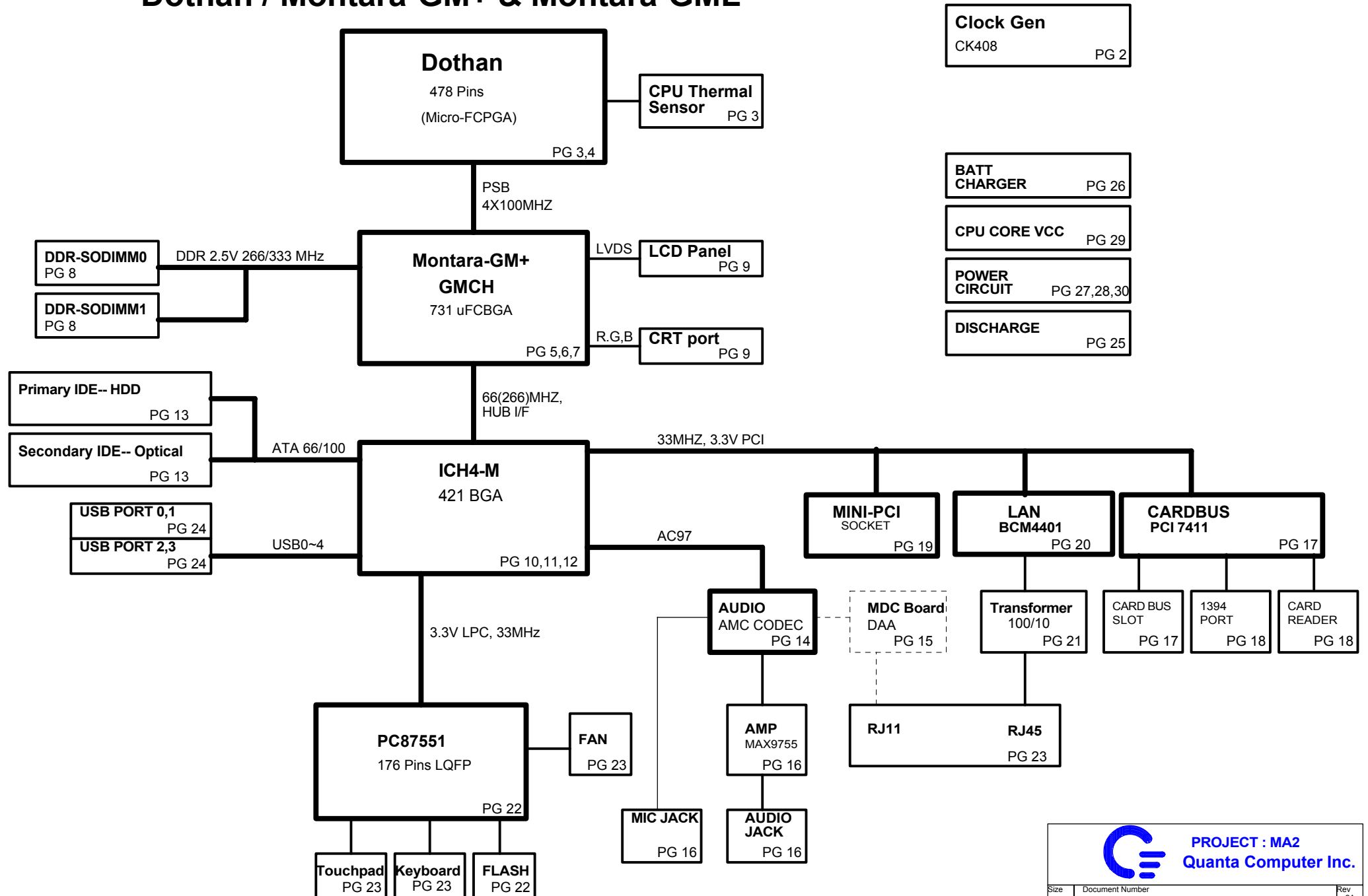
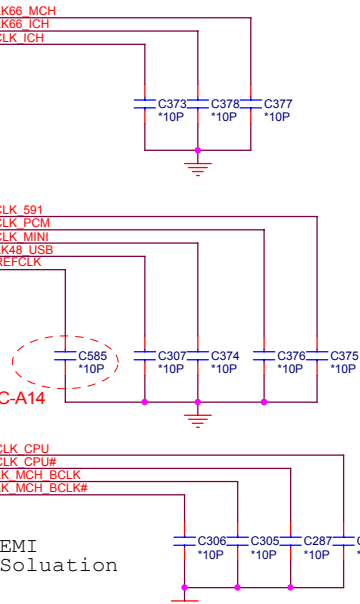
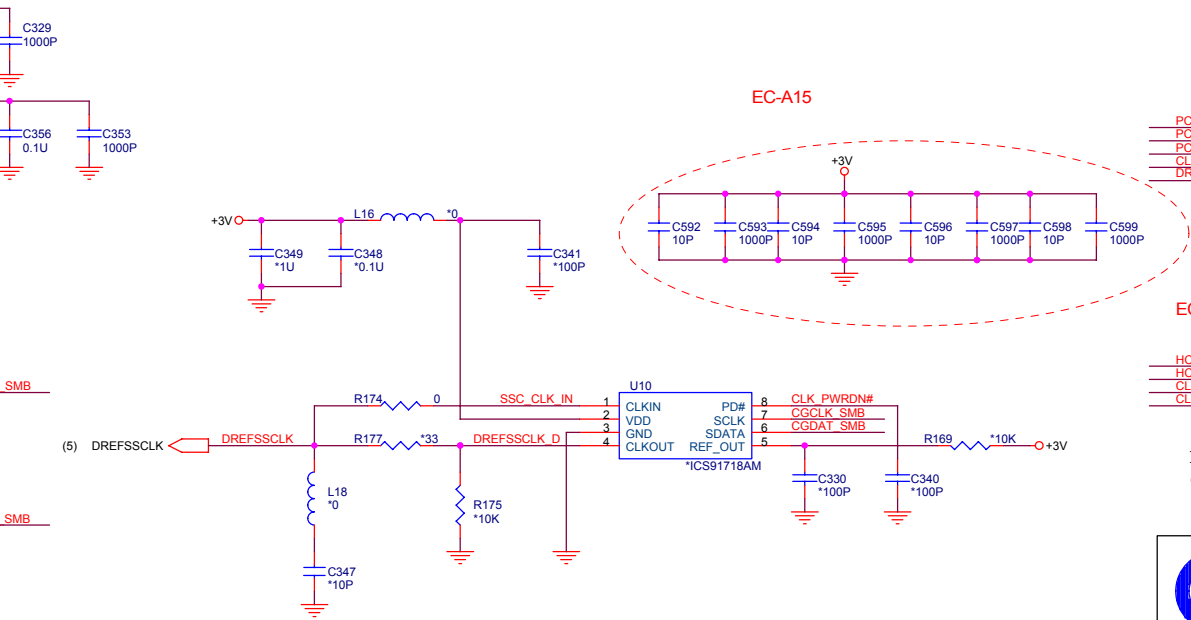
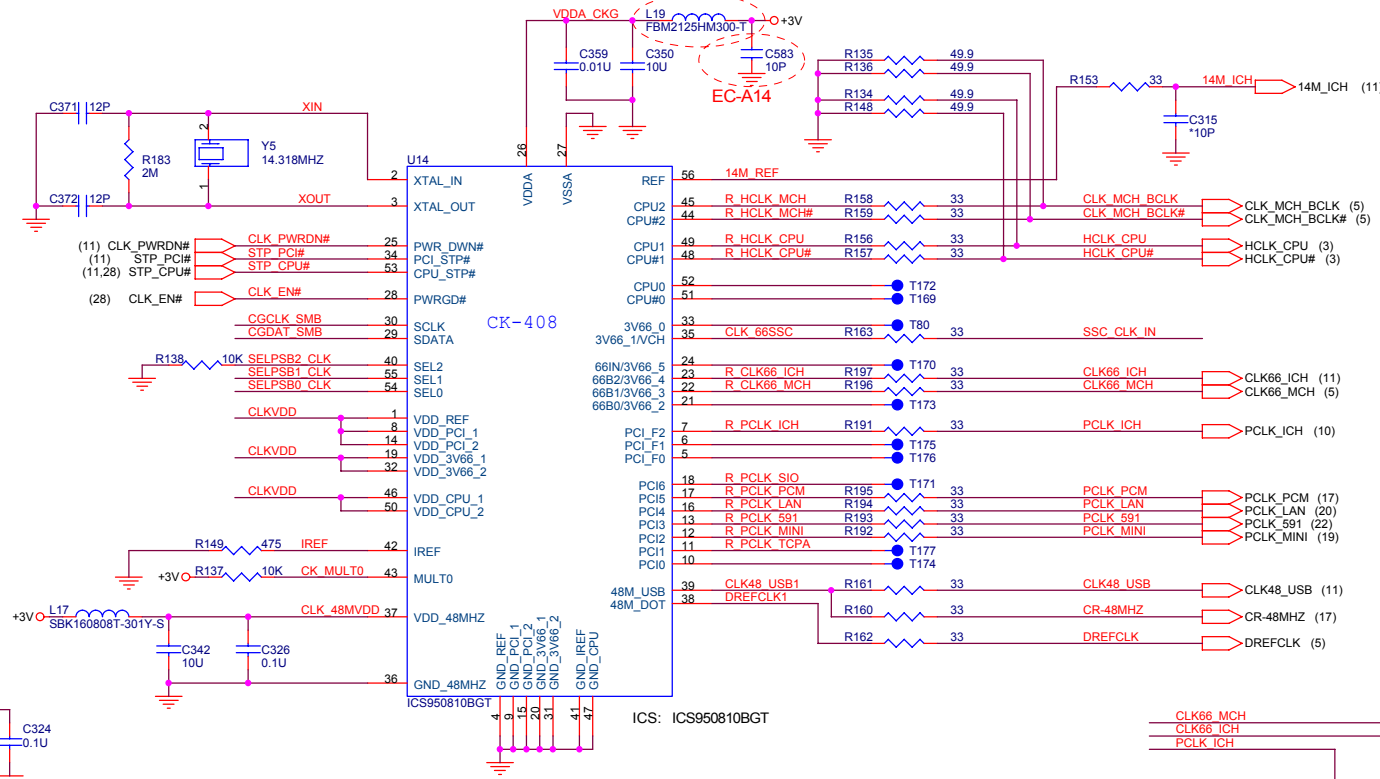
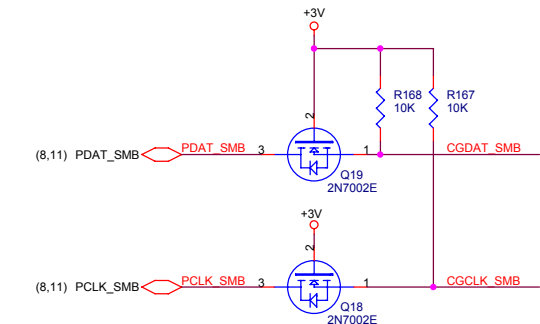
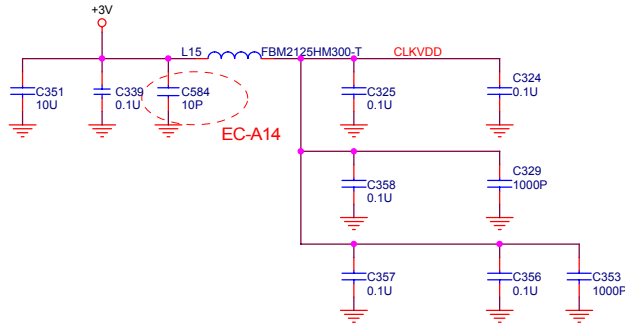
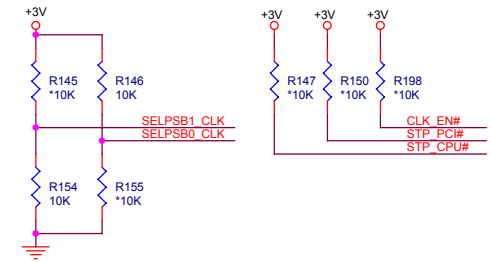


MA2 BLOCK DIAGRAM

Dothan / Montara-GM+ & Montara-GML



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 Input
0	0	1	100	66	66 Input
0	1	0	200	66	66 Input
0	1	1	133	66	66 Input



Dothan

1 OF 3

REQUEST
PHASE
SIGNALS

DATA
PHASE
SIGNALS

ERROR
SIGNALS

ARBITRATION
PHASE
SIGNALS

SNOOP PHASE
SIGNALS

RESPONSE
PHASE
SIGNALS

PC
COMPATIBILITY
SIGNALS

DIAGNOSTIC
& TEST
SIGNALS

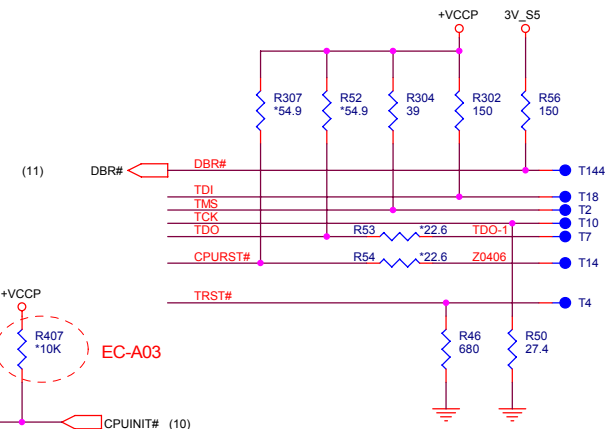
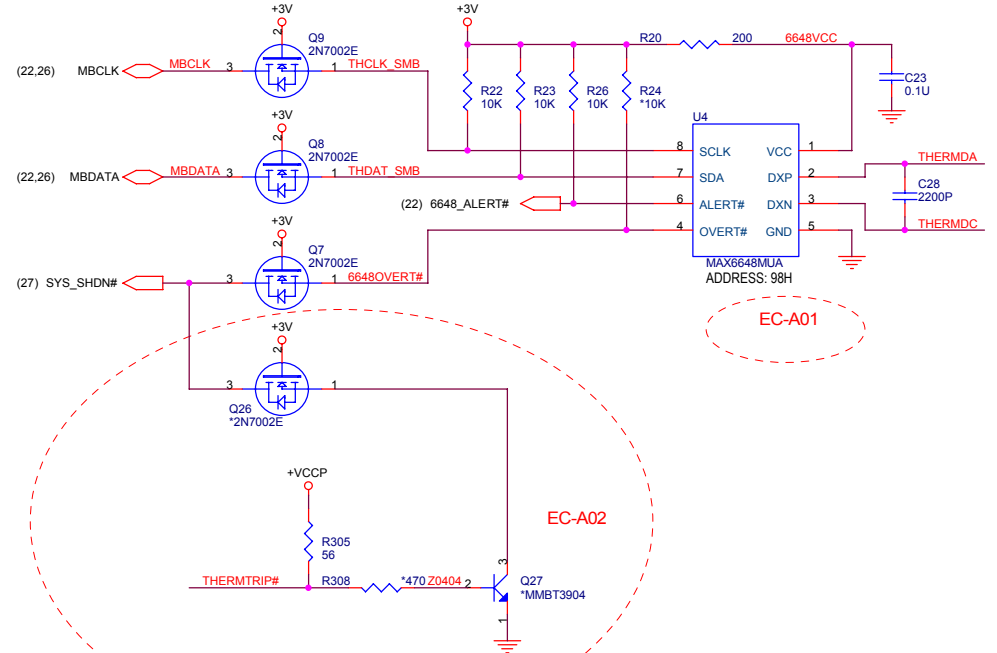
EXECUTION
CONTROL
SIGNALS

THERMAL
DIODE

CPU-479P-UPGA

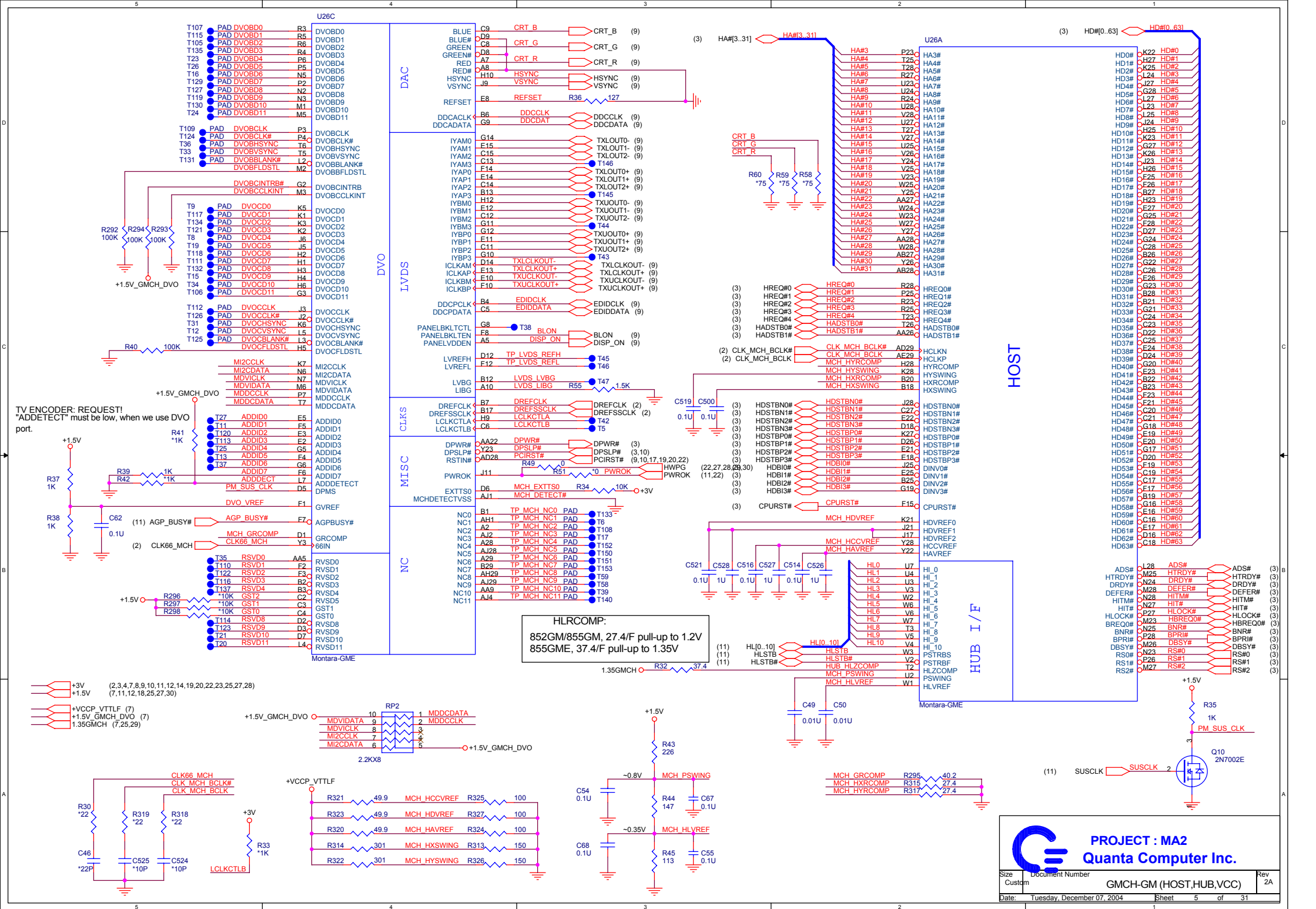
Co-layout uPGA and uBGA.

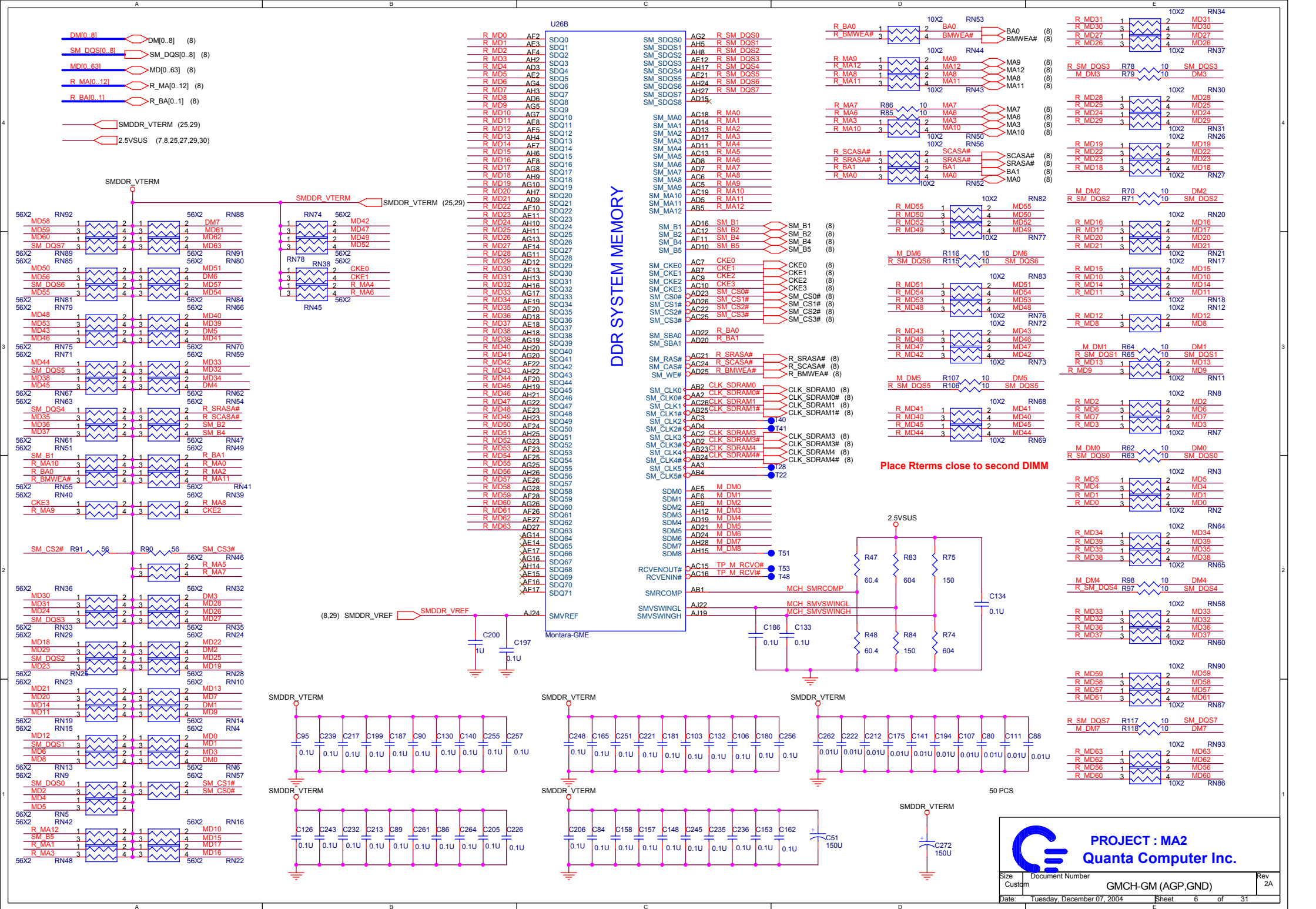
HD#10..631 HD#0..63] (5)

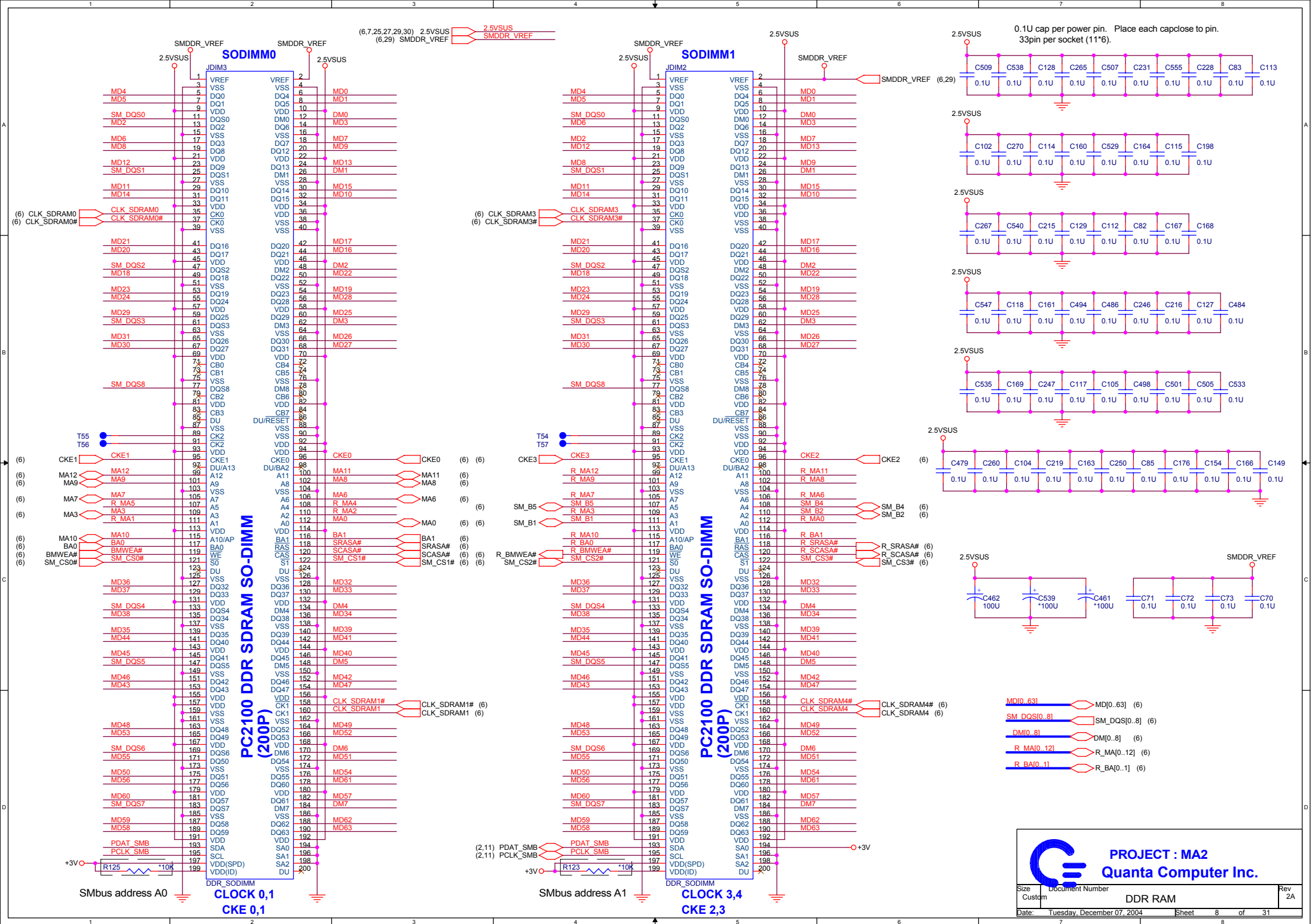


PROJECT : MA2
Quanta Computer Inc.

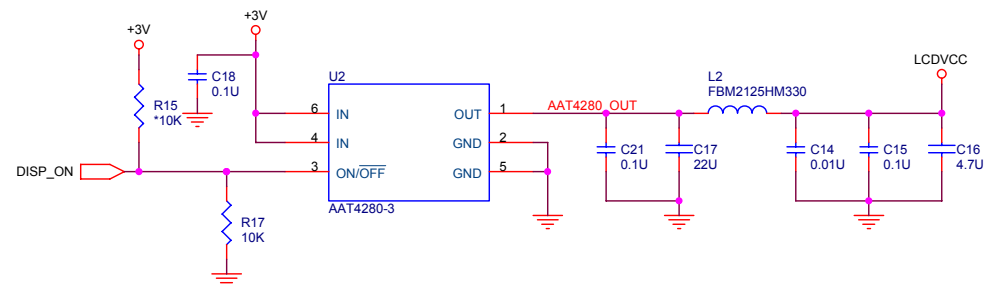
Size	Custom	Document Number	DOTHAN (HOST BUS)	Rev	2A
Date:	Tuesday, December 07, 2004	Sheet	3	of	31



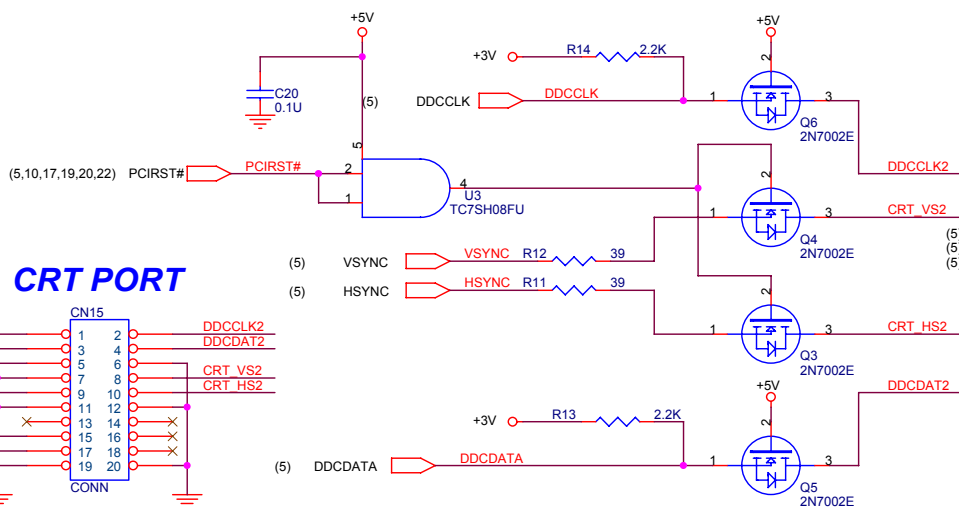
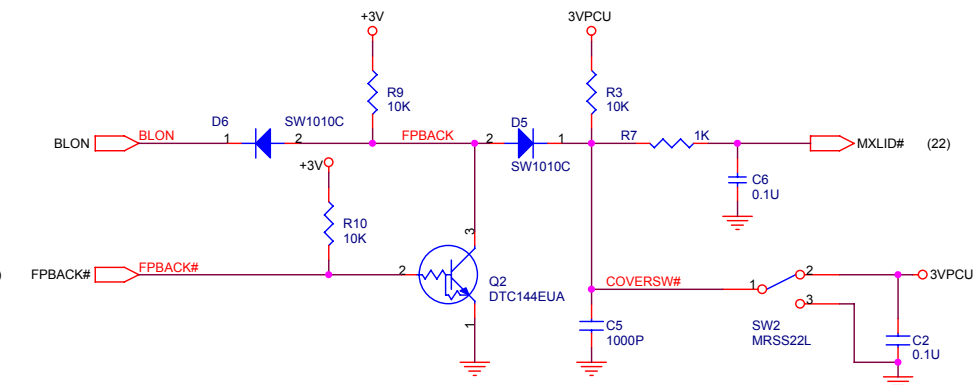




PANEL VCC CONTROL

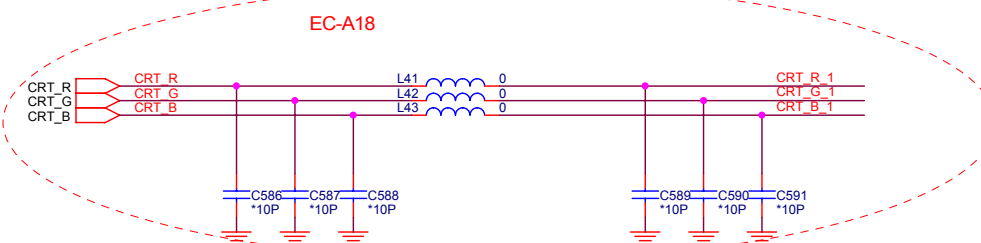
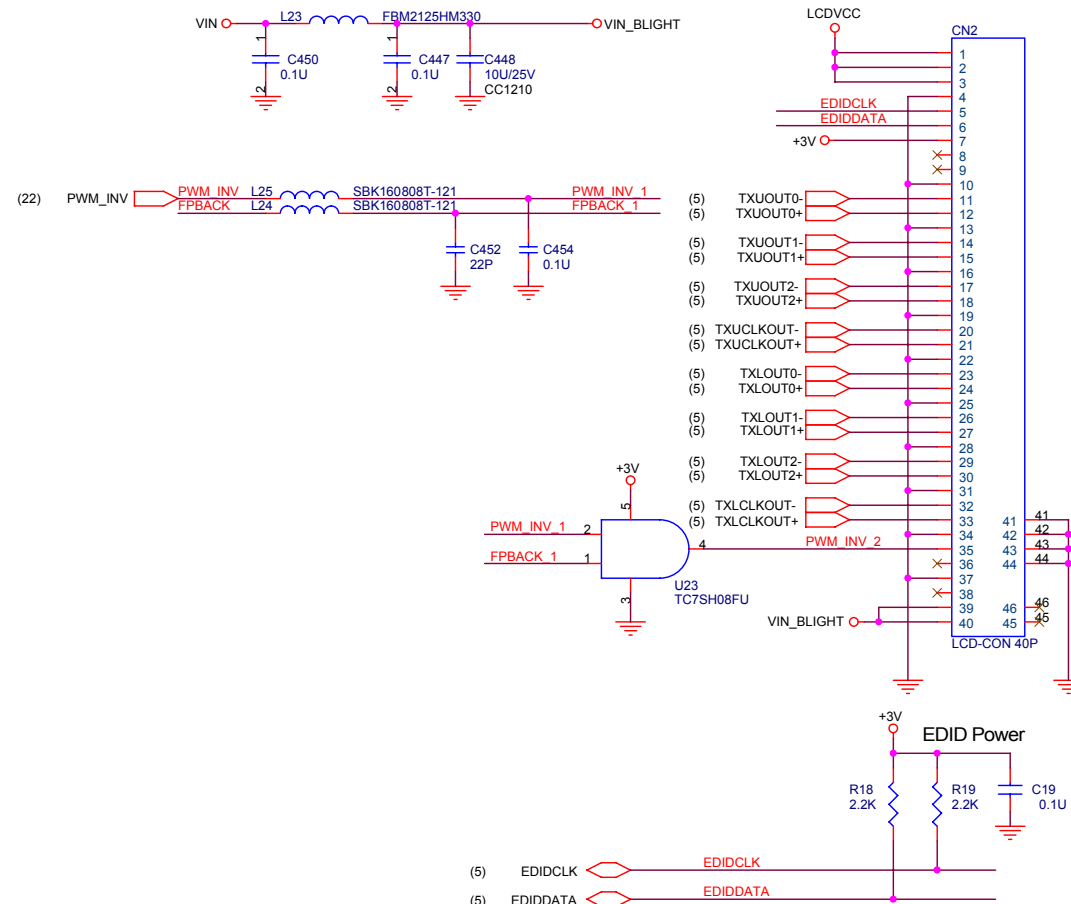


BACKLIGHT CONTROL



CRT PORT

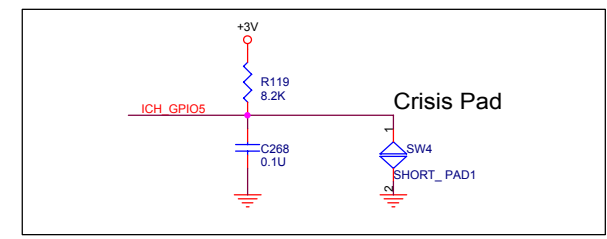
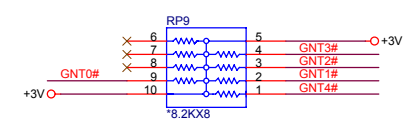
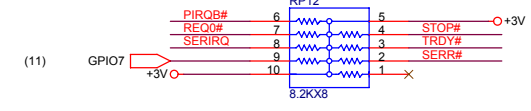
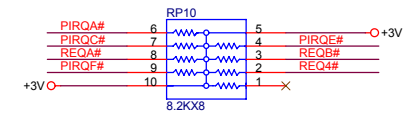
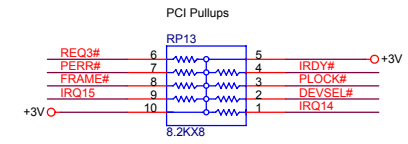
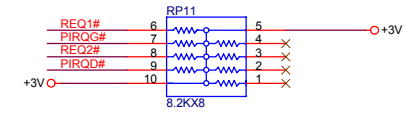
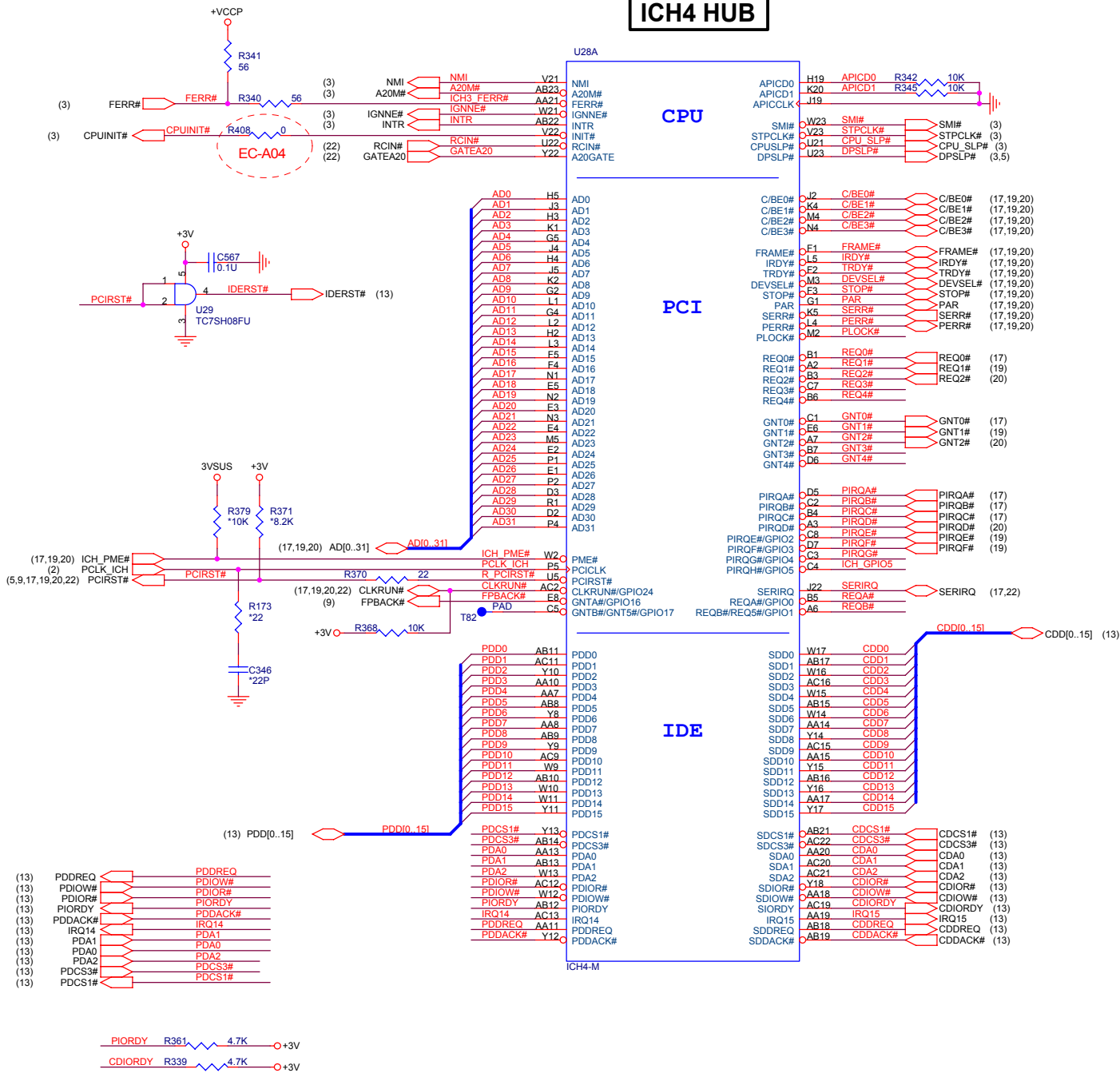
LCD CONNECTOR

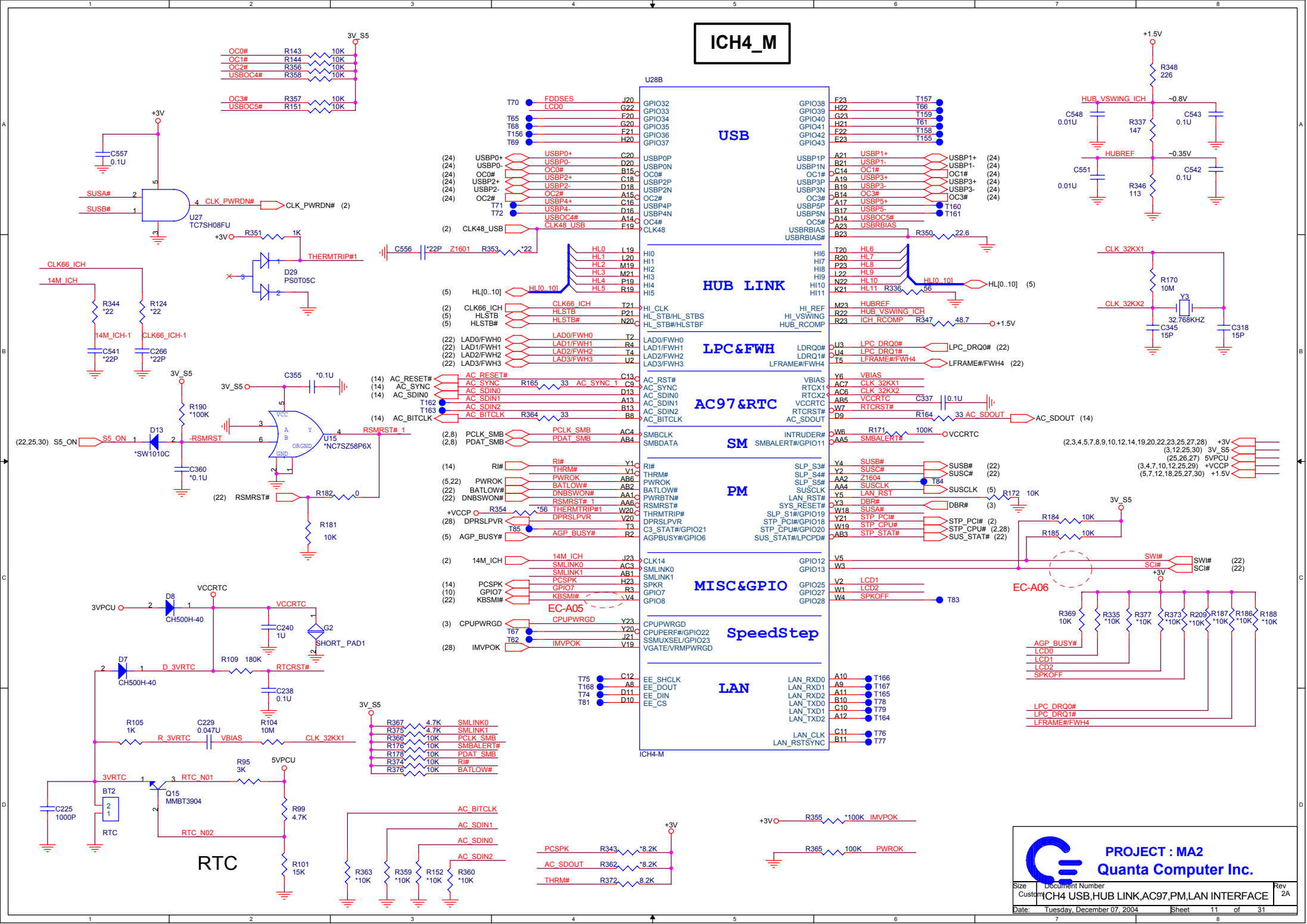


PROJECT : MA2
Quanta Computer Inc.

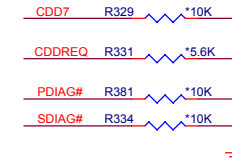
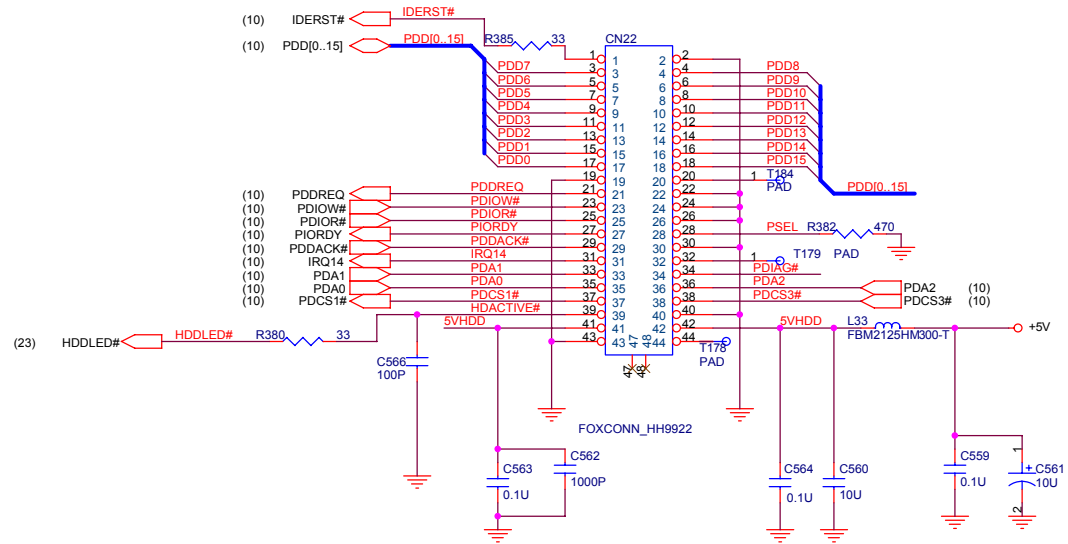
Size B	Document Number LCD LVDS & CRT CON	Rev 2A
Date:	Tuesday, December 07, 2004	Sheet 9 of 31

ICH4 HUB

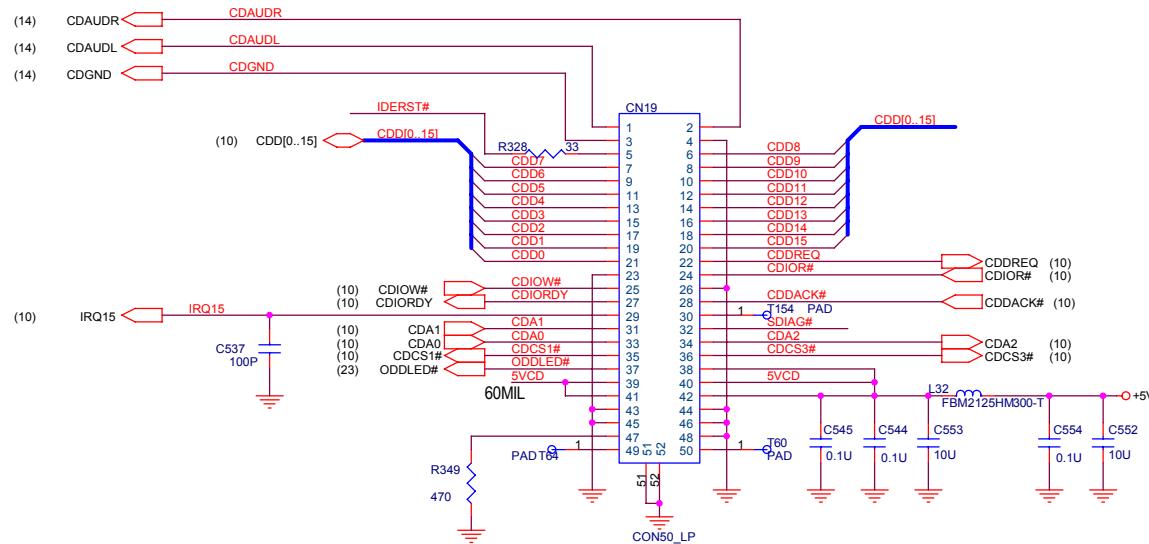




HDD connector

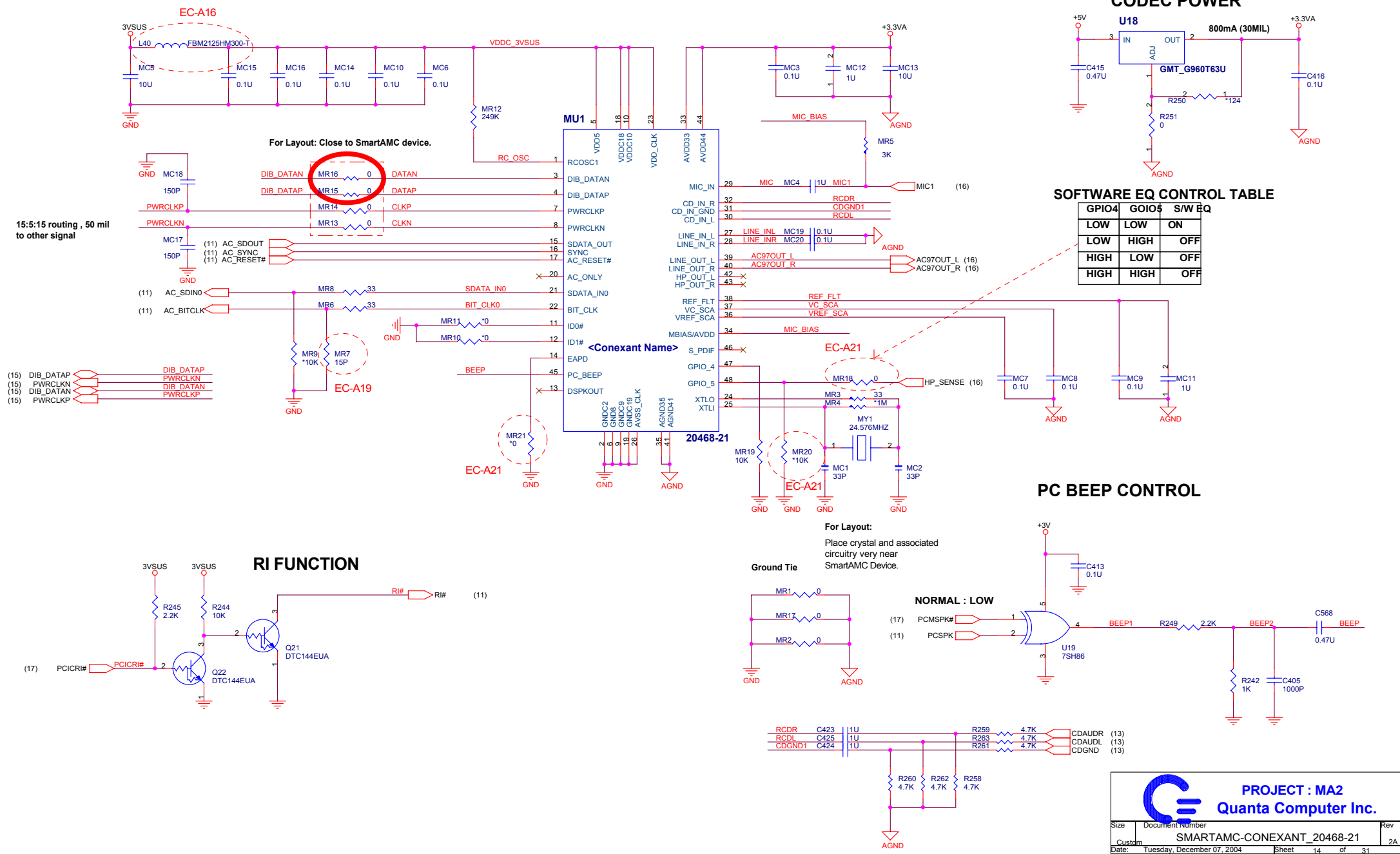


CD-ROM connector



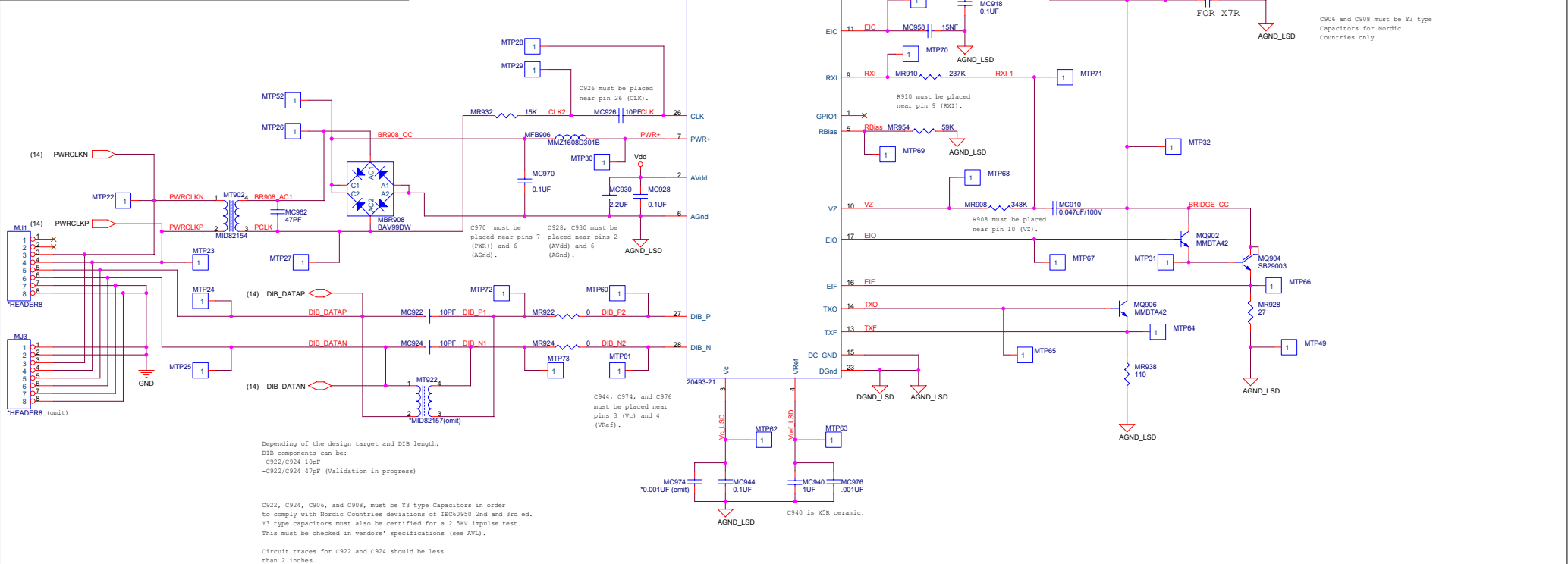
SMARTAMC-CONEXANT 20468-21

For Layout:
Place decoupling caps near the power pins of SmartAMC device.

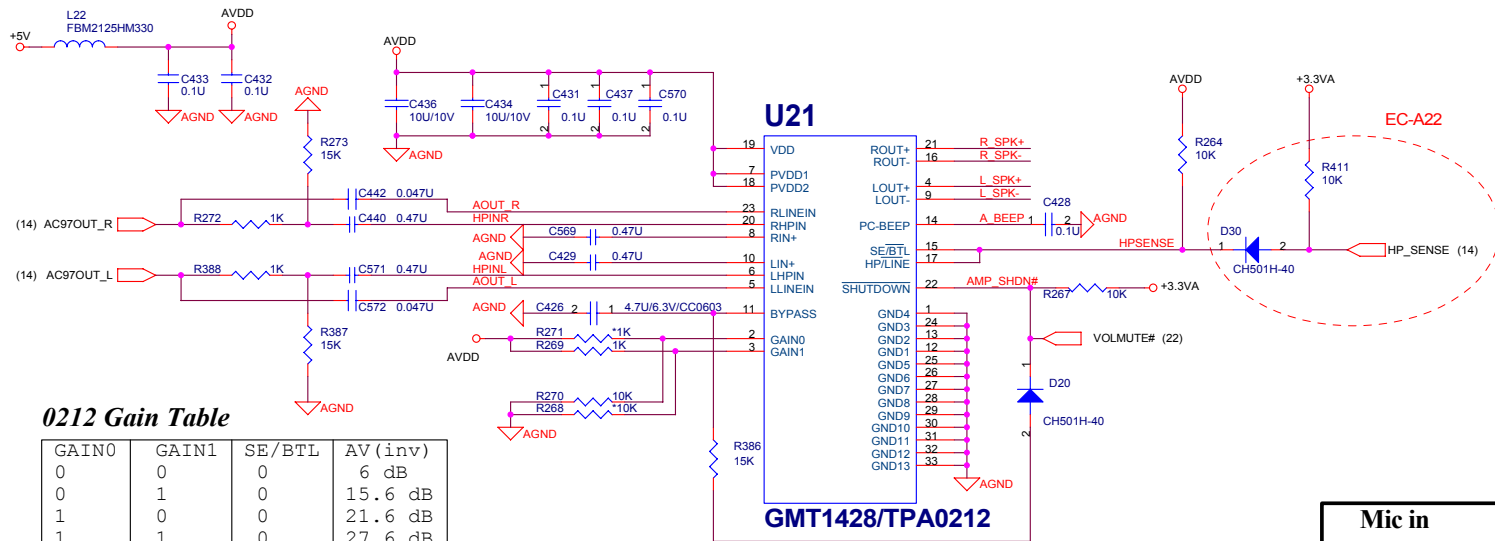


SMARTDAA_20493-21

Revision History		
REV	Description	Date
00	Initial Release	February 14, 2002
01	27mmx27mm form factor.	July 5, 2002
02	6 pins J1 connector-T/R traces for specific uses-100V C902/C904	September 24, 2002
03	add J1B - remove T903	October 9, 2002
04	Change J1 & J1B. Change R938 size, Add TP60 to TP71.	November 12, 2002
05	Removed J1B. Change size for C978, C984, R902, R904, R906, R908, R910 and R978. Changed BR904 and BR906 to different manufacture.	November 26, 2002
06	Corrected error in Q904 PCB footprint.	January 3, 2003
07	Added DIB data transformer footprint, added MC966, deleted ring impedance circuit. Added the letter "MF" prefix to all reference designators.	September 24, 2003
08	Changed value for MC966 from 3.3nF to 10nF, 100V, +/-20%, Y5V. By default, MC966 will be populated. Also, changed CX20493 revision from 11 to 21.	November 06, 2003



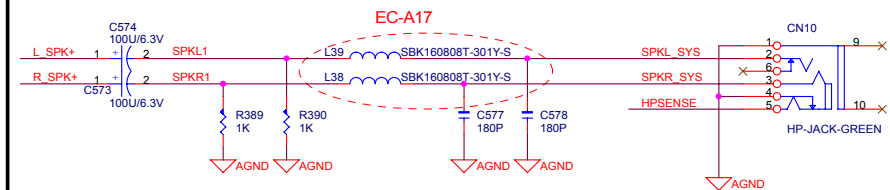
AUDIO AMPLIFIER



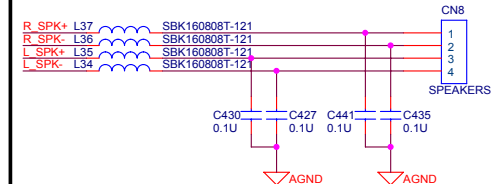
0212 Gain Table

GAIN0	GAIN1	SE/BTL	AV(inv)
0	0	0	6 dB
0	1	0	15.6 dB
1	0	0	21.6 dB
1	1	0	27.6 dB
X	X	1	0 dB

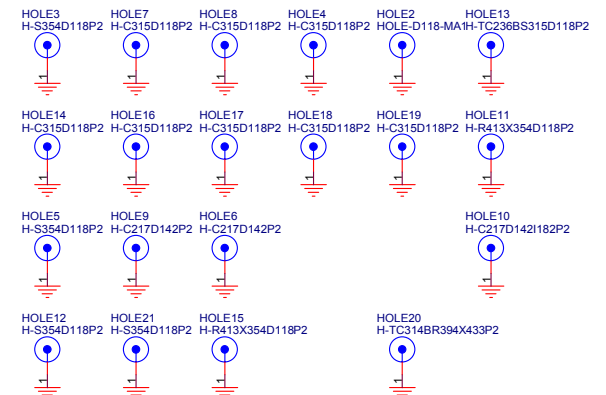
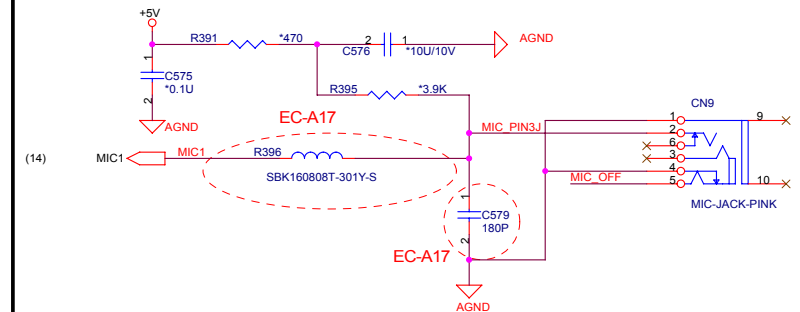
Headphone out



INT. SPEAKER

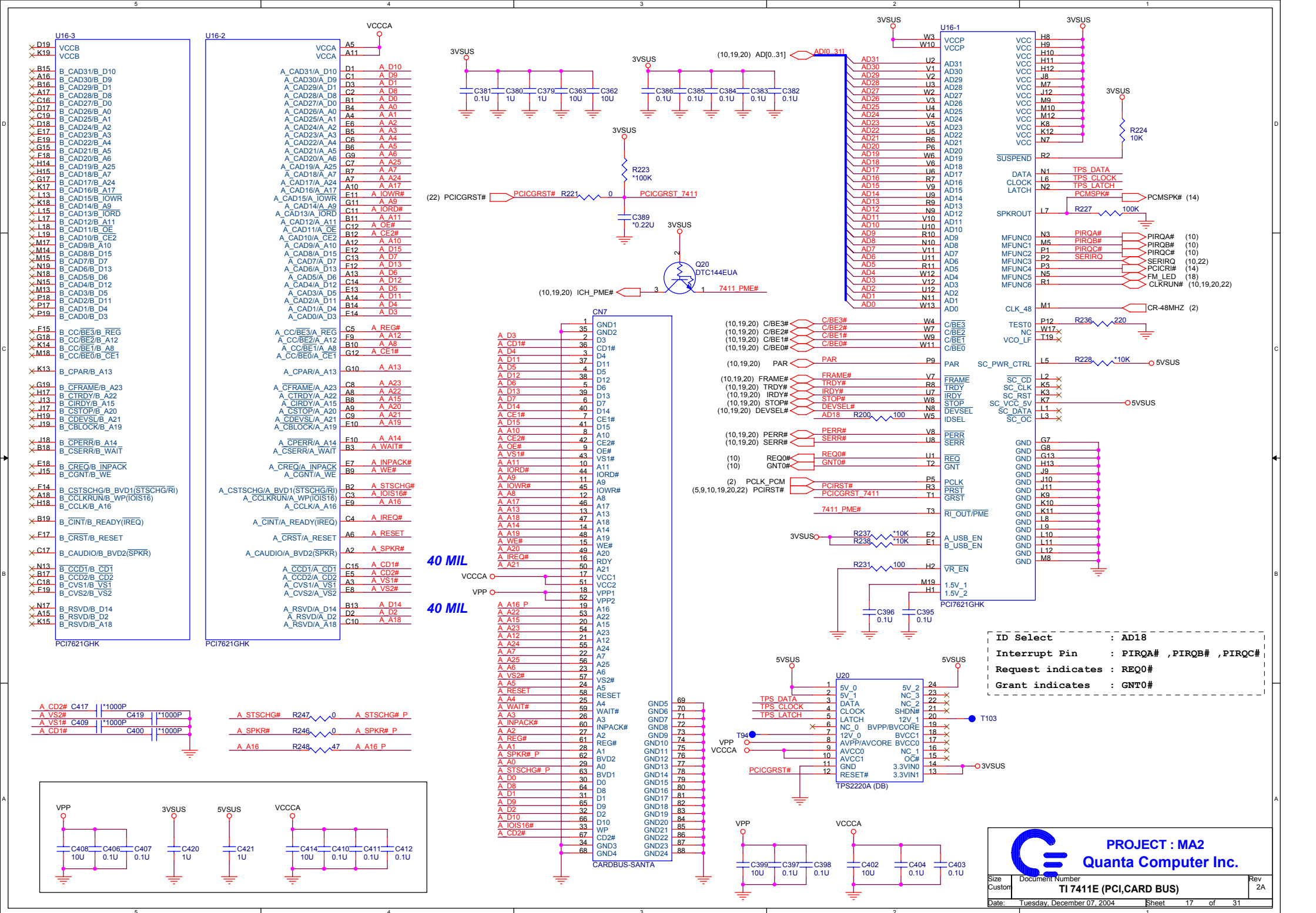


Mic in



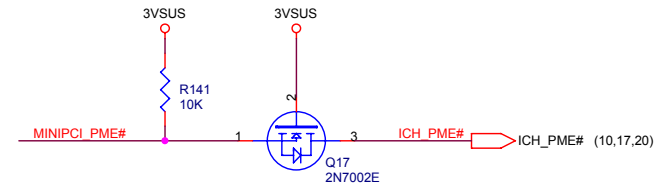
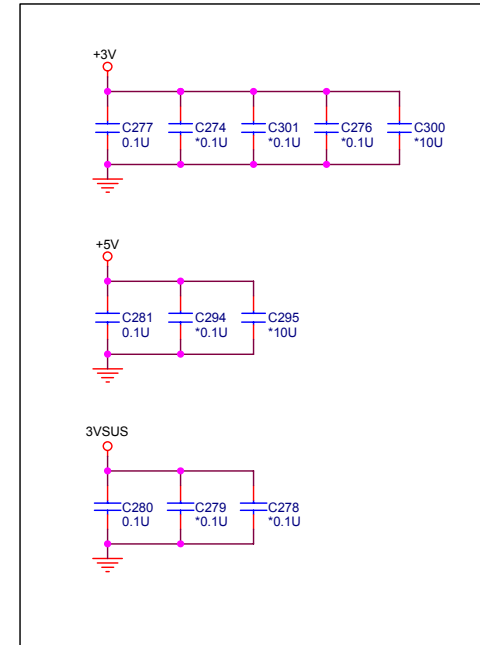
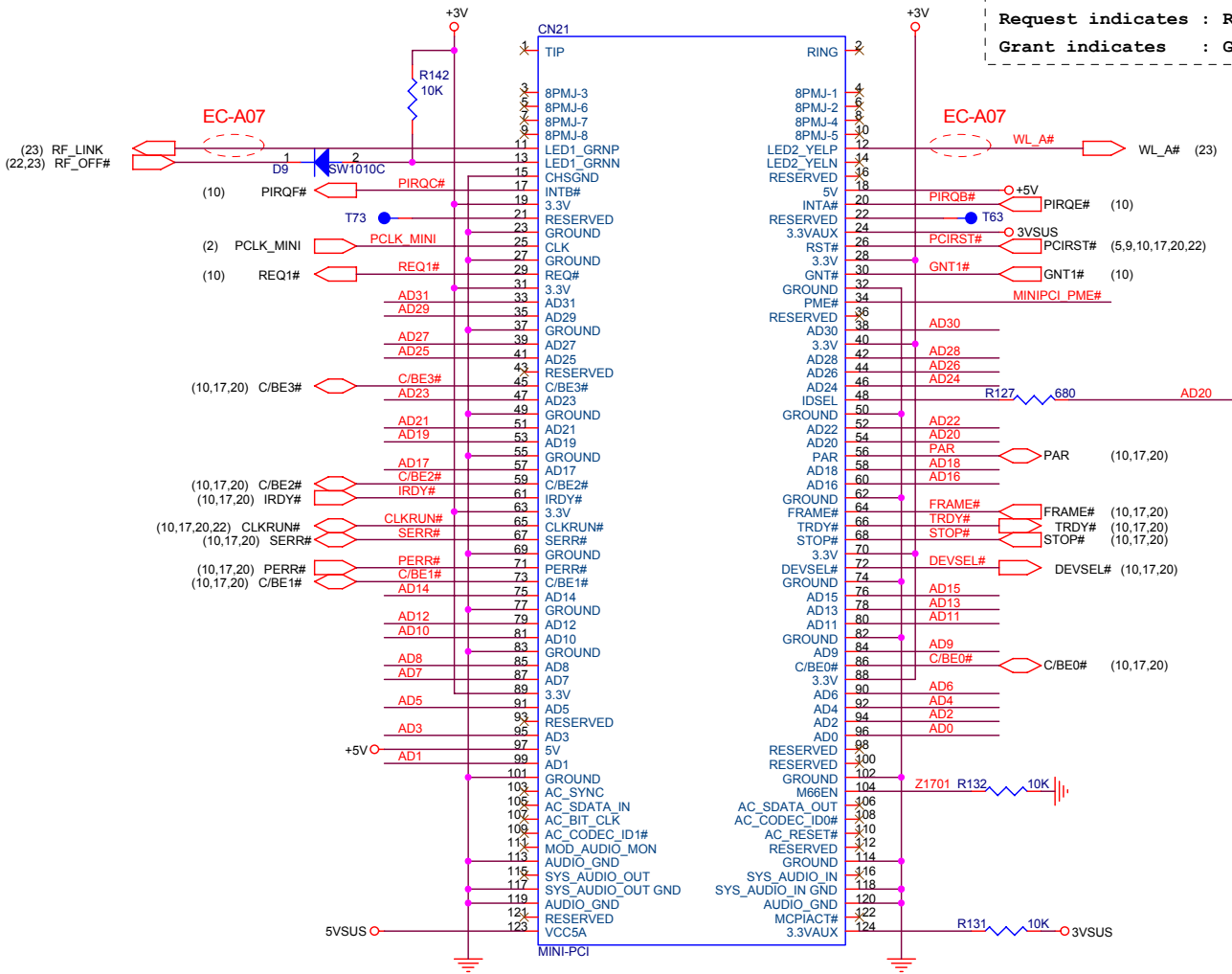
PROJECT : MA2
Quanta Computer Inc.

Size	Document Number	Rev
Custom	AUDIO AMP & JACK	2A
Date:	Tuesday, December 07, 2004	Sheet 16 of 31



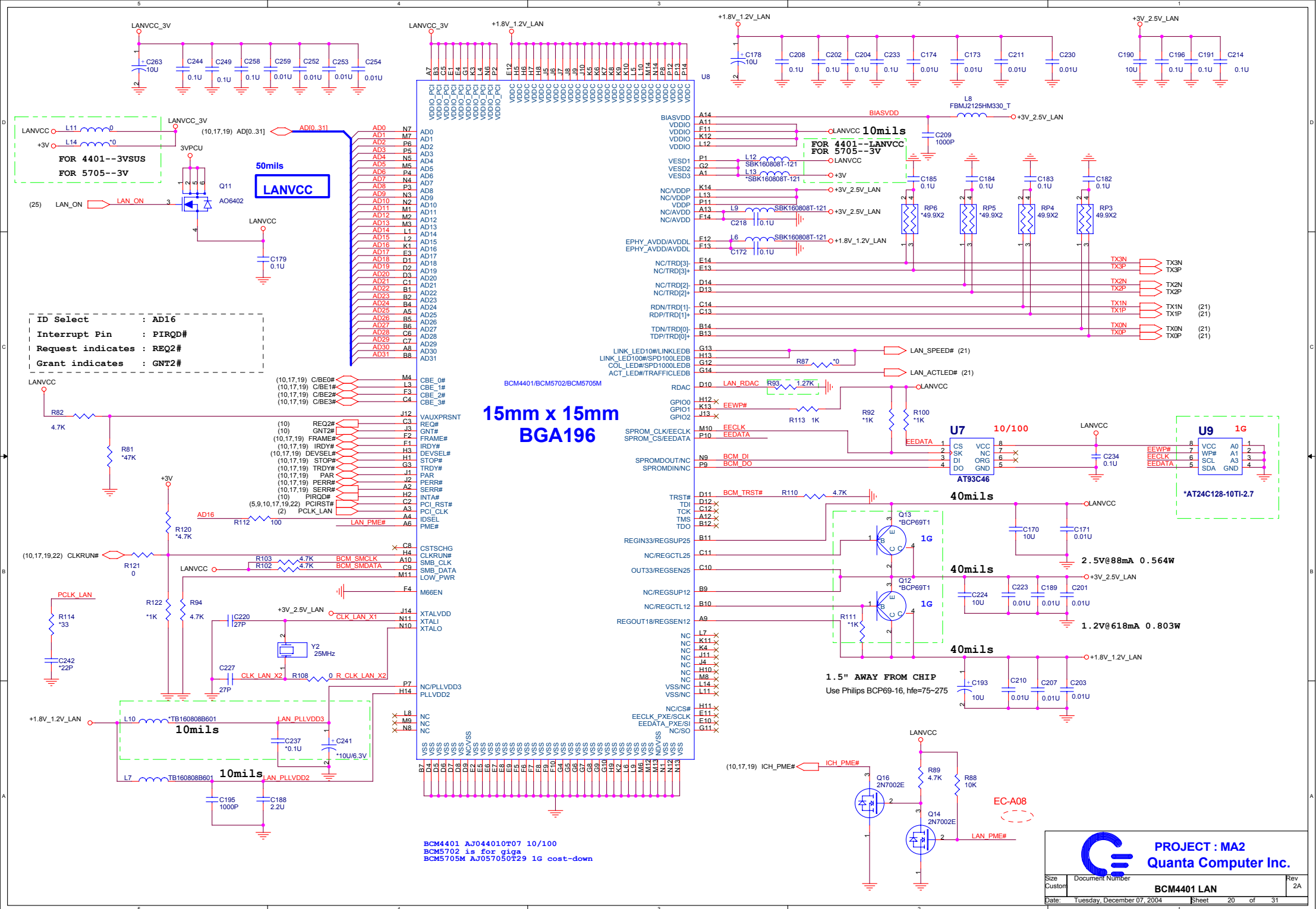
TYPE III MINI PCI SOCKET

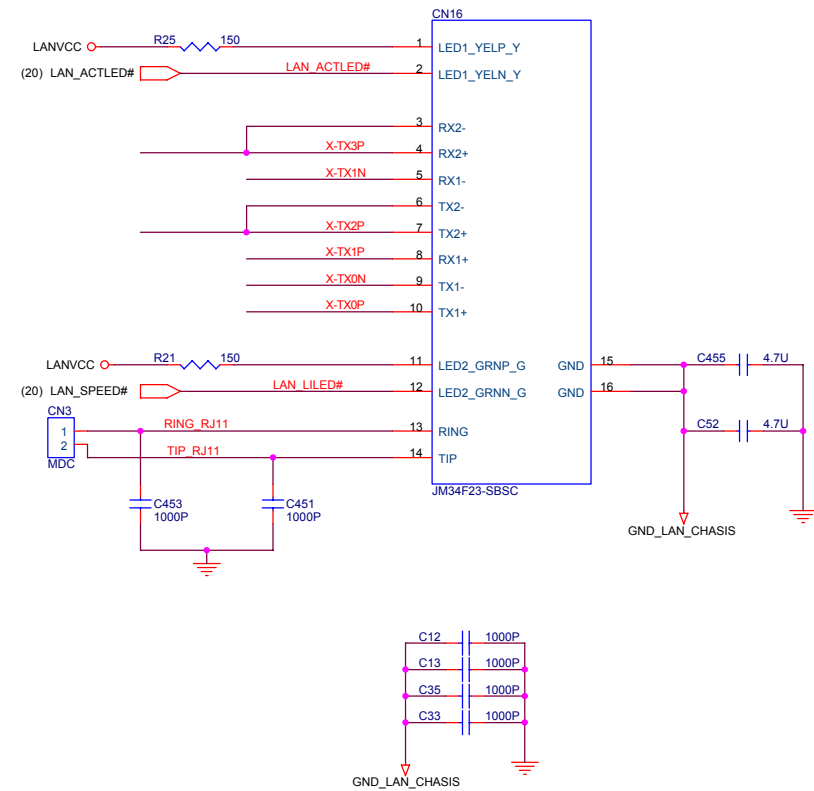
ID Select : AD20
Interrupt Pin : PIRQ# , PIRQF#
Request indicates : REQ1#
Grant indicates : GNT1#



PROJECT : MA2
Quanta Computer Inc.

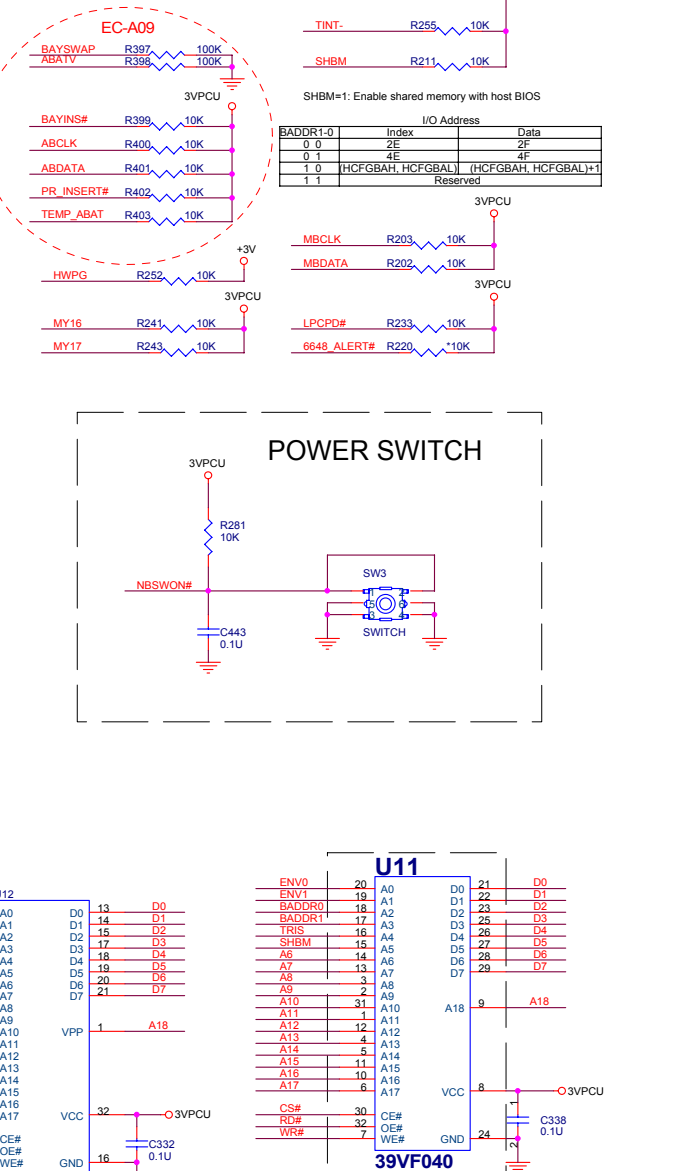
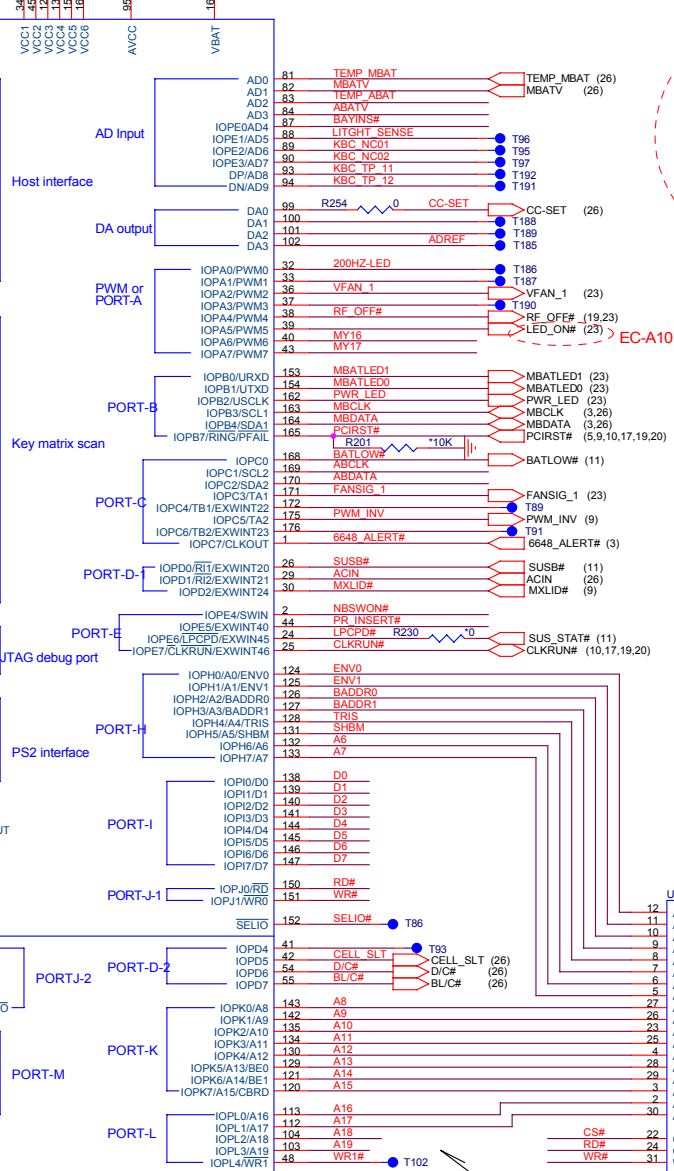
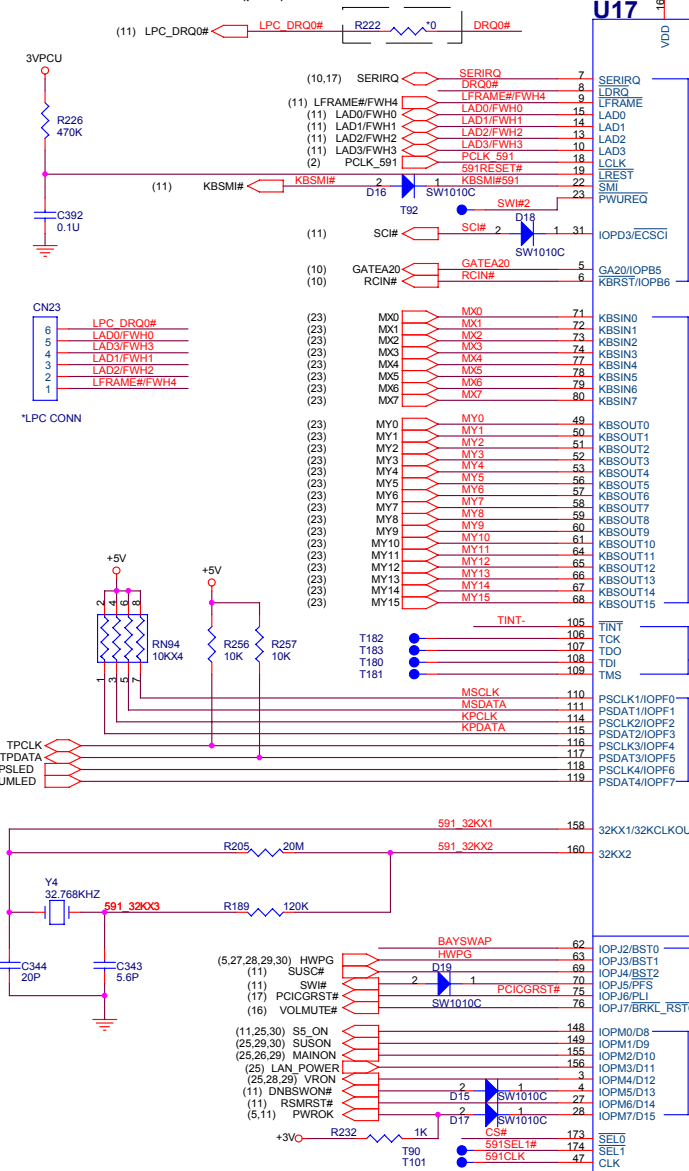
Size B Document Number MINI PCI Socket & MDC Rev 2A
Date: Tuesday, December 07, 2004 Sheet 19 of 31



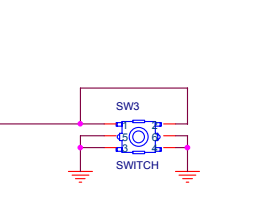


KBC-NS97551L

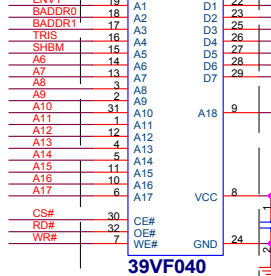
LDRQ#(pin 8) internal is no use



POWER SWITCH

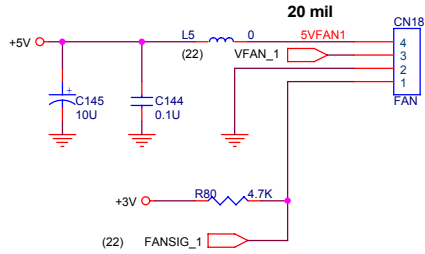


U11

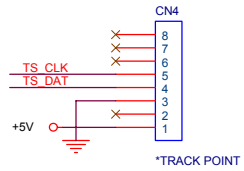


PROJECT : MA2
Quanta Computer Inc.

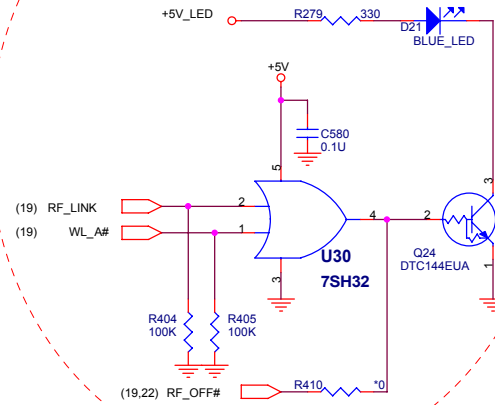
FAN OUT PWM CONNECTOR



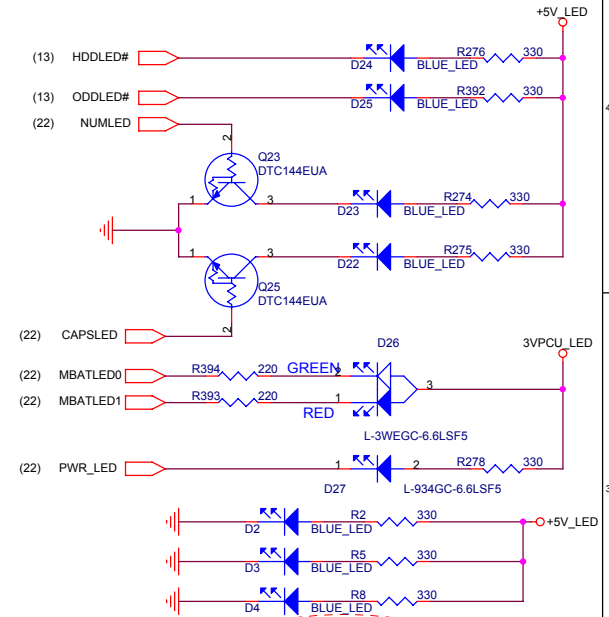
TRACK POINT



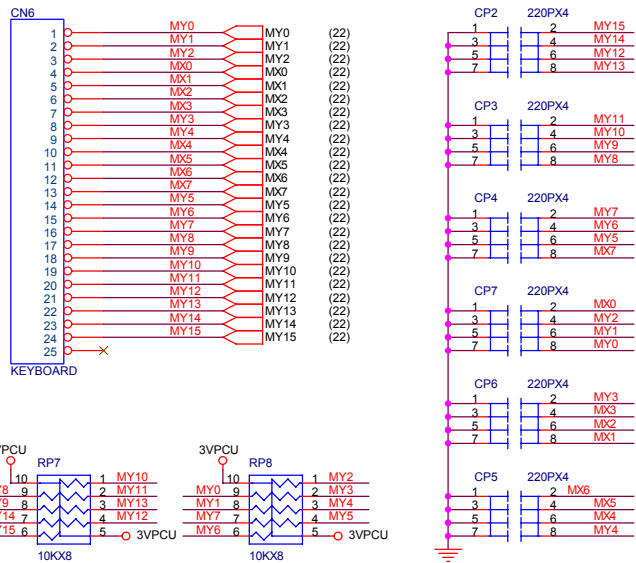
WIRELESS LED



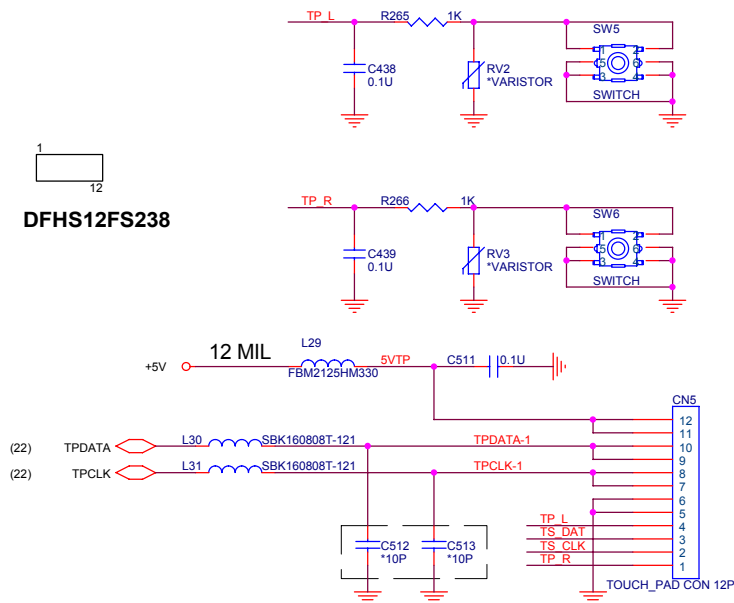
LED INDIATOR



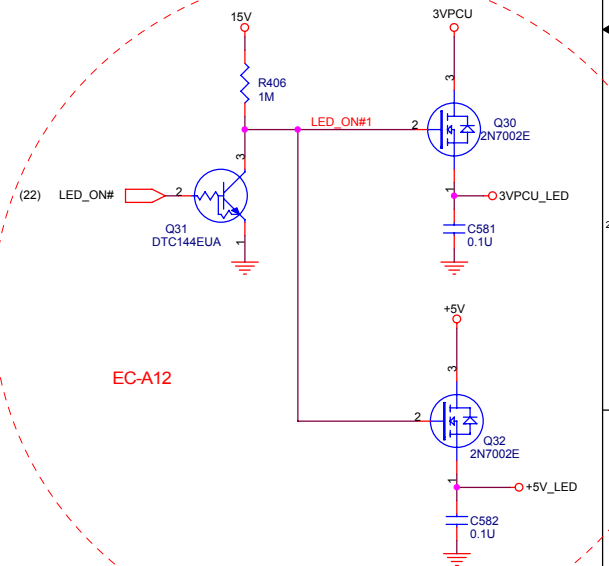
KEYBOARD



TOUCHPAD

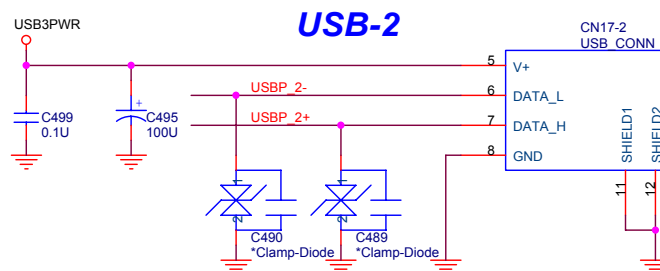
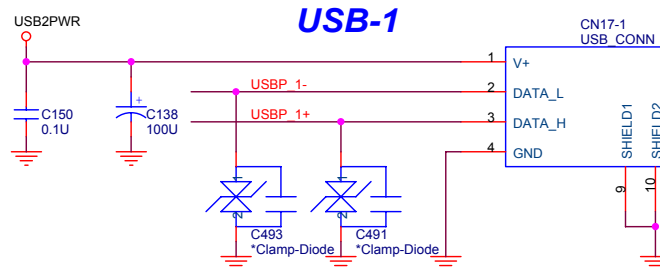
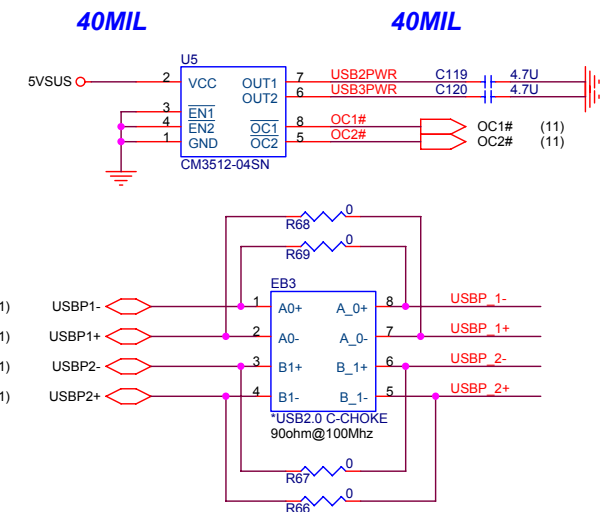
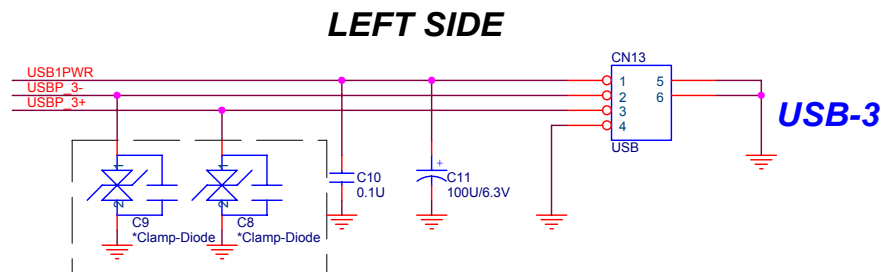
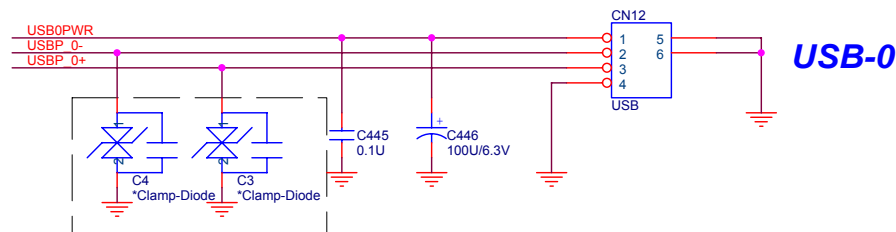
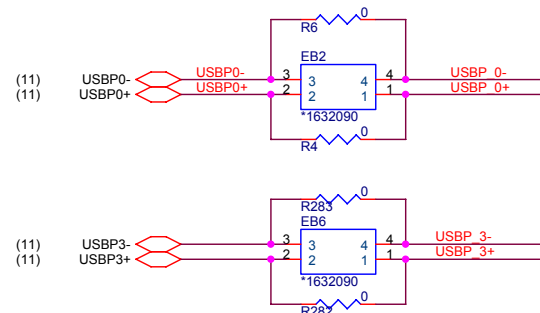
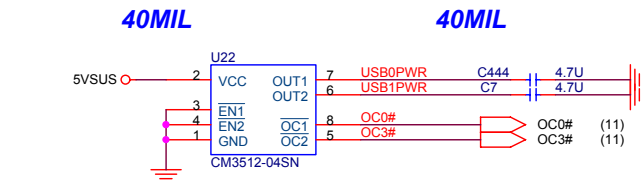


EC-A12



PROJECT : MA2
Quanta Computer Inc.

Size Custom	Document Number K/B & FAN & LED & SW	Rev 2A
Date: Tuesday, December 07, 2004	Sheet 23 of 31	

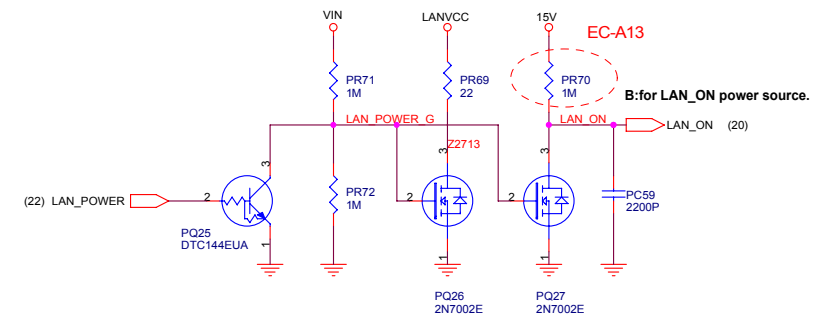
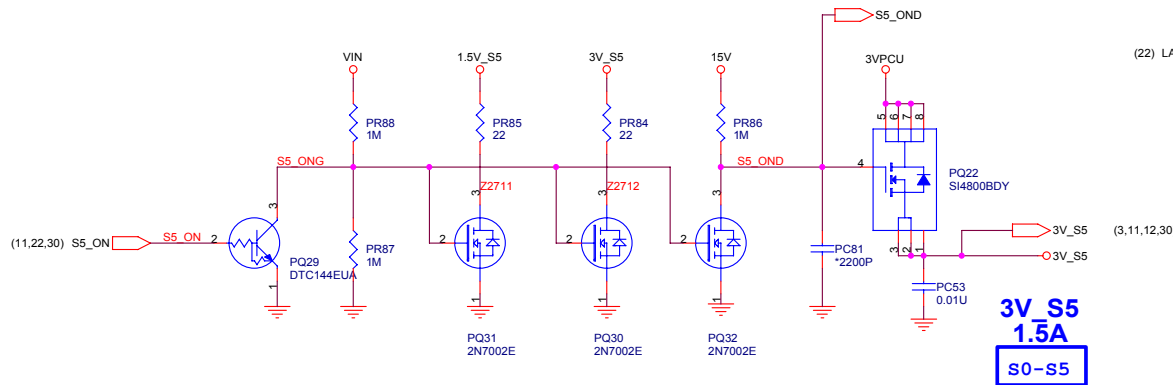
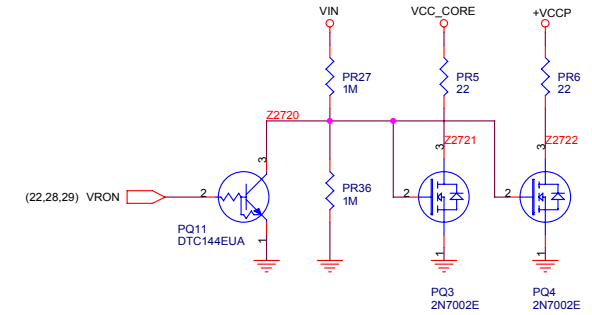
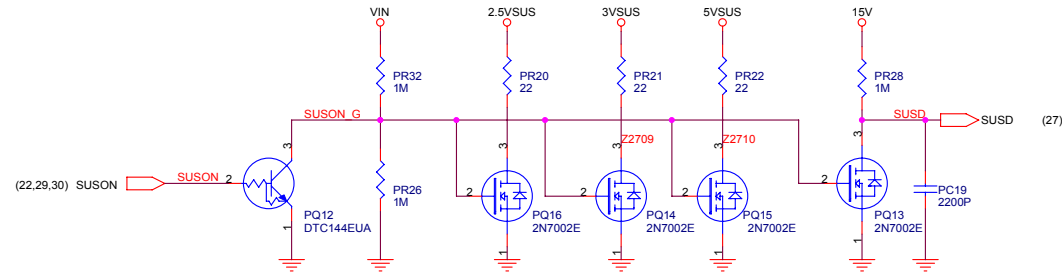
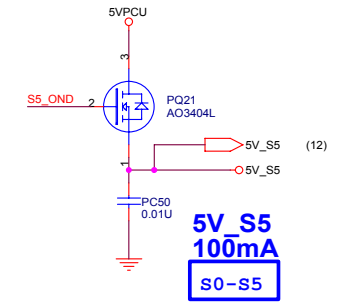
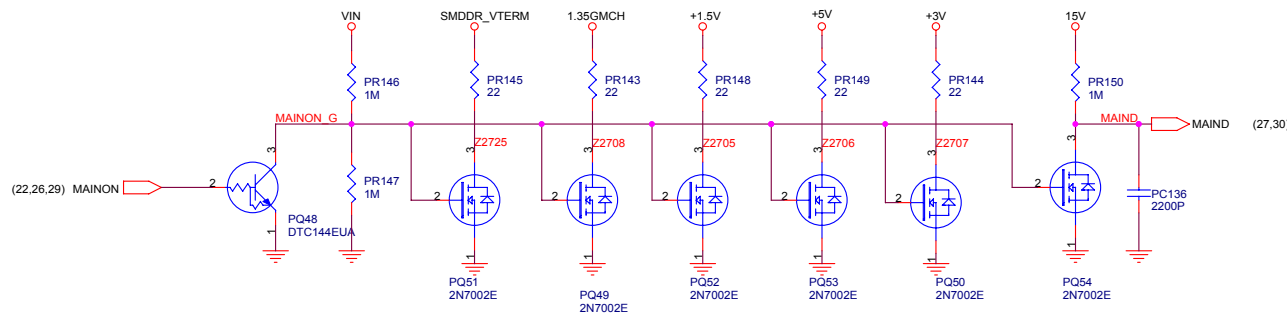


(17,19,25,27,28,29,30) 5VSUS



PROJECT : MA2
Quanta Computer Inc.

Size	Document Number	Rev
Custom	USB Ports	2A
Date:	Tuesday, December 07, 2004	Sheet 24 of 31



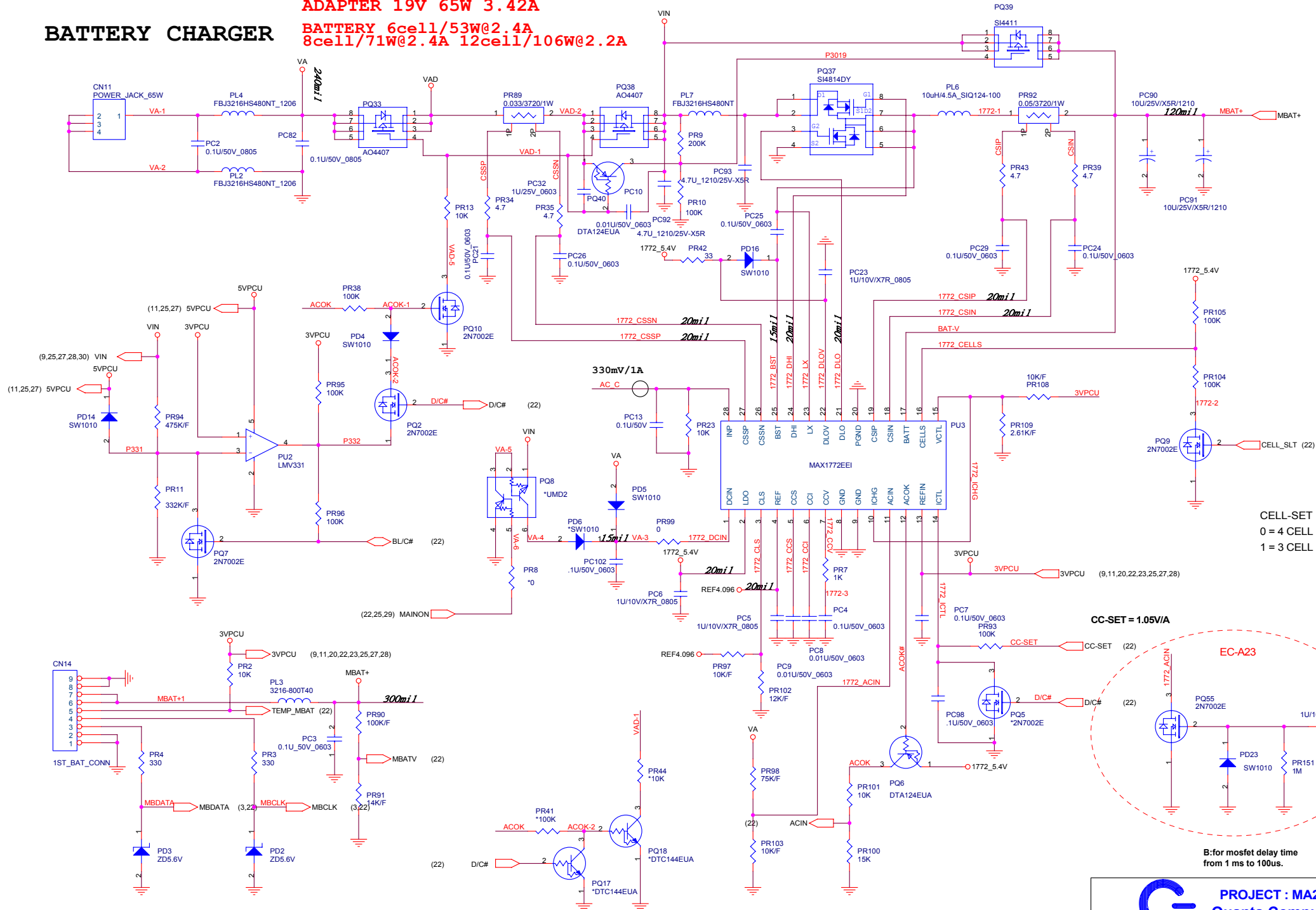
PROJECT : MA2
Quanta Computer Inc.

Size	Document Number	Rev
Custom		2A
DISCHARGE		
Date:	Tuesday, December 07, 2004	Sheet 25 of 31

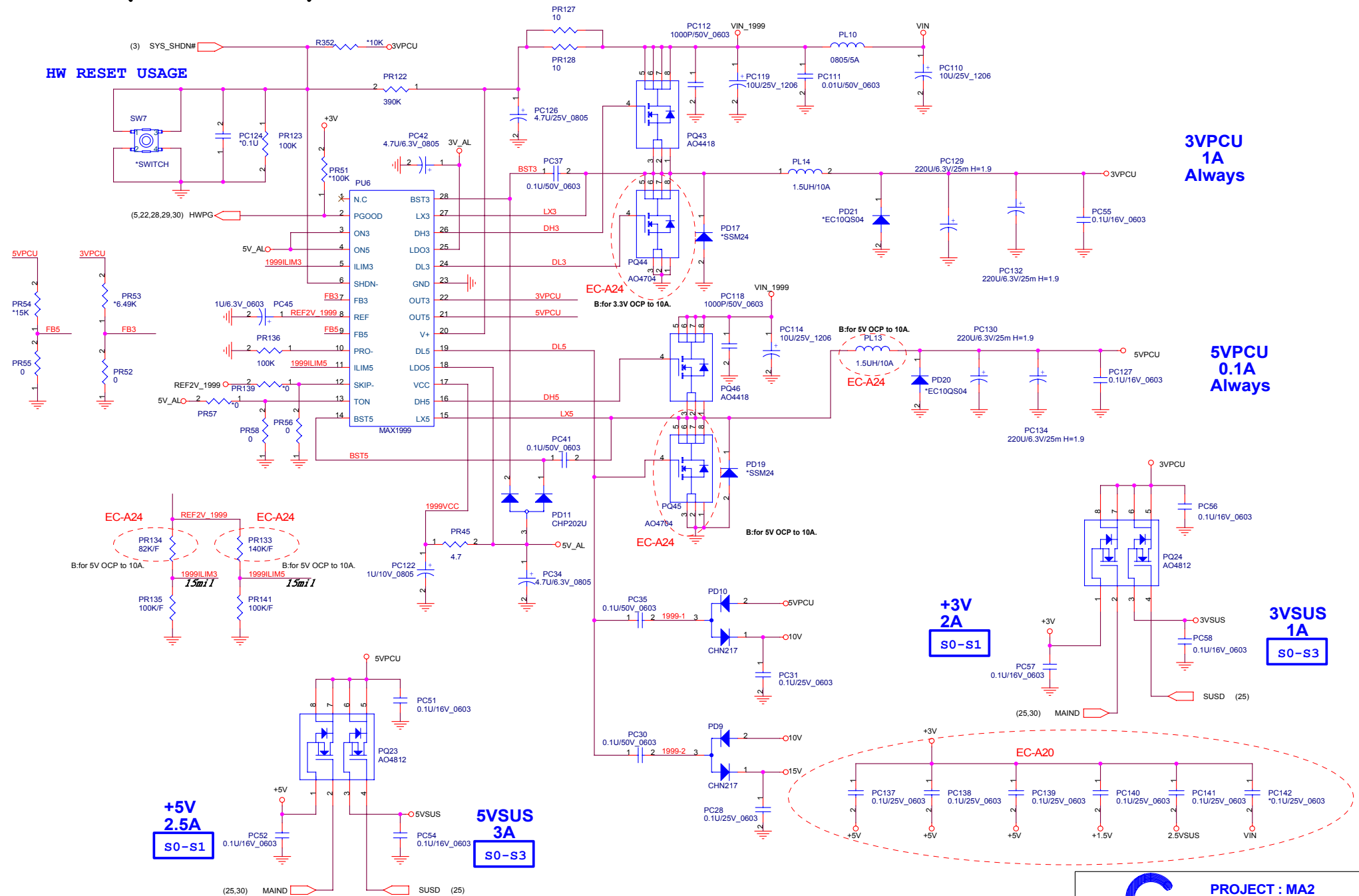
BATTERY CHARGER

ADAPTER 19V 65W 3.42A

BATTERY 6cell/53W@2.4A
8cell/71W@2.4A 12cell/106W@2.2A

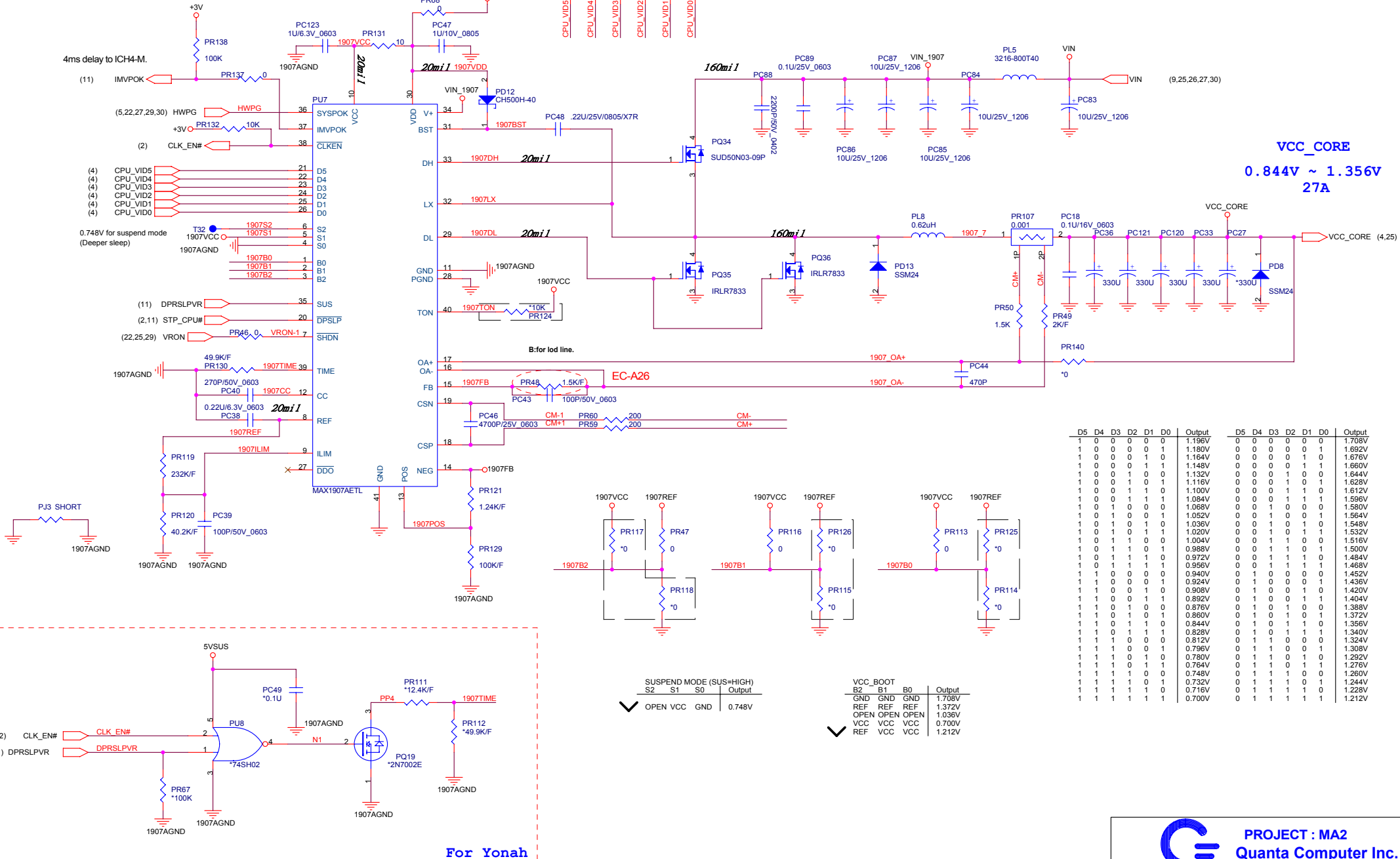


DC-DC (MAX1999)



(17,19,24,25,27,29,30) 5VSUS
(9,11,20,22,23,25,26,27) 3VPCU
(2,3,4,5,7,8,9,10,11,12,14,19,20,22,23,25,27) +3V

CPU VCC CORE (MAX1907)




VCC_CORE
0.844V ~ 1.356V
27A

D5	D4	D3	D2	D1	D0	Output	D5	D4	D3	D2	D1	D0	Output
1	0	0	0	0	0	1.196V	0	0	0	0	0	0	1.708V
1	0	0	0	0	1	1.180V	0	0	0	0	0	1	1.692V
1	0	0	0	1	0	1.164V	0	0	0	0	1	0	1.676V
1	0	0	0	1	1	1.148V	0	0	0	0	1	1	1.660V
1	0	0	1	0	0	1.132V	0	0	0	1	0	0	1.644V
1	0	0	1	0	1	1.116V	0	0	0	1	0	1	1.628V
1	0	0	1	1	0	1.100V	0	0	0	1	1	0	1.612V
1	0	0	1	1	1	1.084V	0	0	0	1	1	1	1.596V
1	0	1	0	0	0	1.068V	0	0	1	0	0	0	1.580V
1	0	1	0	0	1	1.052V	0	0	1	0	0	1	1.564V
1	0	1	0	1	0	1.036V	0	0	1	0	1	0	1.548V
1	0	1	0	1	1	1.020V	0	0	1	0	1	1	1.532V
1	0	1	1	0	0	1.004V	0	0	1	1	0	0	1.516V
1	0	1	1	0	1	0.988V	0	0	1	1	0	1	1.500V
1	0	1	1	1	0	0.972V	0	0	1	1	1	0	1.484V
1	0	1	1	1	1	0.956V	0	0	1	1	1	1	1.468V
1	1	0	0	0	0	0.940V	0	1	0	0	0	0	1.452V
1	1	0	0	0	1	0.924V	0	1	0	0	0	1	1.436V
1	1	0	0	1	0	0.908V	0	1	0	0	1	0	1.420V
1	1	0	0	1	1	0.892V	0	1	0	0	1	1	1.404V
1	1	0	1	0	0	0.876V	0	1	0	1	0	0	1.388V
1	1	0	1	0	1	0.860V	0	1	0	1	0	1	1.372V
1	1	0	1	1	0	0.844V	0	1	0	1	1	0	1.356V
1	1	0	1	1	1	0.828V	0	1	0	1	1	1	1.340V
1	1	1	0	0	0	0.812V	0	1	1	0	0	0	1.324V
1	1	1	0	0	1	0.796V	0	1	1	0	0	1	1.308V
1	1	1	0	0	1	0.780V	0	1	1	0	0	1	1.292V
1	1	1	0	1	0	0.764V	0	1	1	0	1	0	1.276V
1	1	1	0	1	1	0.748V	0	1	1	0	1	1	1.260V
1	1	1	1	0	0	0.732V	0	1	1	1	0	0	1.244V
1	1	1	1	0	1	0.716V	0	1	1	1	0	1	1.228V
1	1	1	1	1	0	0.700V	0	1	1	1	1	1	1.212V

SUSPEND MODE (SUS=HIGH)				
S2	S1	S0	Output	
✓	OPEN	VCC	GND	0.748V

VCC_BOOT			
B2	B1	B0	Output
GND	GND	GND	1.708V
REF	REF	REF	1.372V
OPEN	OPEN	OPEN	1.036V
VCC	VCC	VCC	0.700V
REF	VCC	VCC	1.212V

For Yonah

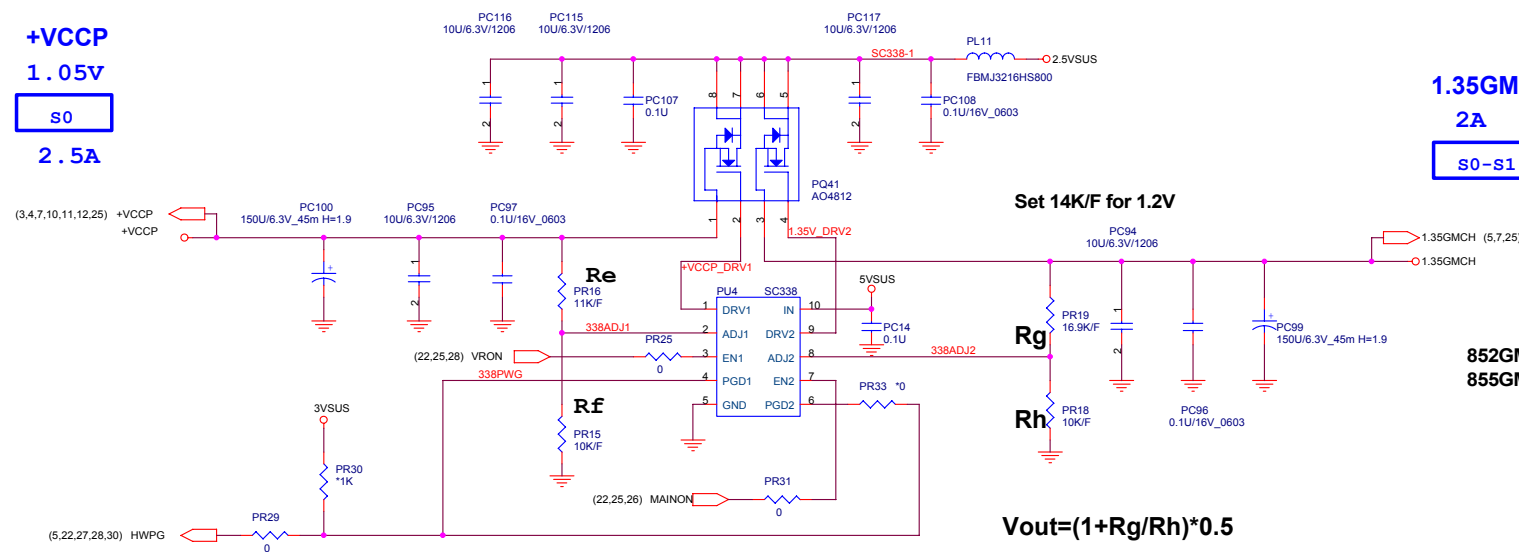


PROJECT : MA2
Quanta Computer Inc.

Size	Document Number	Rev
Custom		2A
Block Diagram		
Date:	Tuesday, December 07, 2004	Sheet 28 of 31

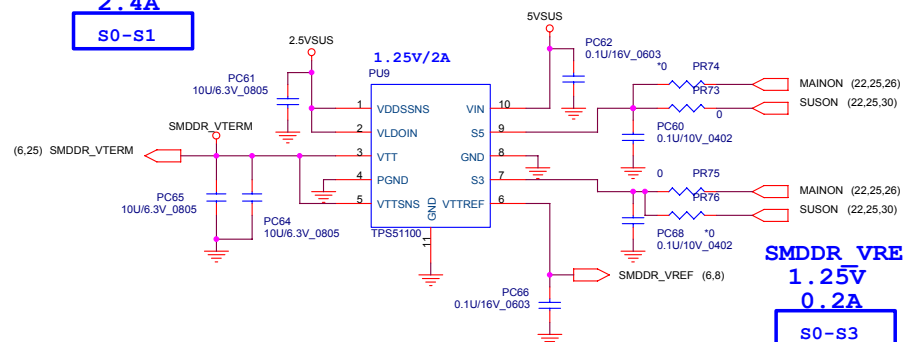
+VCCP
1.05V
S0
2.5A

1.35GMCH
2A
S0-S1



SMDDR VTERM
1.25V
2.4A
S0-S1

SMDDR VREF
1.25V
0.2A
S0-S3



[illegible]