TOSHIBA

Print this page

SERVICE MANUAL

LCD Color Television

32AV833G Ver. 1.01

Updating history

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Amendment by DS Company

Updating History,

2011-06-13 Amendment done by DS Company
Correction of the contents
Correction for Destination Setting Change
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IMPORTANT NOTICE

WARNING:

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GREEN PRODUCT PROCUREMENT

The EC is actively promoting the WEEE & RoHS Directives that define standards for recycling and reuse of Waste Electrical and Electronic Equipment and for the Restriction of the use of certain Hazardous Substances. From July 1, 2006, the RoHS Directive will prohibit any marketing of new products containing the restricted substances.

Increasing attention is given to issues related to the global environmental. Toshiba Corporation recognizes environmental protection as a key management tasks, and is doing its utmost to enhance and improve the quality and scope of its environmental activities. In line with this, Toshiba proactively promotes Green Procurement, and seeks to purchase and use products, parts and materials that have low environmental impacts.

Green procurement of parts is not only confined to manufacture. The same green parts used in manufacture must also be used as replacement parts.

LEAD-FREE SOLDER

This product is manufactured using lead-free solder as a part of a movement within the consumer products industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

WARNING: This product is manufactured using lead free solder.
DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT!

The melting temperature of lead-free solder is higher than that of leaded solder by 86ºF to 104ºF (30ºC to 40ºC). Use of a soldering iron designed for lead-based solders to repair product made with lead-free solder may result in damage to the component and or PCB being soldered. Great care should be made to ensure high-quality soldering when servicing this product especially when soldering large components, through-hole pins, and on PCBs as the level of heat required to melt lead-free solder is high.

SAFETY INSTRUCTION

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

Safety Precaution

WARNING: SERVICING SHOULD NOT BE ATTEMPTED BY ANYONE UNFAMILIAR WITH THE NECESSARY PRECAUTIONS ON THIS RECEIVER. THE FOLLOWING ARE THE NECESSARY PRECAUTIONS TO BE OBSERVED BEFORE SERVICING THIS CHASSIS.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.

2. Always disconnect the power plug before any disassembling of the product. It may result in electrical shock.

3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network, etc.

4. Always keep tools, components of the product, etc away from the children, These items may cause injury to children.

5. Depending on the model, use an isolation transformer or wear suitable gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.

6. Always use the replacement parts specified for the particular model when making repairs. The parts used in products require special safety characteristics such as inflammability, voltage resistance, etc. therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the ⚠ mark is indicated in the circuit diagram or parts list.

7. Parts mounting and routing dressing of wirings should be the same as that used originally. For safety purposes, insulating materials such as isolation tube or tape are sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wirings is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the manufactured wiring routes / dressings.

8. Always ensure that all internal wirings are in accordance before re-assembling the external casing after a repairing completed. Do not allow internal wiring to be pinched by cabinets,

panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.

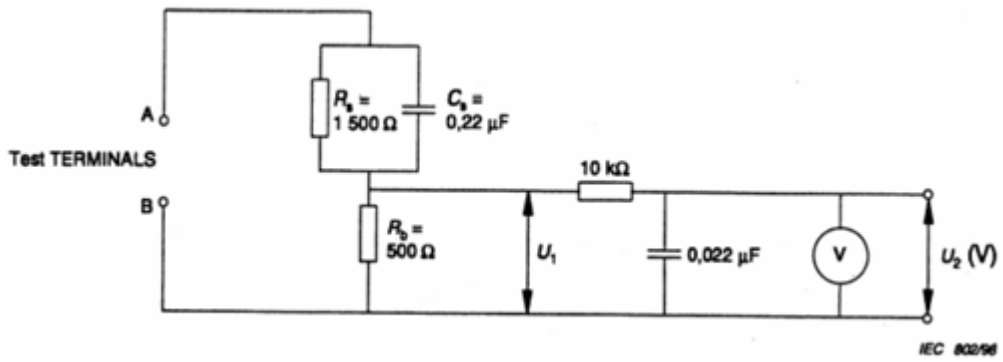
9. NEVER remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous.

10. Touch current check. (After completing the work, measure touch current to prevent an electric shock.)

    - Plug the AC cord directly into the AC outlet. Do NOT use an isolation transformer for this check.
    - Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe.

Annex D
(normative)

Measuring network for TOUCH CURRENTS



Resistance values in orms (Ω).

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance : $\geqq$ 1 MΩ
Input capacitance : $\leqq$ 200 pF
Frequency range : 15 Hz to 1 MHz and d.c. respectively

Note: Appropriate measures should be taken to obtain the correct value in case of non sinusoidal waveforms.

The measuring instrument is calibrated by comparing the frequency factor of U_2 with the solid line in figure F.2 of IEC 60990 at various frequencies. A calibration curve is constructed showing the deviation of U_2 from the ideal curve as a function of frequency.

TOUCH CURRENT = U_2 / 500 (peak value).

- The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 does not exceed the following value:

The part or contact of a TERMINAL is not HAZARDOUS LIVE if:

a) The open-circuit voltage should not exceed 35 V (peak) a.c. or 60 V d.c. or, if a) is not met.

b) The measurement of the TOUCH CURRENT shall be carried out in accordance with IEC 60990, with the measuring network described in **Annex D** of this standard.

   The TOUCH CURRENT expressed as voltages U_1 and U_2, does not exceed the following values:
   - for a.c. : U_1 = 35 V (peak) and U_2 = 0.35 V (peak);
   - for d.c. : U_1 = 1.0 V

Note: The limit values of U_2 = 0.35 V (peak) for a.c. and U_1 = 1.0 V for d.c. correspond to the values 0.7 mA (peak) a.c. and 2.0 mA d.c.

SAFETY INSTRUCTION

Product Safety Notice

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create electrical shock, fire, or other hazards.

SAFETY INSTRUCTION

Handling the LCD Module

Safety Precaution

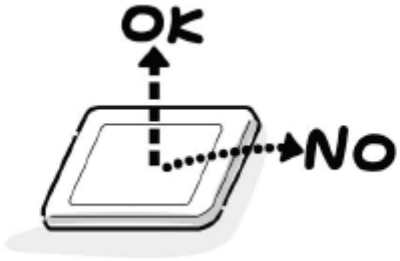
In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid.
Also, never touch this fluid. Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

Precautions for Handling the LCD Module

CAUTION: The metal edges of the LCD module are sharp, handle it with care.

The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

1. When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



2. Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.

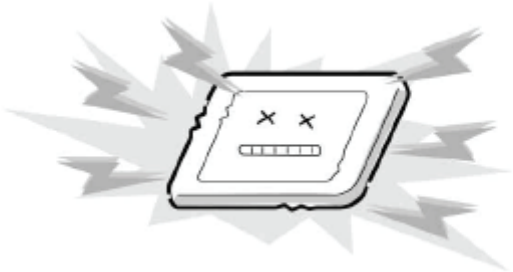
3. If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.

the soiling, breathe on the surface and then wipe again.
If the panel surface is extremely solied, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.

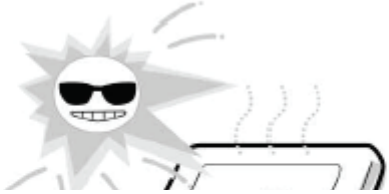
4. Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.

5. Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.

6. CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.

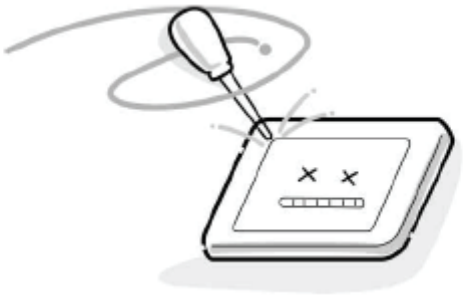


7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.

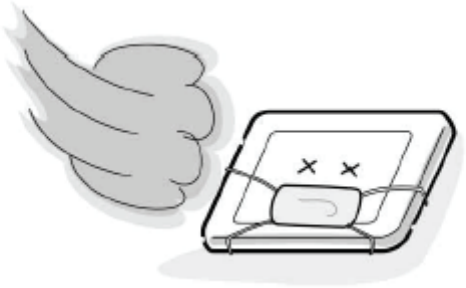


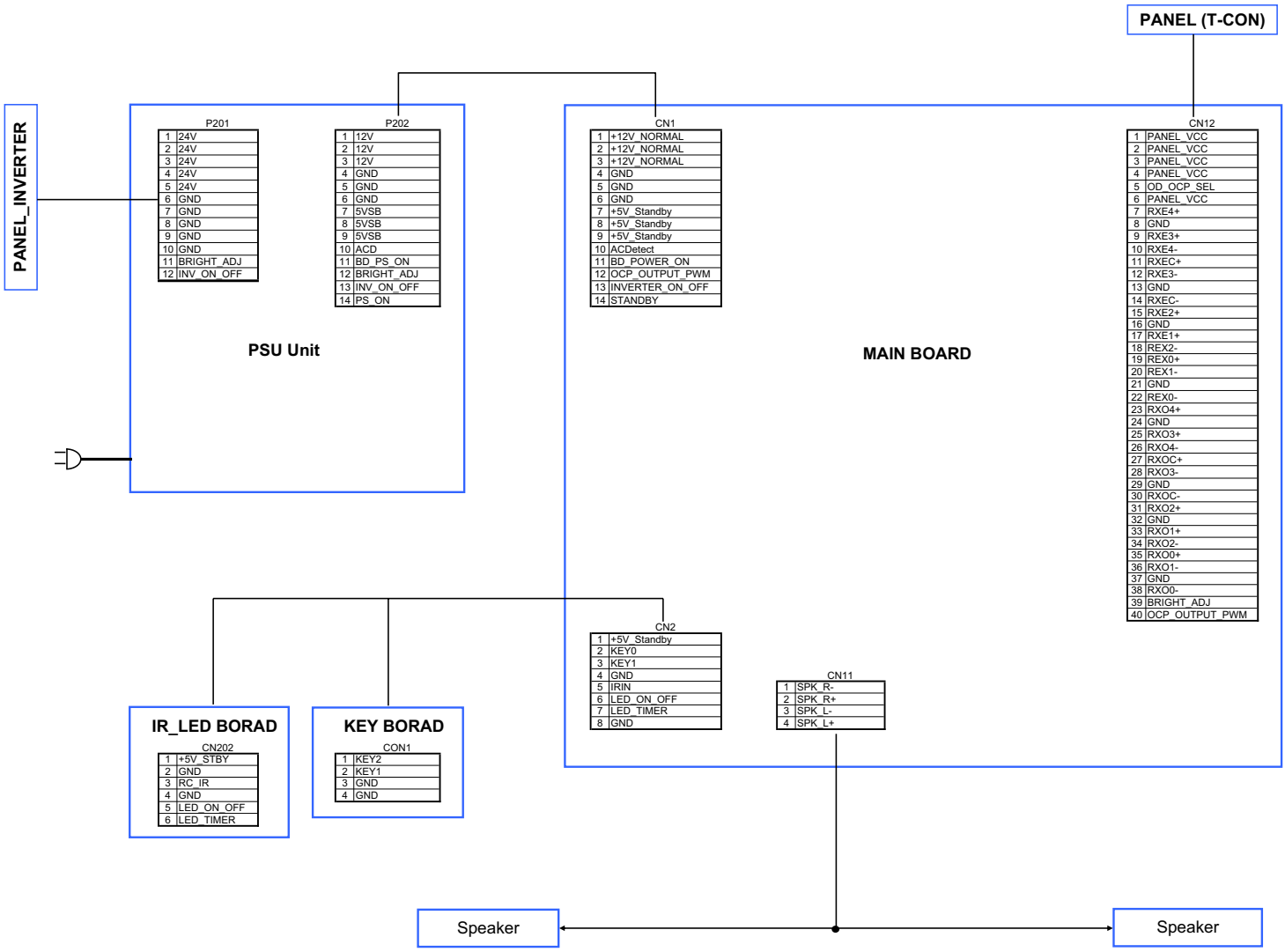
8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.

9. Do not disassemble the LCD module. Such actions could result in improper operation.



10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxim). The gas generated by these materials can cause loss of polarity.




PANEL (T-CON)
PANEL_INVERTER
P201
1 24V
2 24V
3 24V
4 24V
5 24V
6 GND
7 GND
8 GND
9 GND
10 GND
11 BRIGHT_ADJ
12 INV_ON_OFF
P202
1 12V
2 12V
3 12V
4 GND
5 GND
6 GND
7 5VSB
8 5VSB
9 5VSB
10 ACD
11 BD_PS_ON
12 BRIGHT_ADJ
13 INV_ON_OFF
14 PS_ON
PSU Unit
CN1
1 +12V_NORMAL
2 +12V_NORMAL
3 +12V_NORMAL
4 GND
5 GND
6 GND
7 +5V_Standby
8 +5V_Standby
9 +5V_Standby
10 ACDetect
11 BD_POWER_ON
12 OCP_OUTPUT_PWM
13 INVERTER_ON_OFF
14 STANDBY
MAIN BOARD
CN12
1 PANEL_VCC
2 PANEL_VCC
3 PANEL_VCC
4 PANEL_VCC
5 OD_OCP_SEL
6 PANEL_VCC
7 RXE4+
8 GND
9 RXE3+
10 RXE4-
11 RXEC+
12 RXE3-
13 GND
14 RXEC-
15 RXE2+
16 GND
17 RXE1+
18 REX2-
19 REX0+
20 REX1-
21 GND
22 REX0-
23 RXO4+
24 GND
25 RXO3+
26 RXO4-
27 RXOC+
28 RXO3-
29 GND
30 RXOC-
31 RXO2+
32 GND
33 RXO1+
34 RXO2-
35 RXO0+
36 RXO1-
37 GND
38 RXO0-
39 BRIGHT_ADJ
40 OCP_OUTPUT_PWM
CN2
1 +5V_Standby
2 KEY0
3 KEY1
4 GND
5 IRIN
6 LED_ON_OFF
7 LED_TIMER
8 GND
CN11
1 SPK_R-
2 SPK_R+
3 SPK_L-
4 SPK_L+
IR_LED BORAD
CN202
1 +5V_STBY
2 GND
3 RC_IR
4 GND
5 LED_ON_OFF
6 LED_TIMER
KEY BORAD
CON1
1 KEY2
2 KEY1
3 GND
4 GND
Speaker
Speaker

TROUBLESHOOTING GUIDE

UNDER CONSTRUCTION

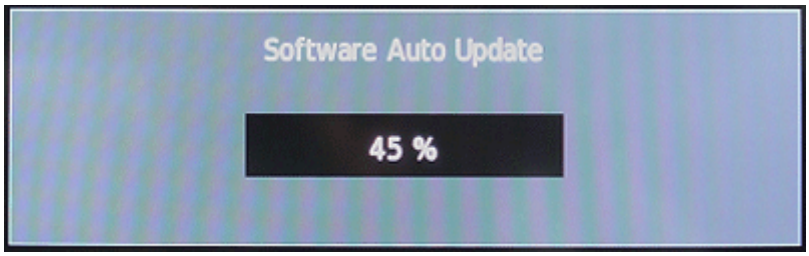
Note: Please check back in the future.

FIRMWARE UPDATING PROCEDURE

Firmware Upgrade - USB

1. Copy a firmware BIN file to USB disk. (Root directory)
2. Plug USB disk into TV USB port.

3. Reboot (AC Off/On) TV to upgrade firmware automatically. During firmware upgrade, OSD will be displayed on LCD screen, and power status LED will be blinking.



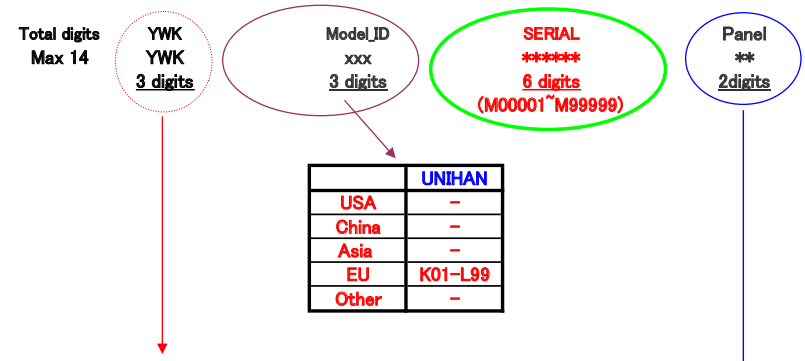
4. When firmware upgrade is finished, a message will be displayed on screen.

5. Unplug USB disk, and turn AC Off/On to reboot TV.

Note:
This upgrade method is available only when boot code exists in flash memory (Main Board).

TOSHIBA WEB-ZEUS

Global Serial No.



	UNIHAN
USA	-
China	-
Asia	-
EU	K01-L99
Other	-

Y：Year

8	2008
9	2009
A	2010
B	2011
C	2012
⋮	⋮

WK:Week

01	WK01
02	WK02
03	WK03
04	WK04
⋮	⋮
53	WK53

Panel vendor and version for the model.

Marking	Panel Vendor	Marking	Panel Vendor	Marking	Panel Vendor
A	AUO	J		S	SHARP
B		K	SAMSUNG	T	
C	CMO	L	LPL/LGD	U	
D		M		V	
E		N		W	
F		P	CPT	X	
G		Q		Y	
H	IPS	R		Z	

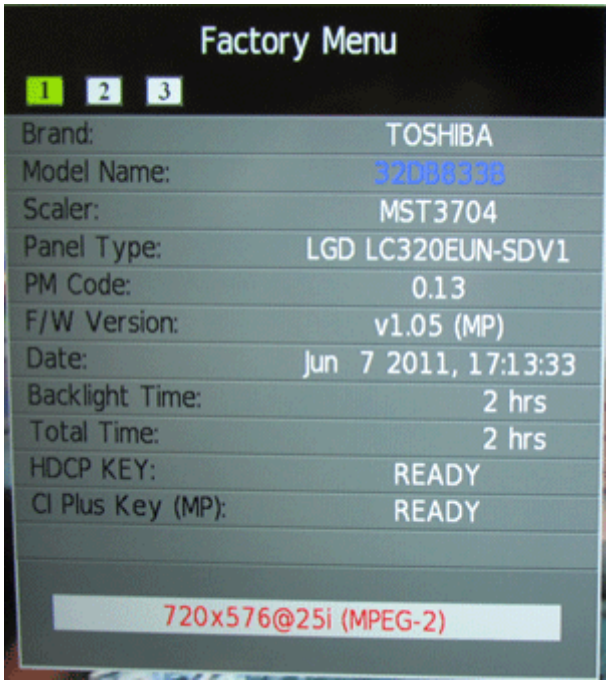
Model Information

Model	Model ID	Panel ID	Panel
32AV833G	K56	L1	LC320WXN-SCC1
32AV833F	K57	L1	LC320WXN-SCC1
32AV833N	K58	L1	LC320WXN-SCC1
32AV833R	K59	L1	LC320WXN-SCC1
32AV833RB	K72	L1	LC320WXN-SCC1

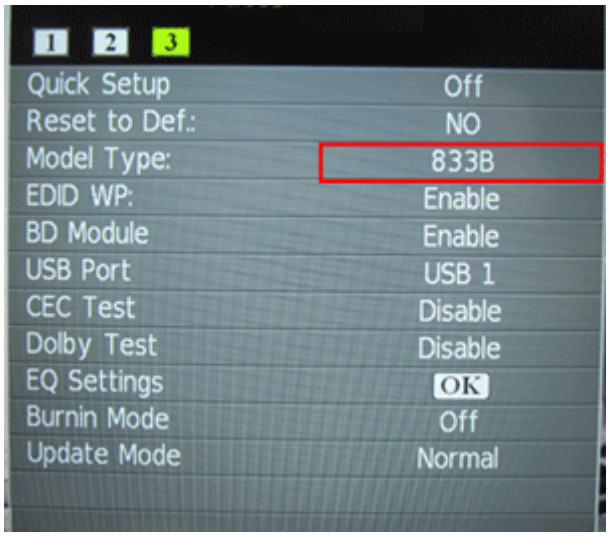
DESTINATION SETTING CHANGE

Whenever replacing the Main PCB with new one, perform this procedure.

1. Press "Mute" key twice on the Remote.
2. Press "Menu" button on the TV set. Then the OSD is displayed.



3. Move to Tag "3" by Right/Left Arrow key on the Remote.
4. Select "Model Type" cell.



5. Select the appropriate model type by Right/Left Arrow key on the Remote. Model type is written on the rating label.

6. Select "Reset to Def".
7. Select "Yes" and press "OK" button on the Remote.

PARTS LIST

Precaution

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE".

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

The mounting position of replacements is to be identical with originals.
Before replacing any of these components, read carefully the "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE".

Do not degrade the safety of the receiver through improper servicing.

Note:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with * mark is no longer available after the end of the production.

Abbreviations

Capacitors	CD	:	Ceramic Disk
Resistors	CF	:	Carbon film
	OMF	:	Oxide Metal Film
	PF	:	Plastic Film
	CC	:	Carbon Composition
	VR	:	Variable Resistor
	EL	:	Electrolytic
	MF	:	Metal Film
	FR	:	Fusible Resistor

All CD and PF capacitors are ±5 %, 50 V and all resistor, ±5 %, 1/6 W unless otherwise noted.

TOSHIBA WEB-ZEUS

PARTS LIST

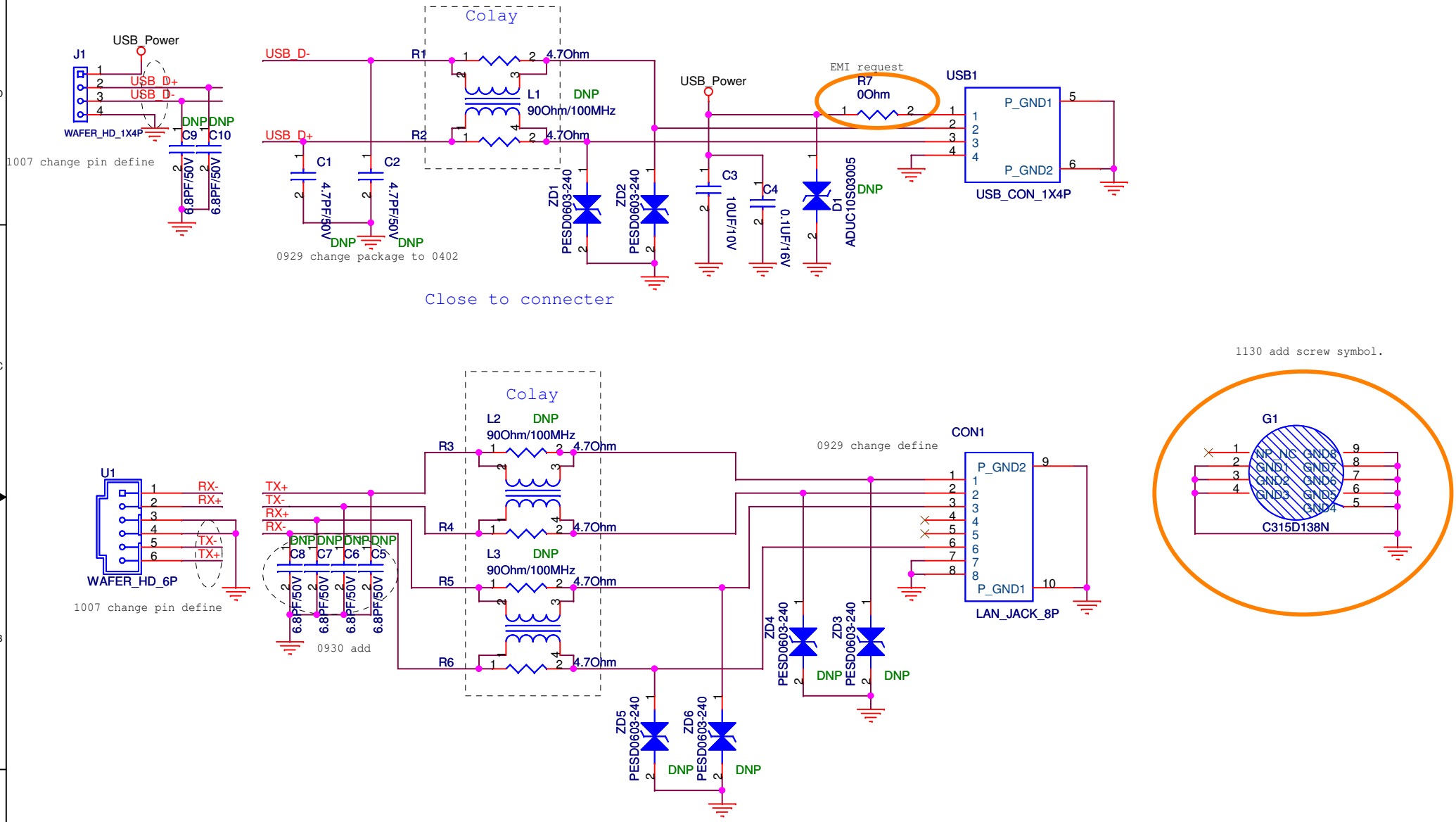
Updating history

Amendment by DS Company

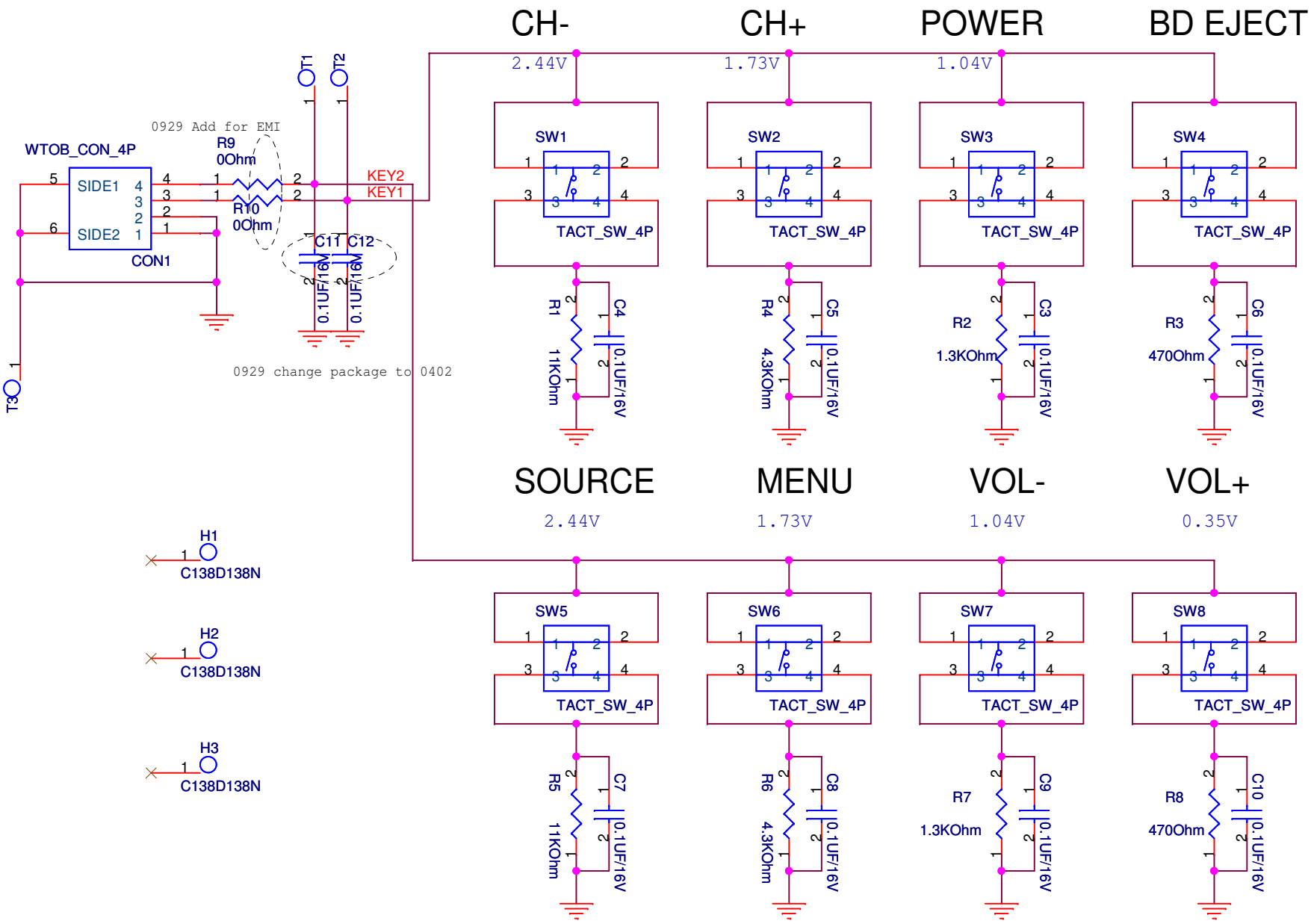
Updating History,

2011-06-13 Amendment done by DS Company

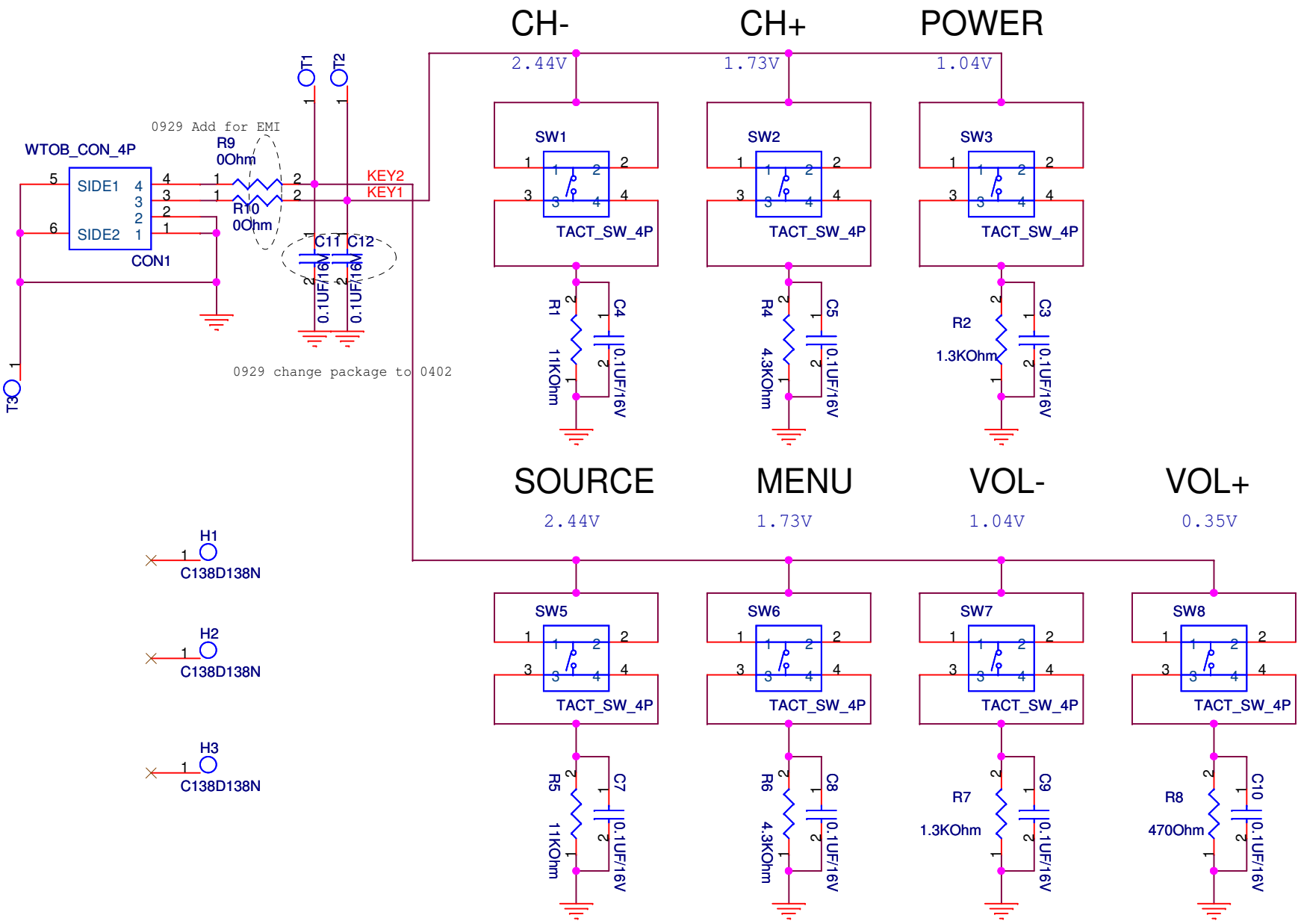
	Location	Parts No.	Description
	E200	75025187	PC BOARD ASSY, MAIN, 32AV833, 90-EB40M00D0
⚠	E250	75025188	POWER OPENFRAME, 130W/+5 12 24V, 0433-005C000
	E260	75025210	PC BOARD ASSY, KEY, 90-EB40S01D0
	E270	75025211	PC BOARD ASSY, IR, 90-EB40S01A0
⚠	E300	75019248	LCD PANEL, LC320WXN-SCC1
	E310	75025190	LVDS CABLE, 51P TO 40P L:320MM, 1414-05AM000
⚠	E320	75025213	POWER CORD, EU/2P BLACK L:1.8M, 1411-00WA000, F/G/N/R/RB
	E330	75025192	SPEAKER, 10W 8 OHM L+R, 04A4-00SK000
	E340	75025194	CABLE, SPEAKER, 2P TO 2P L:370MM, 1419-001S000
	E342	75025195	CABLE, INVERTER, 14P TO 12P, 1410-0086000
	E344	75025196	CABLE, POWER, HSG 14P TO 14P, 1414-05C4000
	E346	75025197	CABLE, POWER, 2P INLET-HSG 4P, 1414-05CT000
	E347	75025199	CABLE, POWER, 2P INLET-HSG 4P, 1414-05JU000
	E348	75025200	CABLE, Y, 8P TO HSG 3+5P, 1414-05C6000
⚠	E410	75025217	MANUAL, 1506-0FS5000, G
	E450	75025218	LABEL, RATING, 1510-0RN3000, G
	E460	75025214	LABEL, CARTON, 1510-0Q8D000, B/F/G/N
	E400	75014827	REMOCON HAND UNIT, CT-90326
	E100	75025180	FRONT BEZEL ASSY, 32AV833, 13EB-2YB0201
	E110	75025182	BACK COVER ASSY, 32AV833, 13EB-2YB0301
	E120	75025207	STAND ASSY, 32AV833, 9C-EB40S00E0
	E125	75025184	SCREW, FOR STAND ASSY, 13EB-2YB0401
	E140	75025185	PLATE, SIDE IO, 32AV833, 13EB-2YB0101
	E150	75025208	BRACKET ASSY, STAND, 32AV833, 9C-EB40S00F0
	E155	75025209	SCREW, BRACKET ASSY, 9C-EB40S00D0
	E500	75025212	CARTON BOX, 32AV833, 1503-033Y000
	E510	75025201	EPS CUSHION, TOP RIGHT, 32AV833, 1505-01WA000
	E511	75025202	EPS CUSHION, TOP LEFT, 32AV833, 1505-01W9000
	E512	75025203	EPS CUSHION, BOTTOM RIGHT, 32AV833, 1505-01W8000
	E513	75025204	EPS CUSHION, BOTTOM LEFT, 32AV833, 1505-01W7000
	E520	75025205	EPE BAG, 1516-015P000
	E530	75025206	PE BAG, STAND, 1516-01AK000



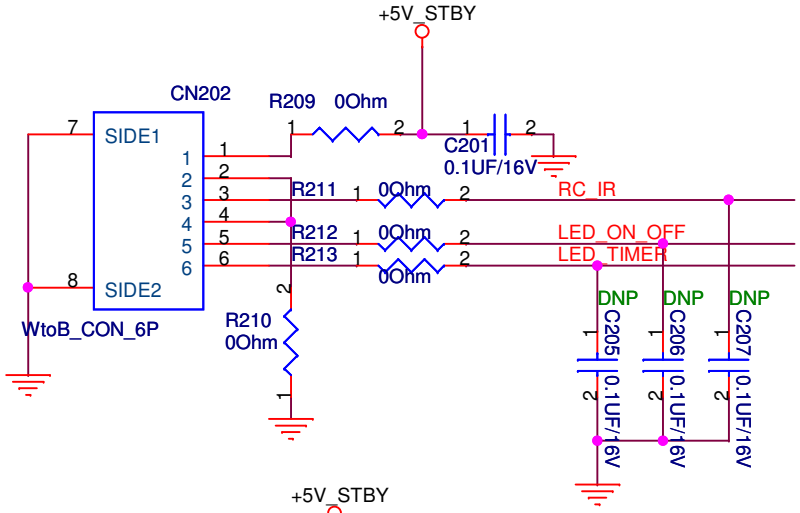
Unihan	Title : USB&LAN JACK	
<OrgName>	Engineer: Robert Chung	
Size: A4	Project Name: BD-IO Card	Rev: 1.02
Date: Thursday, December 02, 2010	Sheet 1 of 1	

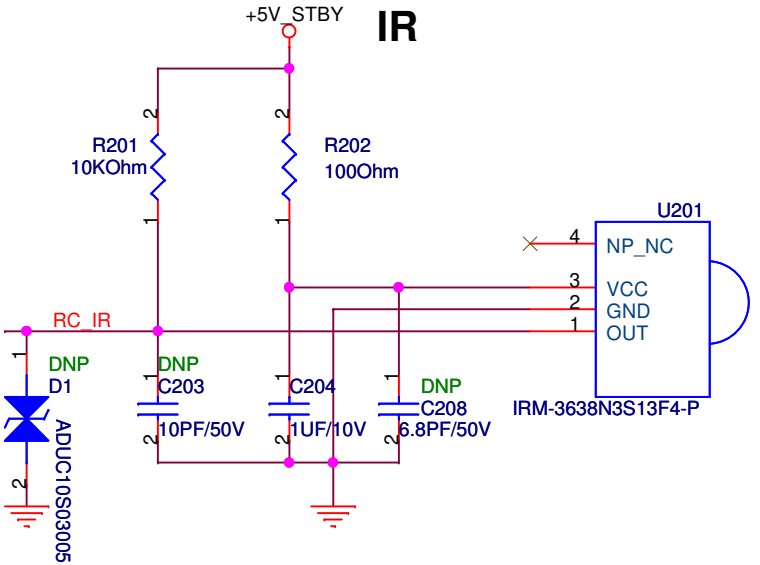


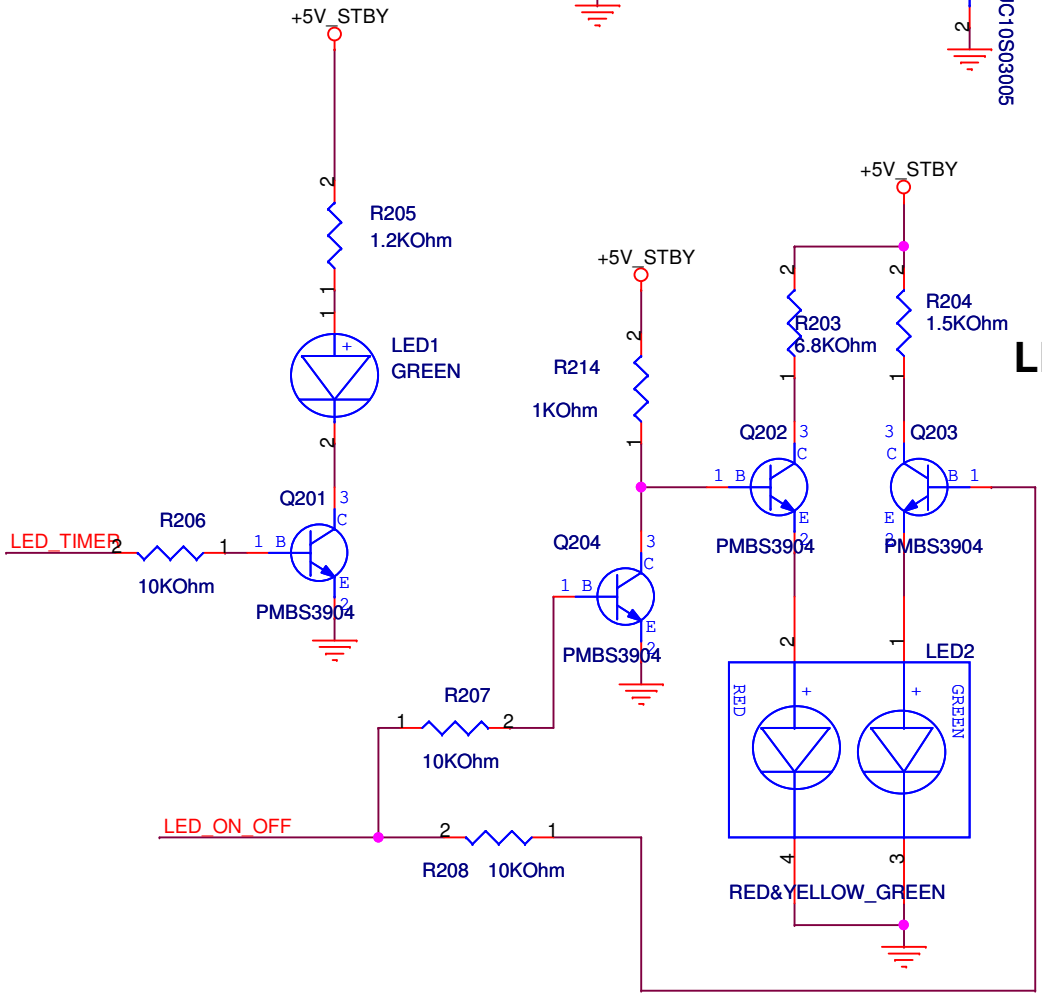
Unihan	Title :	KEYPAD
<OrgName>	Engineer:	Robert Chung
Size: A	Project Name: 32AV803_Keypad	Rev: V1.00
Date: Tuesday, October 05, 2010	Sheet 1 of 1	



Unihan	Title :	KEYPAD
<OrgName>	Engineer:	Robert Chung
Size: A	Project Name: 32AV803_Keypad	Rev: V1.00
Date: Tuesday, October 05, 2010	Sheet 1 of 1	







	LED 2		LED 1
	Red	Green	Green
Function	Standby	Power on	Timer
Control method	HW	Power_on	LED_Timer

Unihan	Title :	IR & LED
<OrgName>	Engineer:	Robert Chung
Size: A	Project Name: 32AV833-IR/LED	Rev: V1.01
Date: Monday, October 18, 2010	Sheet 1 of 1	

CONTENTS

REVISION HISTORY

Date	Author	Ver	Comments
2010/09/28	Cm/Jeff	1.00	For SR stage.
2010/11/24	Cm/Jeff	1.01	For ER stage , all change list reference to ---->"xxav833x_Sch_change_list.xls"
2010/12/03	Cm/Jeff	1.02	For PR stage , all change list reference to ---->"xxav833x_Sch_change_list.xls"

Unihan

Title : Contents&History

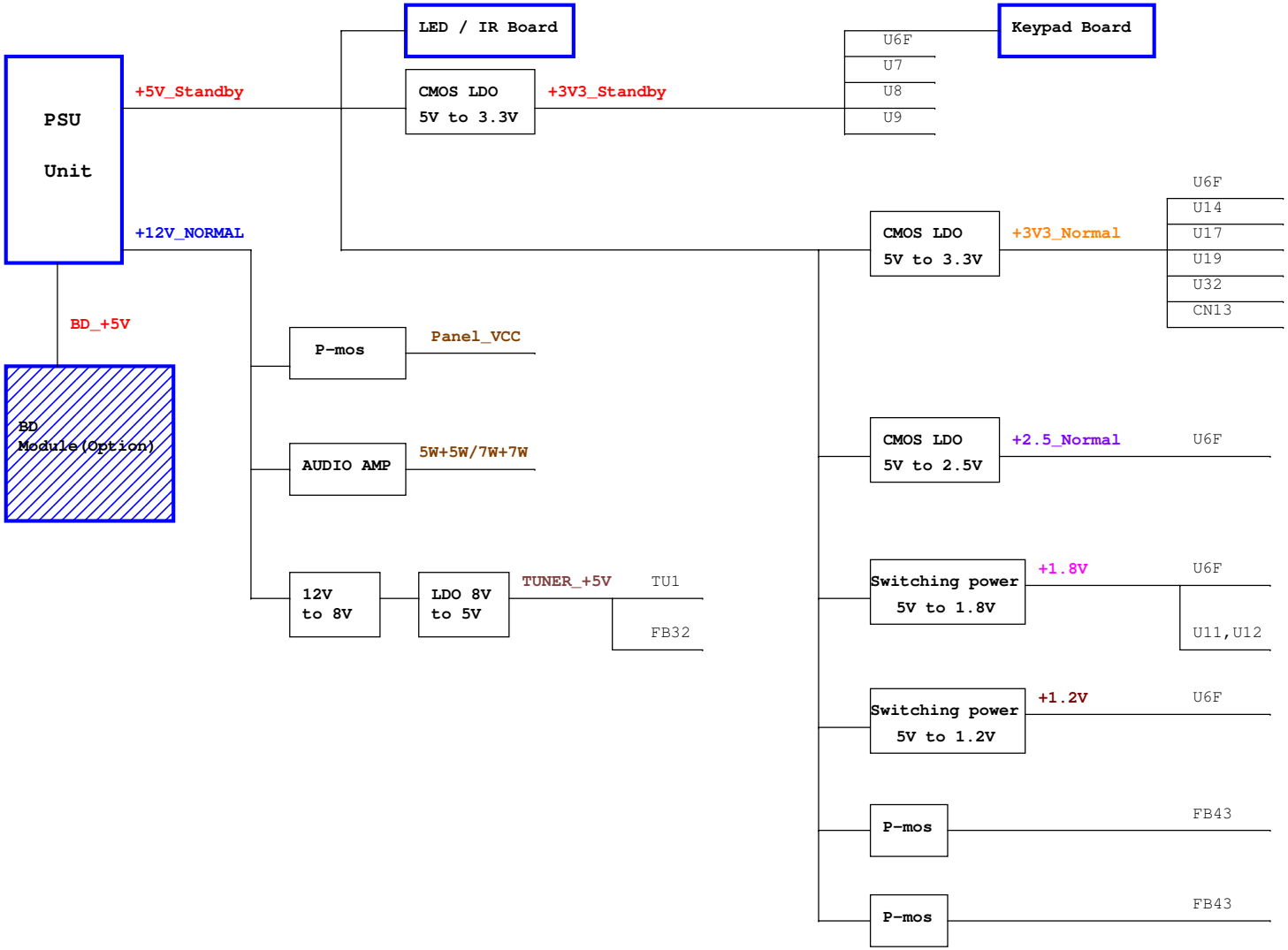
MAIN BOARD

Engineer: CM Chang/Jeff Y Hsiao

Size	Project Name	Rev
B	xxA(L)V833/xxE(H)L833/xxDB833	1.02

Date: Wednesday, January 19, 2011 Sheet 1 of 18

Power Block Diagram



Unihan

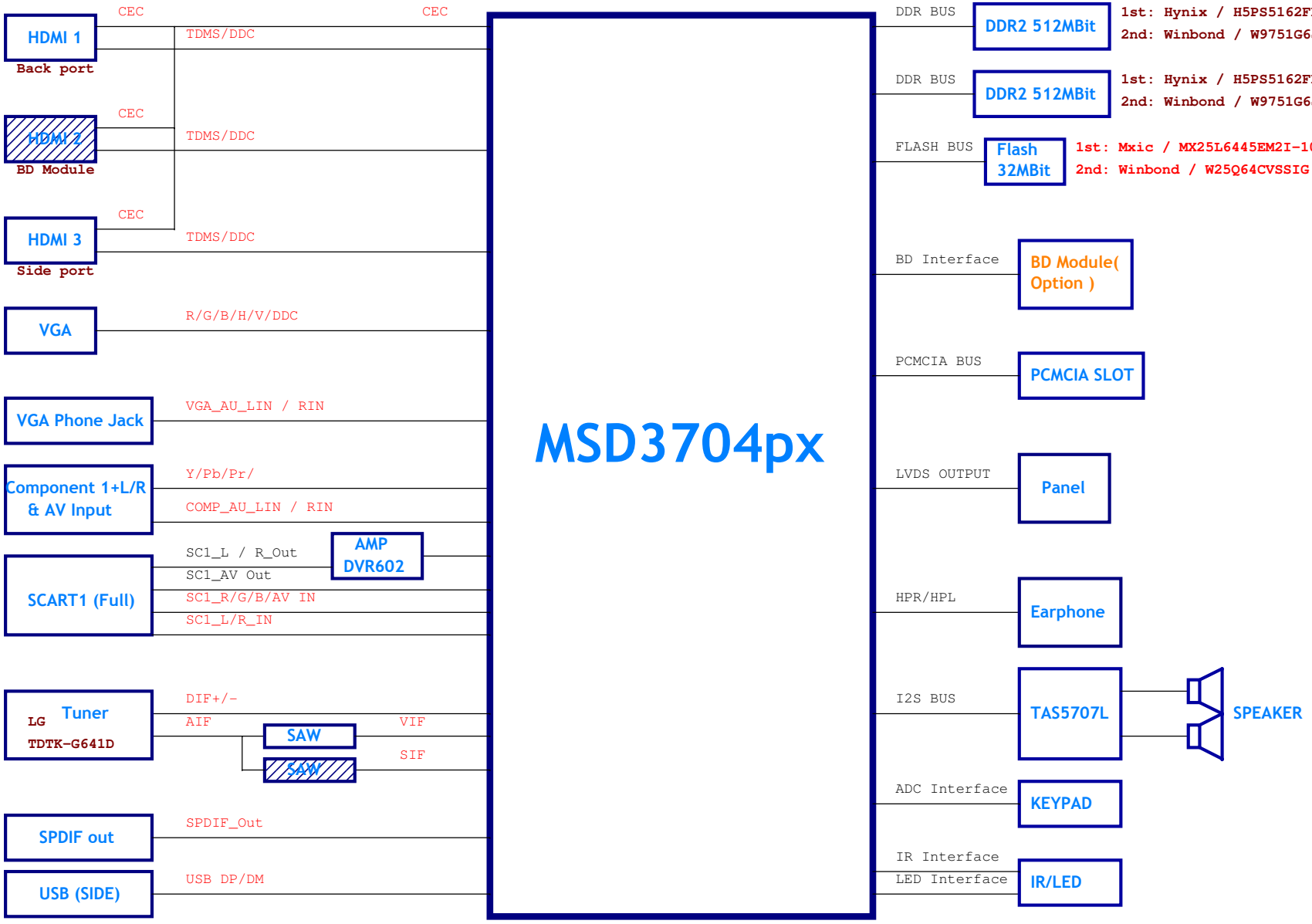
Title : Power Budget

MAIN BOARD

Engineer: CM Chang/Jeff Y Hsiao

Size	Project Name	Rev
B	xxA(L)V833/xxE(H)L833/xxDB833	1.02

Date: Wednesday, January 19, 2011 Sheet 2 of 18



Unihan

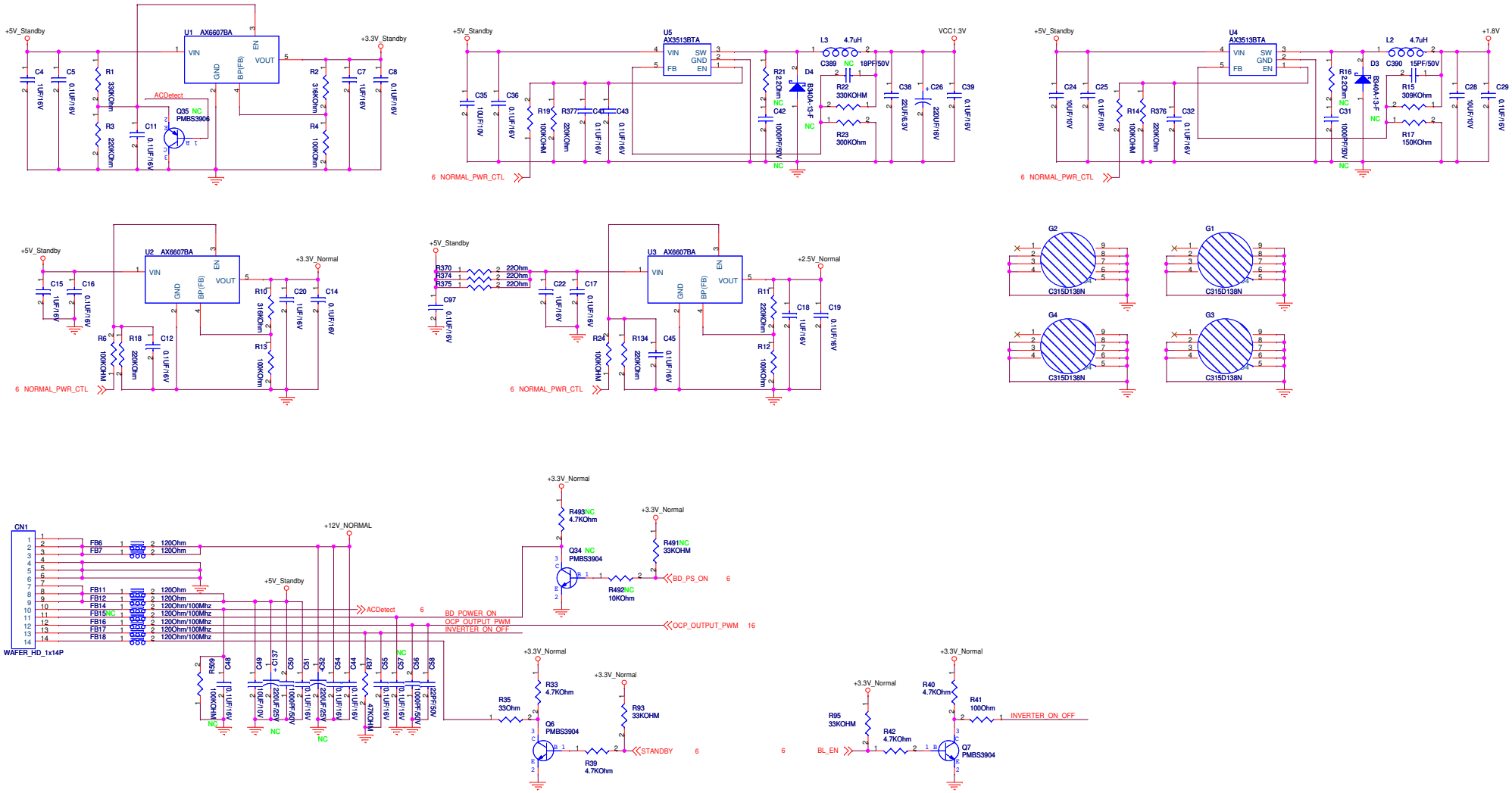
Title : Block Diagram

MAIN BOARD

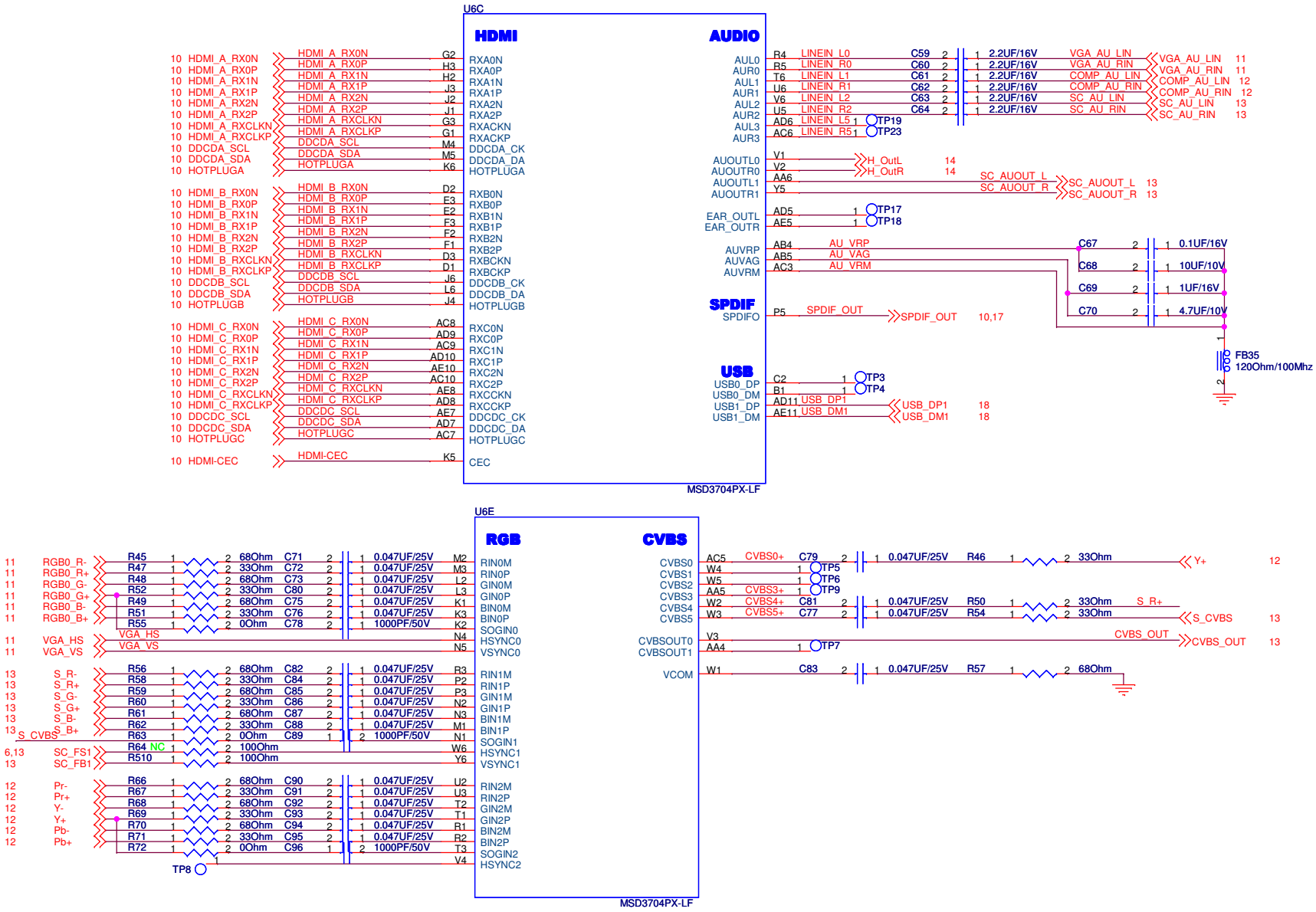
Engineer: CM Chang/Jeff Y Hsiao

Size	Project Name	Rev
B	xxA(L)V833/xxE(H)L833/xxDB833	1.02

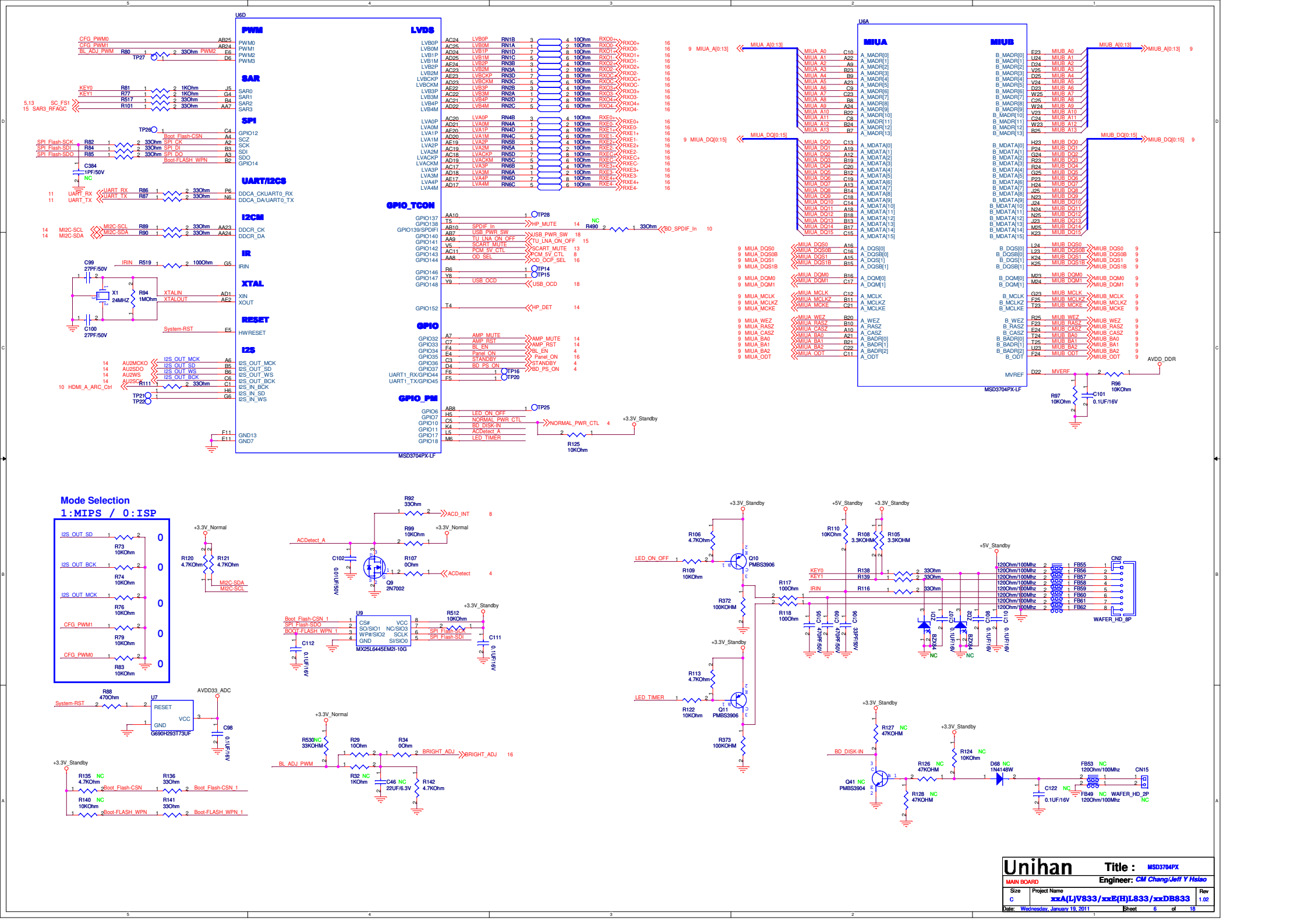
Date: Wednesday, January 19, 2011 Sheet 3 of 18

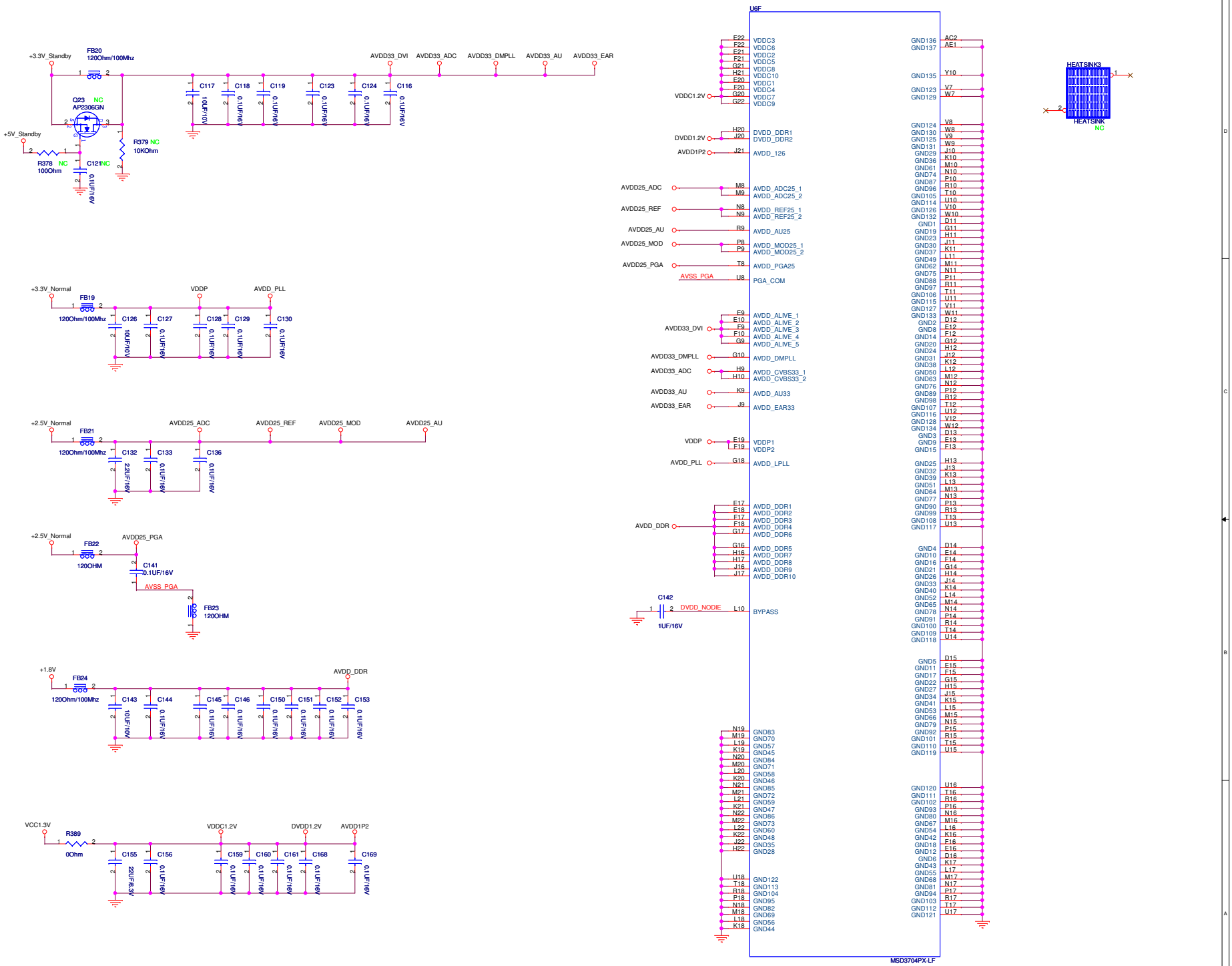


Unihan	Title : DC to DC	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: C	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 4 of 18	



Unihan	Title : MSD3704PX	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: B	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 5 of 18	


U6D
PWM
PWM0
PWM1
PWM2
PWM3
SAR
SAR0
SAR1
SAR2
SAR3
SPI
GPIO12
SCZ
SCK
SDI
SDO
GPIO14
UART/I2CS
DDCA_CKUART0_RX
DDCA_DA/UART0_TX
I2CM
DDCR_CK
DDCR_DA
IR
IRIN
XTAL
XIN
XOUT
RESET
HWRESET
I2S
I2S_OUT_MCK
I2S_OUT_SD
I2S_OUT_WS
I2S_OUT_BCK
I2S_IN_BCK
I2S_IN_SD
I2S_IN_WS
GND13
GND7
MSD3704PX-LF
LVDS
GPIO_TCON
GPIO
GPIO_PM
U6A
MIUA
MIUB
MSD3704PX-LF
Mode Selection
1:MIPS / 0:ISP
U7
G690H293T73UF
U9
MX25L6445EM2I-10G
Q9
2N7002
Q10
PMBS3906
Q11
PMBS3906
Q41
PMBS3904
WAFER_HD_8P
WAFER_HD_2P
Unihan
Title : MSD3704PX
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size C
Project Name xxA(L)V833/xxE(H)L833/xxDB833
Rev 1.02
Date: Wednesday, January 19, 2011
Sheet 6 of 18


+3.3V_Standby
FB20
120Ohm/100Mhz
AVDD33_DVI
AVDD33_ADC
AVDD33_DMPLL
AVDD33_AU
AVDD33_EAR
Q23 NC
AP2306GN
+5V_Standby
R379 NC
10KOhm
R378 NC
100Ohm
C121NC
0.1UF/16V
C117
C118
C119
C123
C124
C116
10UF/10V
0.1UF/16V
+3.3V_Normal
FB19
120Ohm/100Mhz
VDDP
AVDD_PLL
C126
C127
C128
C129
C130
+2.5V_Normal
FB21
120Ohm/100Mhz
AVDD25_ADC
AVDD25_REF
AVDD25_MOD
AVDD25_AU
C132
C133
C136
22UF/16V
+2.5V_Normal
FB22
120OHM
AVDD25_PGA
C141
0.1UF/16V
AVSS_PGA
FB23
120OHM
+1.8V
FB24
120Ohm/100Mhz
AVDD_DDR
C143
C144
C145
C146
C150
C151
C152
C153
VCC1.3V
R389
0Ohm
VDDC1.2V
DVDD1.2V
AVDD1P2
C155
C156
C159
C160
C161
C168
C169
22UF/6.3V
U6F
VDDC3
VDDC6
VDDC2
VDDC5
VDDC8
VDDC10
VDDC1
VDDC4
VDDC7
VDDC9
VDDC1.2V
DVDD_DDR1
DVDD_DDR2
DVDD1.2V
AVDD_126
AVDD1P2
AVDD_ADC25_1
AVDD_ADC25_2
AVDD25_ADC
AVDD_REF25_1
AVDD_REF25_2
AVDD25_REF
AVDD_AU25
AVDD25_AU
AVDD_MOD25_1
AVDD_MOD25_2
AVDD25_MOD
AVDD_PGA25
AVDD25_PGA
AVSS_PGA
PGA_COM
AVDD_ALIVE_1
AVDD_ALIVE_2
AVDD_ALIVE_3
AVDD_ALIVE_4
AVDD_ALIVE_5
AVDD33_DVI
AVDD33_DMPLL
AVDD_DMPLL
AVDD_CVBS33_1
AVDD_CVBS33_2
AVDD33_ADC
AVDD_AU33
AVDD33_AU
AVDD_EAR33
AVDD33_EAR
VDDP1
VDDP2
VDDP
AVDD_LPLL
AVDD_PLL
AVDD_DDR1
AVDD_DDR2
AVDD_DDR3
AVDD_DDR4
AVDD_DDR6
AVDD_DDR
AVDD_DDR5
AVDD_DDR7
AVDD_DDR8
AVDD_DDR9
AVDD_DDR10
C142
DVDD_NODIE
1UF/16V
BYPASS
GND83
GND70
GND57
GND45
GND84
GND71
GND58
GND46
GND85
GND72
GND59
GND47
GND86
GND73
GND60
GND48
GND35
GND28
GND122
GND113
GND104
GND95
GND82
GND69
GND56
GND44
GND136
GND137
GND135
GND123
GND129
GND124
GND130
GND125
GND131
GND29
GND36
GND61
GND74
GND87
GND96
GND105
GND114
GND126
GND132
GND1
GND19
GND23
GND30
GND37
GND49
GND62
GND75
GND88
GND97
GND106
GND115
GND127
GND133
GND2
GND8
GND14
GND20
GND24
GND31
GND38
GND50
GND63
GND76
GND89
GND98
GND107
GND116
GND128
GND134
GND3
GND9
GND15
GND25
GND32
GND39
GND51
GND64
GND77
GND90
GND99
GND108
GND117
GND4
GND10
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GND21
GND26
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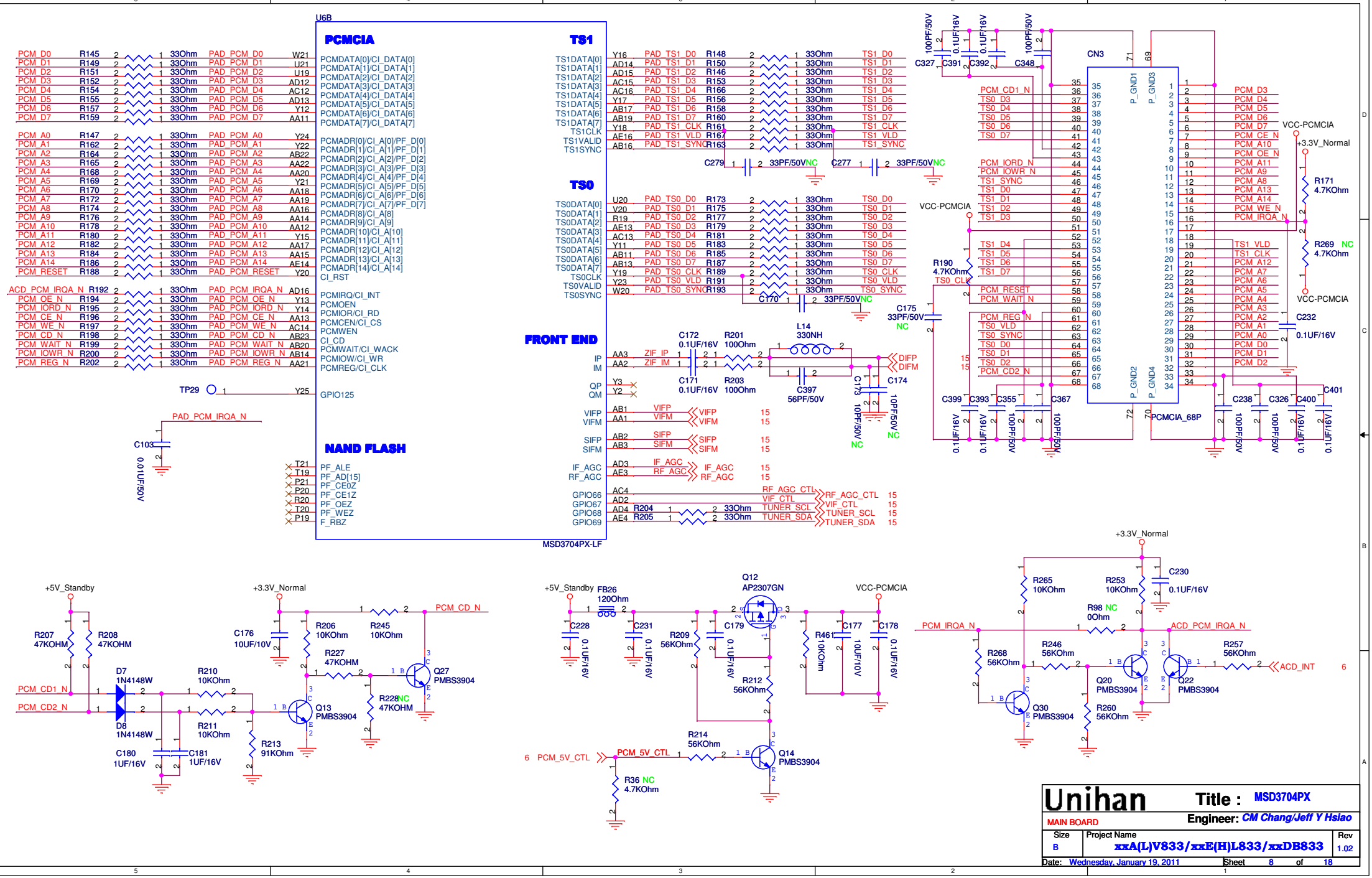
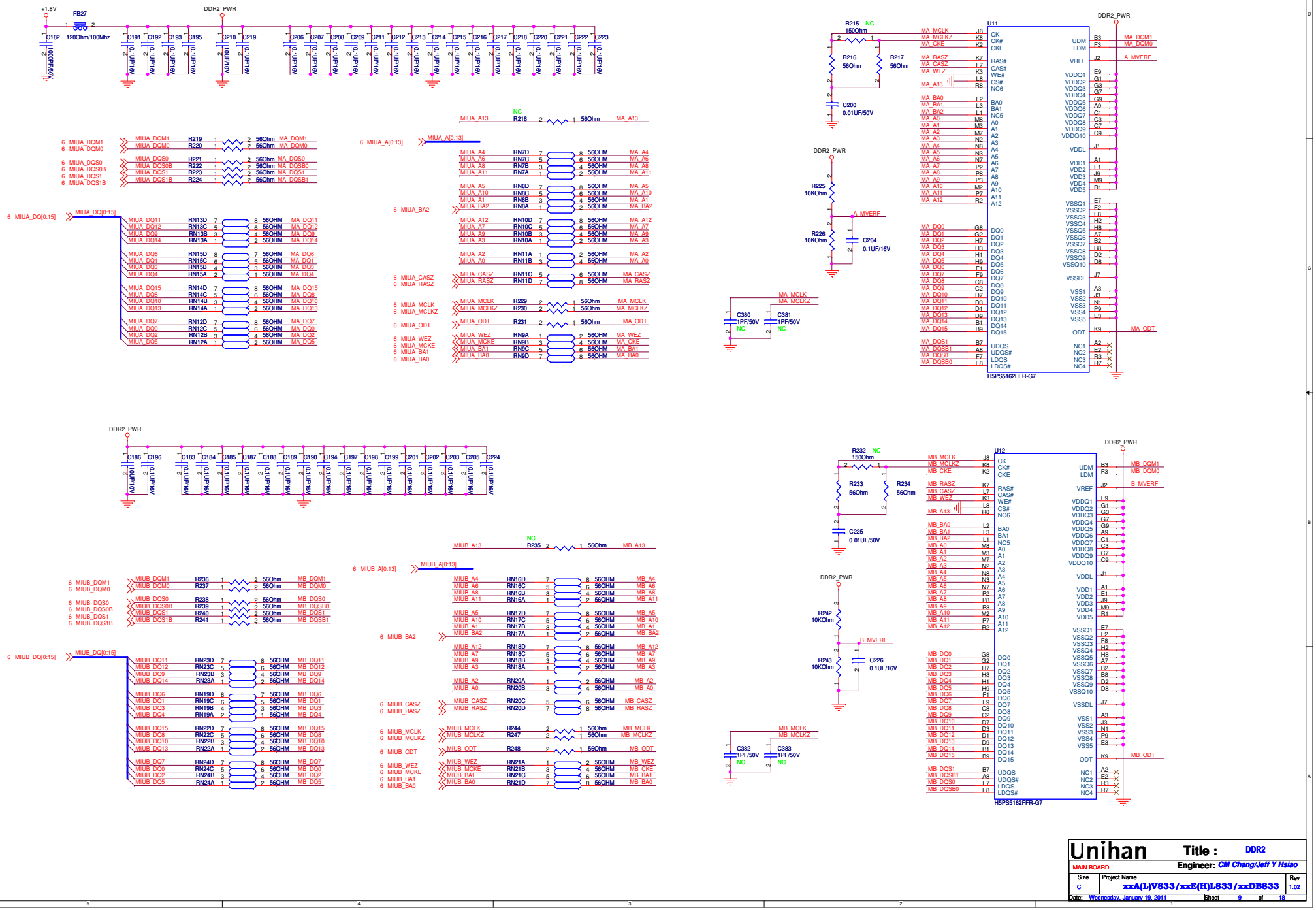
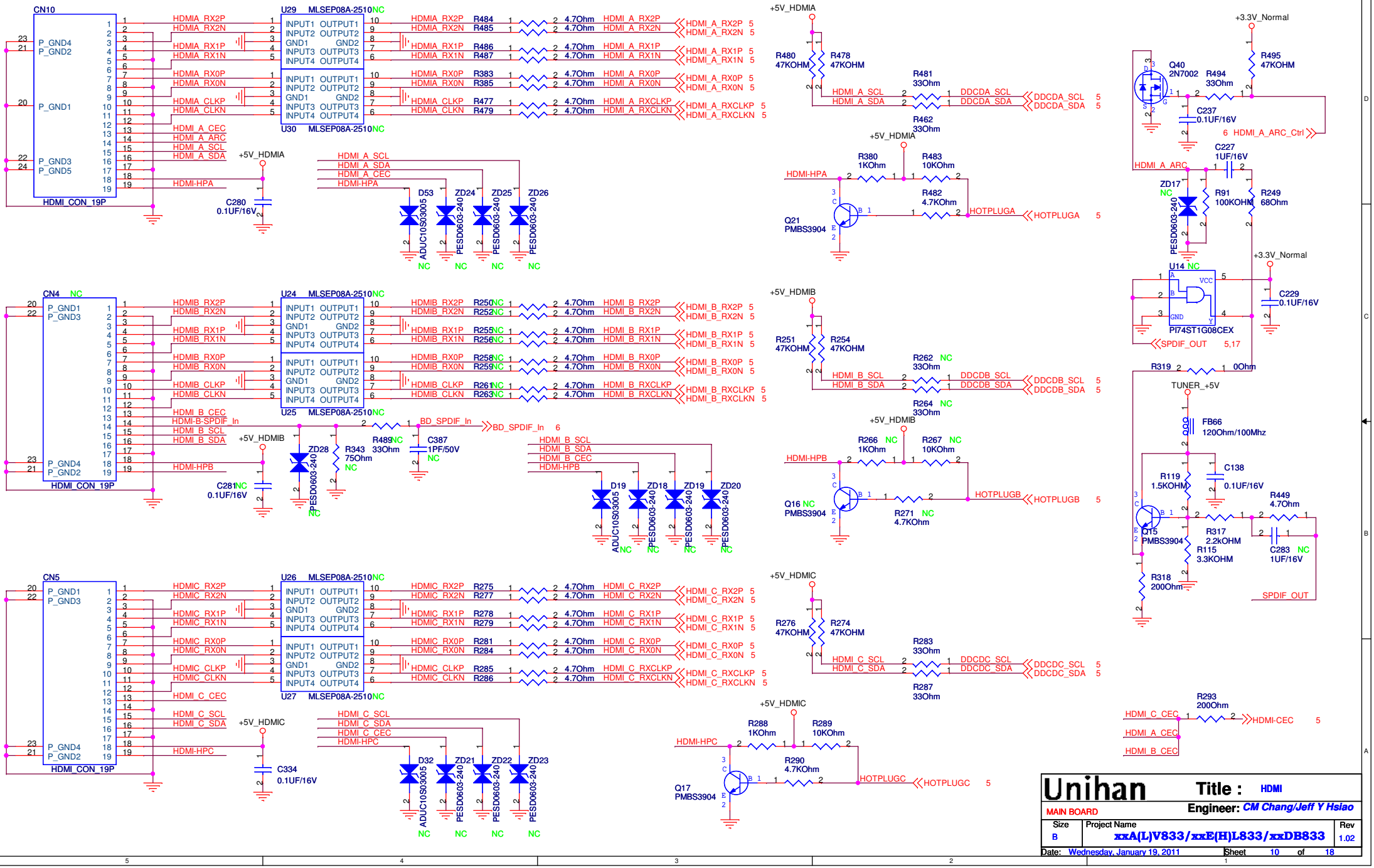
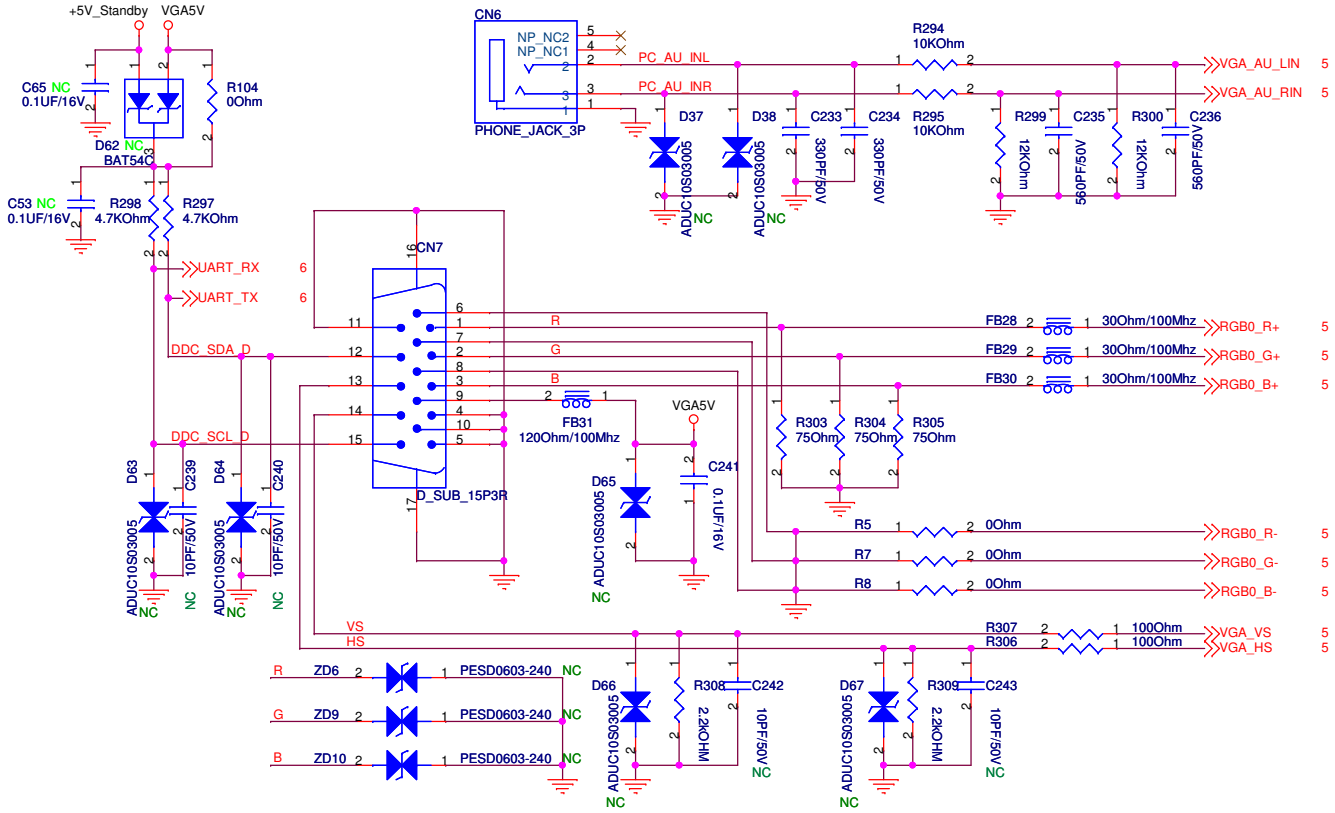
GND40
GND52
GND65
GND78
GND91
GND100
GND109
GND118
GND5
GND11
GND17
GND22
GND27
GND34
GND41
GND53
GND66
GND79
GND92
GND101
GND110
GND119
GND120
GND111
GND102
GND93
GND80
GND67
GND54
GND42
GND18
GND12
GND6
GND43
GND55
GND68
GND81
GND94
GND103
GND112
GND121
MSD3704PX-LF
HEATSINK3
HEATSINK
NC
Unihan
Title : MSD3704PX
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size
Custom
Project Name
xxA(L)V833/xxE(H)L833/xxDB833
Rev
1.02
Date: Wednesday, January 19, 2011
Sheet 7 of 18


U6B
PCMCIA
TS1
TS0
FRONT END
NAND FLASH
MSD3704PX-LF
CN3
PCMCIA_68P
+3.3V_Normal
+5V_Standby
VCC-PCMCIA
Unihan
Title : MSD3704PX
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size B
Project Name xxA(L)V833/xxE(H)L833/xxDB833
Rev 1.02
Date: Wednesday, January 19, 2011
Sheet 8 of 18

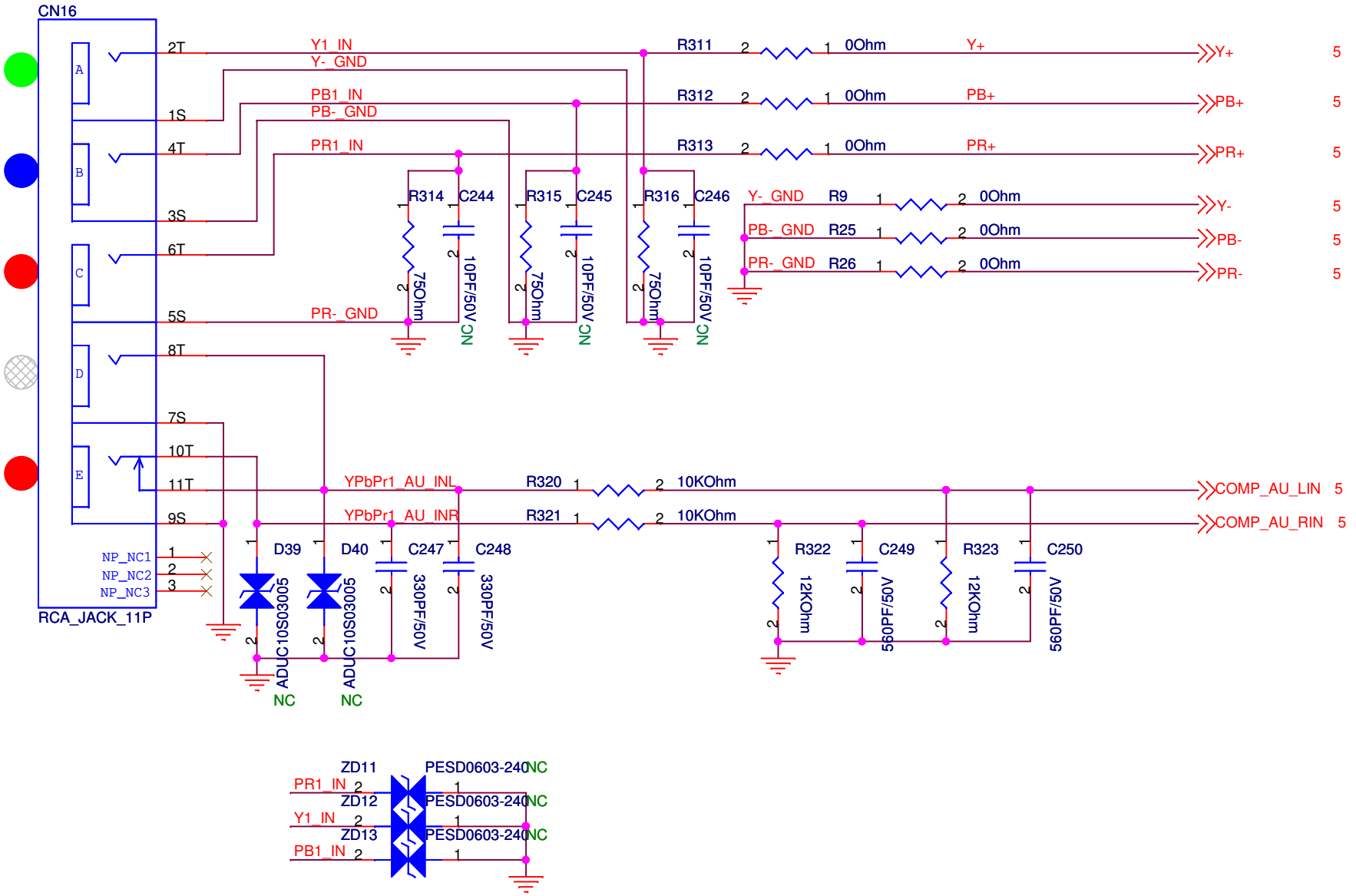

+1.8V
FB27
120Ohm/100Mhz
DDR2_PWR
C182 1000PF/50V
C191 C192 C193 C195 0.1UF/16V
C210 C219 10UF/10V
C206 C207 C208 C209 C211 C212 C213 C214 C215 C216 C217 C218 C220 C221 C222 C223 0.1UF/16V
MIUA_A13 NC R218 56Ohm MA_A13
6 MIUA_DQM1 MIUA_DQM1 R219 56Ohm MA_DQM1
6 MIUA_DQM0 MIUA_DQM0 R220 56Ohm MA_DQM0
6 MIUA_DQS0 MIUA_DQS0 R221 56Ohm MA_DQS0
6 MIUA_DQS0B MIUA_DQS0B R222 56Ohm MA_DQSB0
6 MIUA_DQS1 MIUA_DQS1 R223 56Ohm MA_DQS1
6 MIUA_DQS1B MIUA_DQS1B R224 56Ohm MA_DQSB1
6 MIUA_A[0:13] MIUA_A[0:13]
6 MIUA_DQ[0:15] MIUA_DQ[0:15]
MIUA_DQ11 RN13D MA_DQ11
MIUA_DQ12 RN13C MA_DQ12
MIUA_DQ9 RN13B MA_DQ9
MIUA_DQ14 RN13A MA_DQ14
MIUA_DQ6 RN15D MA_DQ6
MIUA_DQ1 RN15C MA_DQ1
MIUA_DQ3 RN15B MA_DQ3
MIUA_DQ4 RN15A MA_DQ4
MIUA_DQ15 RN14D MA_DQ15
MIUA_DQ8 RN14C MA_DQ8
MIUA_DQ10 RN14B MA_DQ10
MIUA_DQ13 RN14A MA_DQ13
MIUA_DQ7 RN12D MA_DQ7
MIUA_DQ0 RN12C MA_DQ0
MIUA_DQ2 RN12B MA_DQ2
MIUA_DQ5 RN12A MA_DQ5
56OHM
MIUA_A4 RN7D MA_A4
MIUA_A6 RN7C MA_A6
MIUA_A8 RN7B MA_A8
MIUA_A11 RN7A MA_A11
MIUA_A5 RN8D MA_A5
MIUA_A10 RN8C MA_A10
MIUA_A1 RN8B MA_A1
MIUA_BA2 RN8A MA_BA2
6 MIUA_BA2
MIUA_A12 RN10D MA_A12
MIUA_A7 RN10C MA_A7
MIUA_A9 RN10B MA_A9
MIUA_A3 RN10A MA_A3
MIUA_A2 RN11A MA_A2
MIUA_A0 RN11B MA_A0
6 MIUA_CASZ MIUA_CASZ RN11C MA_CASZ
6 MIUA_RASZ MIUA_RASZ RN11D MA_RASZ
6 MIUA_MCLK MIUA_MCLK R229 56Ohm MA_MCLK
6 MIUA_MCLKZ MIUA_MCLKZ R230 56Ohm MA_MCLKZ
6 MIUA_ODT MIUA_ODT R231 56Ohm MA_ODT
6 MIUA_WEZ MIUA_WEZ RN9A MA_WEZ
6 MIUA_MCKE MIUA_MCKE RN9B MA_CKE
6 MIUA_BA1 MIUA_BA1 RN9C MA_BA1
6 MIUA_BA0 MIUA_BA0 RN9D MA_BA0
R215 NC 150Ohm
R216 56Ohm
R217 56Ohm
C200 0.01UF/50V
MA_MCLK J8
MA_MCLKZ K8
MA_CKE K2
MA_RASZ K7
MA_CASZ L7
MA_WEZ K3
MA_A13 L8 R8
MA_BA0 L2
MA_BA1 L3
MA_BA2 L1
MA_A0 M8
MA_A1 M3
MA_A2 M7
MA_A3 N2
MA_A4 N8
MA_A5 N3
MA_A6 N7
MA_A7 P2
MA_A8 P8
MA_A9 P3
MA_A10 M2
MA_A11 P7
MA_A12 R2
MA_DQ0 G8
MA_DQ1 G2
MA_DQ2 H7
MA_DQ3 H3
MA_DQ4 H1
MA_DQ5 H9
MA_DQ6 F1
MA_DQ7 F9
MA_DQ8 C8
MA_DQ9 C2
MA_DQ10 D7
MA_DQ11 D3
MA_DQ12 D1
MA_DQ13 D9
MA_DQ14 B1
MA_DQ15 B9
MA_DQS1 B7
MA_DQSB1 A8
MA_DQS0 F7
MA_DQSB0 E8
U11
CK CK# CKE RAS# CAS# WE# CS# NC6 BA0 BA1 NC5 A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15 UDQS UDQS# LDQS LDQS#
UDM LDM VREF VDDQ1 VDDQ2 VDDQ3 VDDQ4 VDDQ5 VDDQ6 VDDQ7 VDDQ8 VDDQ9 VDDQ10 VDDL VDD1 VDD2 VDD3 VDD4 VDD5 VSSQ1 VSSQ2 VSSQ3 VSSQ4 VSSQ5 VSSQ6 VSSQ7 VSSQ8 VSSQ9 VSSQ10 VSSDL VSS1 VSS2 VSS3 VSS4 VSS5 ODT NC1 NC2 NC3 NC4
B3 F3 J2 E9 G1 G3 G7 G9 A9 C1 C3 C7 C9 J1 A1 E1 J9 M9 R1 E7 F2 F8 H2 H8 A7 B2 B8 D2 D8 J7 A3 J3 N1 P9 E3 K9 A2 E2 R3 R7
MA_DQM1
MA_DQM0
A_MVERF
MA_ODT
H5PS5162FFR-G7
R225 10KOhm
R226 10KOhm
C204 0.1UF/16V
C380 1PF/50V NC
C381 1PF/50V NC
MB_MCLK MB_MCLKZ
MB_A13 NC R235 56Ohm MB_A13
6 MIUB_A[0:13] MIUB_A[0:13]
6 MIUB_DQM1 MIUB_DQM1 R236 56Ohm MB_DQM1
6 MIUB_DQM0 MIUB_DQM0 R237 56Ohm MB_DQM0
6 MIUB_DQS0 MIUB_DQS0 R238 56Ohm MB_DQS0
6 MIUB_DQS0B MIUB_DQS0B R239 56Ohm MB_DQSB0
6 MIUB_DQS1 MIUB_DQS1 R240 56Ohm MB_DQS1
6 MIUB_DQS1B MIUB_DQS1B R241 56Ohm MB_DQSB1
6 MIUB_DQ[0:15] MIUB_DQ[0:15]
MIUB_DQ11 RN23D MB_DQ11
MIUB_DQ12 RN23C MB_DQ12
MIUB_DQ9 RN23B MB_DQ9
MIUB_DQ14 RN23A MB_DQ14
MIUB_DQ6 RN19D MB_DQ6
MIUB_DQ1 RN19C MB_DQ1
MIUB_DQ3 RN19B MB_DQ3
MIUB_DQ4 RN19A MB_DQ4
MIUB_DQ15 RN22D MB_DQ15
MIUB_DQ8 RN22C MB_DQ8
MIUB_DQ10 RN22B MB_DQ10
MIUB_DQ13 RN22A MB_DQ13
MIUB_DQ7 RN24D MB_DQ7
MIUB_DQ0 RN24C MB_DQ0
MIUB_DQ2 RN24B MB_DQ2
MIUB_DQ5 RN24A MB_DQ5
56OHM
MIUB_A4 RN16D MB_A4
MIUB_A6 RN16C MB_A6
MIUB_A8 RN16B MB_A8
MIUB_A11 RN16A MB_A11
MIUB_A5 RN17D MB_A5
MIUB_A10 RN17C MB_A10
MIUB_A1 RN17B MB_A1
MIUB_BA2 RN17A MB_BA2
6 MIUB_BA2
MIUB_A12 RN18D MB_A12
MIUB_A7 RN18C MB_A7
MIUB_A9 RN18B MB_A9
MIUB_A3 RN18A MB_A3
MIUB_A2 RN20A MB_A2
MIUB_A0 RN20B MB_A0
6 MIUB_CASZ MIUB_CASZ RN20C MB_CASZ
6 MIUB_RASZ MIUB_RASZ RN20D MB_RASZ
6 MIUB_MCLK MIUB_MCLK R244 56Ohm MB_MCLK
6 MIUB_MCLKZ MIUB_MCLKZ R247 56Ohm MB_MCLKZ
6 MIUB_ODT MIUB_ODT R248 56Ohm MB_ODT
6 MIUB_WEZ MIUB_WEZ RN21A MB_WEZ
6 MIUB_MCKE MIUB_MCKE RN21B MB_CKE
6 MIUB_BA1 MIUB_BA1 RN21C MB_BA1
6 MIUB_BA0 MIUB_BA0 RN21D MB_BA0
R232 NC 150Ohm
R233 56Ohm
R234 56Ohm
C225 0.01UF/50V
MB_MCLK J8
MB_MCLKZ K8
MB_CKE K2
MB_RASZ K7
MB_CASZ L7
MB_WEZ K3
MB_A13 L8 R8
MB_BA0 L2
MB_BA1 L3
MB_BA2 L1
MB_A0 M8
MB_A1 M3
MB_A2 M7
MB_A3 N2
MB_A4 N8
MB_A5 N3
MB_A6 N7
MB_A7 P2
MB_A8 P8
MB_A9 P3
MB_A10 M2
MB_A11 P7
MB_A12 R2
MB_DQ0 G8
MB_DQ1 G2
MB_DQ2 H7
MB_DQ3 H3
MB_DQ4 H1
MB_DQ5 H9
MB_DQ6 F1
MB_DQ7 F9
MB_DQ8 C8
MB_DQ9 C2
MB_DQ10 D7
MB_DQ11 D3
MB_DQ12 D1
MB_DQ13 D9
MB_DQ14 B1
MB_DQ15 B9
MB_DQS1 B7
MB_DQSB1 A8
MB_DQS0 F7
MB_DQSB0 E8
U12
CK CK# CKE RAS# CAS# WE# CS# NC6 BA0 BA1 NC5 A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15 UDQS UDQS# LDQS LDQS#
UDM LDM VREF VDDQ1 VDDQ2 VDDQ3 VDDQ4 VDDQ5 VDDQ6 VDDQ7 VDDQ8 VDDQ9 VDDQ10 VDDL VDD1 VDD2 VDD3 VDD4 VDD5 VSSQ1 VSSQ2 VSSQ3 VSSQ4 VSSQ5 VSSQ6 VSSQ7 VSSQ8 VSSQ9 VSSQ10 VSSDL VSS1 VSS2 VSS3 VSS4 VSS5 ODT NC1 NC2 NC3 NC4
B3 F3 J2 E9 G1 G3 G7 G9 A9 C1 C3 C7 C9 J1 A1 E1 J9 M9 R1 E7 F2 F8 H2 H8 A7 B2 B8 D2 D8 J7 A3 J3 N1 P9 E3 K9 A2 E2 R3 R7
MB_DQM1
MB_DQM0
B_MVERF
MB_ODT
H5PS5162FFR-G7
R242 10KOhm
R243 10KOhm
C226 0.1UF/16V
C382 1PF/50V NC
C383 1PF/50V NC
Unihan
Title : DDR2
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size C
Project Name xxA(L)V833/xxE(H)L833/xxDB833
Rev 1.02
Date: Wednesday, January 19, 2011
Sheet 9 of 18


CN10
HDMI_CON_19P
P_GND4
P_GND2
P_GND1
P_GND3
P_GND5
HDMIA_RX2P
HDMIA_RX2N
HDMIA_RX1P
HDMIA_RX1N
HDMIA_RX0P
HDMIA_RX0N
HDMIA_CLKP
HDMIA_CLKN
HDMI_A_CEC
HDMI_A_ARC
HDMI_A_SCL
HDMI_A_SDA
HDMI-HPA
U29 MLSEP08A-2510NC
U30 MLSEP08A-2510NC
INPUT1 OUTPUT1
INPUT2 OUTPUT2
GND1 GND2
INPUT3 OUTPUT3
INPUT4 OUTPUT4
R484 4.7Ohm HDMI_A_RX2P
R485 4.7Ohm HDMI_A_RX2N
R486 4.7Ohm HDMI_A_RX1P
R487 4.7Ohm HDMI_A_RX1N
R383 4.7Ohm HDMI_A_RX0P
R385 4.7Ohm HDMI_A_RX0N
R477 4.7Ohm HDMI_A_RXCLKP
R479 4.7Ohm HDMI_A_RXCLKN
HDMI_A_RX2P 5
HDMI_A_RX2N 5
HDMI_A_RX1P 5
HDMI_A_RX1N 5
HDMI_A_RX0P 5
HDMI_A_RX0N 5
HDMI_A_RXCLKP 5
HDMI_A_RXCLKN 5
+5V_HDMIA
C280 0.1UF/16V
D53 ADUC10S03005
ZD24 PESD0603-240
ZD25 PESD0603-240
ZD26 PESD0603-240
NC
+5V_HDMIA
R480 47KOHM
R478 47KOHM
R481 33Ohm
R462 33Ohm
DDCDA_SCL
DDCDA_SDA
R380 1KOhm
R483 10KOhm
R482 4.7KOhm
Q21 PMBS3904
HOTPLUGA
+3.3V_Normal
Q40 2N7002
R494 33Ohm
R495 47KOHM
C237 0.1UF/16V
6 HDMI_A_ARC_Ctrl
C227 1UF/16V
HDMI_A_ARC
ZD17 NC
R91 100KOHM
R249 68Ohm
U14 NC
PI74ST1G08CEX
C229 0.1UF/16V
SPDIF_OUT 5,17
CN4 NC
HDMI_CON_19P
U24 MLSEP08A-2510NC
U25 MLSEP08A-2510NC
HDMIB_RX2P
HDMIB_RX2N
HDMIB_RX1P
HDMIB_RX1N
HDMIB_RX0P
HDMIB_RX0N
HDMIB_CLKP
HDMIB_CLKN
HDMI_B_CEC
HDMI-B-SPDIF_In
HDMI_B_SCL
HDMI_B_SDA
HDMI-HPB
R250 4.7Ohm HDMI_B_RX2P
R252 4.7Ohm HDMI_B_RX2N
R255 4.7Ohm HDMI_B_RX1P
R256 4.7Ohm HDMI_B_RX1N
R258 4.7Ohm HDMI_B_RX0P
R259 4.7Ohm HDMI_B_RX0N
R261 4.7Ohm HDMI_B_RXCLKP
R263 4.7Ohm HDMI_B_RXCLKN
HDMI_B_RX2P 5
HDMI_B_RX2N 5
HDMI_B_RX1P 5
HDMI_B_RX1N 5
HDMI_B_RX0P 5
HDMI_B_RX0N 5
HDMI_B_RXCLKP 5
HDMI_B_RXCLKN 5
+5V_HDMIB
C281 NC 0.1UF/16V
ZD28 PESD0603-240
R343 75Ohm
R489 NC 33Ohm
C387 1PF/50V
BD_SPDIF_In
BD_SPDIF_In 6
D19 ADUC10S03005
ZD18 PESD0603-240
ZD19 PESD0603-240
ZD20 PESD0603-240
+5V_HDMIB
R251 47KOHM
R254 47KOHM
R262 NC 33Ohm
R264 NC 33Ohm
DDCDB_SCL
DDCDB_SDA
R266 NC 1KOhm
R267 NC 10KOhm
R271 NC 4.7KOhm
Q16 NC PMBS3904
HOTPLUGB
R319 0Ohm
TUNER_+5V
FB66 120Ohm/100Mhz
C138 0.1UF/16V
R119 1.5KOHM
R317 2.2kOHM
R115 3.3KOHM
R449 4.7Ohm
C283 NC 1UF/16V
Q15 PMBS3904
R318 200Ohm
SPDIF_OUT
CN5
HDMI_CON_19P
U26 MLSEP08A-2510NC
U27 MLSEP08A-2510NC
HDMIC_RX2P
HDMIC_RX2N
HDMIC_RX1P
HDMIC_RX1N
HDMIC_RX0P
HDMIC_RX0N
HDMIC_CLKP
HDMIC_CLKN
HDMI_C_CEC
HDMI_C_SCL
HDMI_C_SDA
HDMI-HPC
R275 4.7Ohm HDMI_C_RX2P
R277 4.7Ohm HDMI_C_RX2N
R278 4.7Ohm HDMI_C_RX1P
R279 4.7Ohm HDMI_C_RX1N
R281 4.7Ohm HDMI_C_RX0P
R284 4.7Ohm HDMI_C_RX0N
R285 4.7Ohm HDMI_C_RXCLKP
R286 4.7Ohm HDMI_C_RXCLKN
HDMI_C_RX2P 5
HDMI_C_RX2N 5
HDMI_C_RX1P 5
HDMI_C_RX1N 5
HDMI_C_RX0P 5
HDMI_C_RX0N 5
HDMI_C_RXCLKP 5
HDMI_C_RXCLKN 5
+5V_HDMIC
C334 0.1UF/16V
D32 ADUC10S03005
ZD21 PESD0603-240
ZD22 PESD0603-240
ZD23 PESD0603-240
+5V_HDMIC
R276 47KOHM
R274 47KOHM
R283 33Ohm
R287 33Ohm
DDCDC_SCL
DDCDC_SDA
R288 1KOhm
R289 10KOhm
R290 4.7KOhm
Q17 PMBS3904
HOTPLUGC
R293 200Ohm
HDMI-CEC 5
Unihan
Title : HDMI
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size B
Project Name xxA(L)V833/xxE(H)L833/xxDB833
Rev 1.02
Date: Wednesday, January 19, 2011
Sheet 10 of 18

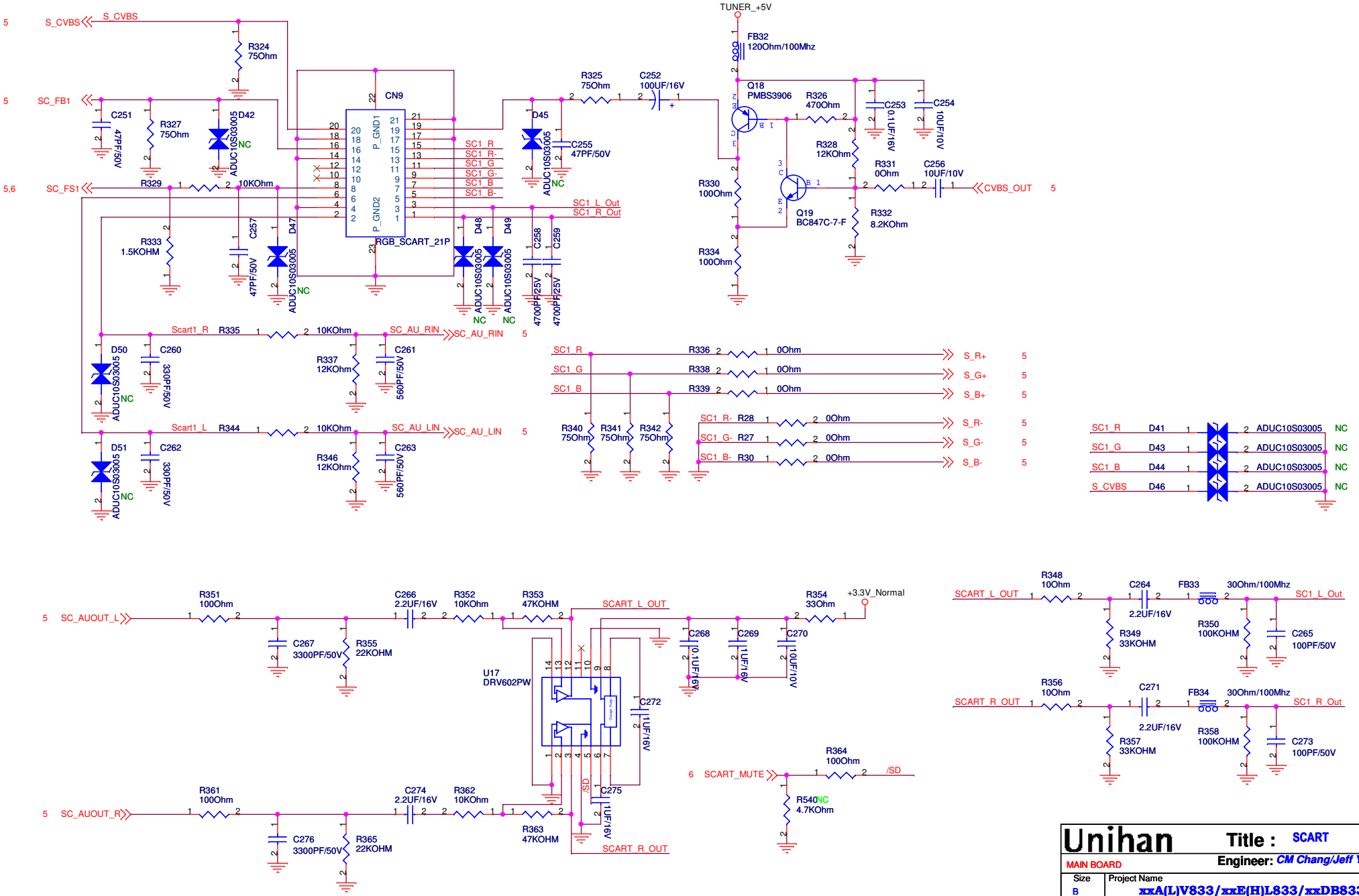


Unihan	Title : VGA	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: B	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 11 of 18	

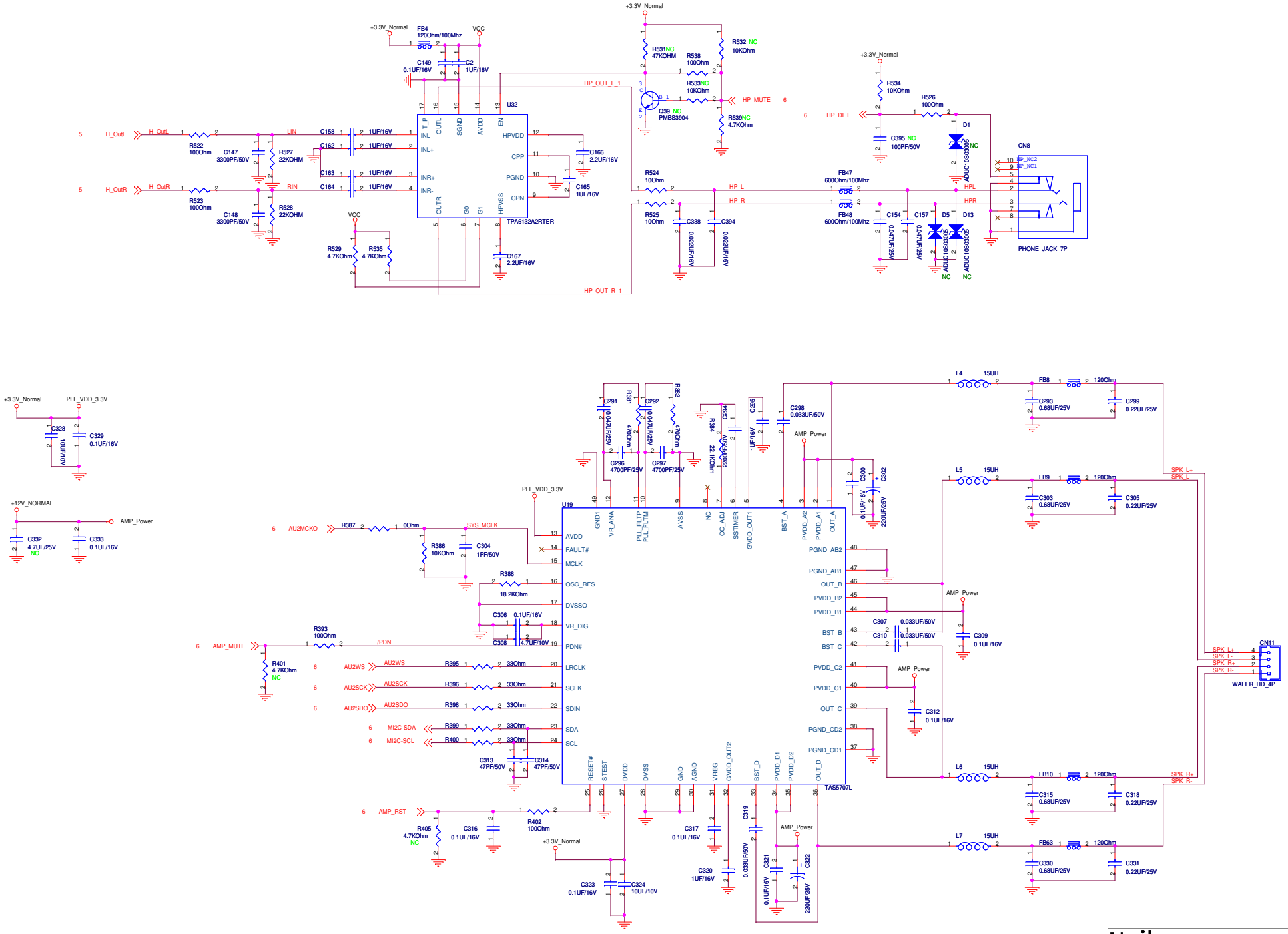
COMPONENT (Y Mix CVBS Input)

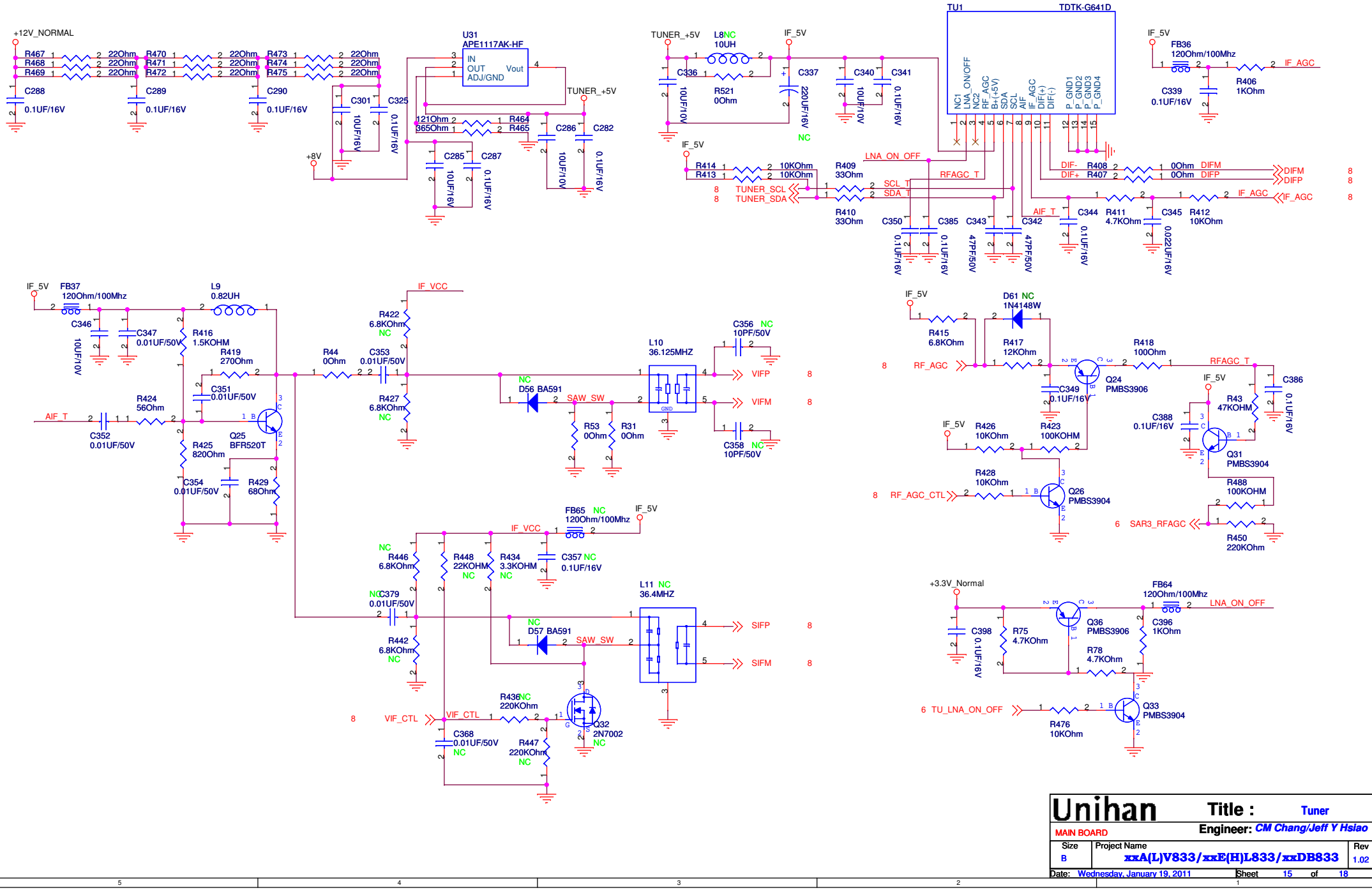


Unihan	Title : COMPONENT& CVBS	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: A	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 12 of 18	

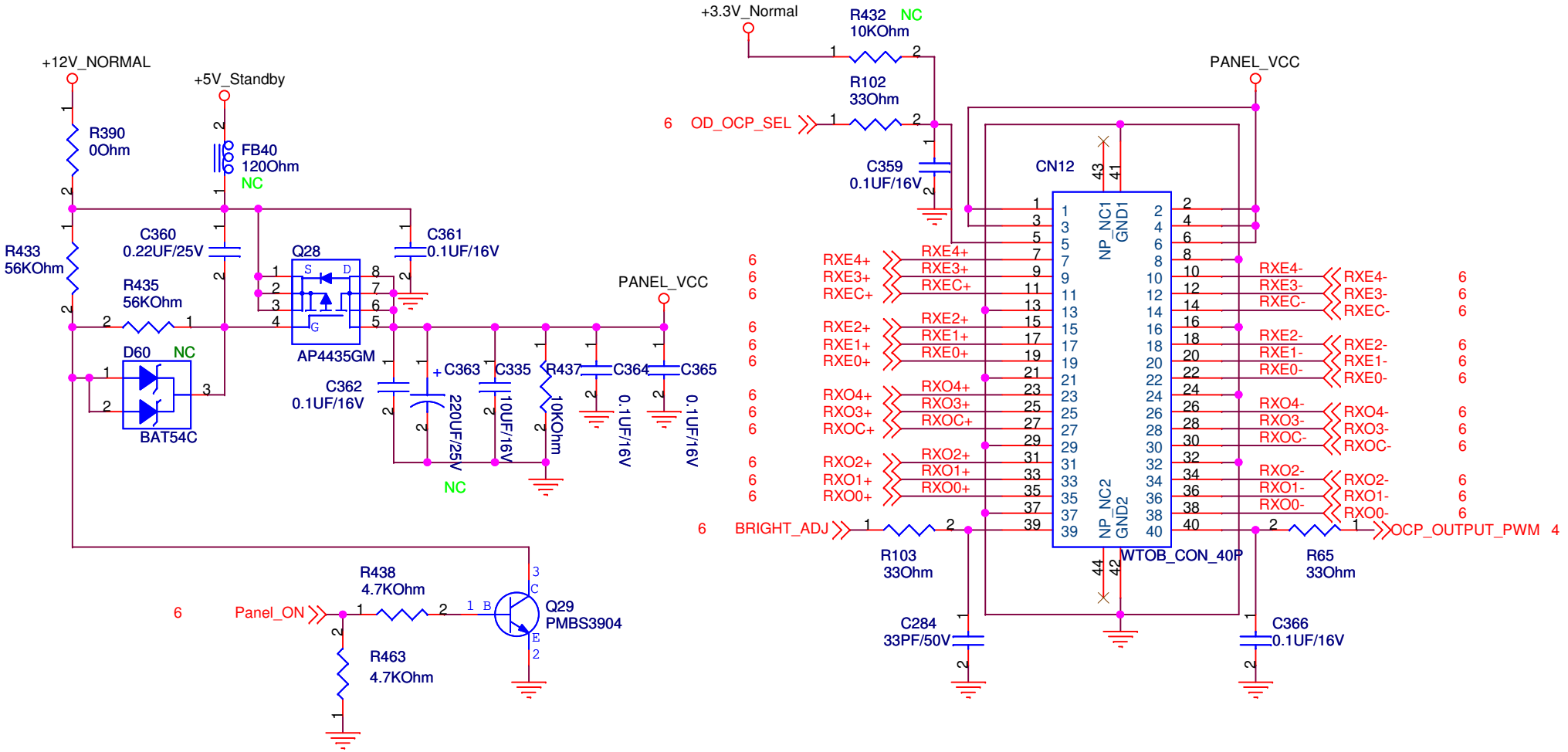


Unihan	Title : SCART	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: B	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 13 of 18	

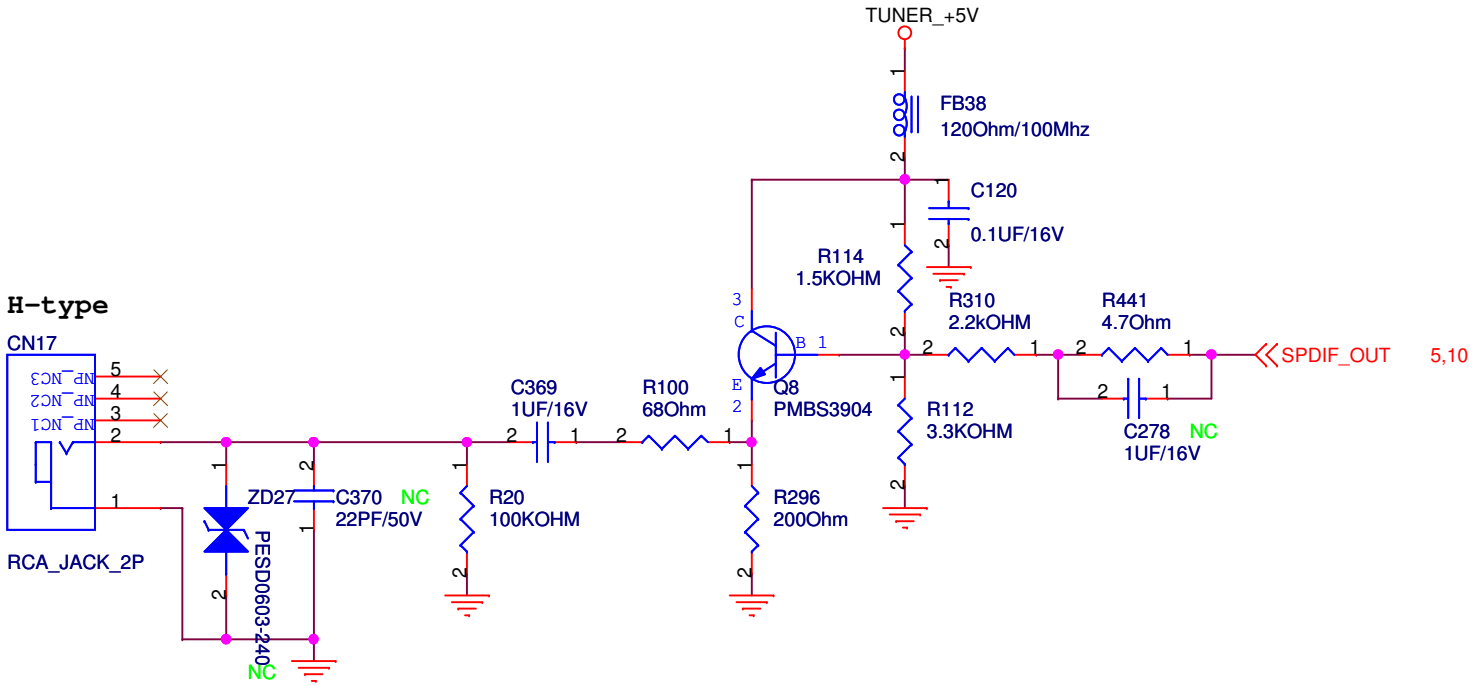

+3.3V_Normal
FB4
120Ohm/100Mhz
VCC
C149
0.1UF/16V
C2
1UF/16V
U32
TPA6132A2RTER
H_OutL
H_OutR
LIN
RIN
R522
100Ohm
R523
100Ohm
C147
3300PF/50V
C148
3300PF/50V
R527
22KOHM
R528
22KOHM
C158
C162
C163
C164
1UF/16V
R529
4.7KOhm
R535
4.7KOhm
C166
2.2UF/16V
C165
1UF/16V
C167
2.2UF/16V
HP_OUT_L_1
HP_OUT_R_1
R531NC
47KOHM
R538
100Ohm
R532 NC
10KOhm
R533NC
10KOhm
R539NC
4.7KOhm
Q39 NC
PMBS3904
HP_MUTE
HP_DET
R534
10KOhm
R526
100Ohm
C395 NC
100PF/50V
D1
ADUC105630005
CN8
PHONE_JACK_7P
R524
10Ohm
R525
10Ohm
C338
0.22UF/16V
C394
0.22UF/16V
HP_L
HP_R
FB47
600Ohm/100Mhz
FB48
600Ohm/100Mhz
C154
C157
0.047UF/25V
D5
D13
NC
+12V_NORMAL
AMP_Power
C332
4.7UF/25V
NC
C333
0.1UF/16V
PLL_VDD_3.3V
C328
10UF/10V
C329
0.1UF/16V
U19
TAS5707L
AU2MCKO
R387
0Ohm
SYS_MCLK
R386
10KOhm
C304
1PF/50V
R388
18.2KOhm
C306
0.1UF/16V
C308
4.7UF/10V
AMP_MUTE
R393
100Ohm
R401
4.7KOhm
NC
/PDN
AU2WS
AU2SCK
AU2SDO
MI2C-SDA
MI2C-SCL
R395
R396
R398
R399
R400
33Ohm
C313
47PF/50V
C314
47PF/50V
AMP_RST
R405
4.7KOhm
NC
C316
0.1UF/16V
R402
100Ohm
C323
0.1UF/16V
C324
10UF/10V
C291
0.047UF/25V
C292
0.047UF/25V
R381
470KOhm
R382
470KOhm
C296
4700PF/25V
C297
4700PF/25V
R384
22KOhm
C294
220PF/50V
C295
1UF/16V
C298
0.033UF/50V
C300
0.1UF/16V
C302
220UF/25V
C307
0.033UF/50V
C310
0.033UF/50V
C309
0.1UF/16V
C312
0.1UF/16V
C317
0.1UF/16V
C319
0.033UF/50V
C320
1UF/16V
C321
0.1UF/16V
C322
220UF/25V
L4
15UH
L5
15UH
L6
15UH
L7
15UH
FB8
FB9
FB10
FB63
120Ohm
C293
0.68UF/25V
C299
0.22UF/25V
C303
0.68UF/25V
C305
0.22UF/25V
C315
0.68UF/25V
C318
0.22UF/25V
C330
0.68UF/25V
C331
0.22UF/25V
SPK_L+
SPK_L-
SPK_R+
SPK_R-
CN11
WAFER_HD_4P
Unihan
Title : Audio AMP
MAIN BOARD
Engineer: CM Chang/Jeff Y Hsiao
Size C
Project Name xxA(L)V833/xxE(H)L833/xxDB833
Rev 1.02
Date: Wednesday, January 19, 2011
Sheet 14 of 18



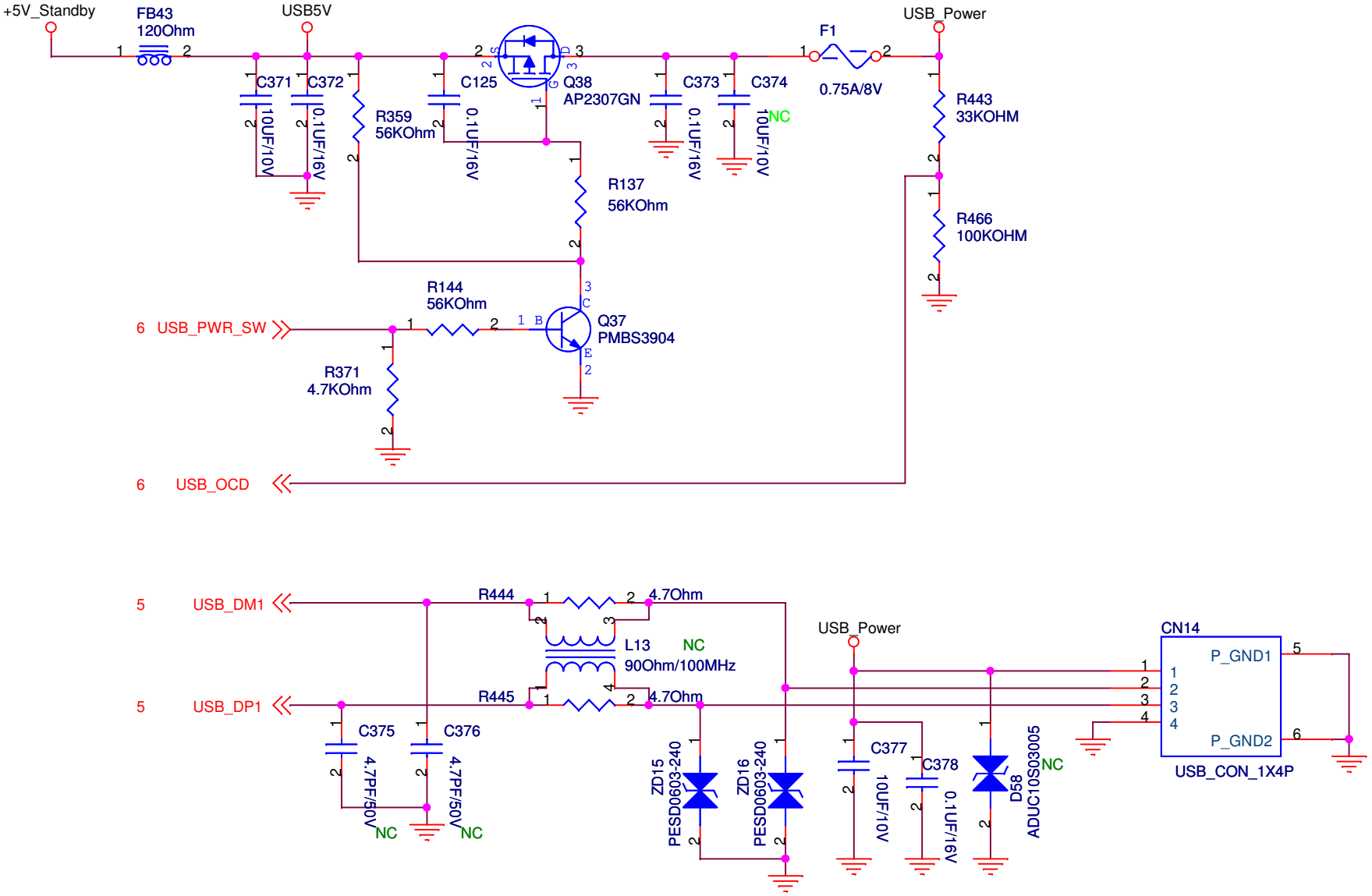
Unihan	Title : Tuner	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: B	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 15 of 18	



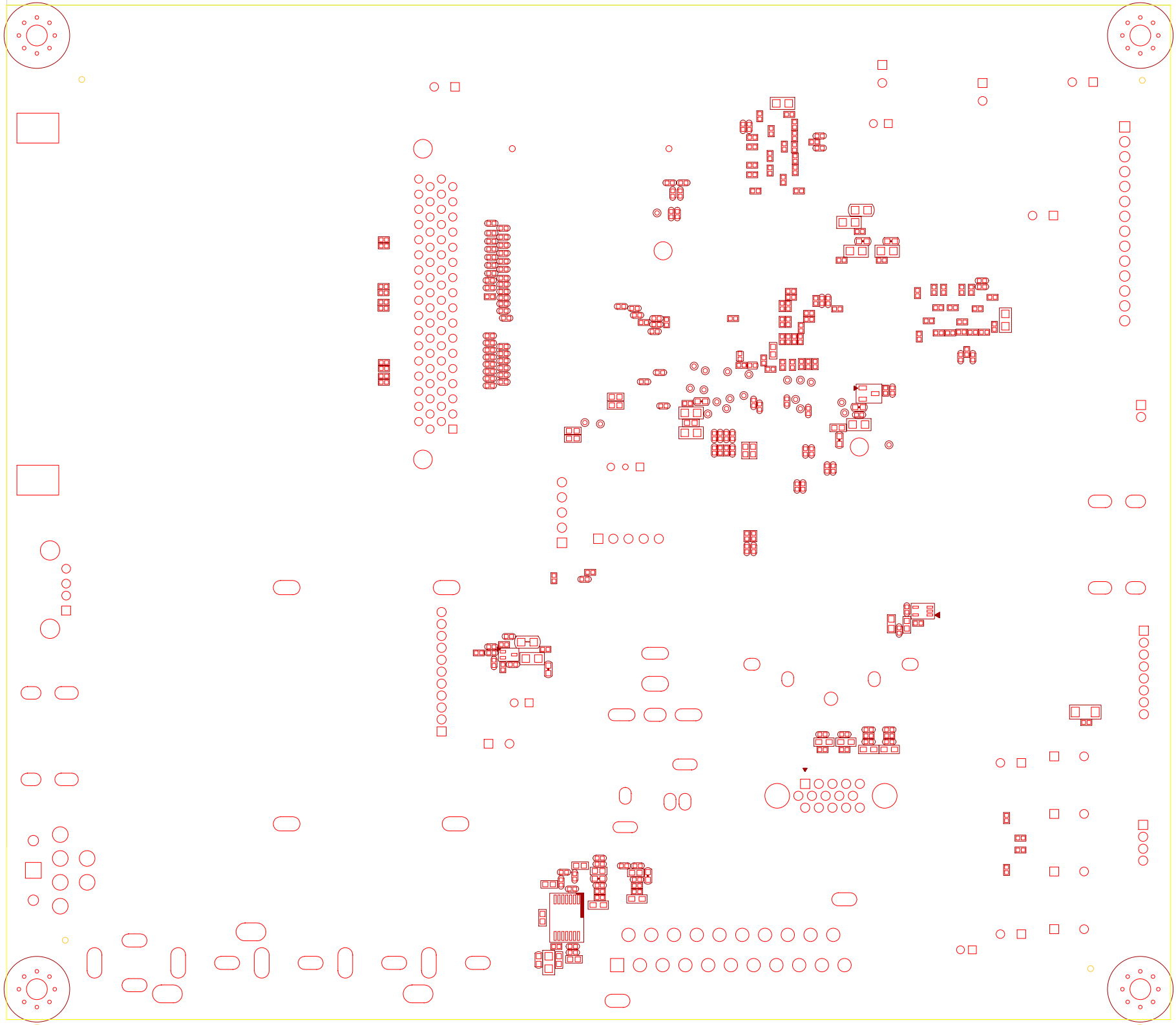
Unihan	Title : LVDS Interface	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: A	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 16 of 18	

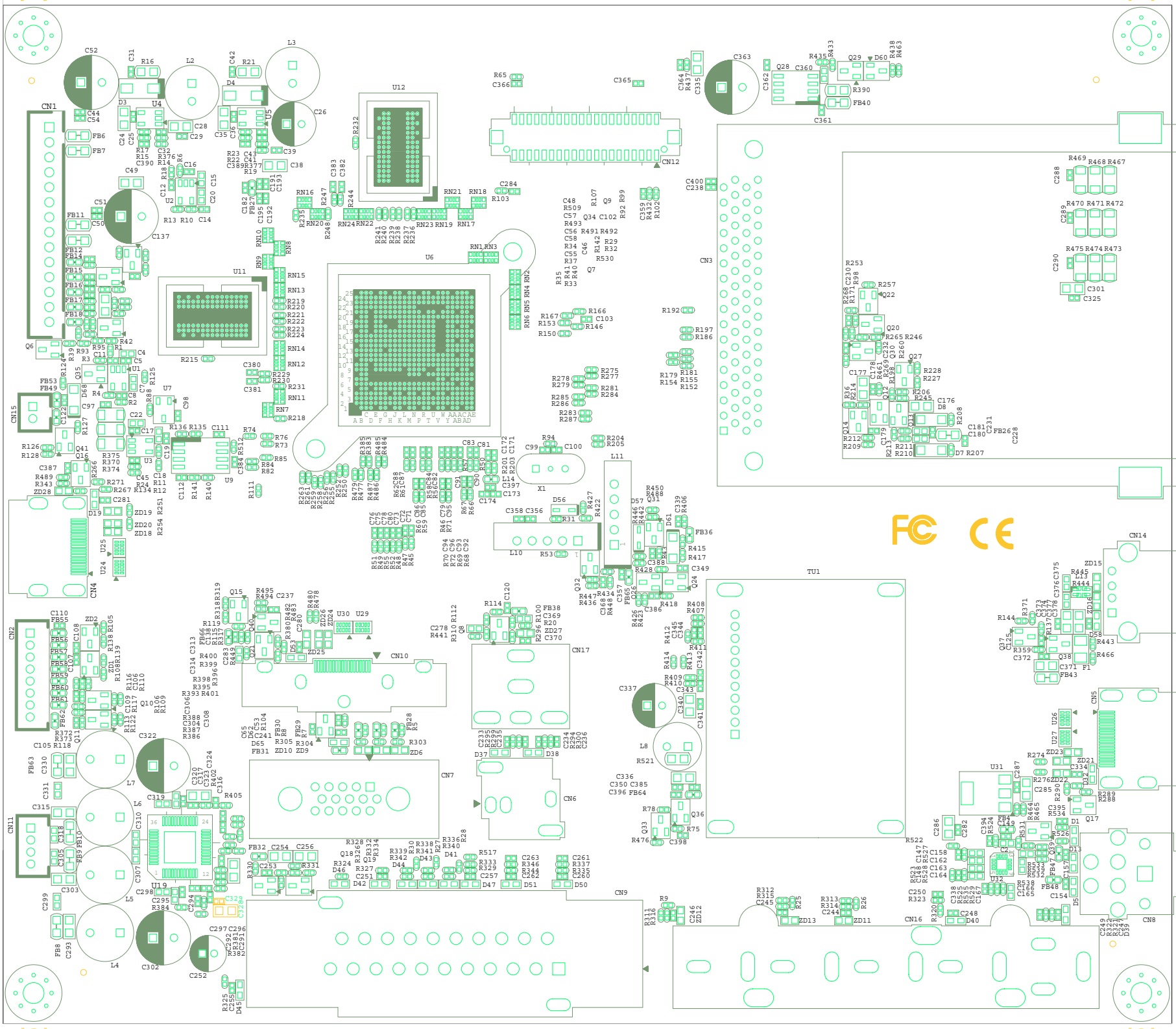


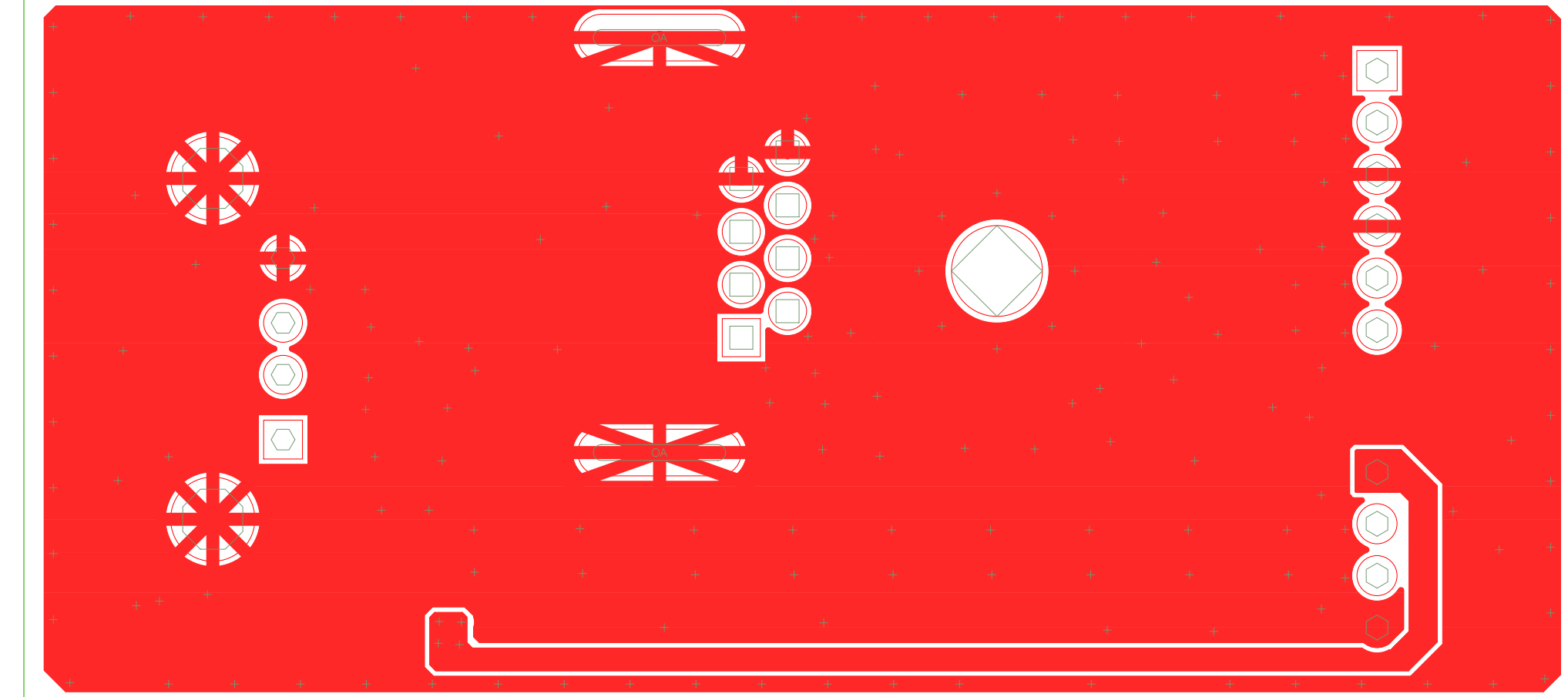
Unihan	Title : SPDIF OUT	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: A	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 17 of 18	

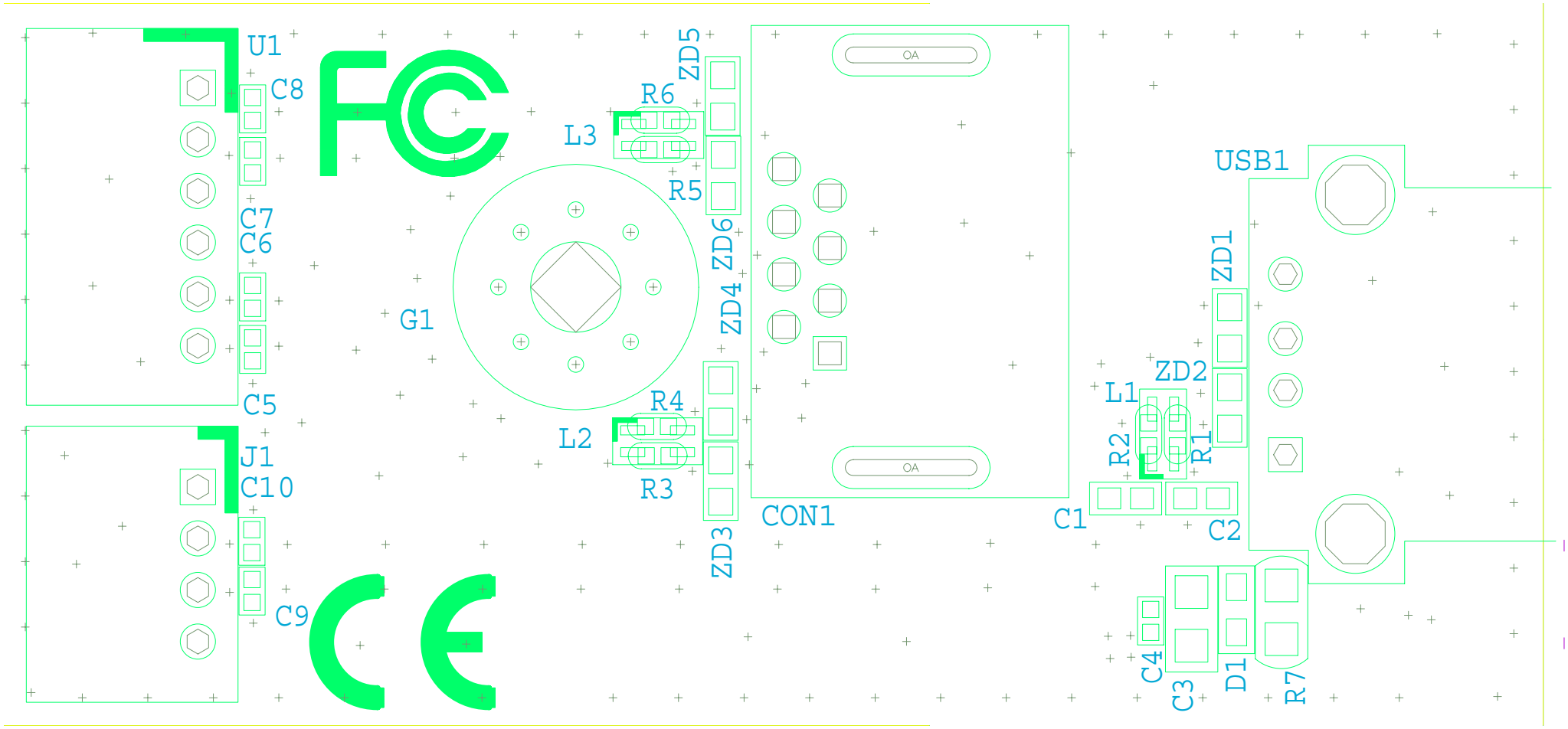


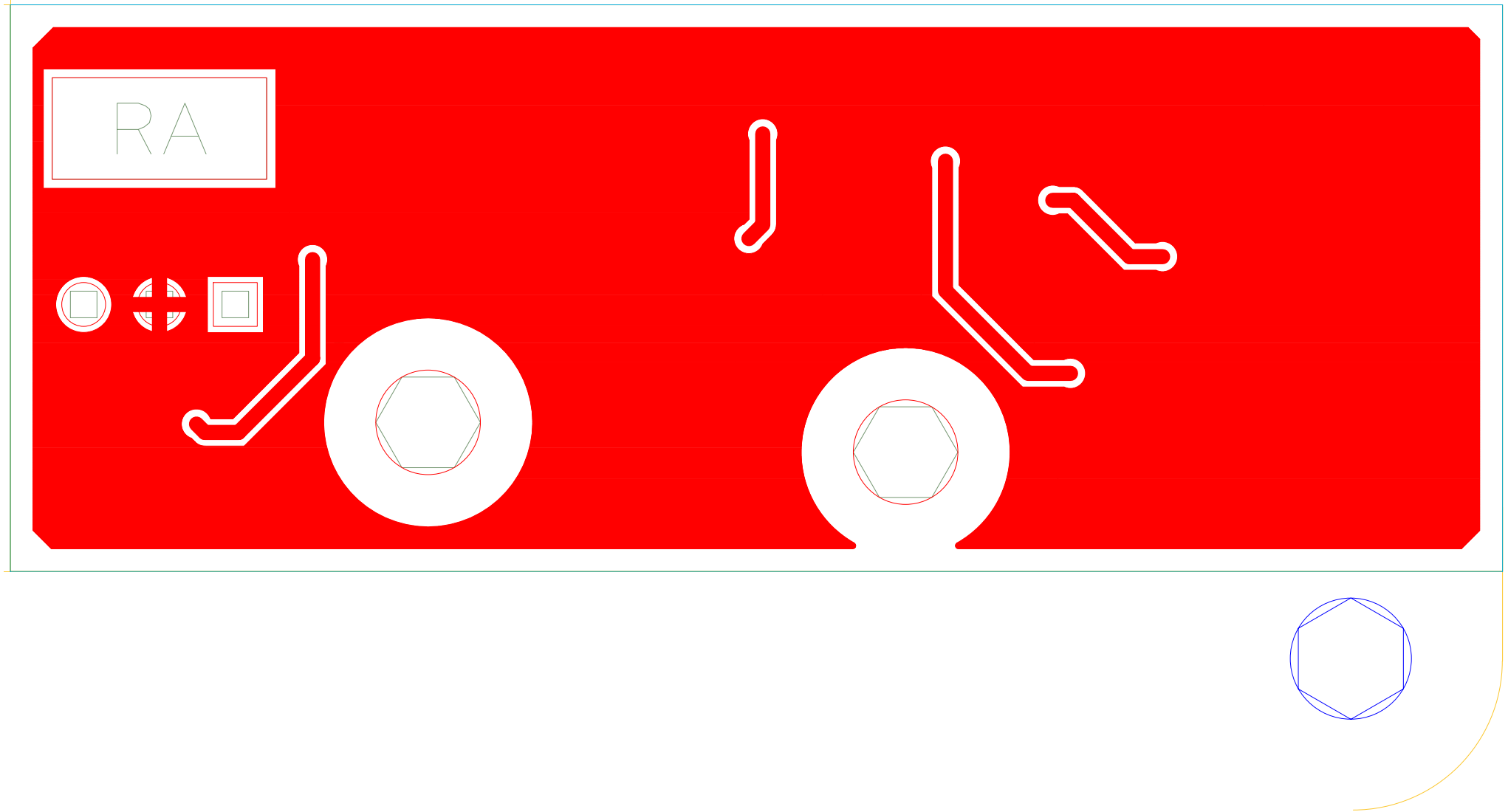
Unihan	Title : USB	
MAIN BOARD	Engineer: CM Chang/Jeff Y Hsiao	
Size: A	Project Name: xxA(L)V833/xxE(H)L833/xxDB833	Rev: 1.02
Date: Wednesday, January 19, 2011	Sheet 18 of 18	

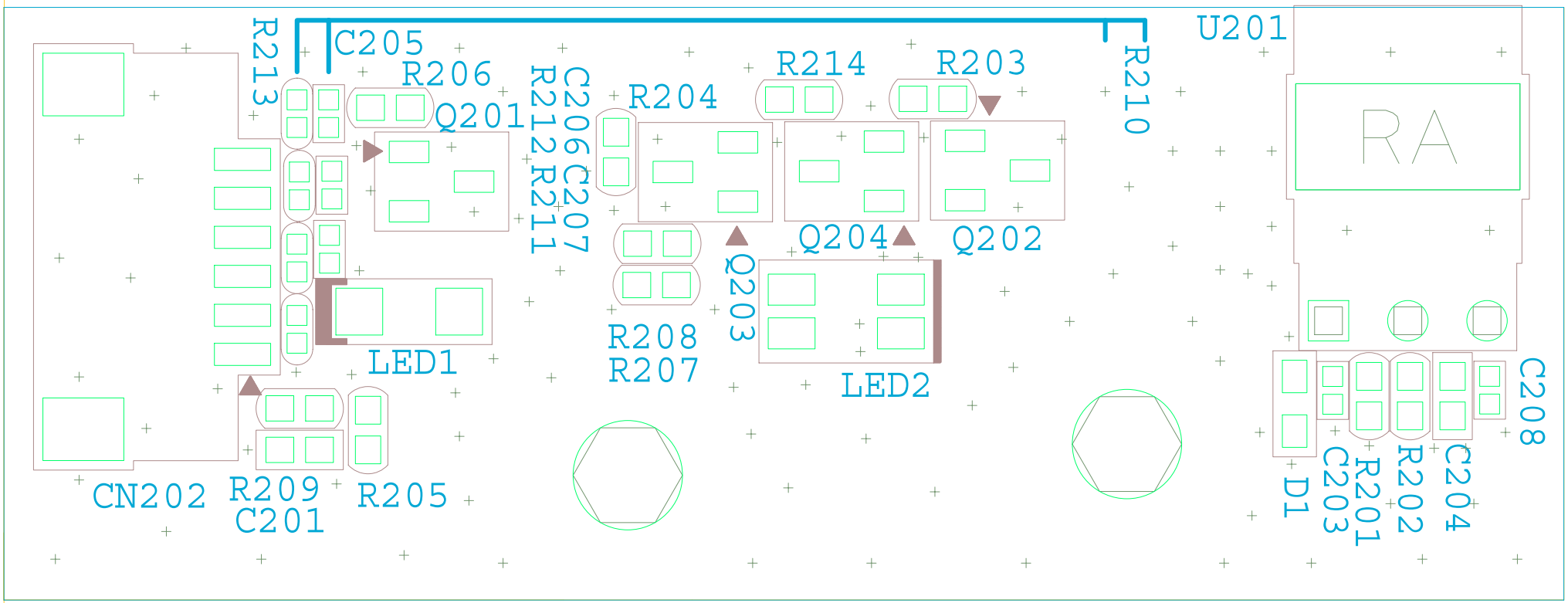







U1
C8
C7
C6
C5
J1
C10
C9
G1
L3
R6
ZD5
R5
ZD6
ZD4
L2
R4
R3
ZD3
CON1
OA
OA
USB1
ZD1
ZD2
L1
R2
R1
C1
C2
C4
C3
D1
R7


RA


R213
C205
R206
Q201
C206
C207
R212
R211
R204
R214
R203
R210
U201
RA
Q204
Q202
Q203
R208
R207
LED1
LED2
C208
D1
C203
R201
R202
C204
CN202
R209
C201
R205