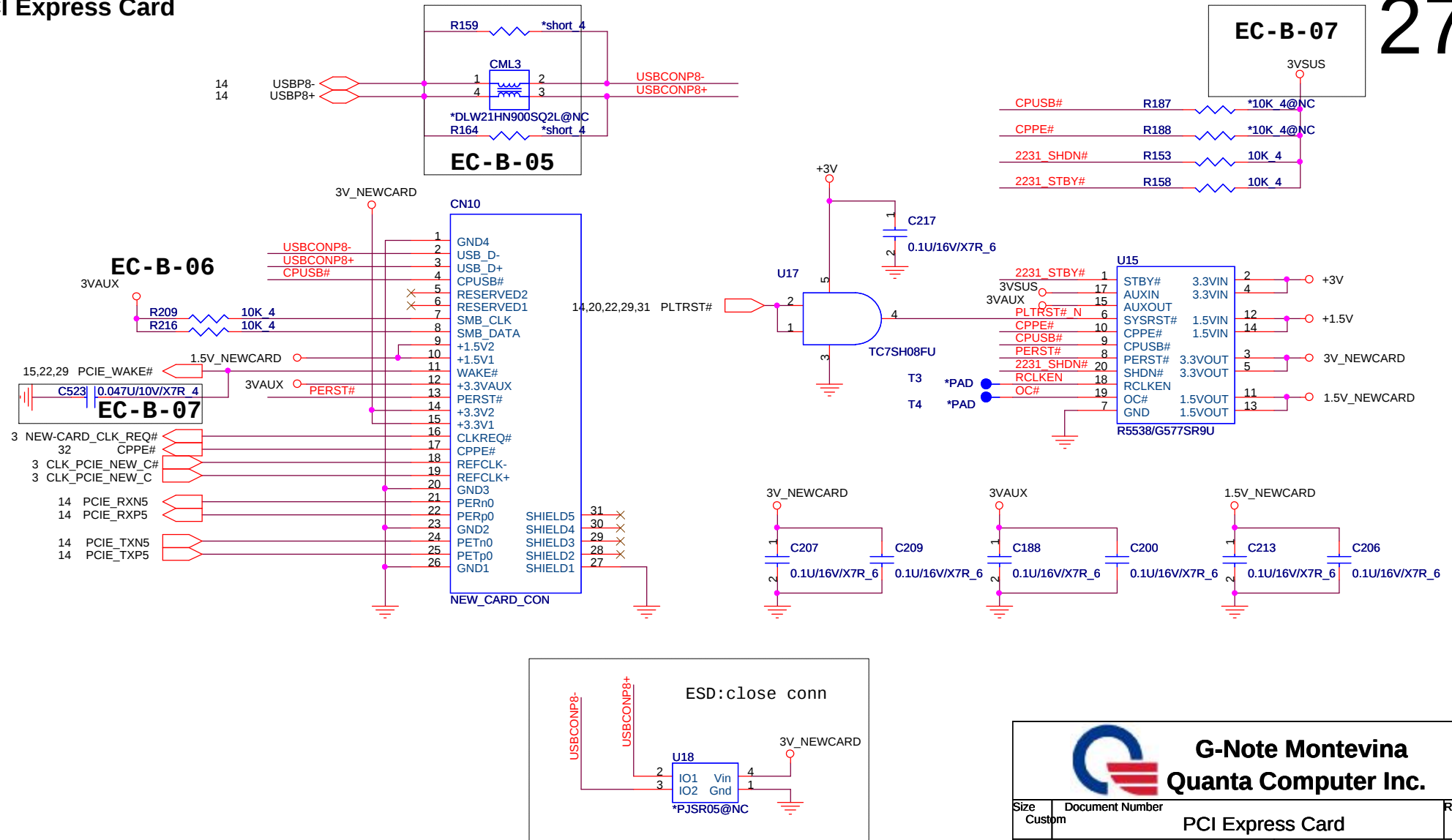


**G-Note Montevina
Quanta Computer Inc.**

Size A	Document Number G-SENSOR	Rev 2A
Date: Tuesday, April 14, 2009	Sheet 26 of 41	

PCI Express Card

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G-Note Montevina
Quanta Computer Inc.

Size	Document Number	Rev
Custom	PCI Express Card	2A
Date: Tuesday, April 14, 2009		Sheet 27 of 41

EC - B - 02

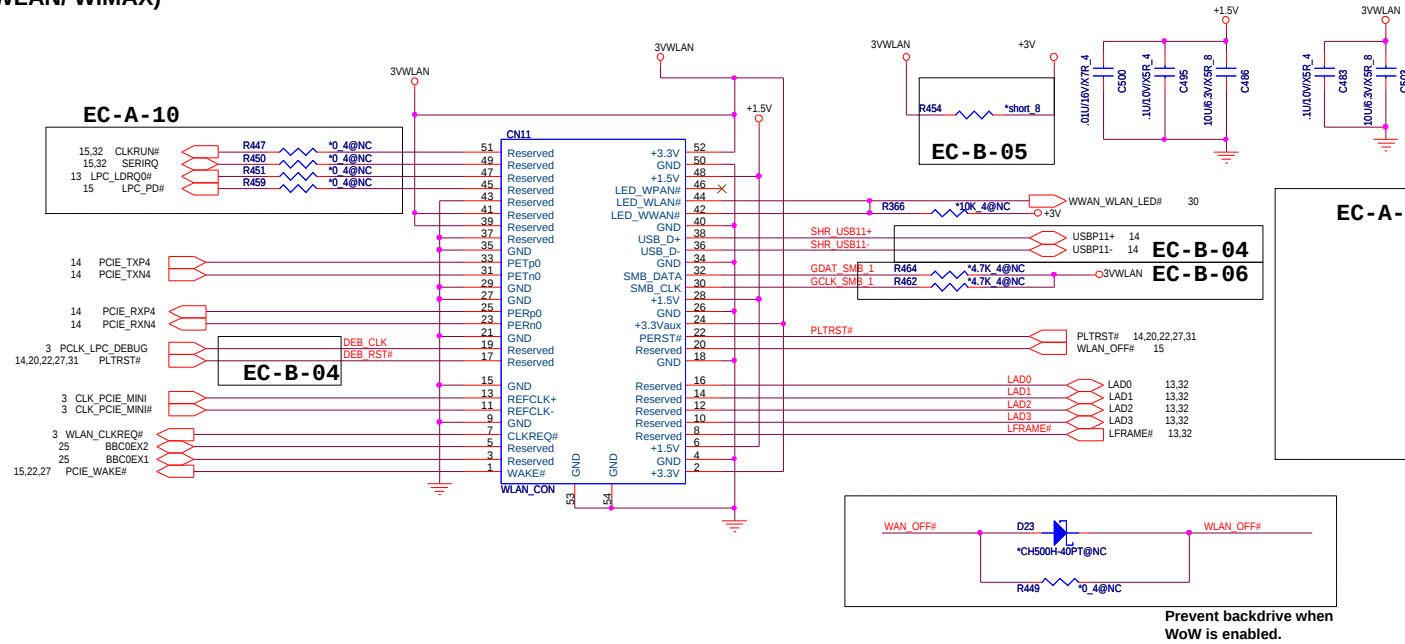


G-Note Montevina
Quanta Computer Inc.

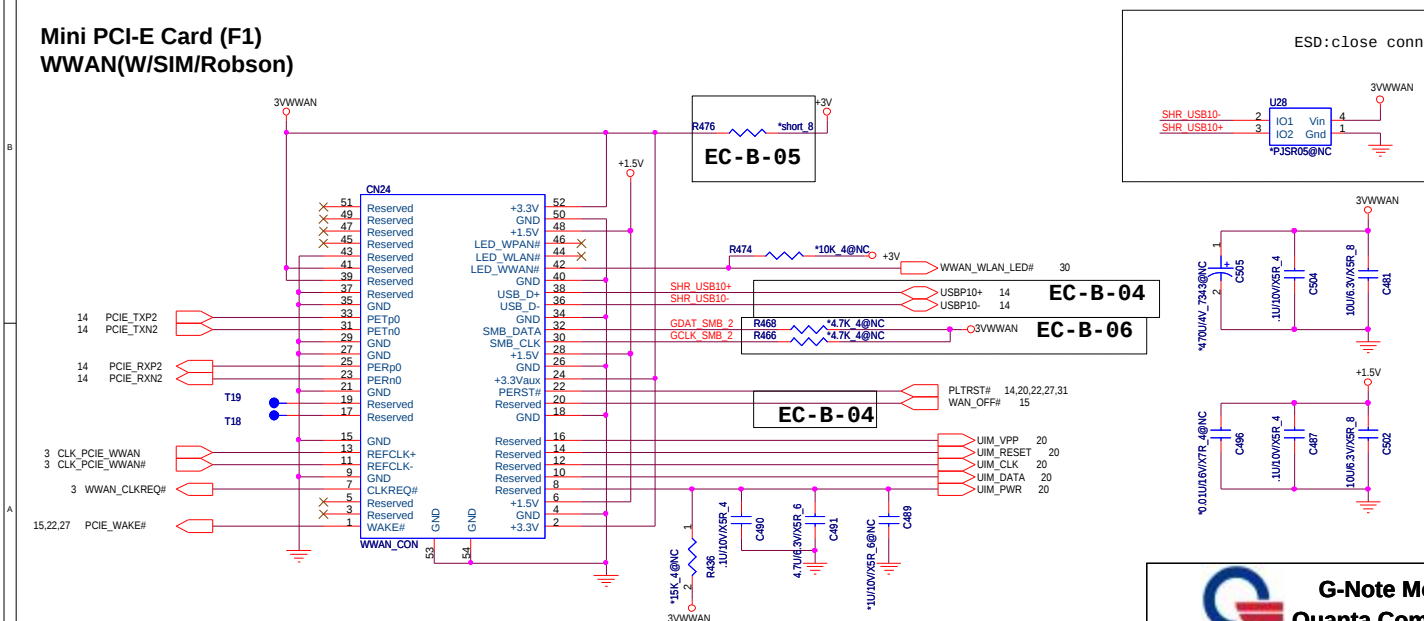
Size A	Document Number UWB Slot	Rev 2A
Date: Tuesday, April 14, 2009	Sheet 28 of 43	

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

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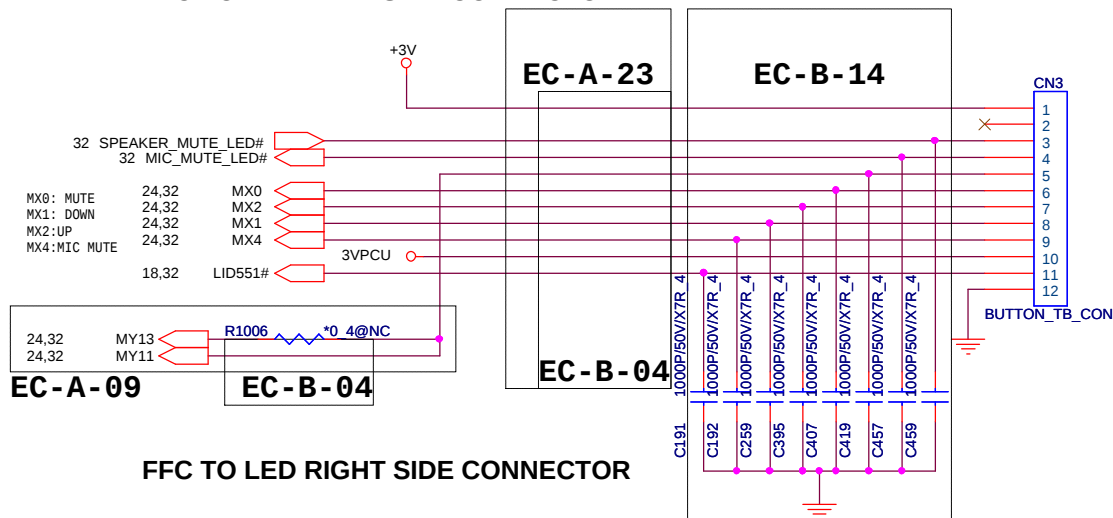
Mini PCI-E Card (F1) WWAN(W/SIM/Robson)



Daughter Boards for LEDs & Ports

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FFC TO KBD LEFT SIDE CONNECTOR

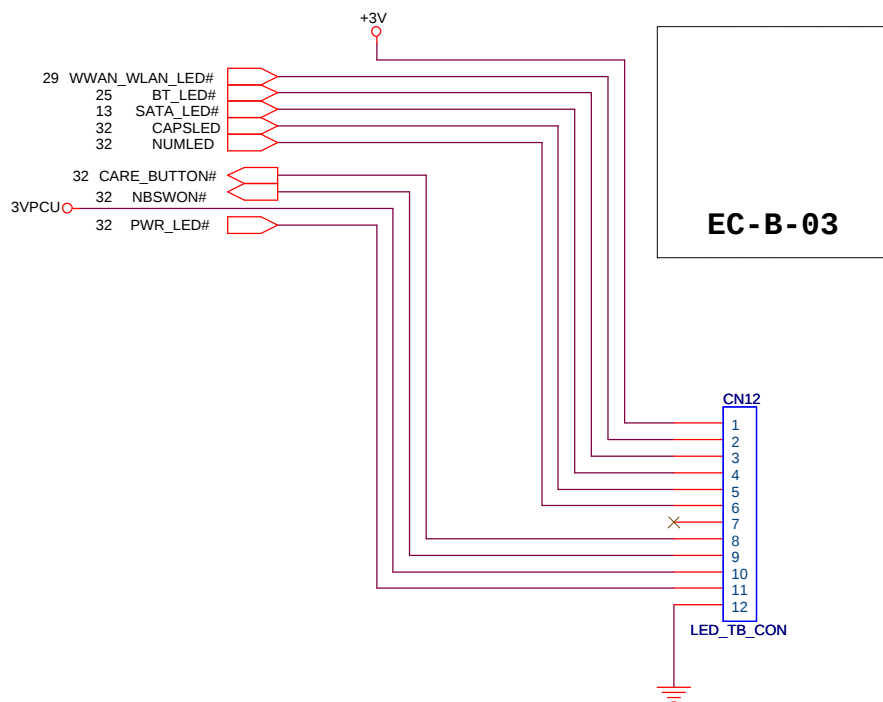


FFC TO LED RIGHT SIDE CONNECTOR

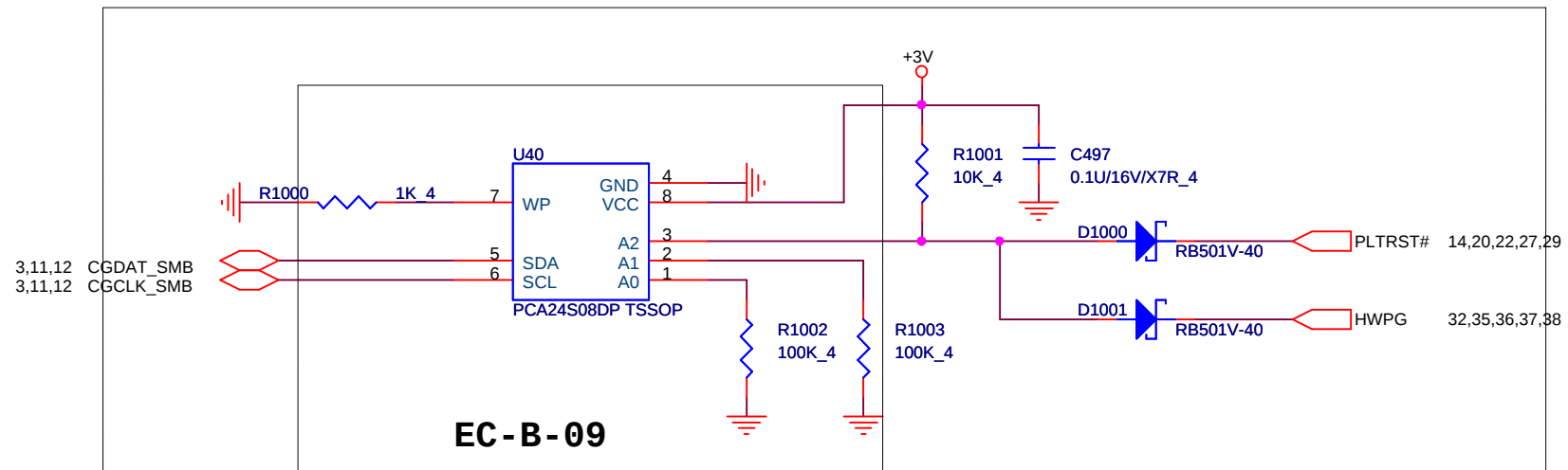
LOGO LED

EC-B-24

EC-B-03

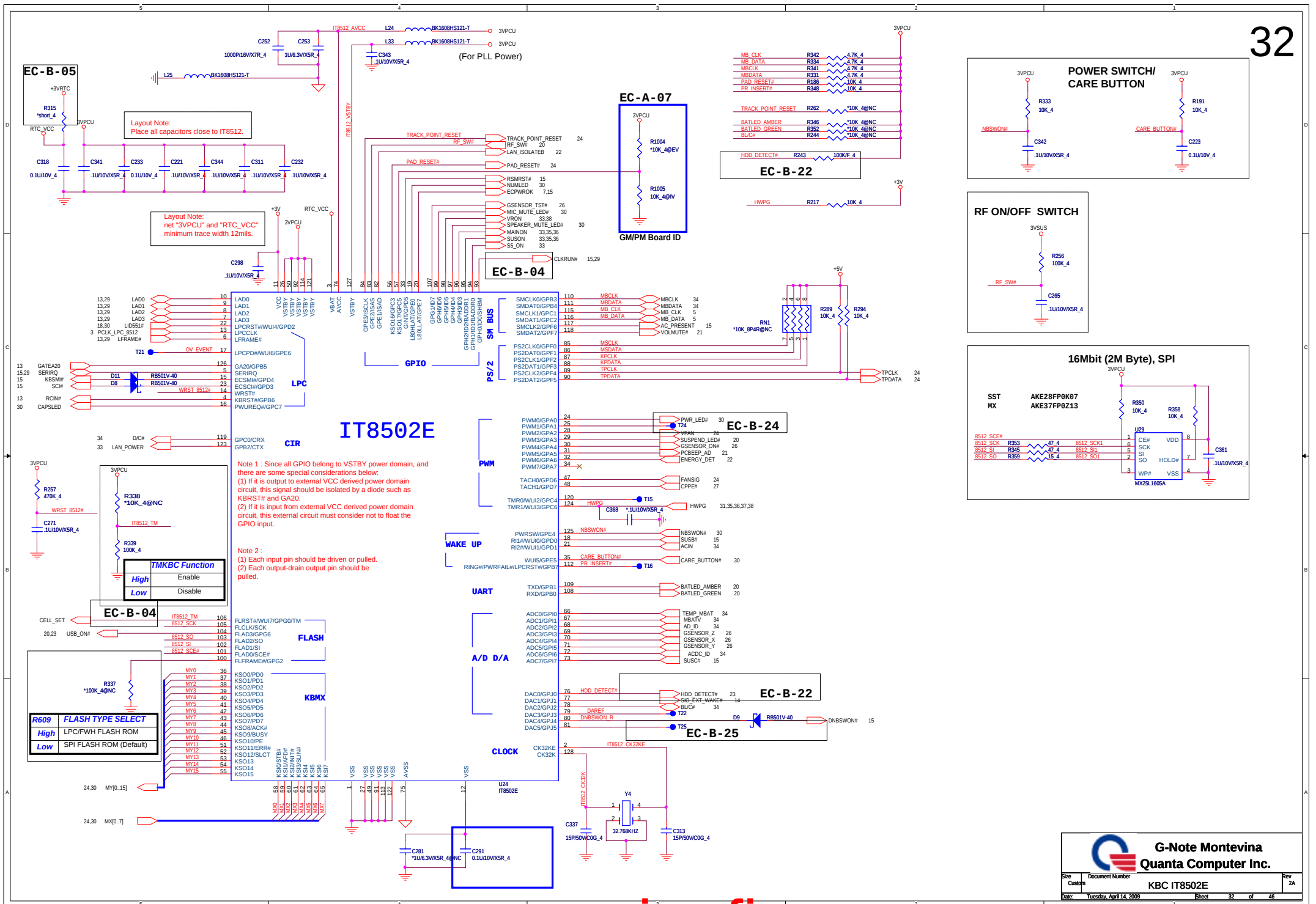


EC-A-04



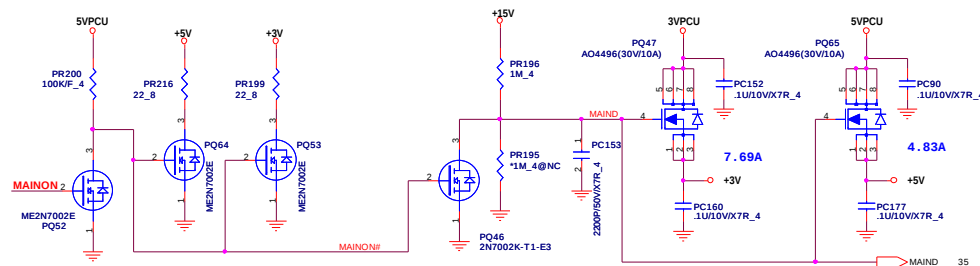
G-Note Montevina
Quanta Computer Inc.

Size A	Document Number RFID EEPROM	Rev 2A
Date: Tuesday, April 14, 2009	Sheet 31 of 41	



+3V, +5V

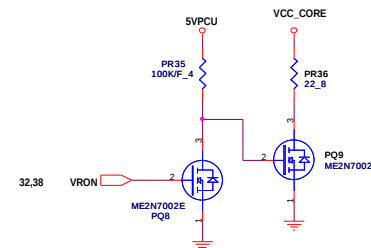
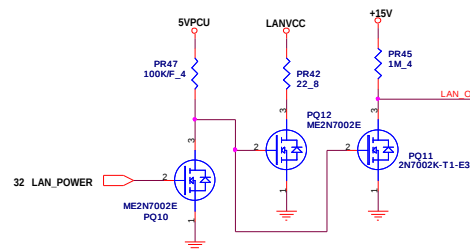
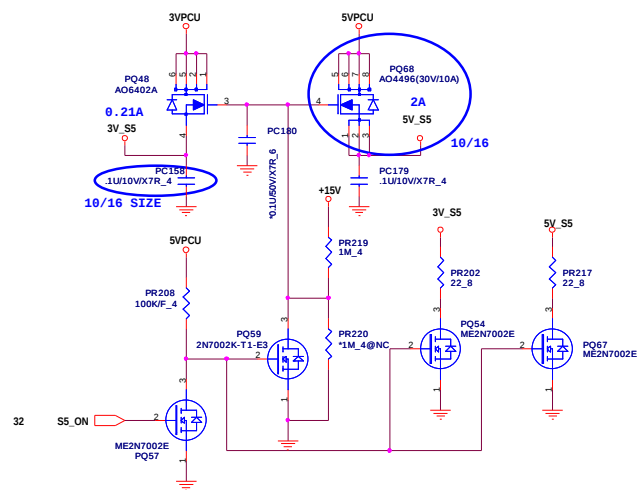
+1.05V, SMDDR_VTERM



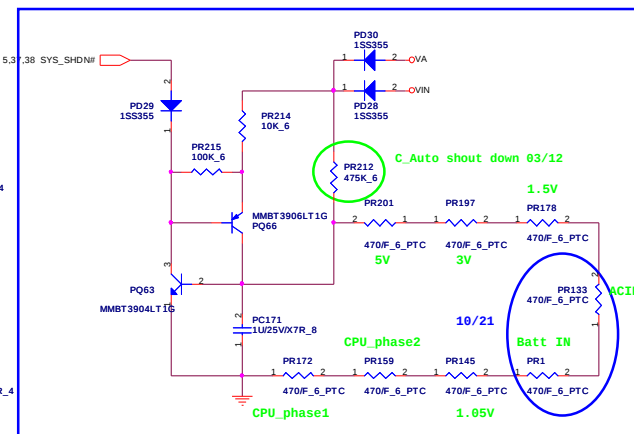
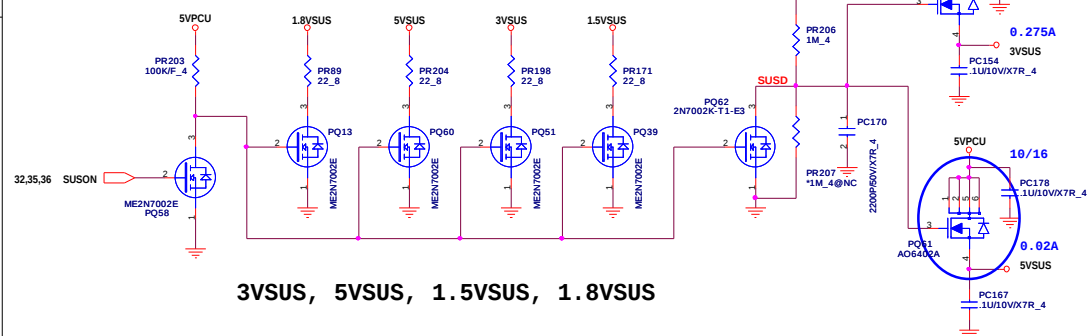
3V_S5, 5V_S5

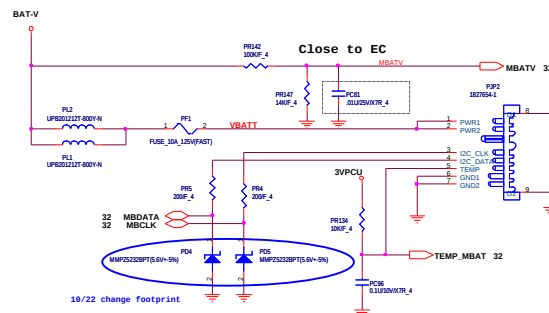
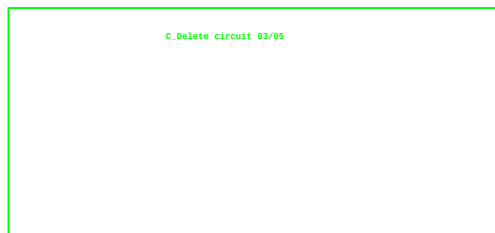
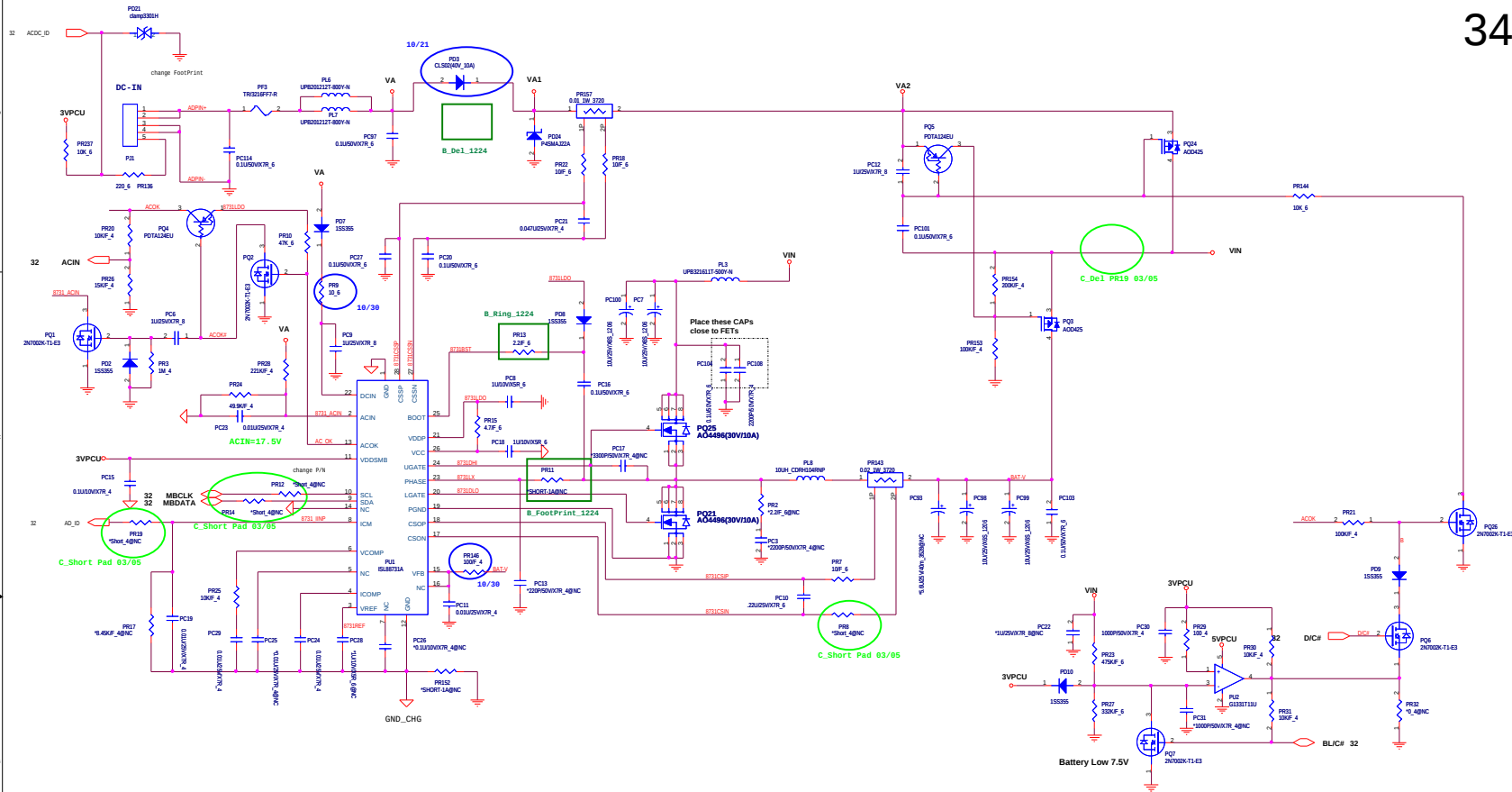
LANVCC

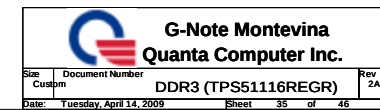
VCC_CORE

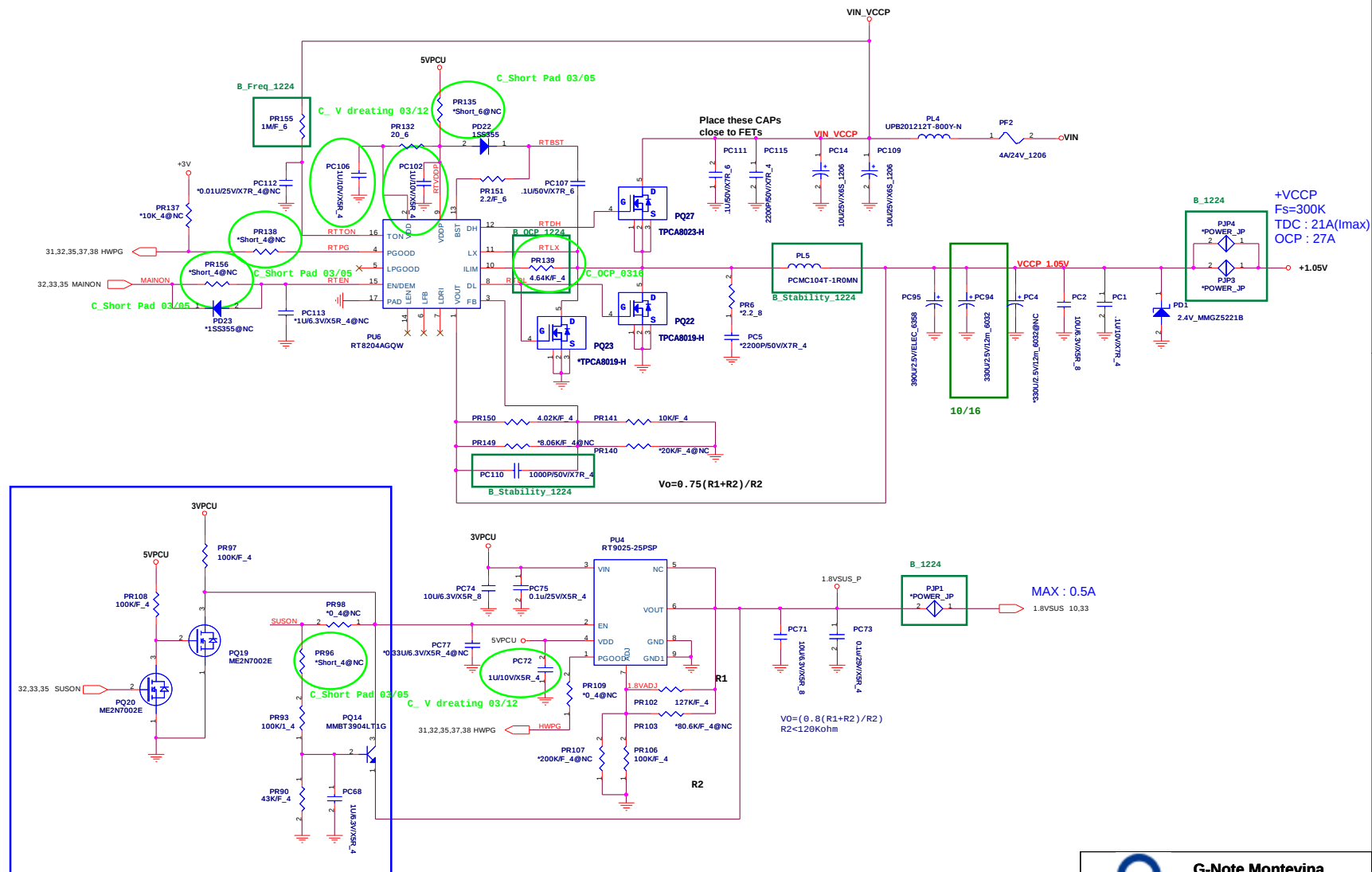


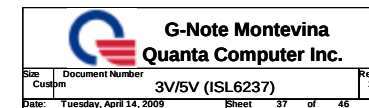
3VSUS, 5VSUS, 1.5VSUS, 1.8VSUS

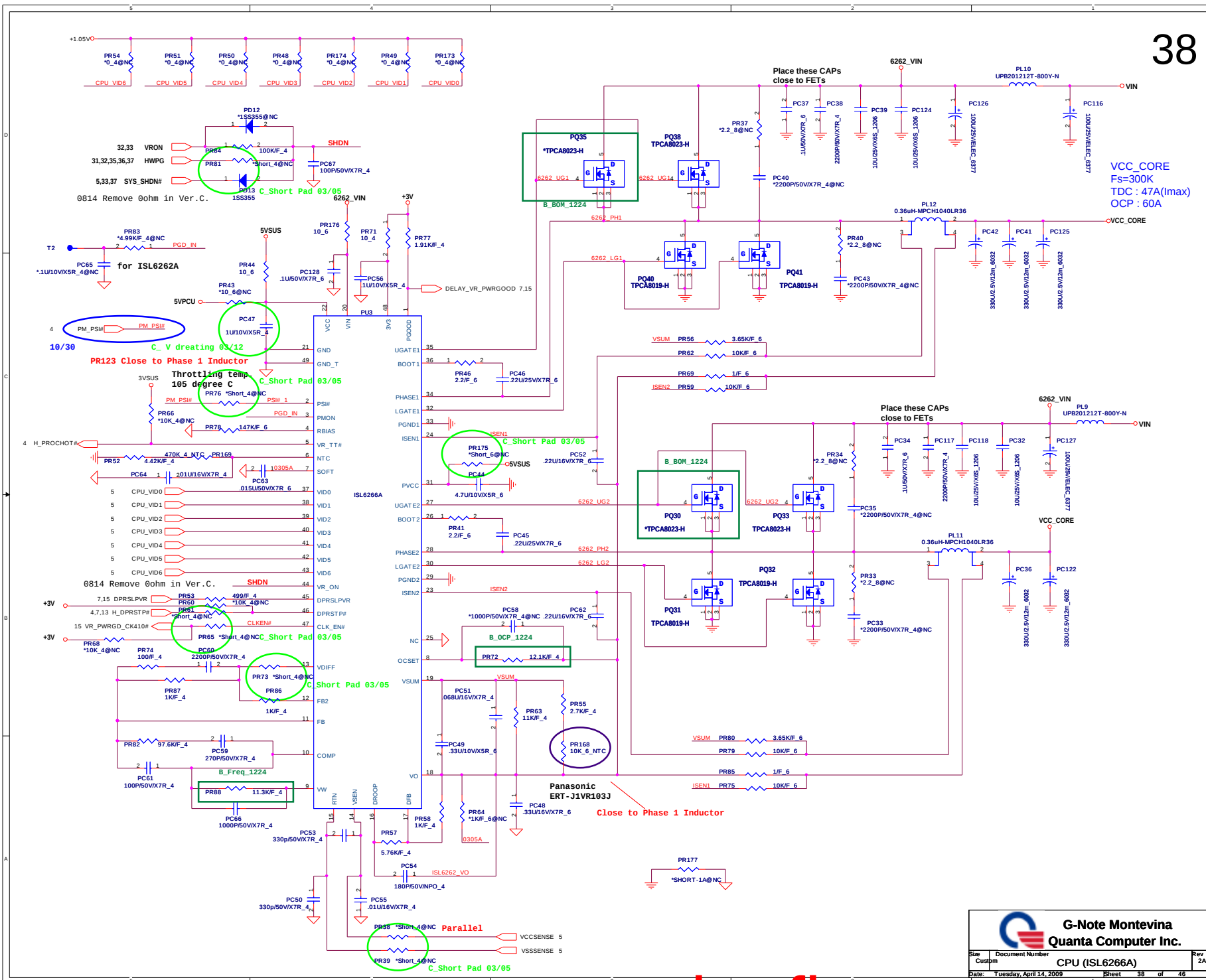


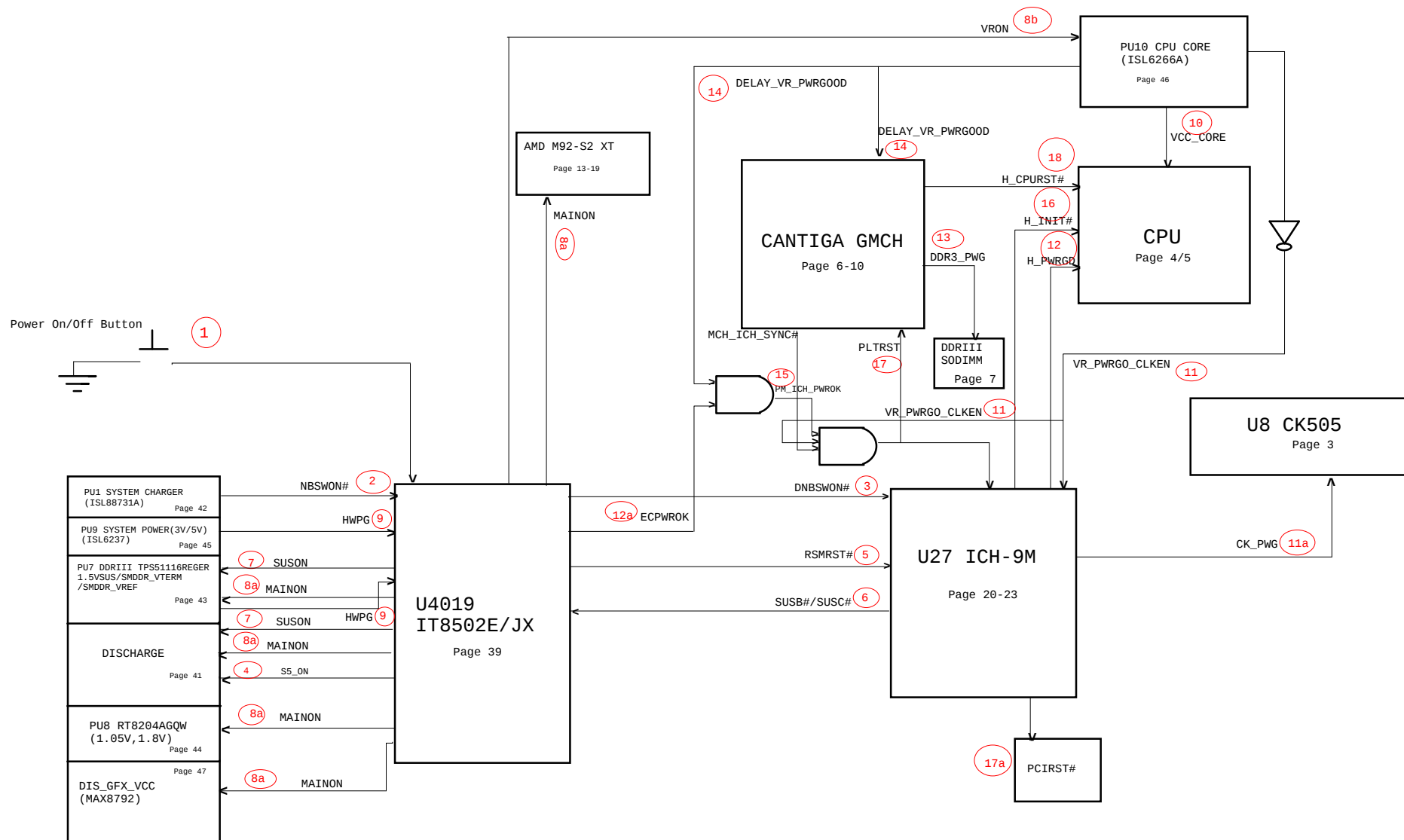












Revision History

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

Schematic Value Explanation Description :

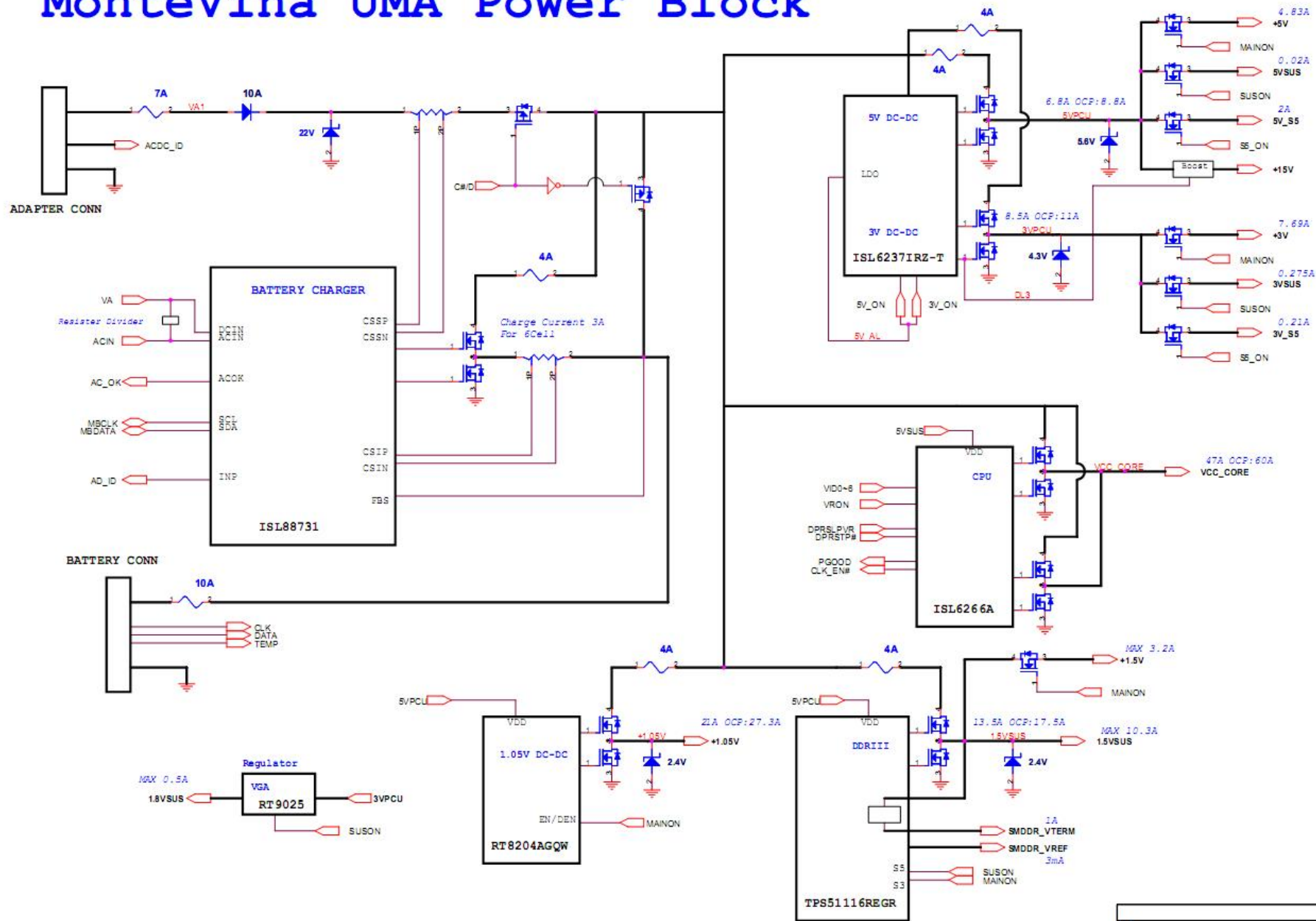
RESISTOR

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

MonteVina UMA Power Block



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G NOTE SKU TABLE

Location					Page

stage	EC NO.	Page	date	Location	description
EC-A-01	22	12/02	U8		LAN IC change footprint from 0.4 to 0.5 pich
EC-A-02	21	12/02	U27		audio IC edit parts add 9 agnd via
EC-A-03	03	12/02	U22		DREFSSCLK/#,DREFCLK/# update correct SRC and dot 96
EC-A-04	31	12/02	U40,R367		add r367 pull up 10kohm for debug code:F4
EC-A-05	14,15	12/02	R472,R243		CCD_ON net change to HDD_DETECT#(pull 100Kohm at R243) ,del R472 Re-assign HDD_Detect# to GPIO38 of ICH9M in order to solve the issue unable to boot from HDD.
EC-A-06	03	12/02	R293		change to 4.7Kohm To solve N.B. cannot get correct FSB frequency selection (error coed 02)
EC-A-07	32	12/09	U24.57,R1004,R1005		adaptor 90W(pull high), 65W(pull low)
EC-A-08	18	12/09	Q8		THINK LIGHT#
EC-A-09	30	12/09	R1006,R1007		MY13,MY11
EC-A-10	29	12/09	CN11		CLKRUN# SERIRQ LPC_LDRQ0# LPC_PD#
EC-A-11	10	12/19	L39		NB IND 0805 to 0603 for height limilt at DDR place
EC-A-12	21	12/09	c286,c287,c312,c326,c362,c372,c373		audio cap 0805 to 0603 for height limilt at new card place
EC-A-13	21	12/19	U27		audio vendor ask AGND to DGND
EC-A-14	18	12/19	CN5		LCD connector add GND for shield (EMI request)
EC-A-15	18	12/19	C178		cap 0805 to 0603 for new card height interfere
EC-A-16	29	12/23			Del aux_en_wowl reserved circuit
EC-A-17	5	12/23	del u34,c407,q10,q23,q28,e388,r390,r396,r398,q22,q20,r394(NC), q19,c389,r411,c457,u36,r417(NC),r418 add q10,q19,q20,r91(NC),r299,r101,r618,r102,r94,c153,u9,c388		change thermal sensor
EC-A-18	21	12/30	del R347(NC) add C710(NC),U54(NC)		Add new schematic to prevent "POP' sound.
EC-A-19	21	12/30	C261 R253 C259		remove C261 for THD+N remove R253 and put 0 ohm in C259 for Magantiude response
EC-A-20	18	12/30	R127 R126 R124 R125		Del R126, R125 /R127,R124 change to 10Kohm for PM common design
EC-A-21	15	12/30	R180 R181		R180 POP , R181 DEPOP for SIV stage
EC-A-22	19	1/6	del R149 R227		cancel IO_GND(EMI)

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stage	EC NO.	Page	date	Location	description
EC-A-23	30	1/6		add R125 R126 R227 R367 R375 del D14	EMI RESERVED
EC-A-24	21	1/6		R357 R354 change to 1k ohm	vendor's suggest . change 1k ohm for ESD
EC-A-24	22	1/6		add R579 R580	add moat for EMI, reserved bridge
EC-A-25	20	1/6		CN27	CN27 pin definid for EMI
EC-A-26	23	1/6			C469 C470 change to 10u/ 10v/X5R/0805 for derating(6.3v to 10v)
EC-A-27	03	1/19		C323 (18p cap pop)	clock generator for USB 48MHz slew rate
EC-B-01	22	3/3			LAN LED indicator definition wrong (LED0 & LED1 Reversed)
EC-B-02	28,14,3	3/3		CN9, R430, R429, R432, R433, R437, R435, U38(nc), C498, C485, C476, C479, C478, C191, C192, RP4, R267, R263	deleted uwb circuit
EC-B-03	23,30	3/3		deleted CN2(POWER/B), CN19(ODD) / (CN12 pop)	cancel GC1 connector
EC-B-04		3/3		P3:R316, R320, R290, R291, R230, R231, RP3, RP5, RP6, RP7 P4:R50 P5:R94 P7:R407, R413, R35, R39 P10:R399, R397, R416, R8, L2, R24, R59, L43, R409, R386, R16, R408 P11:R72 P15:R216, R312(NC) P16:R268, R298, R461, R176, R434, R241, R482, R487, R486, R156, R484, R297, R296, R209 P17:R62, R60, R57, R42, R47, R392, R422, R406, R419 P18:R142, R138, R103, R123, R121 P19:L16, L47, L46, L11, R220 P20:R495, R374 P21:R324, R332, R311, C259, R254, R261 P22:R98, R85, R96, R104, R88 P23:R269, R389, R69 P24:R89, R423, R424, R114 P29:R445, R446, R465, R469, R455, R473, R470 P30:R125, R126, R227, R367, R375, R1007 P32:R351, R336	deleted 0ohm
EC-B-05		3/3		P14:R270 P18:R106 P21:R376, R372, R233, R234, R240, R305 P25:R492, R491 P26:R328 P29:R454, R476 P32:R315 P18:R136, R137, R93 P19:R165, R160, R173, R169, R185, R178, R202, R194 P20:R494, R497, R498, R499, R493, R496 P23:R82, R83 P24:R129 P27:R159, R164	0ohm change to short pad
EC-B-06	24,27,29	3/3		R464, R462, R466, R468 0-->4.7K(NC) Add R209, R216 10K	smb change to pull up
EC-B-07	27	3/3		add C523(0.047u cap)	new card power switch change to 3vsus PCIE_WAKE# add C523(0.047u cap)
EC-B-08	26	3/3		Add R8(10ohm)	for sensitivity of G sensor
EC-B-09	31	3/3			RFID u40 change to TSSOP R1000 change to 1K R1002, R1003 change to 100k
EC-B-10	15	3/3		R180, R207 depop, R192, R181 pop	Change board ID to SIT
EC-B-11	21	3/4		Add C389(NC), C390(NC)	Audio speaker ,EMI
EC-B-12	24	3/5		CN4	K/B CN pin 1 need to rotate 180 degree and footprint
EC-B-13	17	3/5		Delete C419(NC), C459(NC), C71(NC), C73(NC)	SMT open issue. crt R,C too much and close that hard to rework
EC-B-14	21,22,30	3/6		Add C191, C192, C259, C395, C407, C419, C459 R236-R239 0ohm-->bead	EMI solution

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stage	EC NO.	Page	date	Location	description
EC-B-15	21	3/9	Delete C246~C249(NC)		delete audio reserve parts
EC-B-16	3	3/9	Delete R325, R292, R232 add L43, L46~L50		for RF request
EC-B-17	23	3/11	Delete U4, U6 Add R57		for ESD request
EC-B-18	18	3/12	Delete C181(NC), C182(NC) Add R123		for EMI request
EC-B-19	22	3/12	change R579, R580 -> 0.1u		for LAN realtek design guide

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EC NO.	PG.	DATE	PART REFERENCE	DESCRIPTION
EC-A-01	34	12/24	PR10	Change Footprint
EC-A-02	34	12/24	PR12	Change to 2.2 ohm reduce phase ring
EC-A-03	34	12/24	PD6	Delete Footprint
EC-A-04	35	12/24	PJP7,PJP5,PJP6	Change Footprint
EC-A-05	35	12/24	PR94	Change to 5.36K for OCP
EC-A-06	35	12/24	PC145	Add 1000p for stability
EC-A-07	36	12/24	PJP3,PJP4,PJP1	Change Footprint
EC-A-08	36	12/24	PR139	Change to 3.4K for OCP
EC-A-09	36	12/24	PC110	Add 1000p for stability
EC-A-10	36	12/24	PL5,PR155	Reduce ripple voltage
EC-A-11	37	12/24	PR113	Change to 267K for OCP
EC-A-12	37	12/24	PC150,PC176	Change to 4.7u reduce H.F. noise reduce
EC-A-13	37	12/24	PD20,PD17	NA to reduce leakage current
EC-A-14	38	12/24	PR72	Change to 12.1K for OCP
EC-A-15	38	12/24	PR88	Change to 11.3K for frequency 300KHz
EC-A-16	38	12/24	PJP5,PJP6,PJP7	Modify schematic PQ30,PQ35 for NA

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