

PAGE CONTENT

1. Cover Page
2. Sequence Diagram
3. System Block Diagram
4. CPU Pineview-1/3
5. CPU Pineview-2/3
6. CPU Pineview-3/3
7. Trgerpoint 1/4
8. Tigerpoint 2/4
9. Tigerpoint 3/4
10. Tigerpoint 4/4
11. CLOCK GENERATOR
12. DDR3 SODIMM
13. LCD / TPM / G-Sensor /SATA
14. USB & IO CON
15. LAN - RTL8103T
16. Wireless CON
17. 3G
18. WEBCAM/TP/RS232/EMI Request
19. EC IT8502NX
20. VCC MOSFET
21. +CPU_CORE (OZ8291)
22. +V3.3 / +V5(OZ815)
23. +V1.05S (OZ8116)
24. +V1.8S / +V0.75S
25. +V1.5/+V0.89S (OZ8138)
26. DC IN/BATT IN/Charger
27. IO LED & USB
28. IO CRT
29. IO AUDIO CDOEC

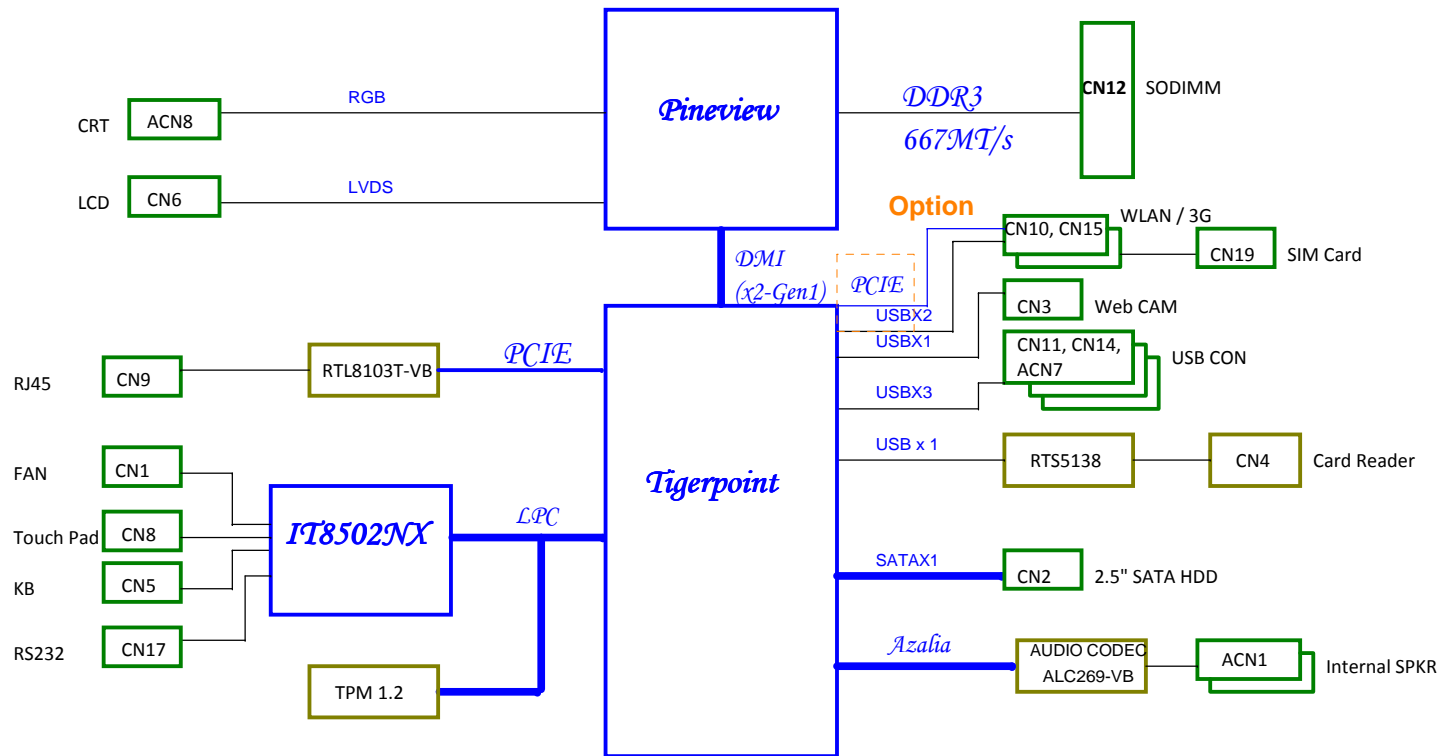
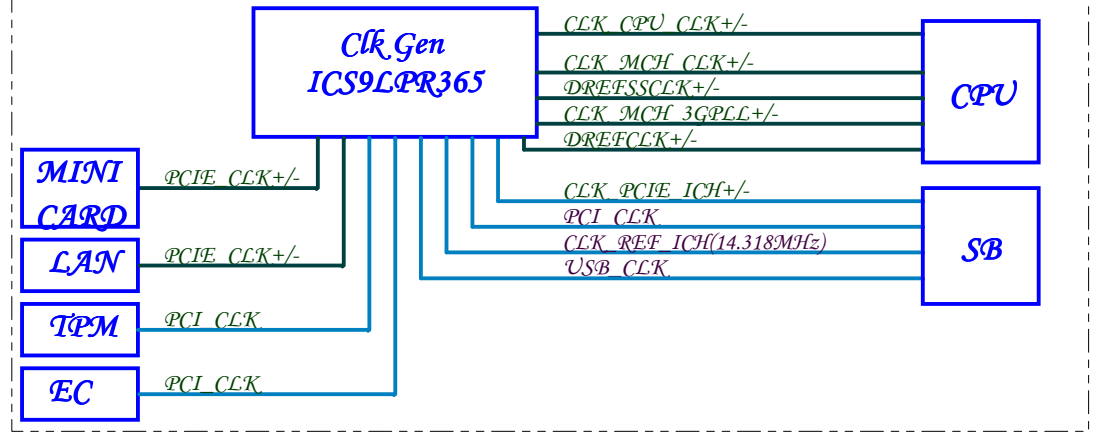
Power Rail

+VCC_CORE	Core voltage for Processor(off in S3-S5)
+V1.05S	1.05V switched power rail (off in S3-S5)
+V1.5	1.8V power rail (off in S4-S5)
+V0.75S	0.9V switched power rail(off in S3-S5)
+V1.5S	1.5V switched power rail (off in S3-S5)
+V0.89S	0.89V switched power rail (off in S3-S5)
+V1.8S	1.8V switched power rail (off in S4-S5)
+V5	5V power rail (off in S4-S5)
+V5S	5V switched power rail (off in S3-S5)
+V5ALWAYS	5V always on power rail
+V3.3ALWAYS	3.3V always on power rail
+V3.3S	3.3V switched power rail (off in S3-S5)
+V3.3	3.3V power rail (off in S4-S5)

+V□□ALWAYS	Always on power rail
+V□□	Switched power rail (off in S4 - S5)
+V□□S	Switched power rail (off in S3 - S5)

System Block Diagram

Clock delivery Block



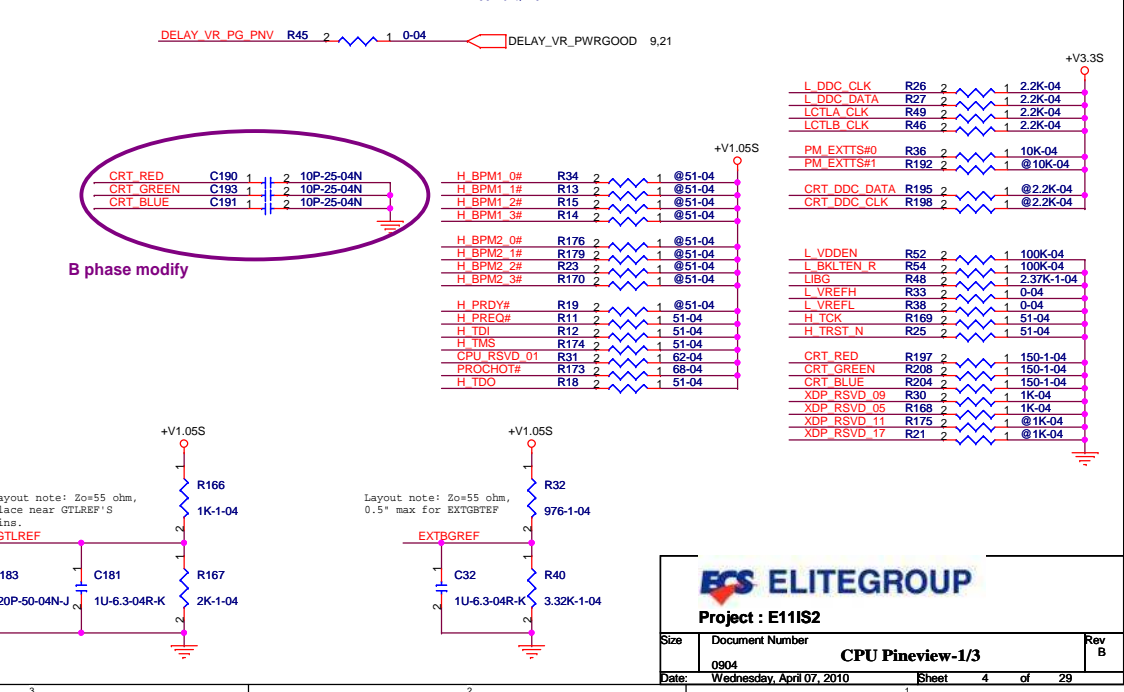
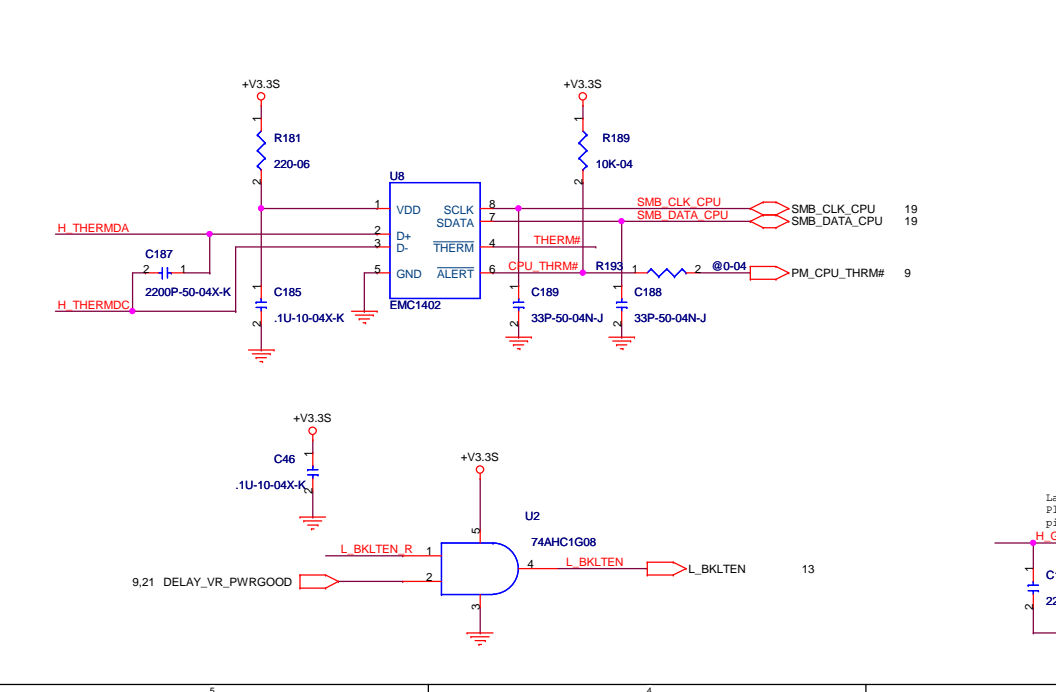
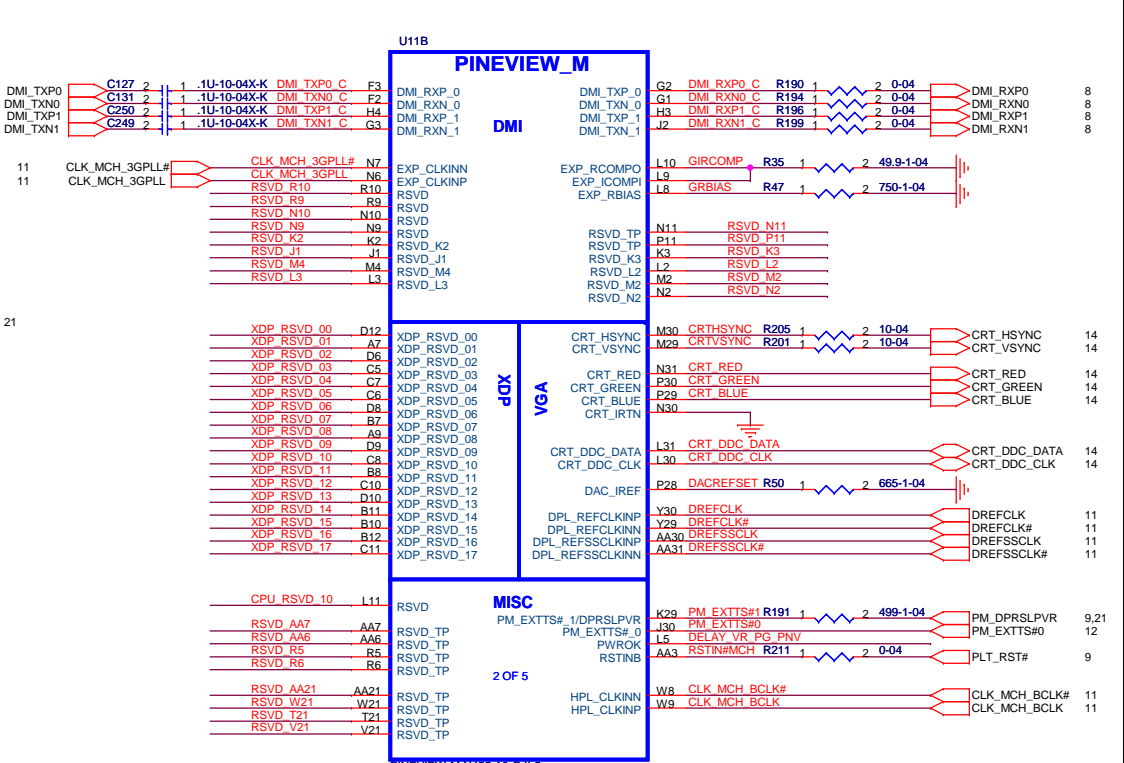
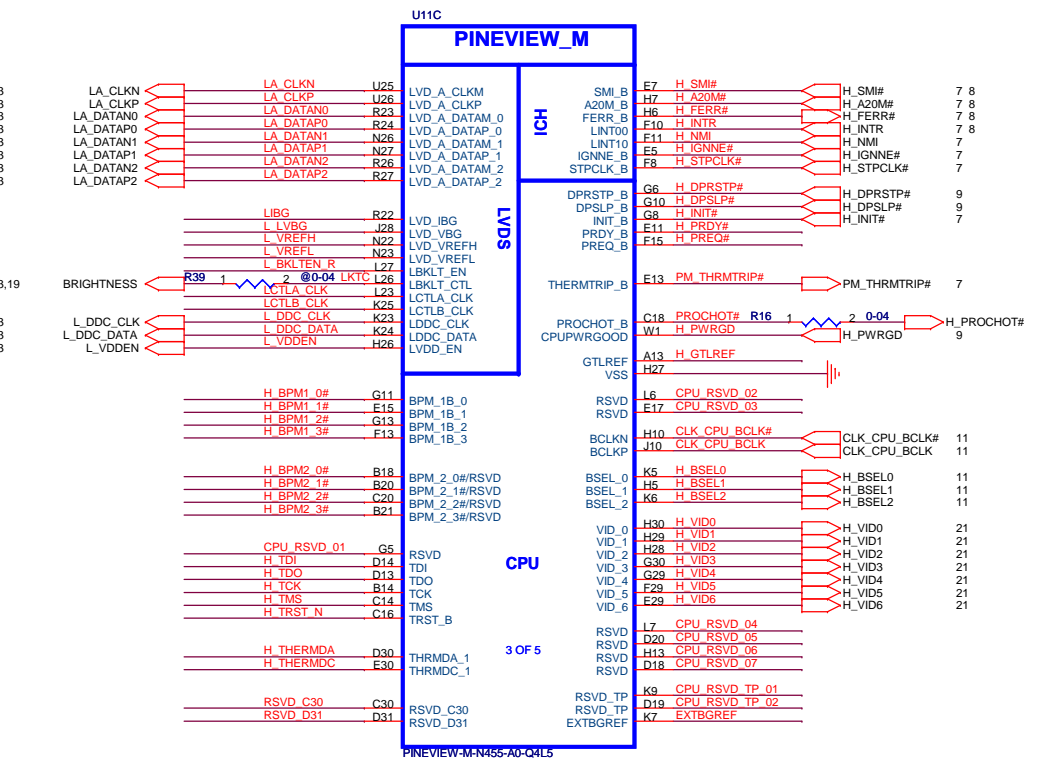
PCB1
PCB_MB_E11IS2_REV:B

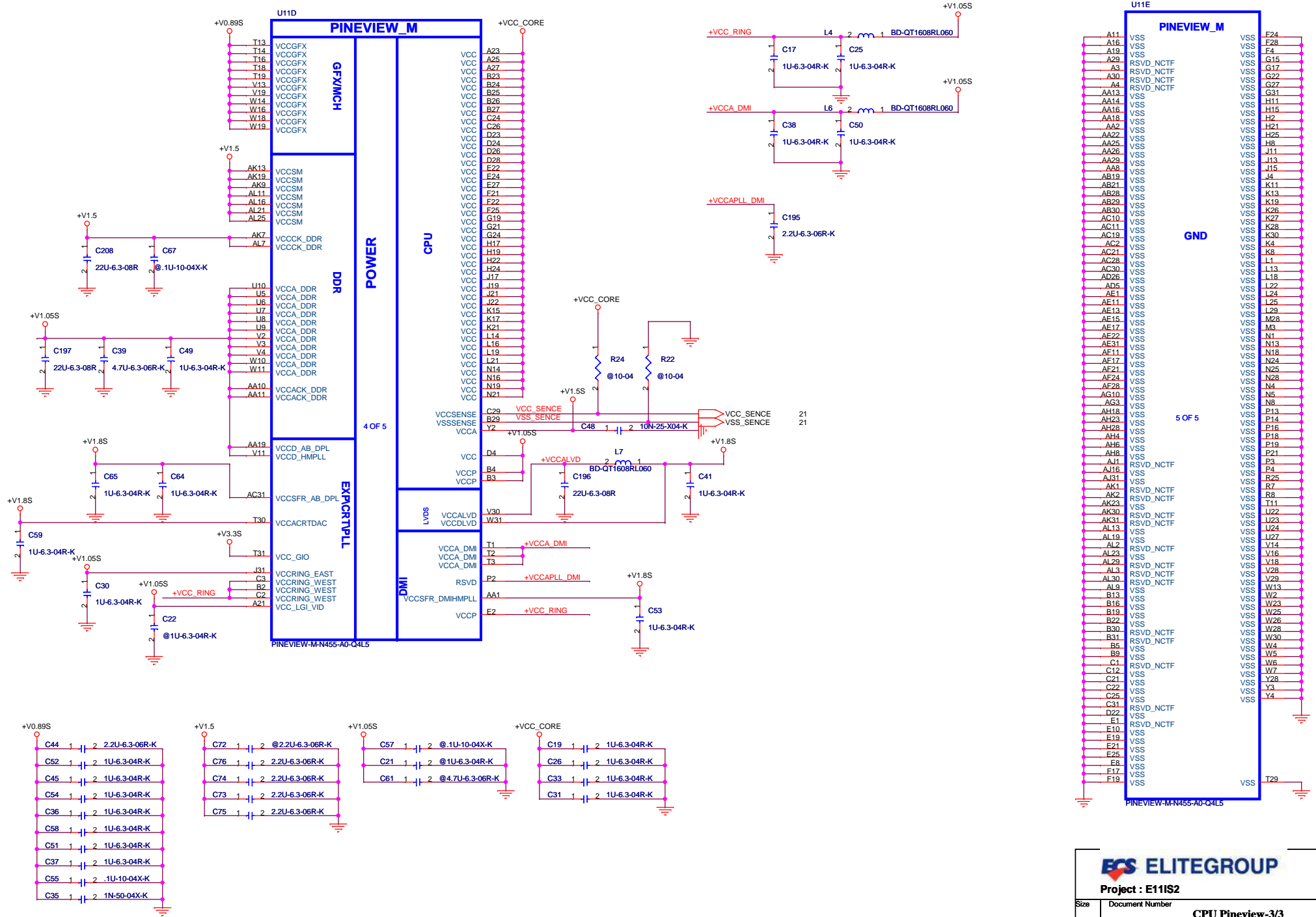
ELITEGROUP

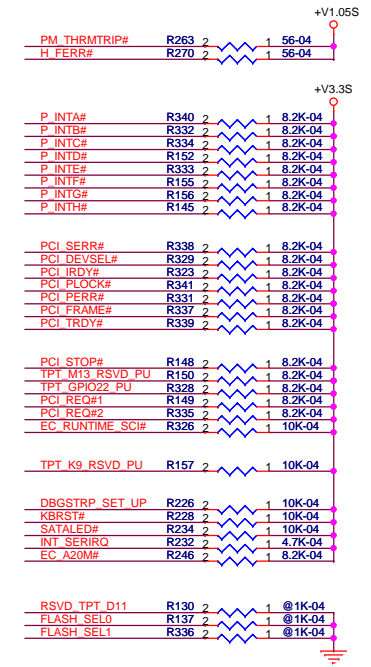
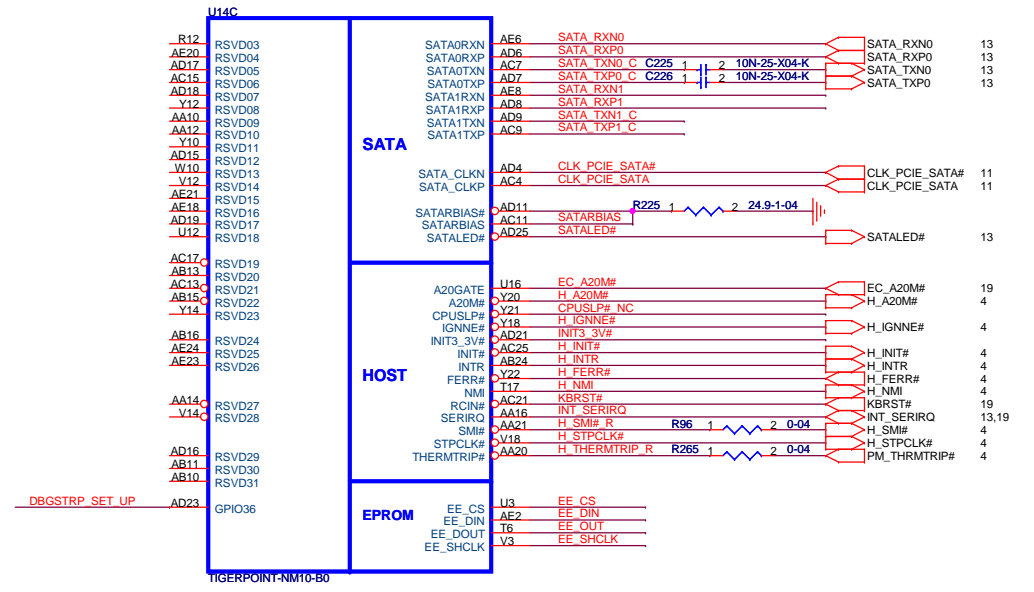
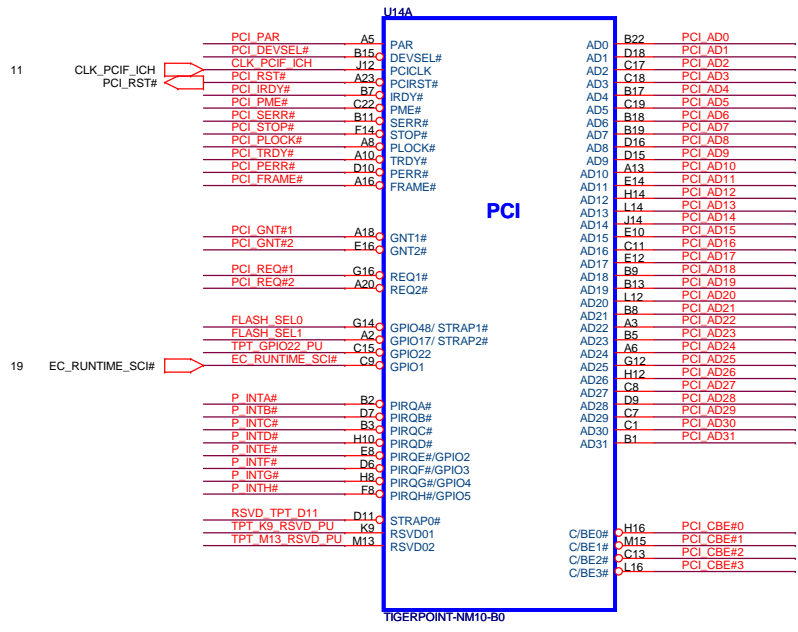
Project : E11IS2

Size	Document Number	Rev
	SYSTEM BLOCK DIAGRAM	B

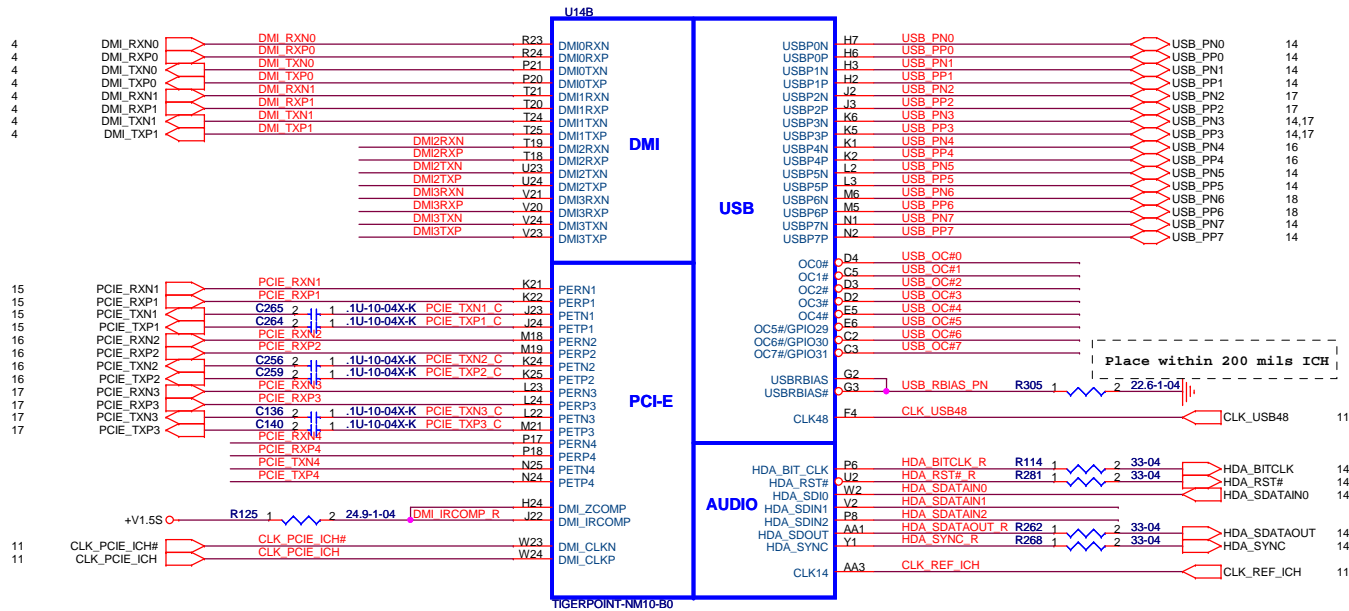
Date: Wednesday, April 07, 2010 Sheet 3 of 29





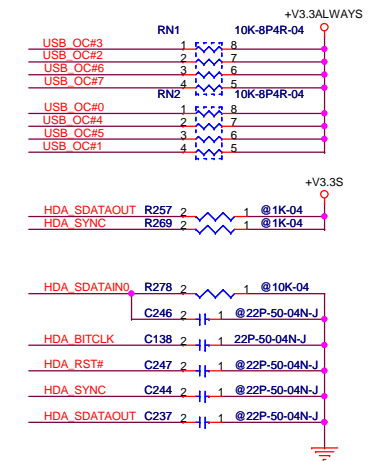


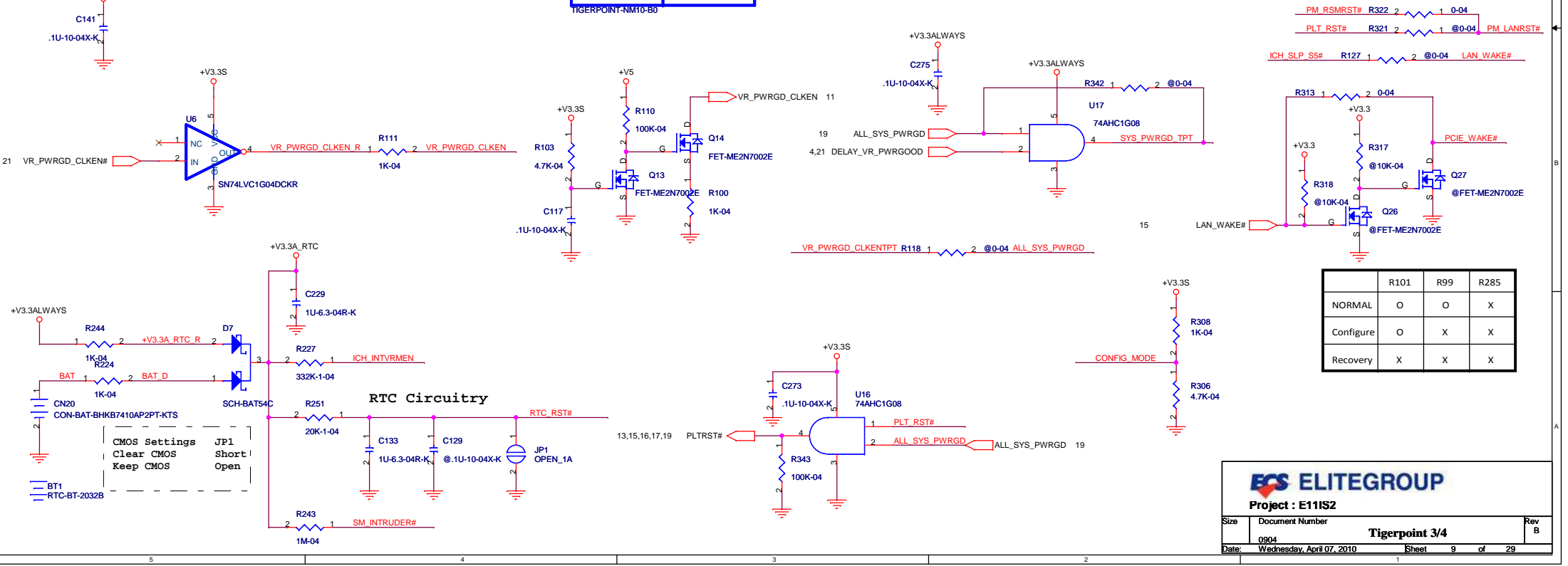
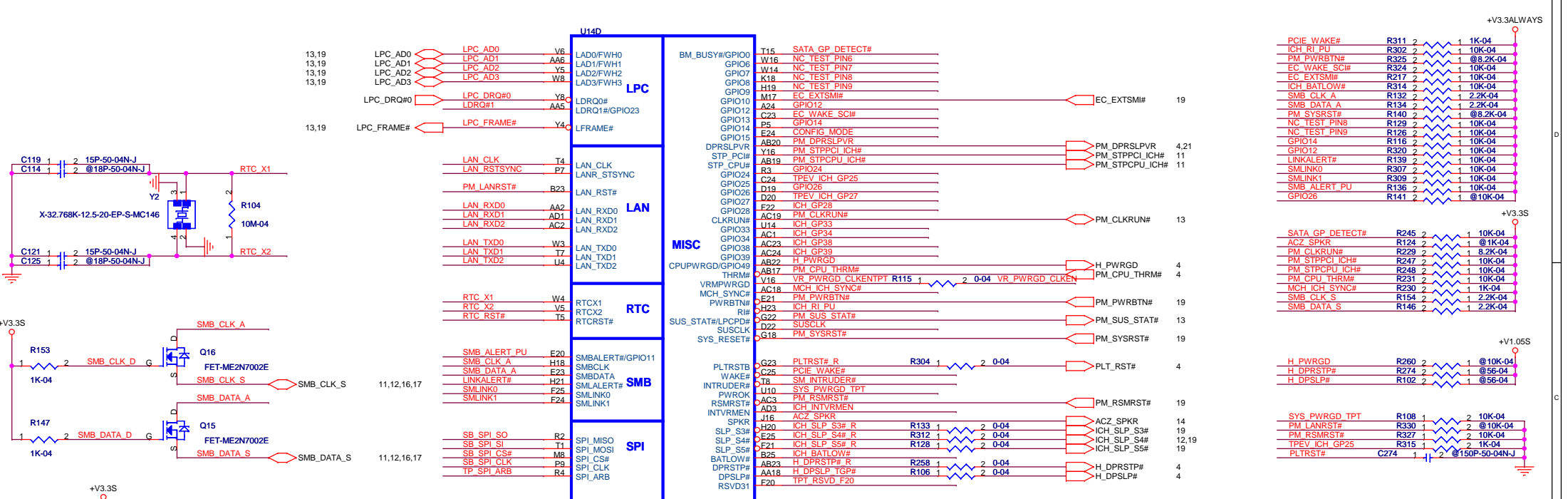
	FLASH_SELO	FLASH_SEL1
SPI	1	0
PCI	0	1
LPC	1	1

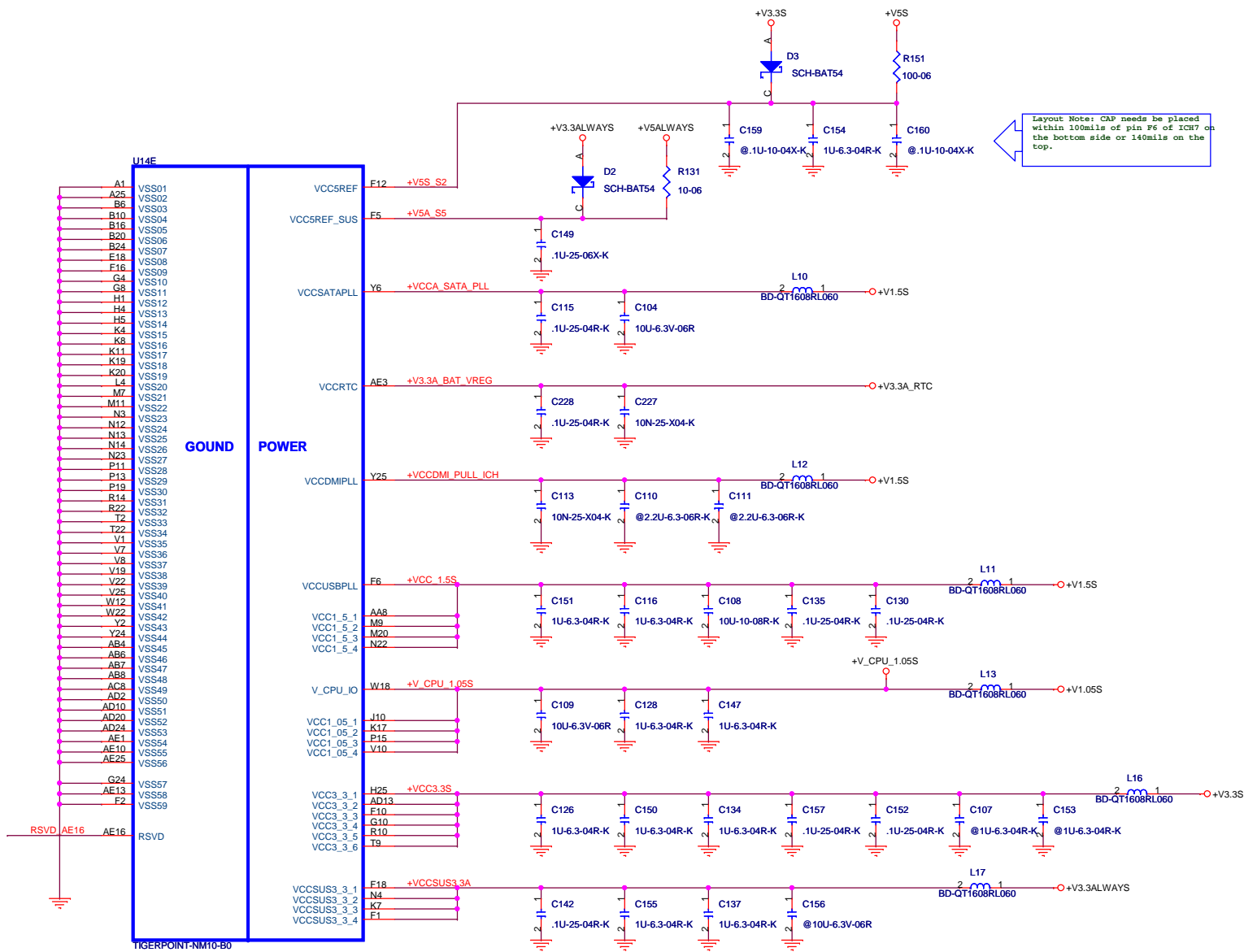


Place within 200 mils ICH

HDA_SDATAOUT	PCI Express port config bit 1
HDA_SYNC	PCI Express port config bit 0

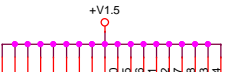
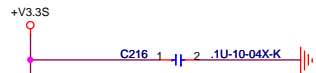
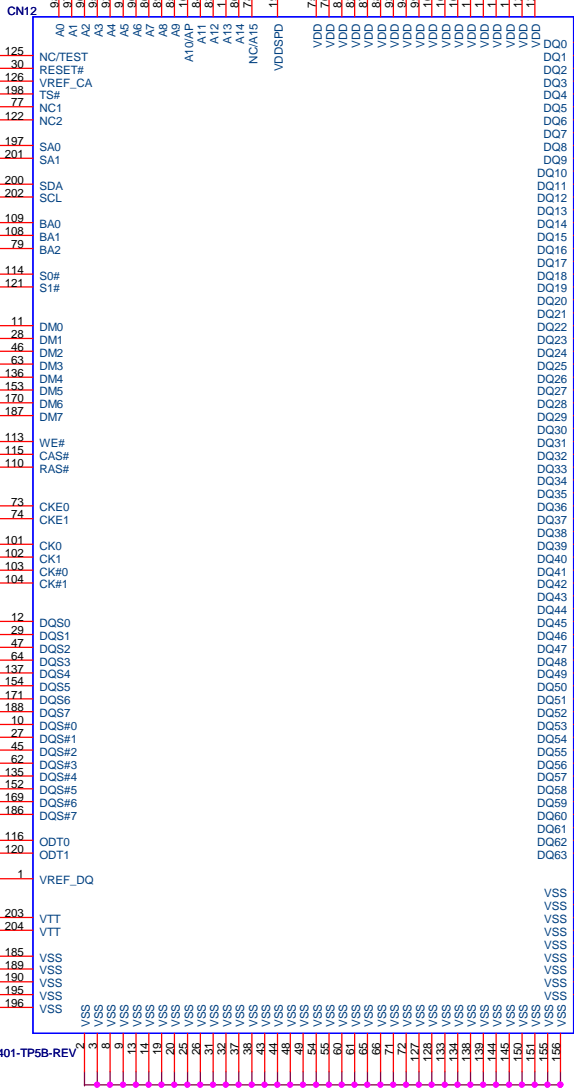




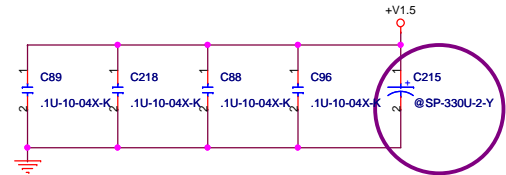
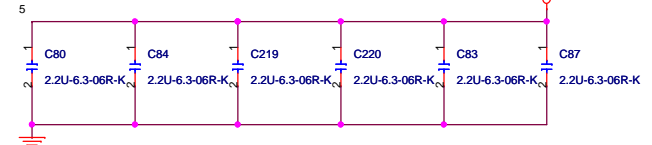


5

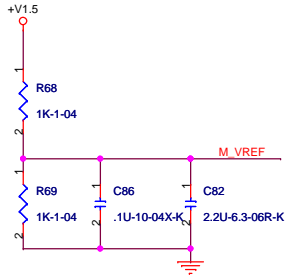
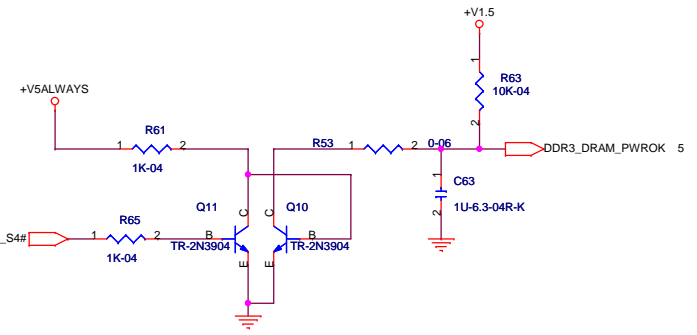
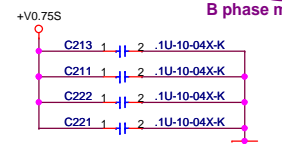
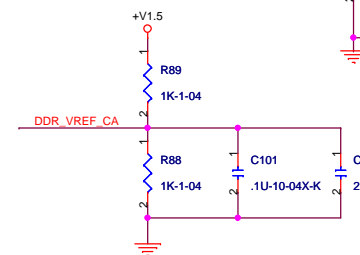
M_A_A[14:0]



layout close to DIMM



B phase modify

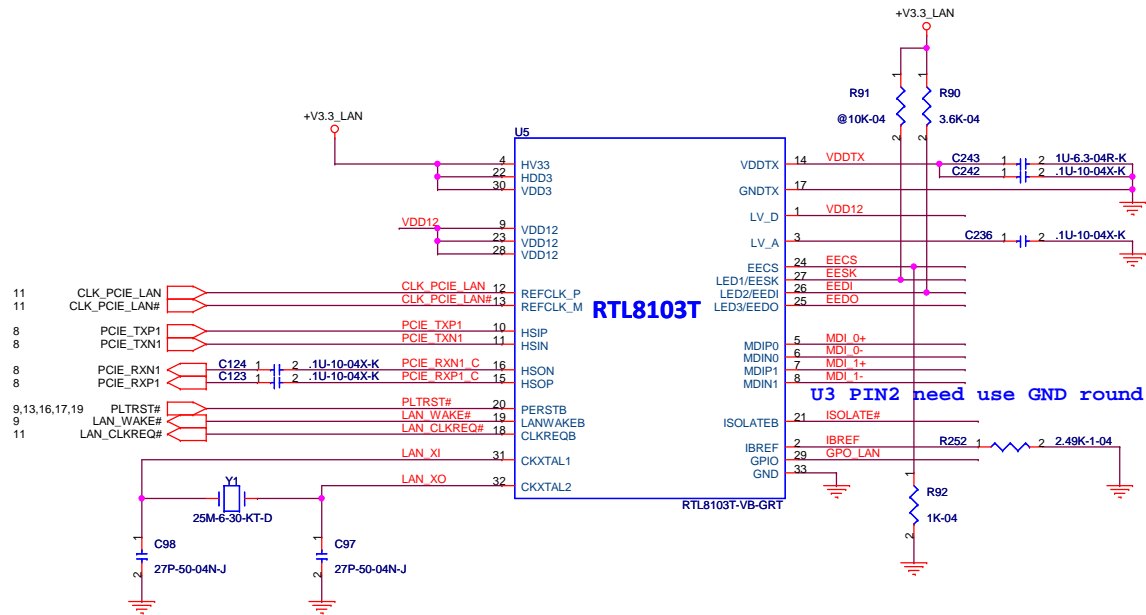


DDR-20401-TP5B-REV

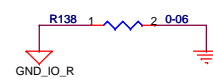
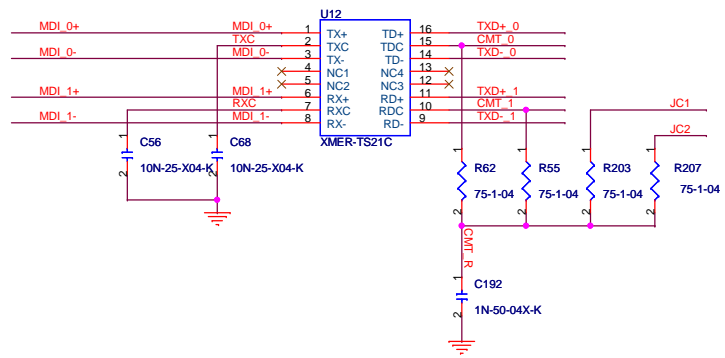
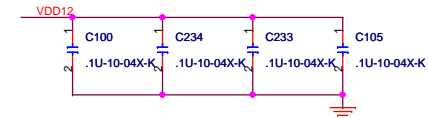
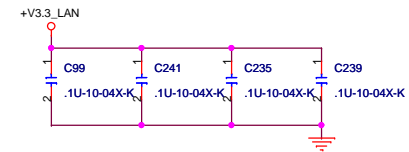
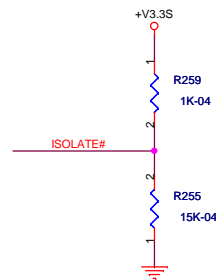
BCS ELITEGROUP

Project : E11IS2

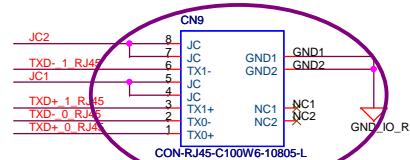
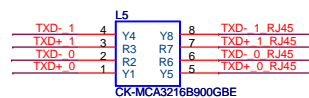
Size	Document Number	Rev
	DDR3 SODIMM	B
Date:	Wednesday, April 07, 2010	Sheet 12 of 29



U3 PIN2 need use GND round



B phase modify

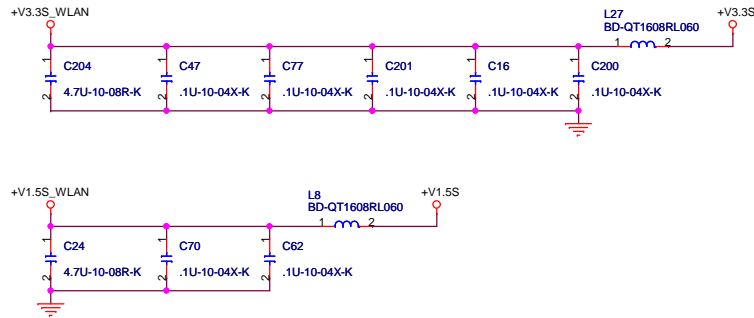
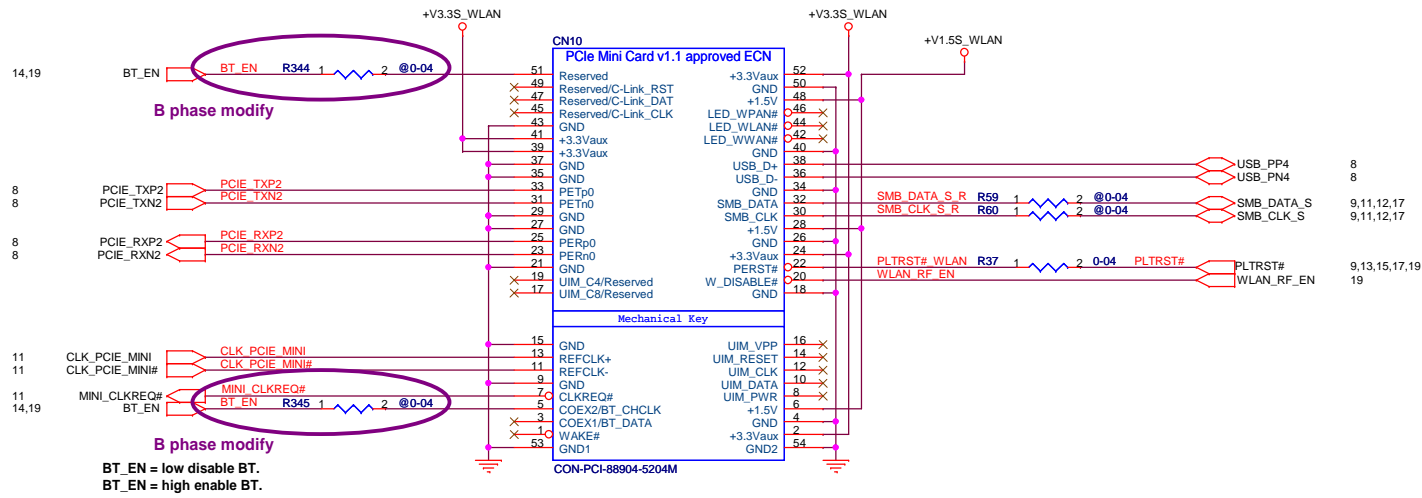


BCS ELITEGROUP

Project : E11IS2

Size	Document Number	Rev
	0904	B
Date:	Wednesday, April 07, 2010	Sheet 15 of 29

Mini Card

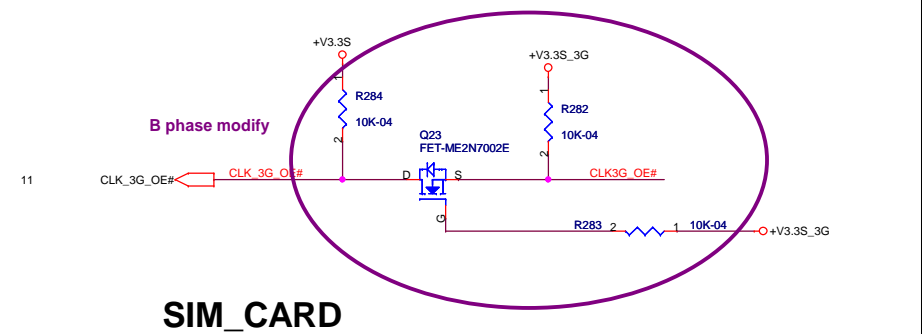
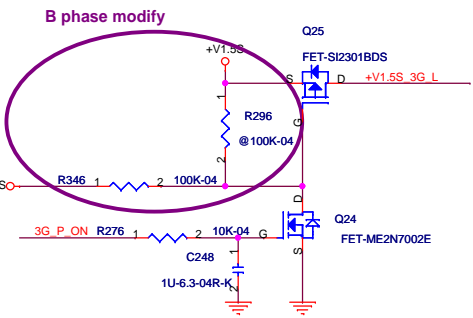
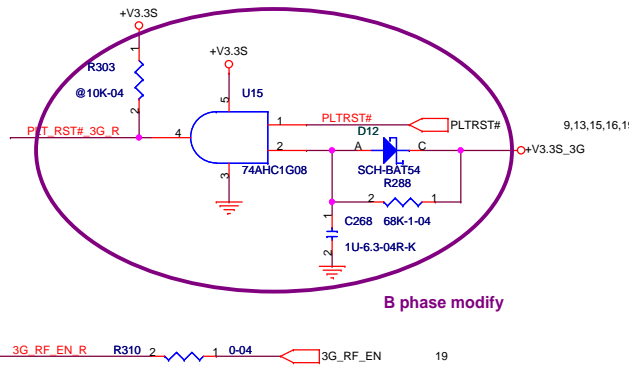
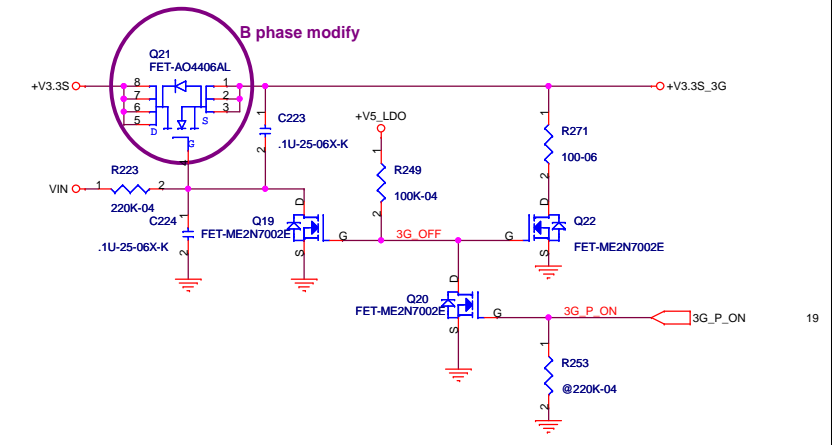
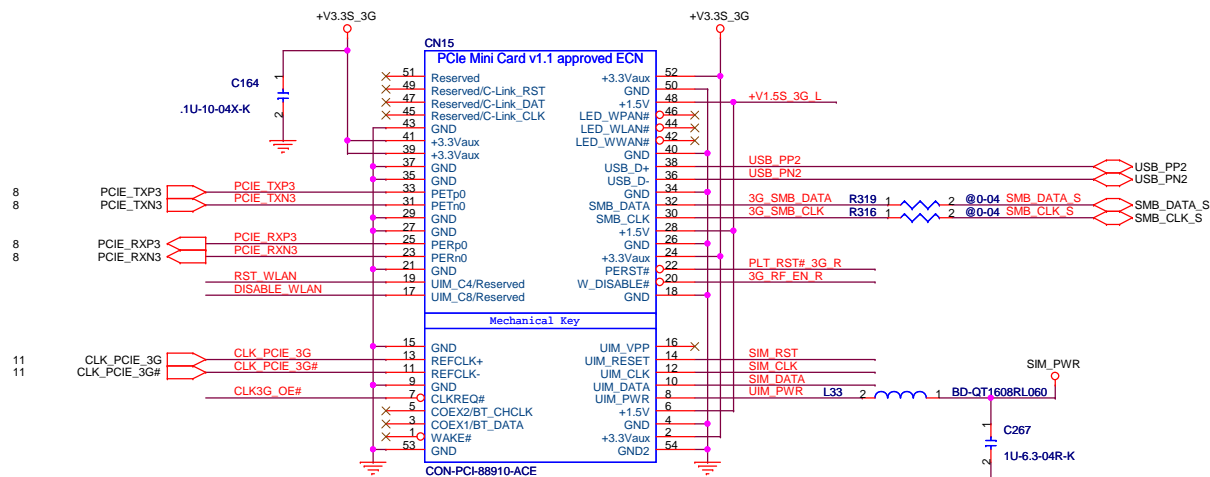


ELITEGROUP

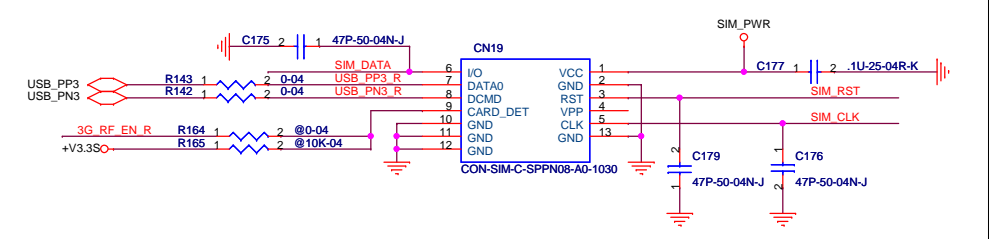
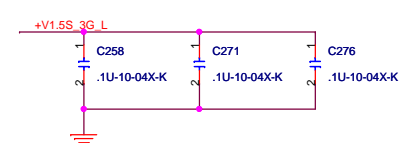
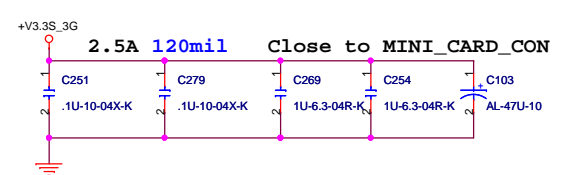
Project : E11IS2

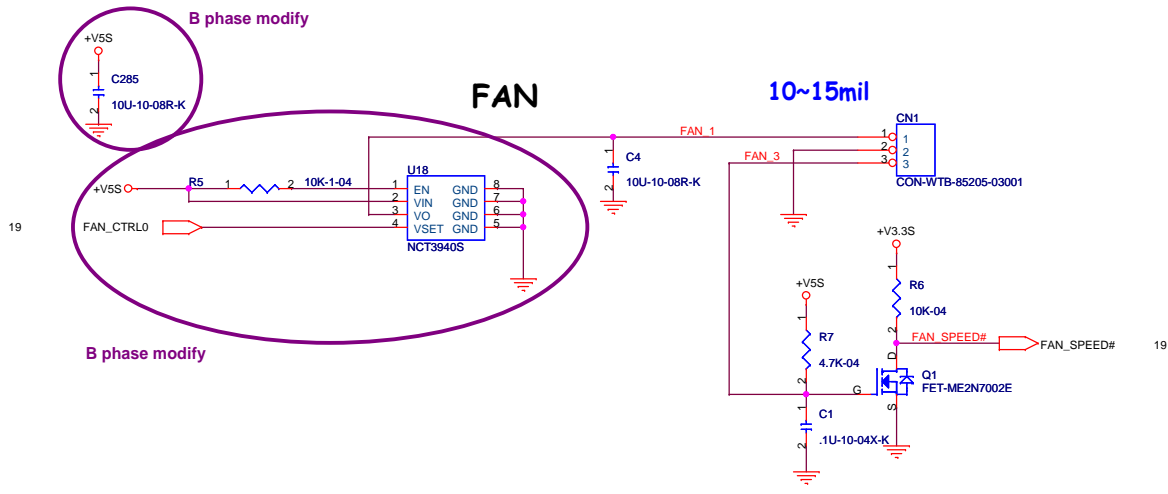
Size	Document Number	Rev
	0904	B
Date:	Wednesday, April 07, 2010	Sheet 16 of 29

Mini Card_3G

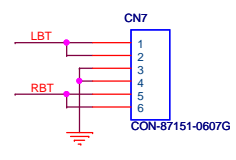


SIM_CARD

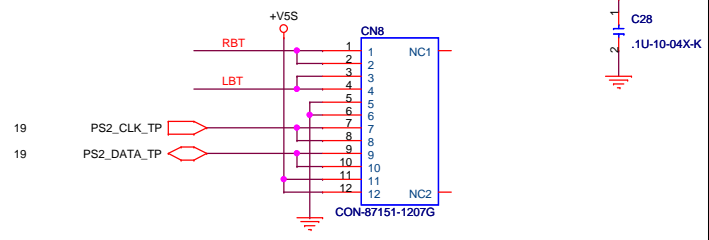




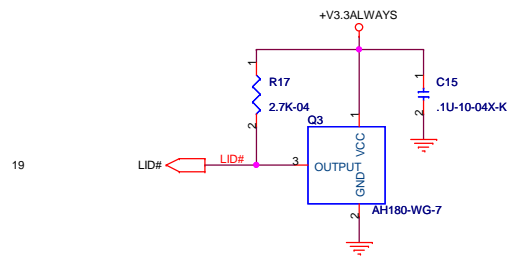
Touch PAD Button



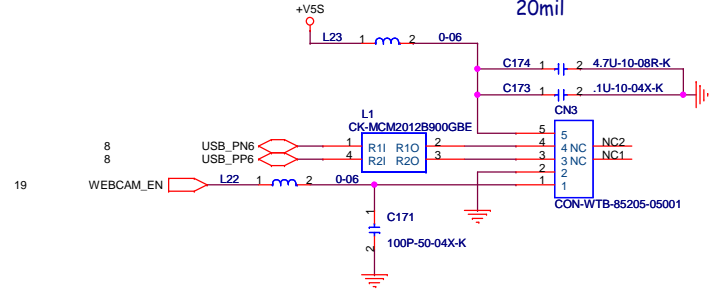
Touch PAD



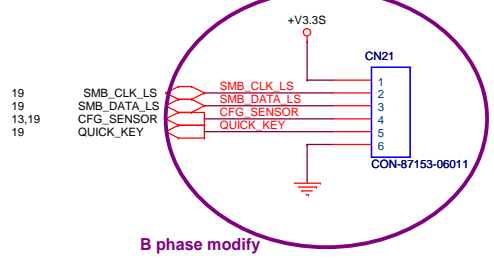
HALL Sensor



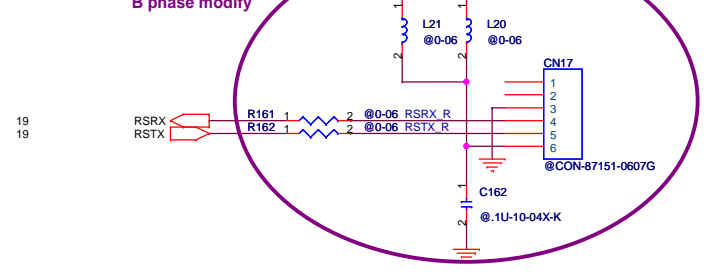
Web CAM CON



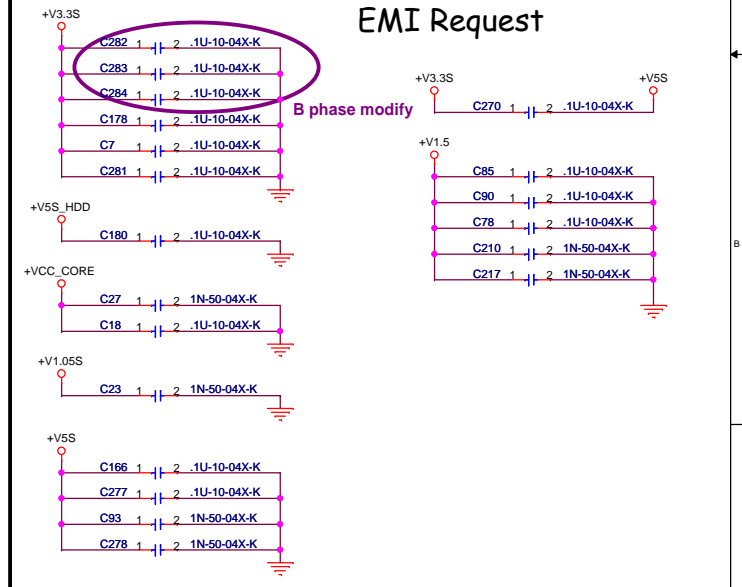
Configure Sensor/Quick Key CON

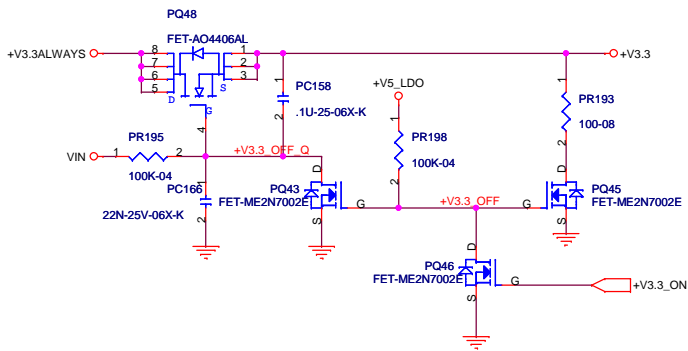
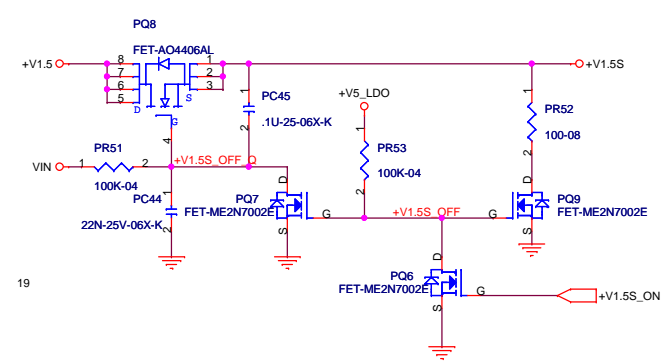
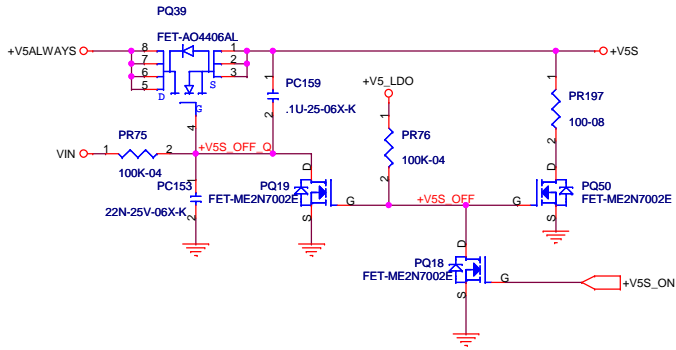
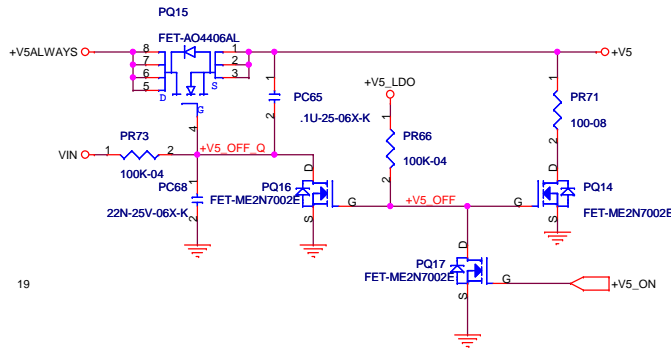
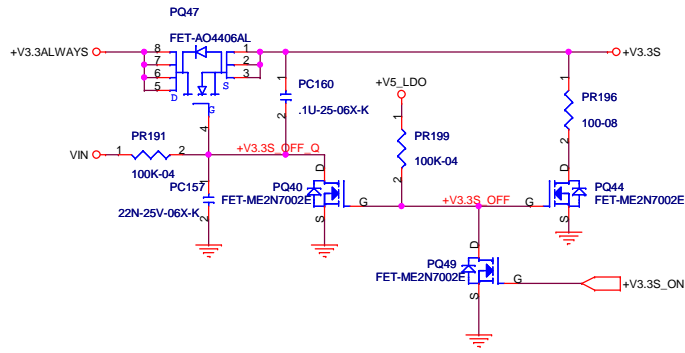


RS-232



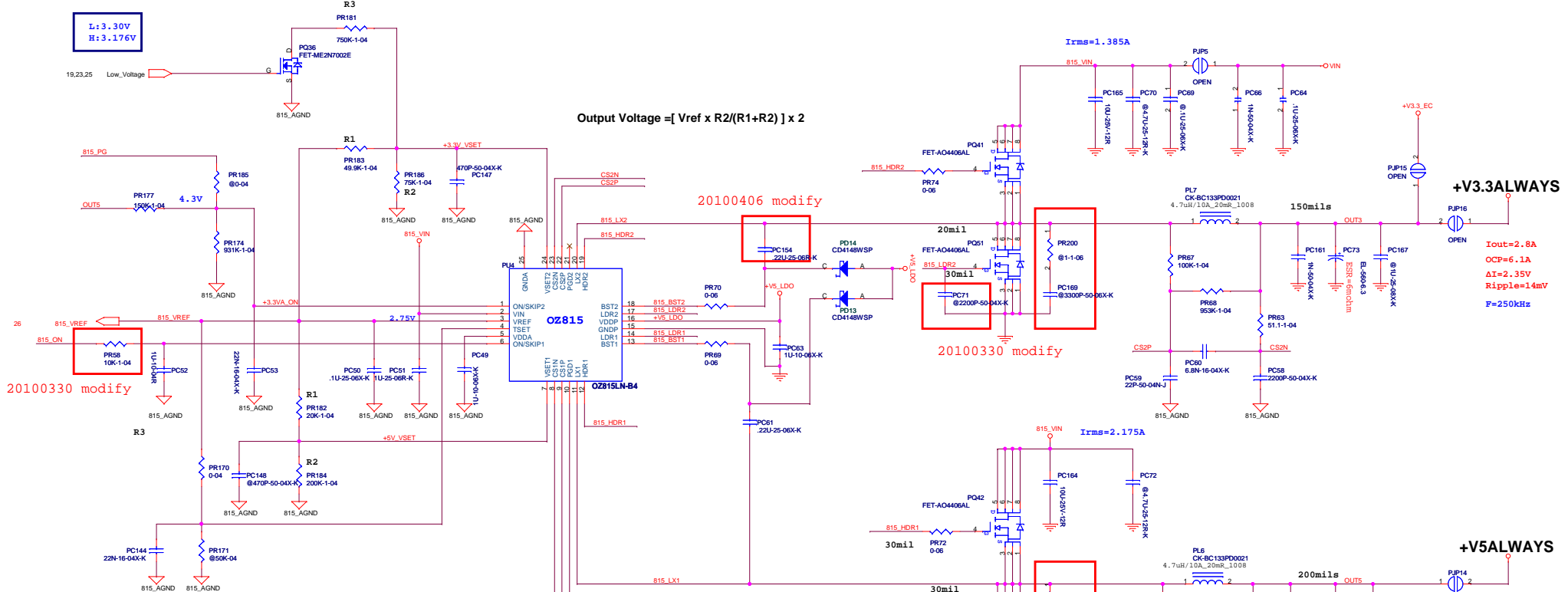
EMI Request



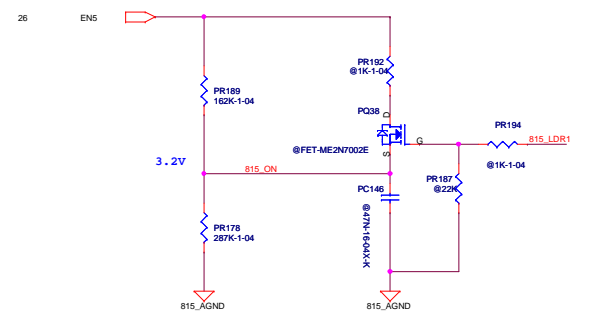


L: 3.30V
H: 3.176V

Output Voltage = [Vref x R2/(R1+R2)] x 2



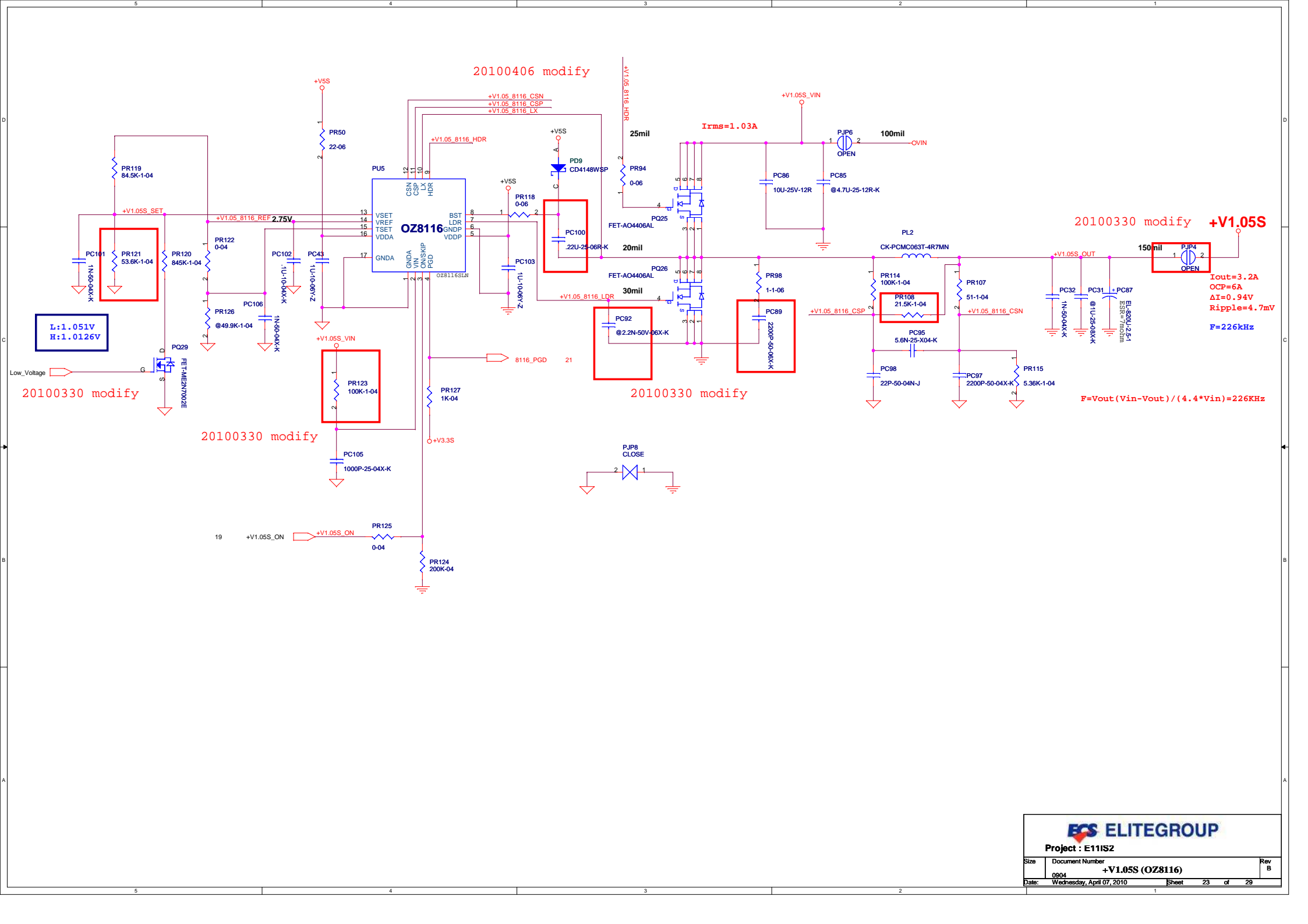
Non-Audio circuit



+V3.3ALWAYS
 Iout=2.8A
 OCP=6.1A
 ΔI=2.35V
 Ripple=14mV
 F=250kHz

+V5ALWAYS
 Iout=4.3A
 OCP=7.2A
 ΔI=2.35V
 Ripple=14mV
 F=340kHz

$F = V_{set} * (V_{in} / 2 - V_{set}) / (2 * I_{out} * V_{set} * V_{in} / 2)$
 $V_{set} = V_{out} / 2, V_{set} = 2.75V$



20100406 modify

+V1.05 8116_CSN
+V1.05 8116_CSP
+V1.05 8116_LX

I_{rms}=1.03A

20100330 modify +V1.05S

I_{out}=3.2A
OCP=6A
ΔI=0.94V
Ripple=4.7mV
F=226kHz

L:1.051V
H:1.0126V

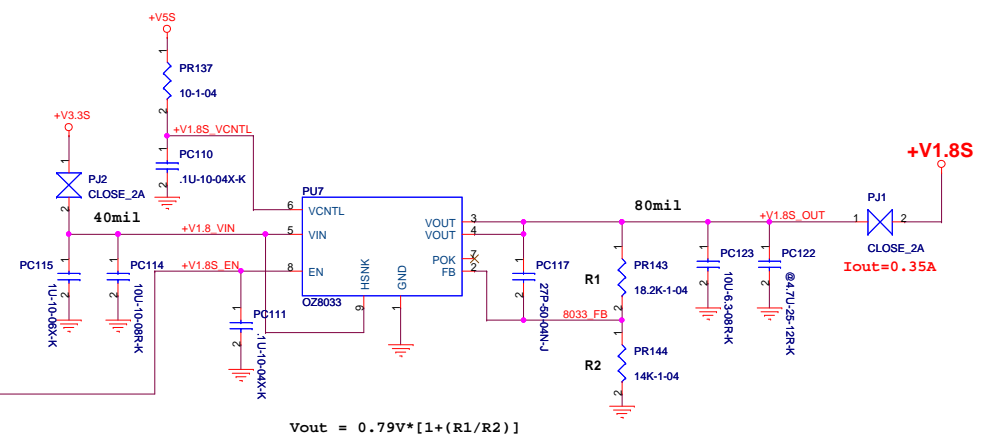
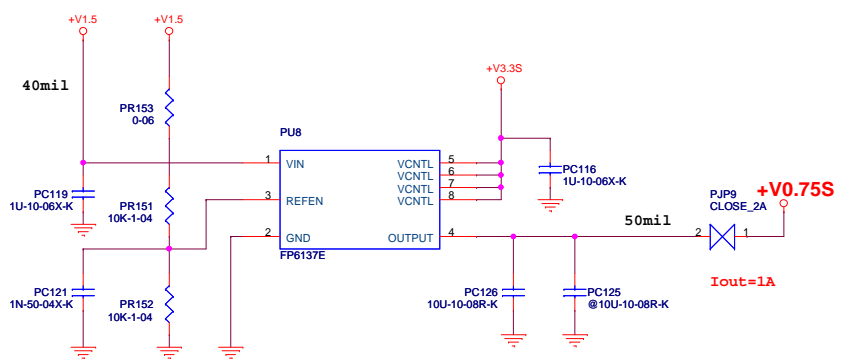
20100330 modify

20100330 modify

20100330 modify

F=V_{out}(V_{in}-V_{out})/(4.4*V_{in})=226KHz

ECS ELITEGROUP		
Project : E11IS2		
Size	Document Number	Rev
0904	+V1.05S (OZ8116)	B
Date:	Wednesday, April 07, 2010	Sheet 23 of 29



20100330 modify

20100406 modify

20100330 modify

20100330 modify

L:1.506V
H:1.443V

L:0.889V
H:0.857V

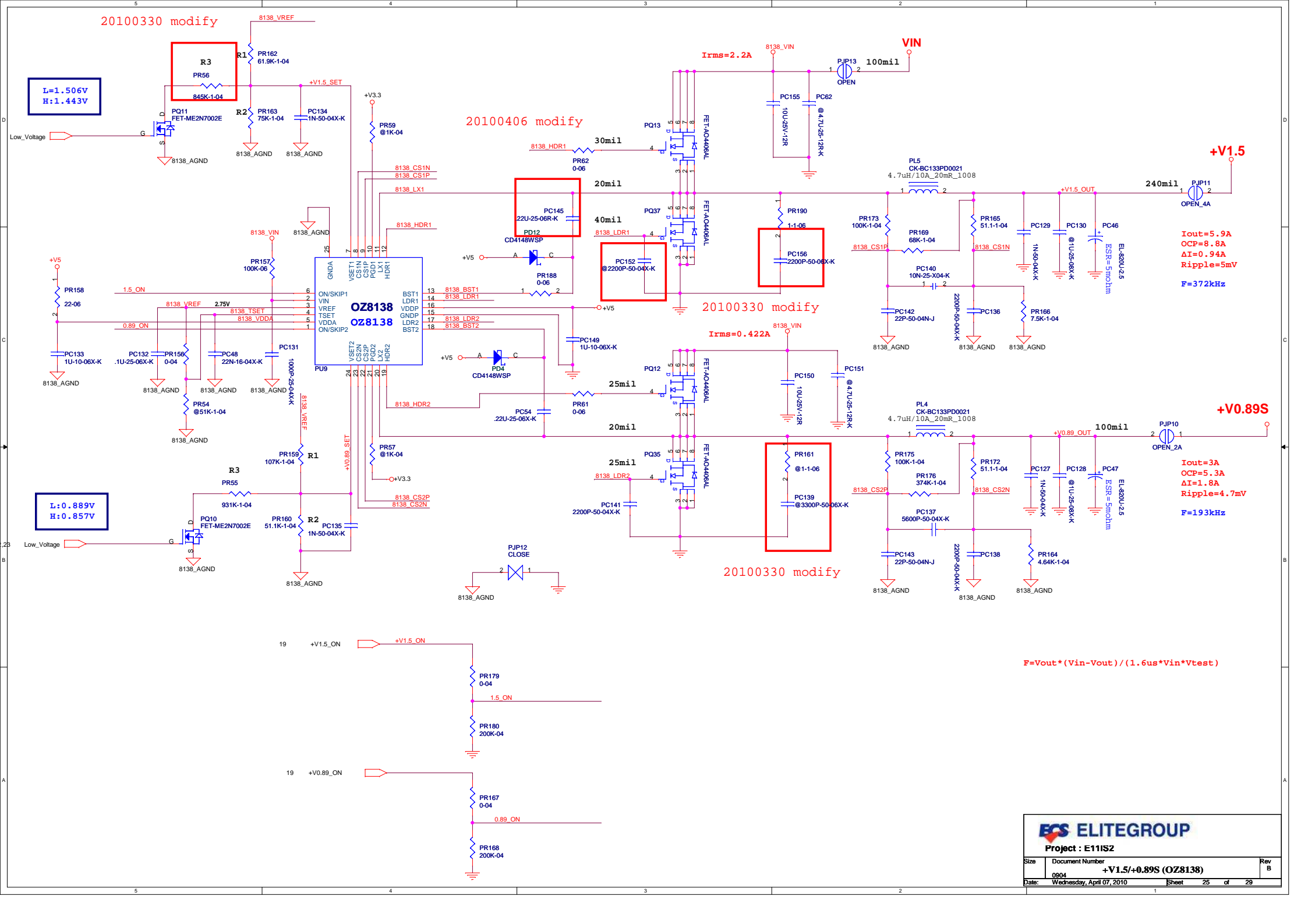
Iout=5.9A
OCP=8.8A
ΔI=0.94A
Ripple=5mV
F=372kHz

Iout=3A
OCP=5.3A
ΔI=1.8A
Ripple=4.7mV
F=193kHz

$$F = V_{out} * (V_{in} - V_{out}) / (1.6us * V_{in} * V_{ttest})$$

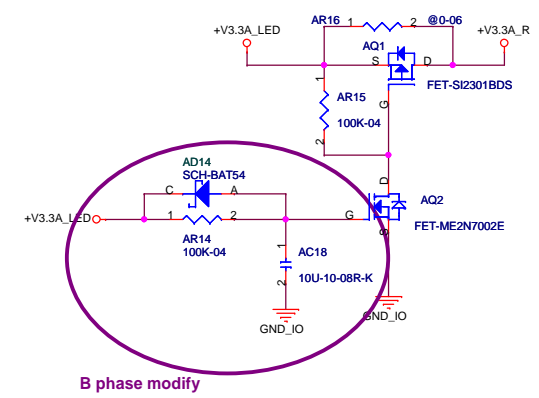
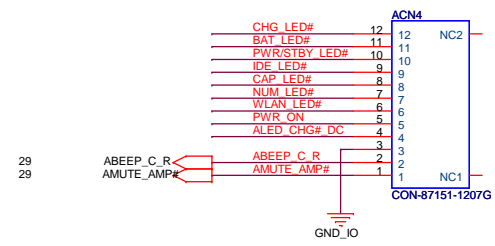
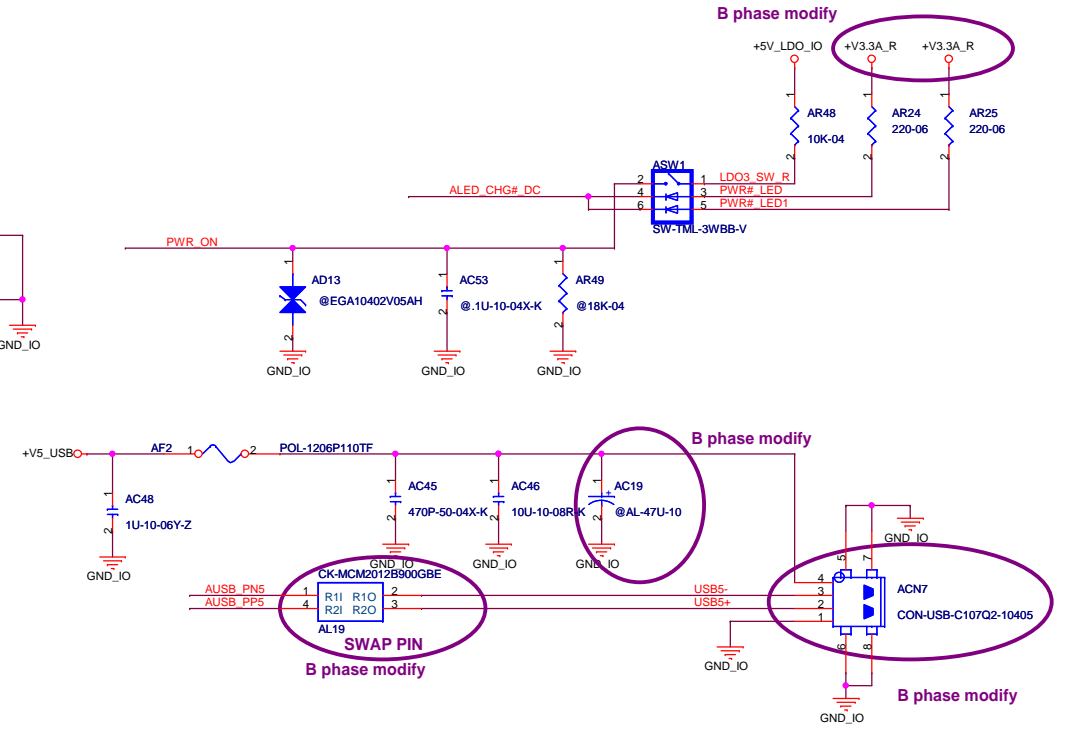
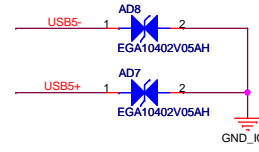
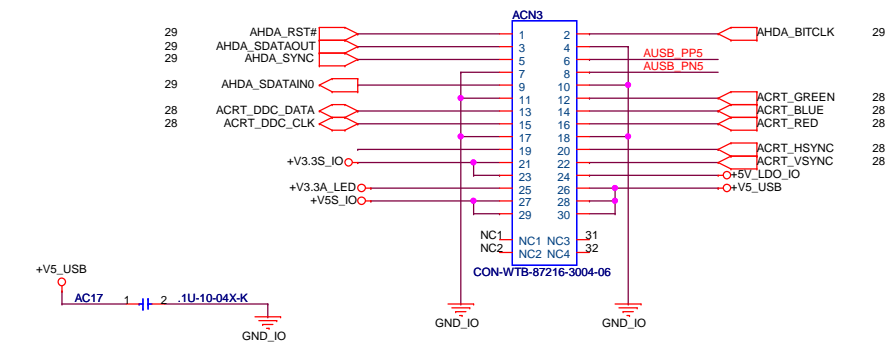
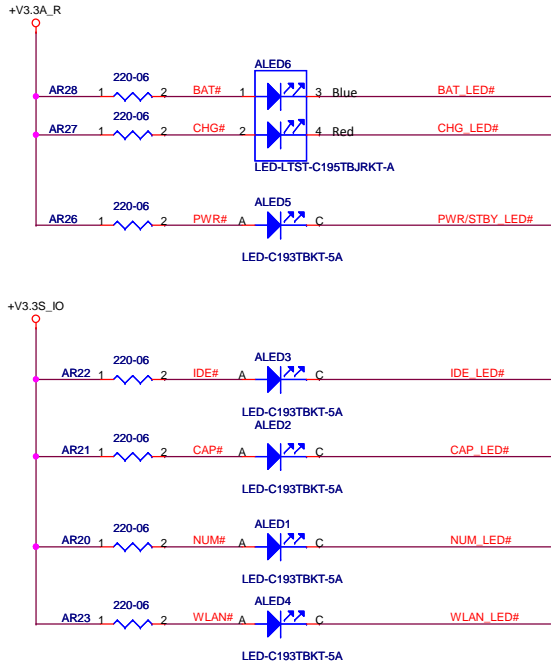
ECS ELITEGROUP
 Project : E11IS2

Size	Document Number	Rev
0904	+V1.5/+0.89S (OZ8138)	B
Date:	Wednesday, April 07, 2010	Sheet 25 of 29



LED placement

- CHG/BAT
- PWR/STBY
- WLAN
- HDD
- CAP
- NUM



ELITEGROUP
Project : E11IS2

Size	Document Number	Rev
0904	IO LED & USB	B
Date:	Wednesday, April 07, 2010	Sheet 27 of 29

CRT

