

MAX1845 (+1.5V & VCCP1.05V)
P31

SC486IML TRT (+1.8SUS & 0.9V)
P32

SC4215 (+2.5V)
P32

MAX1999 (3VPCU & 5VPCU)
P33

BATTERY CHARGER
P34

MAX1907 (CPU_CORE)
P35

DISCHARGE
P36

EF6 SYSTEM BLOCK DIAGRAM

Intel Dothan Processor
478 uFCPGA
VCC_CORE
GMCH_VTT
VCCA
P3,4

CPU Thermal Sensor
+5V
P3

FSB
533/400MHz

Alviso-GM
GMCH
82915GM
1257 PCBGA
GMCH_VTT
1.8VSUS
+1.5V
+2.5V
+3V
P5,6,7,8,9

LCD/INV
CONN
VIN
+5V
+3V
P13

CRT
+5V
+2.5V
P12

S-VIDEO
P12

Dual Channel
DDR2
DDR II
SODIMM0
1.8VSUS
SMDDR_VTERM
DDR II
SODIMM1
P10,11

X'TAL
14.318M
CK-GEN
CK410M
+3V
ICS954206
P2

X'TAL
32.768K

DMI interface

SATA

PATA

USB 2.0

PCI Bus interface

USB,PCI Express

SATA
(reserved)
P18

HDD/CD-ROM
+5V
P18

USB Port 0 ~ 3
5VSUS
P17

ICH6-M
609 BGA
+3V
3VSUS
+2.5V
+1.5V
1.5VSUS
VCCRTC
GMCH_VTT
P14,15,16

AC'97

LPC

AMCODEC
CONEXANT
20468-31
P19

MODEM DAA
CONEXANT
20463-31
P20

EC/KBC
PC97551
3VPCU
+3V
VCCRTC
X'TAL
32.768K
P22

SIOPC87383
P30

FIR
P30

TYPE III
MINI-PCI
Socket
INTB/C
REQ1
GNT1
AD20
+3V
3VSUS
5VSUS
P25

TI PCI7411
288 PBGA
(PCMCIA+1394
+Cardreader)
X'TAL
24.576M
+3V
3VSUS
5VSUS
+1.5V
INTA/B/C
REQ0
GNT0
AD25
P28

RELTEK
RTL8100CL(10/100M)
RTL8110SB(1G)
X'TAL
25M
INTD
REQ2
GNT2
AD16
LANVCC3
LANVCC18
LANVCC10
P26

MIC IN
JACK
P21

Audio
Amplifier
GMT1428
+5V
P21

Stereo Speaker
P21

Headphone Jack
P21

RJ11
P27

ISA BIOS
3VPCU
P22

TOUCHPAD
+5V
P23

Keyboard
P23

PORT
REPLICATOR
P24

CRT
PORT

COM&PRT
PORT

USB PORT
5,6

RJ45
JACK

PS/2
CONN.

H/P
JACK

POWER
JACK

NEW
CARD
(reserved)
P37

BLUETOOTH
P37

1394
Conn.
P29

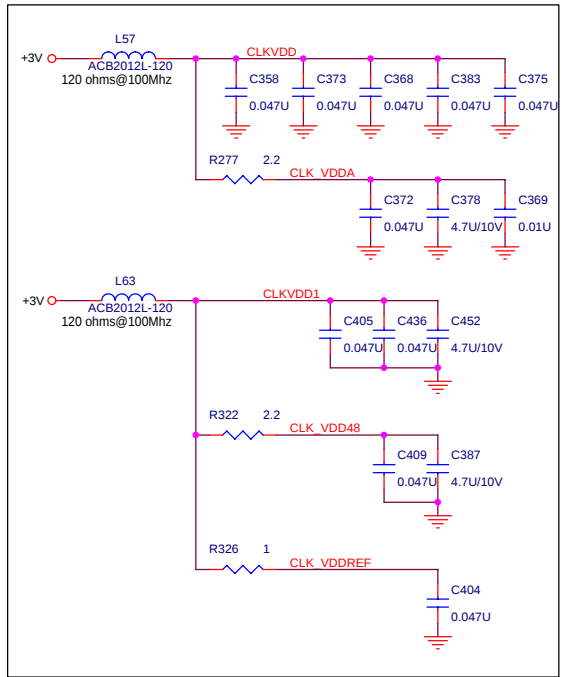
3 in 1 Cardreader
Socket
P29

CARDBUS
Slot
type I x II
P28

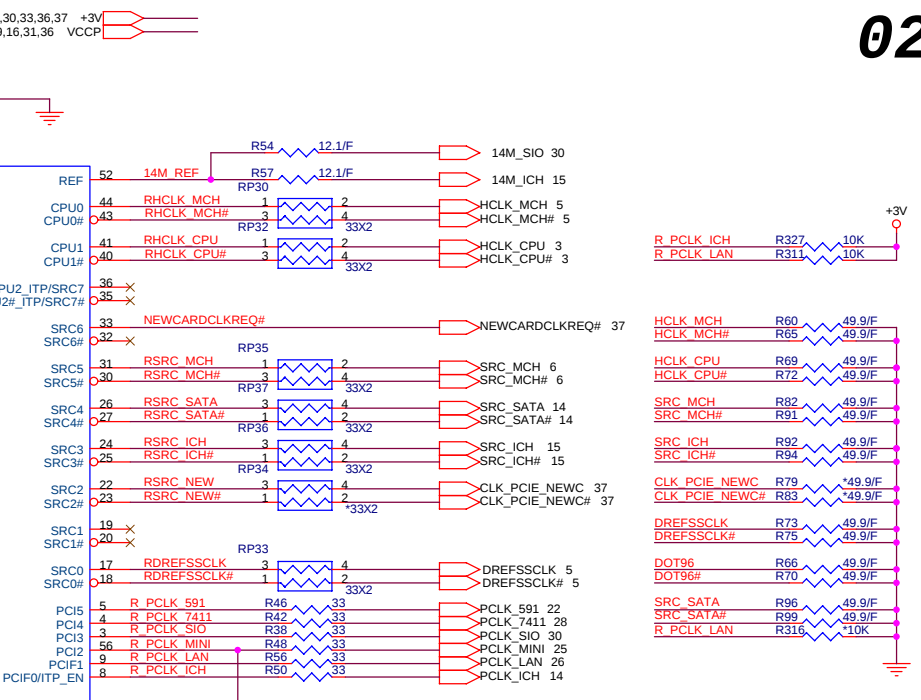
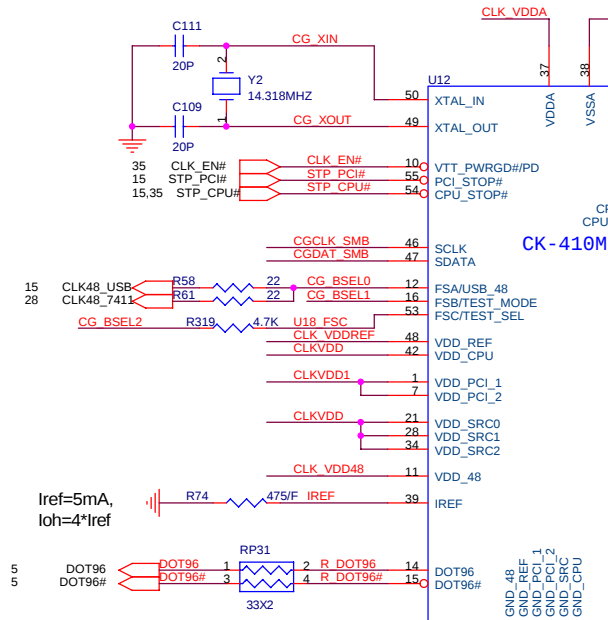
RJ45
P27



PROJECT : EF6
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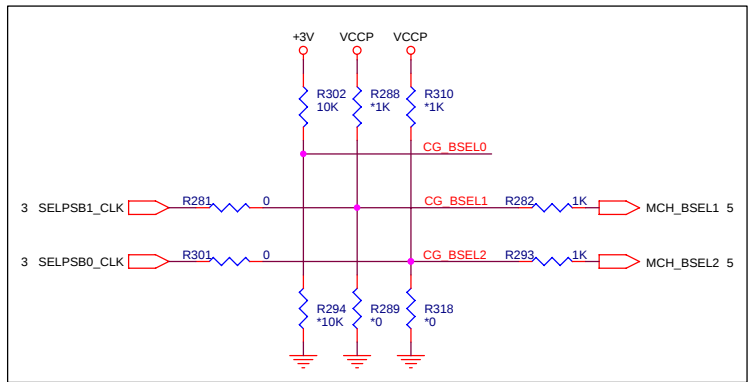
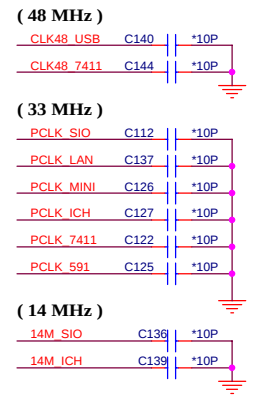
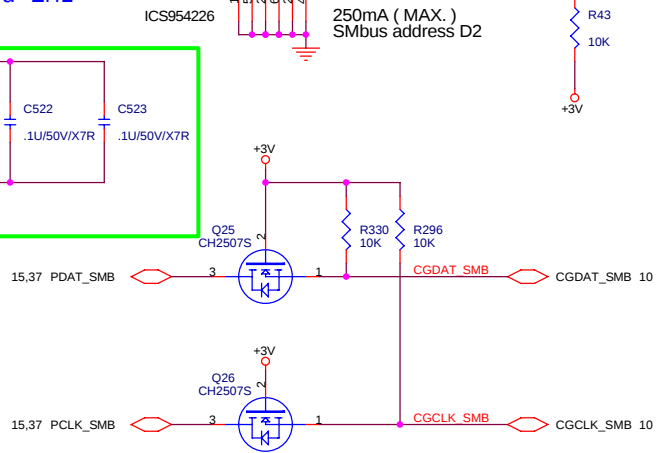
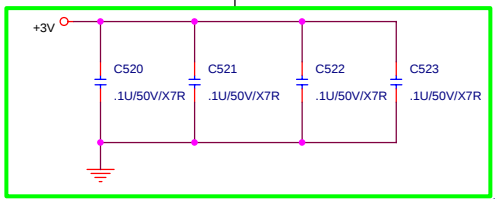
Place these termination to close ICS954226

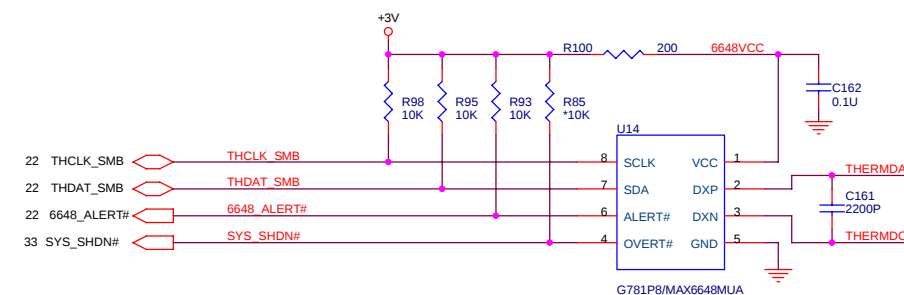
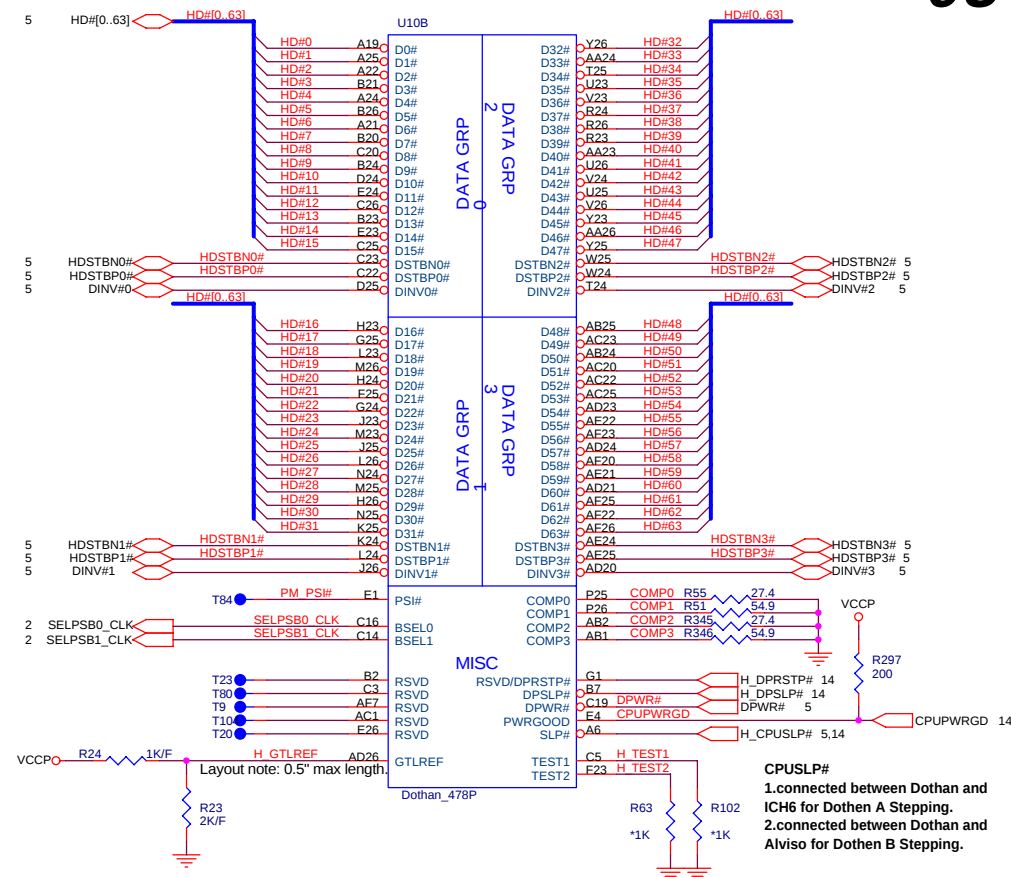
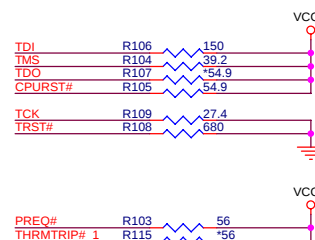


FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RESERVED		

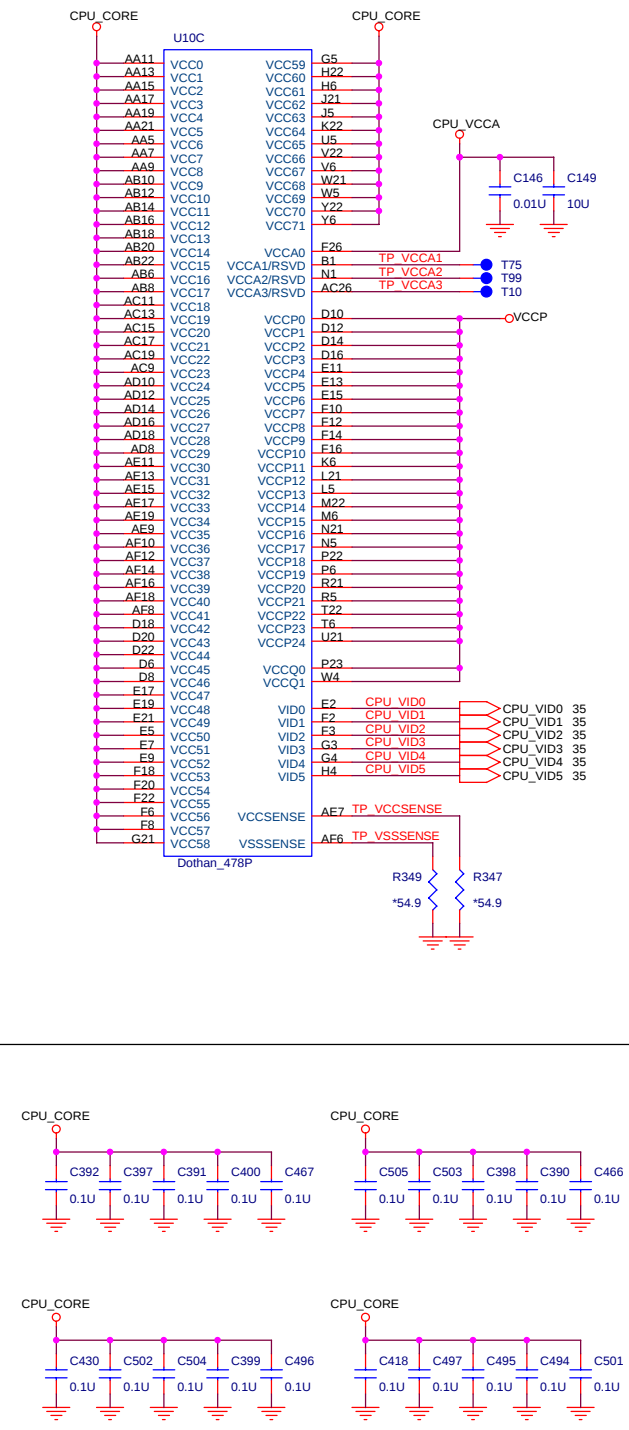
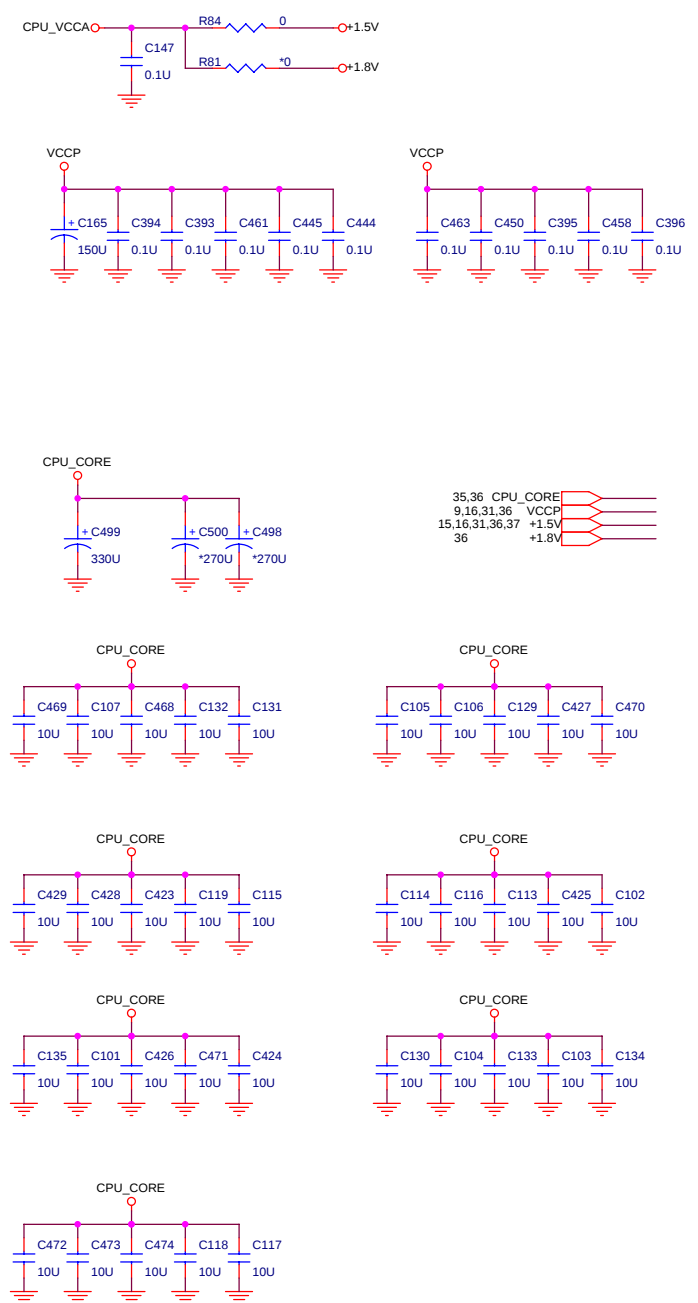
* Frequency select by CPU auto sense.

C TEST modified EMI

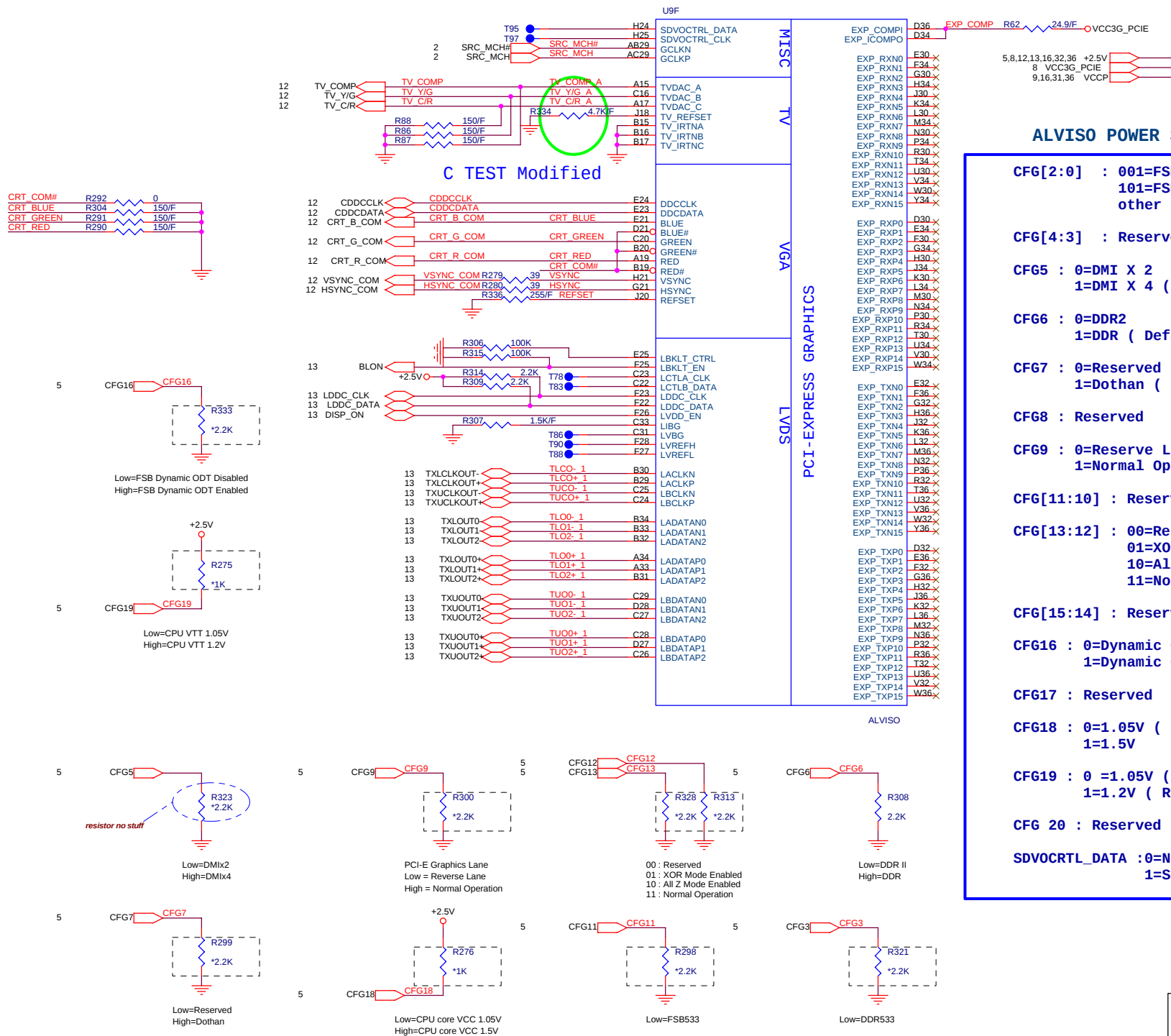


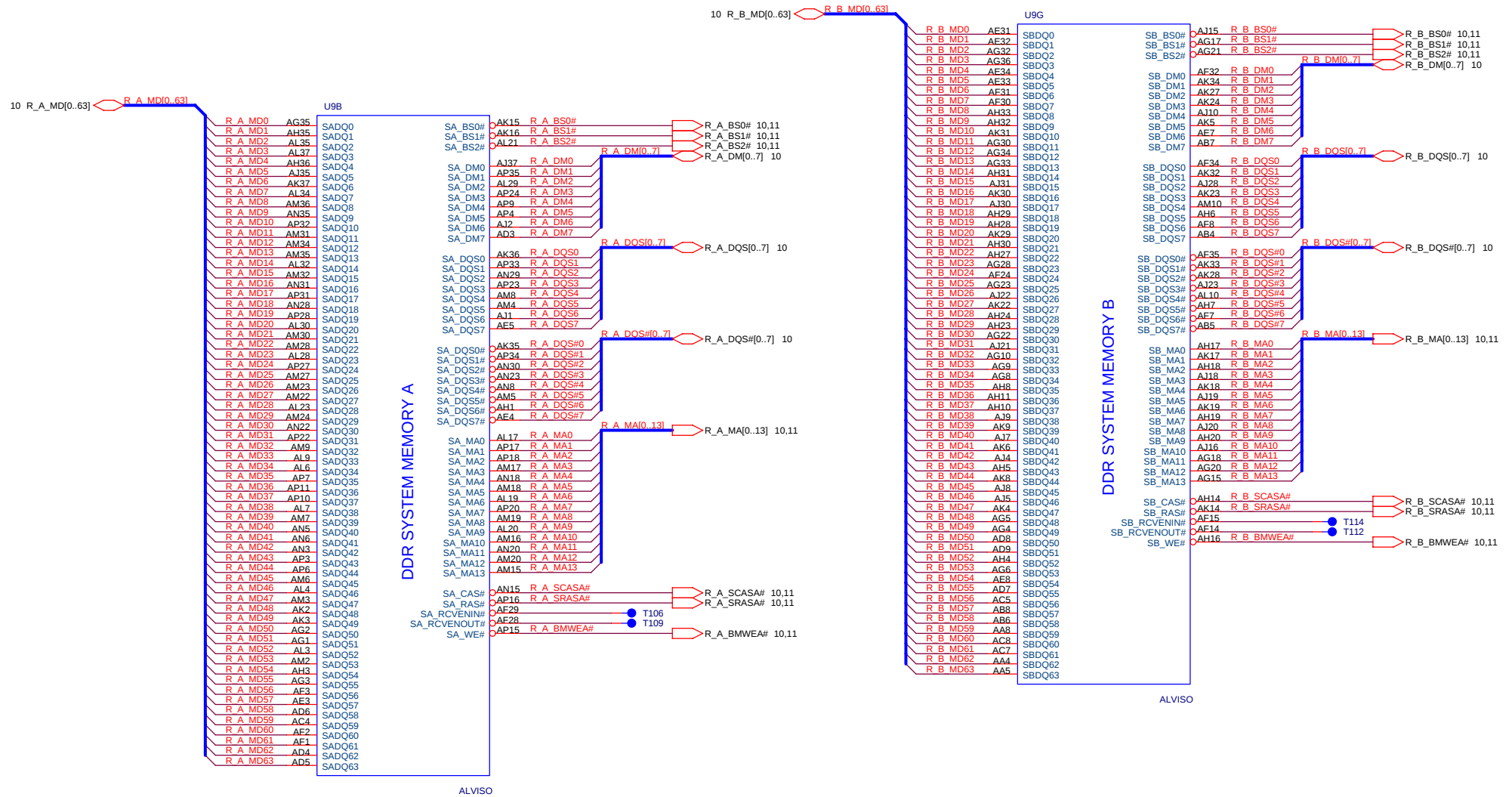


U10C		
A2	VSS0	D13
A5	VSS1	D15
A8	VSS2	D17
A11	VSS3	D19
A14	VSS4	D21
A17	VSS5	D23
A20	VSS6	D26
A23	VSS7	E3
A26	VSS8	E6
AA1	VSS9	E8
AA4	VSS10	E10
AA6	VSS11	E12
AA8	VSS12	E14
AA10	VSS13	E16
AA12	VSS14	E18
AA14	VSS15	E20
AA16	VSS16	E22
AA18	VSS17	E25
AA20	VSS18	F1
AA22	VSS19	F4
AA25	VSS20	F5
AB3	VSS21	F7
AB5	VSS22	F9
AB7	VSS23	F11
AB9	VSS24	F13
AB11	VSS25	F15
AB13	VSS26	F17
AB15	VSS27	F19
AB17	VSS28	F21
AB19	VSS29	F24
AB21	VSS30	G2
AB23	VSS31	G22
AB26	VSS32	G23
AC2	VSS33	G26
AC5	VSS34	H3
AC8	VSS35	H5
AC10	VSS36	H5
AC12	VSS37	H21
AC14	VSS38	H25
AC16	VSS39	J1
AC18	VSS40	J4
AC21	VSS41	J6
AC24	VSS42	J22
AD1	VSS43	K2
AD4	VSS44	K5
AD7	VSS45	K21
AD9	VSS46	K23
AD11	VSS47	K26
AD13	VSS48	L3
AD15	VSS49	L6
AD17	VSS50	L22
AD19	VSS51	L25
AD22	VSS52	M1
AD25	VSS53	M4
AE3	VSS54	M5
AE6	VSS55	M21
AE8	VSS56	M24
AE10	VSS57	N3
AE12	VSS58	N6
AE14	VSS59	N22
AE16	VSS60	N23
AE18	VSS61	N26
AE20	VSS62	P2
AE23	VSS63	P5
AE26	VSS64	P21
AF2	VSS65	P24
AF5	VSS66	R1
AF9	VSS67	R4
AF11	VSS68	R6
AF13	VSS69	R22
AF15	VSS70	R25
AF17	VSS71	T3
AF19	VSS72	T5
AF21	VSS73	T21
AF24	VSS74	T23
B3	VSS75	T26
B6	VSS76	U2
B9	VSS77	U6
B12	VSS78	U22
B16	VSS79	U24
B19	VSS80	V1
B22	VSS81	V4
B25	VSS82	V5
C1	VSS83	V21
C4	VSS84	V25
C7	VSS85	W3
C10	VSS86	W6
C13	VSS87	W22
C15	VSS88	W23
C18	VSS89	W26
C21	VSS90	Y2
C24	VSS91	Y5
D2	VSS92	Y21
D5	VSS93	Y24
D7	VSS94	
D9	VSS95	
D11	VSS96	



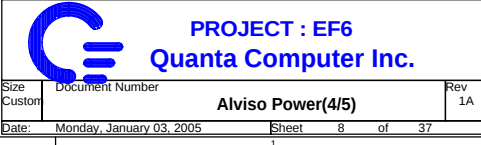


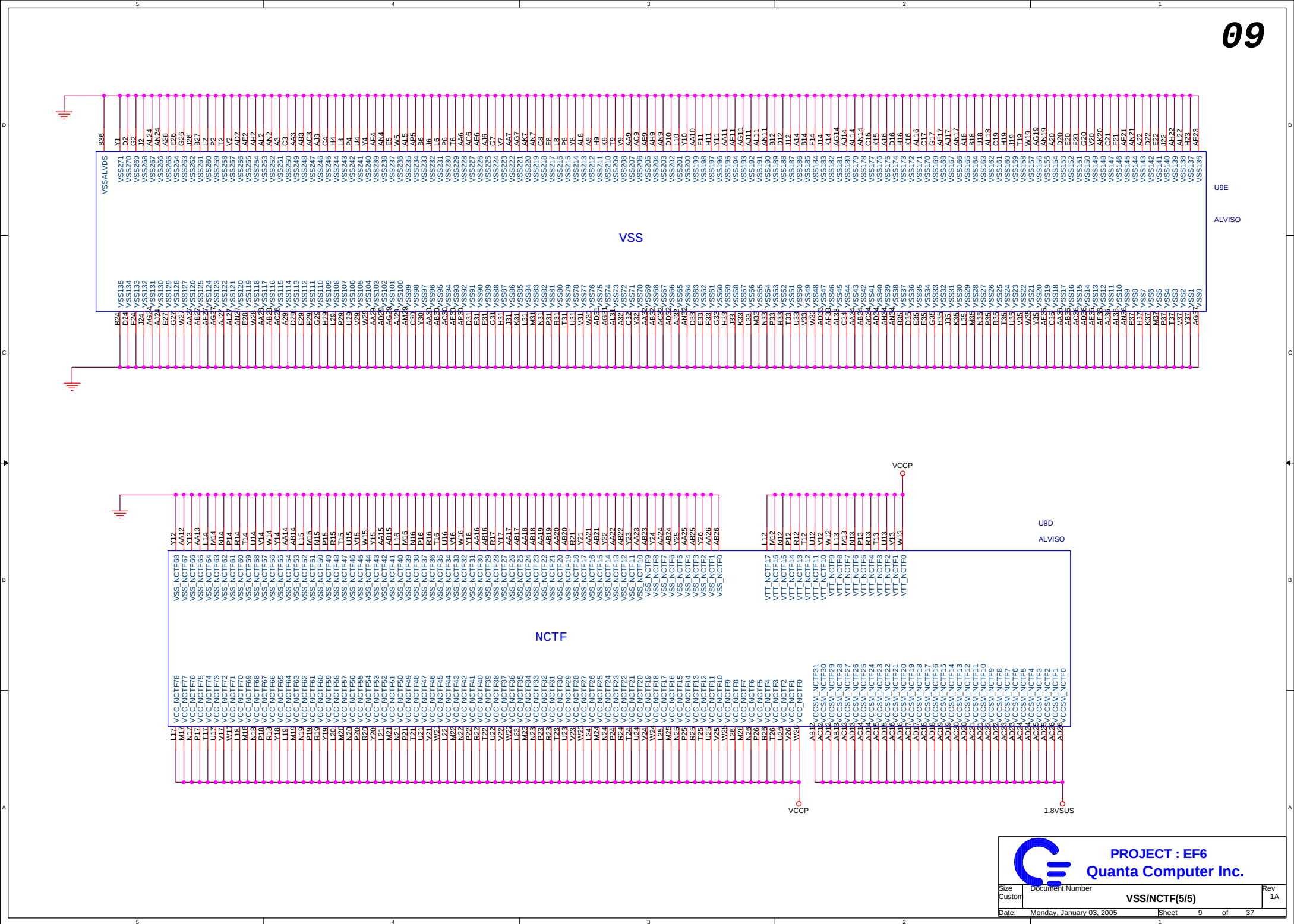


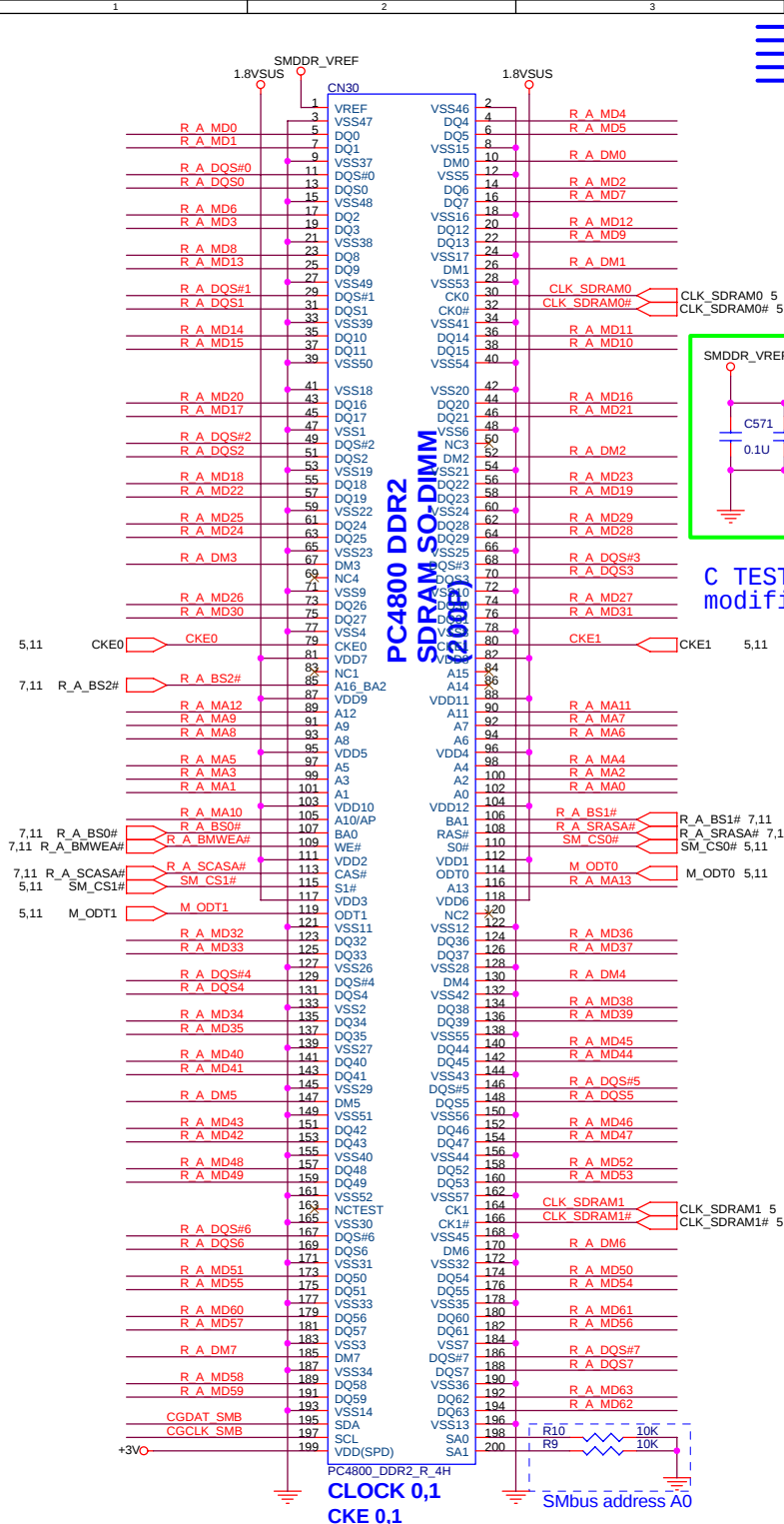
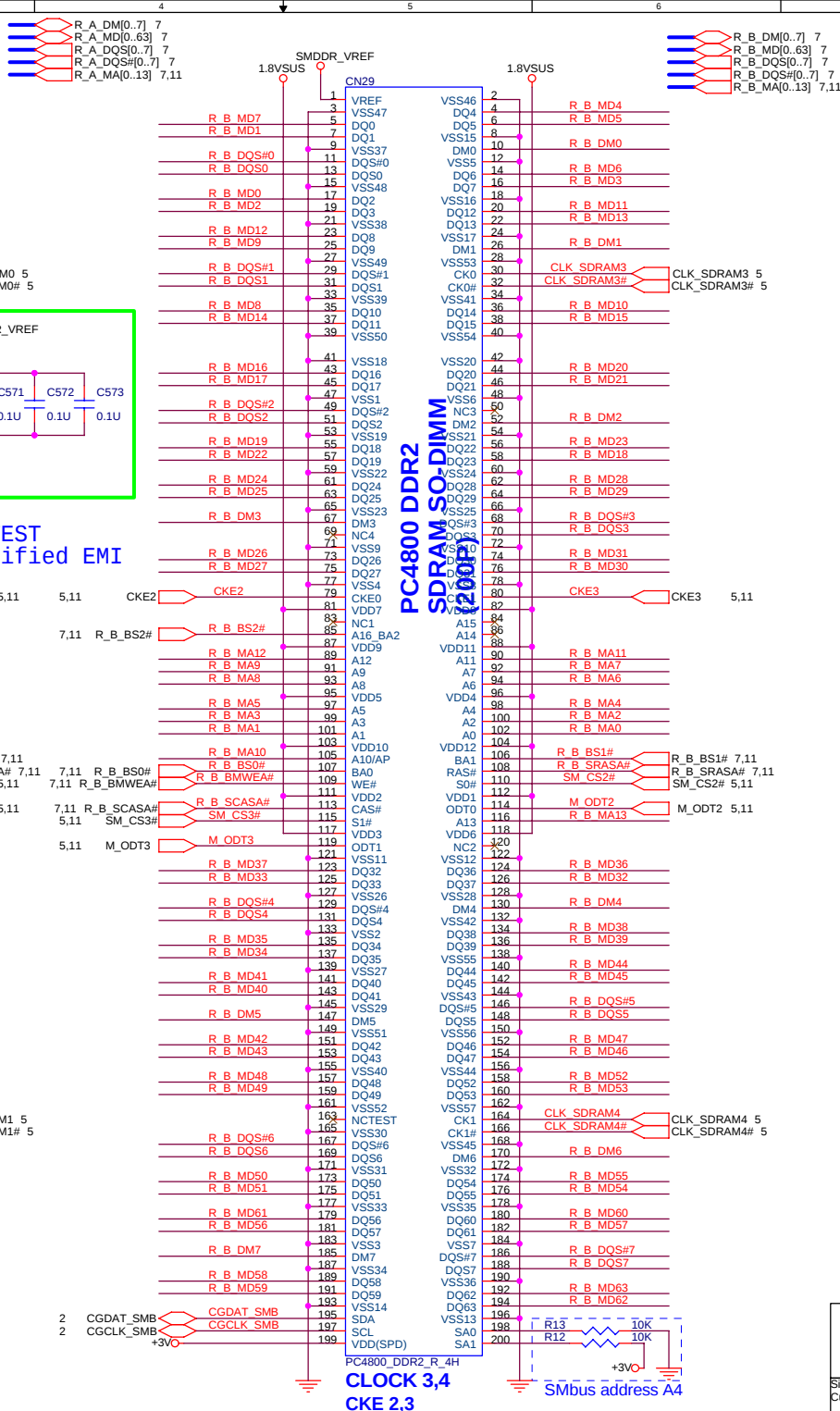
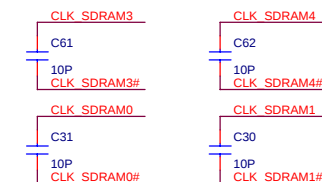
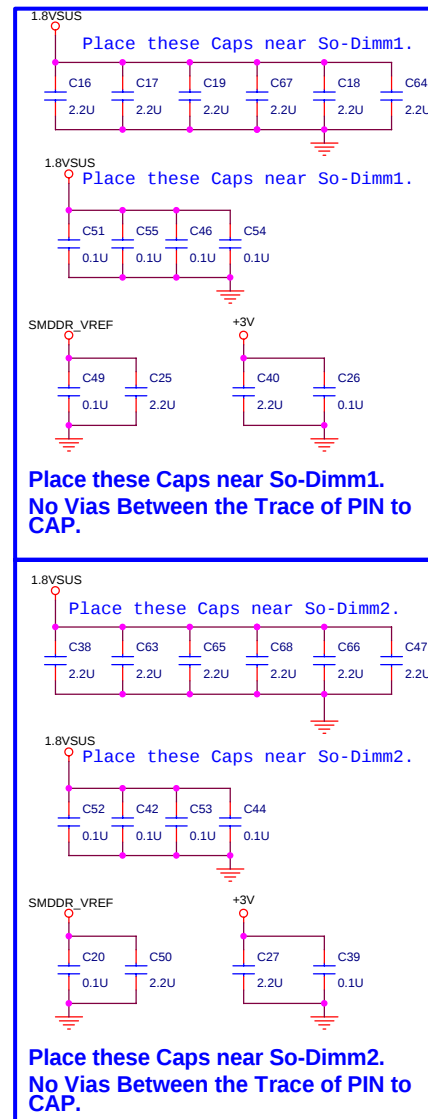


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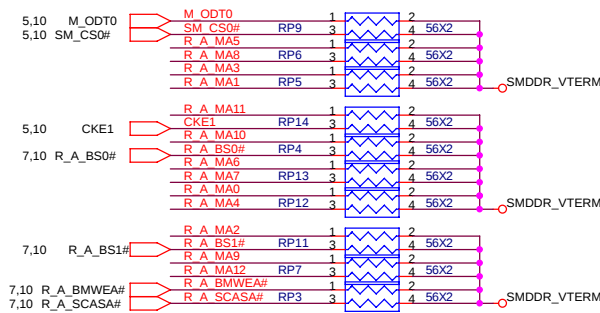
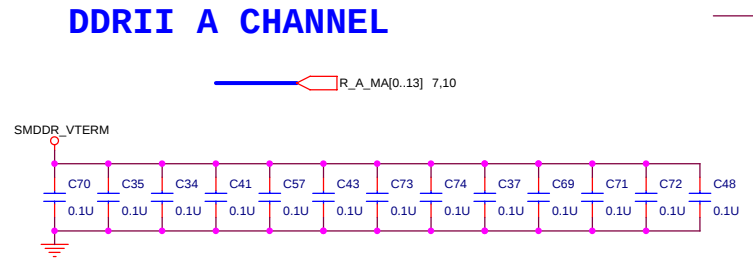




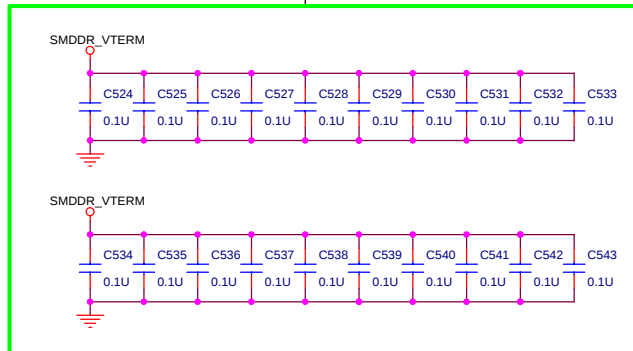


DDRII DUAL CHANNEL A, B.

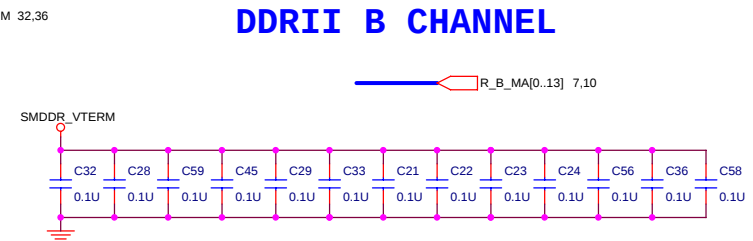
DDRII A CHANNEL



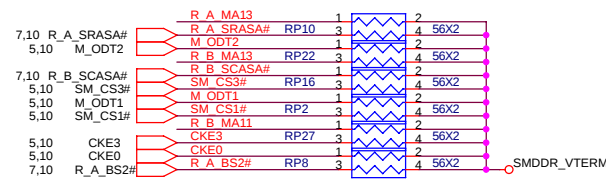
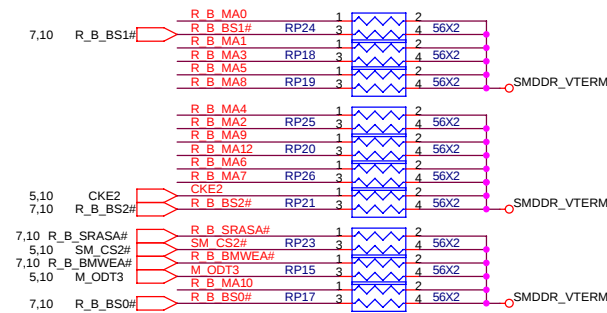
C TEST modified EMI



DDRII B CHANNEL

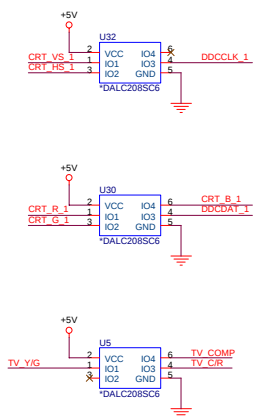


Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR_VTERM

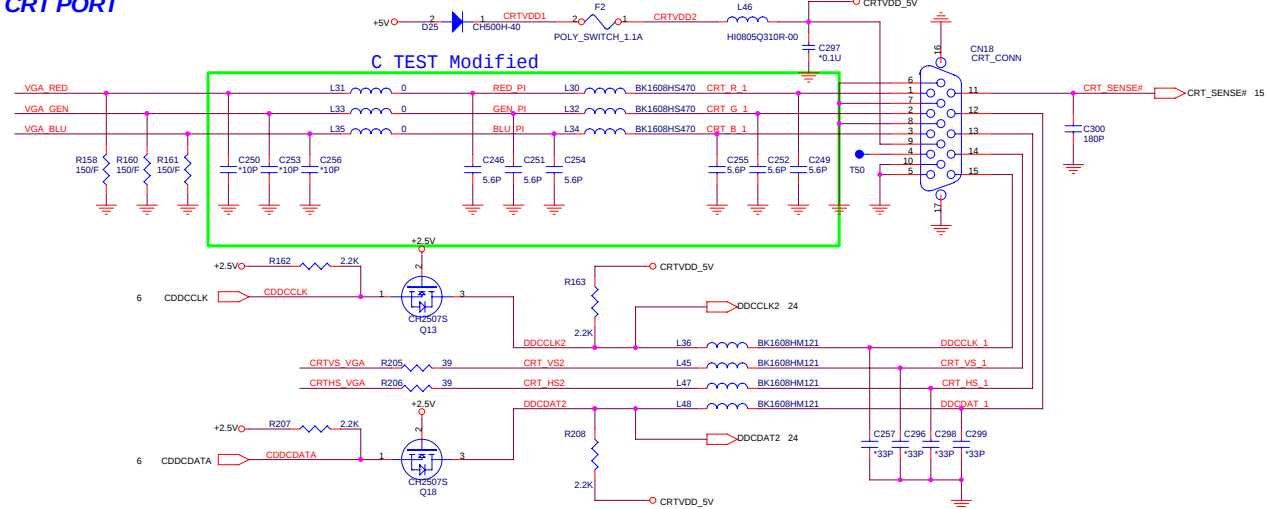


PROJECT : EF6
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ESD PROTECTION



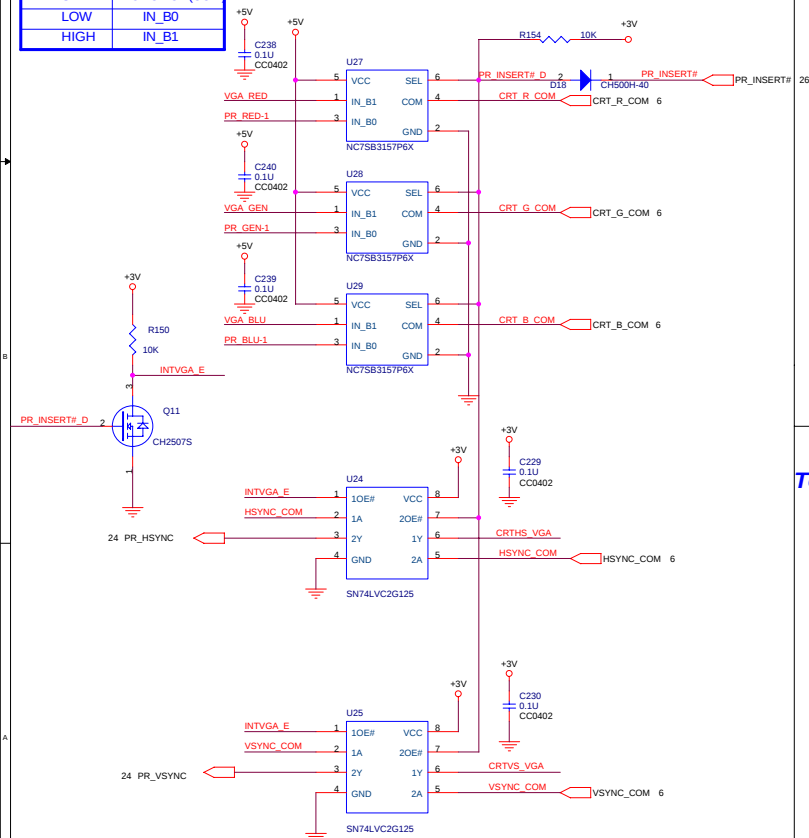
CRT PORT



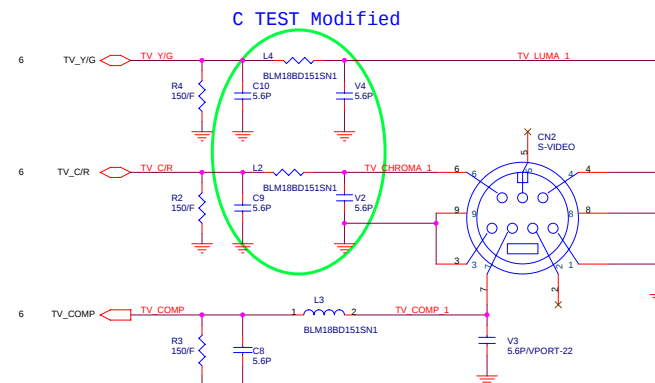
12

CRT SWITCH

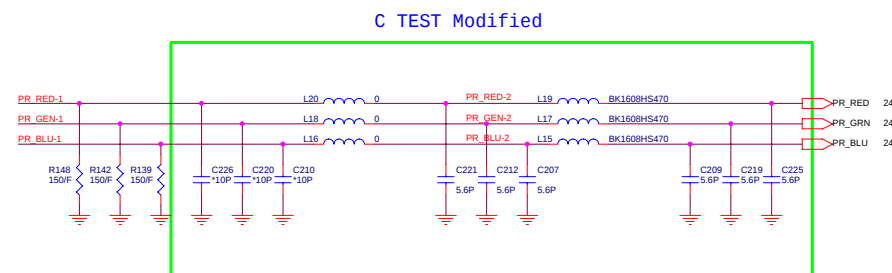
SEL	FUNCTION(COM
LOW	IN_B0
HIGH	IN_B1



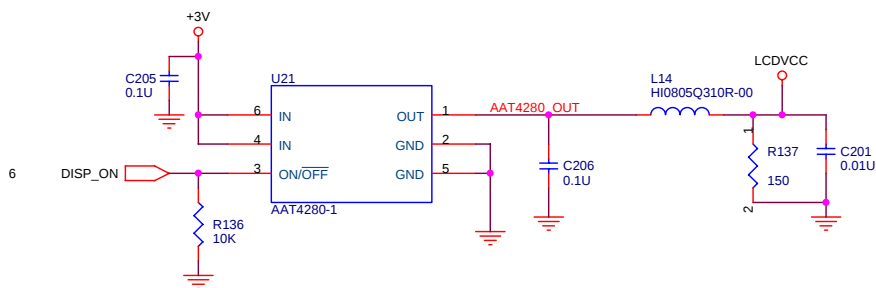
TV-OUT



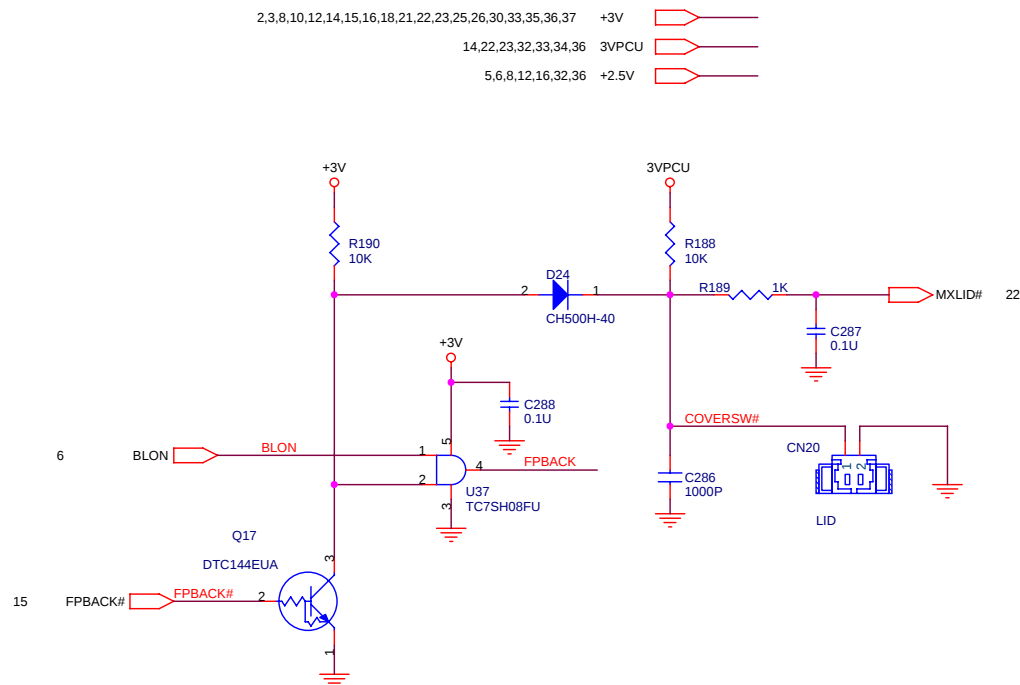
To port - replicator C.R.T



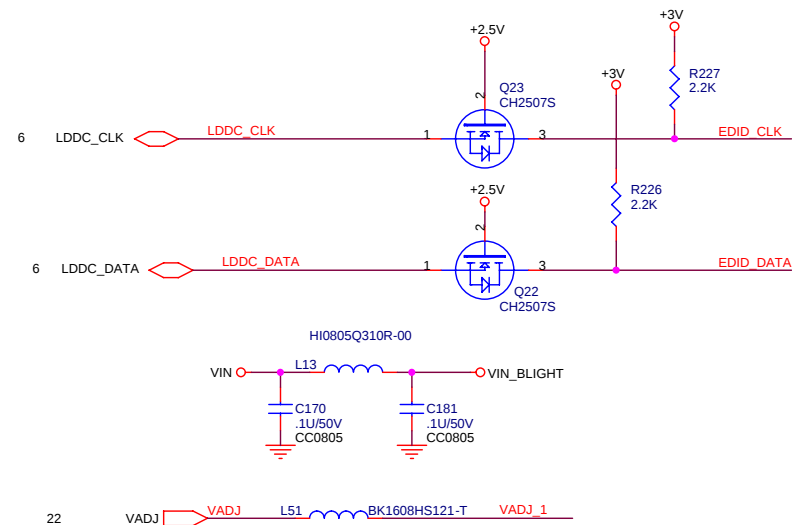
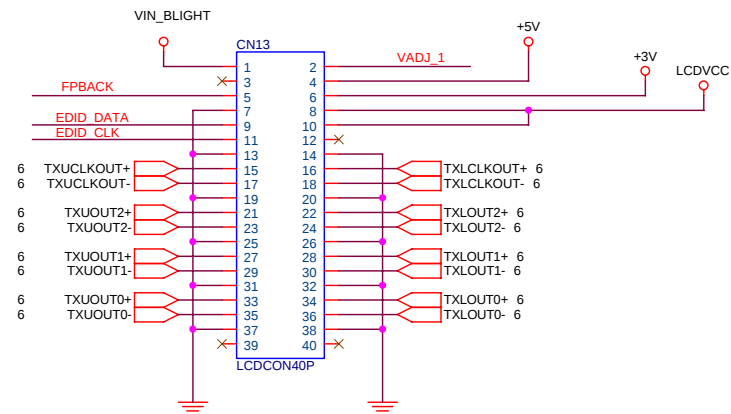
PANEL VCC CONTROL

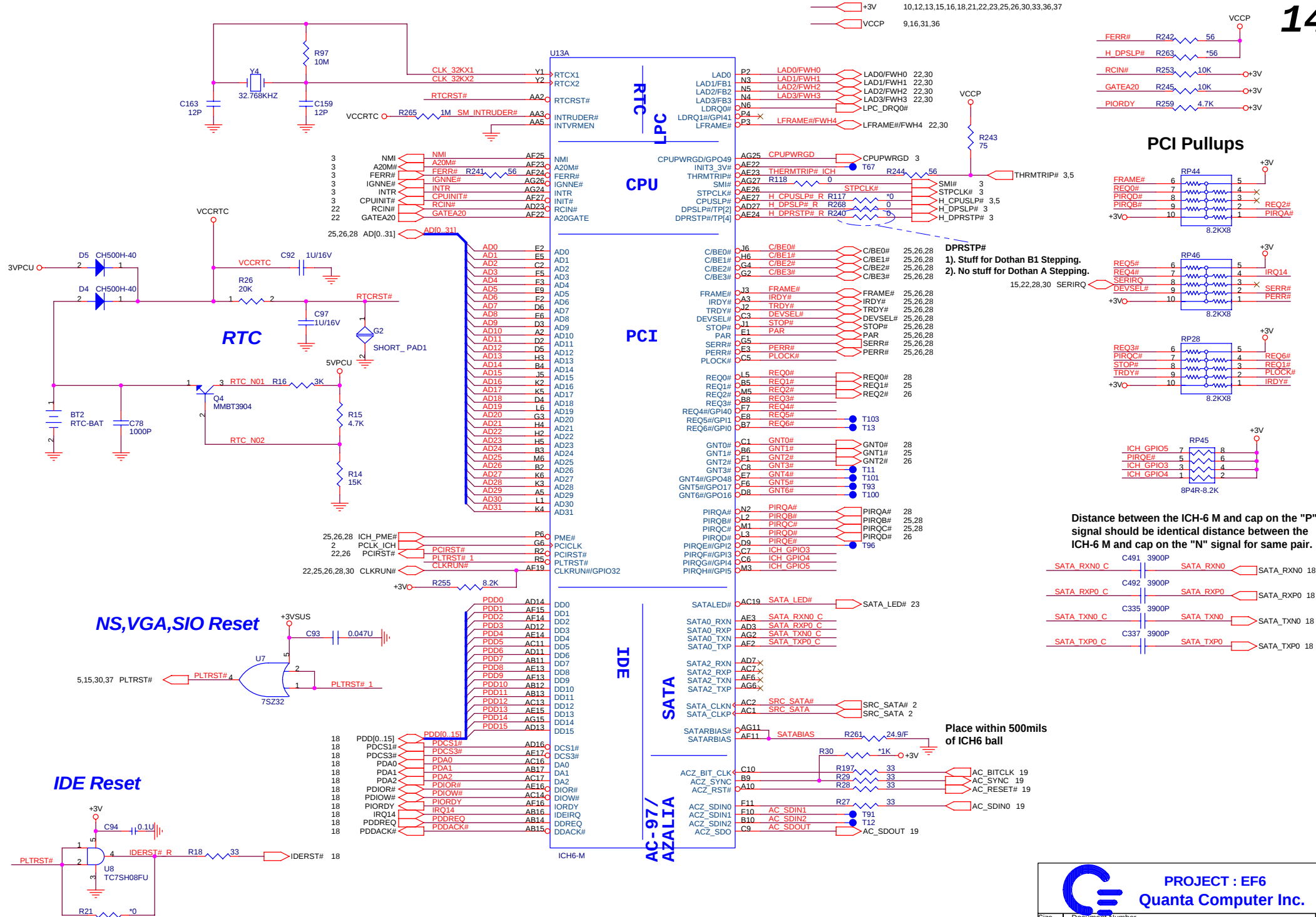


BACKLIGHT CONTROL



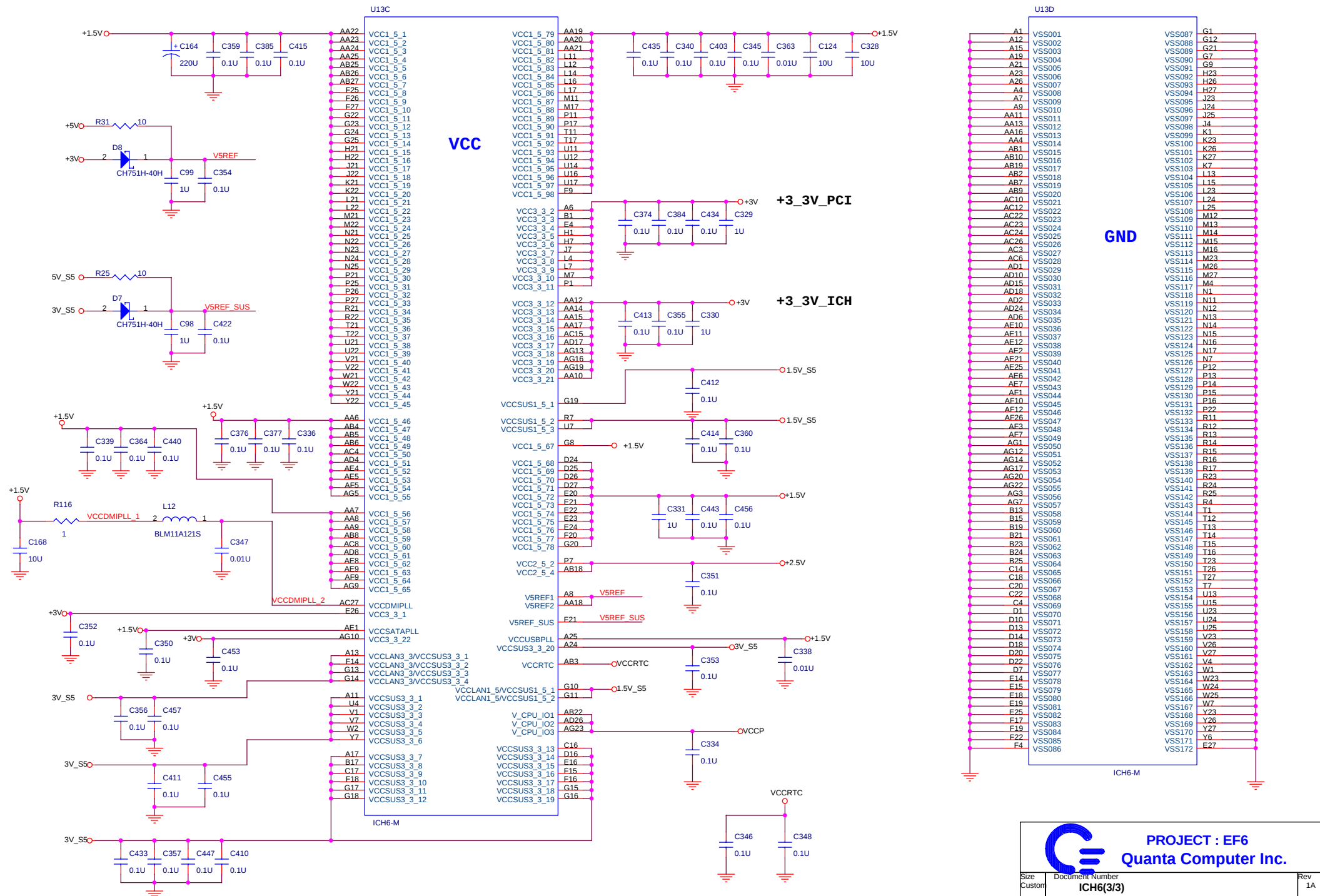
LCD CONNECTOR





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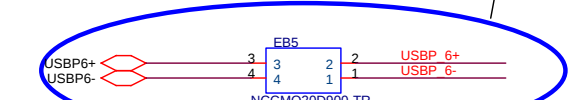
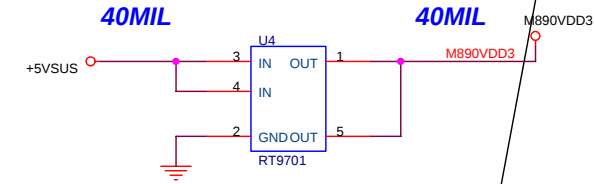
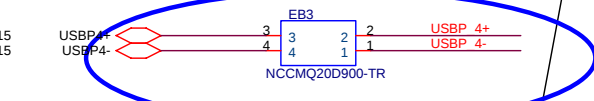
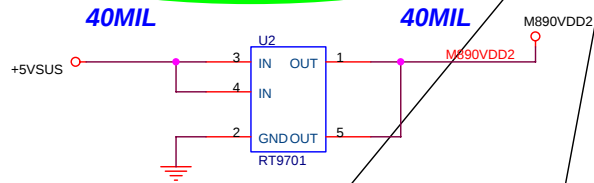
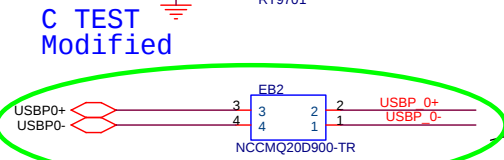
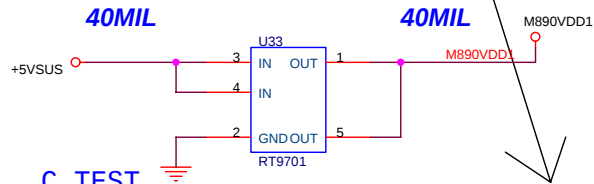
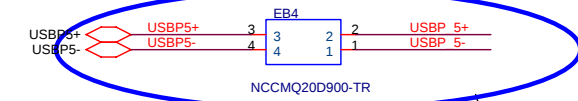
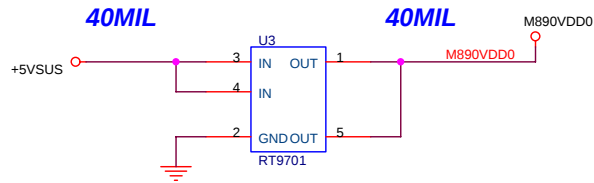
Size	Document Number	Rev
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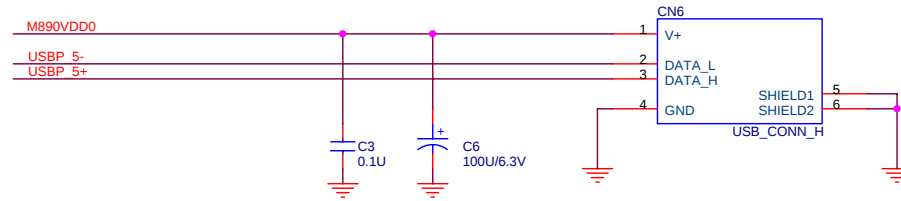
Size	Document Number	Rev
Custom	ICH6(3/3)	1A
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24,28,32,33,36 +5VSUS

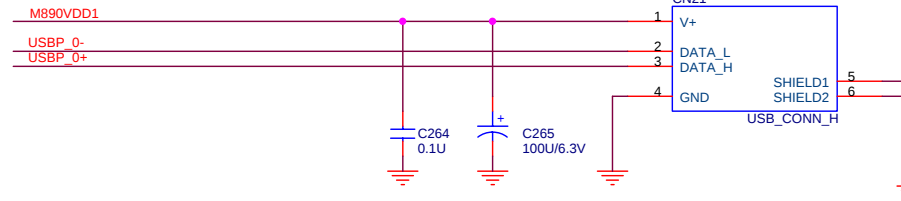


B TEST Modified
Signal pin swap for layout

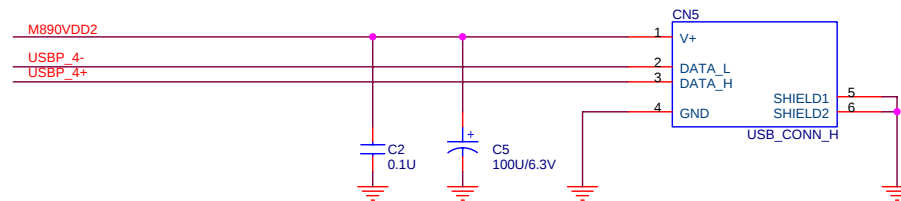
USB-0



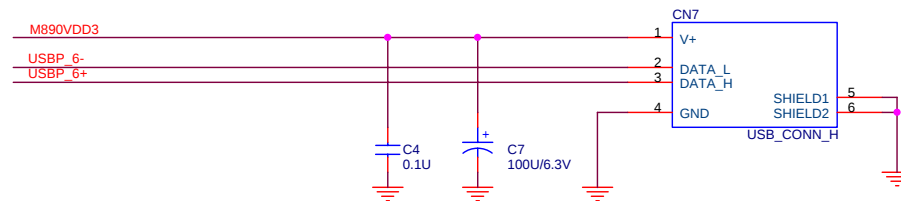
USB-1



USB-2

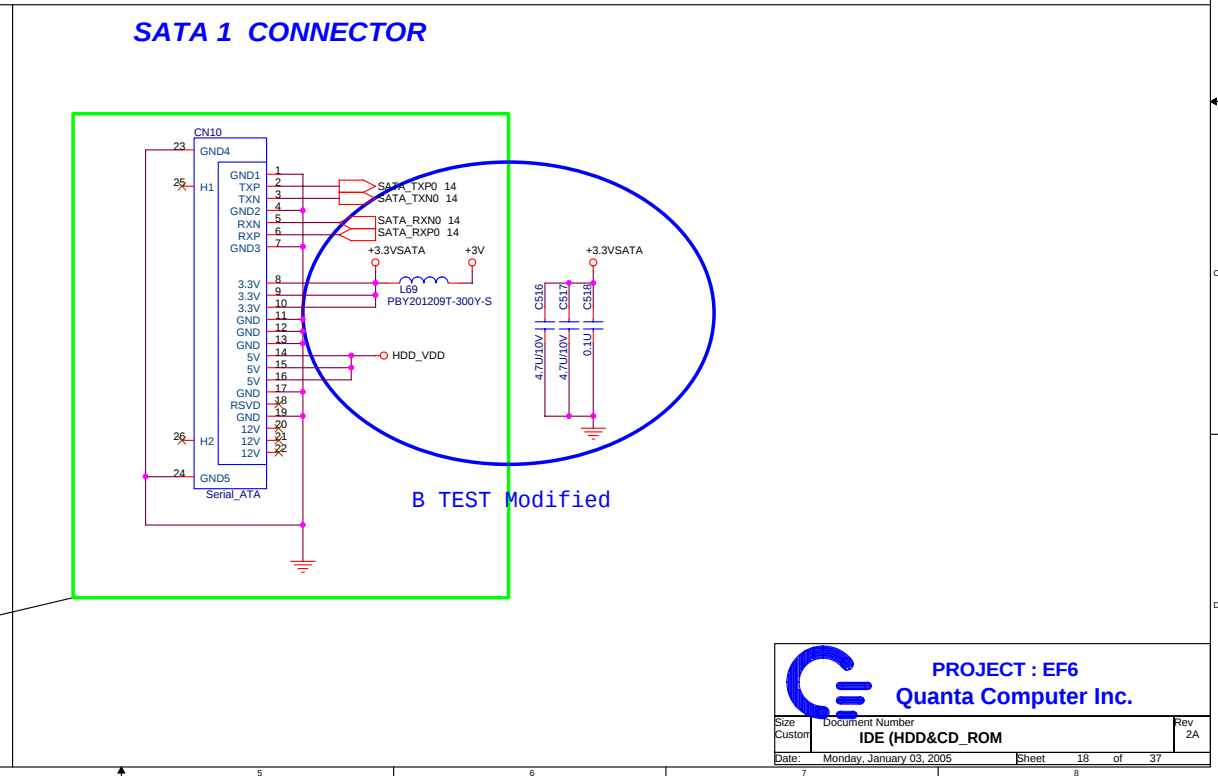
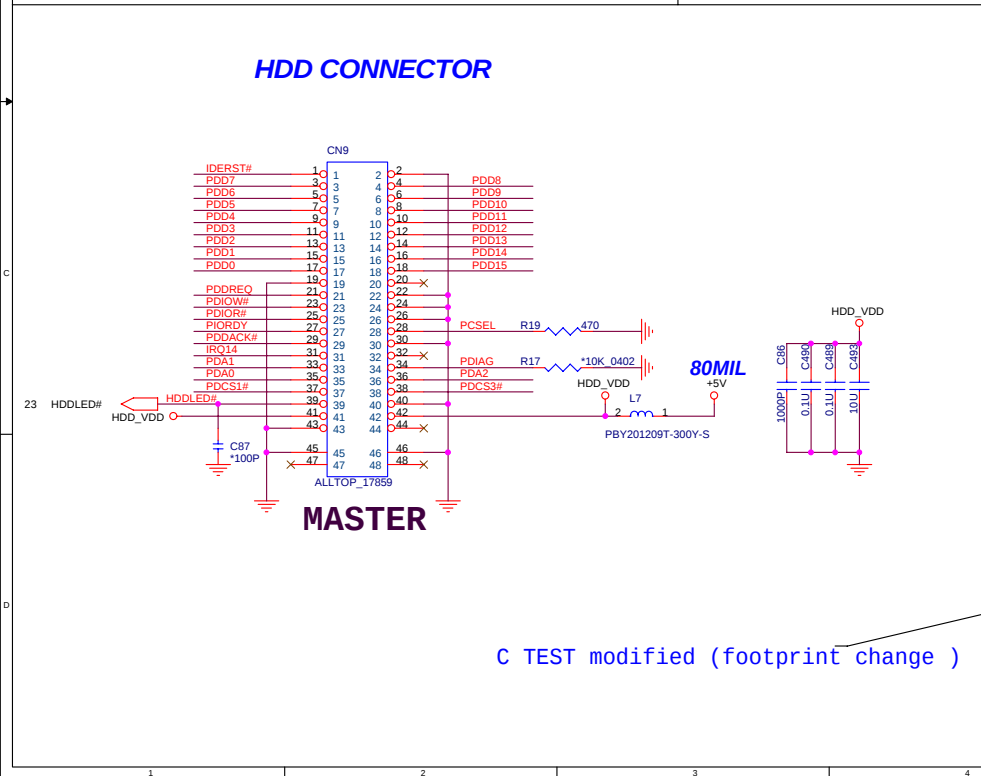
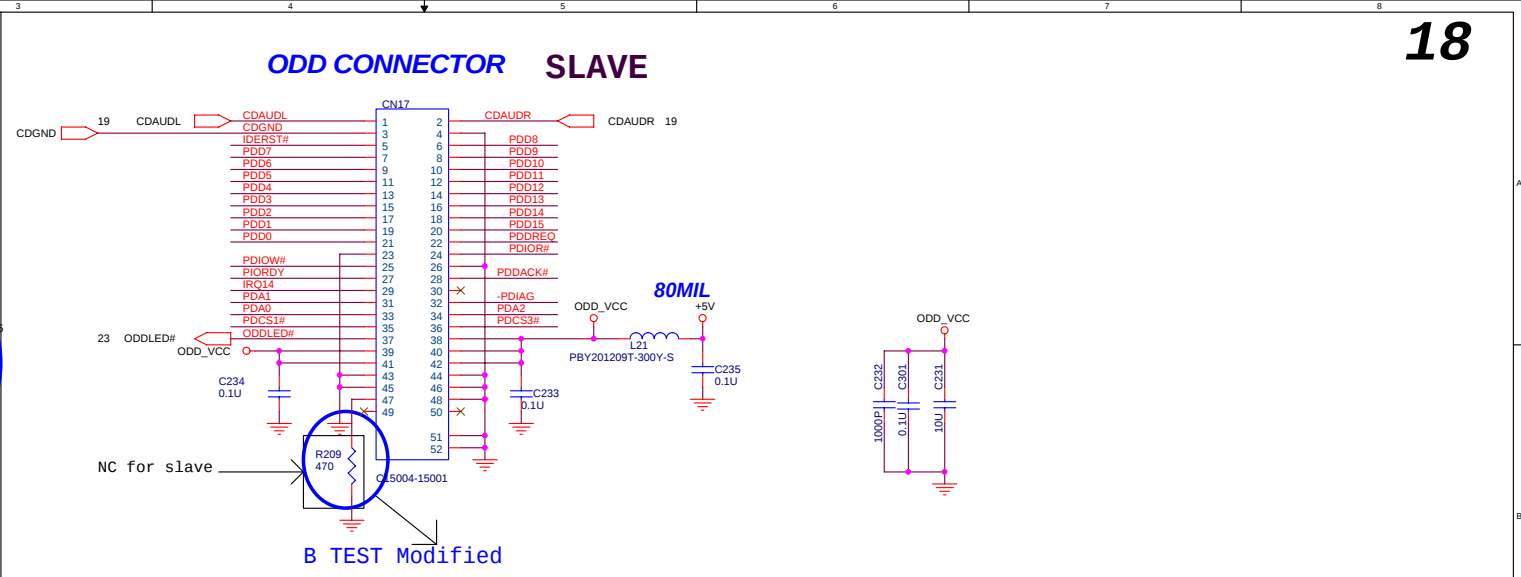
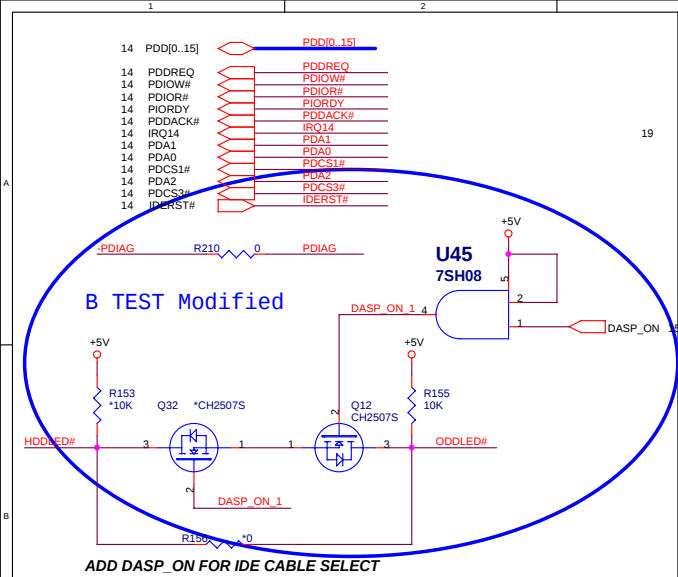


USB-3

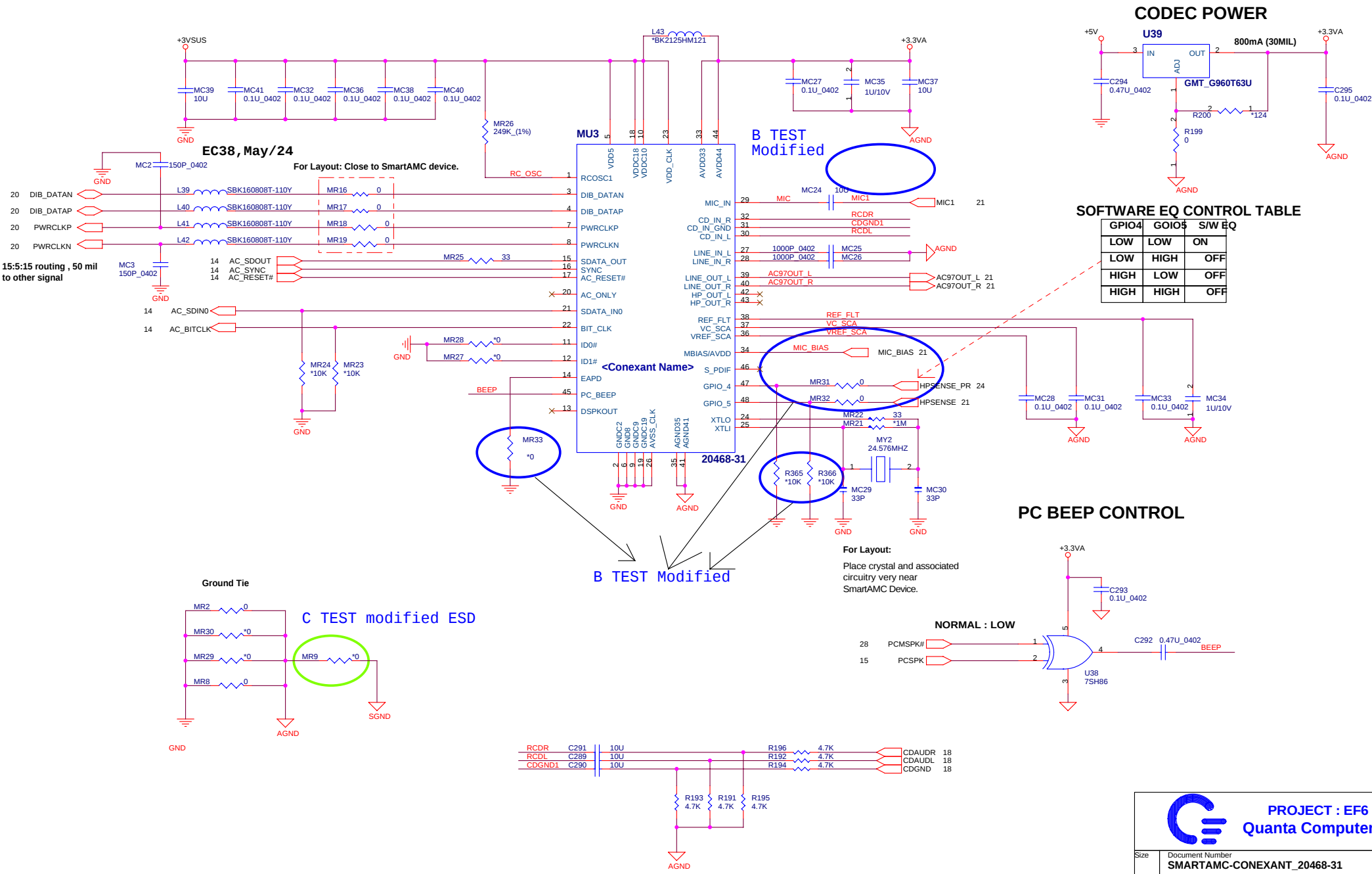


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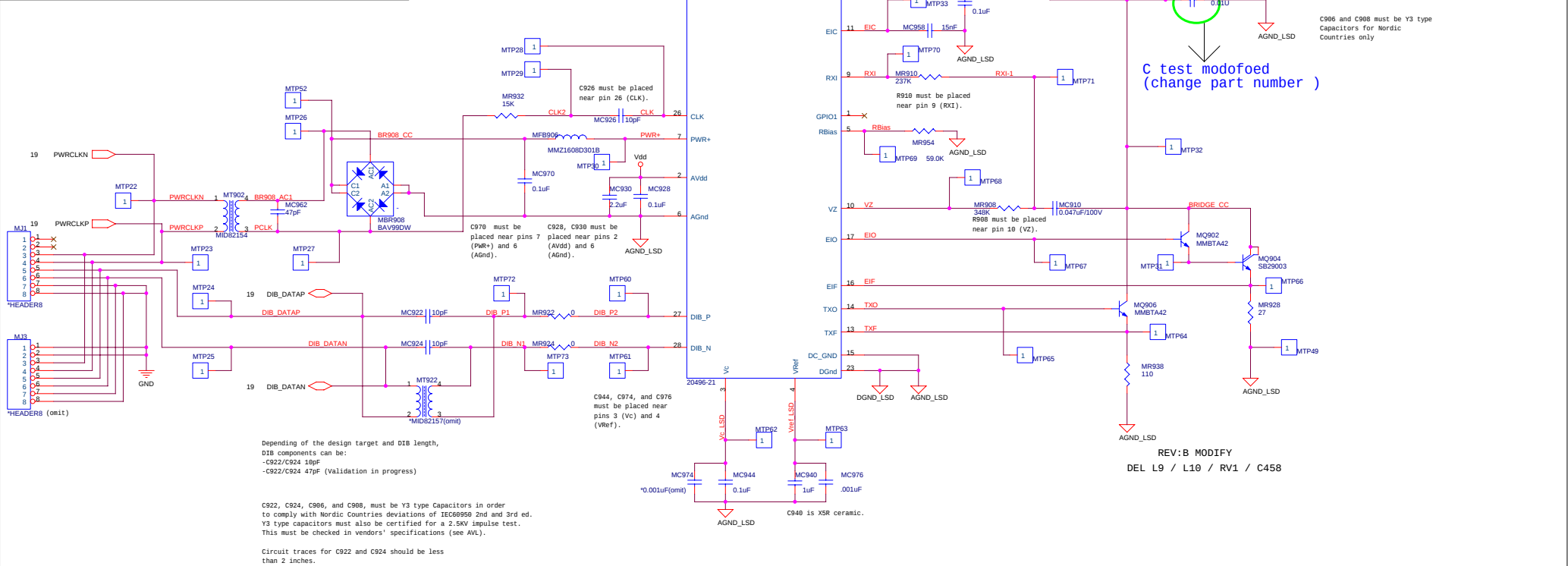


For Layout:
Place decoupling caps near the power pins of
SmartAMC device.



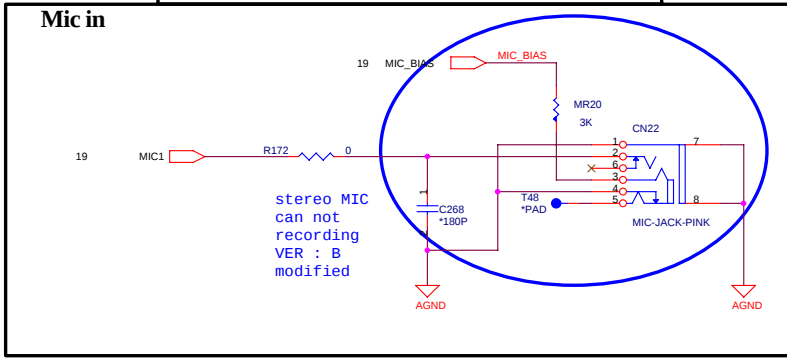
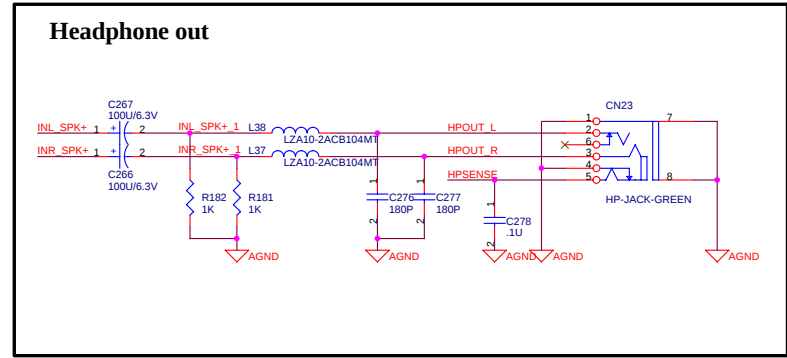
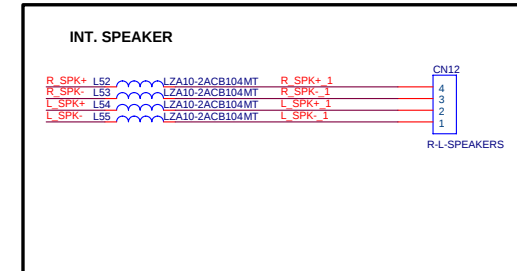
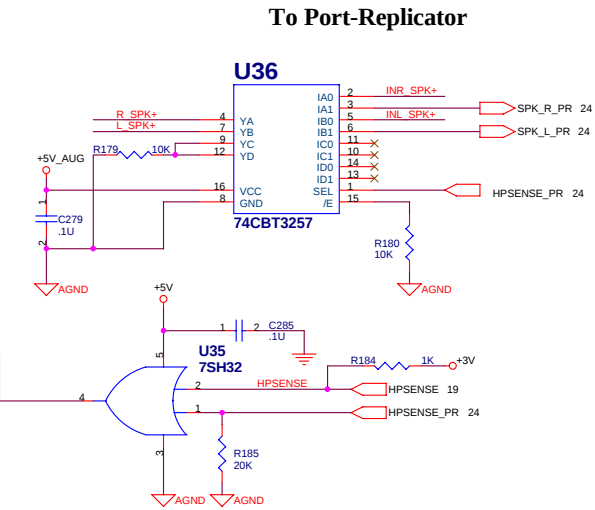
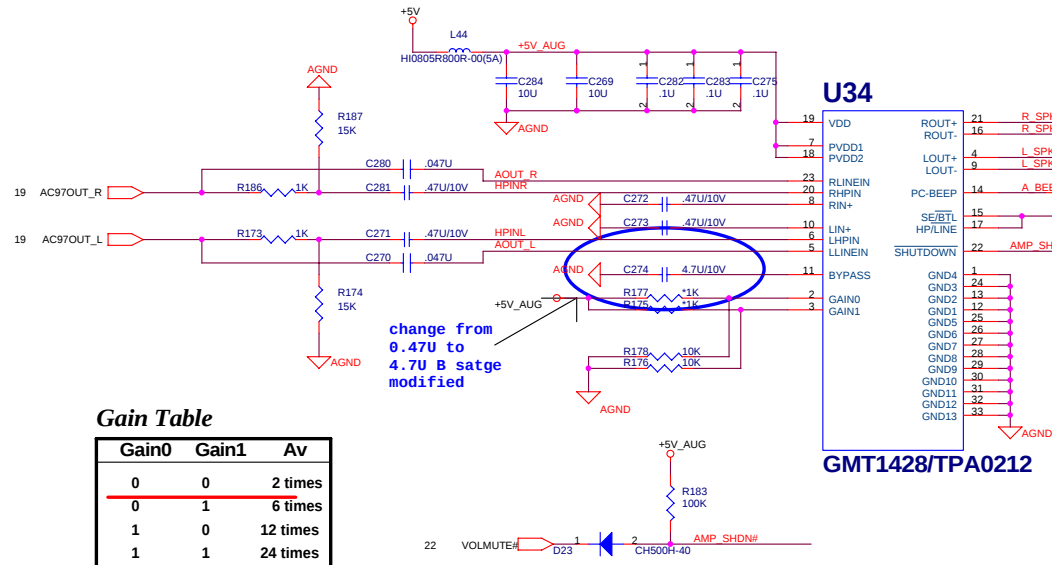
Revision History		
REV	Description	Date
00	Initial Release	February 14, 2002
01	27mmx27mm form factor.	July 5, 2002
02	6 pins J1 connector-T/R traces for specific uses-100V C902/C904	September 24, 2002
03	add J1B - remove T903	October 9, 2002
04	Change J1 & J1B. Change R938 size. Add TP60 to TP71.	November 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 "M" prefix to all reference designators for MC966 from 3.3nF to 10nF, 100V, +/-20%, Y5V. By default, MC966 will be populated. Also, changed CX20493 revision from 11 to 21.	September 24, 2003
08		November 06, 2003

REV:B MODIFY FOR USE
NEW MODEM MODULE

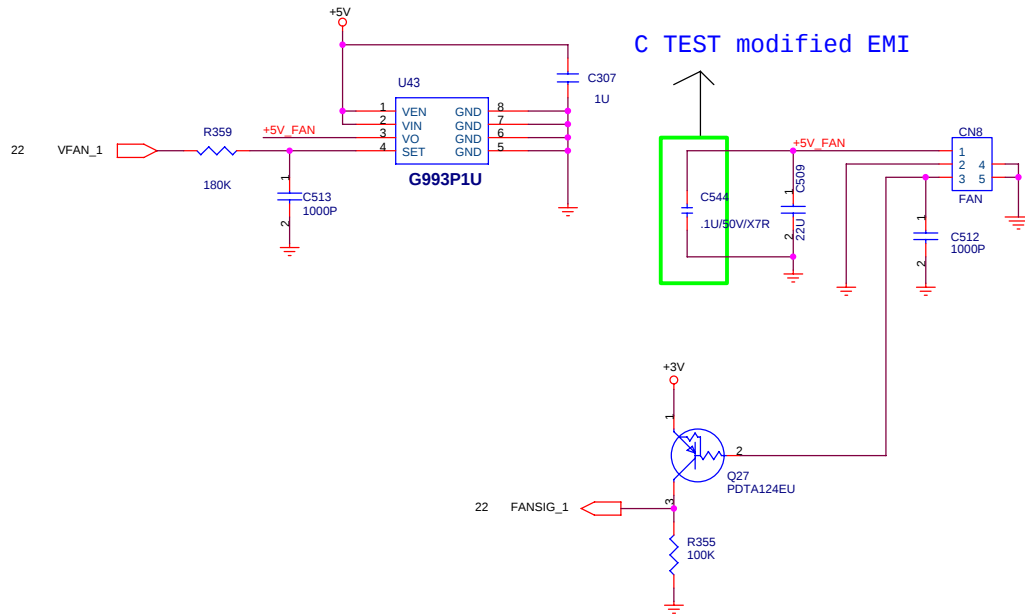


AUDIO AMPLIFIER-GMT_1428

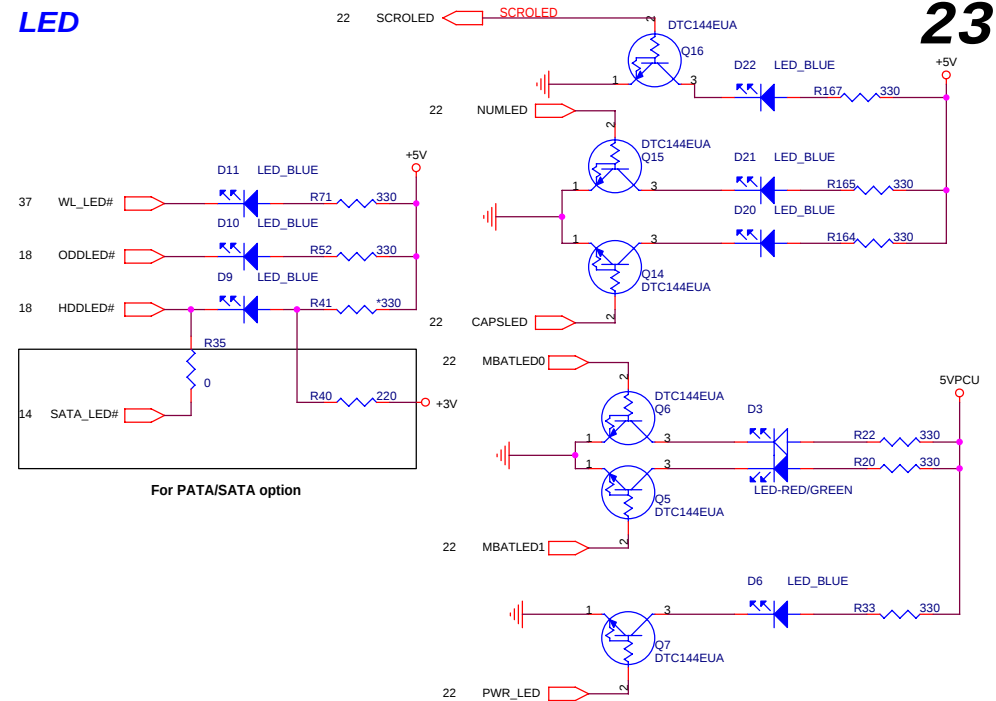
21



1st FAN OUT CONNECTOR

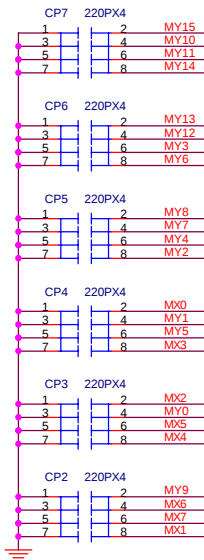
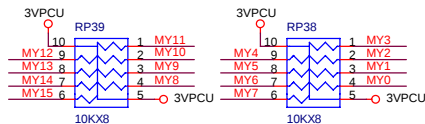
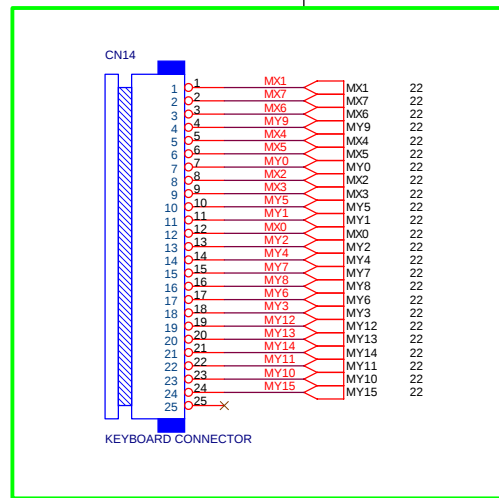


LED

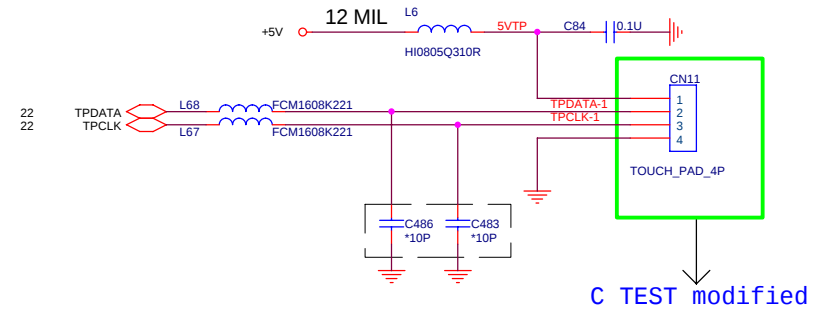


KEYBOARD

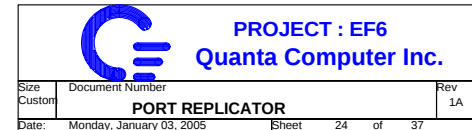
C TEST modified



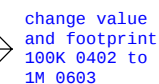
TOUCHPAD



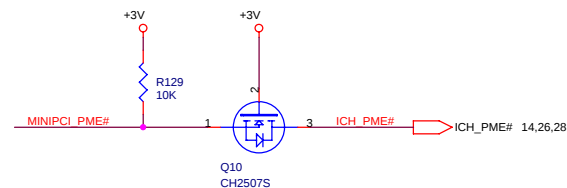
24

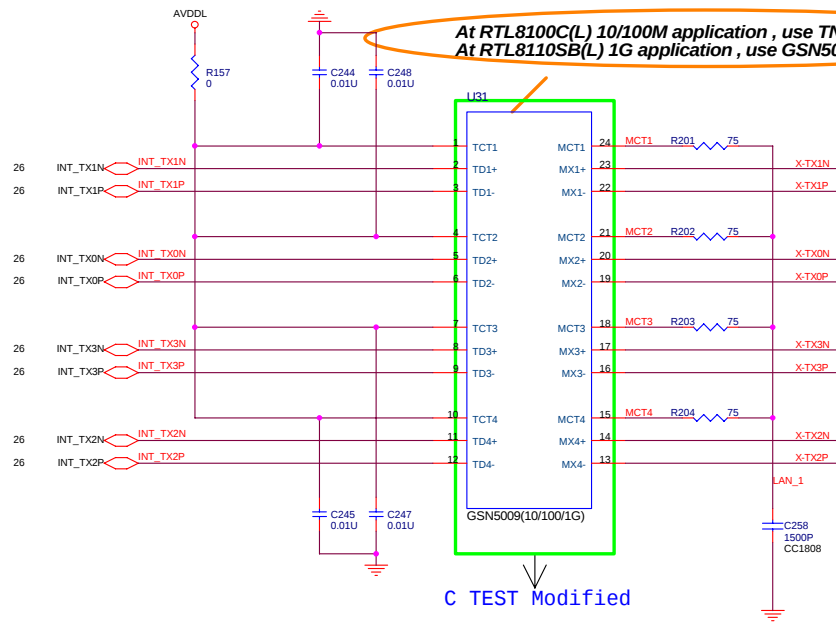


AD[0..31] AD[0..31] 14,26,28

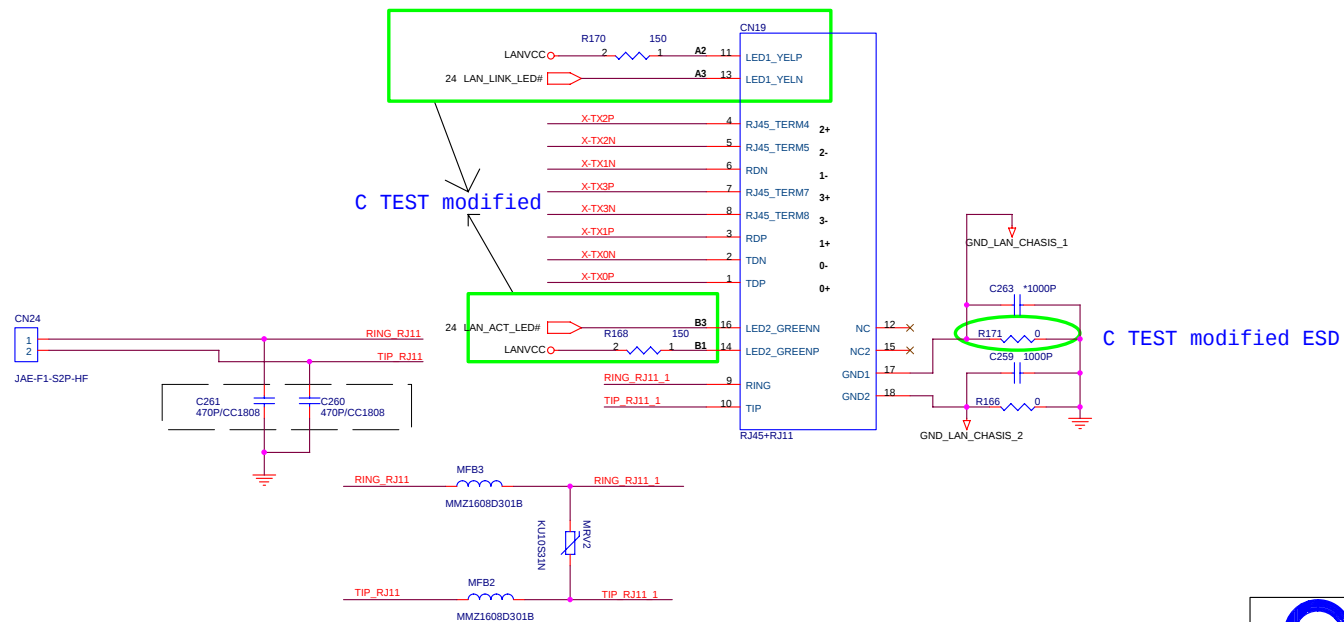


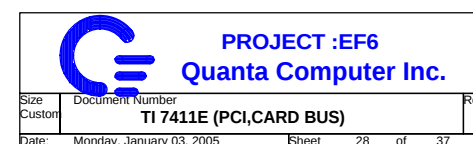
C TEST modified





RJ45 and RJ11 CONNECTOR







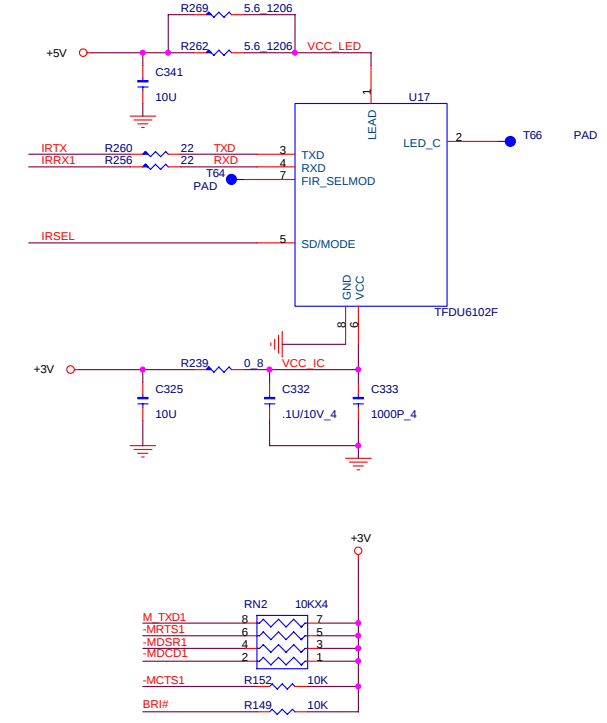
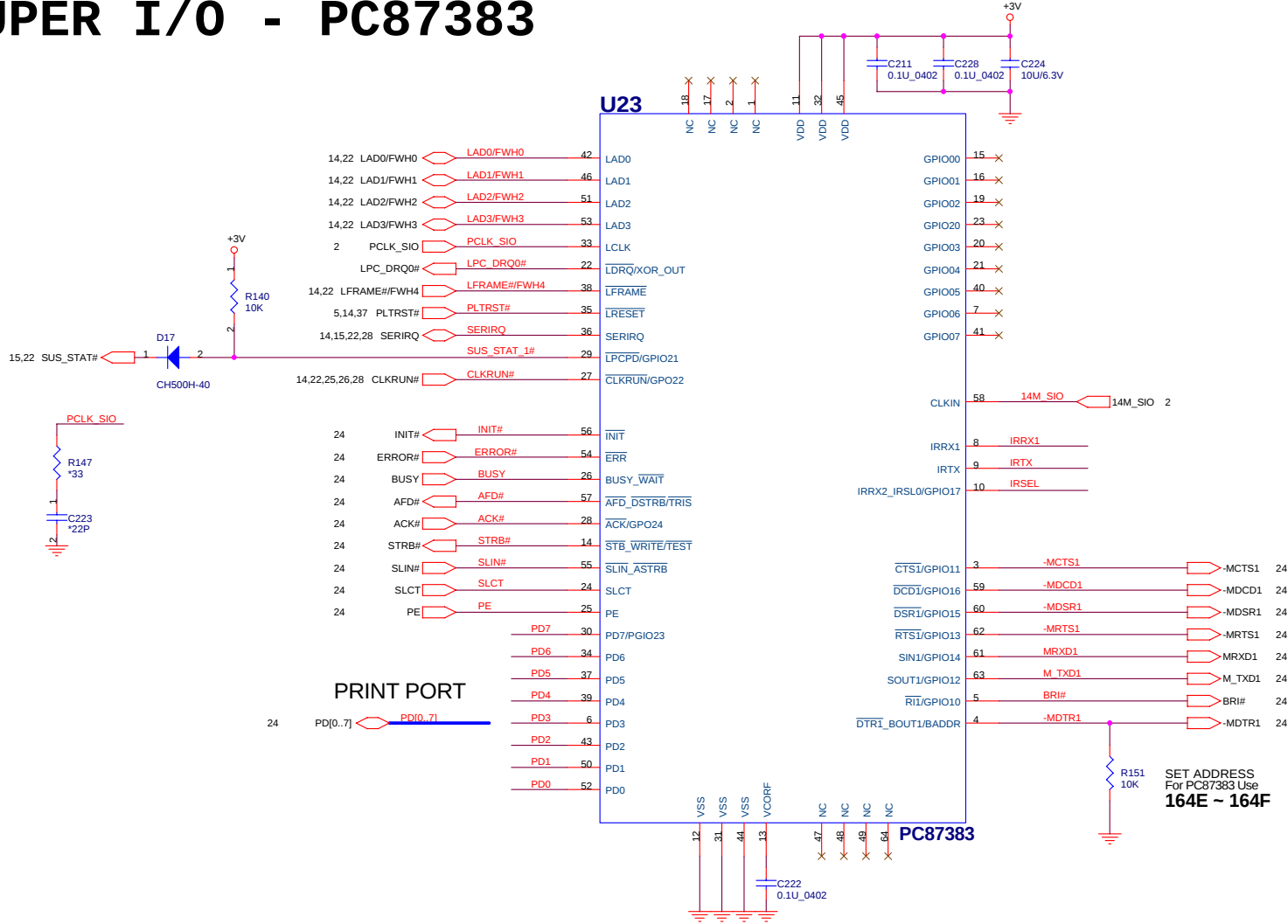
Supporting MMC/SD/MS Cards



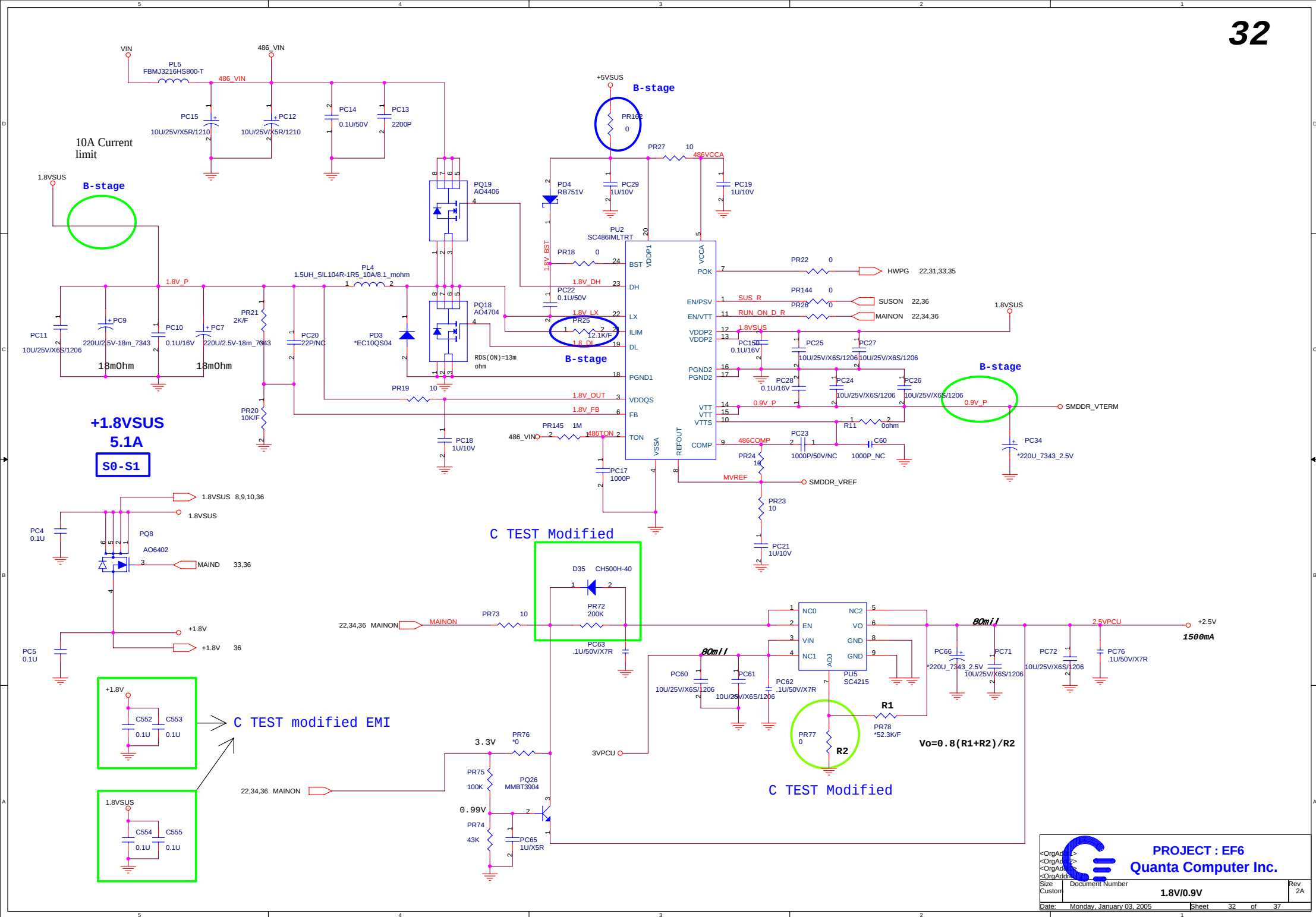
SUPER I/O - PC87383

FIR
40mil: Power/ GND
35mil: VCC_LED, VCC_IC, GND_IC
10mil: TXD, RXD, IRSEL, IRTX,
IRRX1

30





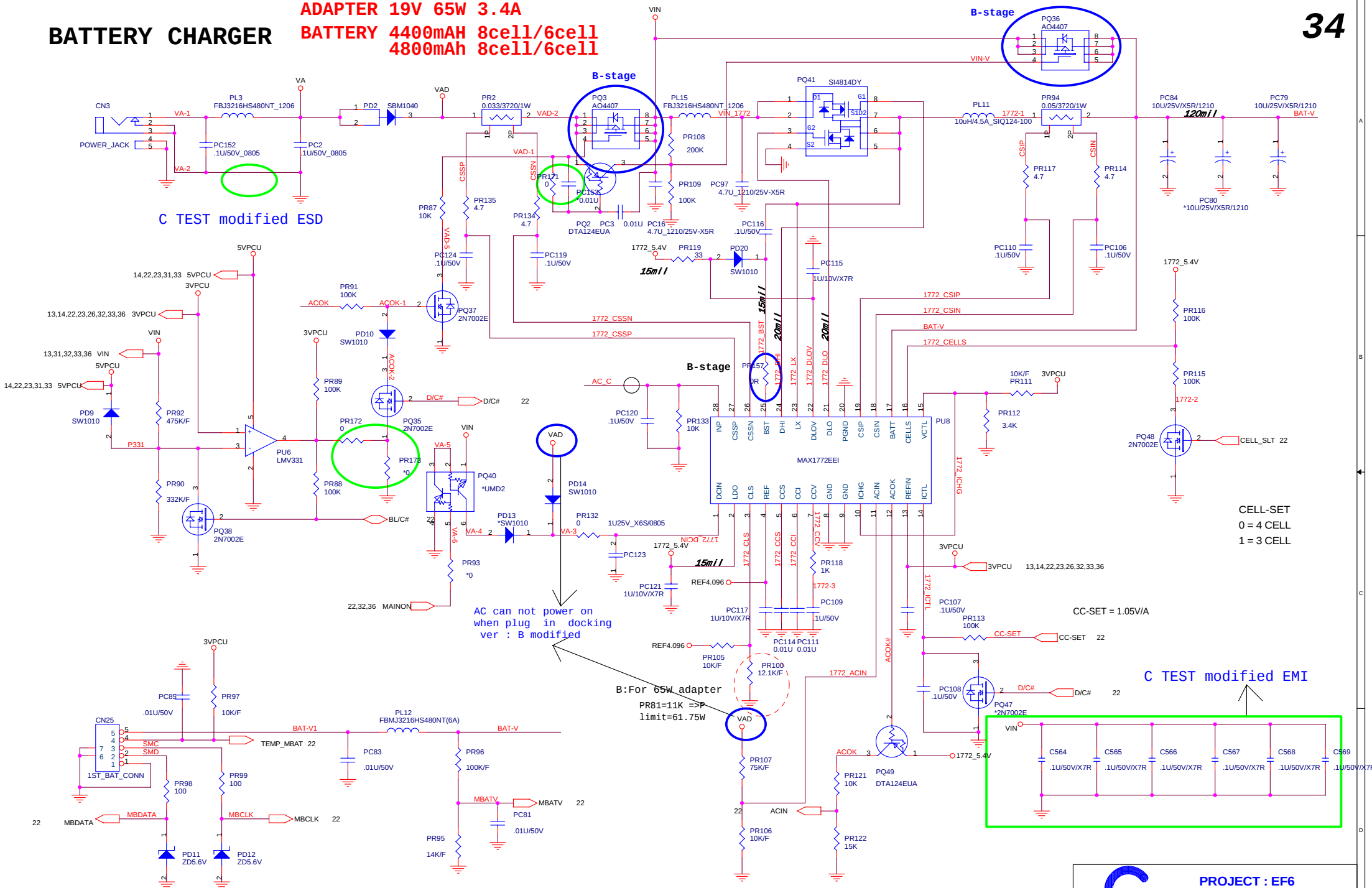




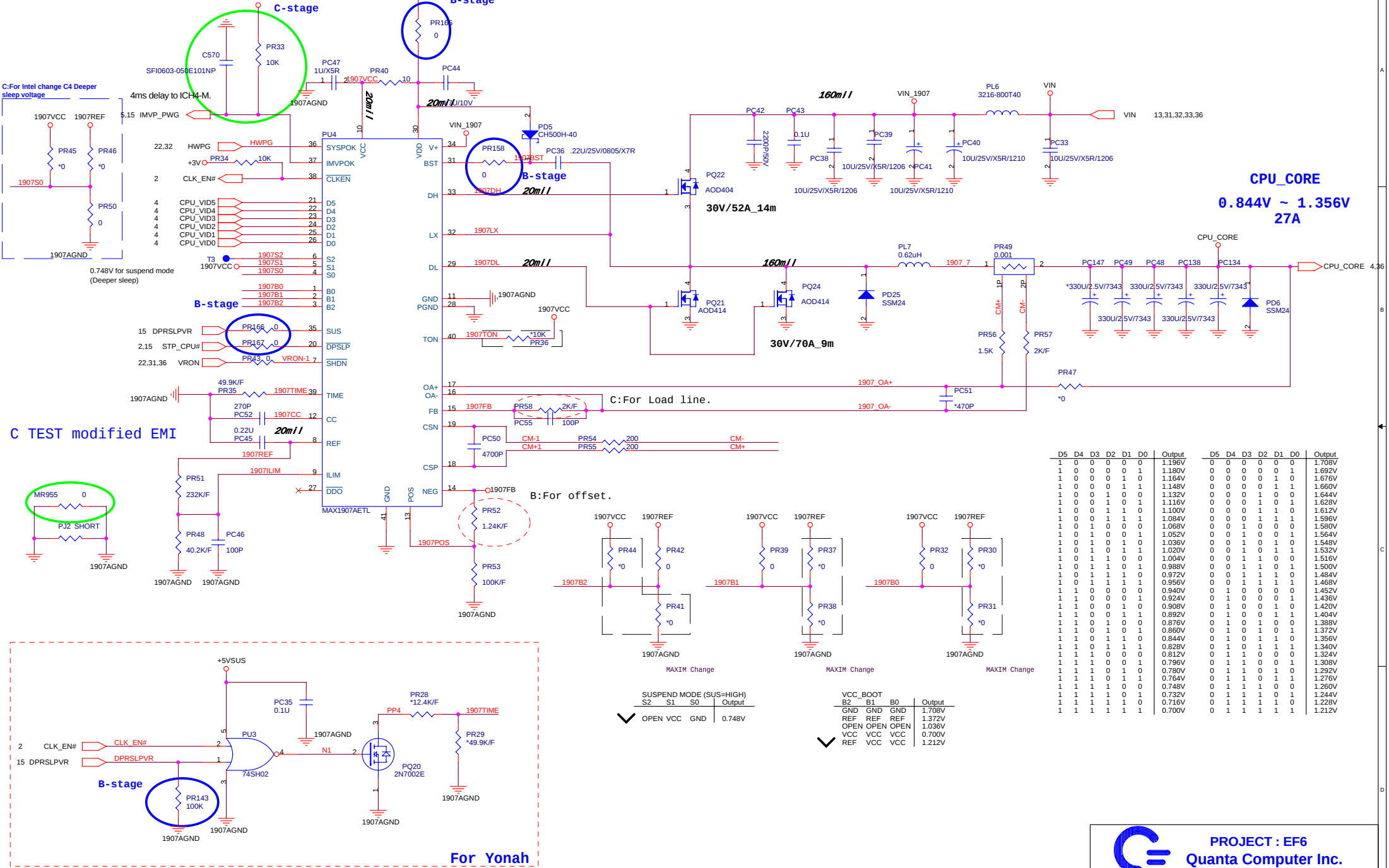
BATTERY CHARGER

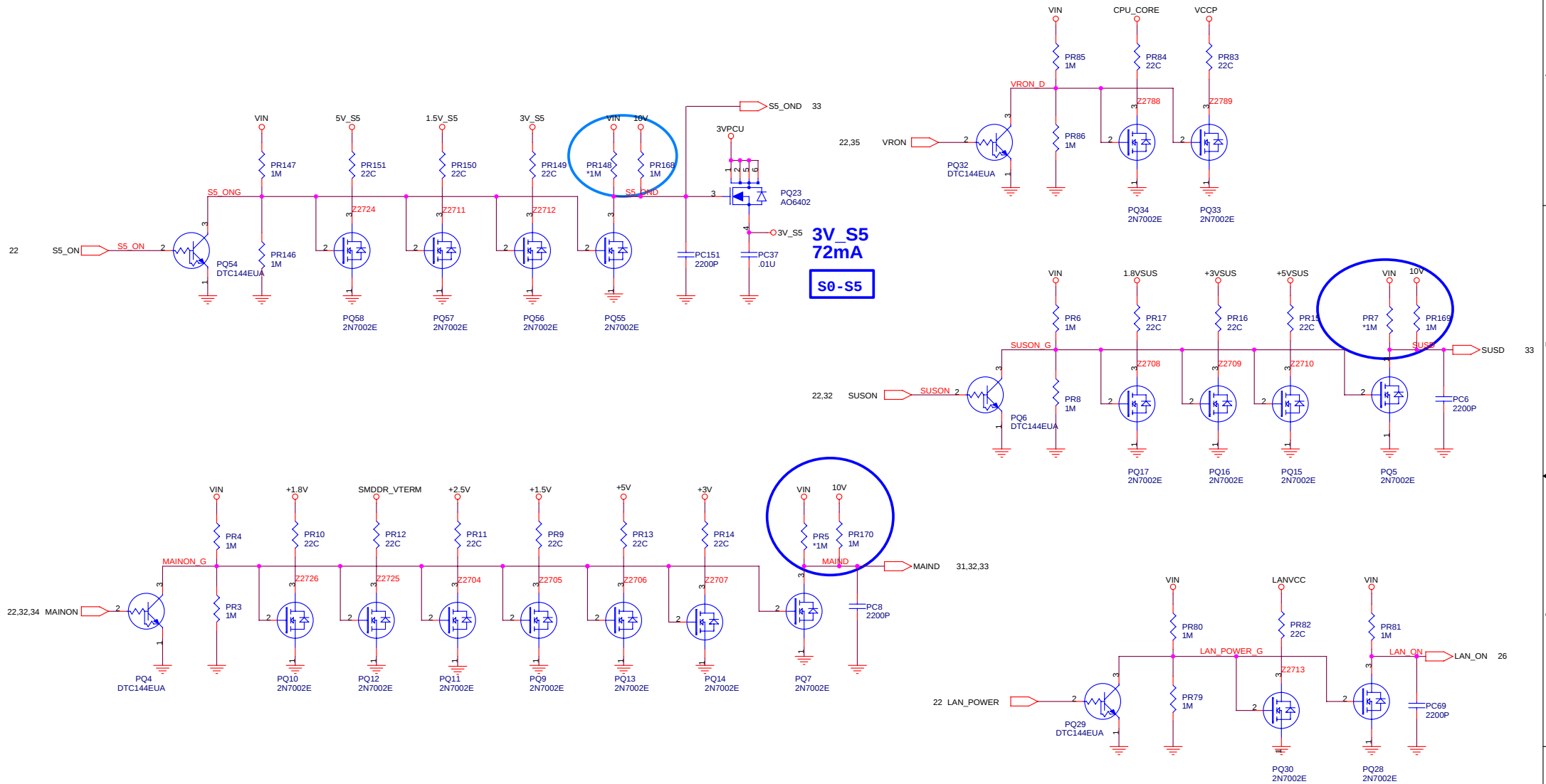
ADAPTER 19V 65W 3.4A
BATTERY 4400mAh 8cell/6cell
4800mAh 8cell/6cell

34

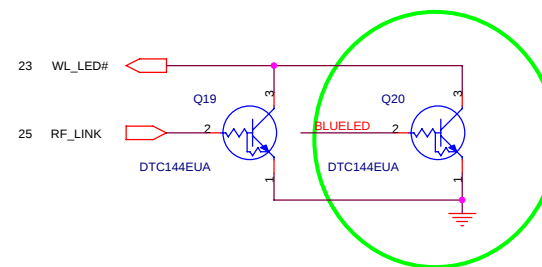
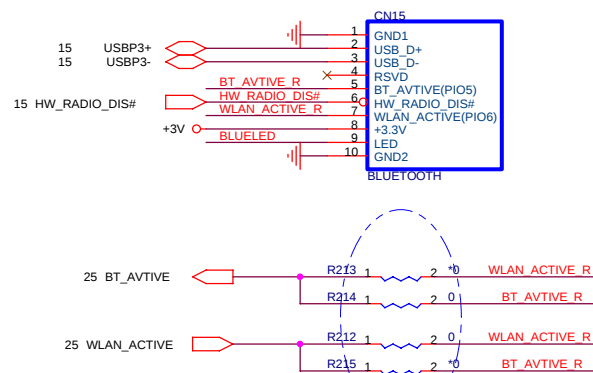


CPU VCC CORE (MAX1907)



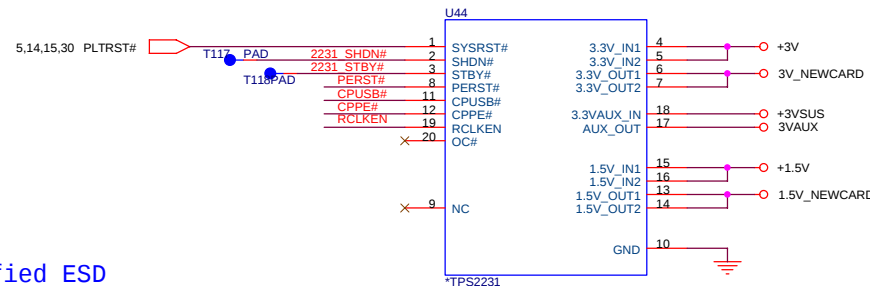
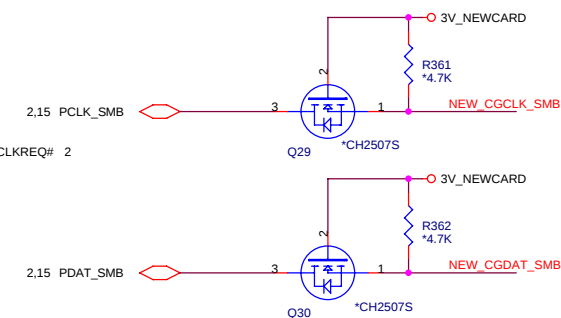
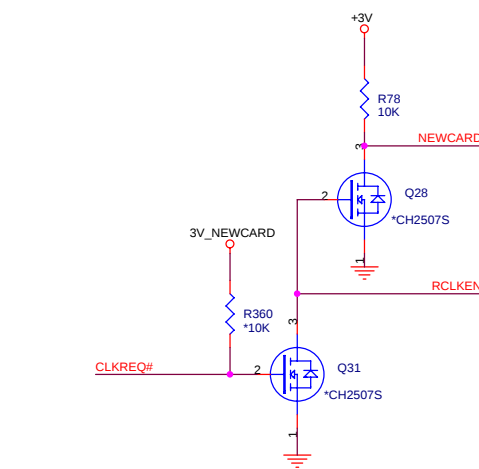
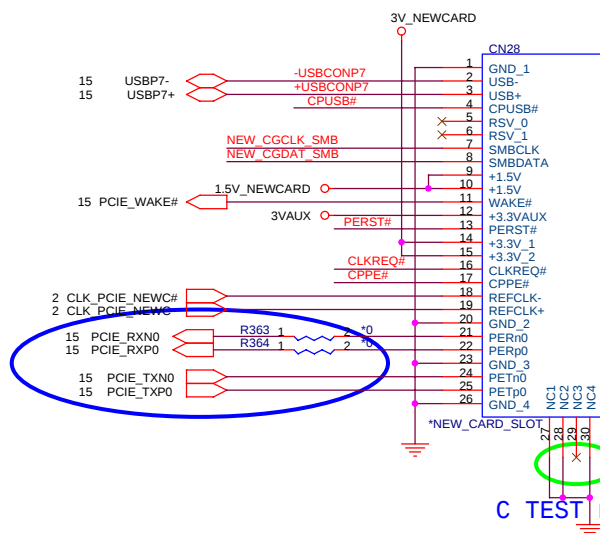


BLUETOOTH CONNECTOR



C TEST Modified

NEWCARD (PCIEXPRESS*1 + USB*1)



PROJECT : EF6
 Quanta Computer Inc.

Size	Document Number	NEW CARD	Rev
Custom			1A
Date:	Monday, January 03, 2005	Sheet	37 of 37