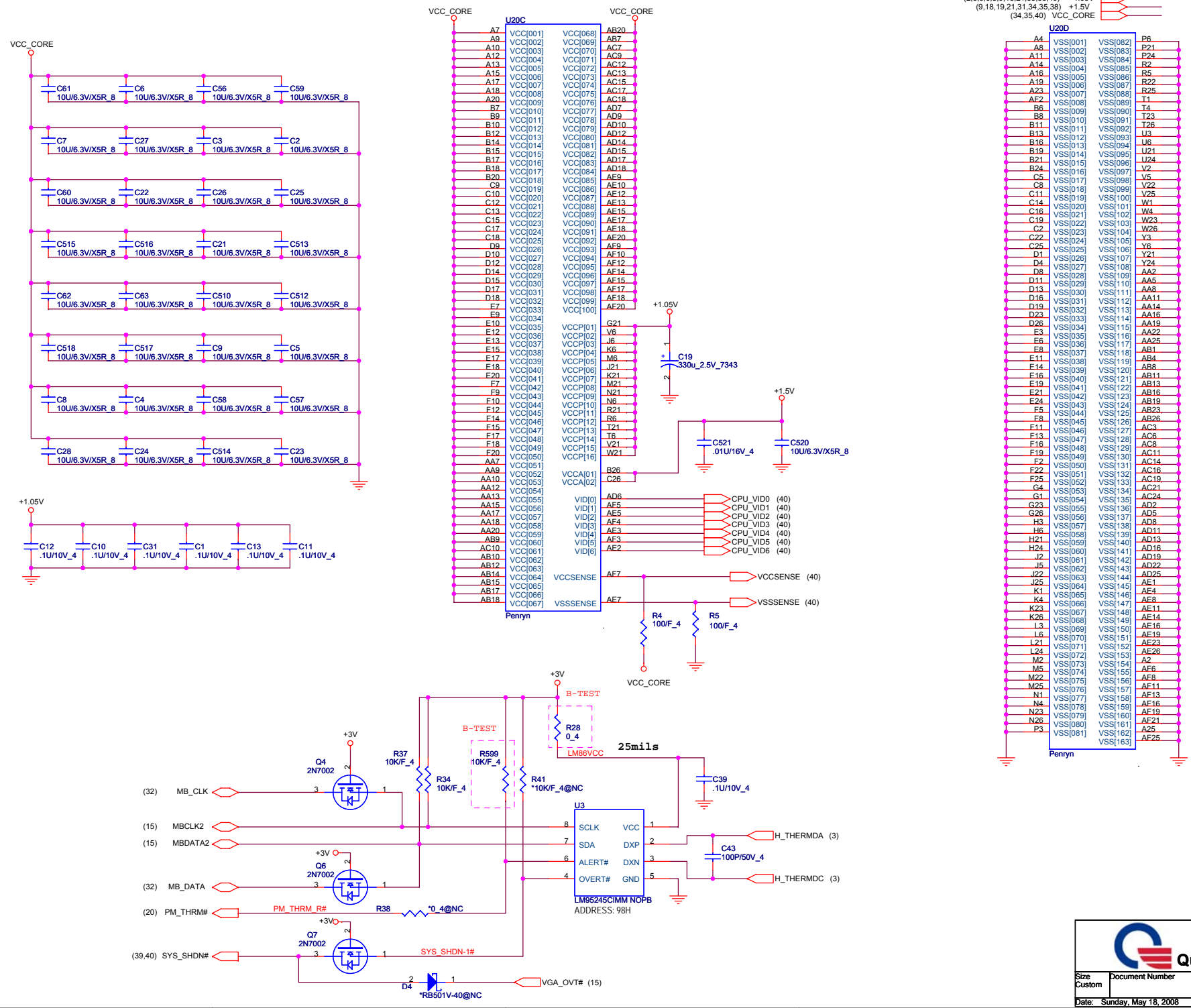


(2,6,9,10,11,12,14,15,18,19,20,21,22,23,24,26,28,29,30,31,32,33,34,35,36,37,38,39,40,41) +3V  
(2,3,5,6,8,9,18,21,35,38,40) +1.05V  
(9,18,19,21,31,34,35,38) +1.5V  
(34,35,40) VCC\_CORE

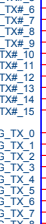
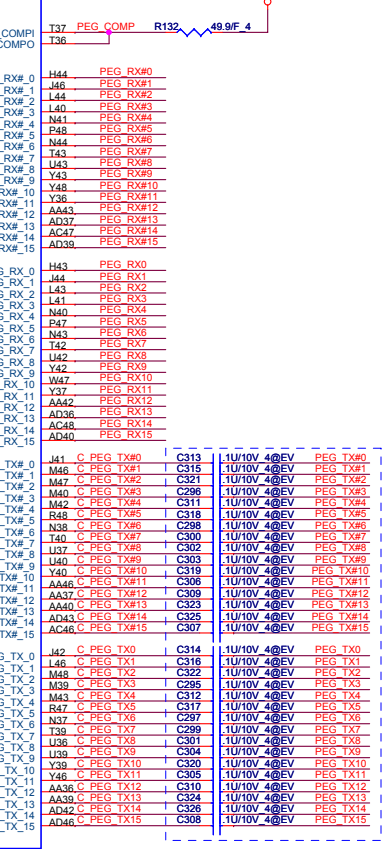
04

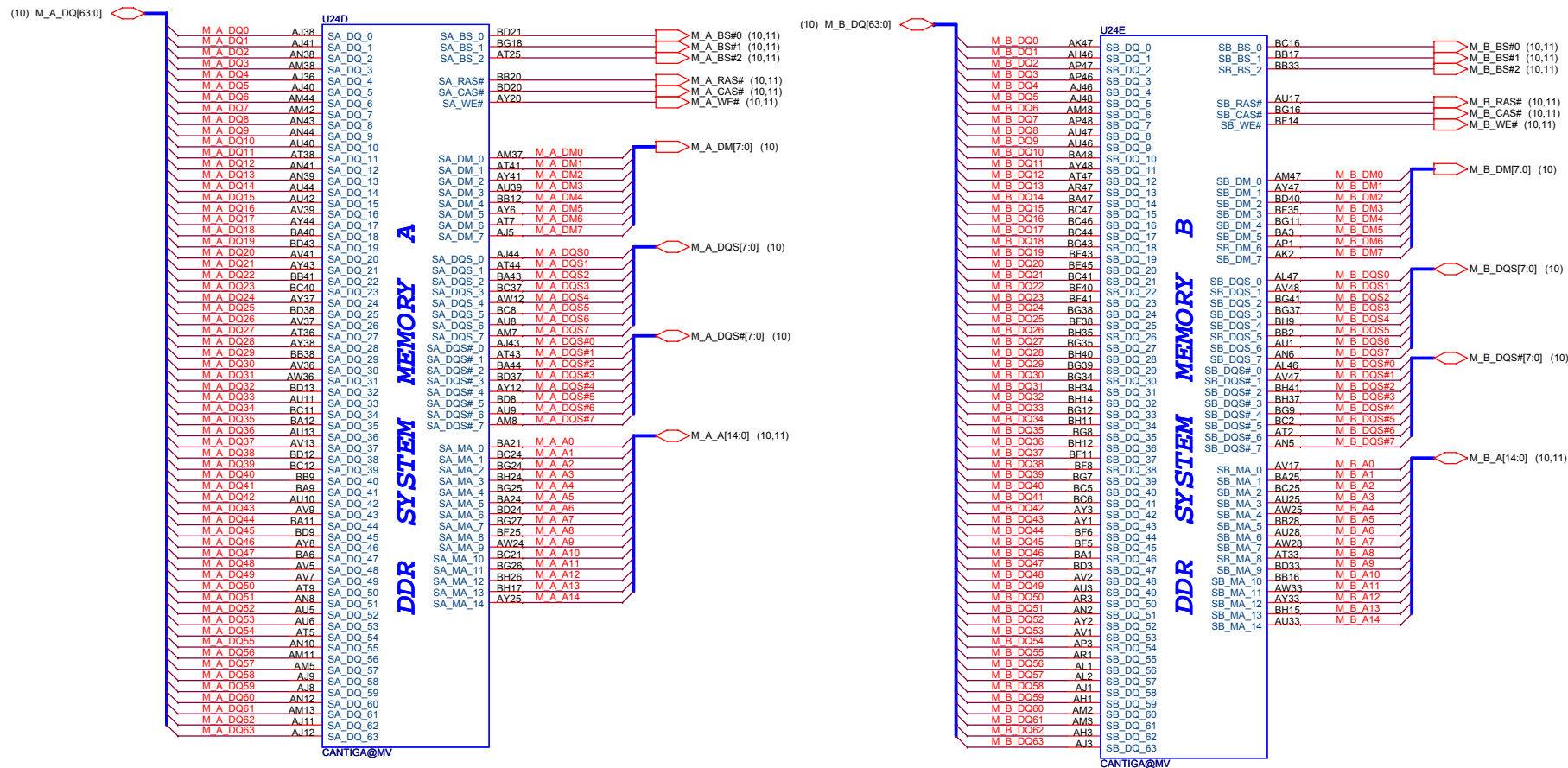


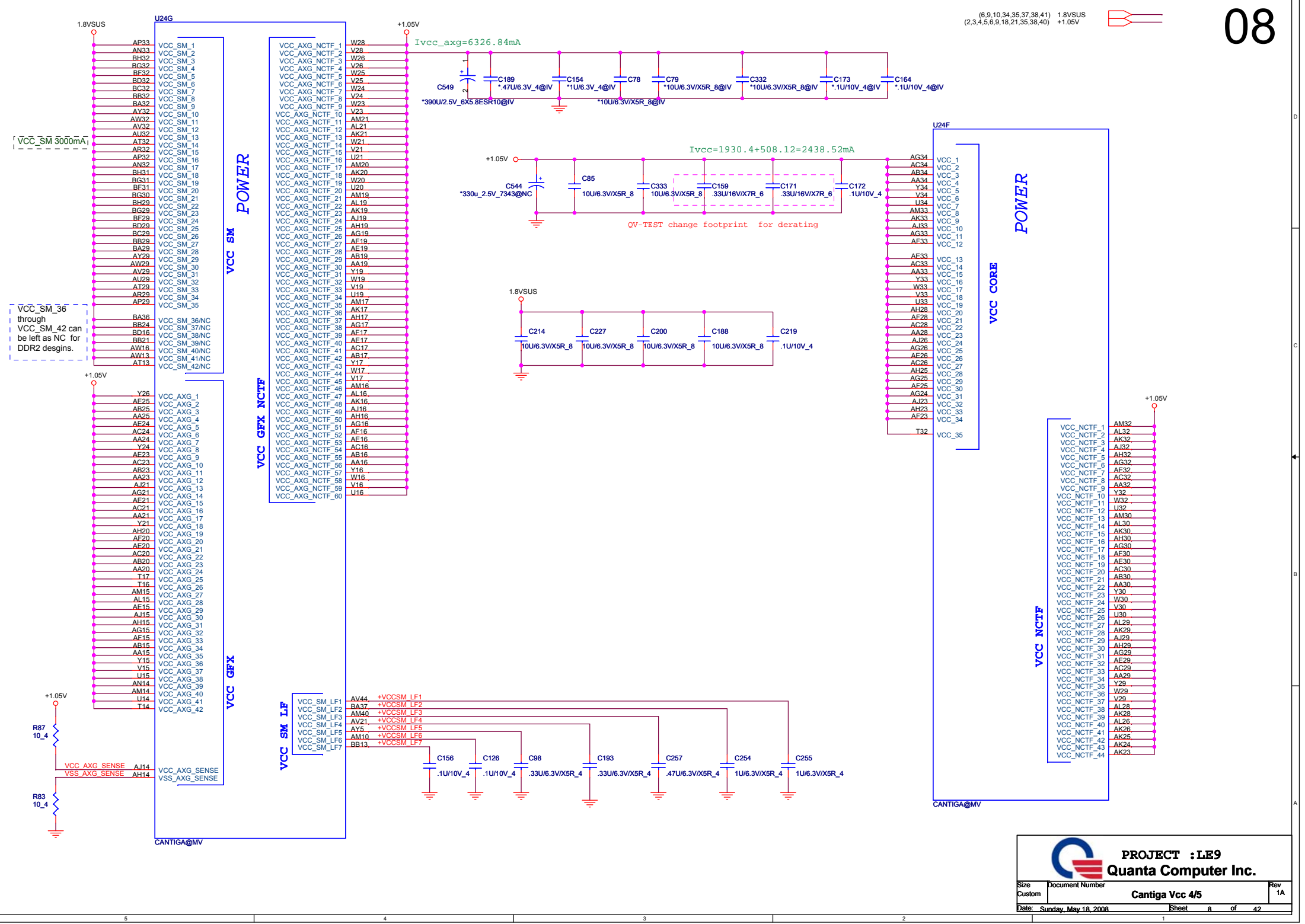




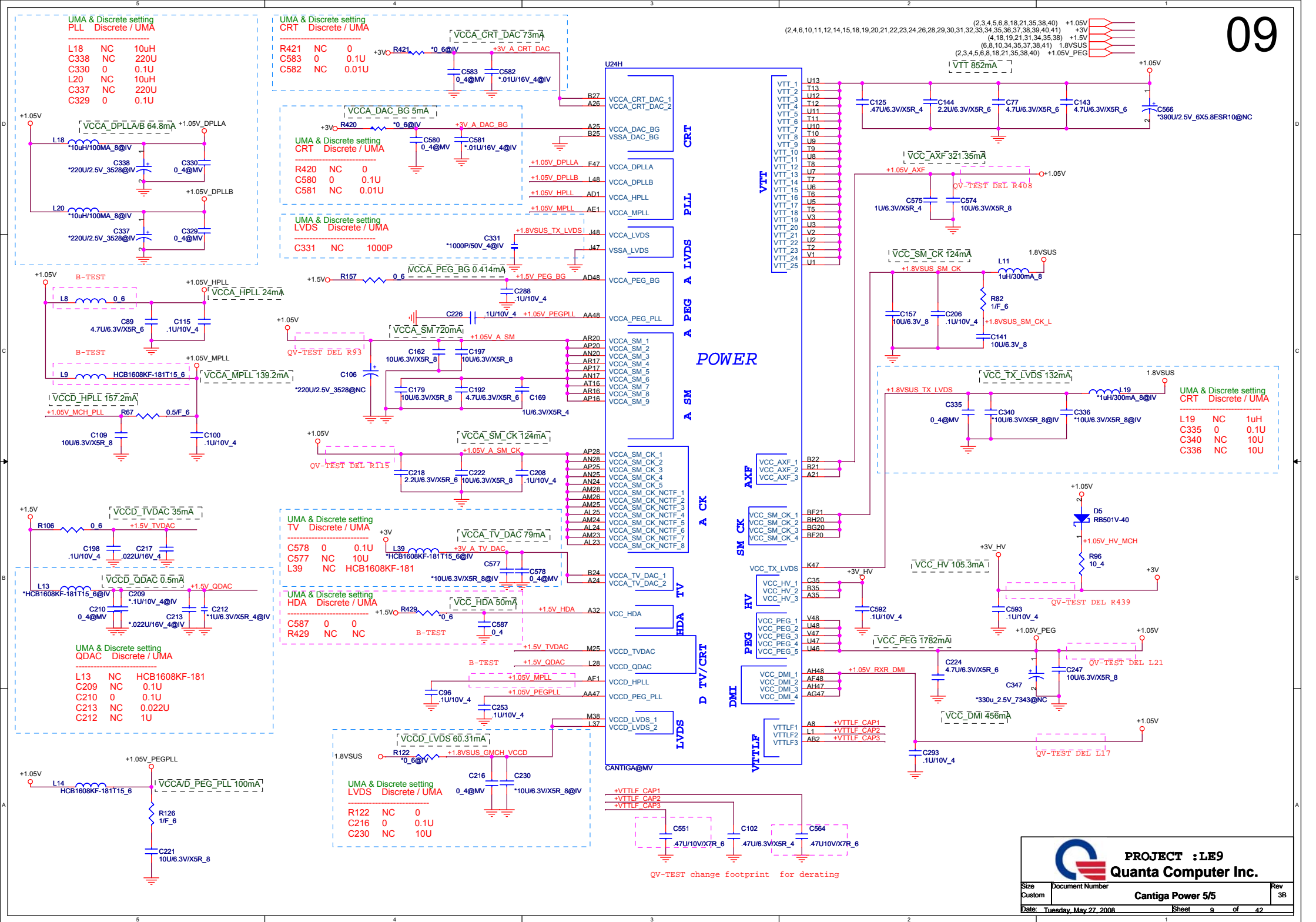
## 0 0 Reserved

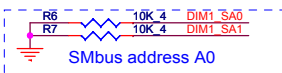
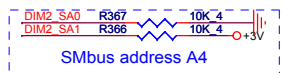
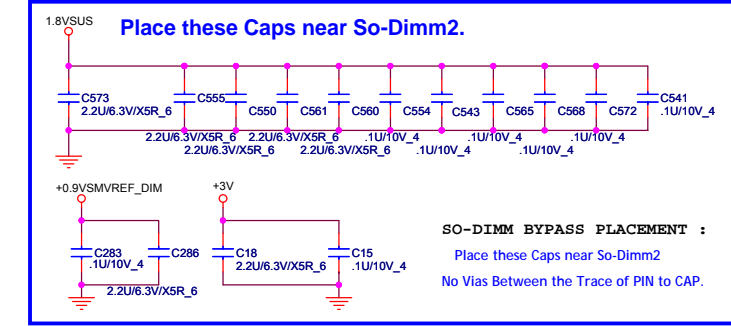
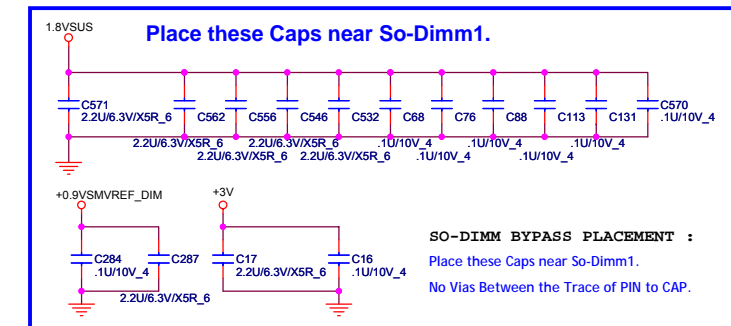
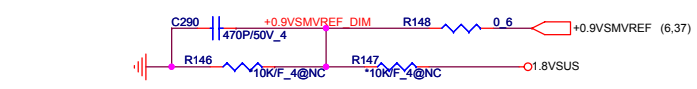
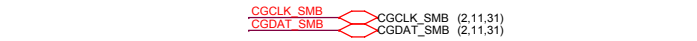
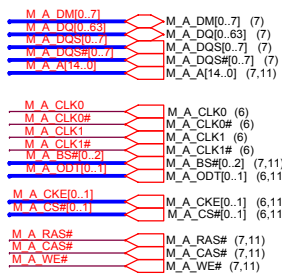
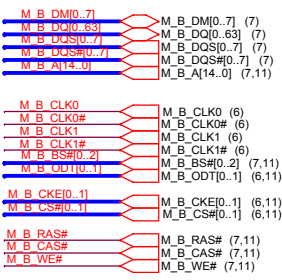
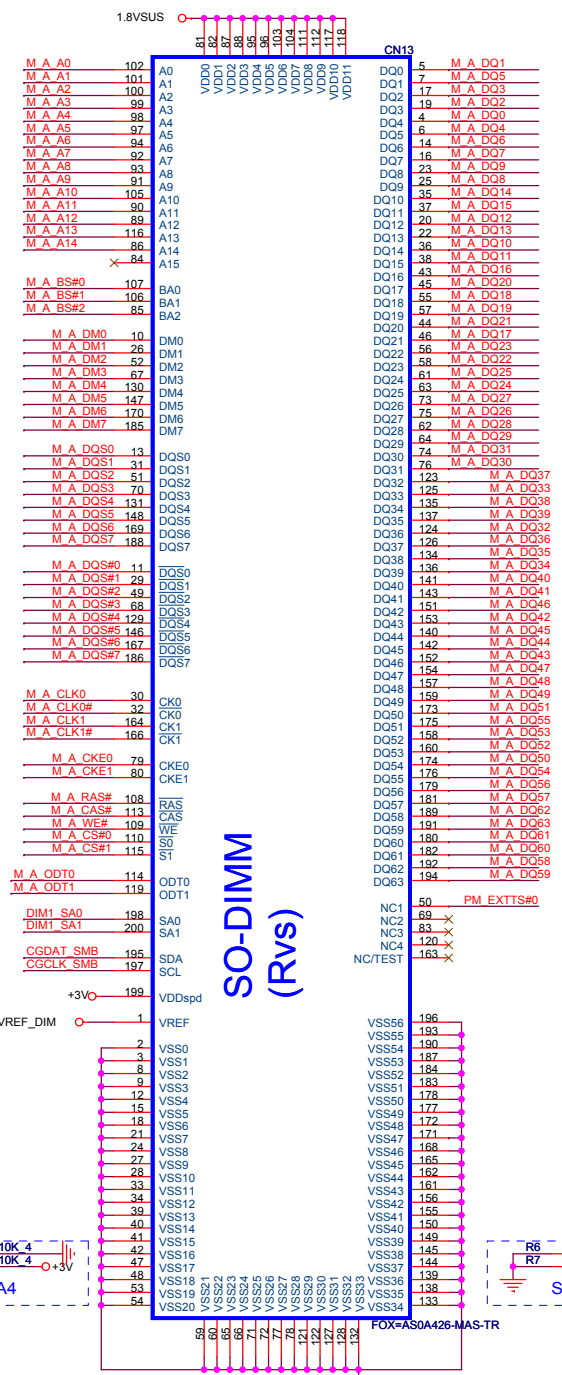
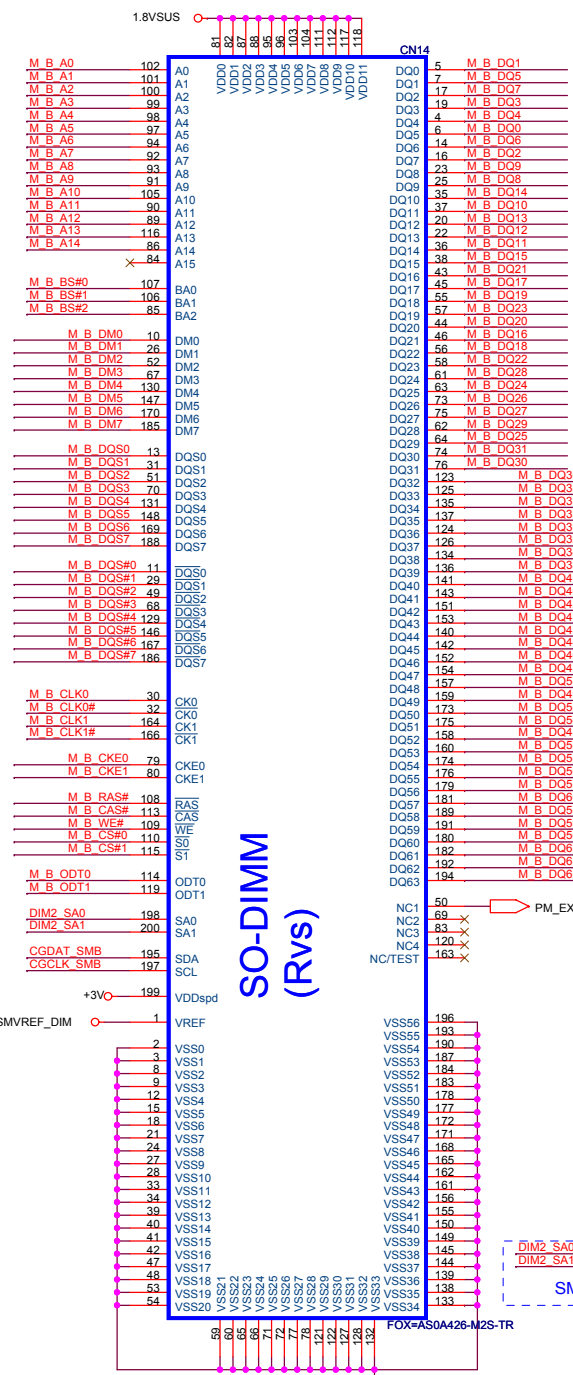










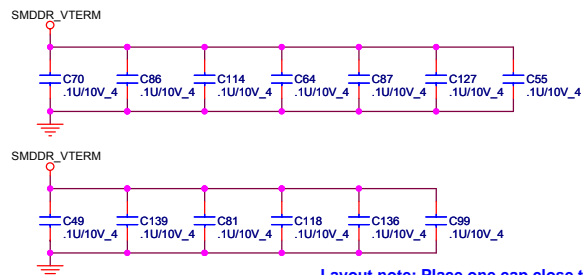


H 9.2

H 5.2

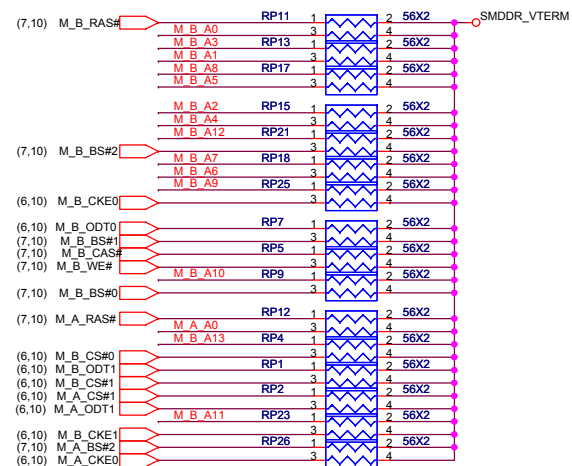
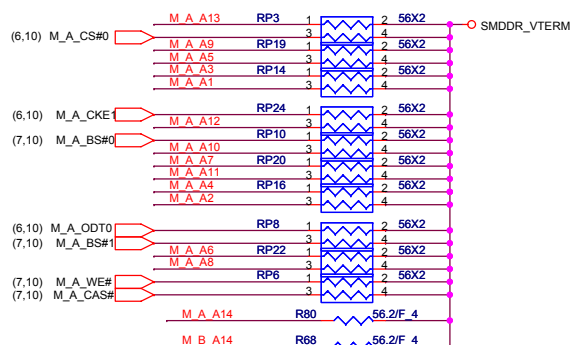
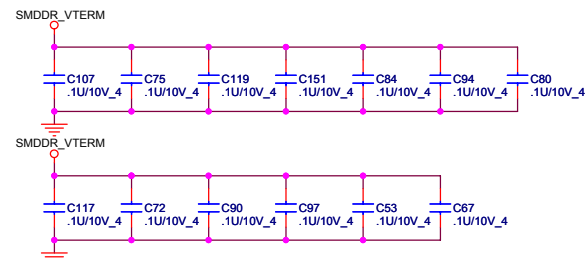
# DDRII DUAL CHANNEL A,B.

## DDRII A CHANNEL



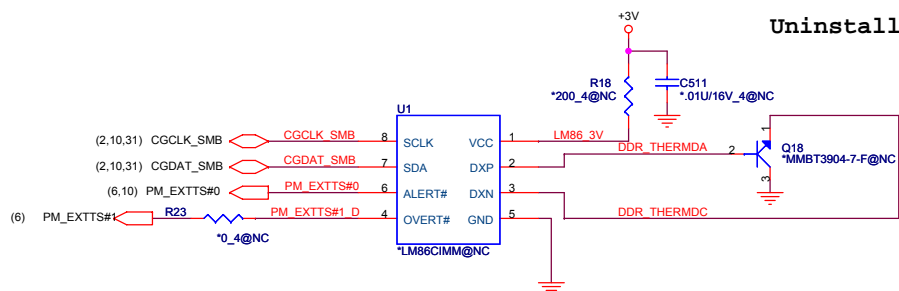
Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR\_VTERM

## DDRII B CHANNEL

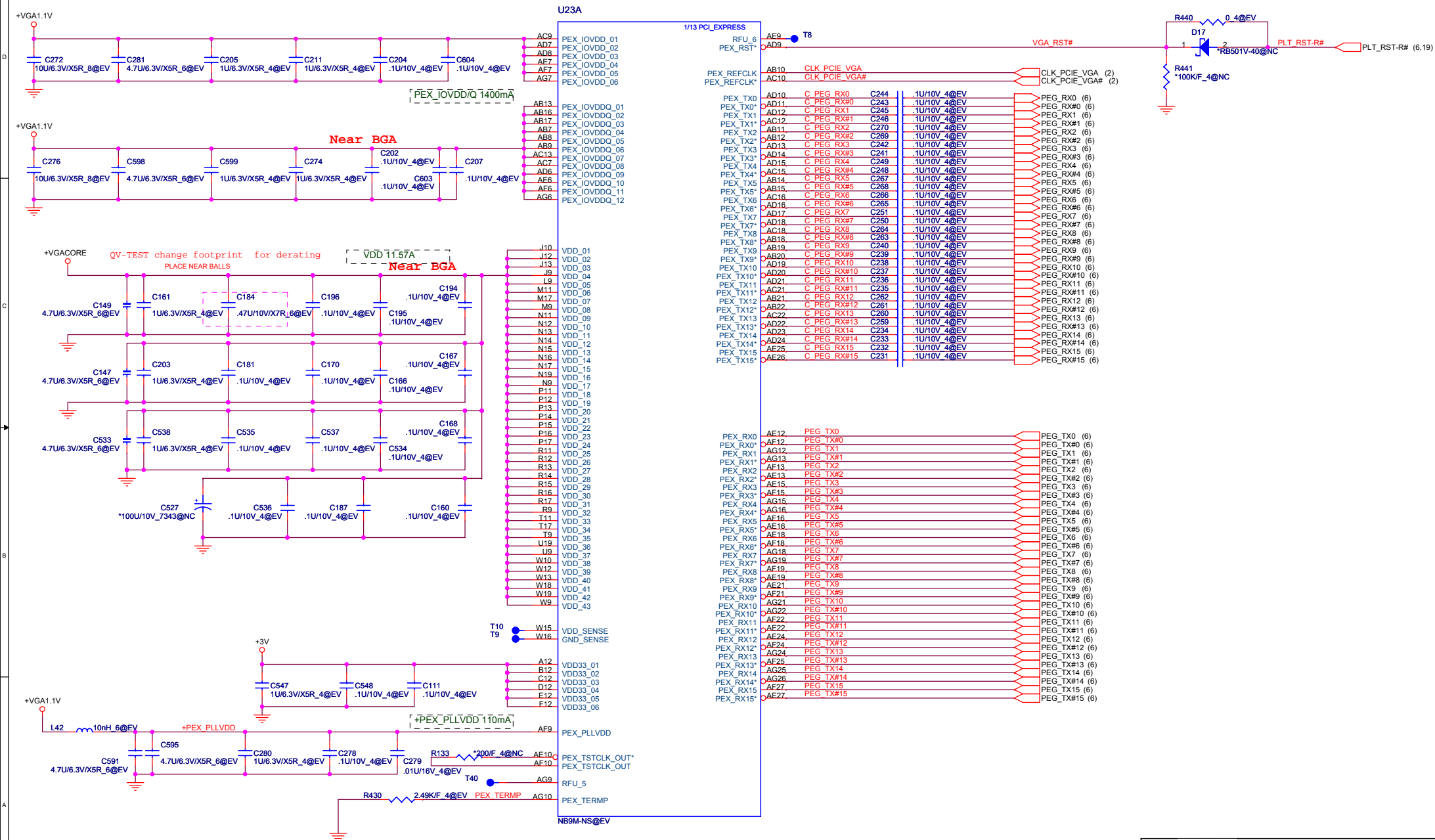


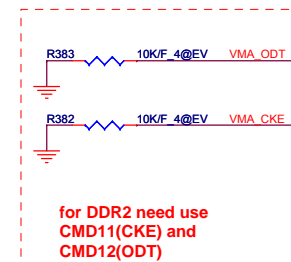
M\_B\_A[14..0] M\_B\_A[14..0] (7,10)  
M\_A\_A[14..0] M\_A\_A[14..0] (7,10)

Uninstall

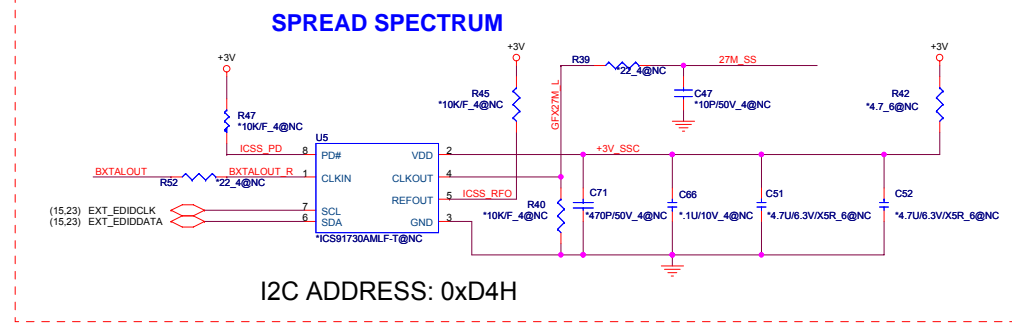
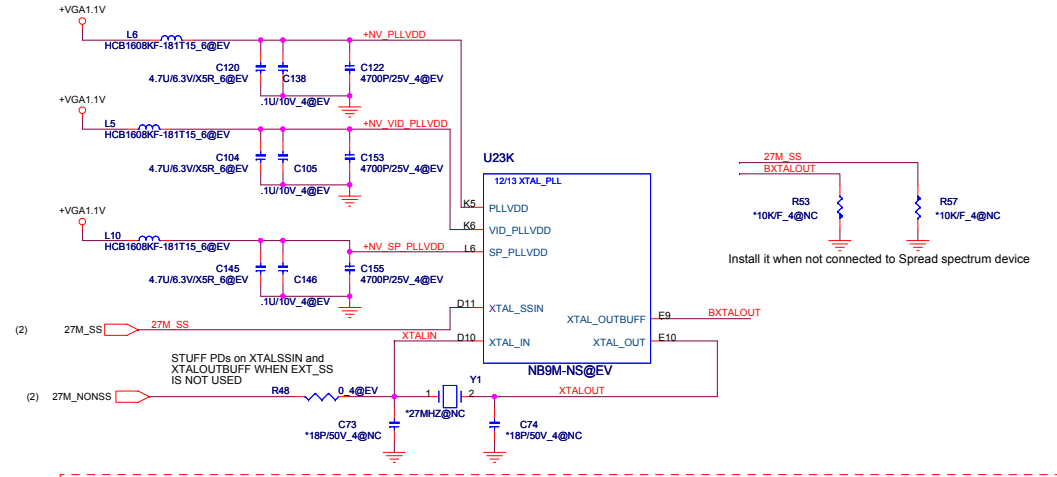
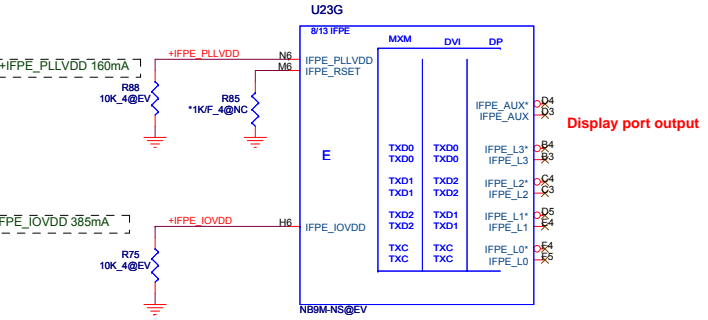
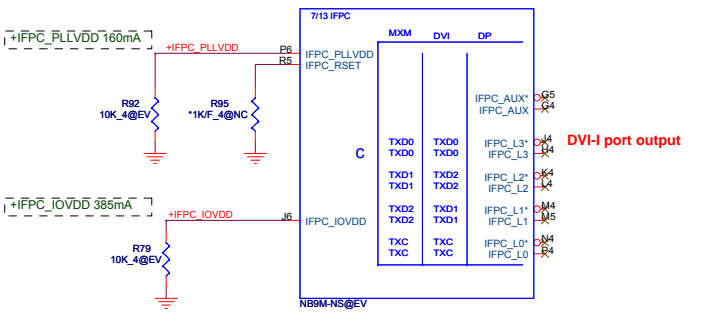
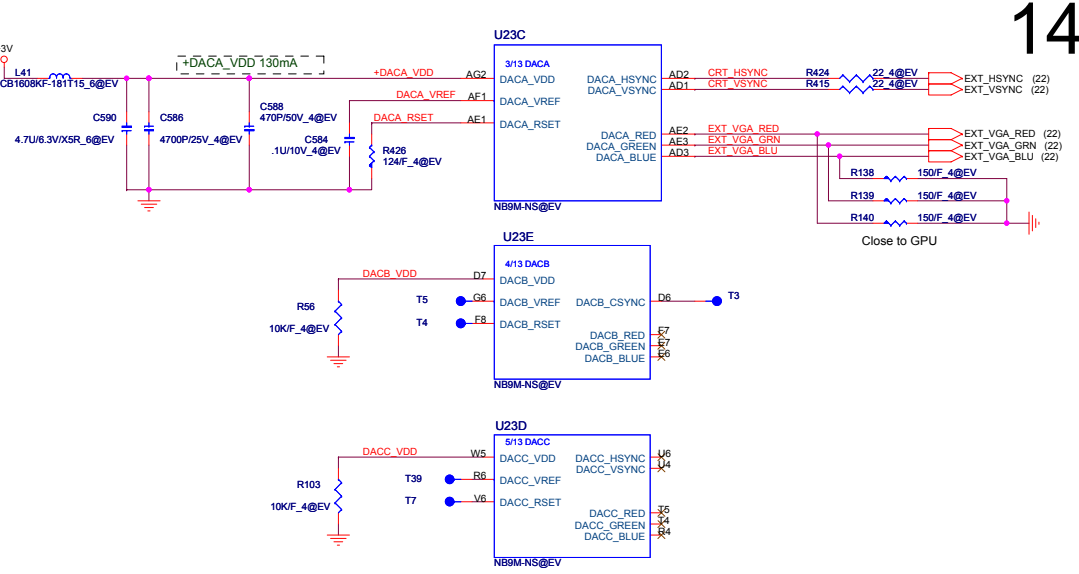
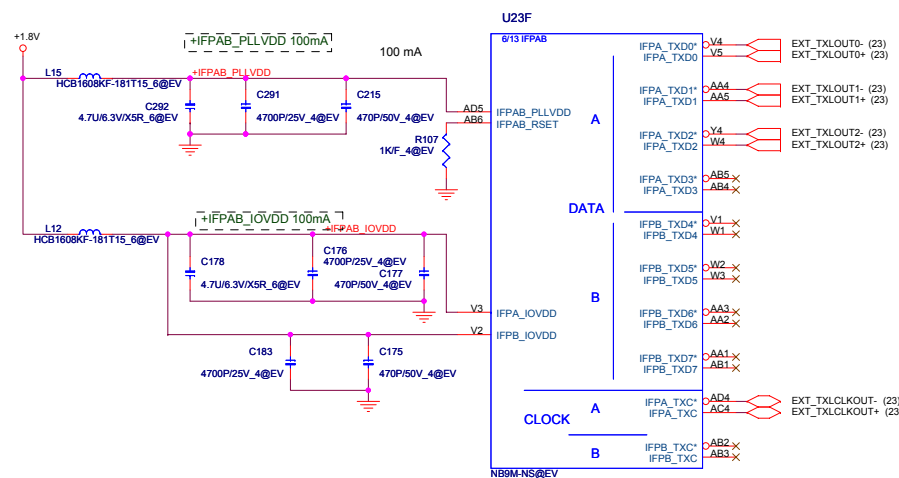


PROJECT : LE9  
Quanta Computer Inc.

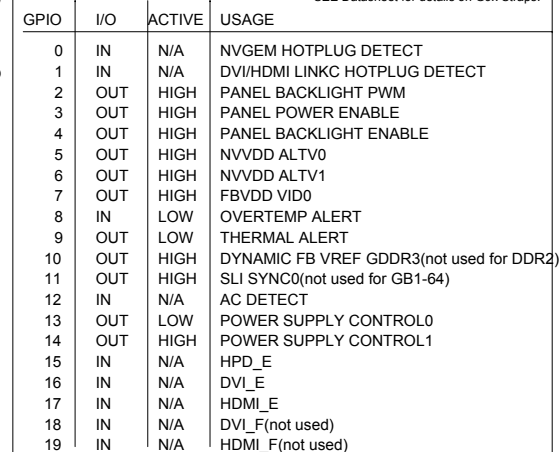








(13,17,35,37) +1.8V  
(2,4,6,9,10,11,12,15,18,19,20,21,22,23,24,26,28,29,30,31,32,33,34,35,36,37,38,39,40,41) +3V  
(12,13,35,41) +VGA1.1V



### NB9M-NS VRAM Configuration Table

STRAP	VALUE		MEMORY Vendor
0	5K	PD	NOT USED
1	10K	PD	Samsung DDR2 16Mx16
2	15K	PD	Qmnd DDR2 16Mx16
3	20K	PD	HYNX DDR2 16Mx16
4	25K	PD	NOT USED
5	30K	PD	Samsung DDR2 32Mx16
6	34.8K	PD	Qmnd DDR2 32Mx16
7	45.3K	PD	HYNX DDR2 32Mx16

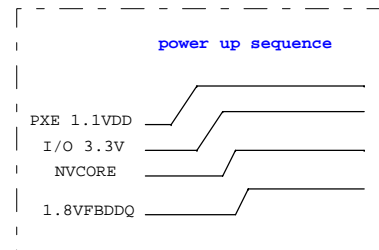
U23J

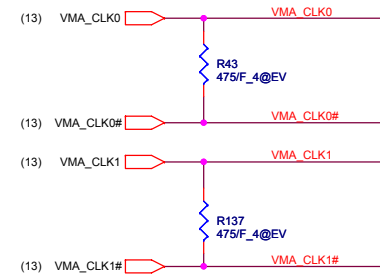
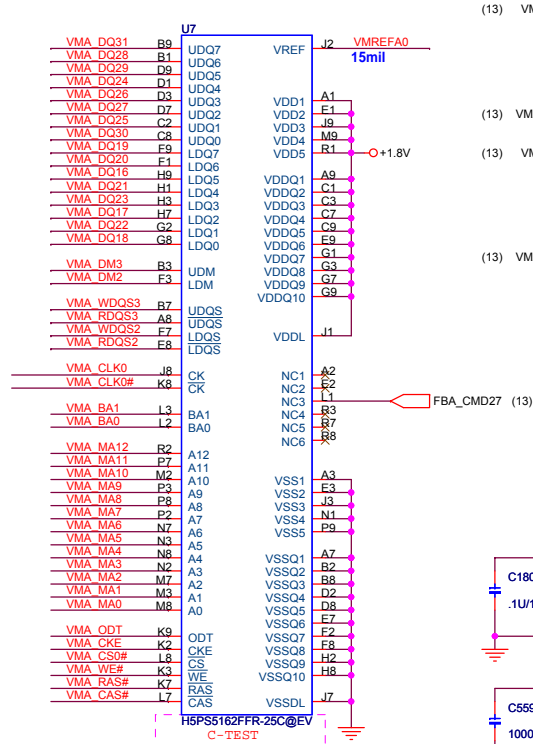
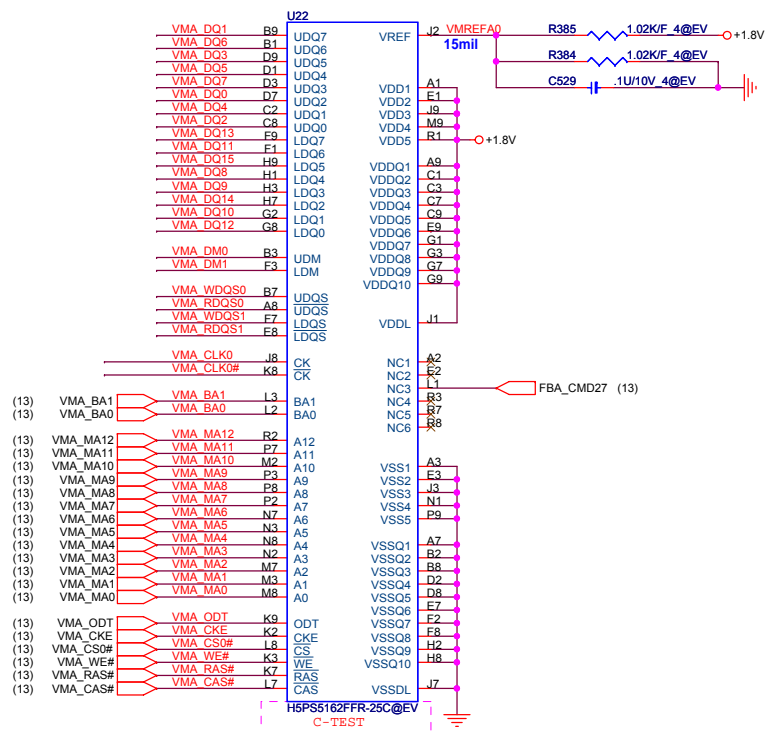
13/13 GND\_NC

AC11	GND_01	NC_01	AA6
AC14	GND_02	NC_02	AC19
AC17	GND_03	NC_03	E15
AC2	GND_04	NC_04	T6
AC20	GND_05		
AC23	GND_06		
AC26	GND_07		
AC5	GND_08		
AC8	GND_09		
AE11	GND_10		
AE14	GND_11		
AE17	GND_12		
AE2	GND_13		
AE20	GND_14		
AE23	GND_15		
AE26	GND_16		
AE5	GND_17		
AE8	GND_18		
B11	GND_19		
B14	GND_20		
B17	GND_21		
B2	GND_22		
B20	GND_23		
B23	GND_24		
B26	GND_25		
B5	GND_26		
B8	GND_27		
E11	GND_28		
E14	GND_29		
E17	GND_30		
E2	GND_31		
E20	GND_32		
E23	GND_33		
E26	GND_34		
E5	GND_35		
E8	GND_36		
H2	GND_37		
H5	GND_38		
J11	GND_39		
J14	GND_40		
J17	GND_41		
K19	GND_42		
K9	GND_43		
L11	GND_44		
L12	GND_45		
L13	GND_46		
L14	GND_47		
L15	GND_48		
L16	GND_49		
L17	GND_50		
L2	GND_51		
L5	GND_52		
M12	GND_53		
M13	GND_54		
M14	GND_55		
M15	GND_56		
M16	GND_57		
P19	GND_58		
P2	GND_59		
P23	GND_60		
P26	GND_61		
P5	GND_62		
P9	GND_63		
T12	GND_64		
T13	GND_65		
T14	GND_66		
T15	GND_67		
T16	GND_68		
U11	GND_69		
U12	GND_70		
U13	GND_71		
U14	GND_72		
U15	GND_73		
U16	GND_74		
U17	GND_75		
U2	GND_76		
U23	GND_77		
U26	GND_78		
U5	GND_79		
V19	GND_80		
V9	GND_81		
W11	GND_82		
W14	GND_83		
W17	GND_84		
Y2	GND_85		
Y23	GND_86		
Y26	GND_87		
Y5	GND_88		

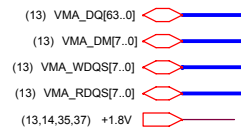
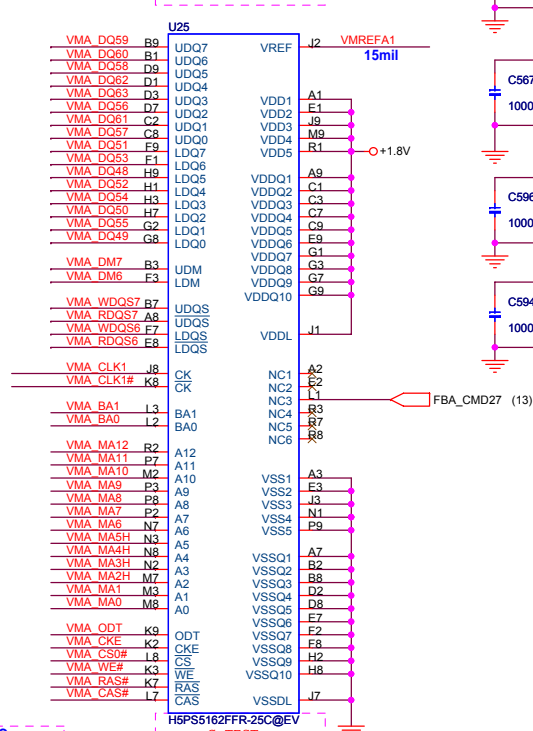
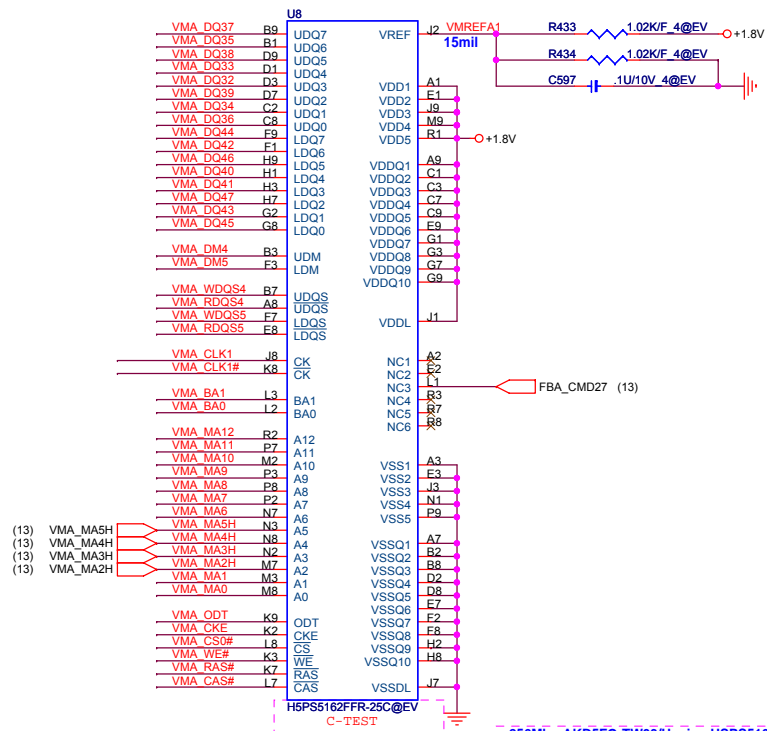
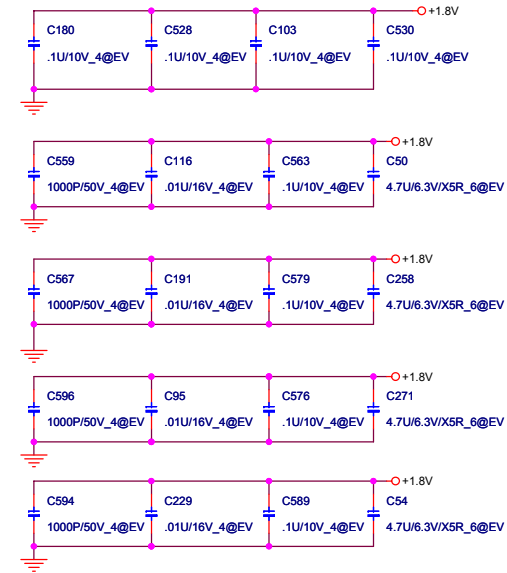
NB9M-NS@EV

NB9M: VGACORE +0.9V ~ +1.0V



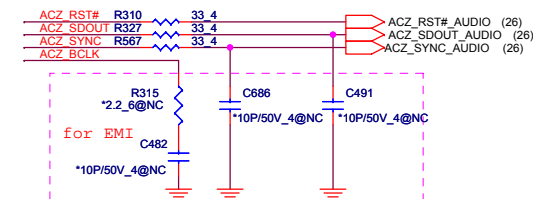


(By pass capacitor)



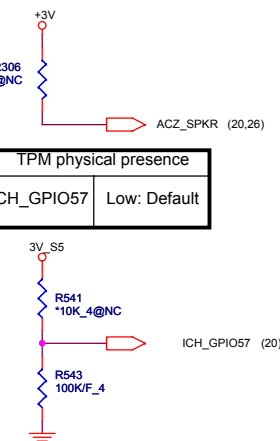
256Mb : AKD5FG-TW03/Hynix --HSPS5162FFR-25C

AKD5FG-T\*03/Qimonda --YB18T512161B2F-25

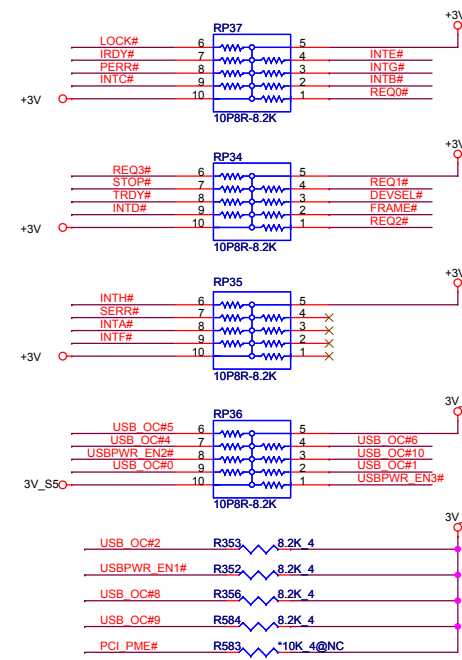


## C-TEST

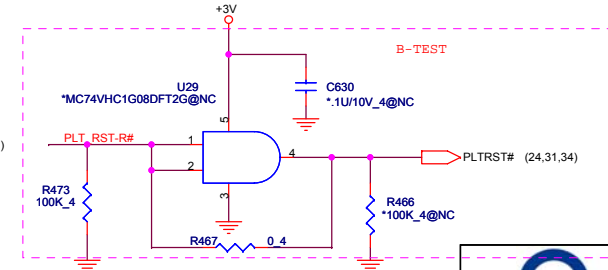
TPM physical presence	
CH_GPIO57	Low: Default






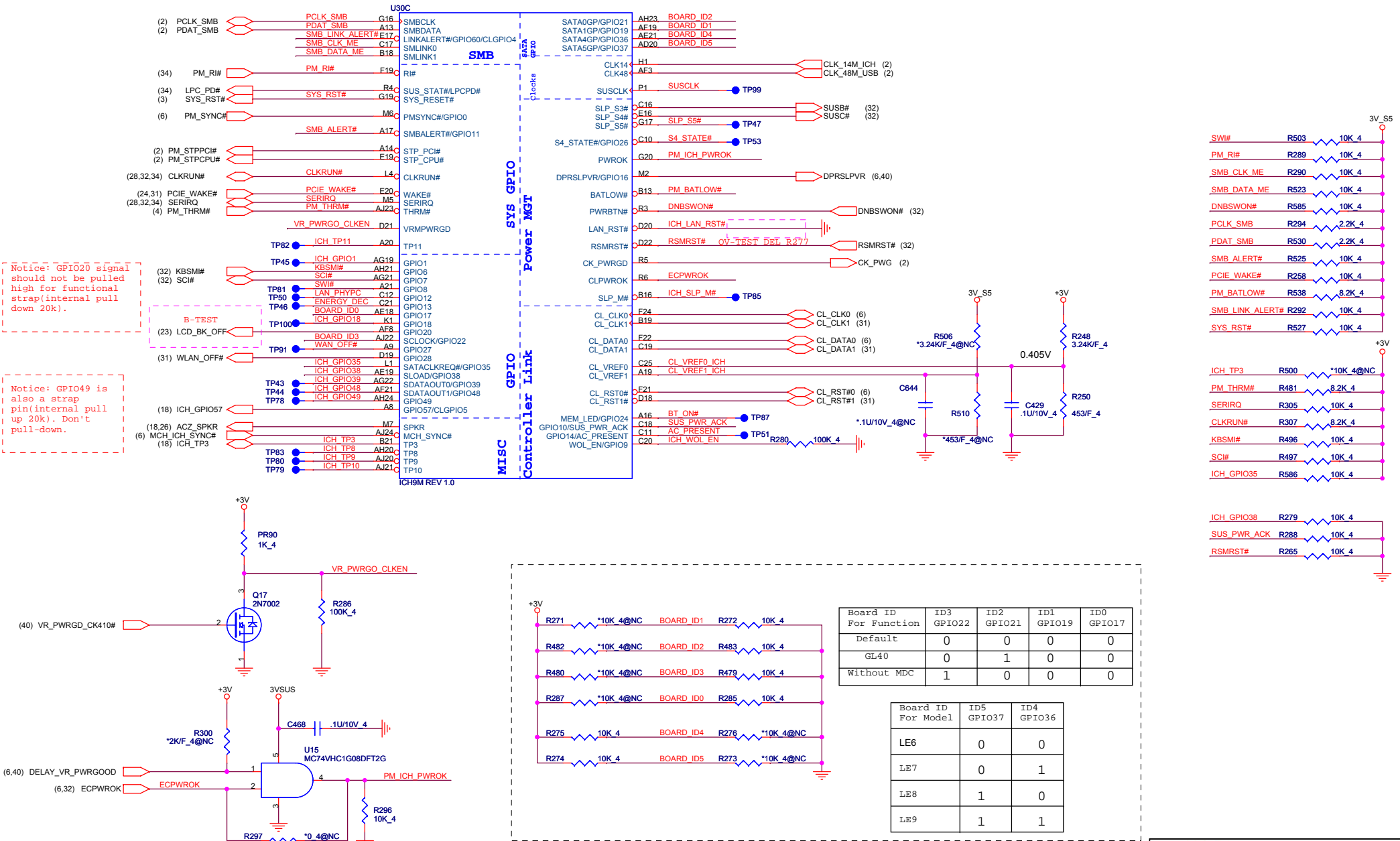


```
Notice: GPIO55,53,51
signal has a weak
internal pull-up 20k
for functional
strap.Don't pull-down.
```



DEVICE	IDSEL #	REQ/GNT #	PCI_INT
CardBus/1394 /Card Reader	AD21	0	E,F

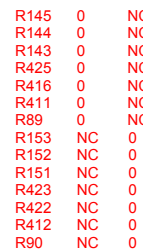
		<b>PROJECT : LE9</b> <b>Quanta Computer Inc.</b>	
Size Custom	Document Number	ICH9-M PCIE 2/4	Rev 3A
Date: Monday, May 12, 2008	Sheet	19	of 42



Board ID For Function	ID3 GPIO22	ID2 GPIO21	ID1 GPIO19	ID0 GPIO1
Default	0	0	0	0
GL40	0	1	0	0
Without MDC	1	0	0	0

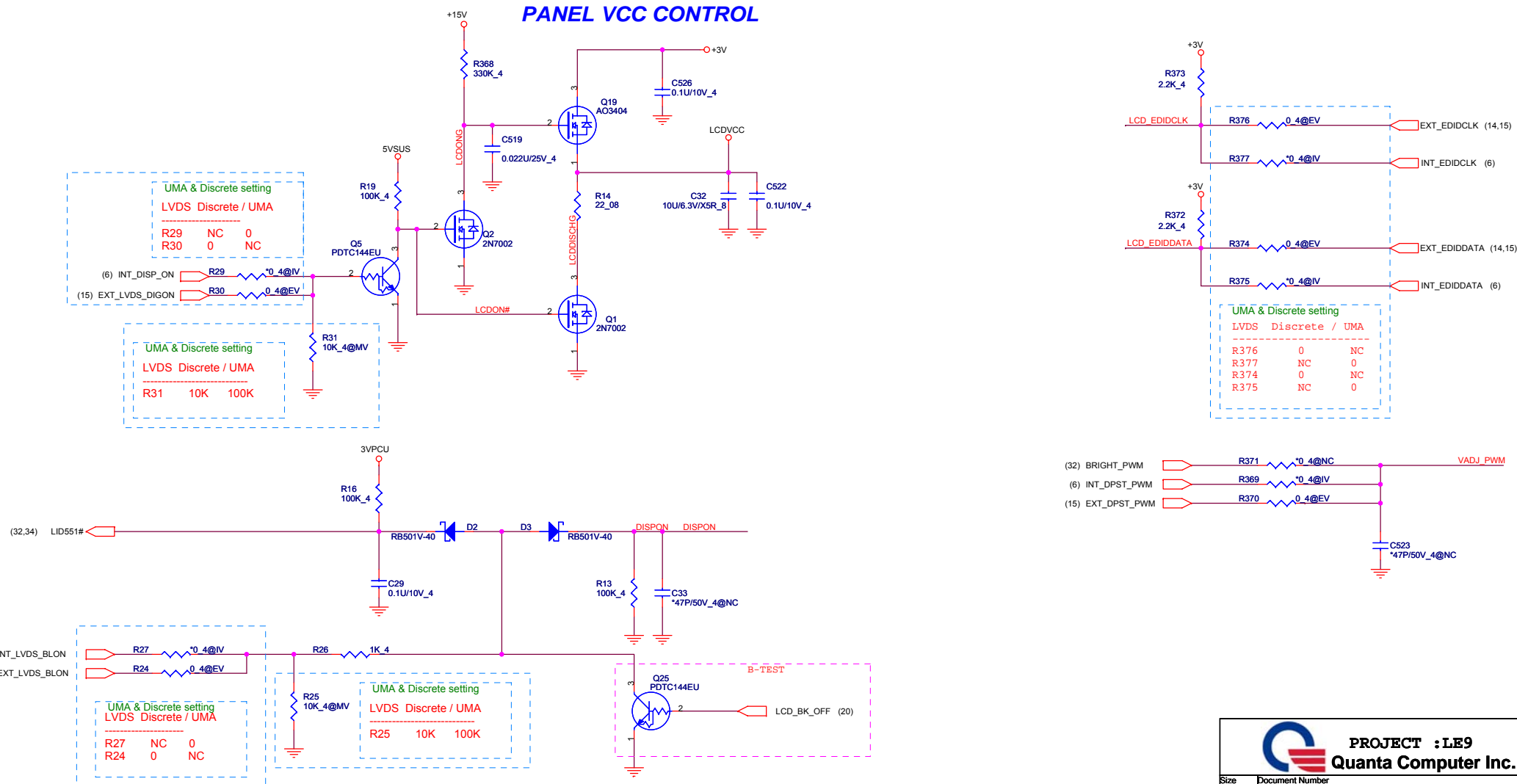
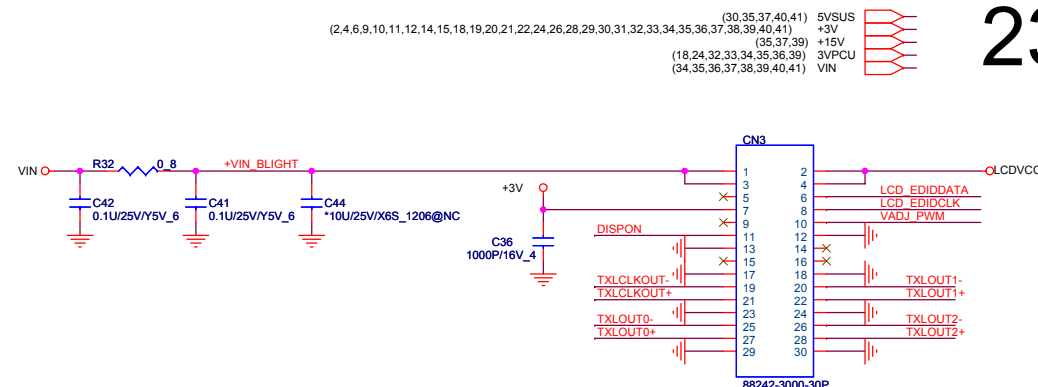
Board ID For Model	ID5 GPIO37	ID4 GPIO36
LE6	0	0
LE7	0	1
LE8	1	0
LE9	1	1



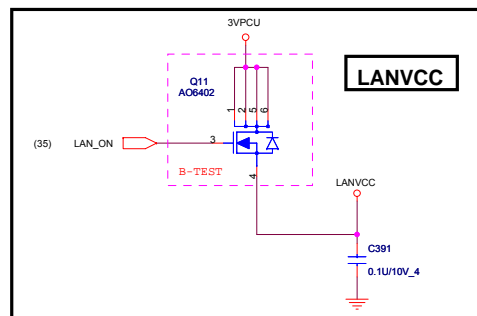


**PROJECT :LE9**  
**Quanta Computer Inc.**

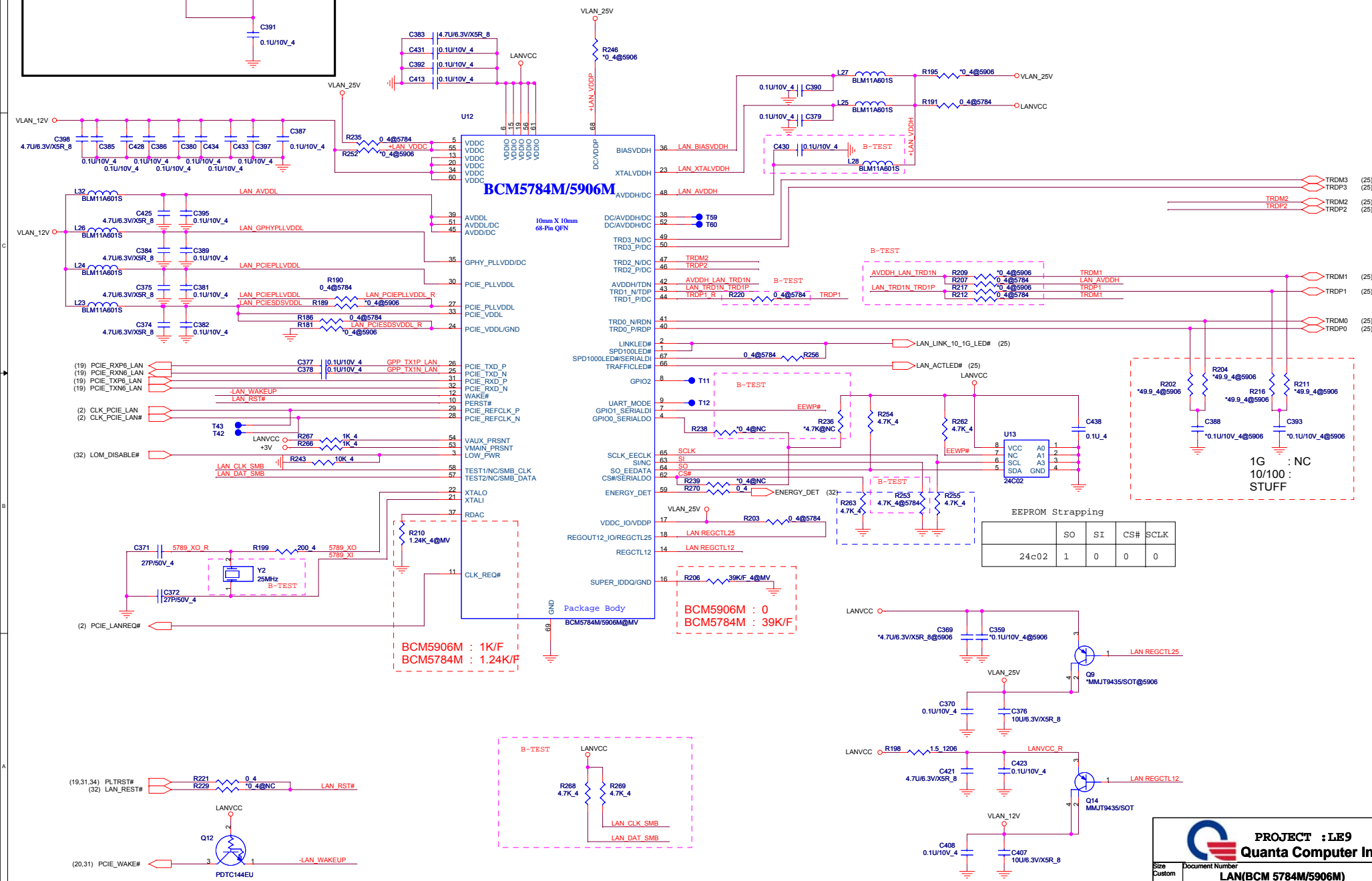
Size Custom	Document Number <b>CRT &amp; S-VIDEO CON</b>	Rev 1A
Date: Thursday, May 08, 2008	Sheet 22 of 42	

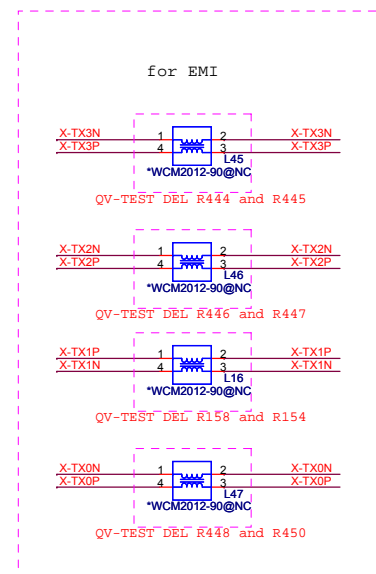
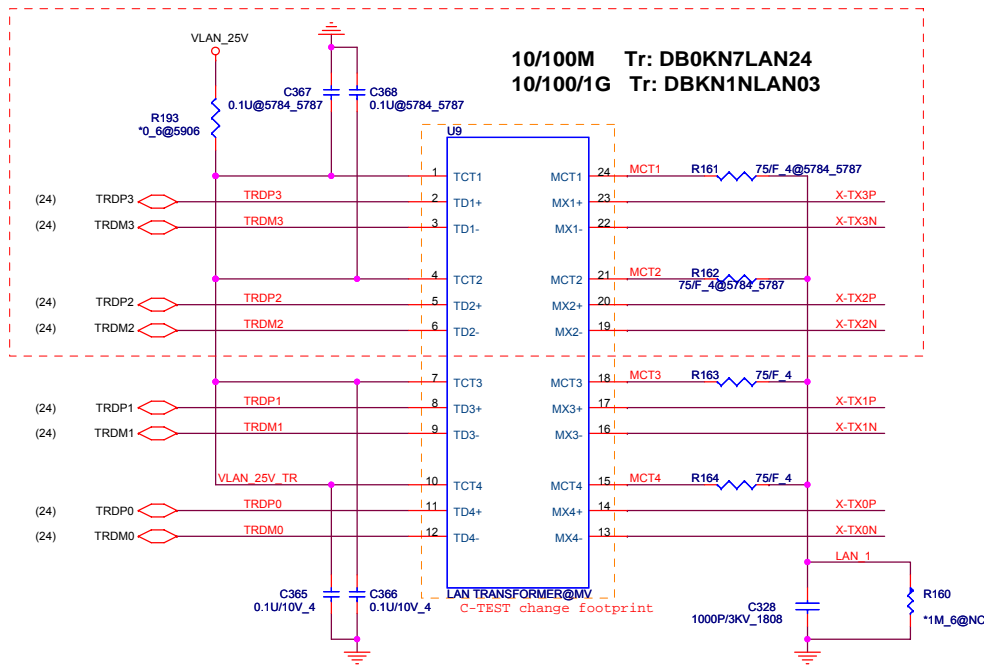




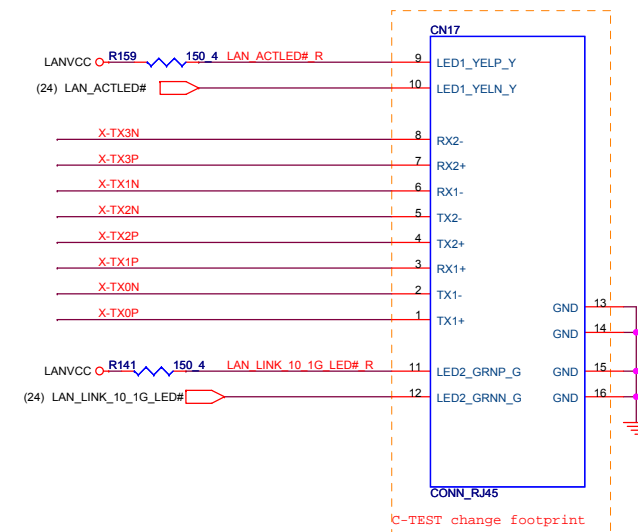


BCM5784M( LAN 10/ 100/ 1G ) ==>  
BCM5906M( LAN 10/ 100 ) ==>  
AJ059060000

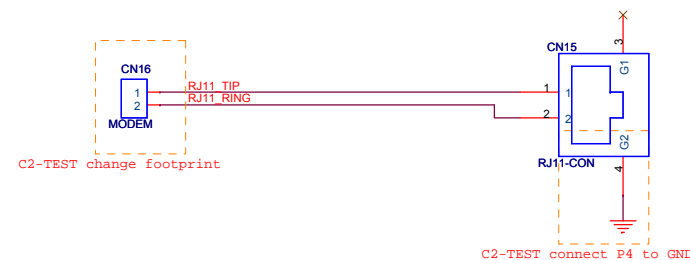


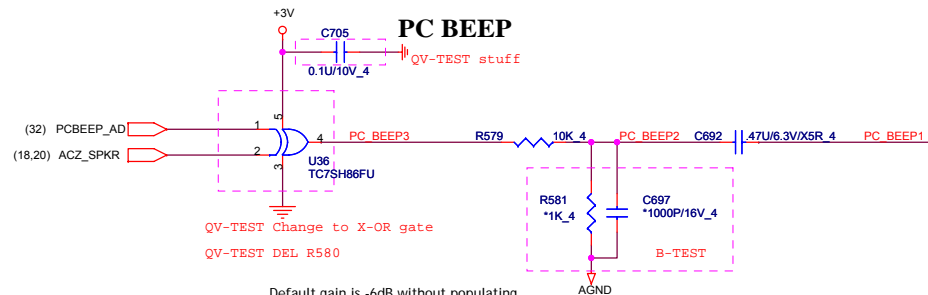
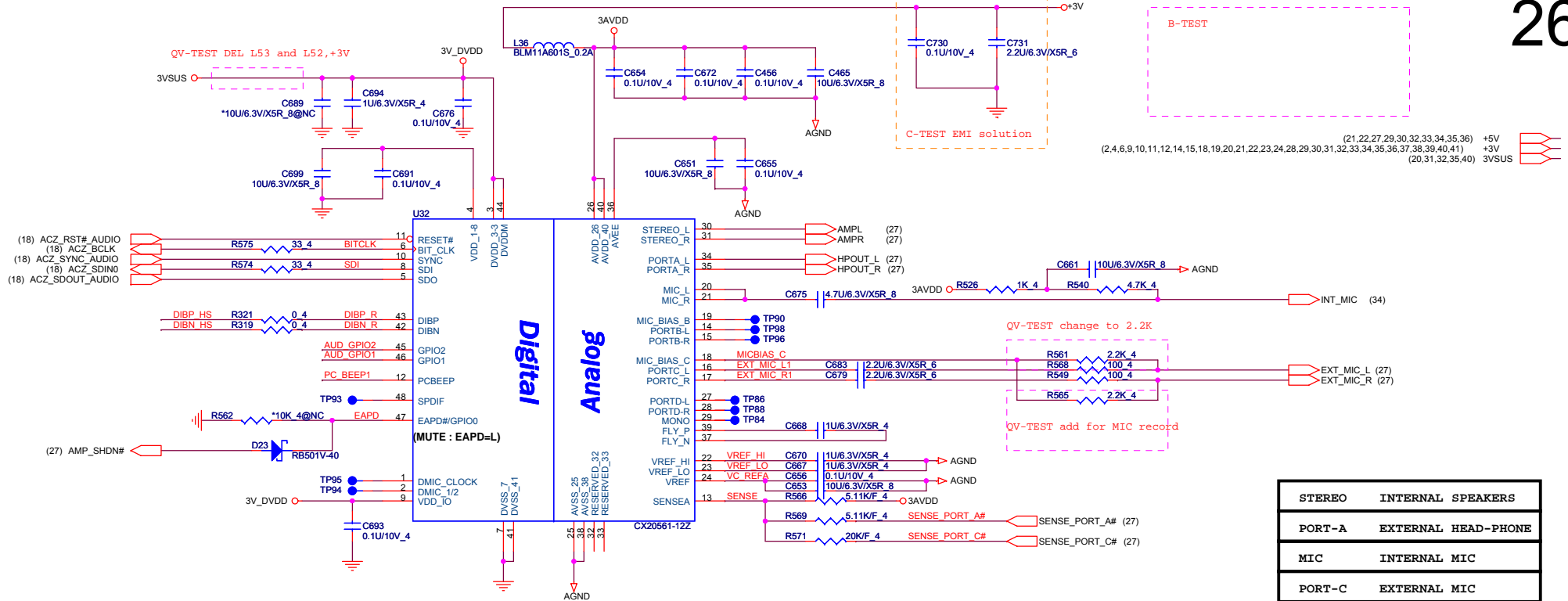


## RJ45 Connector

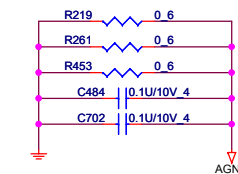


## RJ11 Connector

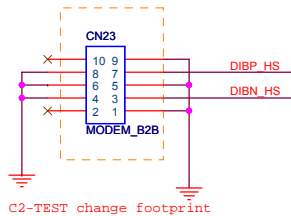




## FOR EMI SOLUTION



## MODEM/B CONN.



Default gain is -6dB without populating the 10K ohm pull down resistors going to GPIO1 and GPIO2

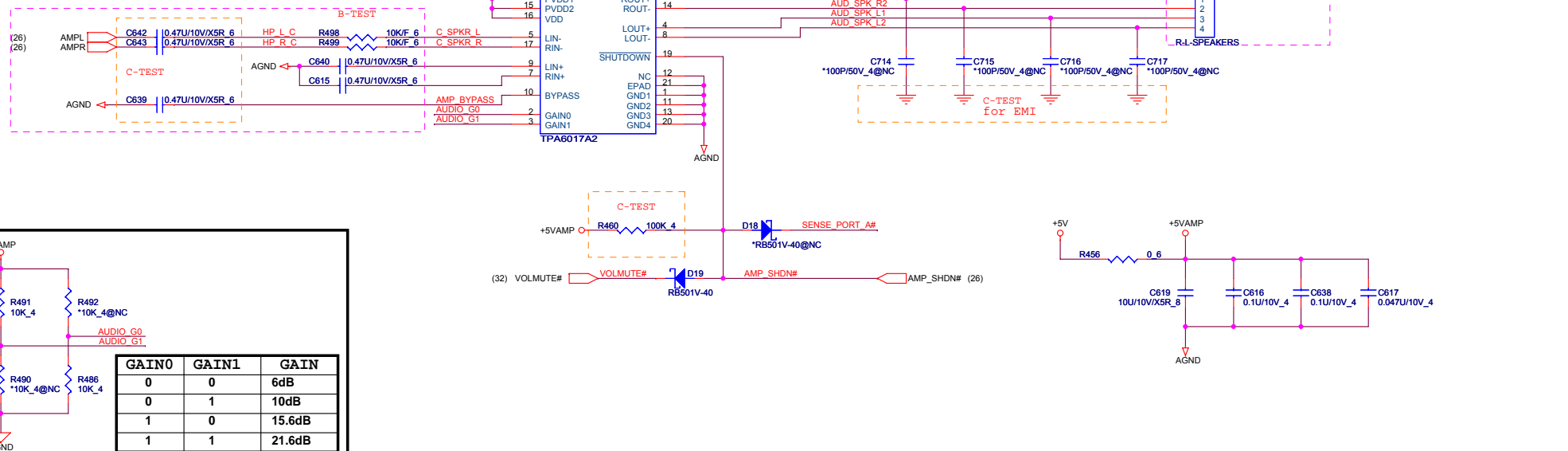


GAIN	10K GPIO RESISTORS	
	GPIO1	GPIO2
0dB	Populate	Populate
-6dB	Omit	Omit
-12dB	Populate	Omit
-16dB	Omit	Populate

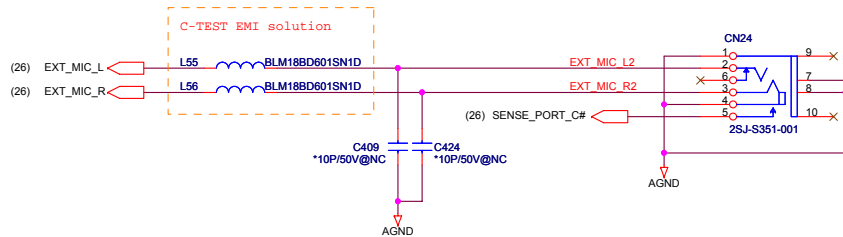


PROJECT : LE9  
Quanta Computer Inc.

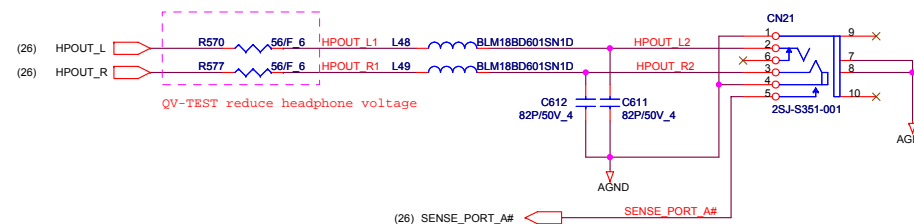
## INTERNAL SPEAKER AMPLIFIER

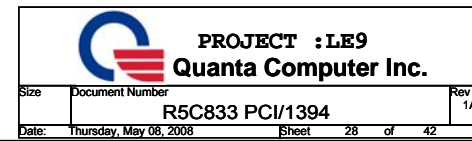
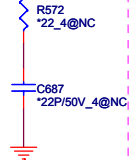


**MIC-IN JACK**

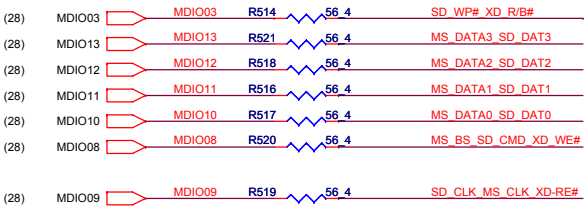


## HEADPHONE





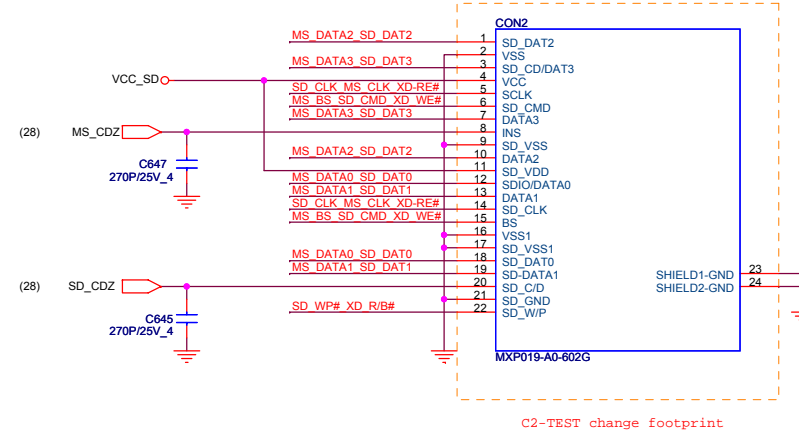




(2,4,6,9,10,11,12,14,15,18,19,20,21,22,23,24,26,28,30,31,32,33,34,35,36,37,38,39,40,41) +3V  
(21,22,27,30,32,33,34,35,36) +5V

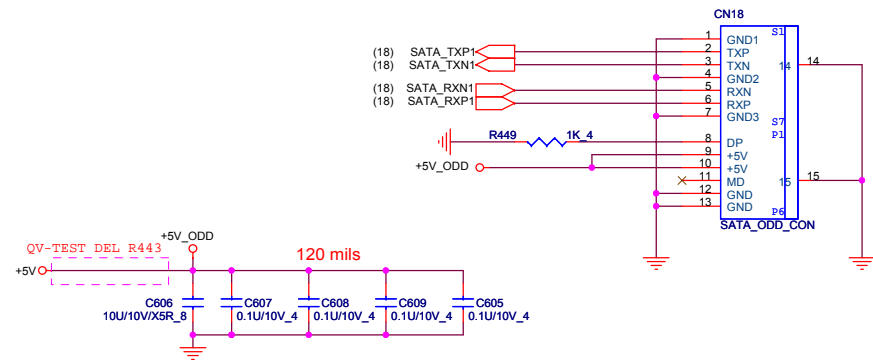
### 3 IN1 CARD-READER (PUSH-PUSH)

Support MMC/SD/MS Cards



C2-TEST change footprint

## SATA CD-ROM

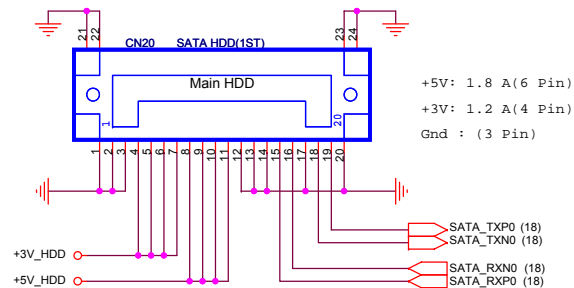


## SATA-HDD CONNECTOR

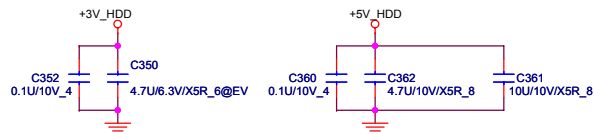
## B-TEST

Modify 固定孔 Size as SMT request

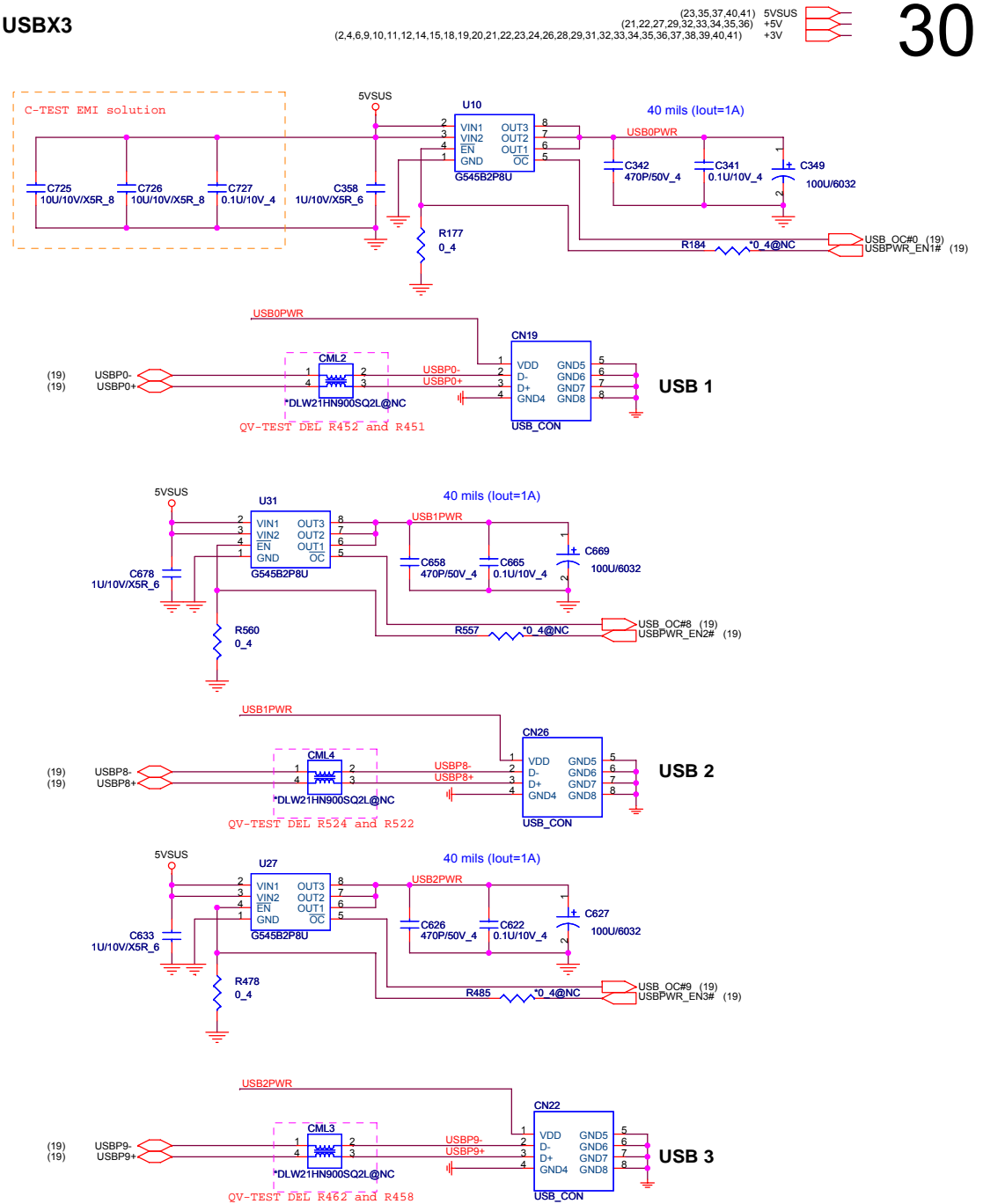
DC Current rating: 0.5 A



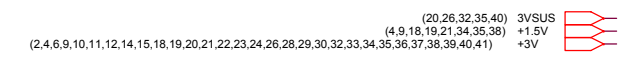
QV-TEST DEL R192 and R169



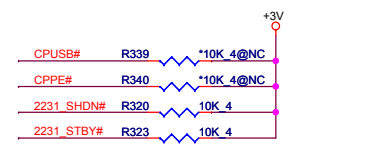
## USBX3

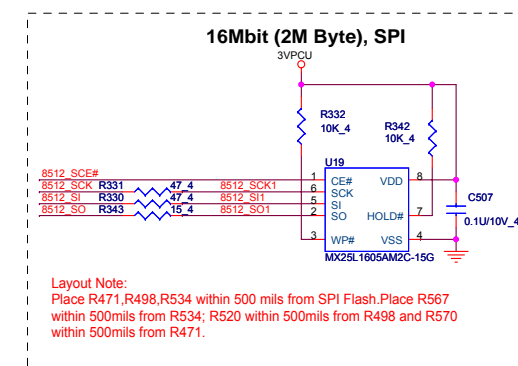


## 31

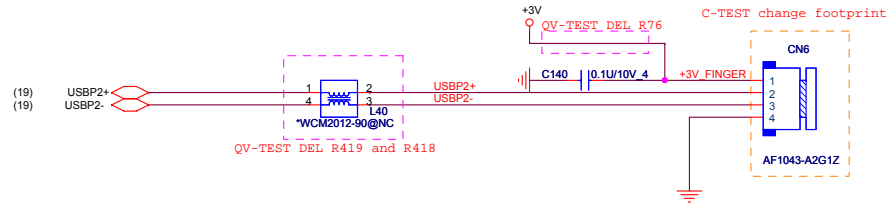


## Express Card





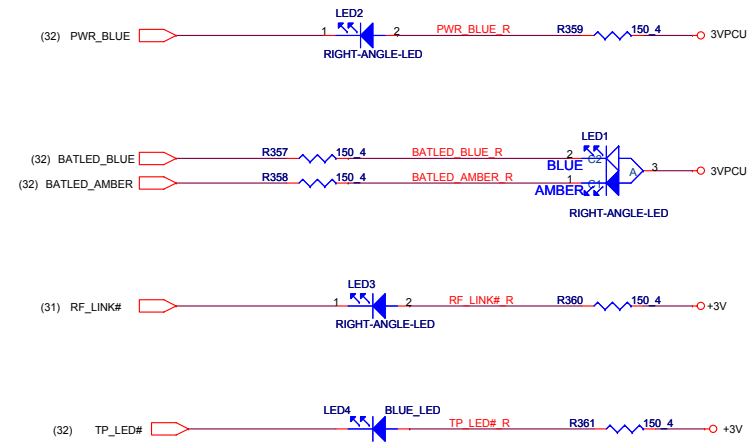
# FINGER PRINTER



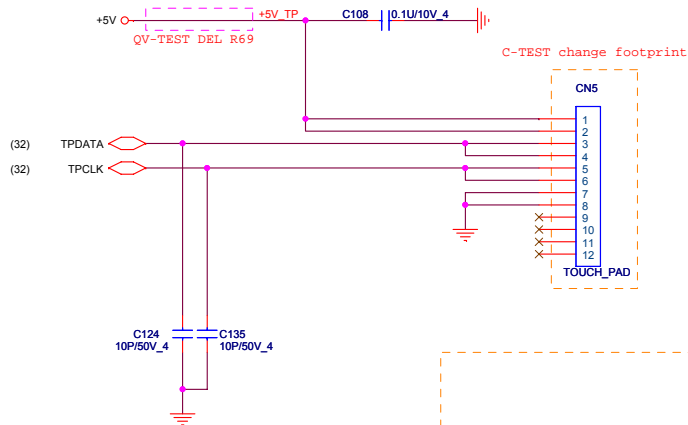
(2,4,6,9,10,11,12,14,15,18,19,20,21,22,23,24,26,28,29,30,31,32,34,35,36,37,38,39,40,41)  
(2,4,6,9,10,11,12,14,15,18,19,20,21,22,23,24,26,28,29,30,31,32,34,35,36,37,38,39,40,41)  
(18,23,24,32,34,35,36,39)

+3V  
+3V  
3VPCU

# LED

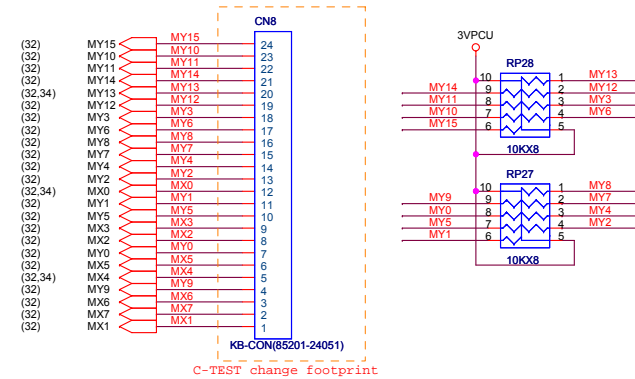


# TOUCH PAD

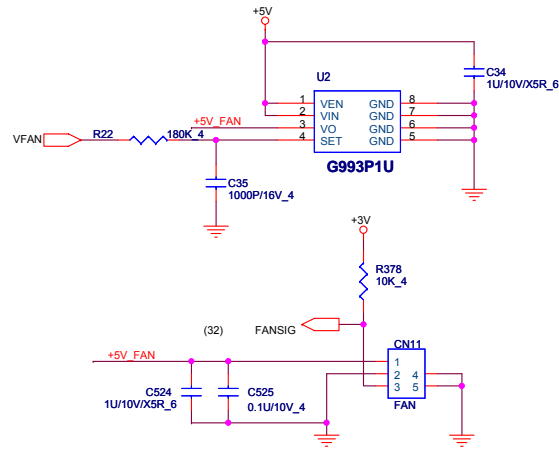


C2-TEST combain P2 and P3  
QV-TEST DEL CN7 and net TOUCH\_LEFT and TOUCH\_RIGHT

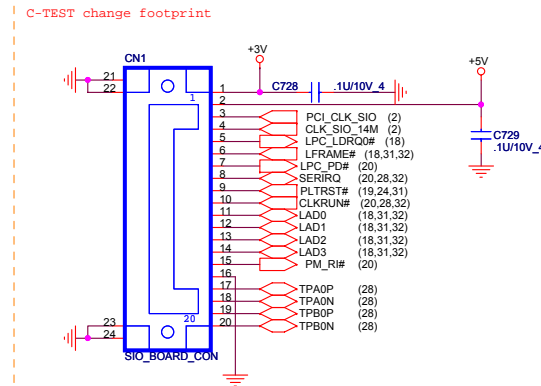
# KEYBOARD



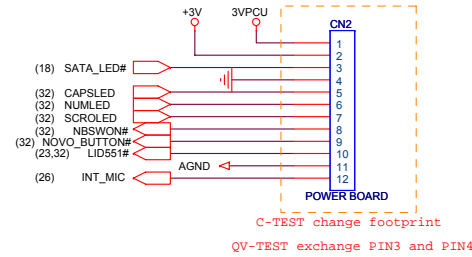
## FAN CONTROL



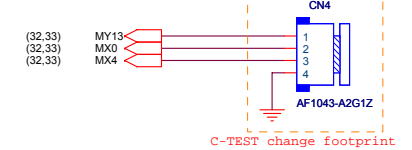
## SIO BOARD



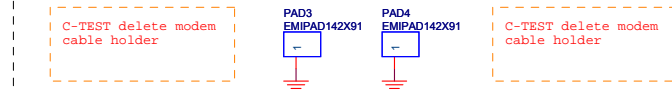
## POWER BOARD



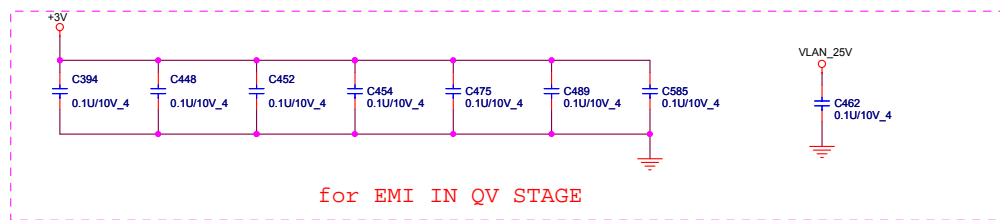
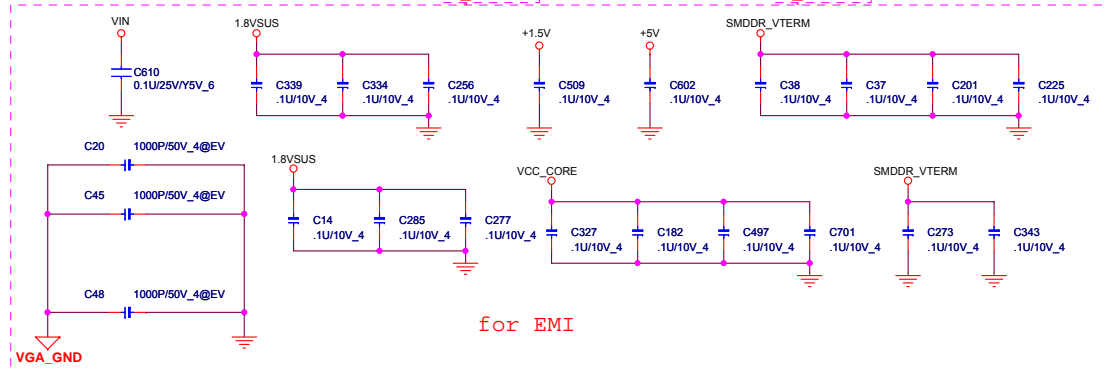
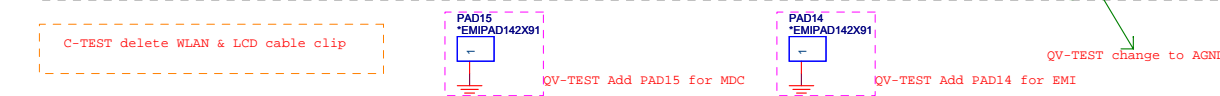
## Function BUTTON BOARD



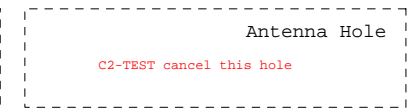
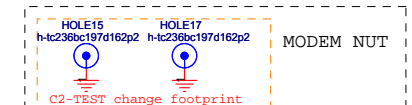
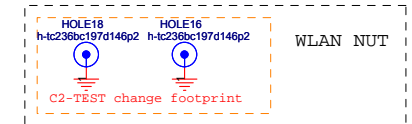
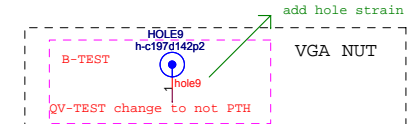
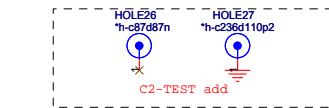
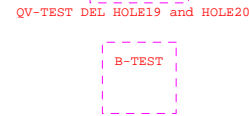
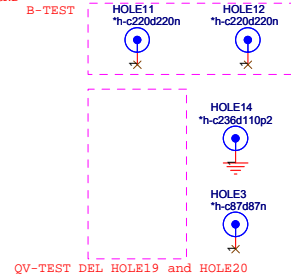
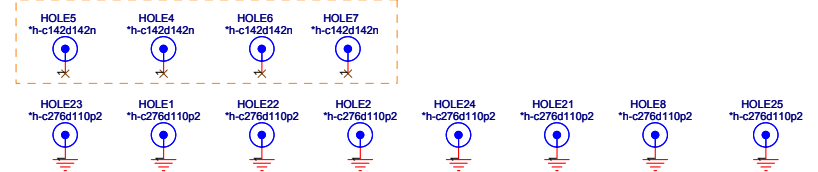
## For Modem Cable Holders



## C-TTEST delete WLAN &amp; LCD cable clip



## C2-TTEST change to not PTH

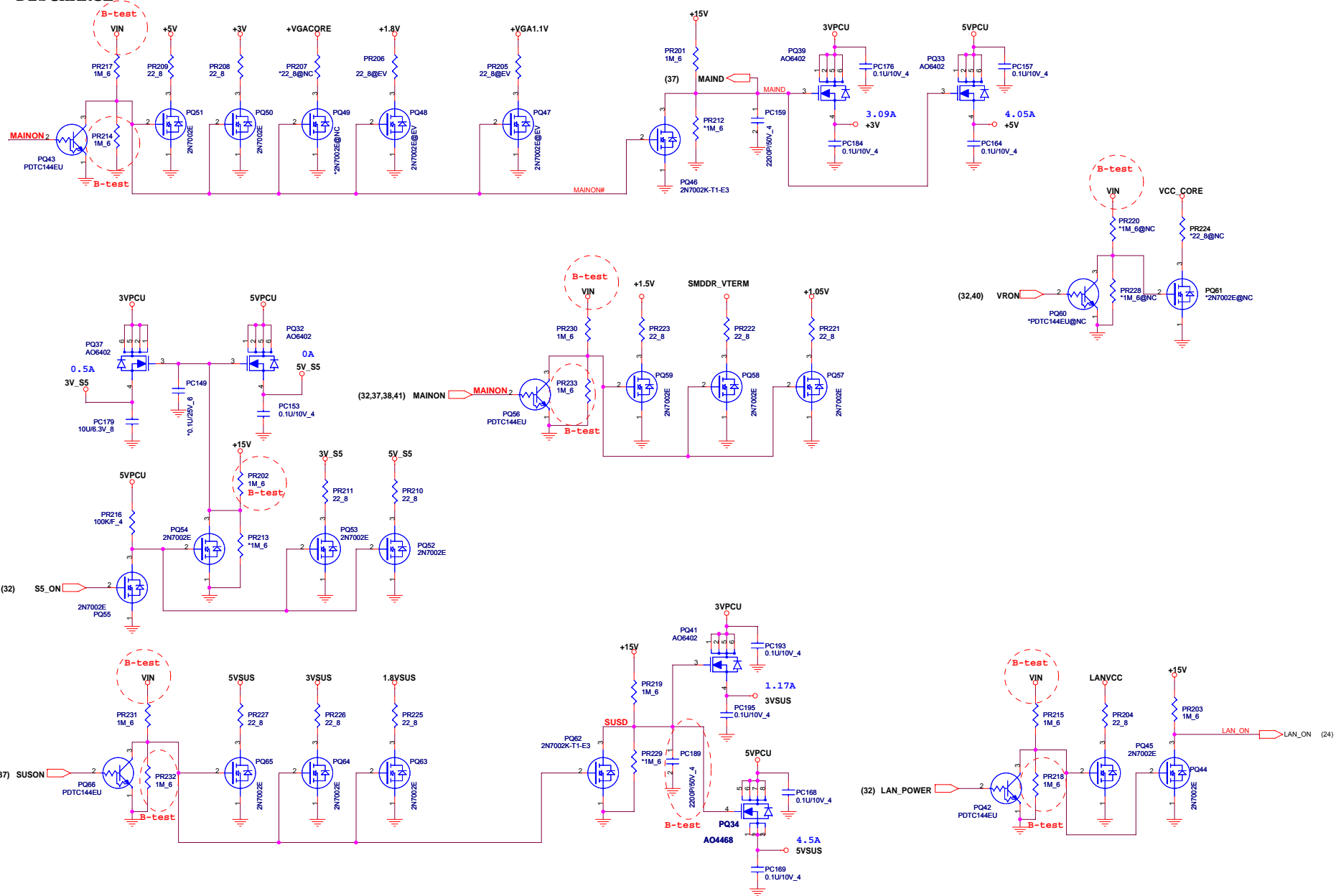


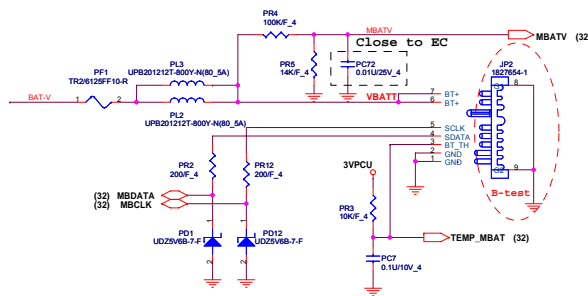
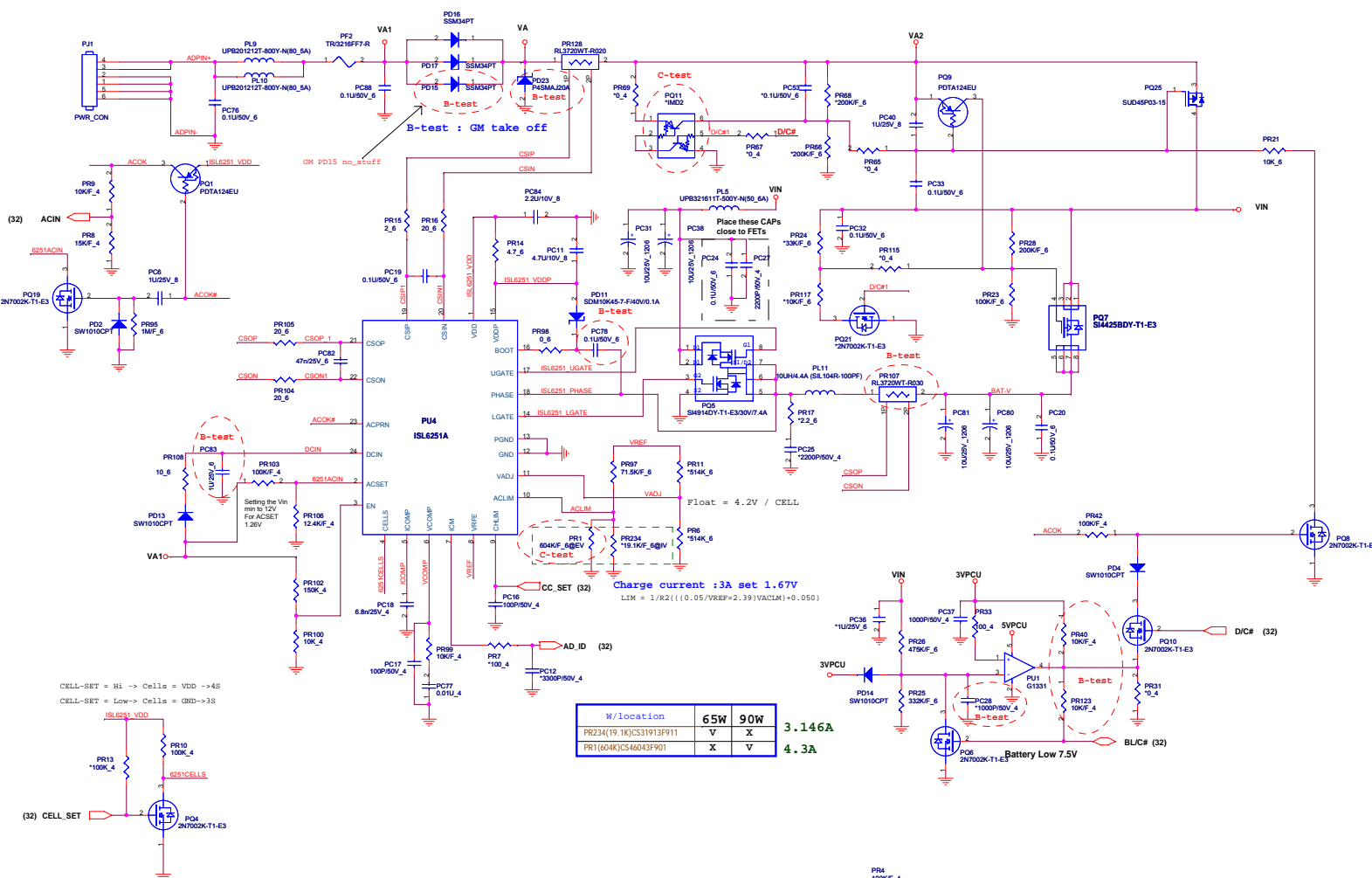
PROJECT :LE9  
Quanta Computer Inc.

Size	Document Number	Rev
Custom	B to B CON,Fan CON,HOLE	3B
Date:	Tuesday, May 27, 2008	Sheet 34 of 42



## DISCHARGE

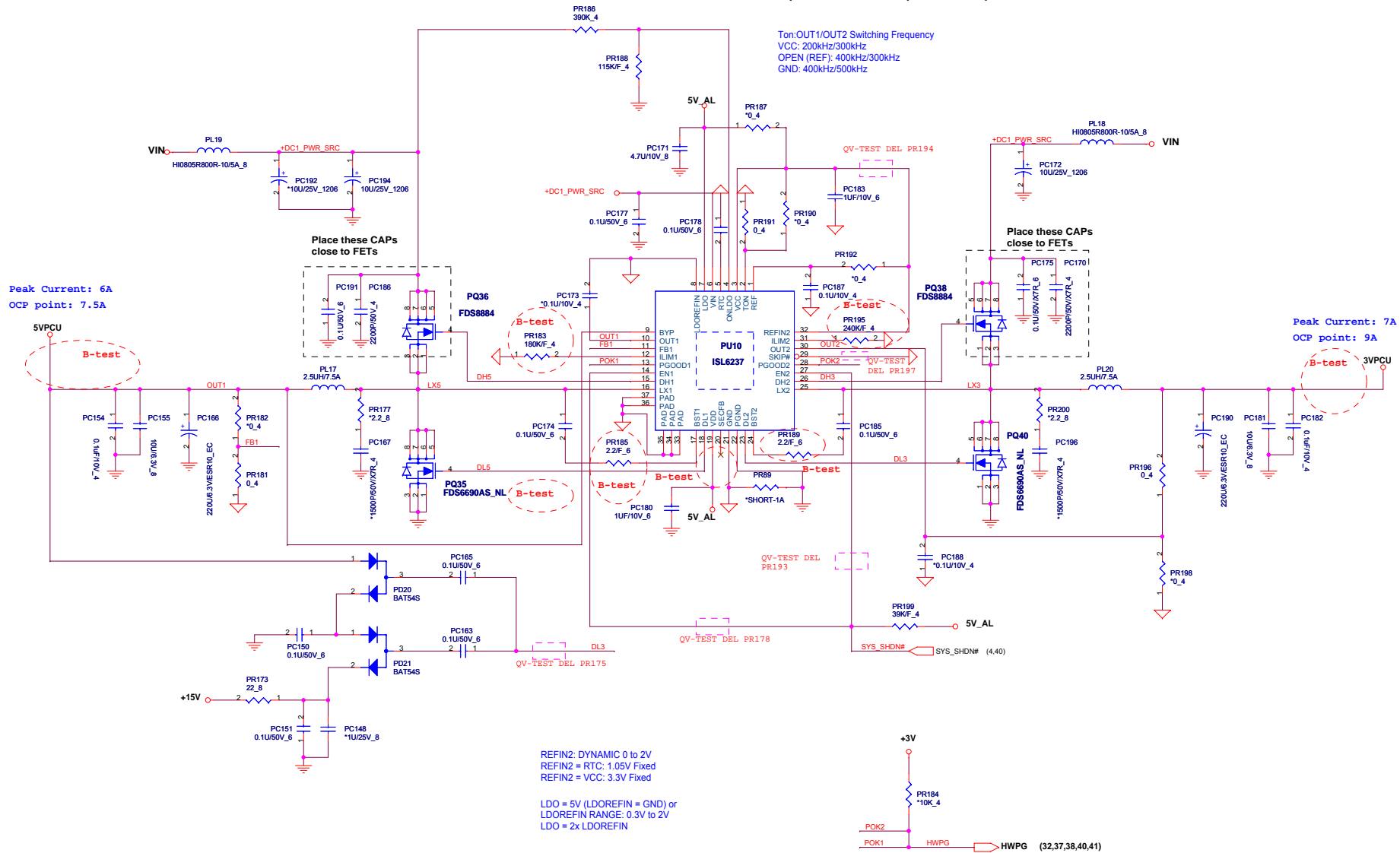


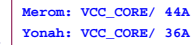




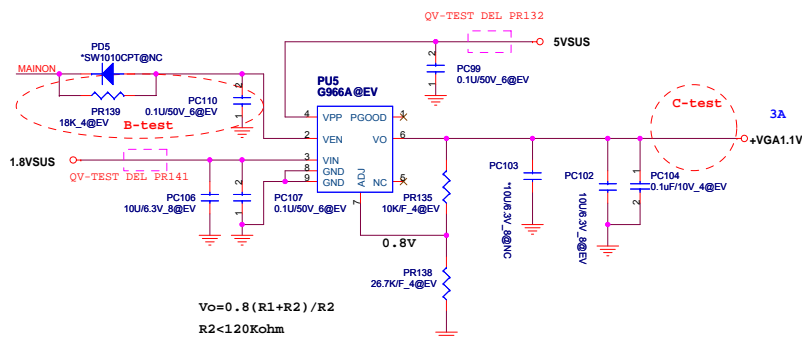


DC/DC 3VPCU/5VPCU/+15V









V_PWRCNLI	V_PWRCNTL	Vout (spec)
0	0	1.17V
0	1	1.09V
1	0	0.95V
1	1	0.9V

$$V_o = 0.8(R_1 + R_2) / R_2$$

$$R_2 < 120 \text{ Kohm}$$

# LE9 SYSTEM POWER BLOCK DIAGRAM

