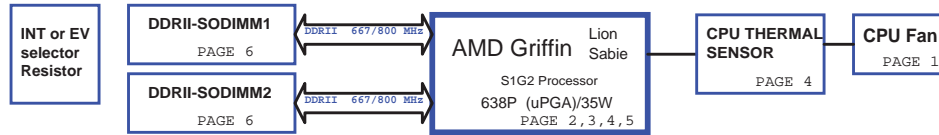


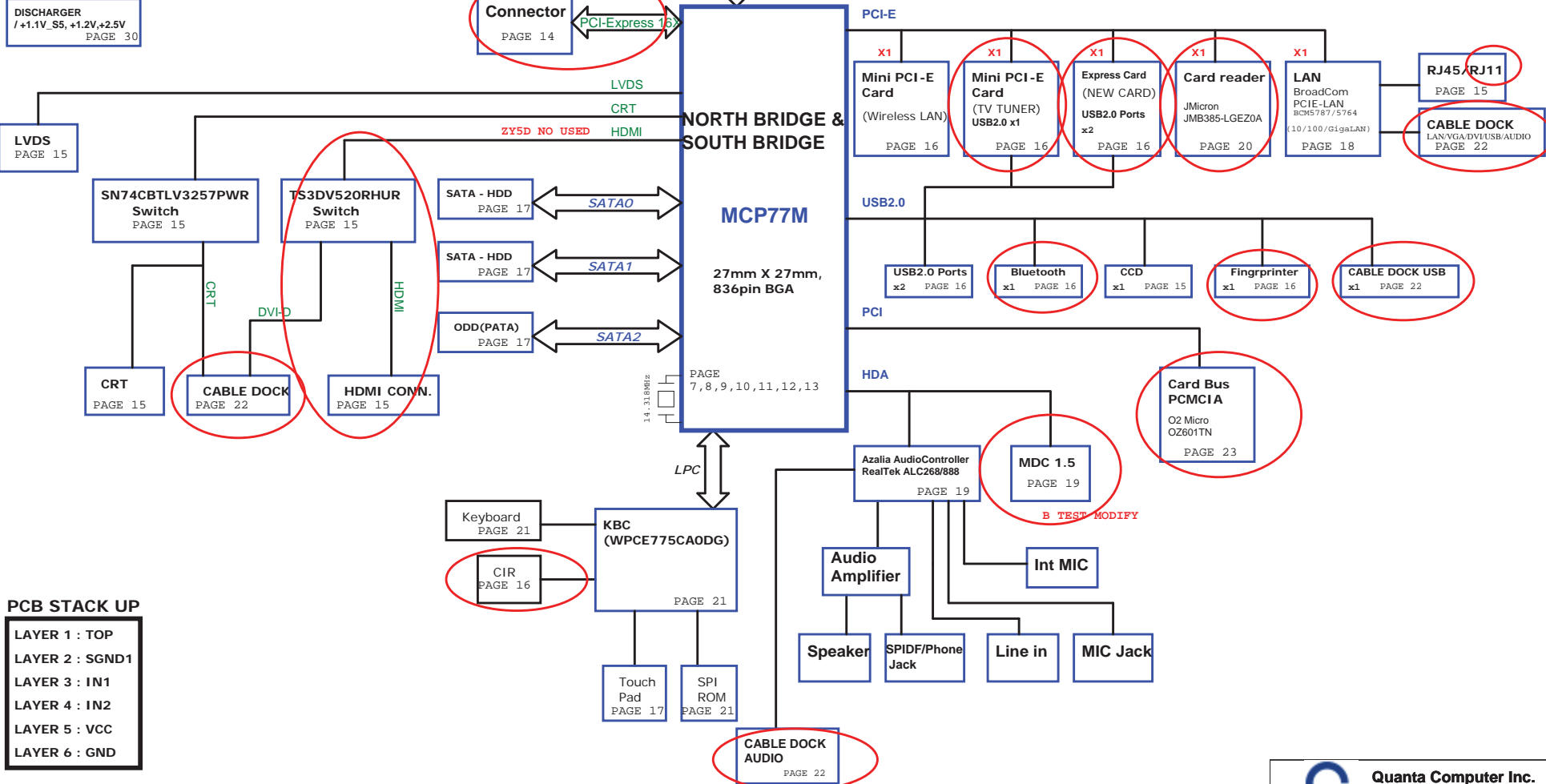
<http://laptopblue.vn/>
ZY5/ZY5D SYSTEM BLOCK DIAGRAM



CPU CORE ISL6265A	PAGE 26
NB CORE +1.1V	PAGE 27
NB RUN +1.1V	PAGE 28
DDR II SMD DR VTERM 1.8VSUS(TPS51116REGR)	PAGE 29
SYSTEM POWER ISL6237	PAGE 25
SYSTEM CHARGER (ISL6251A)	PAGE 24
DISCHARGER / +1.1V_S5, +1.2V,+2.5V	PAGE 30

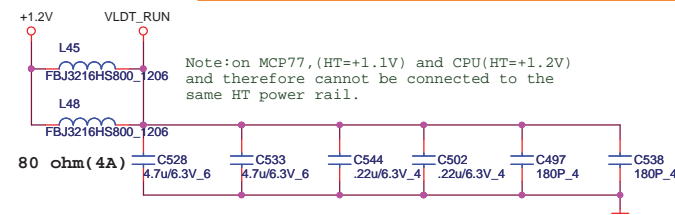


ZY5D NO USED



PCB STACK UP

LAYER 1 : TOP
LAYER 2 : SGND1
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : GND

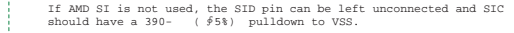


**NEAR HT POWER PINS THAT ARE NOT CONNECTED DIRECTLY TO DOWNSTREAM HT DEVICE, BUT CONNECTED INTERNALLY TO OTHER HT POWER PINS
PLACE CLOSE TO VLDT0 POWER PINS**

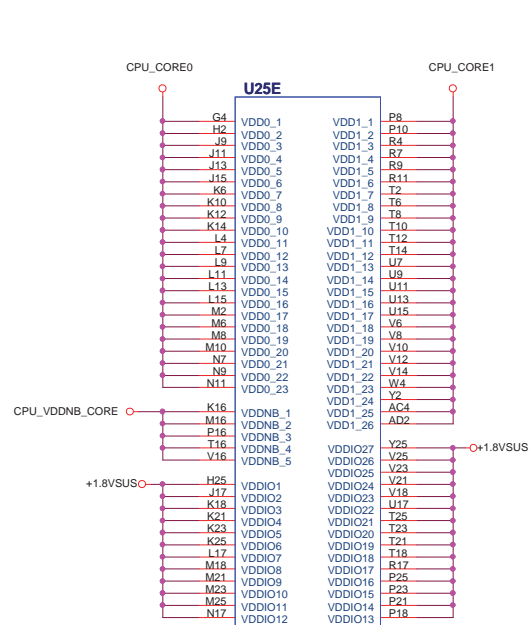
Athlon 64 S1g2 SOCKET_638_PIN
Athlon 64 S1g2
Processor Socket
SOCKET 638 PIN

NO STUB
for HT3

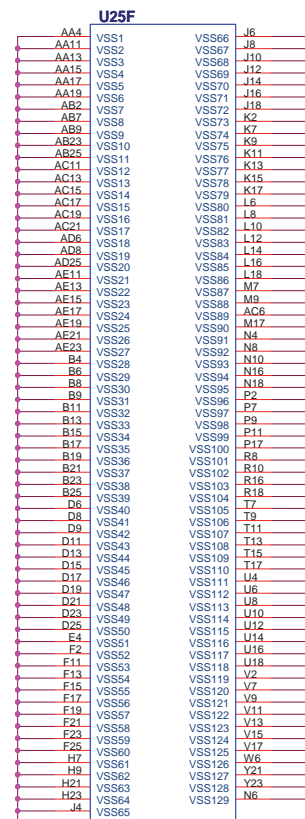
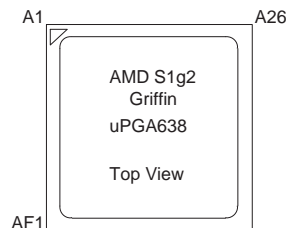


VFIX MODE

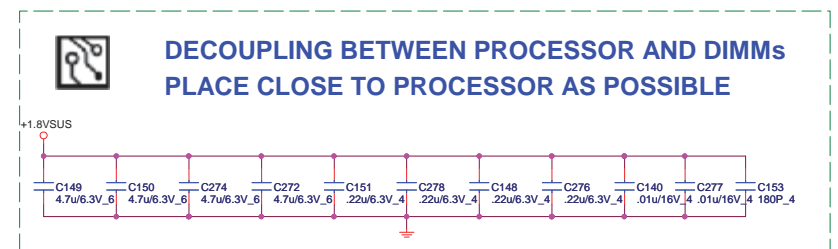
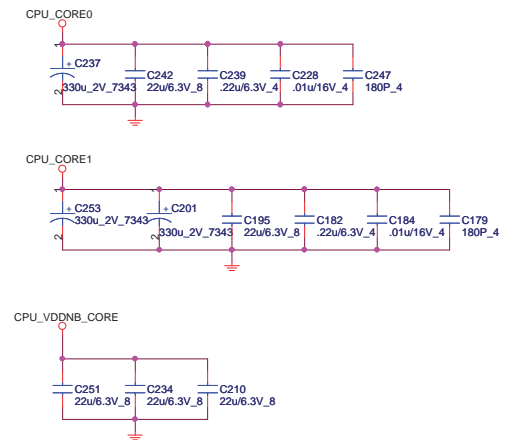
PROCESSOR POWER AND GROUND

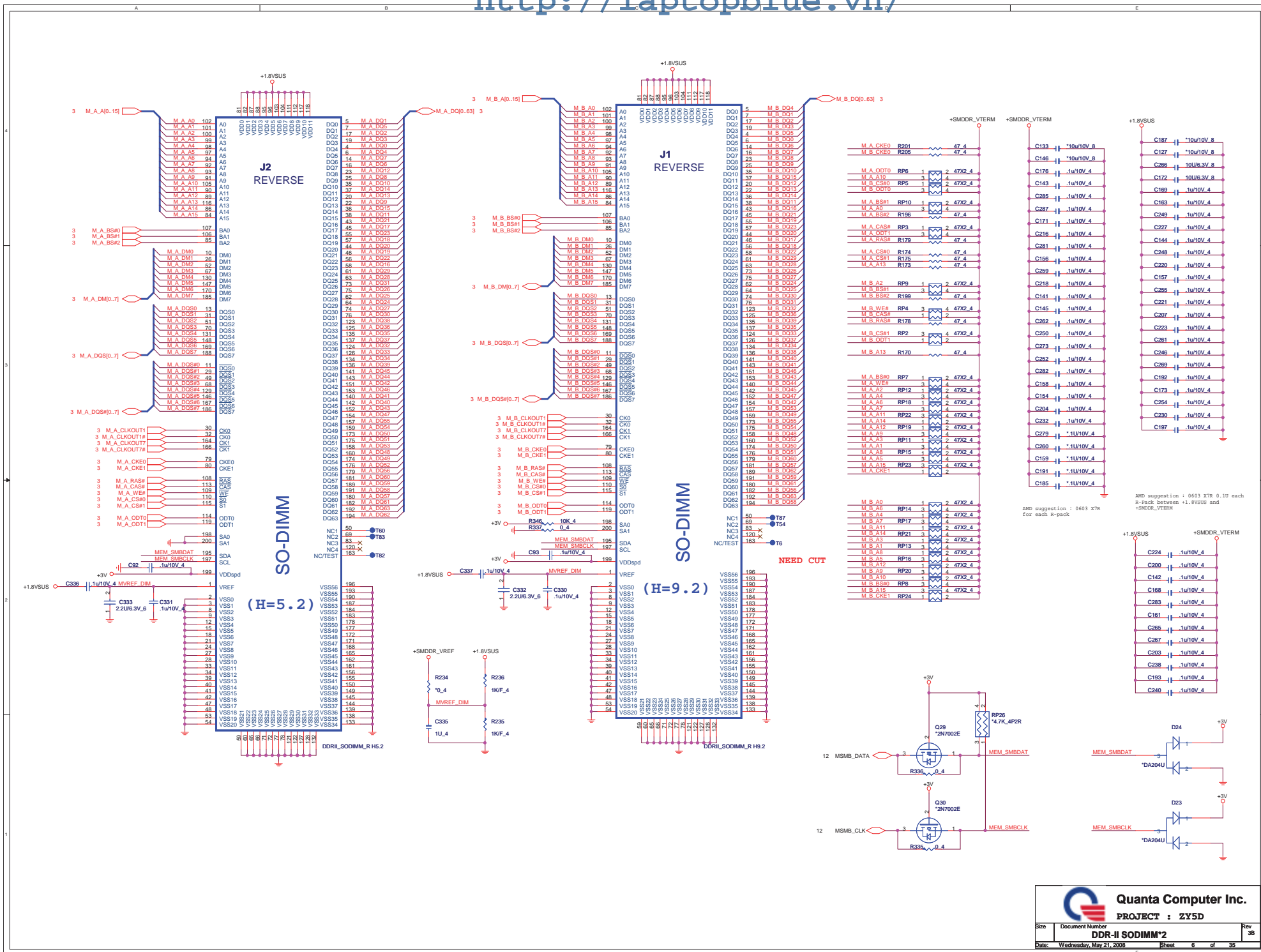


Athlon 64 S1g2 SOCKET_638_PIN
Athlon 64 S1g2
Processor Socket
SOCKET_638_PIN



Athlon 64 S1g2 SOCKET_638_PIN





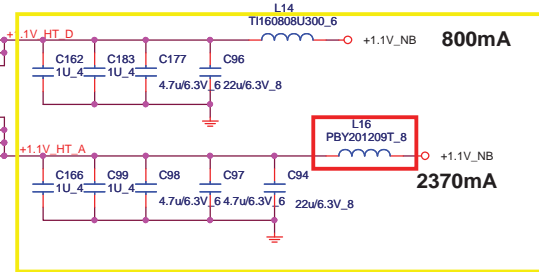
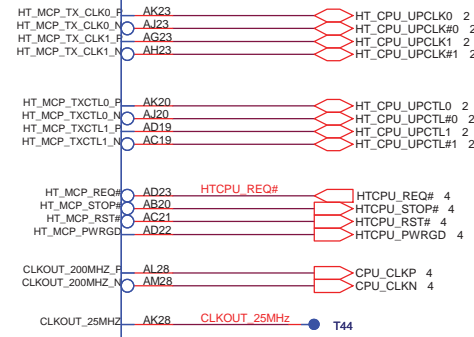
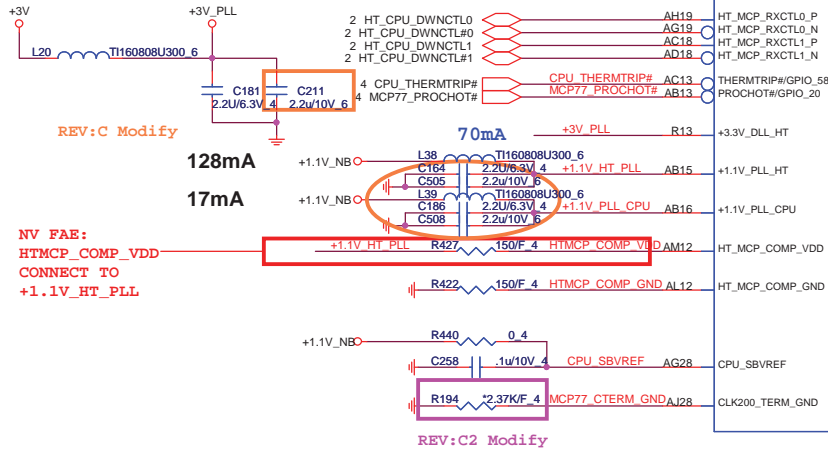
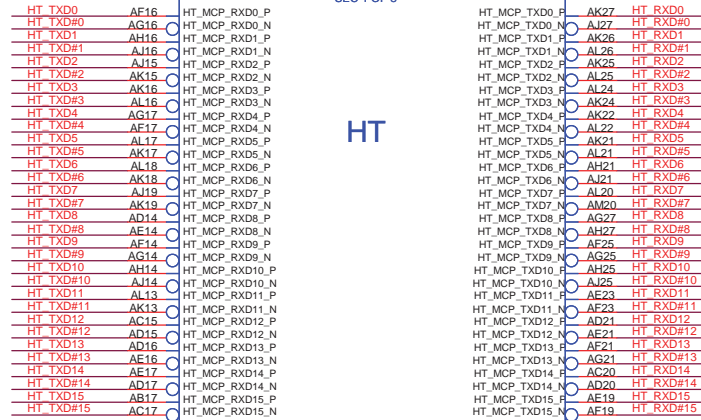
2 HT_TXD[15..0] 2 HT_RXD[15..0]
2 HT_TXD#[15..0] 2 HT_RXD#[15..0]

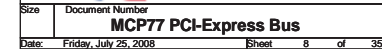
A1:AJMCP670T00
A2:AJMCP670T04

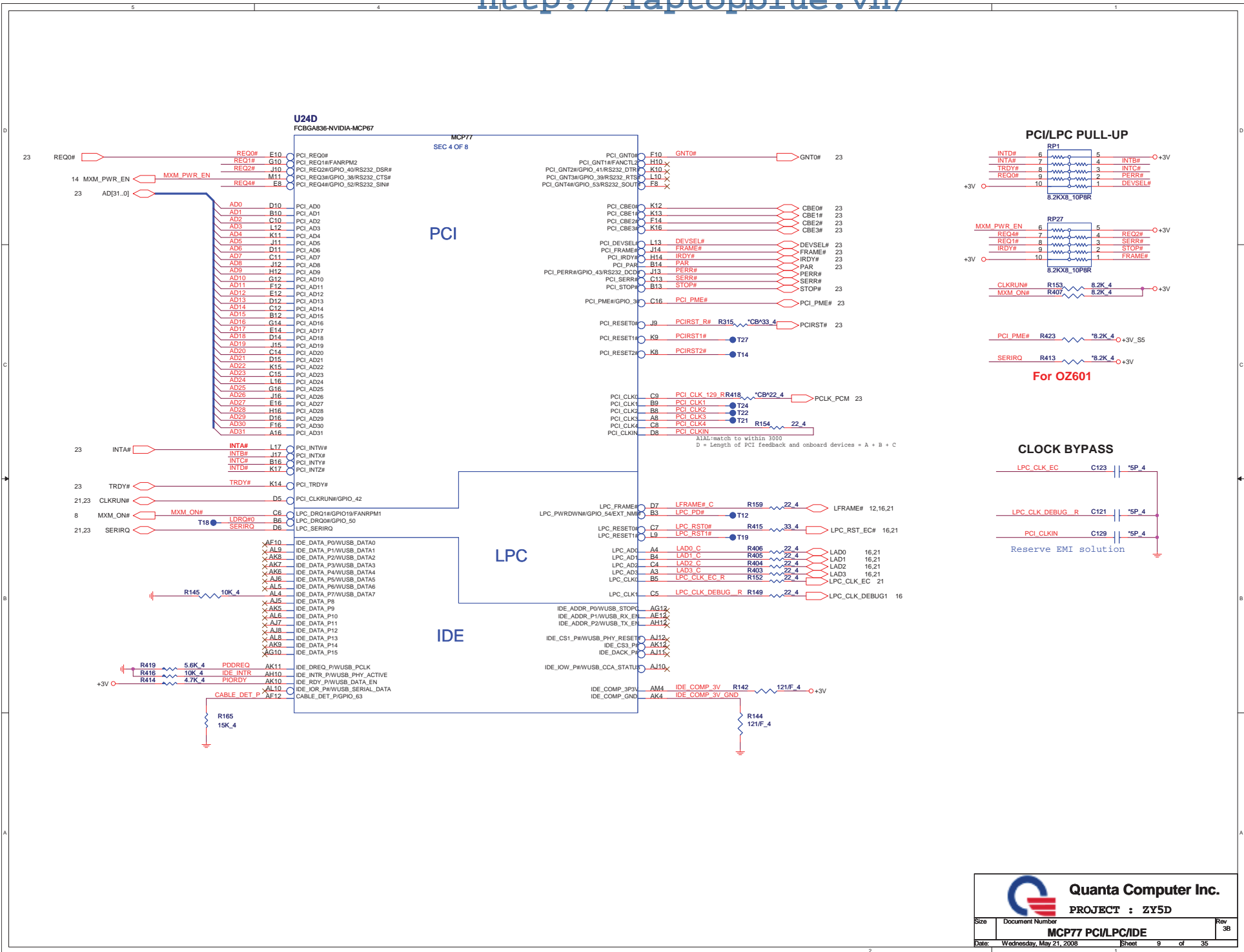
U24A
FCBGA836-NVIDIA-MCP67

SEC 1 OF 8

HT









U24E
FCBG836-NVIDIA-MCP67

SEC 5 OF 8

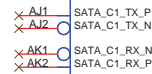
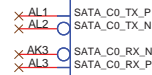
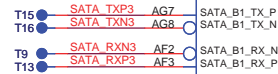
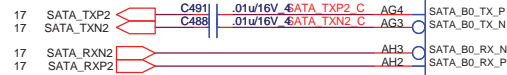
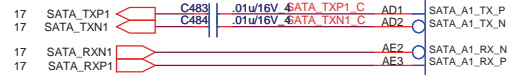
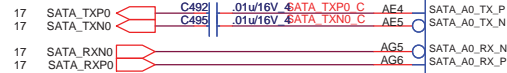
SATA

USB

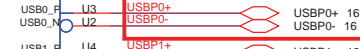
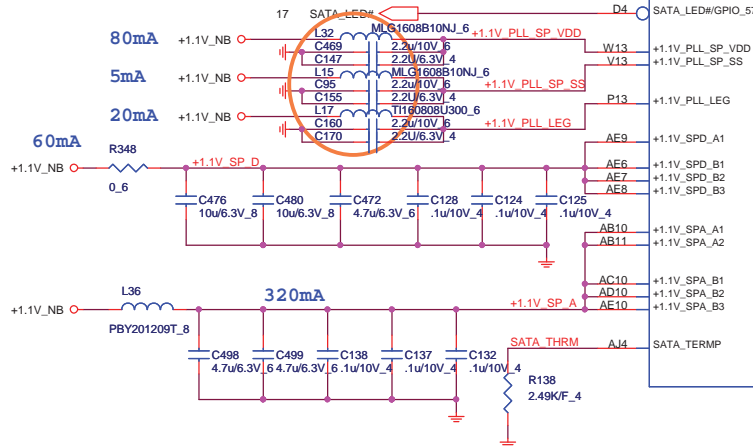
[SATA HDD 1]

[SATA HDD 2]

[SATA ODD]



REV:C Modify



MINI CARD * 2

MINI CARD * 2

BLUETOOTH

REV:C Modify

INT LEFT USB 2

CARD READER

INT LEFT USB 1

Fingerprint

EXT USB * 2

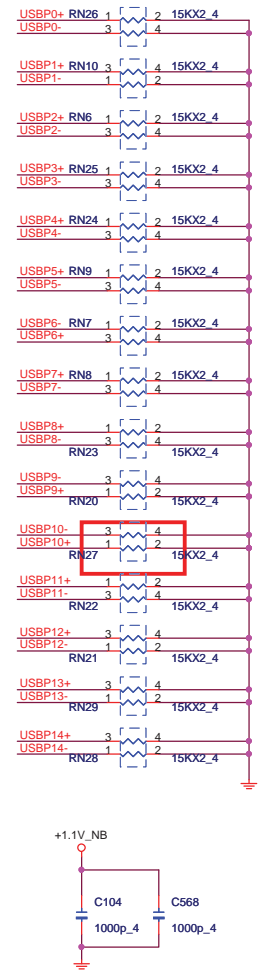
Docking

CCD

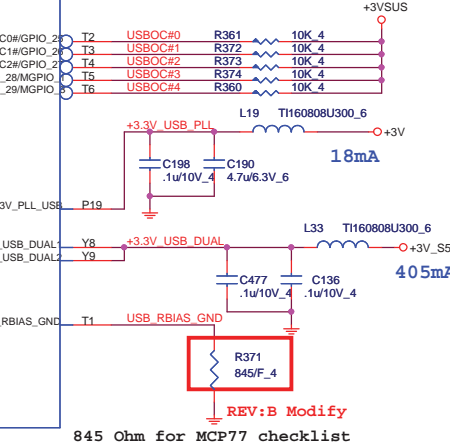
EXT USB * 2

NEW CARD

USB PULL-DOWN



REV:B Swap
Modify

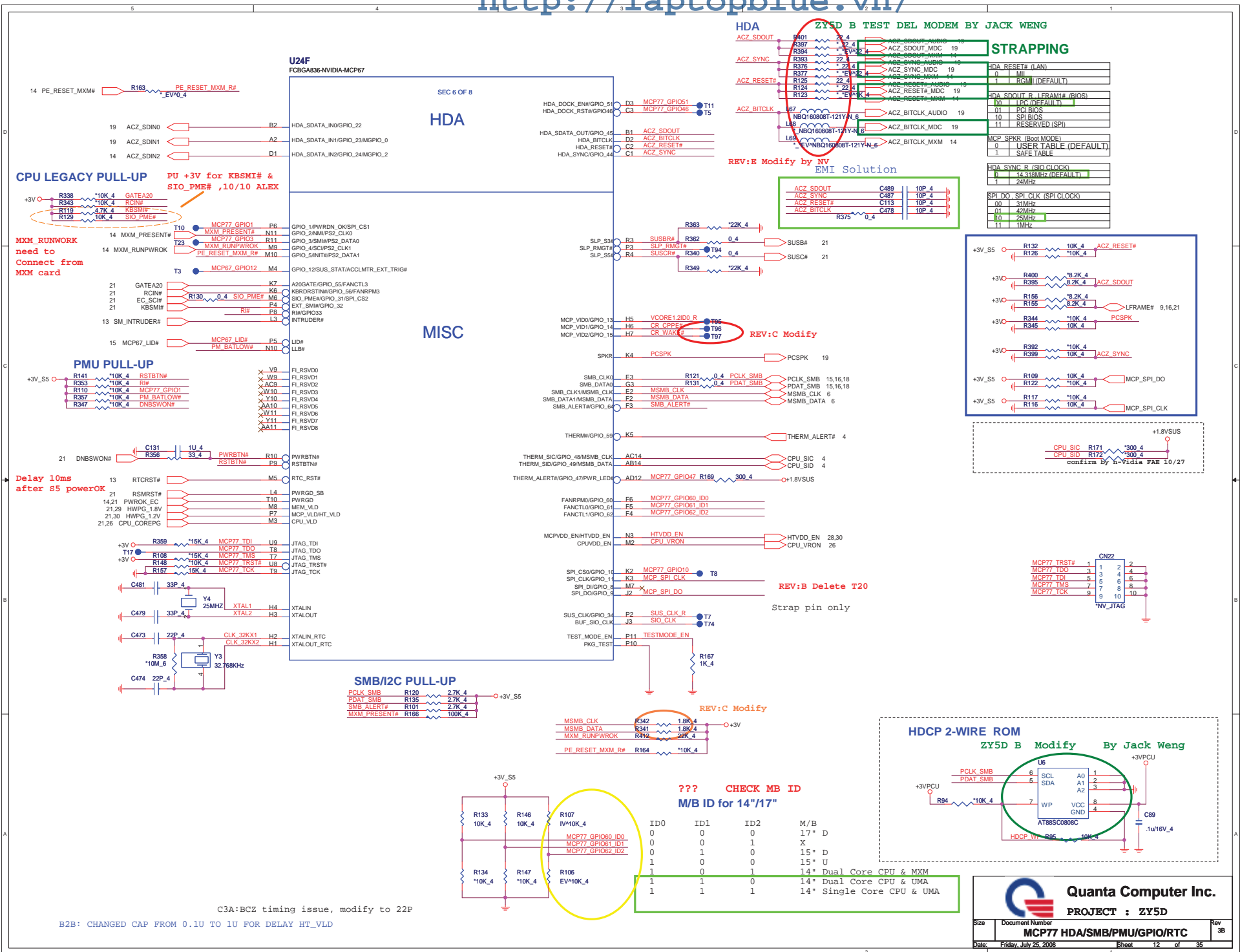


845 Ohm for MCP77 checklist

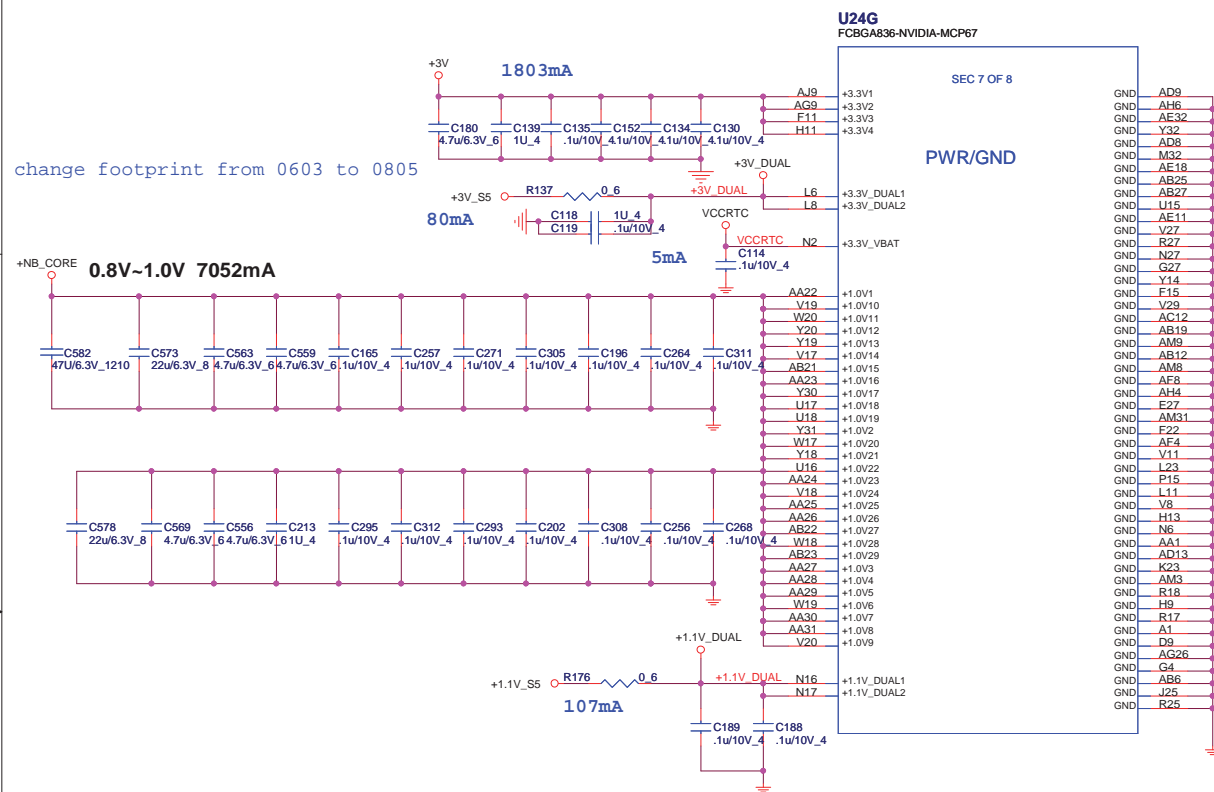


Quanta Computer Inc.
PROJECT : ZY5D

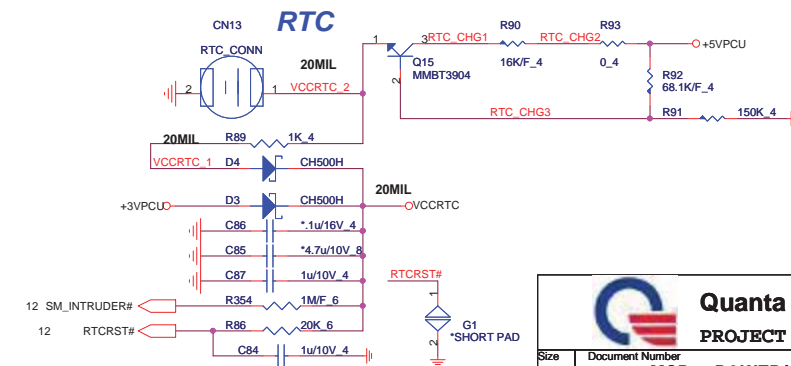
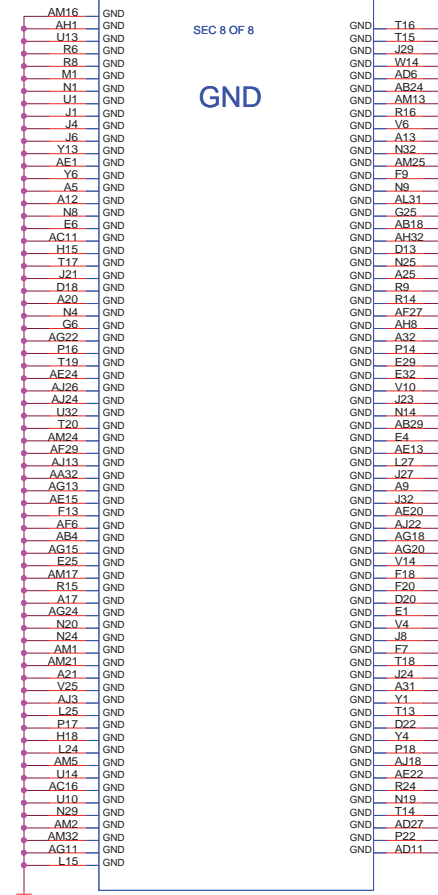
Size	Document Number	Rev
	MCP77 SATA and USB	3B
Date:	Wednesday, May 21, 2008	Sheet 11 of 35

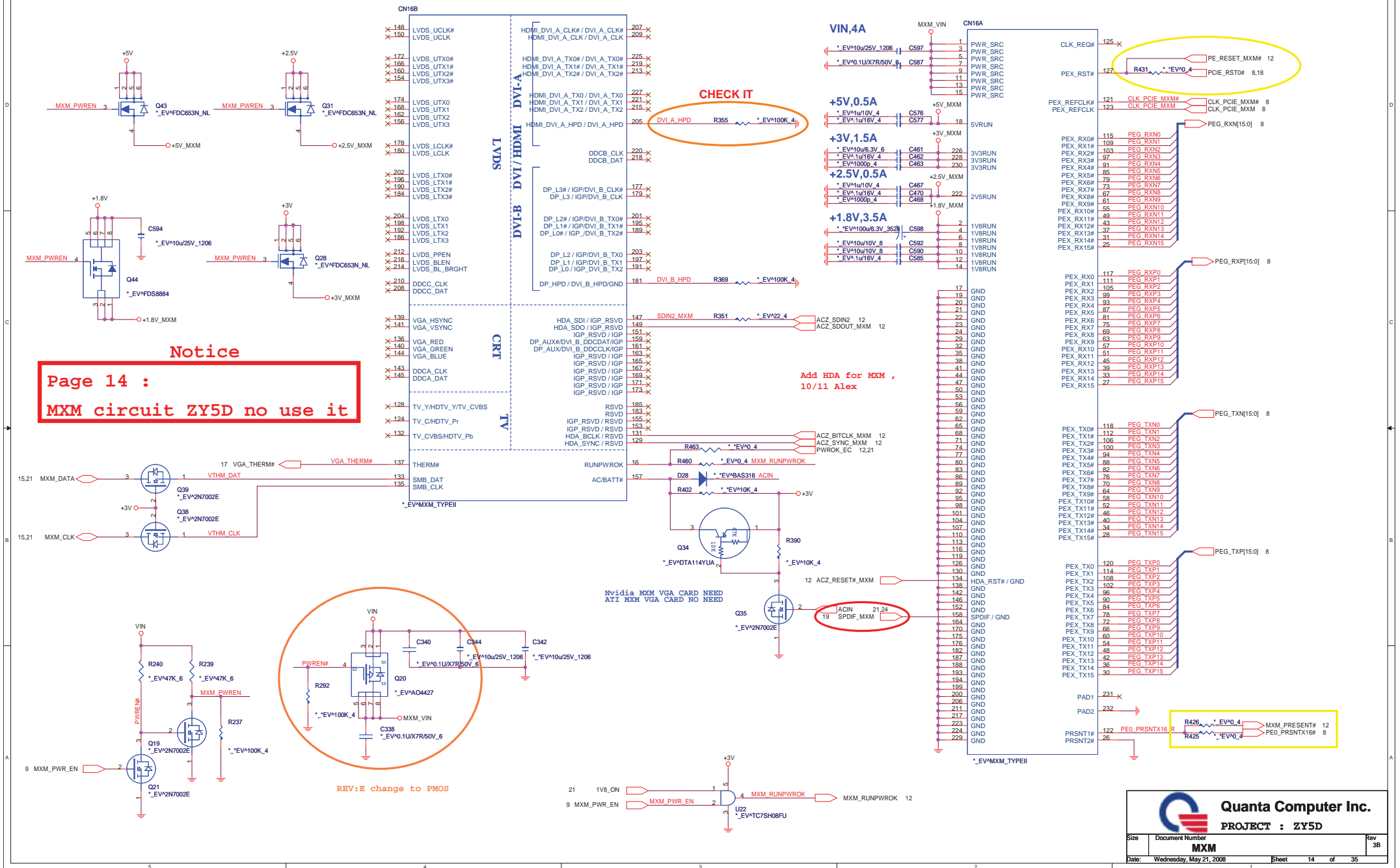


MCP77 POWER PLANE/GND & BYPASS

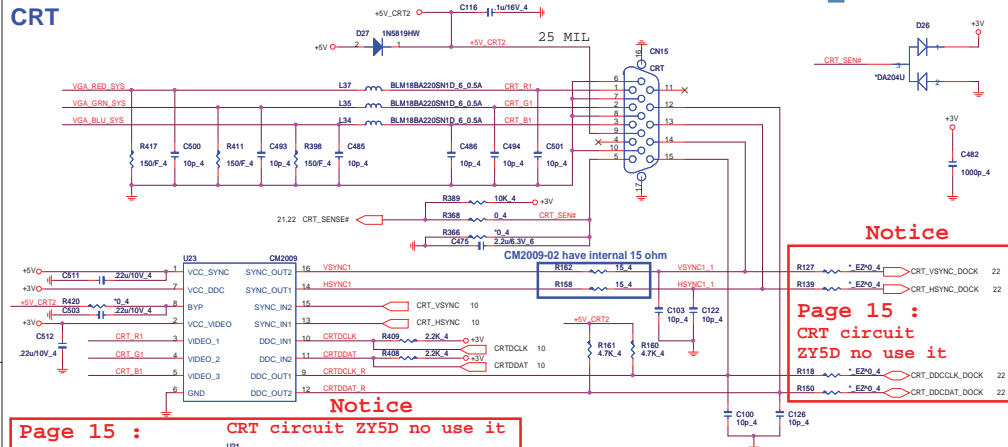


U24H
FCBGA836-NVIDIA-MCP67

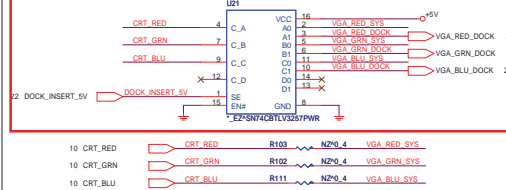




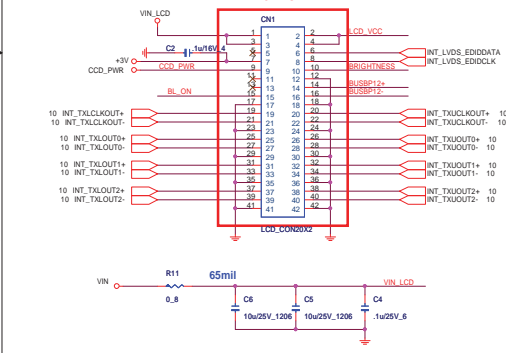
CRT



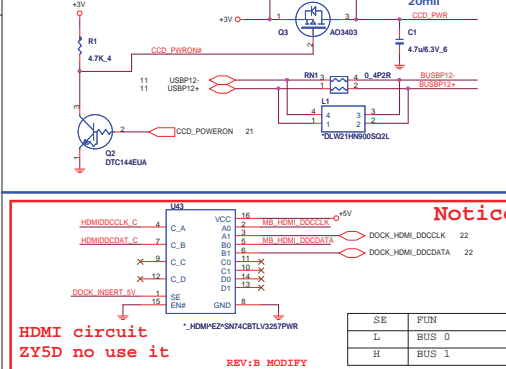
Page 15 :
CRT circuit ZY5D no use it



LVDS



Camera



HDMI circuit
ZY5D no use it

REV:B MODIFY

SEL	FUN
H	DOCK (port B)
L	BUS 0
H	BUS 1

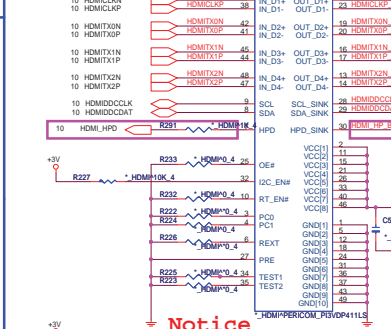
BRIGHTNESS



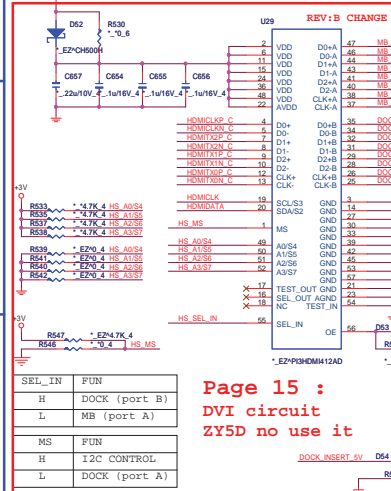
LCD EDID SMBus PU



HDMI



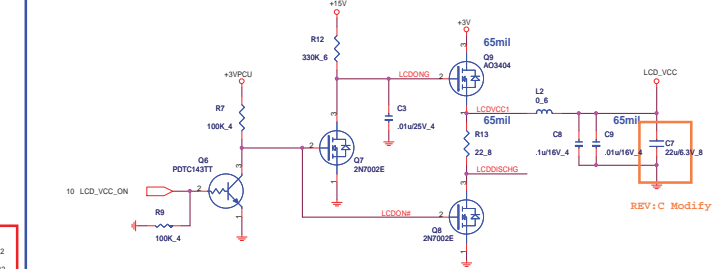
Notice



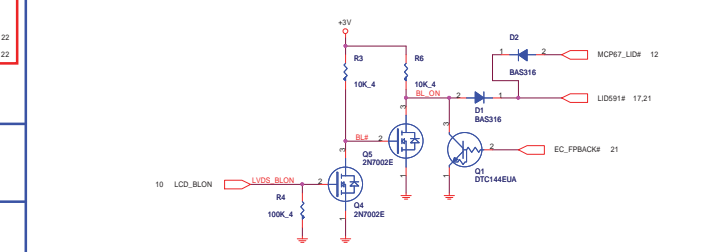
Page 15 :
DVI circuit
ZY5D no use it

REV:B MODIFY

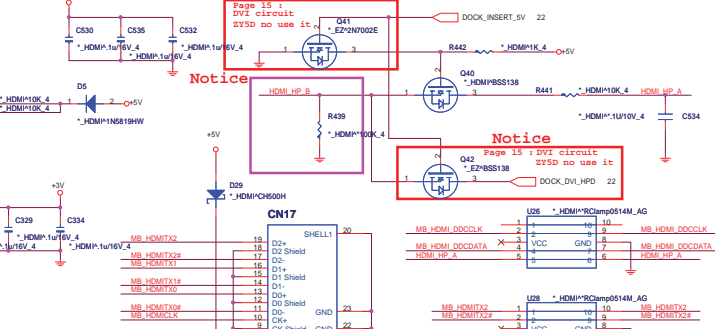
LCD_ON



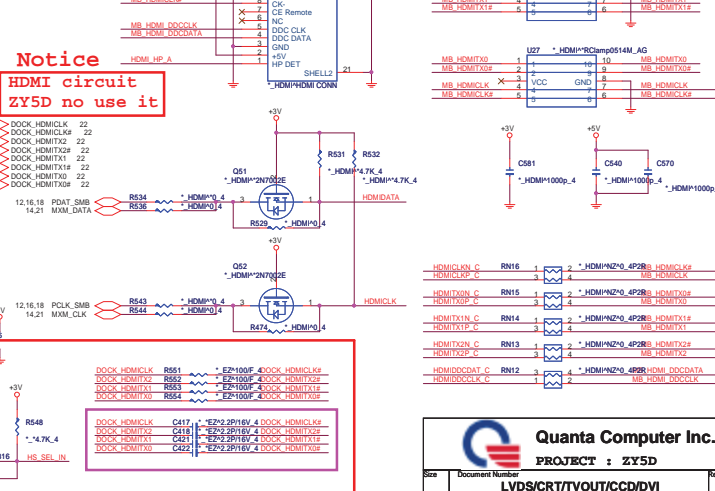
Backlight Control



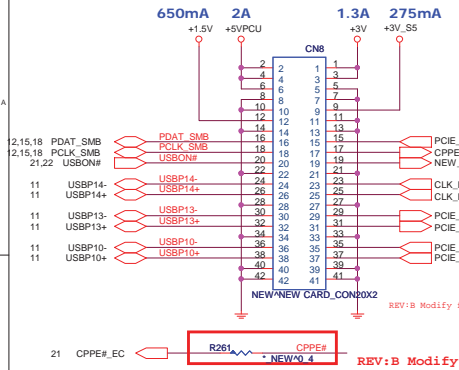
REV C2: R439 Modify connect to U8 pin30; add R291 connect from U8 pin7 to U24 pin AL32.



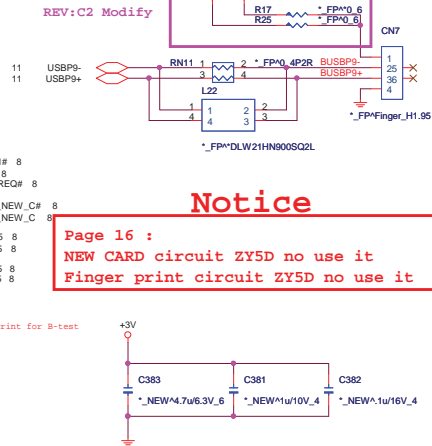
Notice



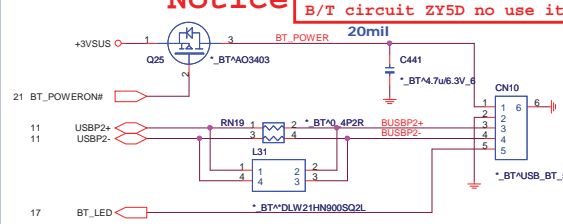
To NEW-CARD & EXT. USB



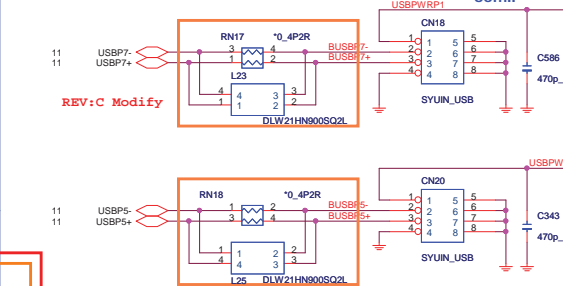
Fingerprint



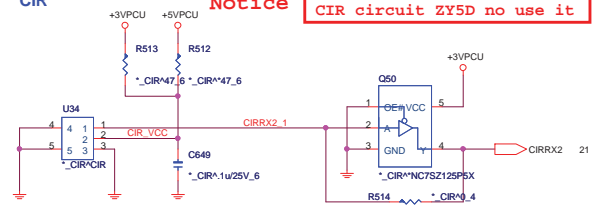
Bluetooth



INT. USB

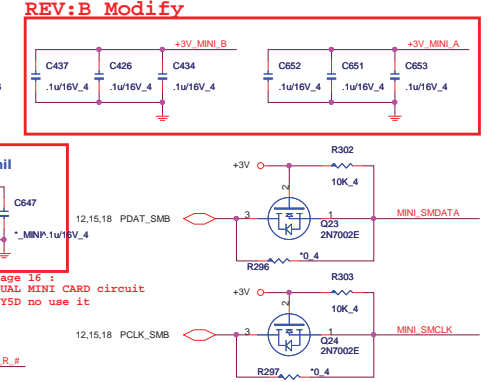
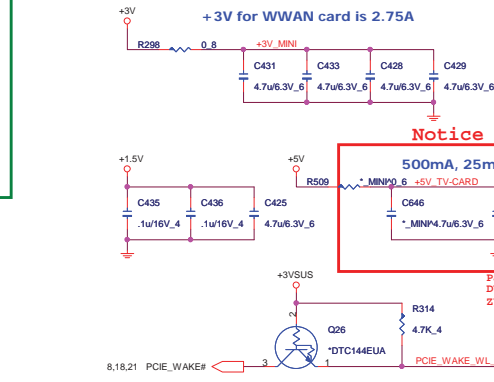
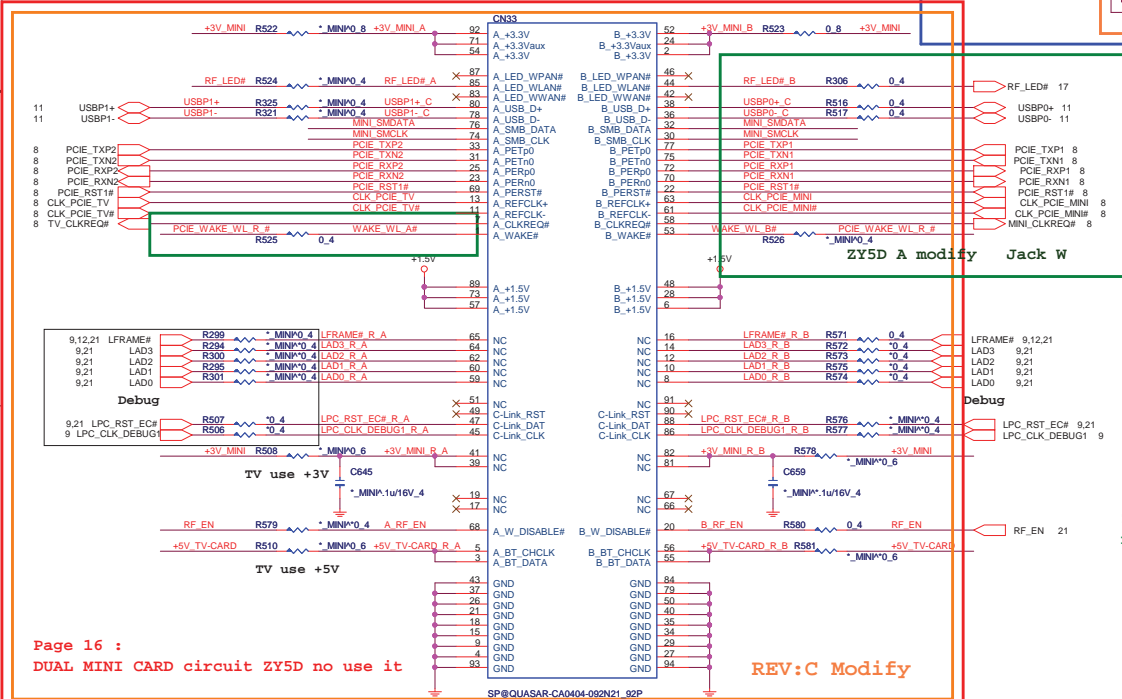


CIR



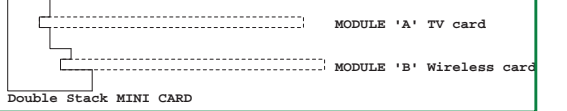
MINI-CARD

Notice



ZY5D B test has modified to single stack no TV card, only Wireless card

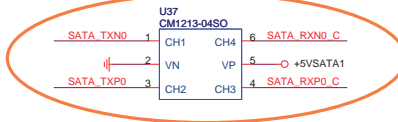
CAPACITOR on Module



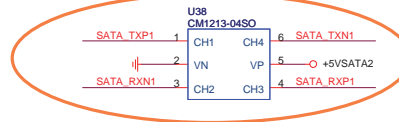
Page 16 : DUAL MINI CARD circuit ZY5D no use it

REV:C Modify

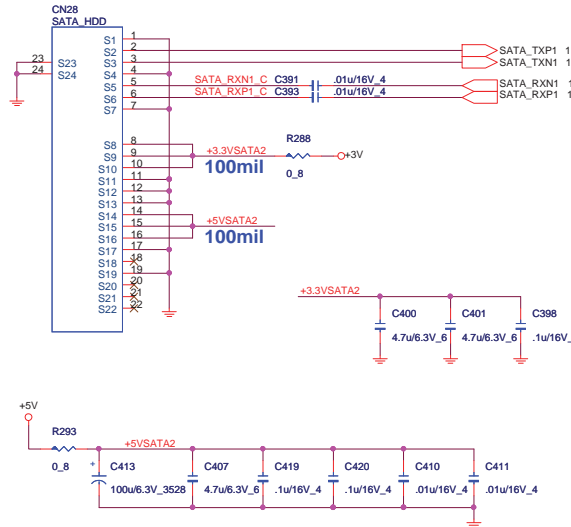
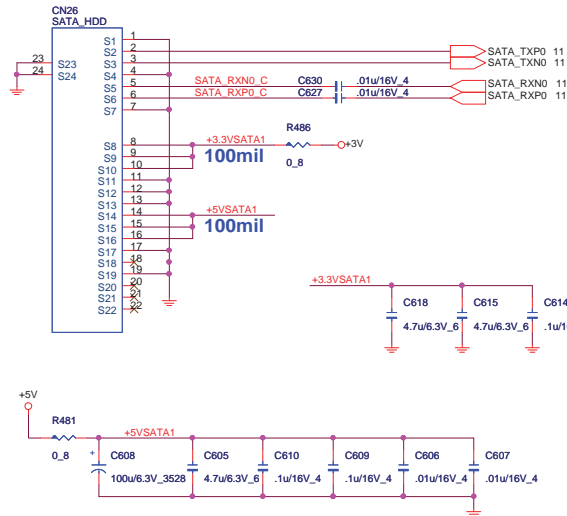
SATA1



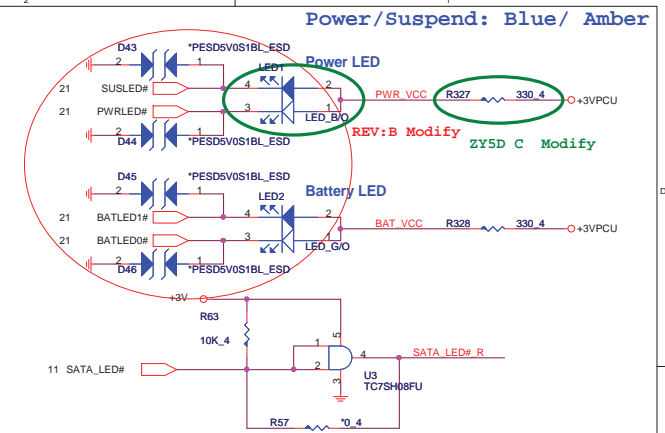
SATA2



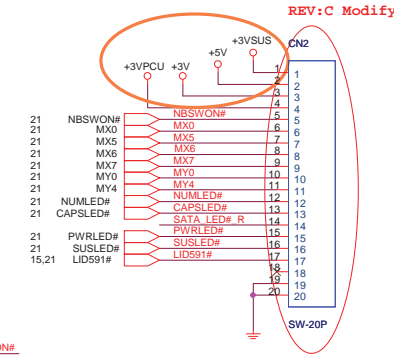
REV:E add ESD



LED

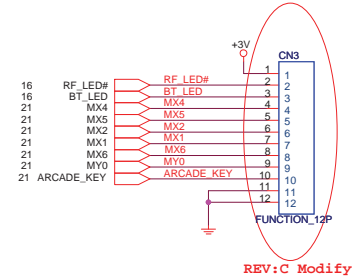


To Power/B



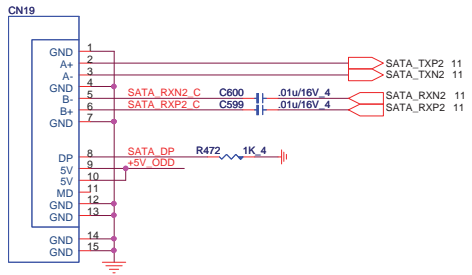
REV:B Modify

To Switch/B

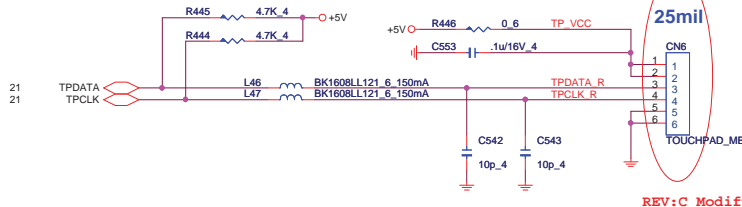


REV:C Modify

ODD (SATA)

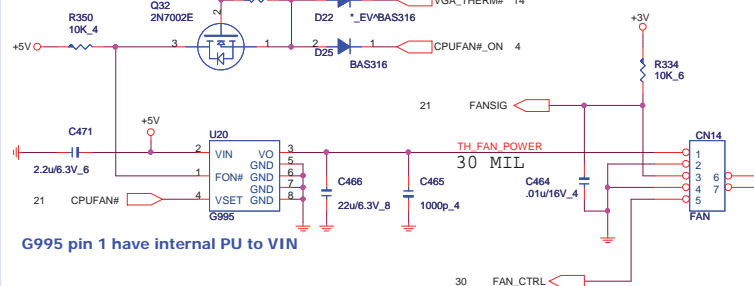


TP CONN



REV:C Modify

FAN



G995 pin 1 have internal PU to VIN

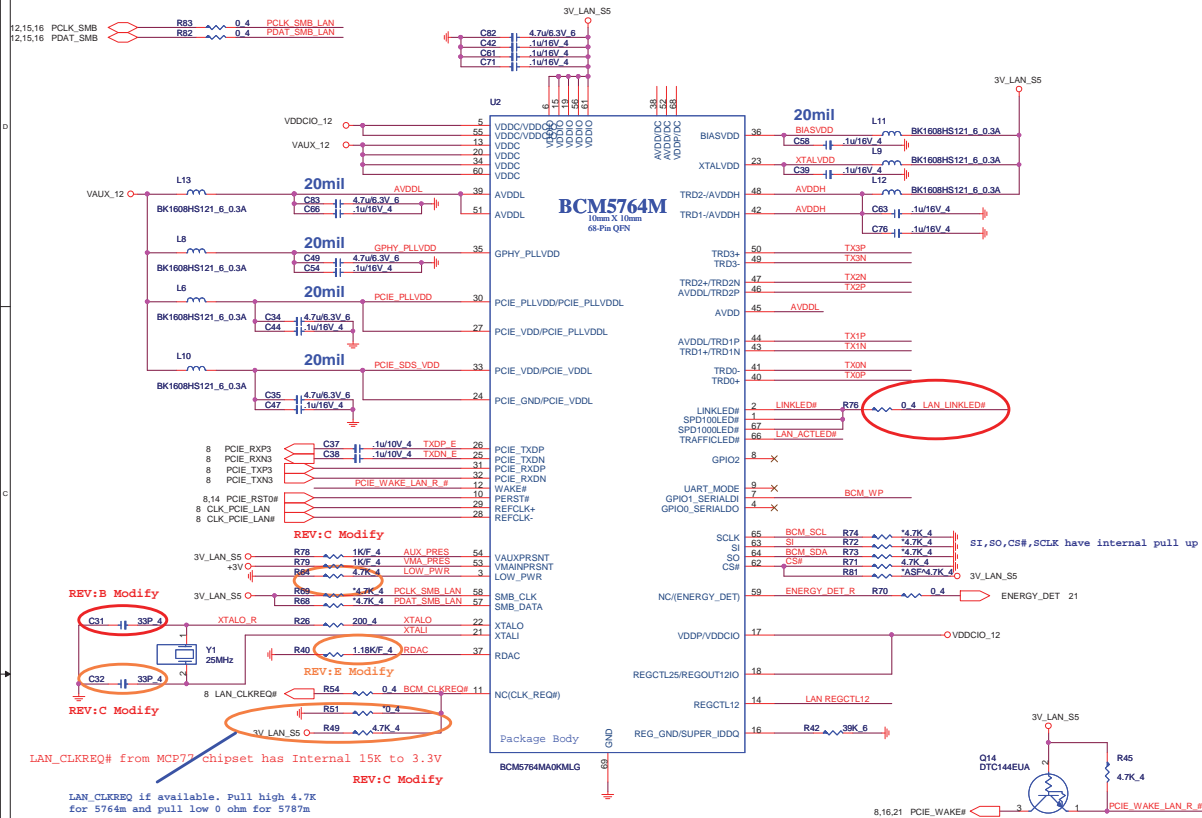
REV:E add ESD



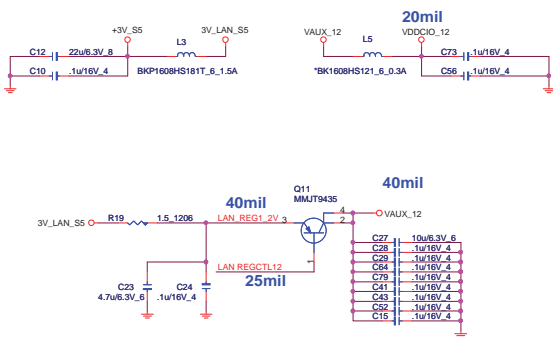
Quanta Computer Inc.
PROJECT : ZY5D

Size	Document Number	Rev
	HDD/ODD/LED/SW/TP/FAN	3B
Date:	Friday, July 25, 2008	Sheet 17 of 35

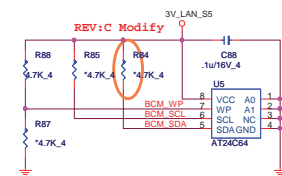
Giga LAN BCM5787M/5764M



LAN POWER

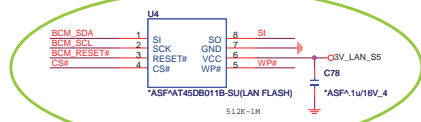


EEPROM



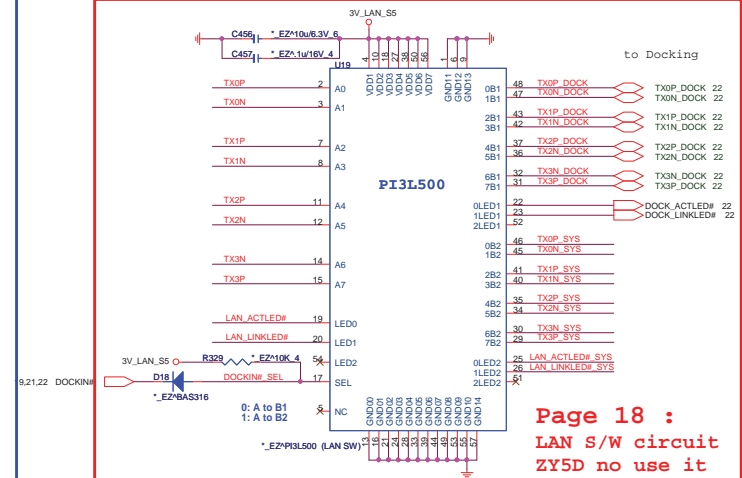
EEPROM Strapping

	SO	SI	CS#	SCLK
24c64	1	1	0	1
AT45DB011B	1	0	1	1

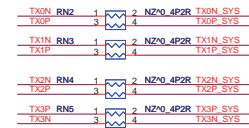


LAN SWITCH

Notice

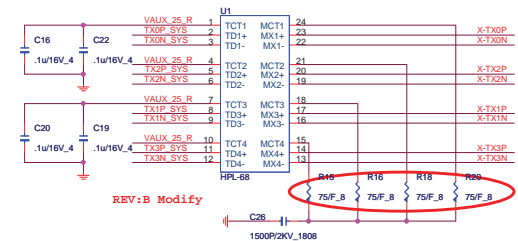


Page 18 :
LAN S/W circuit
ZY5D no use it

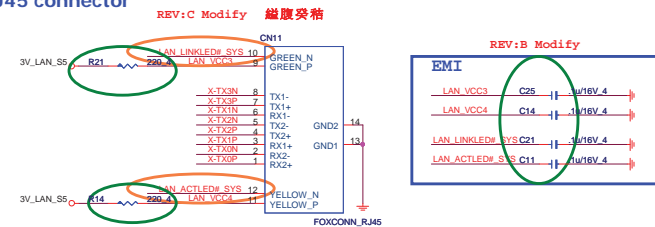


Transformer

Source 1:	DELTA	LFE9249	DB0ZR1LAN11
Source 2:	Bothand	GST5009	DBKN1NLAN03

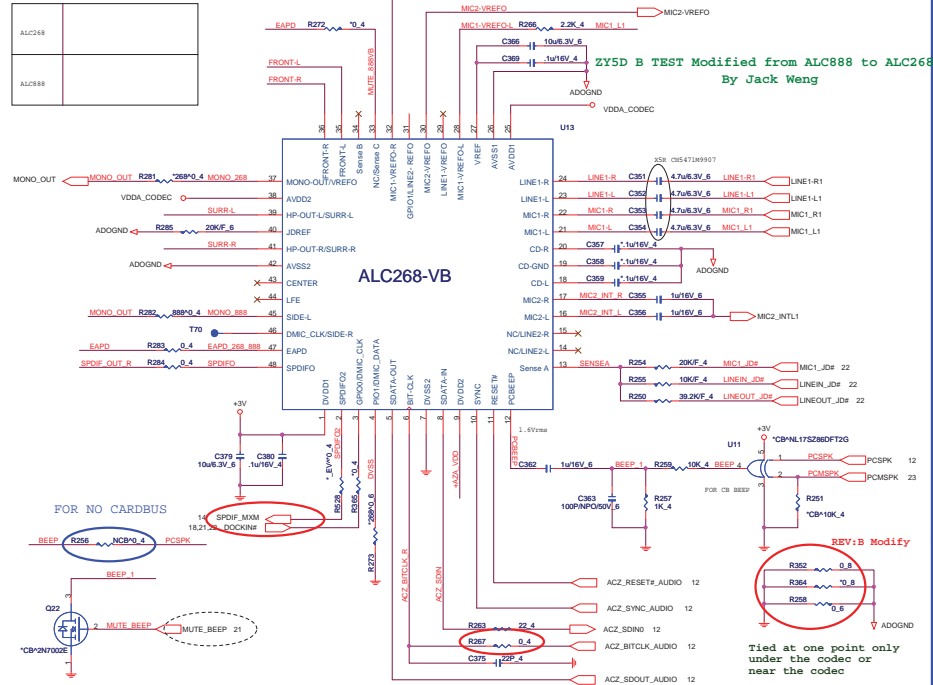


RJ45 connector

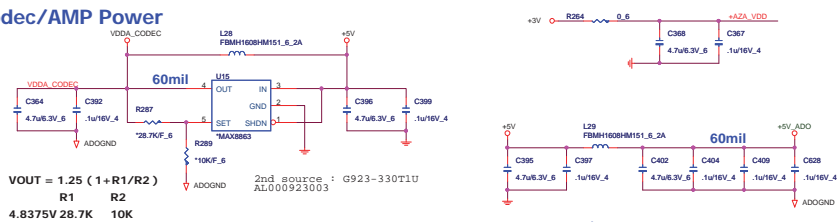


ZY5D C TEST Modified footprint from 0402 to 0805
to solve Lan burnt issue on Acer project
By Jack Weng

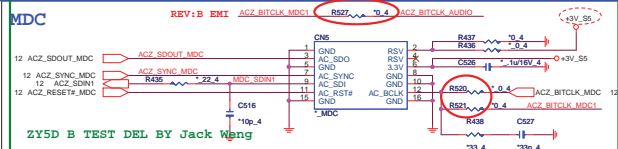
CODEC



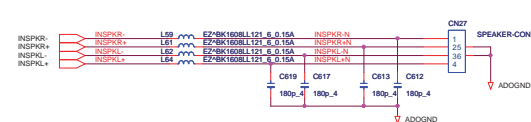
Codec/AMP Power



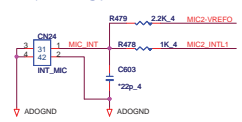
MDC



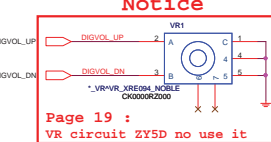
SPEAKER



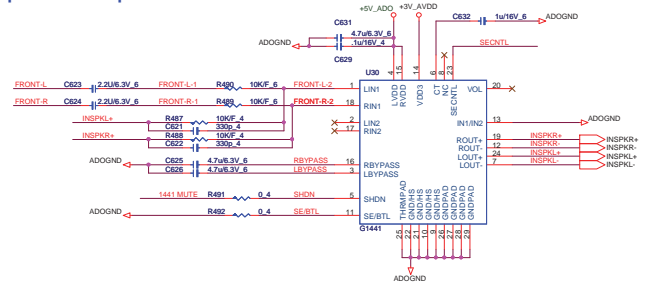
INT MIC.



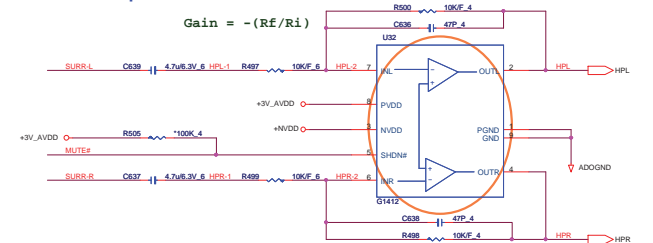
VR



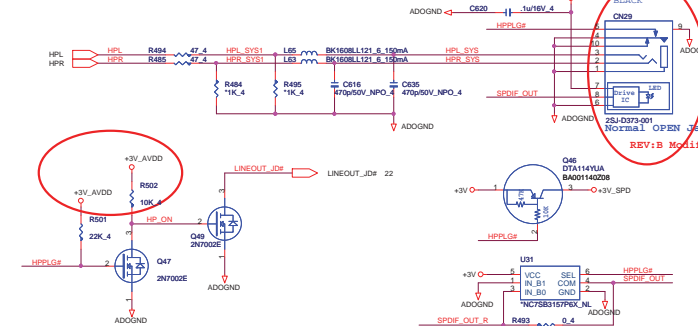
Speaker Amplifier



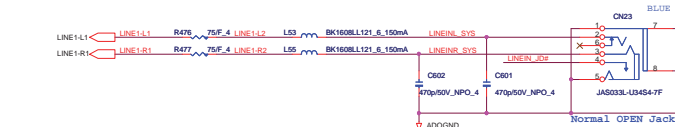
LINE OUT Amplifier



LINE OUT/SPDIF



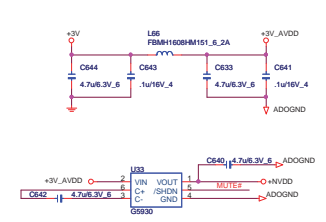
LINE IN



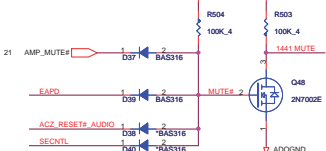
MIC



Amplifier POWER

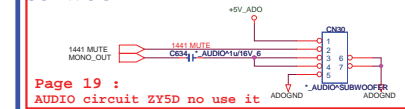


MUTE



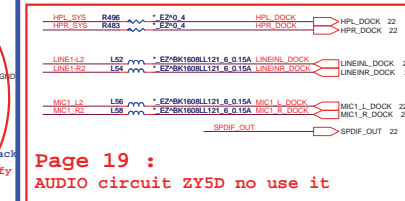
SUBWOOFER

Notice

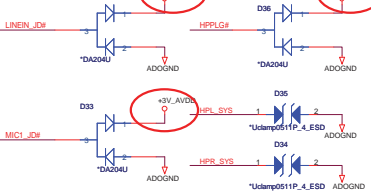


TO DOCKING

Notice



ESD

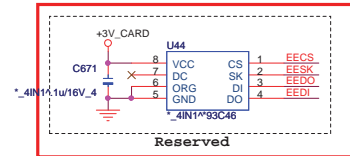


Notice

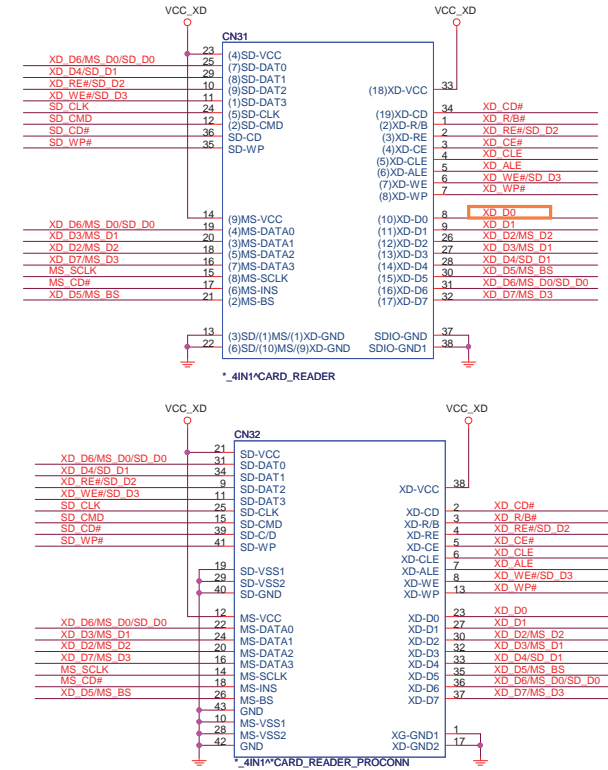
Page 20 :
4 IN 1 CARD READER circuit ZY5D no use it

RTS5158E

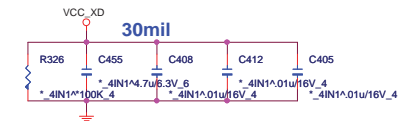
EEPROM



4 IN 1 CARD READER



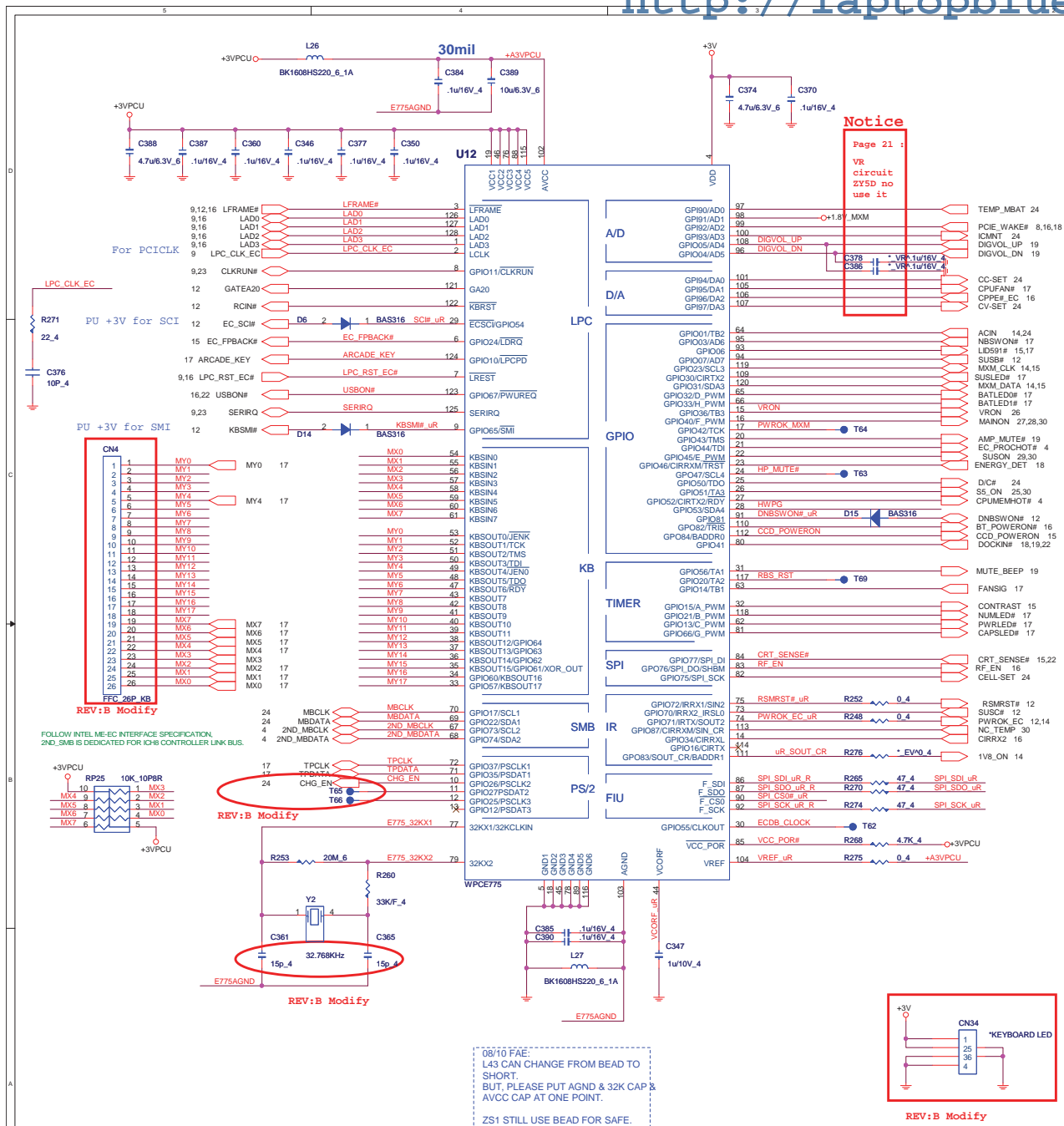
CARDREADER POWER



Quanta Computer Inc.

PROJECT : ZY5D

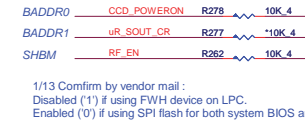
Size	Document Number	Rev
	CARD READER RTS5158E	3B
Date:	Wednesday, May 21, 2008	Sheet 20 of 35



I/O ADDRESS SETTING

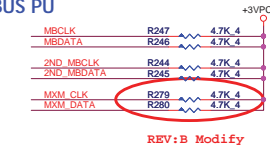
I/O Address	
BADDR1-0	Index Data
0 0	XOR TREE TEST MOD
0 1	CORE DEFINED
1 0	2Eh 2Fh
1 1	164Eh 164Fh

SHBM=0: Enable shared memory with host BIOS



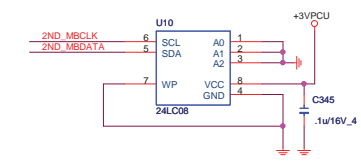
1/13 Confirm by vendor mail :
Disabled ('1') if using FWH device on LPC.
Enabled ('0') if using SPI flash for both system BIOS and EC firmware

SM BUS PU

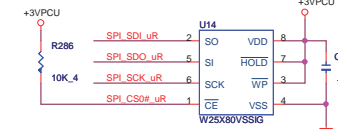


REV:B Modify

ACER ID

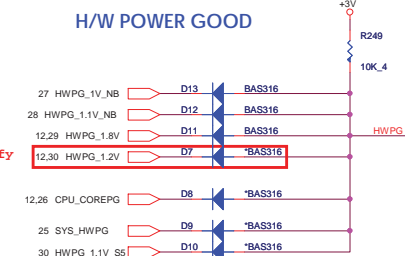


SPI FLASH



1/13 Confirm by vendor mail :
If the Southbridge enables 'Long Wait Abort' by default, the flash device should be 50MHz (or faster)

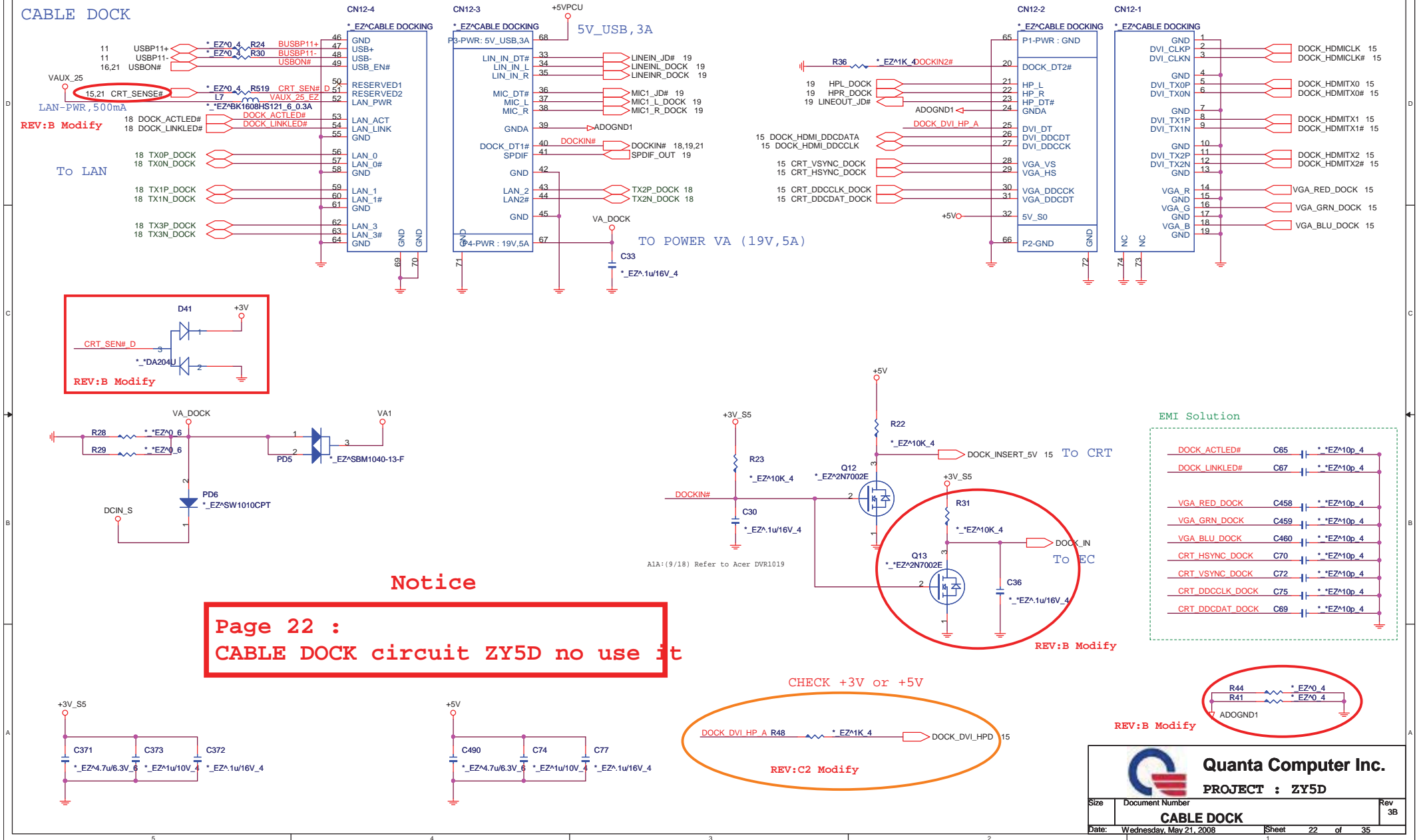
H/W POWER GOOD

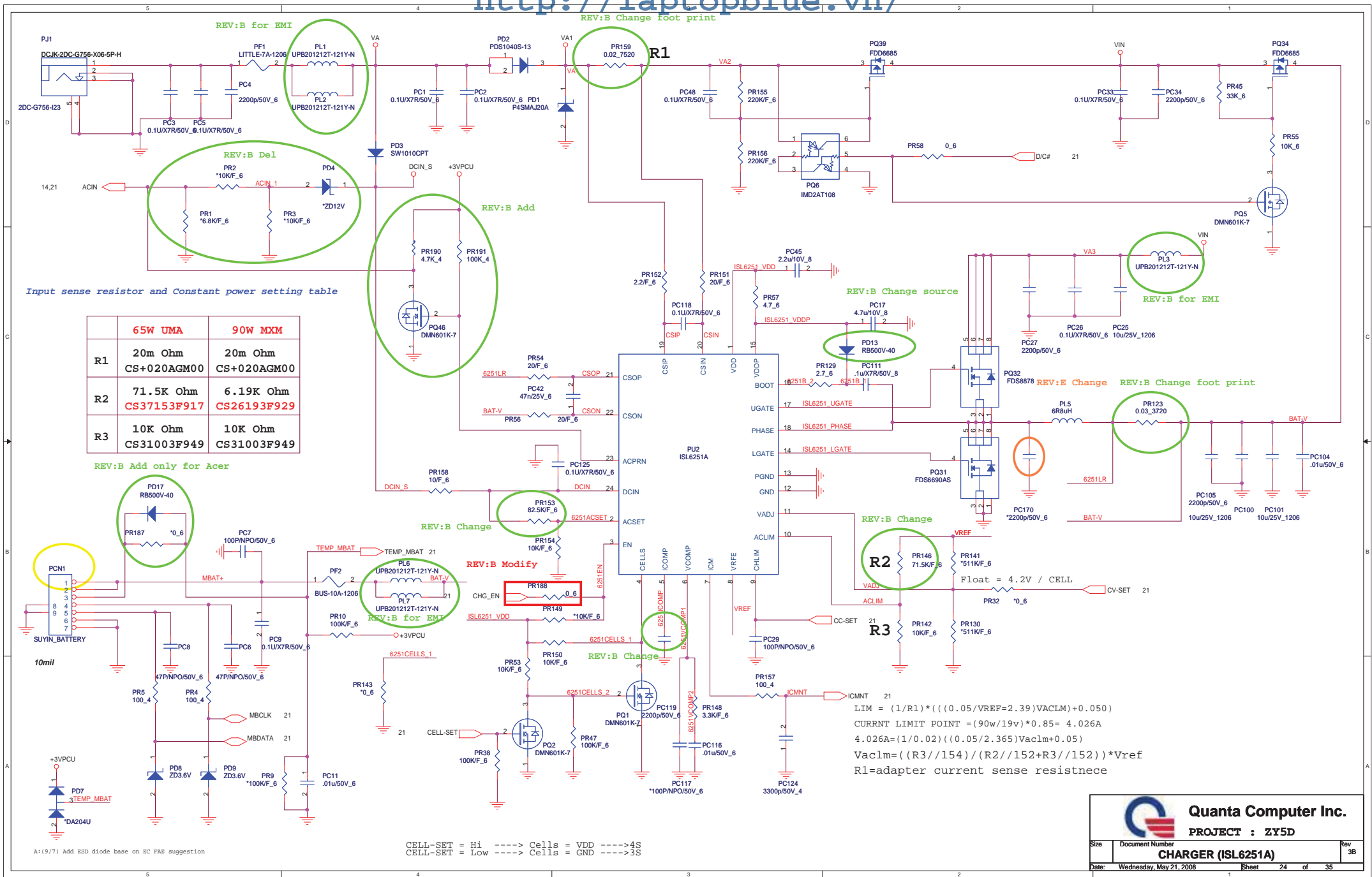


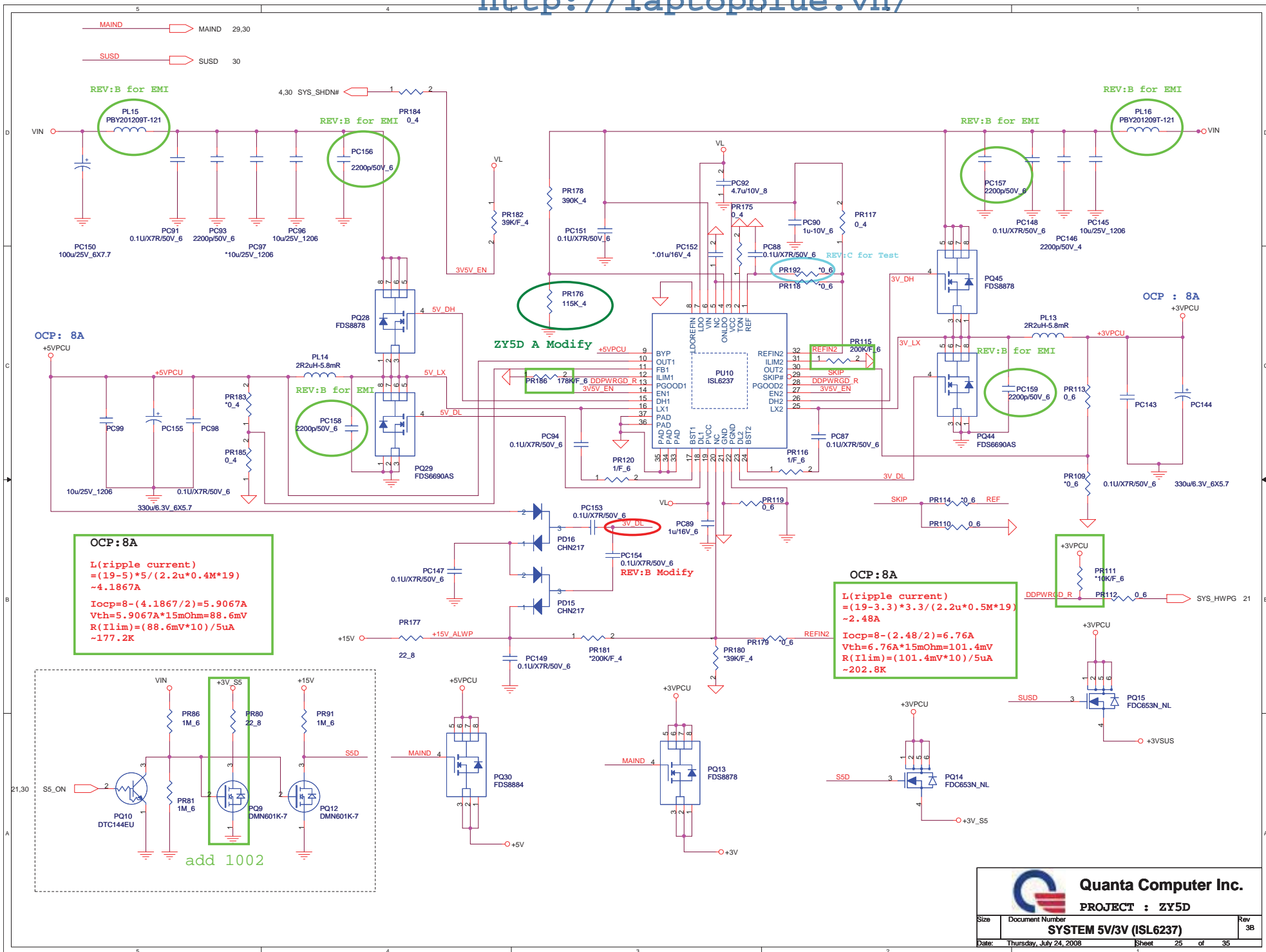
INTERNAL KEYBOARD STRIP SET

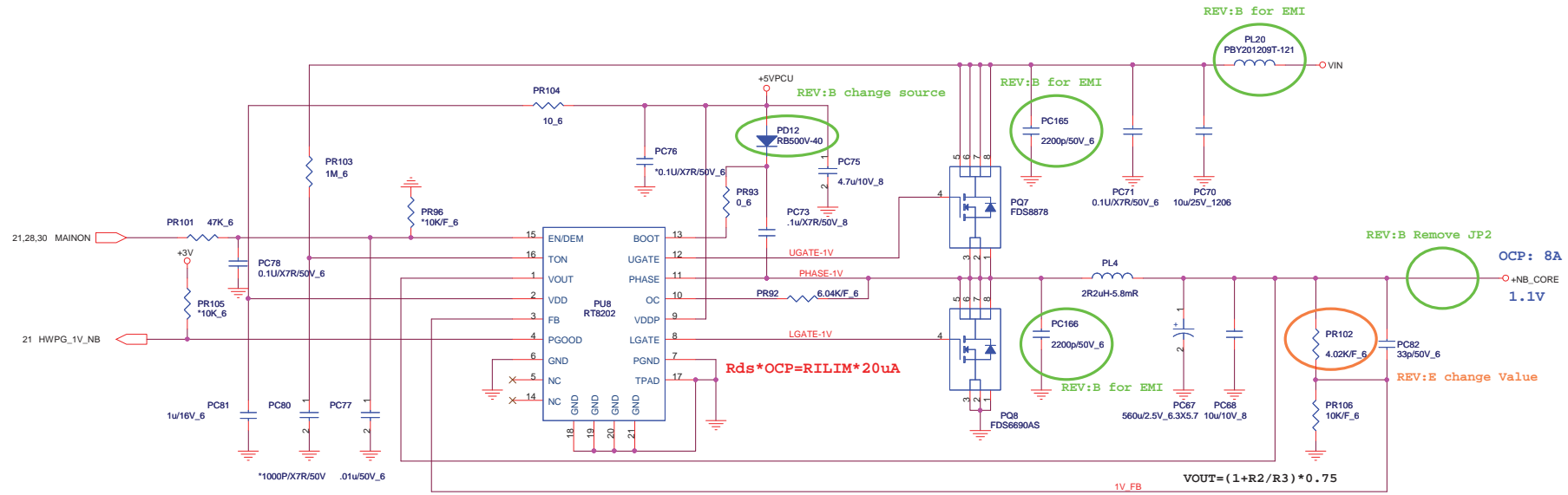


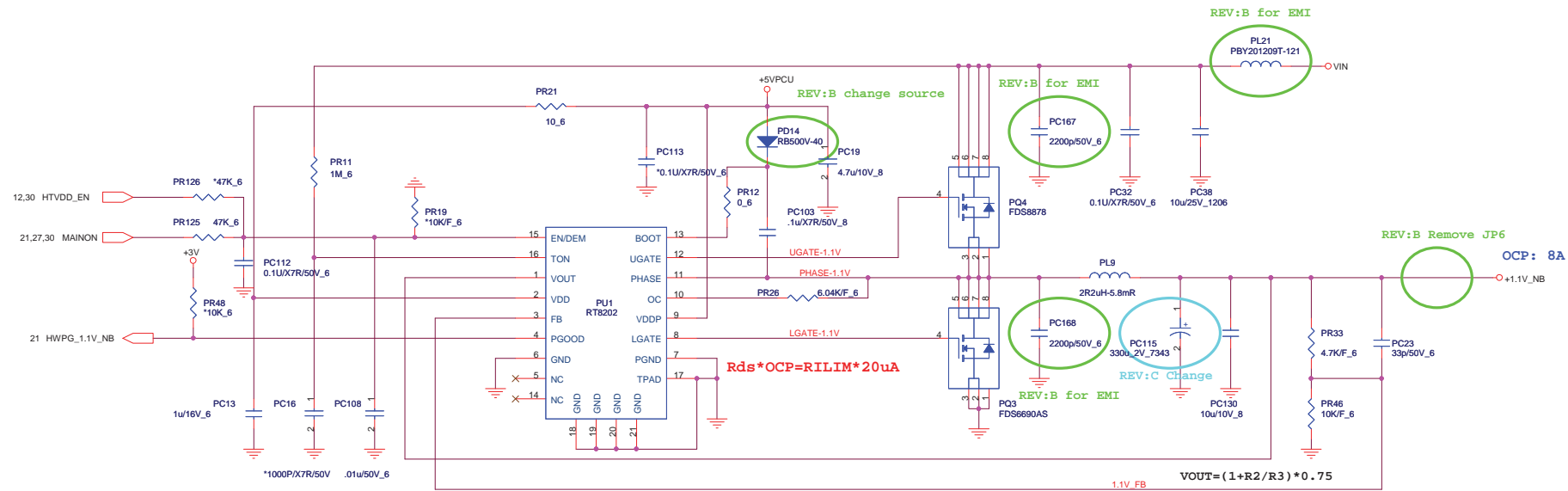
CABLE DOCK

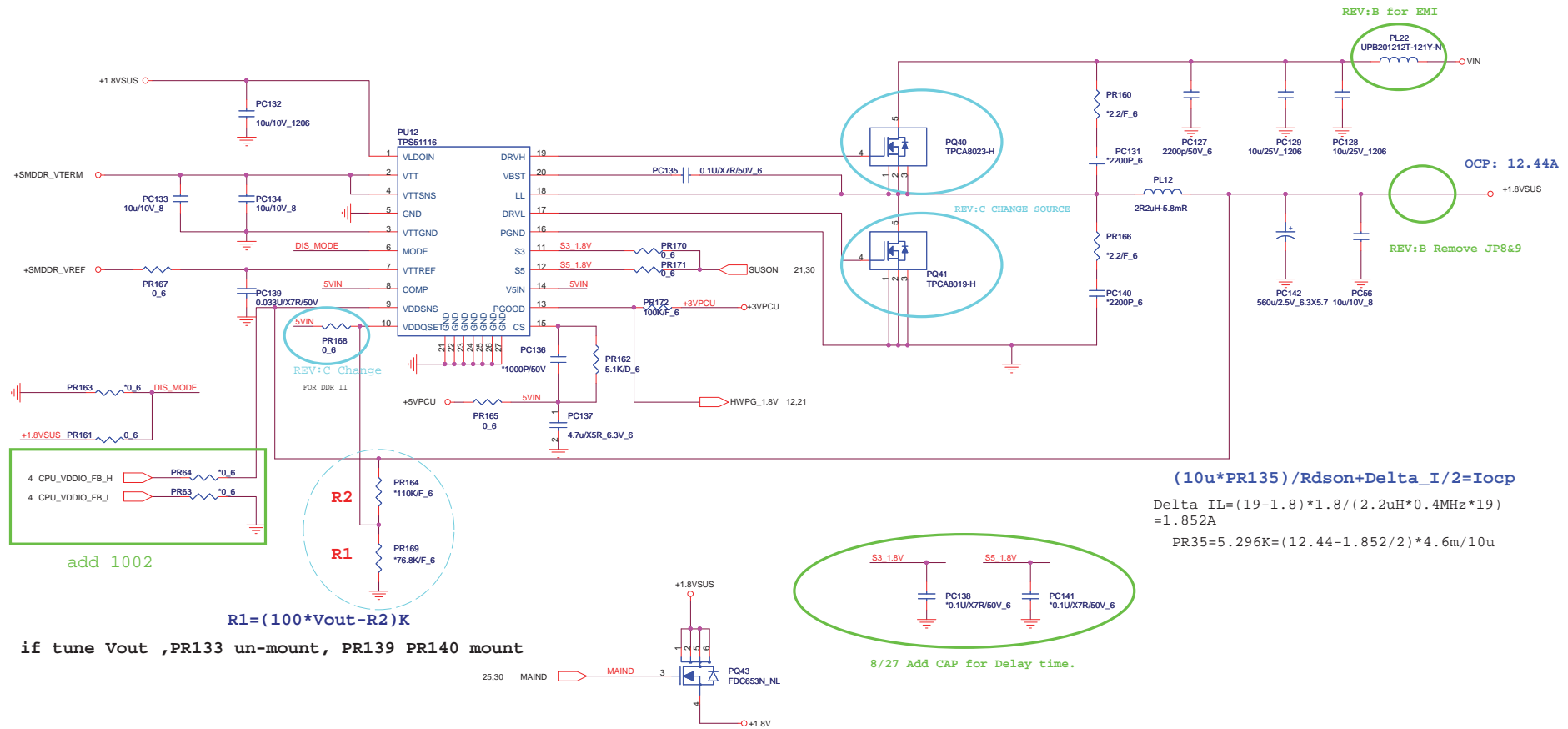












$$(10u \cdot PR135) / R_{dson} + \Delta I / 2 = I_{ocp}$$

$$\Delta I_L = (19 - 1.8) \cdot 1.8 / (2.2uH \cdot 0.4MHz \cdot 19) = 1.852A$$

$$PR35 = 5.296K = (12.44 - 1.852 / 2) \cdot 4.6m / 10u$$

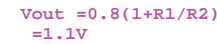


For EC control thermal protection (output 3.3V)

REV:B Change source


$$V_{out} = 0.8(1 + R_1/R_2) = 1.5V$$

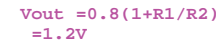
8/27 Add C for Delay time



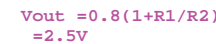
0.15A


$$V_{out} = 0.8(1 + R_1/R_2) = 1.5V$$

8/27 Add C for Delay time



1.5A



+2.5V



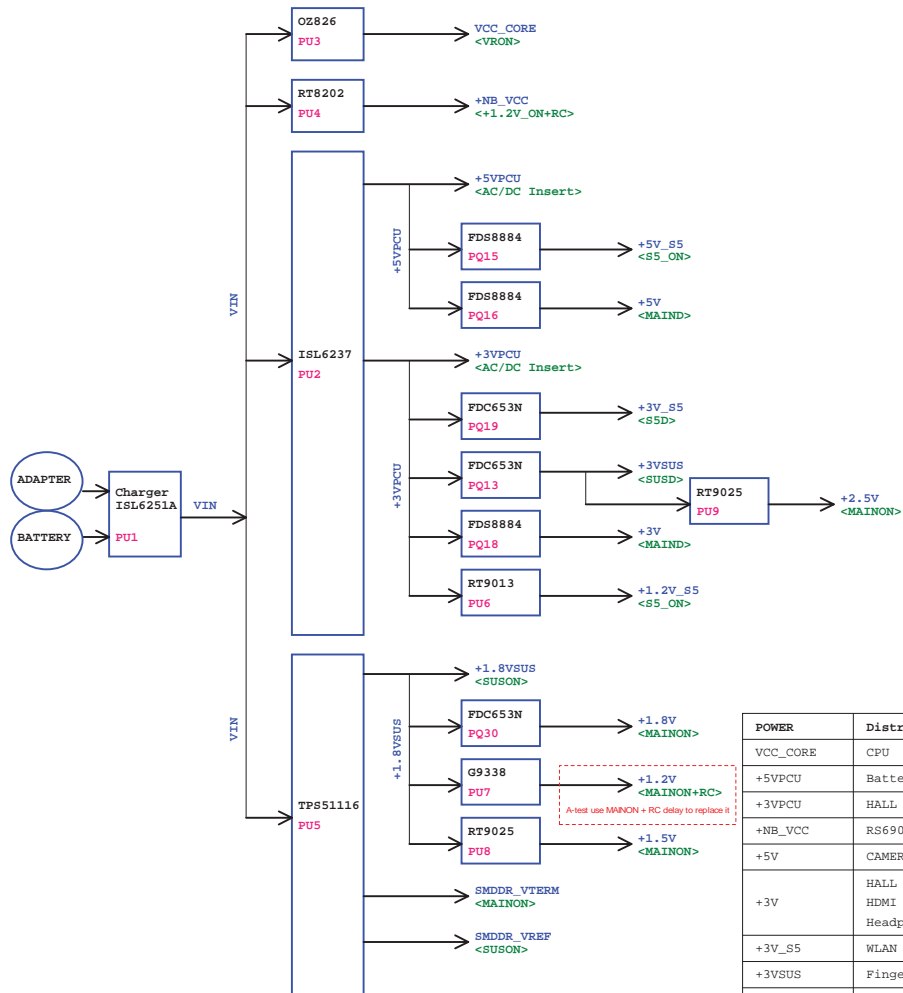
PROJECT : ZY5D

Discharge (1.1V/1.2V/2.5V)

Date: Thursday, July 24, 2008

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Rev	
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POWER	Distribution
VCC_CORE	CPU
+5VPCU	Battery LED , Power LED , USB , CIR , RTC
+3VPCU	HALL SENSOR , Battery LED , RF LED , kill SW , Jumper LED , KB , Power Board , EC , ID , SPI Flash , CIR
+NB_VCC	RS690M
+5V	CAMERA , Card Reader LED , ODD/HDD LED , Felica , T/P , T/sensor , CRT , HDMI , SB600 , CPU FAN , MXM , Headphone , EC , INT SPK AMP
+3V	HALL SENSOR , LCD PANEL , LVDS , WLAN , HD Decoder , NEW CARD , KB , KB LED , XD LED , Blue tooth , Touch sensor , Card Reader (OZ129) , ODD/HDD , HDMI , CRT , TVOUT , REQUIRED STRAPS , DEBUG STRAPS , SB600 , RS690M , DDR , CPU Thermal monitor , CPU FAN , CLK , MXM , VR , FM Tuner MDC , Headphone , EC , LAN , Codec(CX 20561)
+3V_S5	WLAN , NEW CARD , SB600 , MXM , LAN
+3VSUS	Finger print , SB600
+2.5V	CPU
+1.2V_S5	SB600
+1.8VSUS	SB600 , DDR , CPU , HDT
+1.8V	SB600 , LCD , LVDS , RS690M
+1.2V	SB600 , RS690M , CPU , WLAN , HD Decoder , NEW CARD
+SMDDR_VTERM	DDR , CPU
+SMDDR_VREF	DDR
+5V_S5	

ZY5 Power on Sequence

