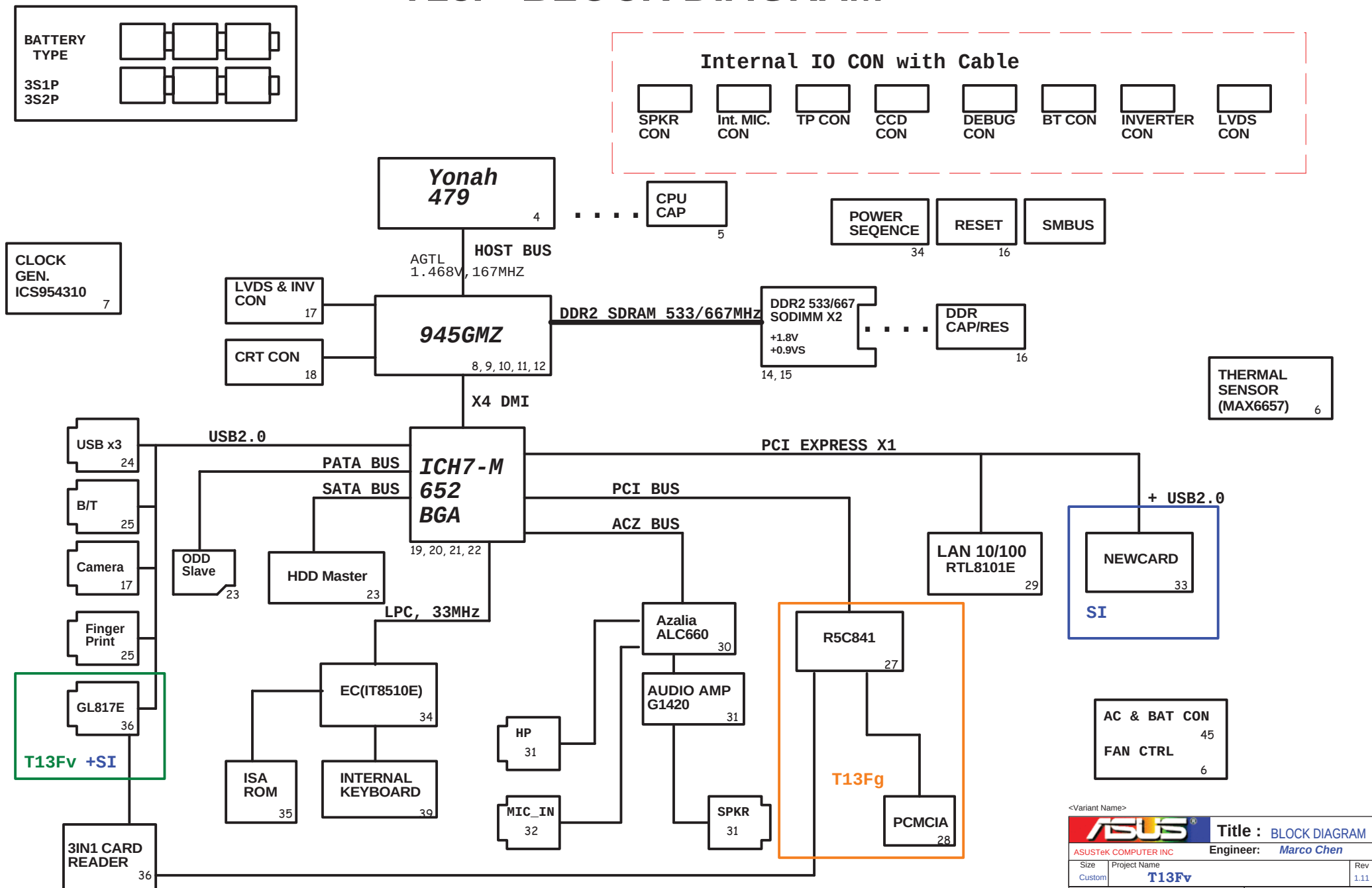


T13Fv SCHEMATIC R1.11

PAGE	Content	PAGE	Content
SYSTEM PAGE REF.		47	EMPTY
4	YONAH CPU (1)	48	History(1)
5	YONAH CPU (2)	49	History(2)
6	FAN CTRL&Thernal protection		
7	CLK GEN-ICS954310	POWER PAGE REF.	
8	Calistoga--CPU	50	POWER_VCORE
9	Calistoga--PCIE	51	POWER_SYSTEM
10	Calistoga--DDR2	52	POWER_I/O_1.8V & 1.05VS
11	Calistoga--POWER	53	POWER_I/O_DDR & VTT
12	Calistoga--GND	54	POWER_I/O_VTT & +2.5VS
13	Calistoga--Strap	55	POWER_VGA_CORE(Empty)
14	DDR2 SO-DIMM_0	56	POWER_VGA_RAM(Empty)
15	DDR2 SO-DIMM_1	57	POWER_CHARGER
16	DDR2 ADDRESS TERMINATION	58	POWER_PIC(Empty)
17	LVDS & INVERTER CONN	59	POWER_DETECT
18	VGA CONN	60	POWER_PROTECT
19	ICH7M--CPU, IDE, AUDIO	61	POWER_LOAD SWITCH
20	ICH7M--GPIO	62	POWER_FLOWCHART
21	ICH7M--PCI, PCI-E, USB	63	POWER_SIGNAL
22	ICH7M--VCC, GND		
23	HDD & CD-ROM CONN		
24	USB PORT		
25	B/T & F/P		
26	B TO B CONN(M)		
27	CARDBUS R5C841		
28	PCMCIA SOCKET		
29	PCI-E--LAN_RTL8101E		
30	AZALIA - ALC660-GR		
31	AUDIO_AMPLIFIER		
32	MICROPHONE		
33	NEWCARD		
34	EC-IT8510E		
35	ISA ROM & Touch Pad & KB& FP		
36	Card Reader GL817E		
37	DISCHARGE		
38	Instant Key & FFC CONN		
39	LEDs		
40	EMPTY		
41	EMPTY		
42	EMPTY		
43	EMPTY		
44	EMPTY		
45	SREW HOLE		
46	DC & BAT IN		

T13F BLOCK DIAGRAM



EC GPIO SETTING

Pin	Pin Name	Signal Name	Type
32	PWM0/GPA0	N/A	
33	PWM1/GPA1	FAN_PWM	
36	PWM2/GPA2	N/A	
37	PWM3/GPA3	N/A	
38	PWM4/GPA4	CHG_LED_UP#	O
39	PWM5/GPA5	PWR_LED_UP#	O
40	PWM6/GPA6	BATSEL_3S#	O
43	PWM7/GPA7	LCD_BACKOFF#	O
153	RXD/GPB0	NUM_LED	O
154	TXD/GPB1	CAP_LED	O
162	GPB2	N/A	O
163	SMCLK0/GPB3	SMB0_CLK	I/O
164	SMDAT0/GPB4	SMB0_DAT	I/O
5	GA20/GPB5	A20GATE	O
6	KBRST#/GPB6	RCIN#	O
165	GPB7	THRO_CPU	O
47	CLKOUT/GPC0	PWRGEAR_LED	O
169	SMCLK1/GPC1	SMB1_CLK	I/O
170	SMDAT1/GPC2	SMB1_DAT	I/O
171	GPC3	CR_DRIVER#	O
172	TMR10/WUI2/GPC4	ACIN_OC#	I
175	GPC5	OP_SD#	O
176	TMR11/WUI3/GPC6	BAT_IN_OC#	I
1	CK32KOUT/GPC7	EC_IDE_RST#	O
26	RI1#/WUI0/GPD0	SUSB#	I
29	RI2#/WUI1/GPD1	SUSC#	I
30	LPCRST#/WUI4/GPD2	PCI_RST#	I
31	ECSC# /GPD3	EXT_SC#	O
41	GPD4	CR_POWER#	O
42	GINT/GPD5	N/A	
62	TACH0/GPD6	FAN0_TACH	I
63	TACH1/GPD7	N/A	
87	ADC4/GPE0	WLAN_BTN#	I
88	ADC5/GPE1	N/A	I
89	ADC6/GPE2	MARATHON#	I
90	ADC7/GPE3	N/A	
2	PWRSW/GPE4	PWR_SW#	I
44	WUI5/GPE5	N/A	
24	LPCPD#/WUI6/GPE6	LID_EC#	I
25	CLKRUN#/WUI7/GPE7	N/A	
110	PS2CLK0/GPF0	/	
111	PS2DAT0/GPF1	/	
114	PS2CLK1/GPF2	/	
115	PS2DAT1/GPF3	/	
116	PS2CLK2/GPF4	TP_CLK	I/O
117	PS2DAT2/GPF5	TP_DAT	I/O
118	PS2CLK3/GPF6	PWRLMT_EC#	I
119	PS2DAT3/GPF7	/	I
113	FA16/GPG0	FA16	
112	FA17/GPG1	FA17	
104	FA18/GPG2	FA18	
103	FA19/GPG3	/	
3	FA20/GPG4	THRM_CPU#	I
4	FA21/GPG5	N/A	
27	LPC80HL/GPG6	PMTHERM#	O
28	LPC80LL/GPG7	AC_APR_UC#	I

Pin	Pin Name	Signal Name	Type
48	GPH0	VSUS_ON	O
54	GPH1	VSUS_GD#	O
55	GPH2	CPUPWR_GD#	O
69	GPH3	PM_PWRBTN#	O
70	GPH4	SUSC_ON	O
75	GPH5	SUSB_ON	O
76	GPH6	CPU_VRON	O
105	GPH7	PM_RSMRST#	O
148	GP10	ICH7_PWROK	O
149	GP11	WATCH_DOG#	O
152	GP12	N/A	
155	GP13	CHG_EN#	O
156	GP14	PRECHG	O
168	GP15	BAT_LL#	O
174	GP16	BAT_LEARN	O
81	ADC0	N/A	
82	ADC1	N/A	
83	ADC2	N/A	
84	ADC3	SYS_TEMP	I
93	ADC8	KID0	
94	ADC9	KID1	
99	DAC0	N/A	
100	DAC1	N/A	
101	DAC2	INVTER_DA	O
102	DAC3	BATSEL_2P#	O

ICH7M_PCI EXPRESS:

PCI-E Device	PAIR
RTL8101E	1
GOLAN	2
NEWCARD	3

ICH7M_SMBUS ADDRESS :

SM-Bus Device	SM-Bus Address
Clock Generator	1101001x (D2)
SO-DIMM 0	1010000x (A0)
SO-DIMM 1	1010001x (A4)
Thermal Sensor(MAX6657)	1001100x (98)

ICH7M_PCI_DEVICE:

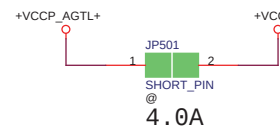
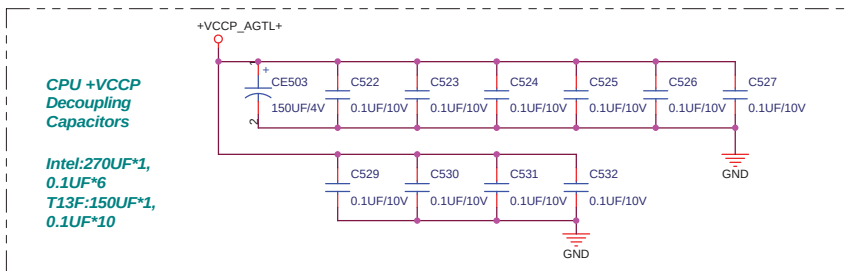
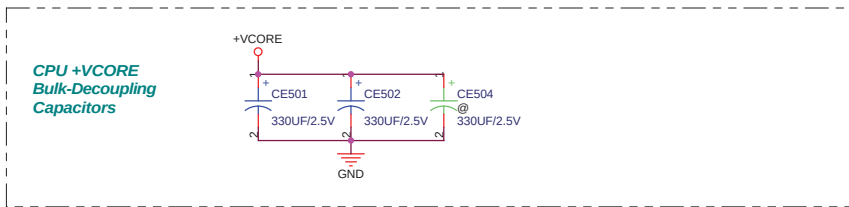
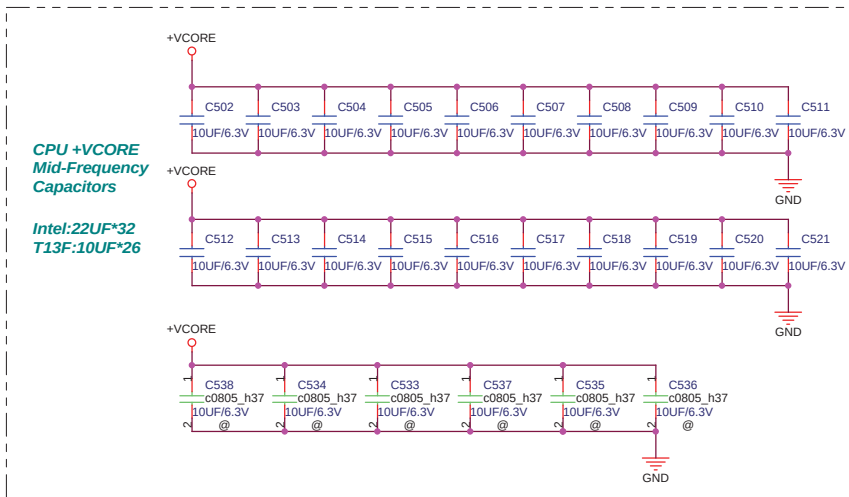
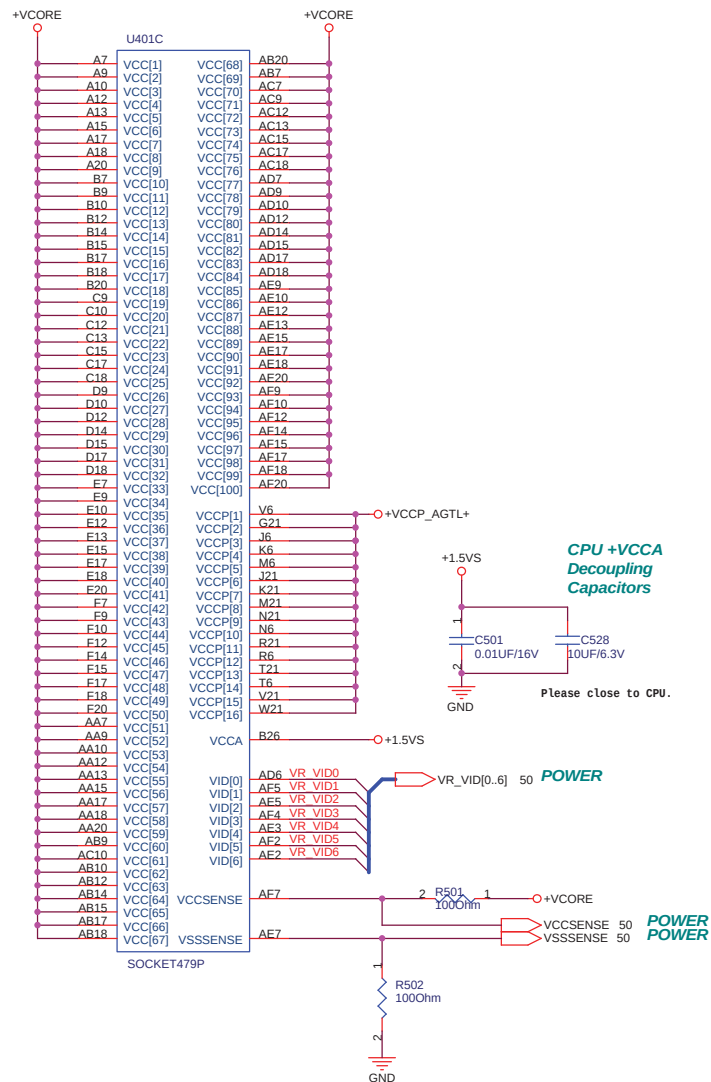
PCI Device	IDSEL#	REQ / GNT#	Interrupts
R5C841	AD17	1	B, D

ICH7M_GPIO

Pin	Use As	Signal Name	Power
GPIO 00	i	GPI	PM_BMBUSY#
GPIO 01	i	GPI	PCI_REQ#5
GPIO [5:2]	i	GPI	PCI_INT[E:H]#
GPIO 06	i	GPO	BT_LED_EN
GPIO 07	i	GPI	N/A
GPIO 08	i	GPI	EXTSMI#
GPIO 09	i	GPI	N/A
GPIO 10	i	GPI	N/A
GPIO 11	i	Native	SMB_ALERT#
GPIO 12	i	GPI	KBC_SCI#
GPIO 13	i	GPI	N/A
GPIO 14	i	GPI	N/A
GPIO 15	i	GPO	802_LED_EN
GPIO 16	O 0	GPO	PM DPRSLPVR
GPIO 17	O 1	GPO	PCI_GNT#5
GPIO 18	O 1	GPO	STP_PCI#
GPIO 19	i 1	GPI	N/A
GPIO 20	O 1	GPO	STP_CPU#
GPIO 21	i 1	GPO	N/A
GPIO 22	i 1	Native	PCI_REQ#4
GPIO 23	i 1	Native	N/A
GPIO 24	O 0	GPO	MSK_PCIRST
GPIO 25	O 1	GPO	CB_SD#
GPIO 26	O 0	GPO	BT_ON#
GPIO 27	O 0	GPO	WLAN_ON#
GPIO 28	O 0	GPO	MEMROM/YONAH#
GPIO 29	i 0	Native	USB_OC#5
GPIO 30	i 0	Native	USB_OC#6
GPIO 31	i 0	Native	USB_OC#7
GPIO 32	O 1	GPO	PM_CLKRUN#
GPIO 33	O 1	GPO	N/A
GPIO 34	O 0	GPO	CPU_Select
GPIO 35	O 0	GPO	N/A
GPIO 36	i 0	GPO	N/A
GPIO 37	i 0	GPI	PCB_ID0
GPIO 38	i 0	GPI	PCB_ID1
GPIO 39	i 0	GPI	PCB_ID2
GPIO [40:47]	NA	NA	NA
GPIO 48	Native	PCI_GNT#4	+3VS
GPIO 49	Native	H_PWRGD	+VCORE

<Variant Name>

		Title :	Schematic data
ASUSTek COMPUTER INC		Engineer:	Marco Chen
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	3 of 63



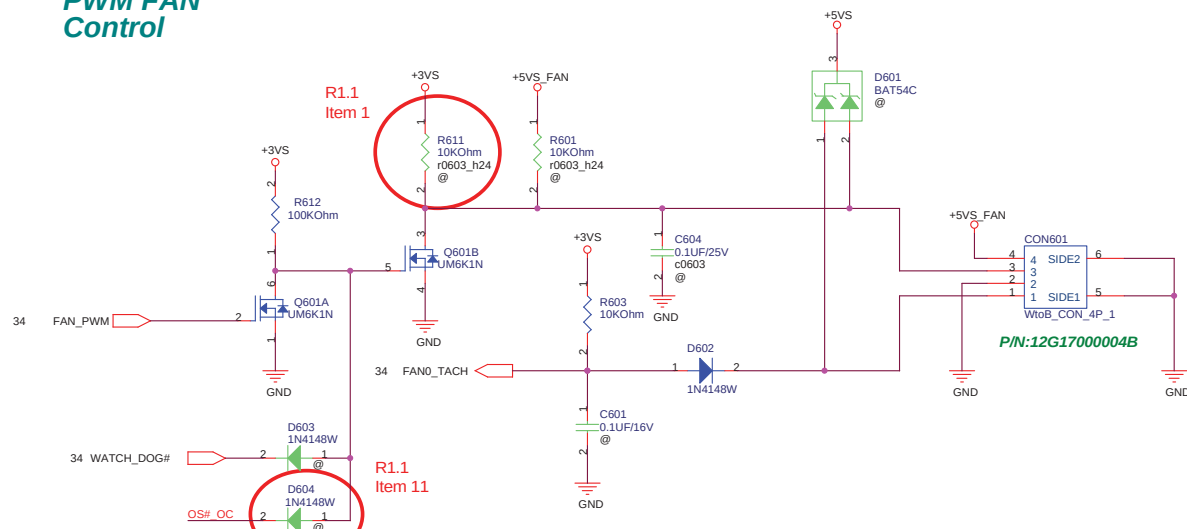
<Variant Name>

ASUS Title : YONAH CPU (2)
ASUSTek COMPUTER INC Engineer: Marco Chen

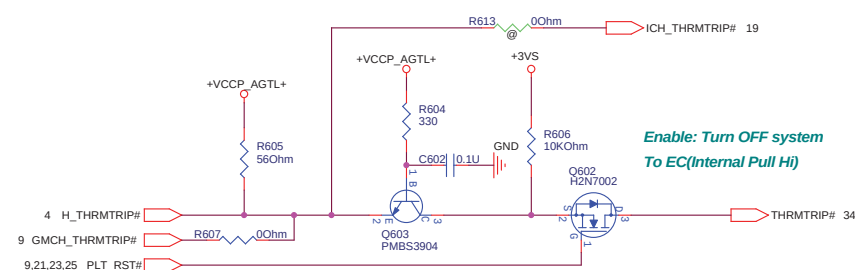
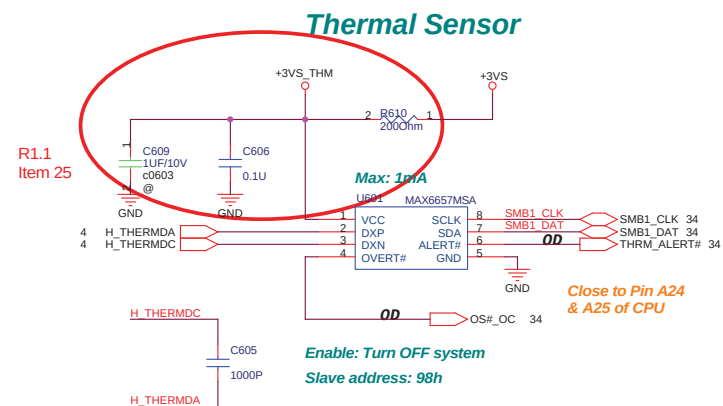
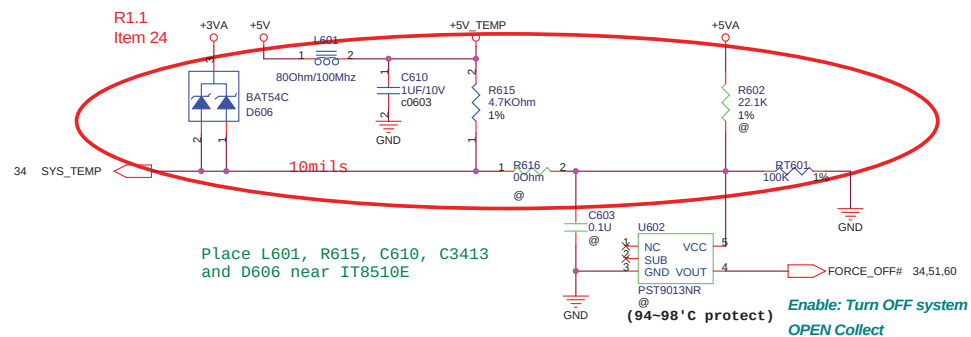
Size	Project Name	Rev
Custom	T13Fv	1.11

Date: Monday, August 28, 2006 Sheet 5 of 63

PWM FAN Control

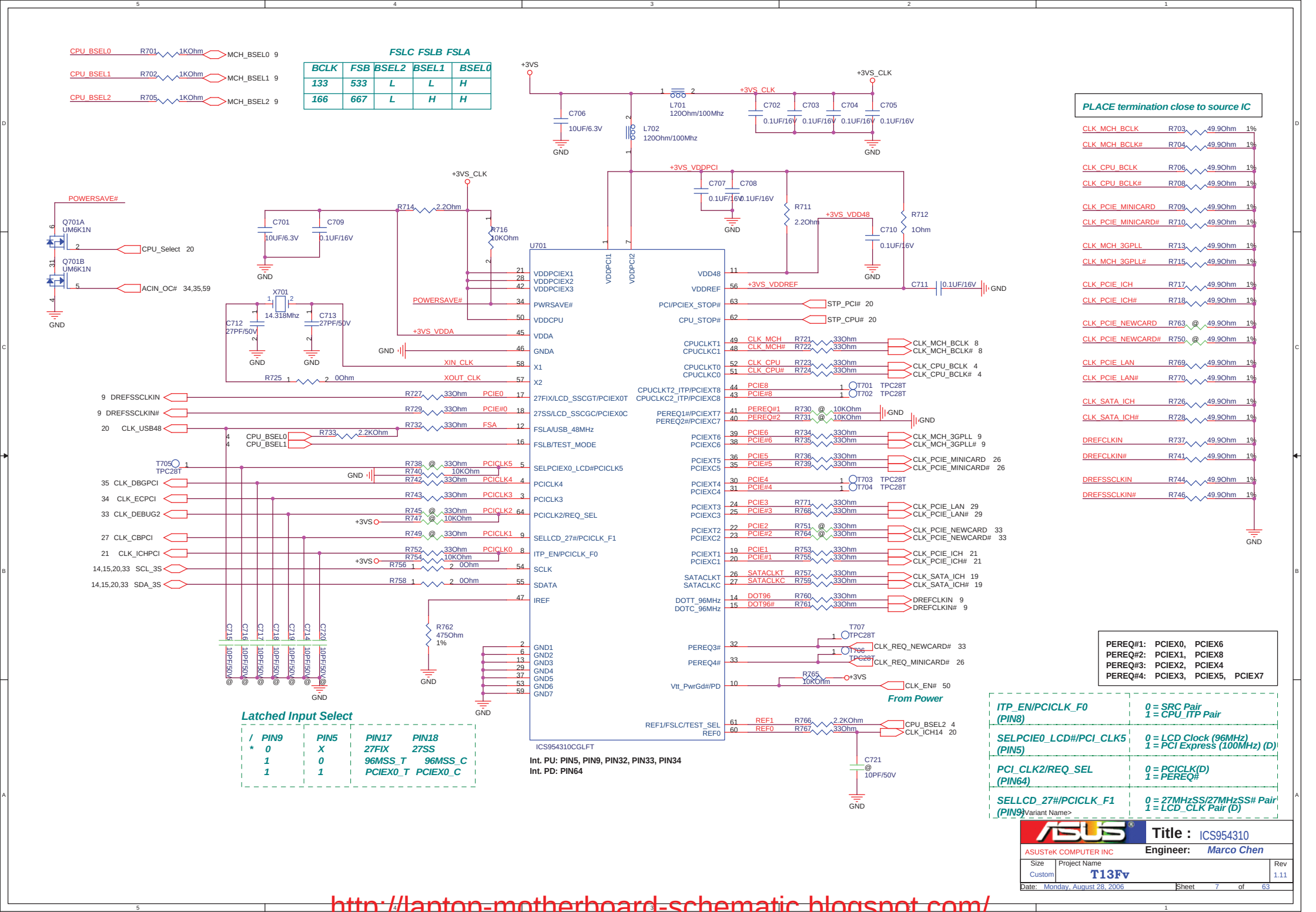


CPU FAN will be forced on:
1) Thermal Sensor Over-temperature
2) WATCHDOG asserted by EC



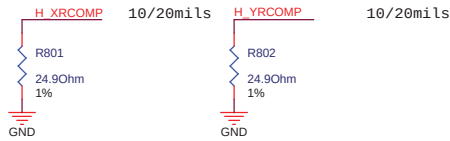
<Variant Name>

		Title : <u>FAN_CTRL&Thermal</u>	
ASUSTek COMPUTER INC		Engineer: <u>Marco Chen</u>	
Size Custom	Project Name <u>T13Fv</u>		Rev 1.11
Date: <u>Monday, August 28, 2006</u>		Sheet <u>6</u> of <u>63</u>	



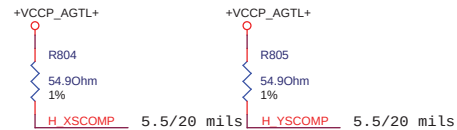
RCOMP

For Calibrating FSB I/O Buffer



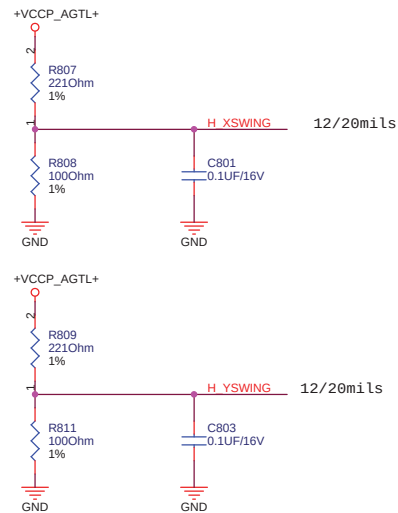
SCOMP

For Slew Rate Compensation on the FSB



Voltage Swing

For Providing a Reference Voltage to The FSB RCOMP Circuit



4 H_D#[0..63] H_D#[0..63]

H_D#0	F1	H_D#_0
H_D#1	J1	H_D#_1
H_D#2	H1	H_D#_2
H_D#3	J6	H_D#_3
H_D#4	H3	H_D#_4
H_D#5	K2	H_D#_5
H_D#6	G1	H_D#_6
H_D#7	G2	H_D#_7
H_D#8	K9	H_D#_8
H_D#9	K1	H_D#_9
H_D#10	K7	H_D#_10
H_D#11	J8	H_D#_11
H_D#12	H4	H_D#_12
H_D#13	J3	H_D#_13
H_D#14	K11	H_D#_14
H_D#15	G4	H_D#_15
H_D#16	T10	H_D#_16
H_D#17	W11	H_D#_17
H_D#18	T3	H_D#_18
H_D#19	U7	H_D#_19
H_D#20	U9	H_D#_20
H_D#21	U11	H_D#_21
H_D#22	T11	H_D#_22
H_D#23	W9	H_D#_23
H_D#24	T1	H_D#_24
H_D#25	T4	H_D#_25
H_D#26	T8	H_D#_26
H_D#27	W7	H_D#_27
H_D#28	U5	H_D#_28
H_D#29	T9	H_D#_29
H_D#30	W6	H_D#_30
H_D#31	T5	H_D#_31
H_D#32	A87	H_D#_32
H_D#33	AA9	H_D#_33
H_D#34	W4	H_D#_34
H_D#35	W3	H_D#_35
H_D#36	Y3	H_D#_36
H_D#37	Y7	H_D#_37
H_D#38	W5	H_D#_38
H_D#39	Y10	H_D#_39
H_D#40	AB8	H_D#_40
H_D#41	W2	H_D#_41
H_D#42	AA4	H_D#_42
H_D#43	AA7	H_D#_43
H_D#44	AA2	H_D#_44
H_D#45	AA6	H_D#_45
H_D#46	AA10	H_D#_46
H_D#47	Y8	H_D#_47
H_D#48	AA1	H_D#_48
H_D#49	AB4	H_D#_49
H_D#50	AC9	H_D#_50
H_D#51	AB11	H_D#_51
H_D#52	AC11	H_D#_52
H_D#53	AB3	H_D#_53
H_D#54	AC2	H_D#_54
H_D#55	AD1	H_D#_55
H_D#56	AD9	H_D#_56
H_D#57	AC1	H_D#_57
H_D#58	AD7	H_D#_58
H_D#59	AC6	H_D#_59
H_D#60	AB5	H_D#_60
H_D#61	AD10	H_D#_61
H_D#62	AD4	H_D#_62
H_D#63	AC8	H_D#_63

7 CLK_MCH_BCLK#
7 CLK_MCH_BCLK#

H_XRCOMP	E1	H_XRCOMP
H_XSCOMP	E2	H_XSCOMP
H_XSWING	E4	H_XSWING
H_YRCOMP	Y1	H_YRCOMP
H_YSCOMP	U1	H_YSCOMP
H_YSWING	W1	H_YSWING

AG2	AG2	H_CLKIN
AG1	AG1	H_CLKIN#

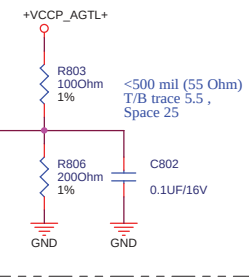
H_A#[3..31] H_A#[3..31]

H_A#_3	H8	H_A#3
H_A#_4	C9	H_A#4
H_A#_5	E11	H_A#5
H_A#_6	G11	H_A#6
H_A#_7	E11	H_A#7
H_A#_8	G12	H_A#8
H_A#_9	E9	H_A#9
H_A#_10	H11	H_A#10
H_A#_11	J12	H_A#11
H_A#_12	G14	H_A#12
H_A#_13	D9	H_A#13
H_A#_14	J14	H_A#14
H_A#_15	H13	H_A#15
H_A#_16	J15	H_A#16
H_A#_17	E14	H_A#17
H_A#_18	D12	H_A#18
H_A#_19	A11	H_A#19
H_A#_20	C11	H_A#20
H_A#_21	A12	H_A#21
H_A#_22	A13	H_A#22
H_A#_23	E13	H_A#23
H_A#_24	G13	H_A#24
H_A#_25	E12	H_A#25
H_A#_26	B12	H_A#26
H_A#_27	B14	H_A#27
H_A#_28	C12	H_A#28
H_A#_29	A14	H_A#29
H_A#_30	C14	H_A#30
H_A#_31	D14	H_A#31

H_ADS#	E8	H_ADS#
H_ADSTB#_0	B9	H_ADSTB#_0
H_ADSTB#_1	C13	H_ADSTB#_1
H_AVREF	J13	H_AVREF
H_BNR#	C6	H_BNR#
H_BPRI#	F6	H_BPRI#
H_BR0#	C7	H_BR0#
H_CPURST#	B7	H_CPURST#
H_DBSY#	A7	H_DBSY#
H_DEFER#	C3	H_DEFER#
H_DPWR#	J9	H_DPWR#
H_DRDY#	H8	H_DRDY#
H_DVREF	K13	H_DVREF
H_DINV#_0	J7	H_DINV#_0
H_DINV#_1	W8	H_DINV#_1
H_DINV#_2	U3	H_DINV#_2
H_DINV#_3	AB10	H_DINV#_3
H_DSTBN#_0	K4	H_DSTBN#_0
H_DSTBN#_1	T7	H_DSTBN#_1
H_DSTBN#_2	Y5	H_DSTBN#_2
H_DSTBN#_3	AC4	H_DSTBN#_3
H_DSTBP#_0	K3	H_DSTBP#_0
H_DSTBP#_1	T6	H_DSTBP#_1
H_DSTBP#_2	AA5	H_DSTBP#_2
H_DSTBP#_3	AC5	H_DSTBP#_3
H_HIT#	D3	H_HIT#
H_HITM#	D4	H_HITM#
H_LOCK#	B3	H_LOCK#

H_REQ#_0	D8	H_REQ#0
H_REQ#_1	G8	H_REQ#1
H_REQ#_2	B8	H_REQ#2
H_REQ#_3	E8	H_REQ#3
H_REQ#_4	A8	H_REQ#4
H_RS#_0	B4	H_RS#0
H_RS#_1	E6	H_RS#1
H_RS#_2	D6	H_RS#2
H_SLP#	E3	H_SLP#
H_TRDY#	E7	H_TRDY#

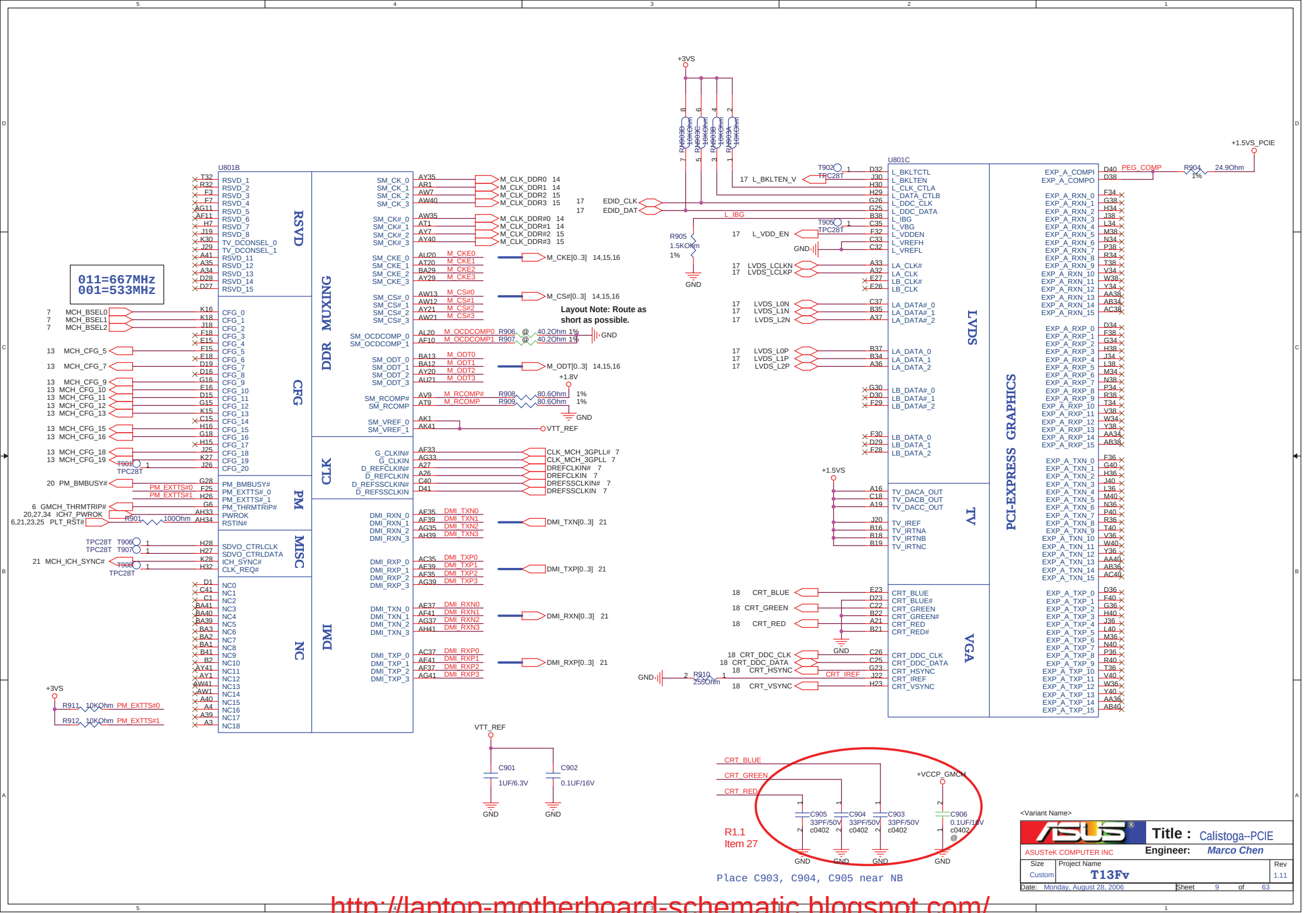
AGTL+ I/O Voltage Reference

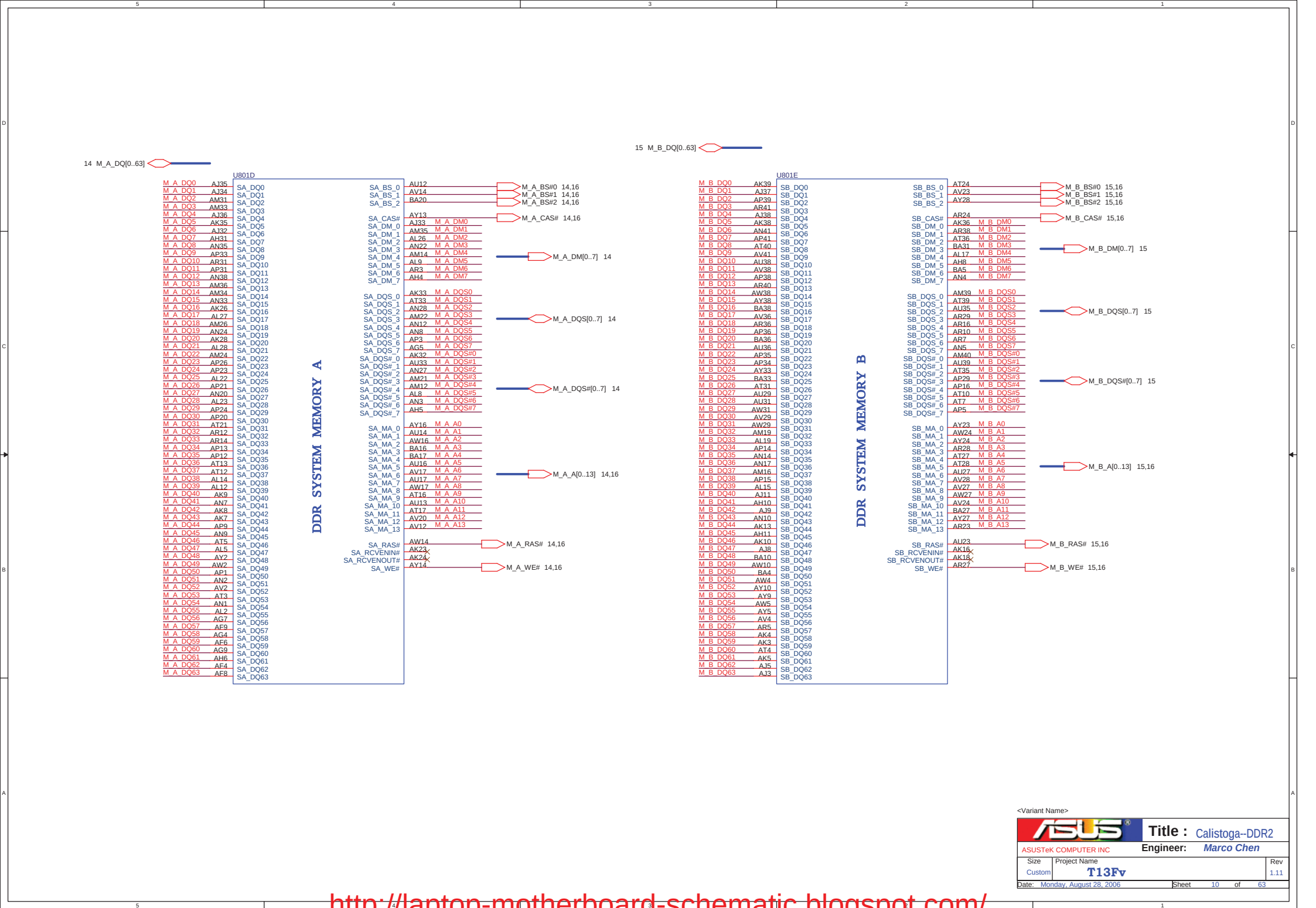


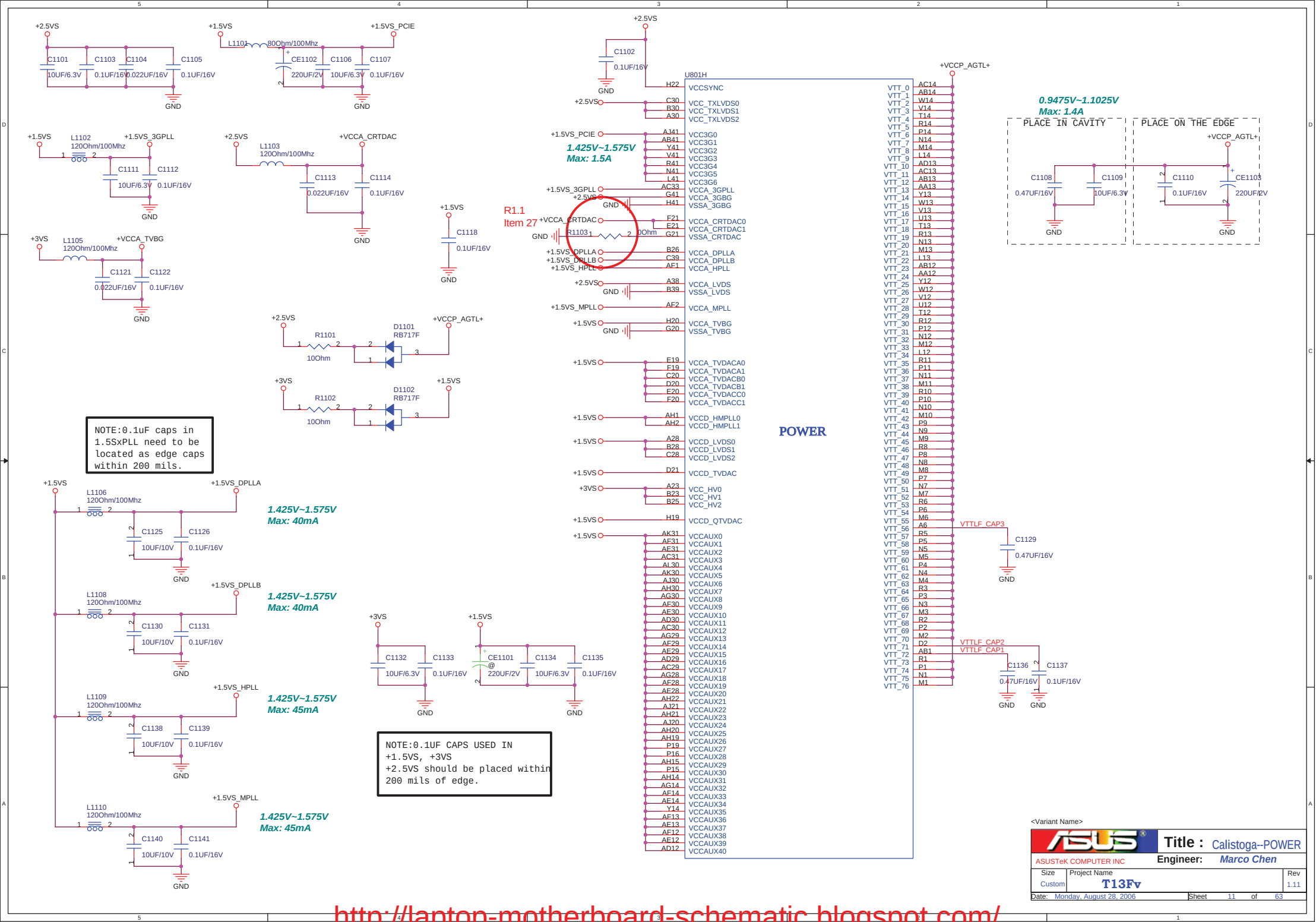
H_CPURST#_1 T801 TPC28T

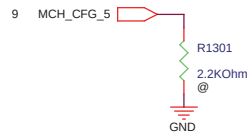
<Variant Name>

ASUS		Title : Calistoga-CPU	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date	Monday, August 28, 2006	Sheet	8 of 63



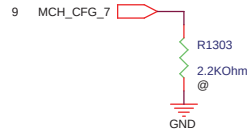






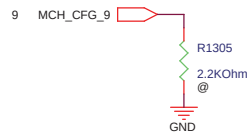
CFG5 : DMI STRAP

LOW = DMI X 2
HIGH = DMI X 4 (Default)



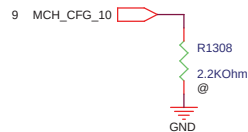
CFG7 : CPU STRAP

LOW = RESERVED
HIGH = Mobile Yonah CPU (Default)



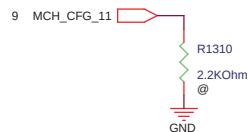
CFG9 : PCIE GRAPHIC LANE

LOW = REVERSE LANE
 HIGH = NORMAL OPERATION (Default)



CFG10 : HOST PLL VCO SELECT

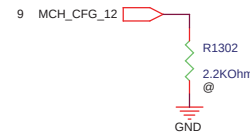
LOW = RESERVED
HIGH = MOBILITY (Default)



CFG11 : PSB 4x CLK ENABLE

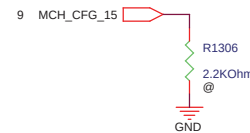
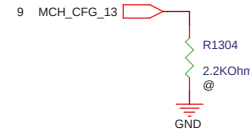
LOW = 4X ENABLED
HIGH = 8X ENABLED (Default)

CFG[17..3] have internal pullup resistors.
 CFG[19..18] have internal pulldown resistors.
 SDVOCRTL_DATA has internal pulldown resistors.



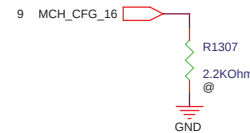
CFG[13:12] : GMCH TEST MODE SELECT

00 = Partial CLK gating disable
 01 = XOR Mode Enable
 10 = ALL Z Mode Enable
11 = NORMAL OPERATION (Default)



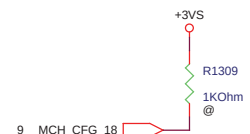
CFG15 : ICH RESET Disable

LOW = ICH RESET Disabled
HIGH = Normal Operation (Default)



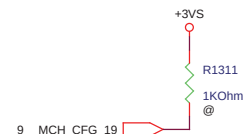
CFG16 : FSB Dynamic ODT

LOW = Dynamic ODT Disabled
HIGH = Dynamic ODT Enabled (Default)



CFG18 : GMCH Core Voltage Level

LOW = 1.05V (Default)
 HIGH = 1.5V



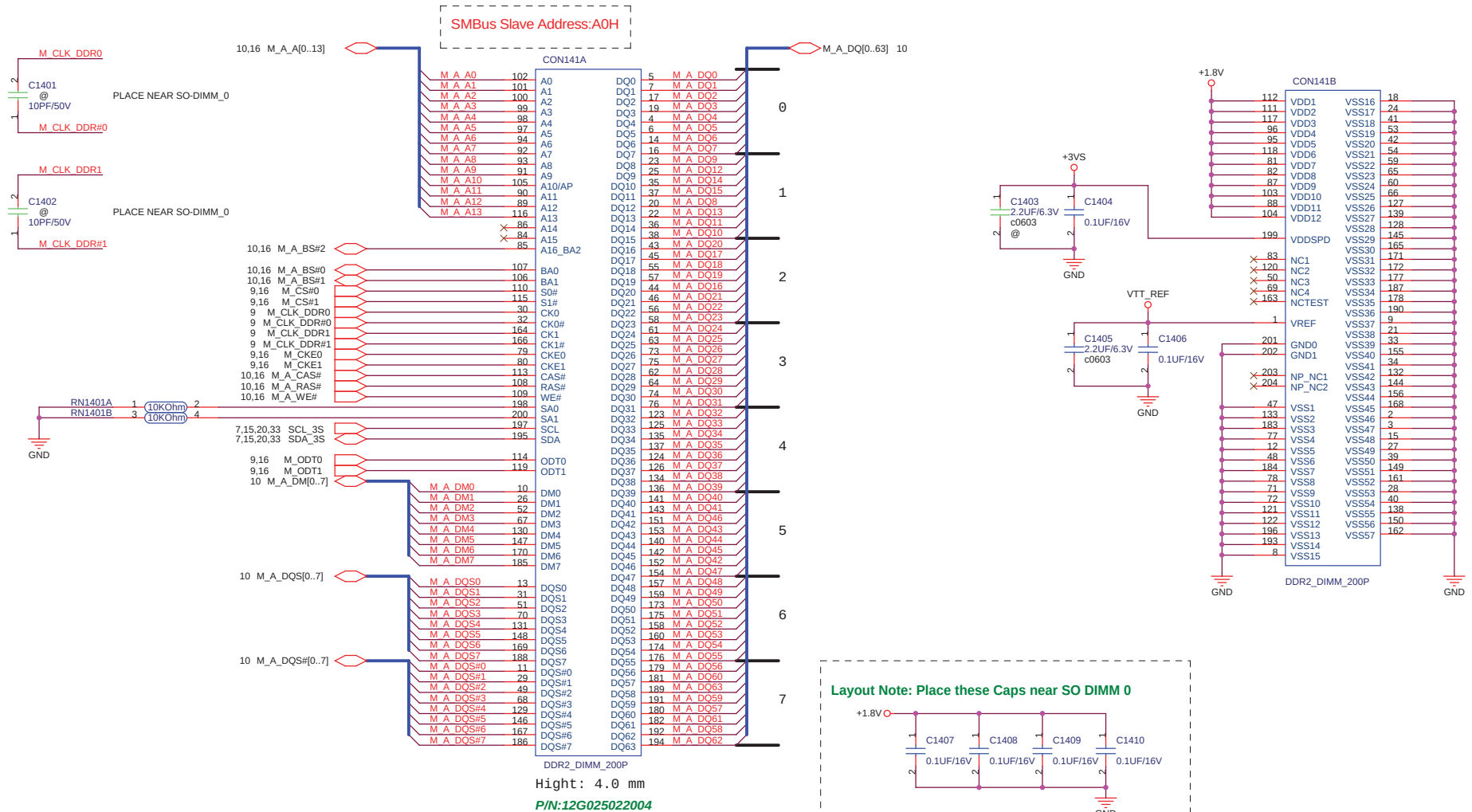
CFG19 : DMI LANE REVERSAL

LOW = NORMAL (Default)
 HIGH = LANES REVERSED

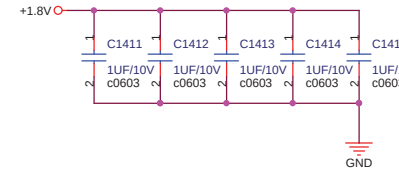
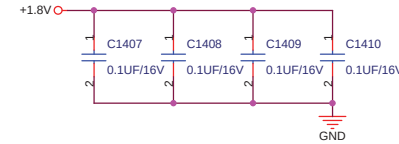
<Variant Name>

ASUS		Title : Calistoga-Strap	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size Custom	Project Name T13Fv		Rev 1.11
Date: Monday, August 28, 2006	Sheet	13	of 63

DDR2 HAD SWAPED.



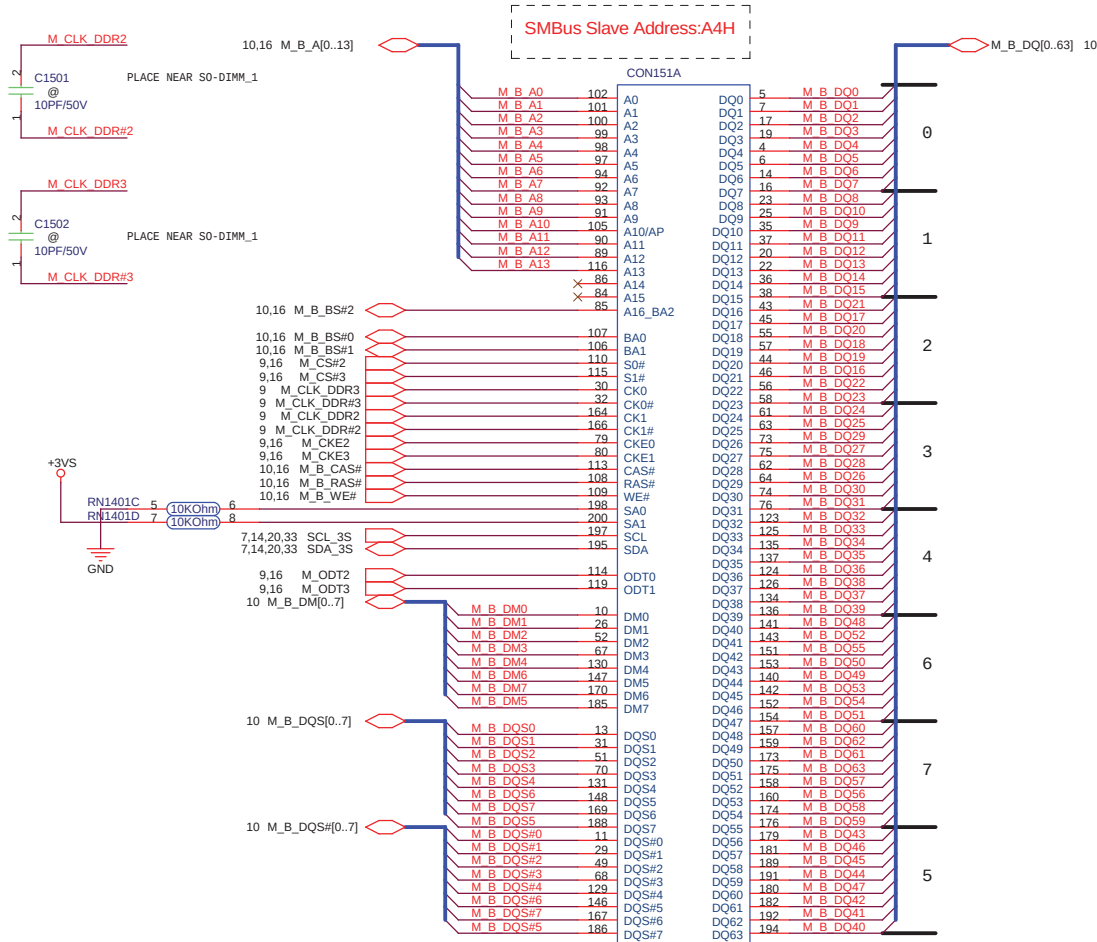
Layout Note: Place these Caps near SO DIMM 0



<Variant Name>

ASUS		Title : DDR2 SO-DIMM_0	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet 14	of 63	

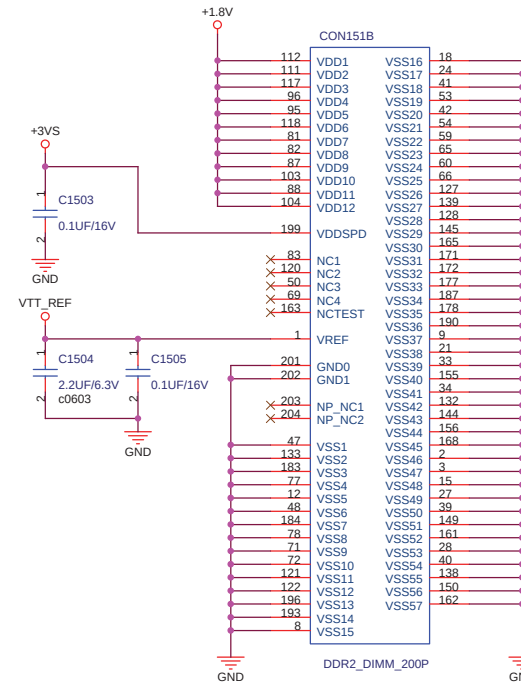
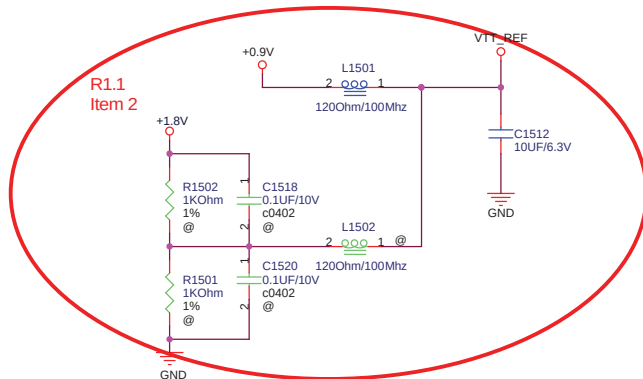
DDR2 HAD SWAPED.



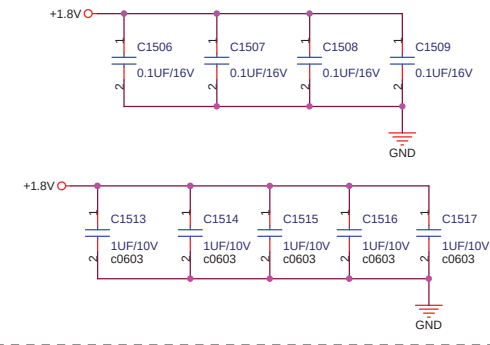
DDR2_DIMM_200P

Hight: 9.2 mm

P/N:12G025C22004



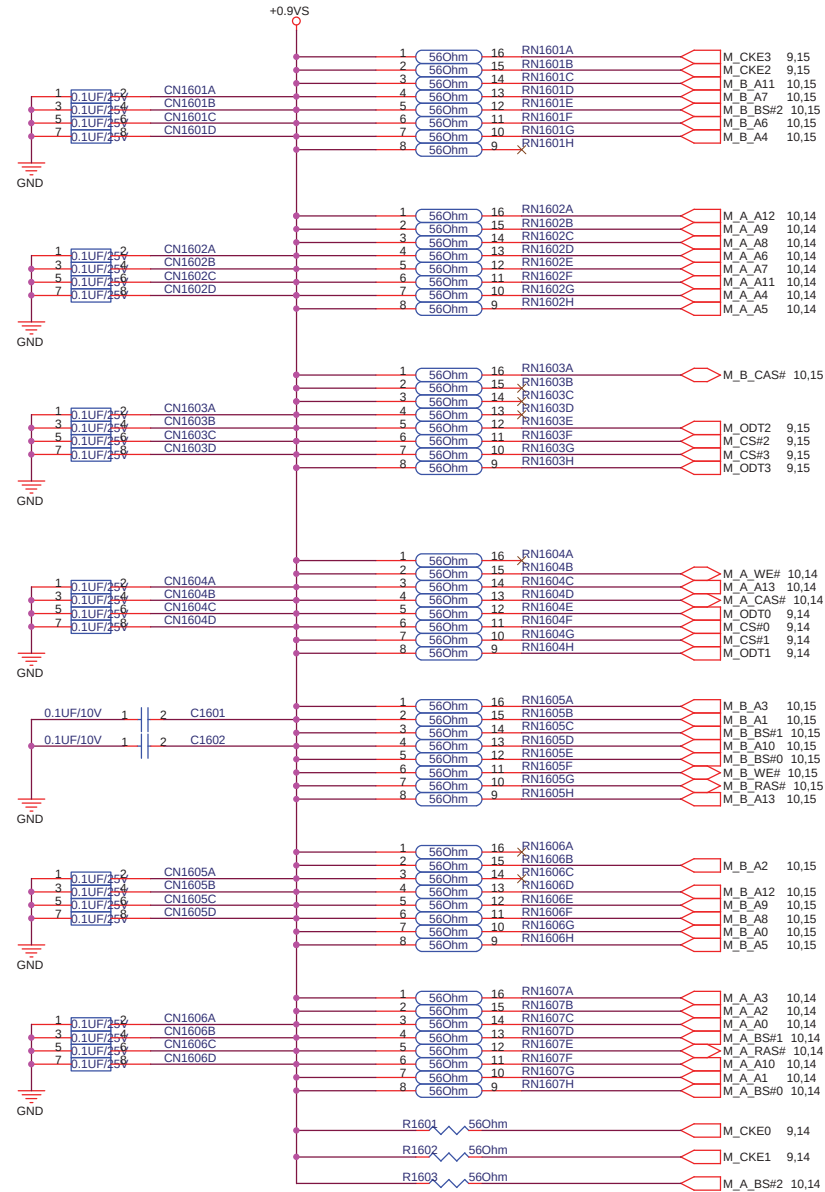
Layout Note: Place these Caps near SO DIMM 1



<Variant Name>

ASUS		Title : DDR2 SO-DIMM_1	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet	15	of 63

DDR2 HAD SWAPED.



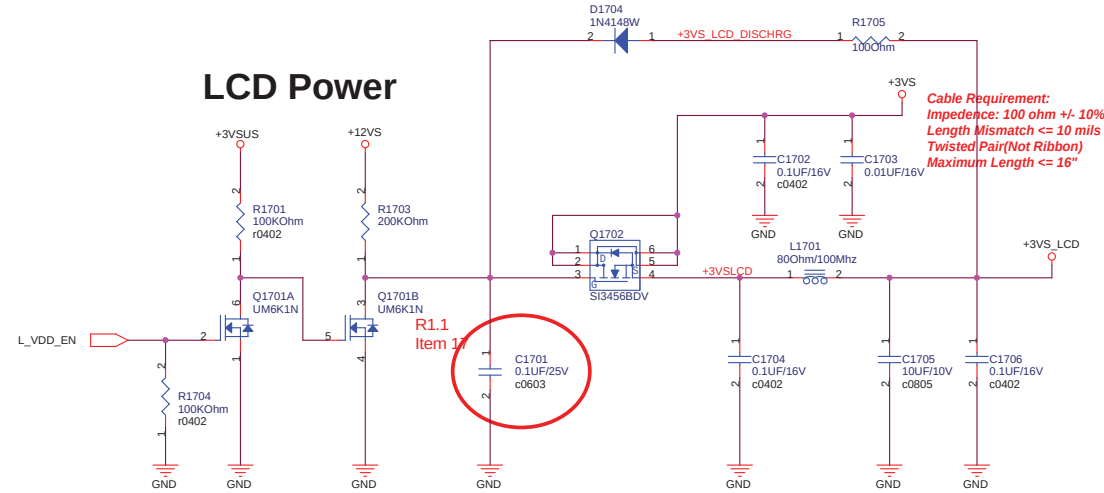
Layout note: Place array cap close to each pullup resistors terminated to +0.9VS

<Variant Name>

ASUS		Title :DDR2 TERMINATION	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet 16	of 63	

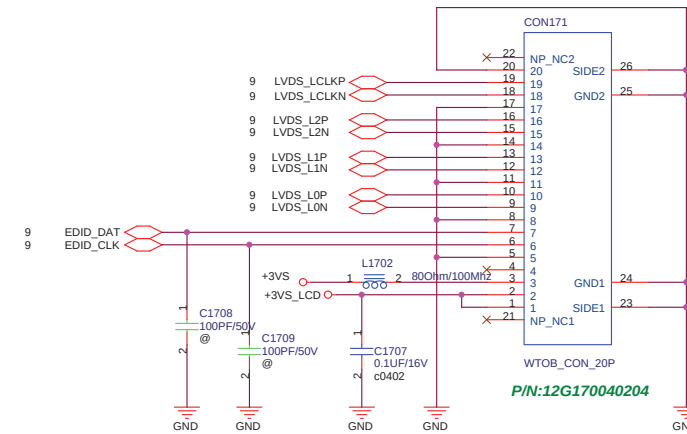
LCD Backlight Control

LCD Power

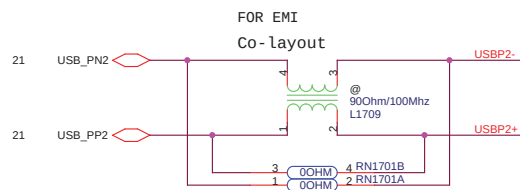
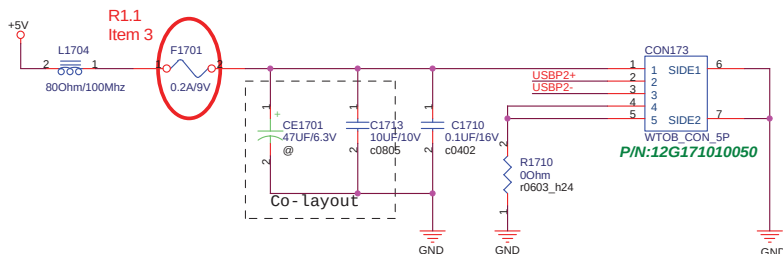


PR_NOTE: Change R1703 to 200K ohm, C1701 to 0.1uF/25V, D1704 to BAT54C and R1705 to 100ohm

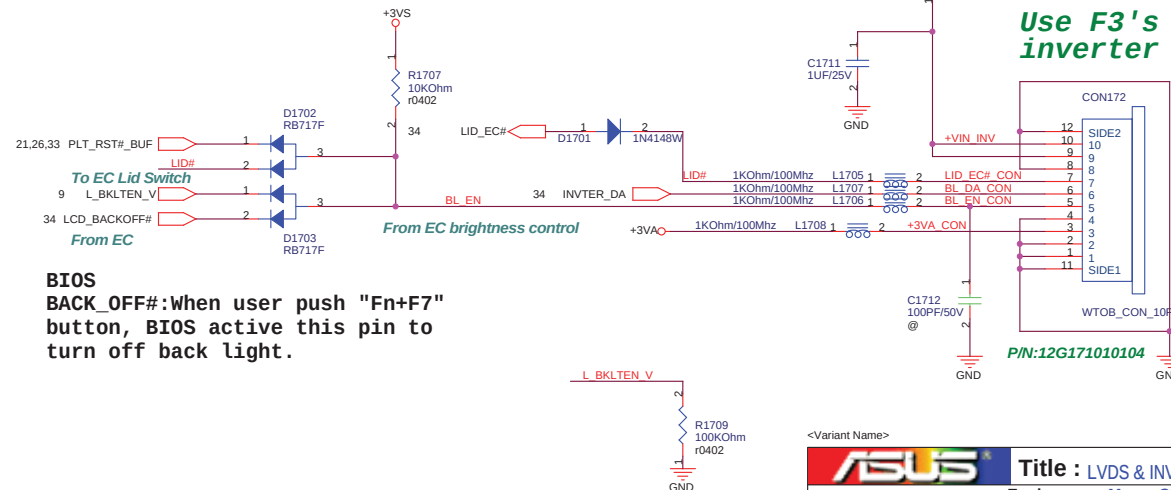
LCD LVDS Interface



CCD connector



Inverter connector



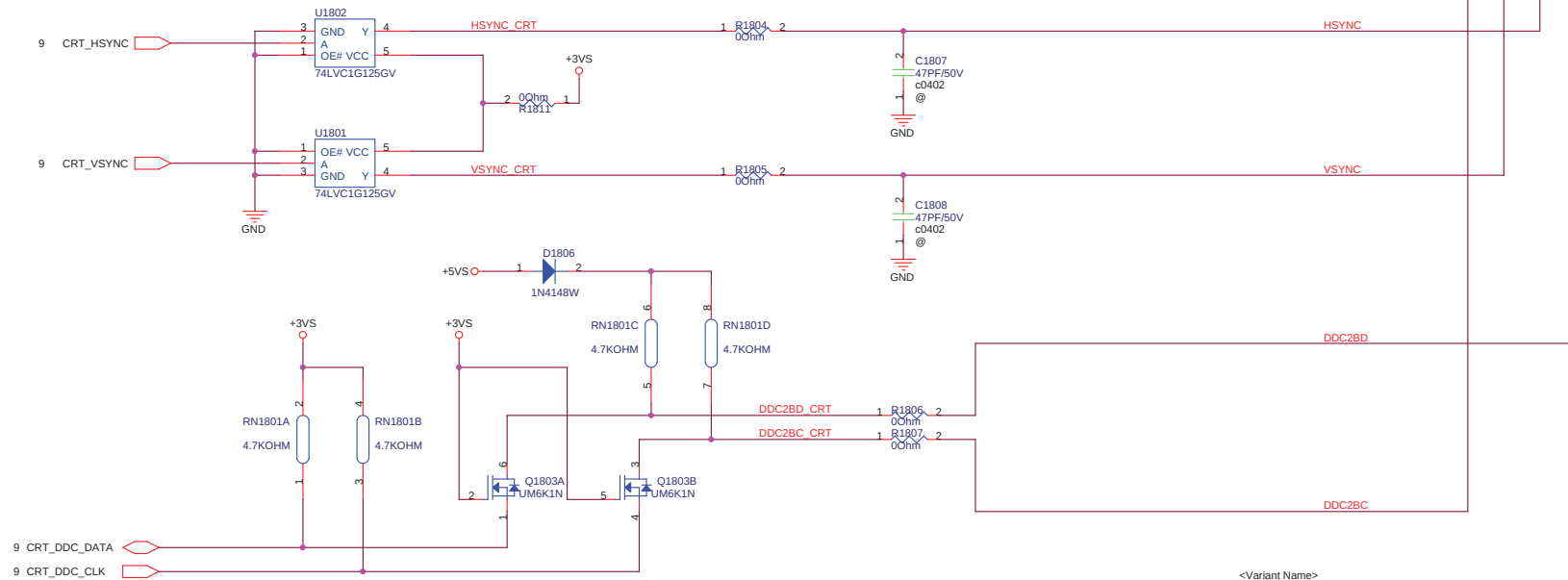
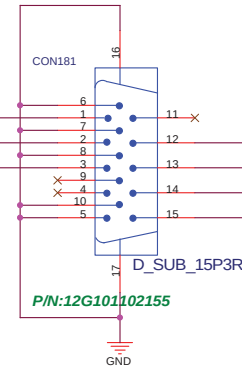
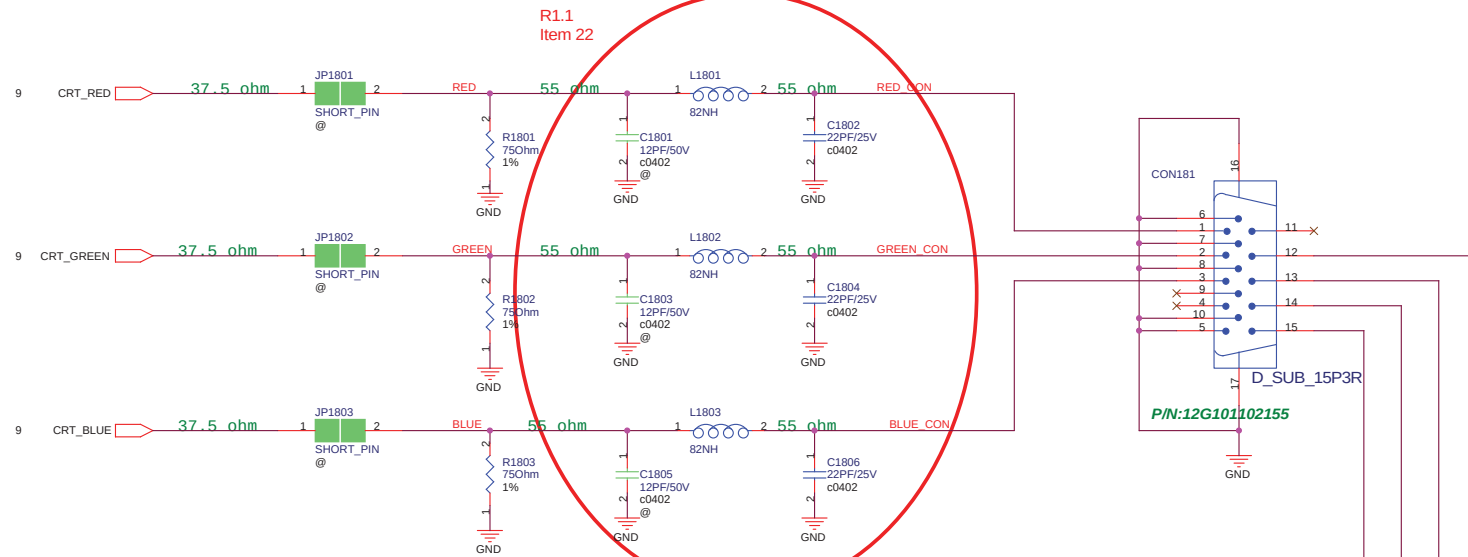
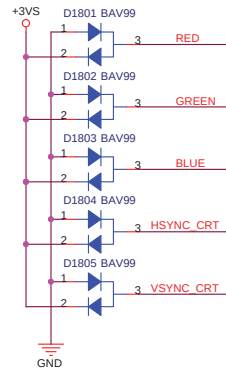
BIOS
 BACK_OFF#: When user push "Fn+F7" button, BIOS active this pin to turn off back light.

<Variant Name>

ASUS		Title : LVDS & INVERTER	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet 17 of 63	

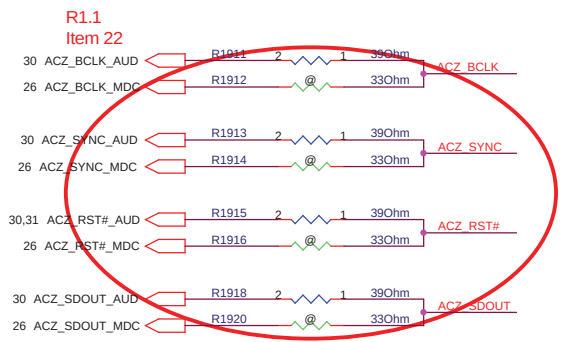
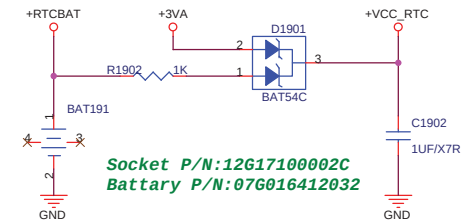
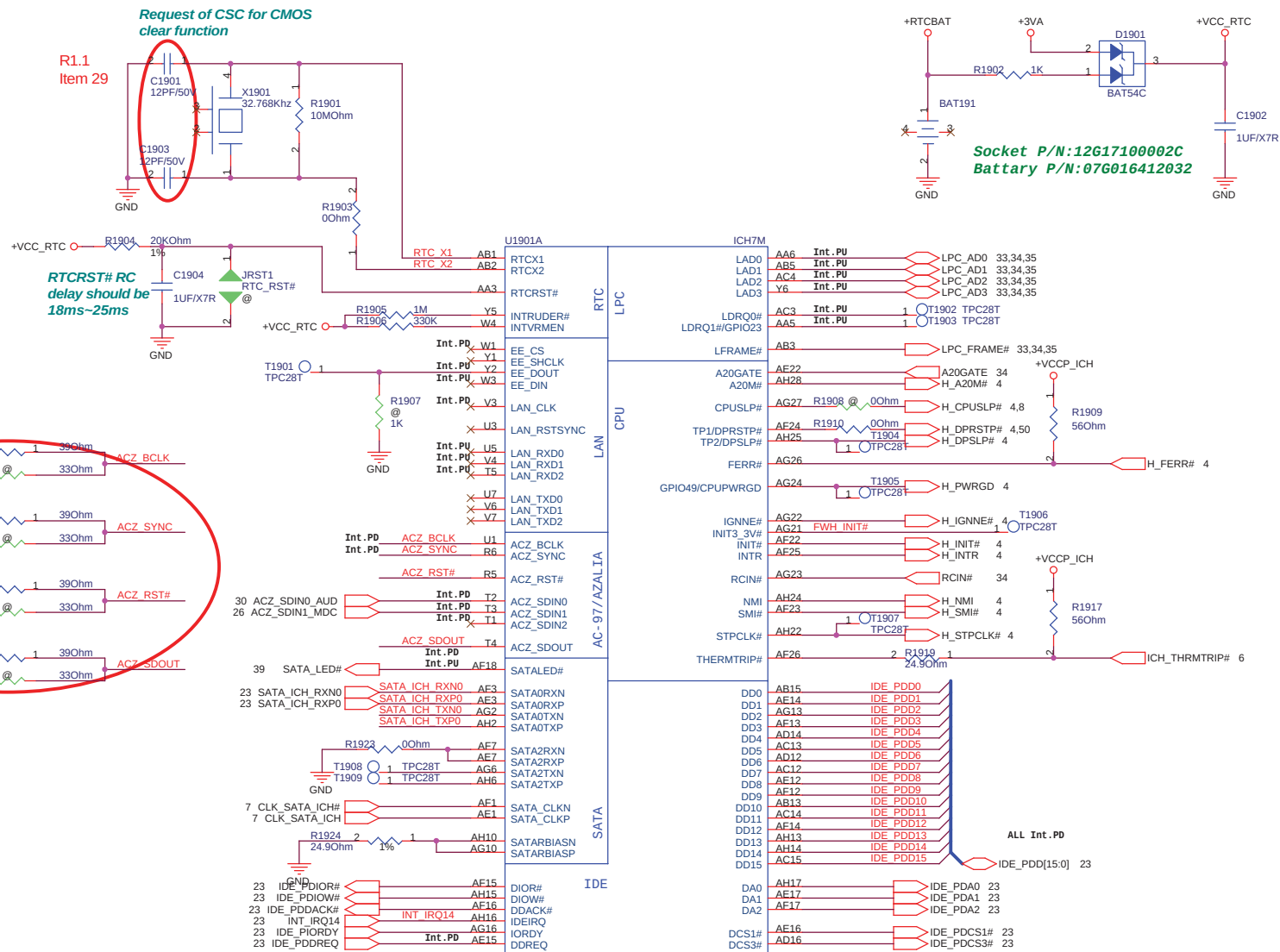
CRT

PLACE NEAR CON181.



<Variant Name>

ASUS		Title : CRT CONN	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet 18 of 63	



19 SATA_HDD_RXP0

19 SATA_HDD_RXN0

19 SATA_ICH_RXN0

19 SATA_ICH_RXP0

C2301

C2301

3900PF/50V

3900PF/50V

Differential Pair

Differential Pair

+3VS

+5VS

GND

C2305

0.1UF/16V

C2306

10UF/10V

@

GND

CON231

1

2

3

4

5

6

7

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12

13

14

15

16

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26

NP_NC3

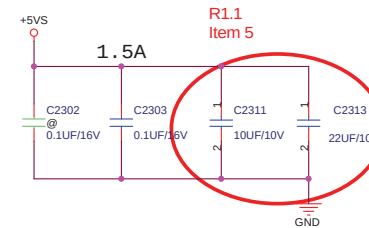
NP_NC1

NP_NC2

NP_NC4

SATA_CON_22P

P/N:12G15100022K



6.9,21.25 PLT_RST#

+3VS

R2302 330Ohm

+5VS

R2305 10KOhm

Q2301 PMBS3904

PLT_RST#

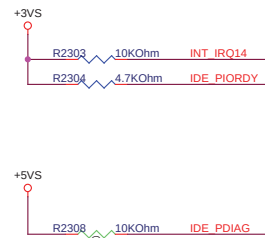
0Ohm

R2301

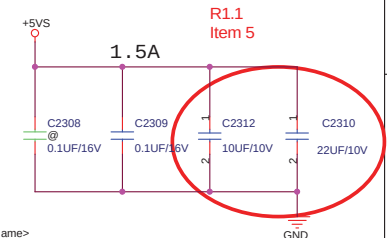
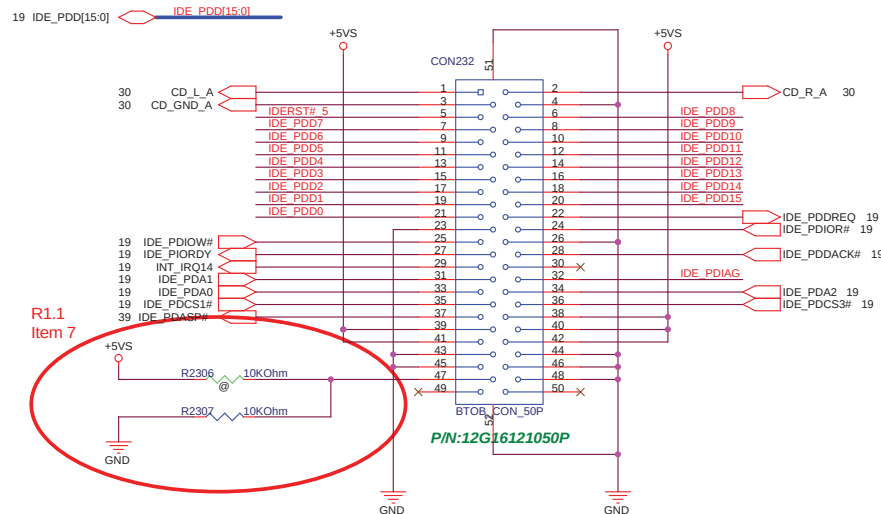
10KOhm

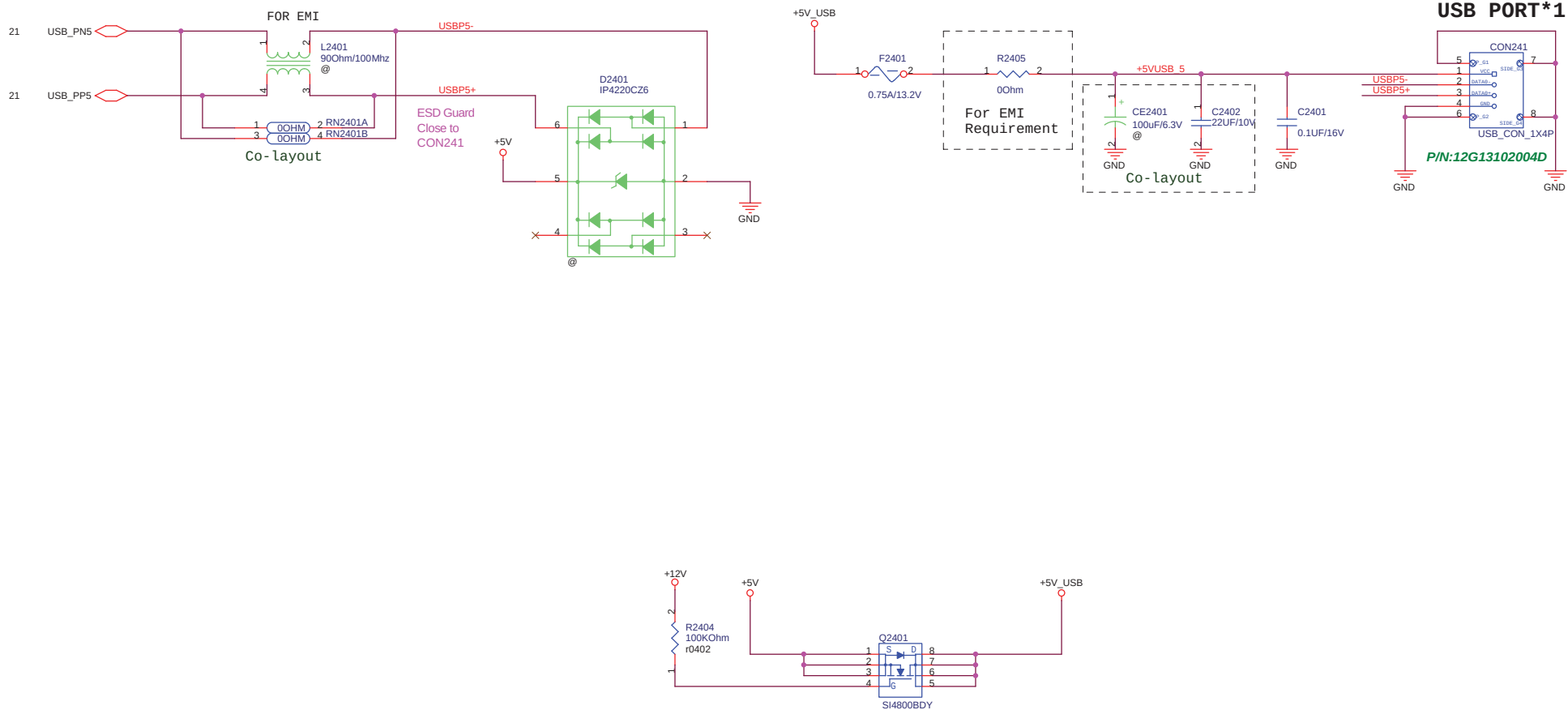
IDERST# 5

R1.1 Item 6



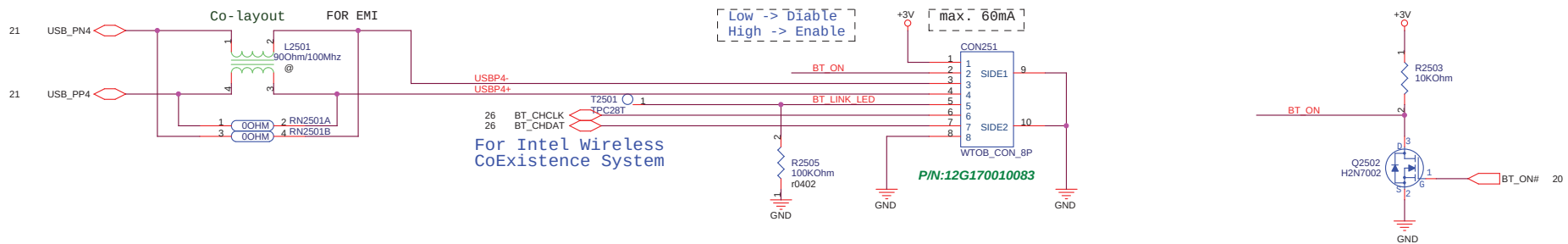
Normal type
High: Slave
Low : Master





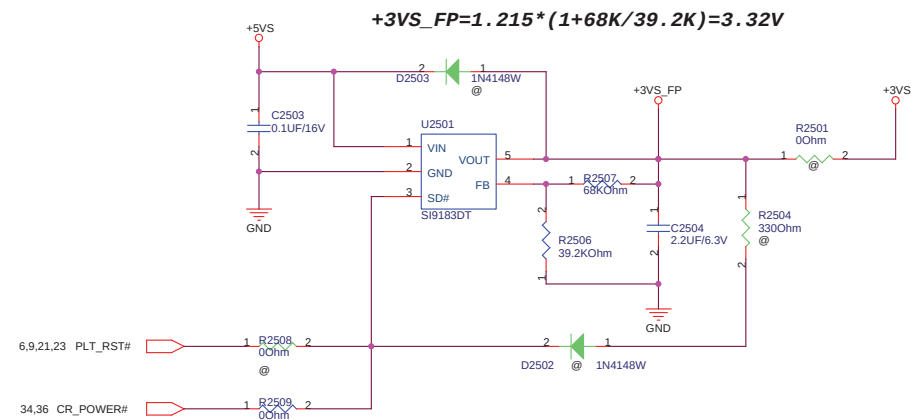
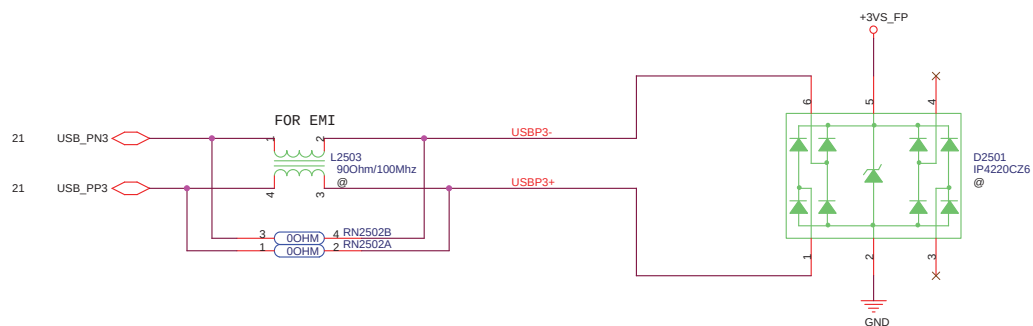
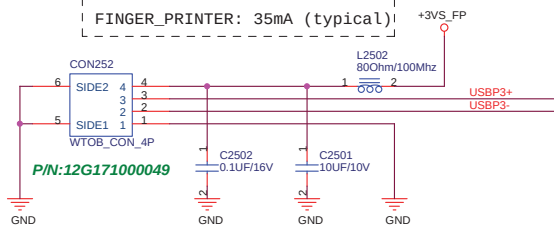
<Variant Name>

ASUS		Title : USB PORT	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet	24	of 63



Finger Printer

FINGER_PRINTER: 35mA (typical)



<Variant Name>

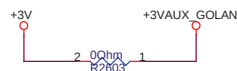
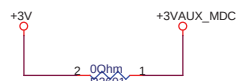
ASUS		Title : BT & FP	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	25 of 63

POWER CONSUMPTION:
+3VS: +3.003V~+3.597V
Max= 750 mA

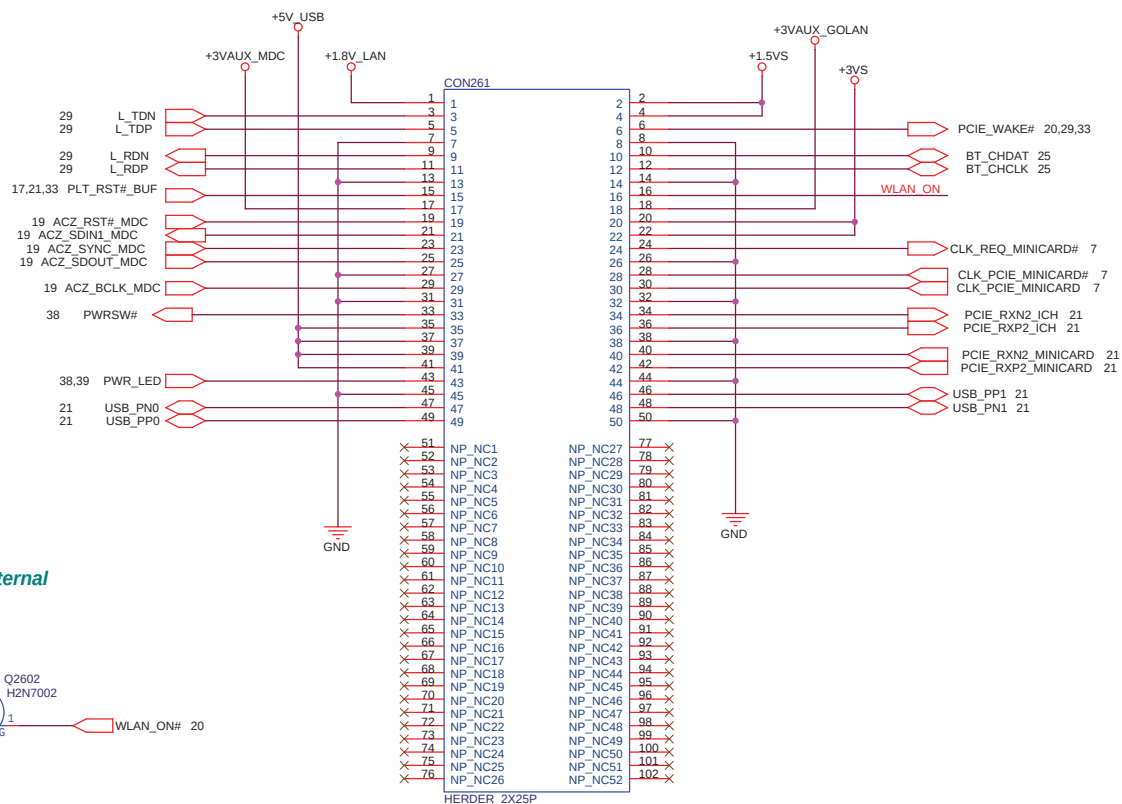
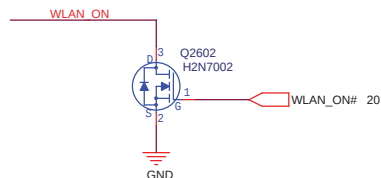
+1.5VS: +1.425V~+1.575V
Max= 375 mA

+3VAUX_GOLAN: +3.003V~+3.597V
Max= 250 mA

+3VAUX_MDC: +3.003V~+3.597V
Max= 300 mA



Intel SPEC(18780): Internal Pull UP 110Kohm

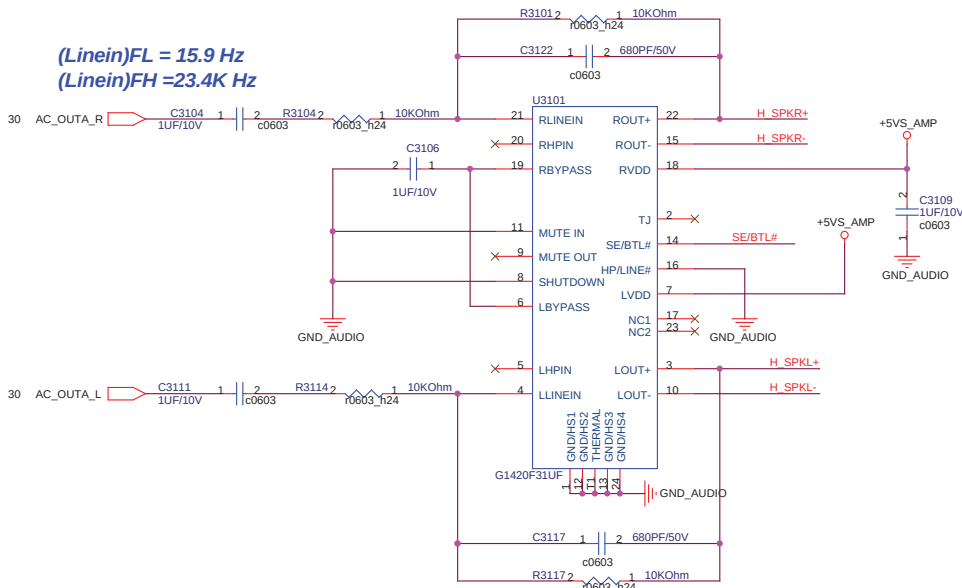


P/N: 12G061200504

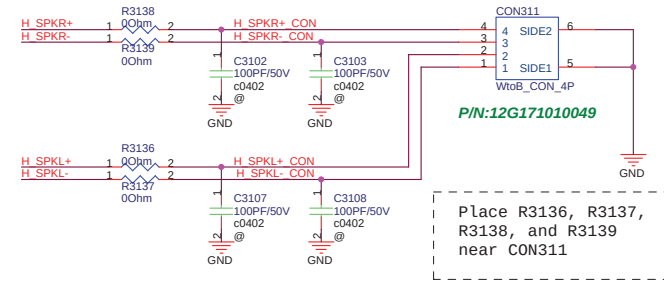
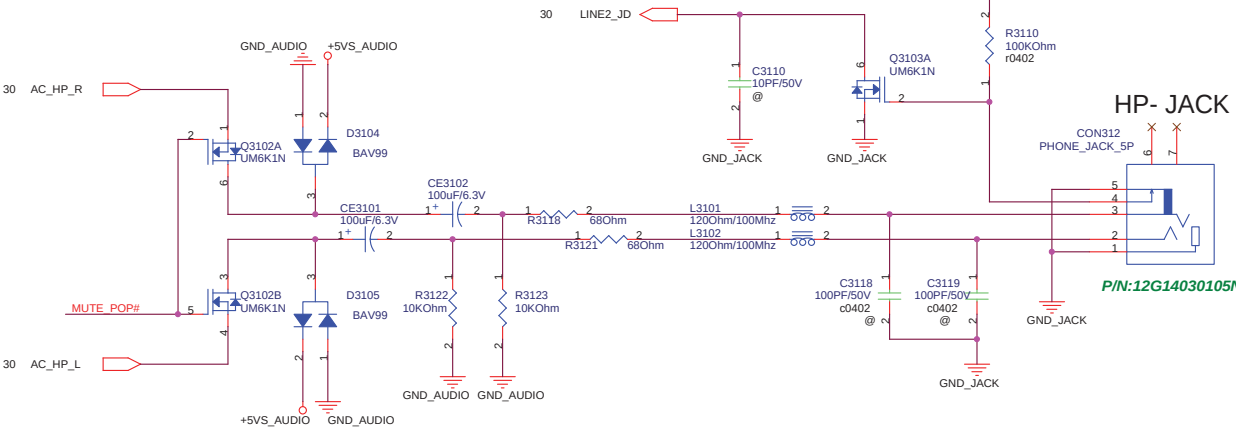
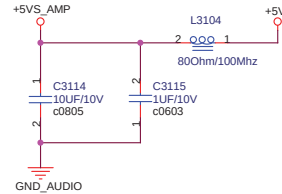
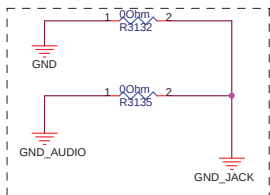
<Variant Name>

ASUS		Title : B TO B CONN(M)	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size Custom	Project Name T13Fv	Rev 1.11	
Date: Monday, August 28, 2006	Sheet 26	of 63	

(Linein)FL = 15.9 Hz
(Linein)FH = 23.4K Hz

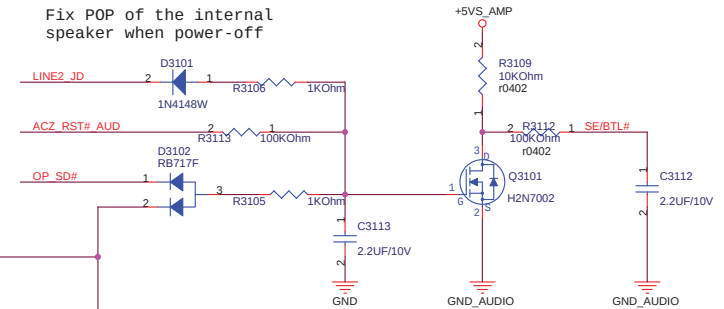


EMI Request

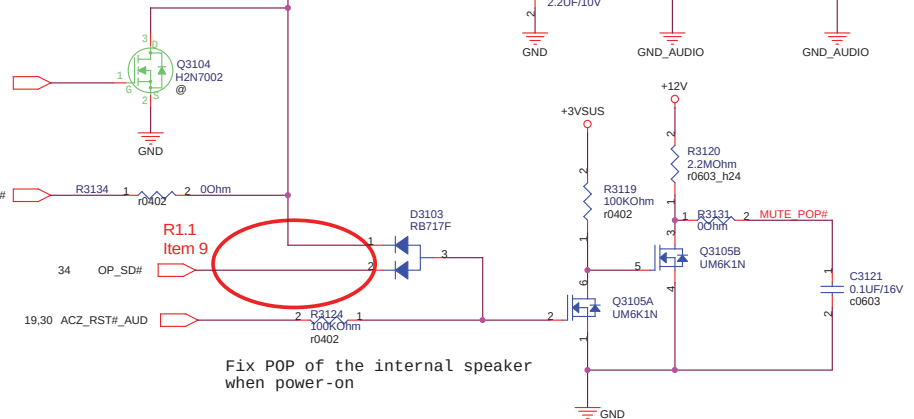


Place R3136, R3137, R3138, and R3139 near CON311

Fix POP of the internal speaker when power-off

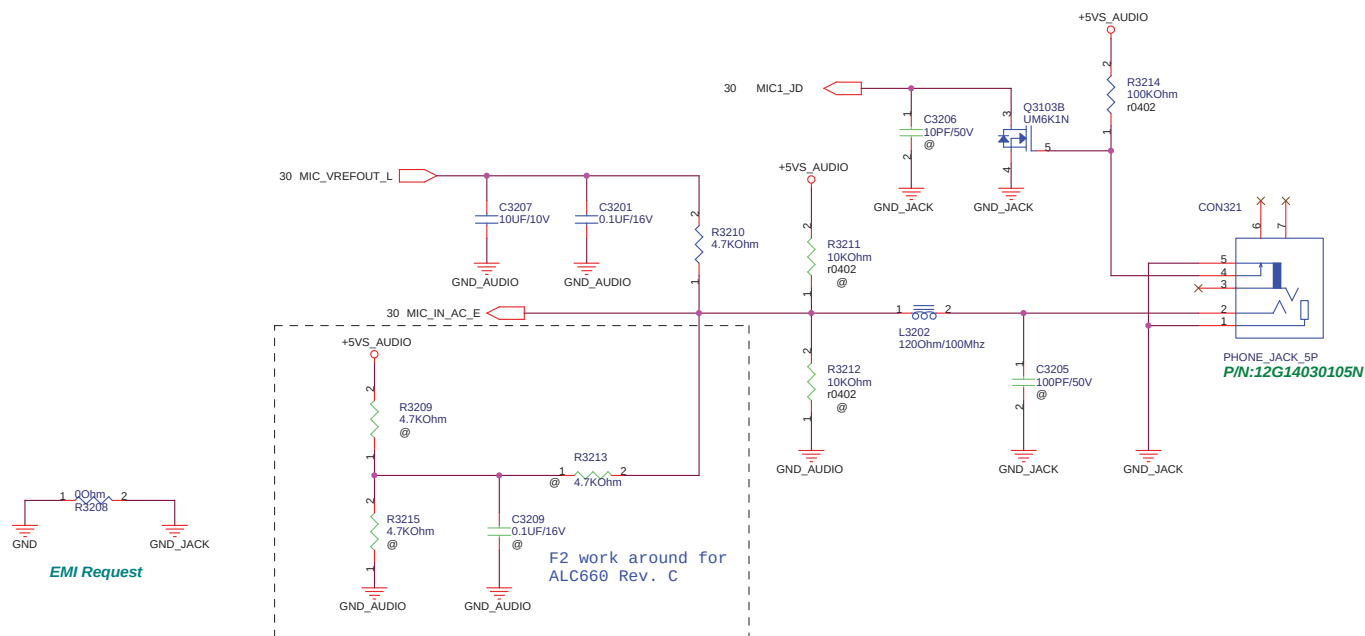
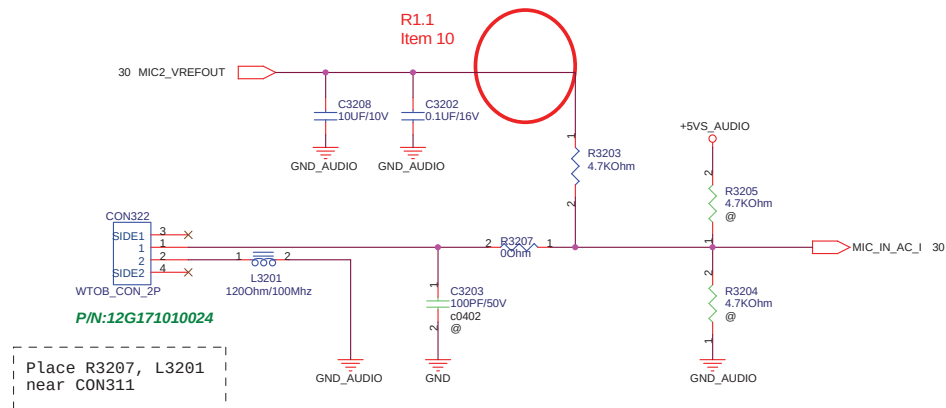


Fix POP of the internal speaker when power-on



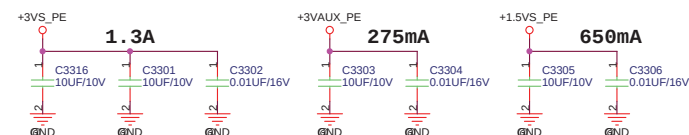
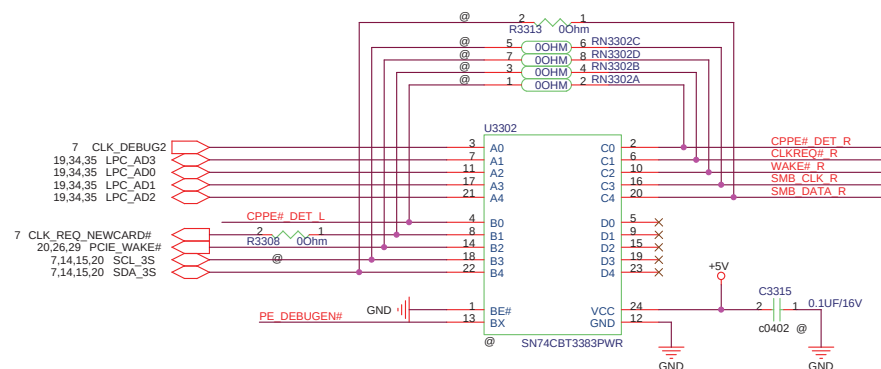
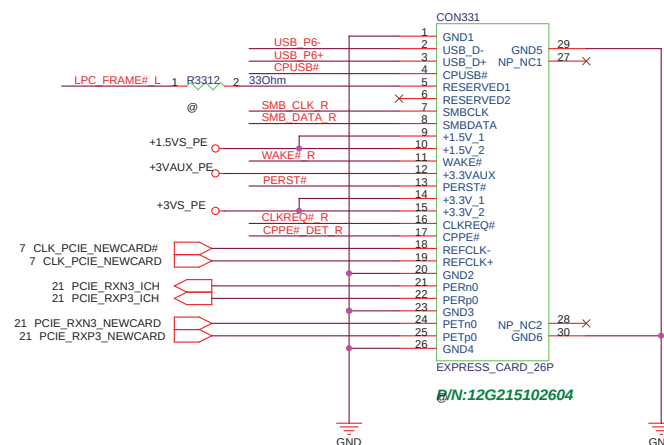
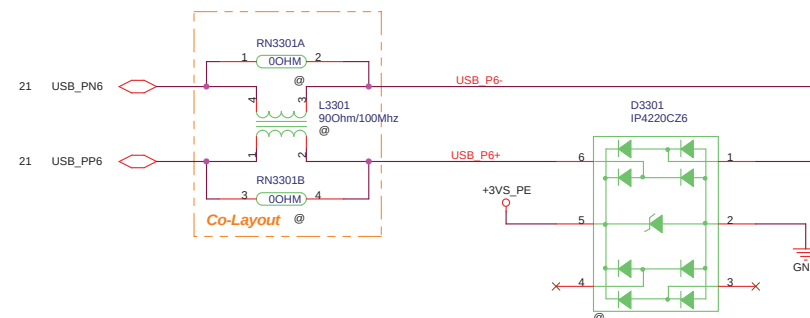
<Variant Name>

ASUS		Title : G1420	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	31 of 63



<Variant Name>

ASUS		Title : MICROPHONE	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	T13Fv	Rev 1.11
Custom			
Date: Monday, August 28, 2006		Sheet 32	of 63

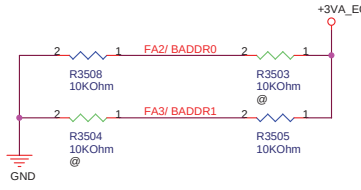


		Title : <u>NEWCARD</u>	
ASUSTek COMPUTER INC		Engineer: <u>Marco Chen</u>	
Size Custom	Project Name T13Fv		Rev <u>1.11</u>
Date: <u>Monday, August 28, 2006</u>		Sheet <u>33</u>	of <u>63</u>

EC Hardware Strapping

FA2/ BADDR0 & FA3/ BADDR1

- 00: PNPCNG Access Register Pair Are 002Eh and 002Fh
- 10: PNPCNG Access Register Pair Are 004Eh and 004Fh
- 01: PNPCNG Access Register Pair Are Determined by EC Domain Registers SWCBALR and SWCBAHR.
- 11: Reserved



Note: Sampled at VSTBY Power Up Reset

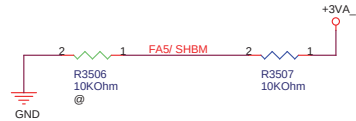
FA4/ PPEN

- 0: Normal
- 1: KBS Interface Pins Are Switched to Parallel Port Interface for In-System Programming

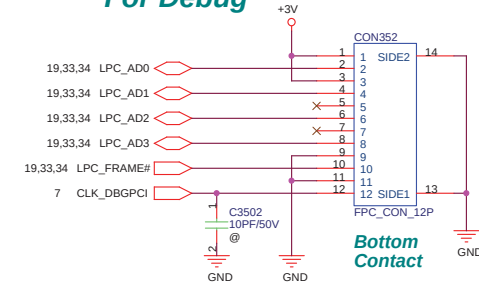


FA5/ SHBM

- 0: Disable Shared Memory with Host BIOS
- 1: Enable Shared Memory with Host BIOS

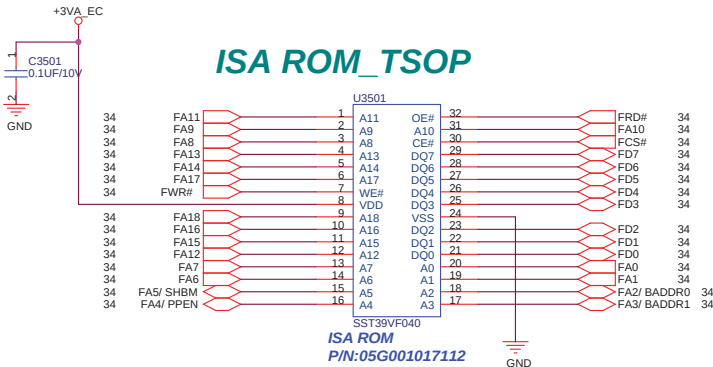


For Debug

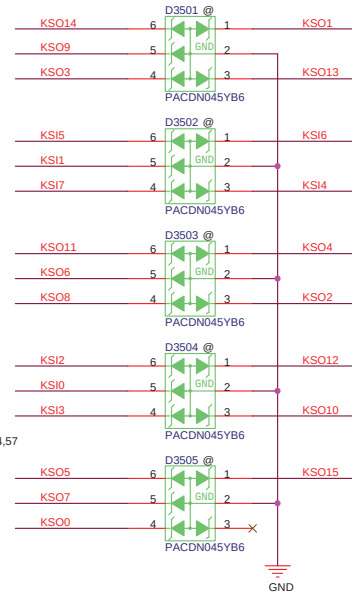
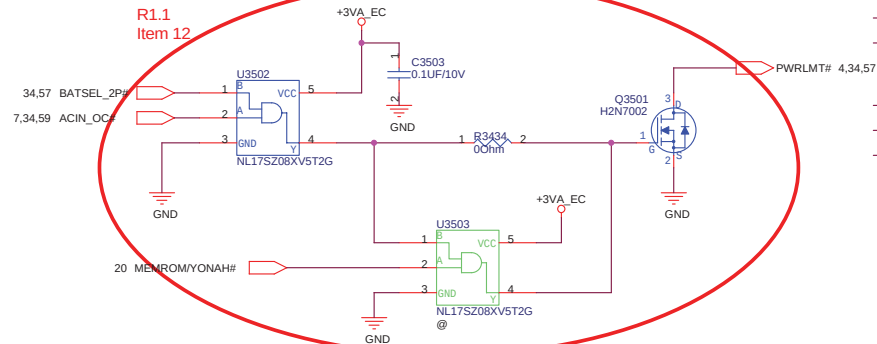


P/N:12G183301208

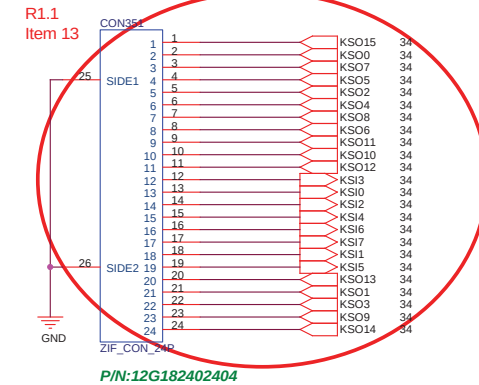
ISA ROM_TSOP



R1.1
Item 12



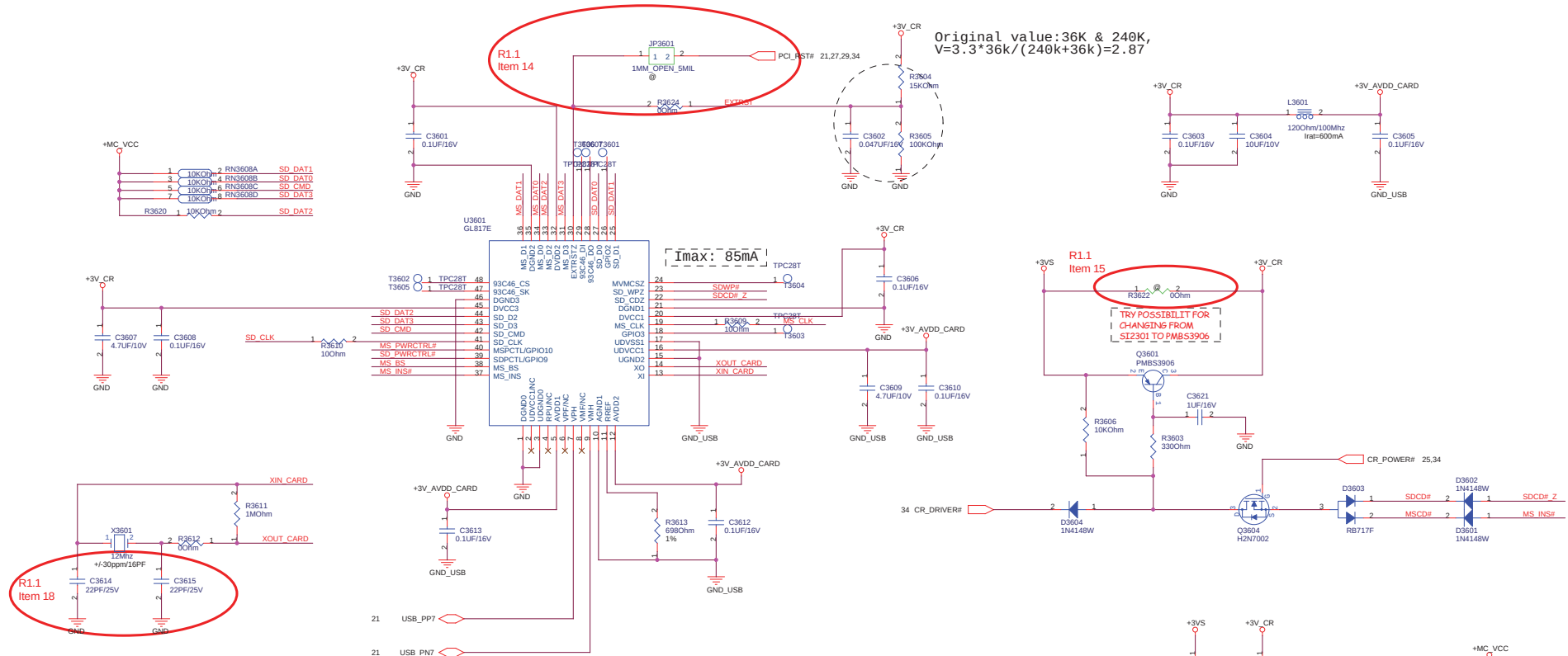
For Keyboard



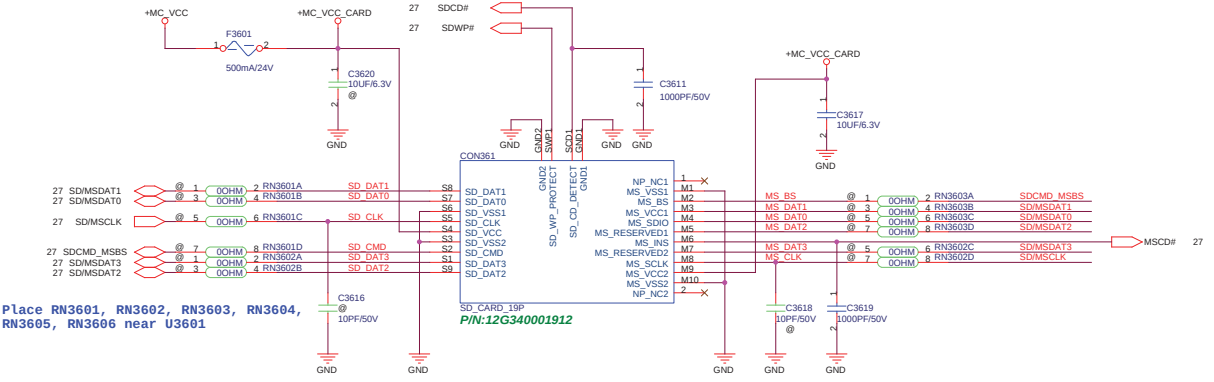
P/N:12G182402404

<Variant Name>

ASUS		Title :ISA_ROM&KB conn	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet 35 of 63	

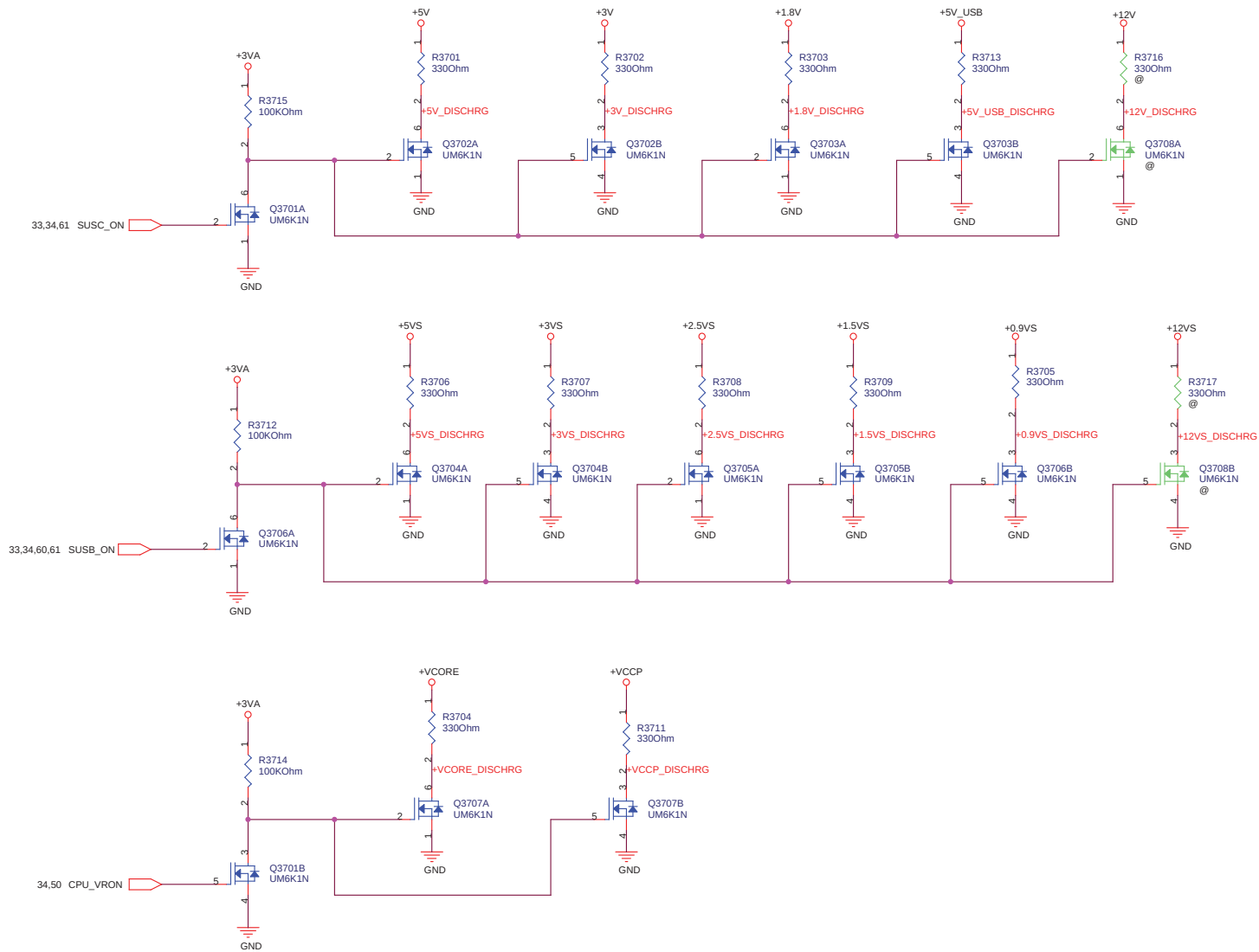


DNI RN3601, RN3602, RN3603, RN3604, RN3605, RN3606 BY USING GL817E.



<Variant Name>

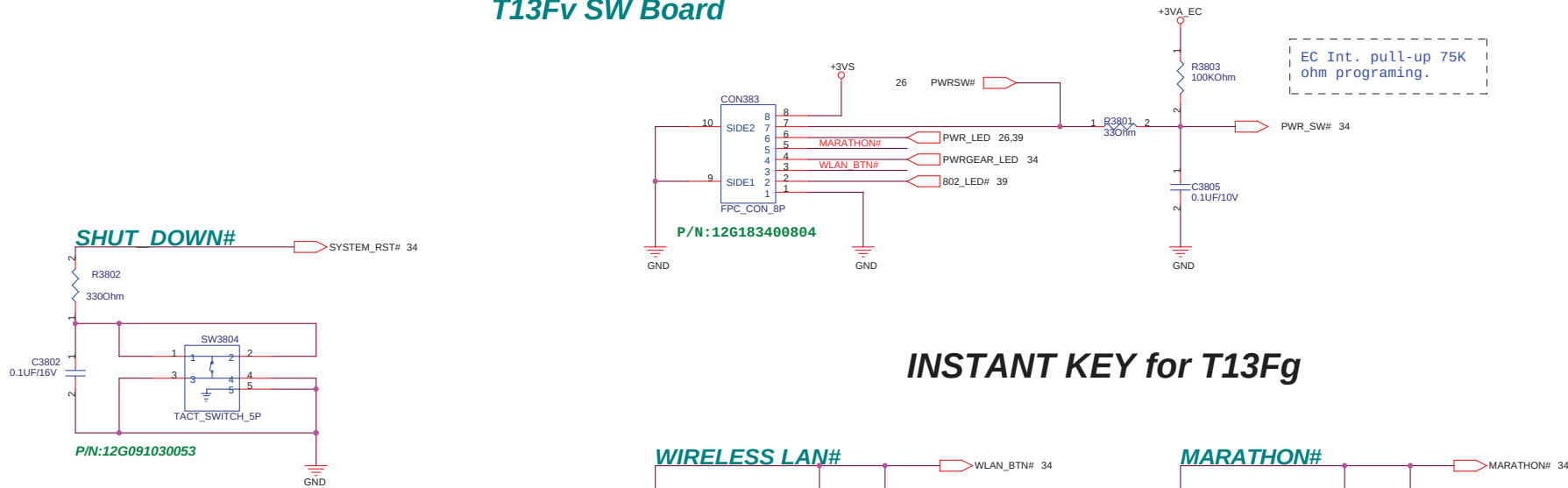
ASUS		Title : 3IN1 CARD-READER	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
C	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet	36	of 63



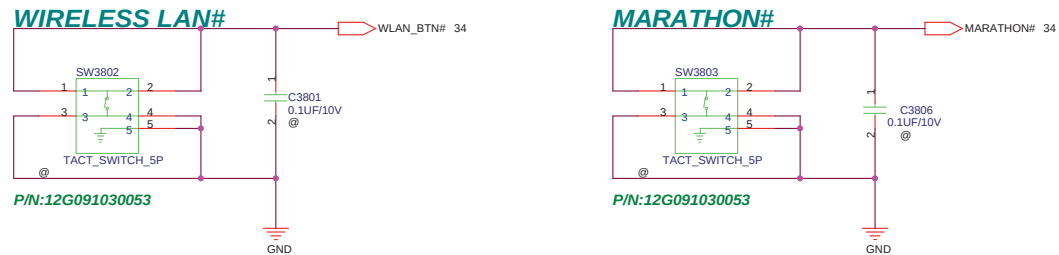
<Variant Name>

		Title : DISCHARGE	
ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size Custom	Project Name T13Fv		Rev 1.11
Date: Monday, August 28, 2006		Sheet 37 of 63	

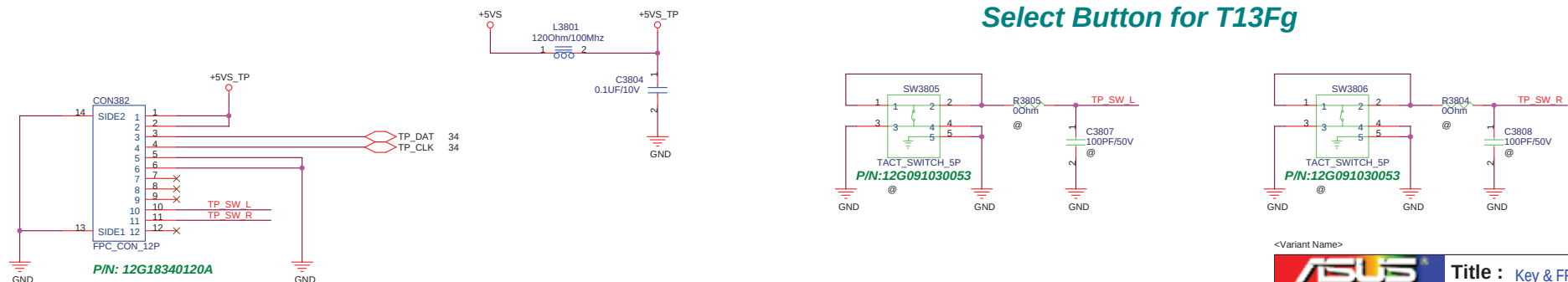
FFC CONNECTER for T13Fv SW Board



INSTANT KEY for T13Fg



Select Button for T13Fg

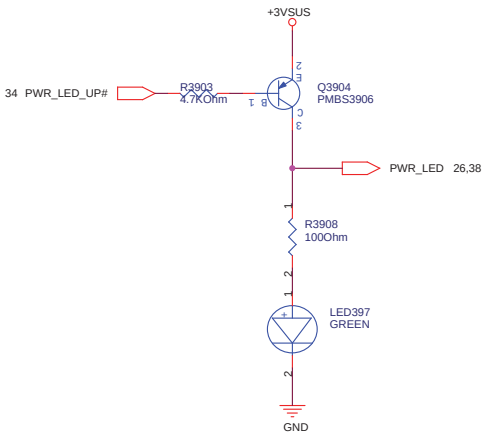


<Variant Name>

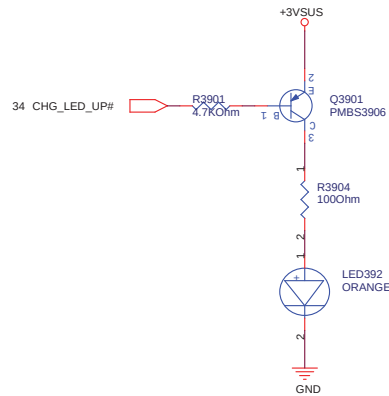
ASUS		Title : Key & FFC CONN	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	38 of 63

PR_NOTE: Change all LED series resistors from 0402 to 0603 type and change color from green to blue.

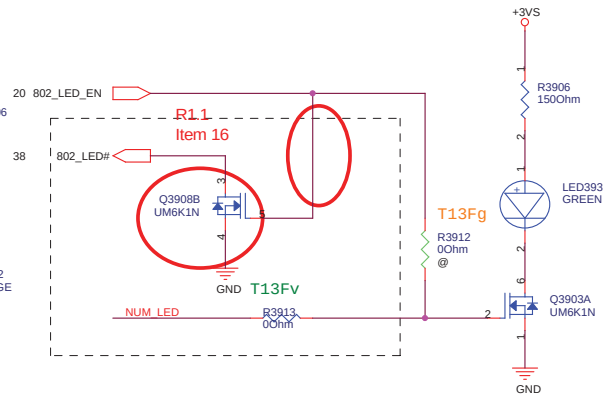
For POWER LED



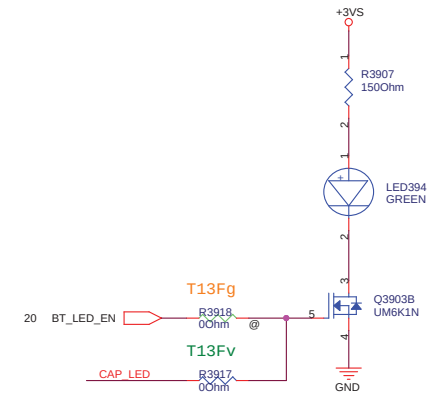
For BATTERY LED



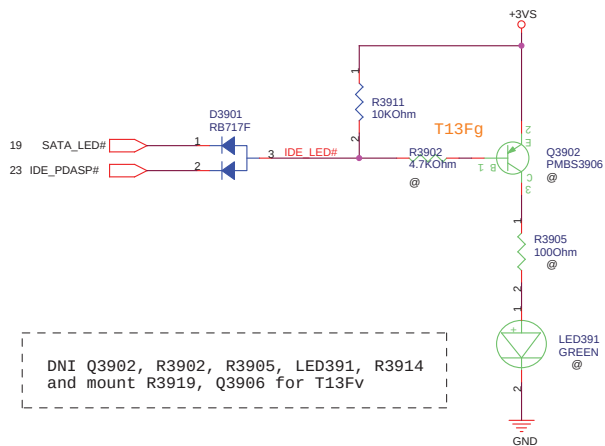
For WireLess LED



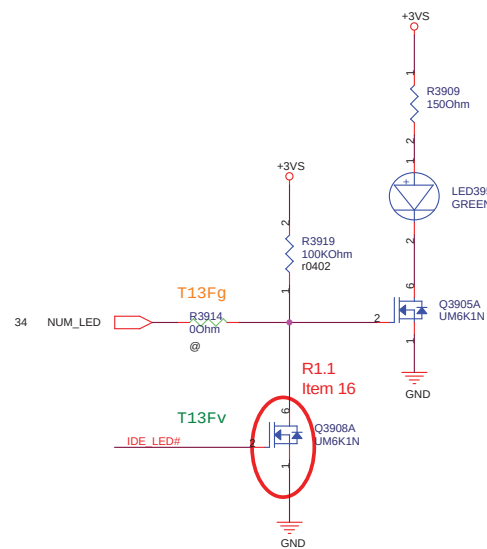
For BT LED



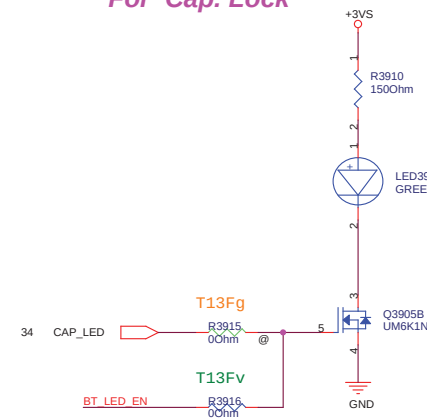
For SATA/IDE LED



For Num Lock



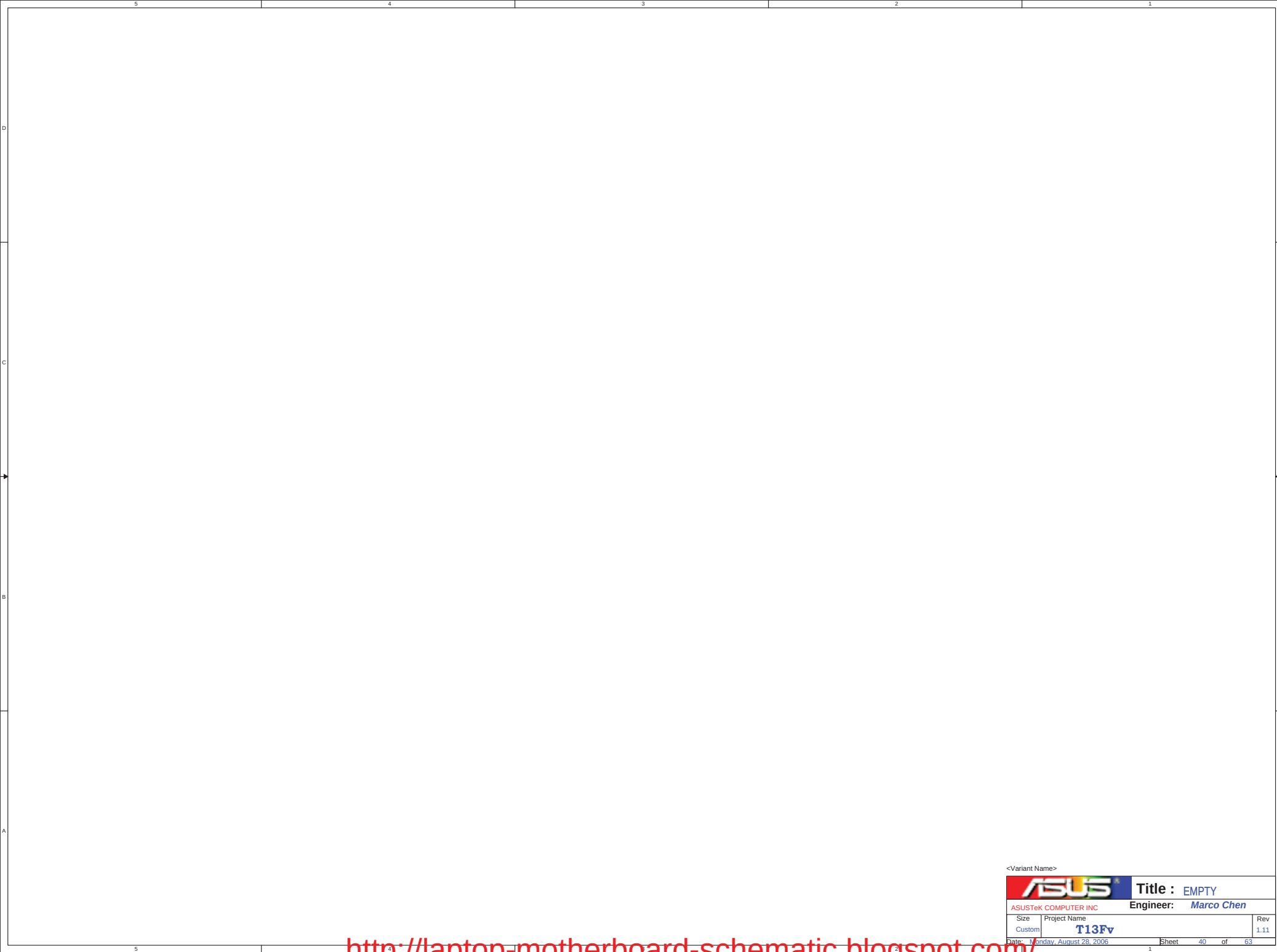
For Cap. Lock



DNI Q3902, R3902, R3905, LED391, R3914 and mount R3919, Q3906 for T13Fv

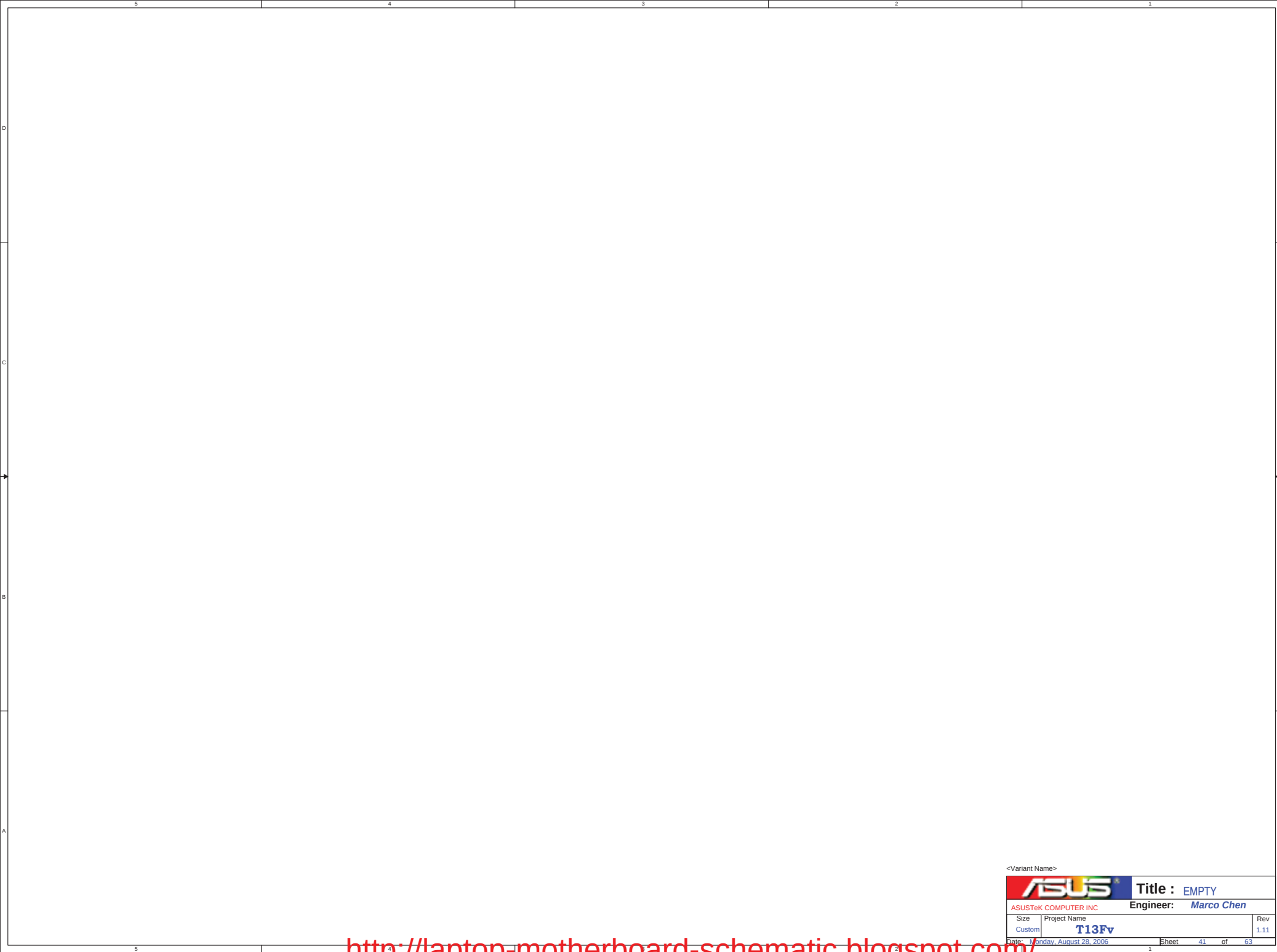
<Variant Name>

ASUS		Title : LEDs	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet 39 of 63	



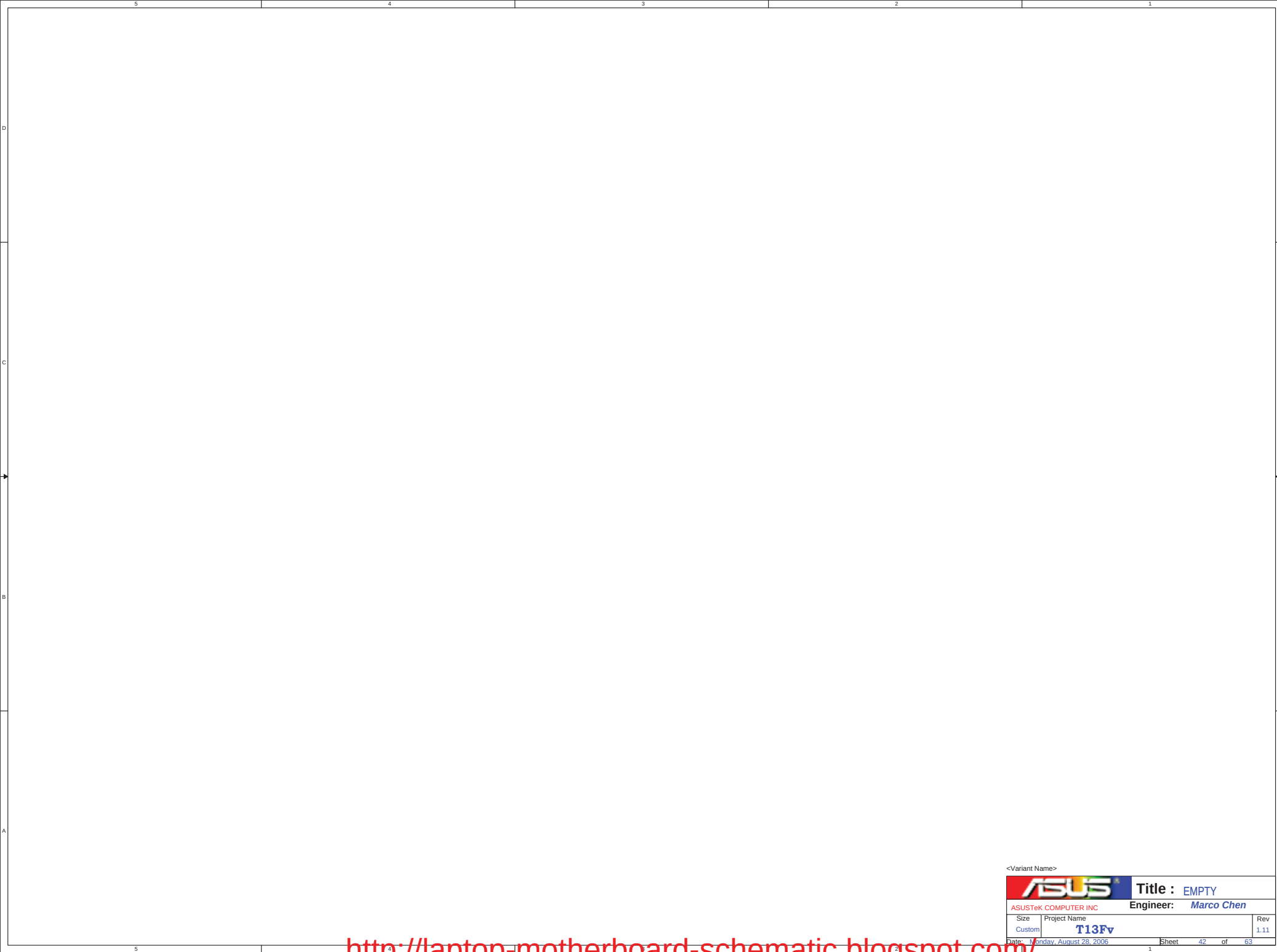
<http://laptop-motherboard-schematic.blogspot.com/>

<Variant Name>		Title : EMPTY	
ASUS		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	40 of 63



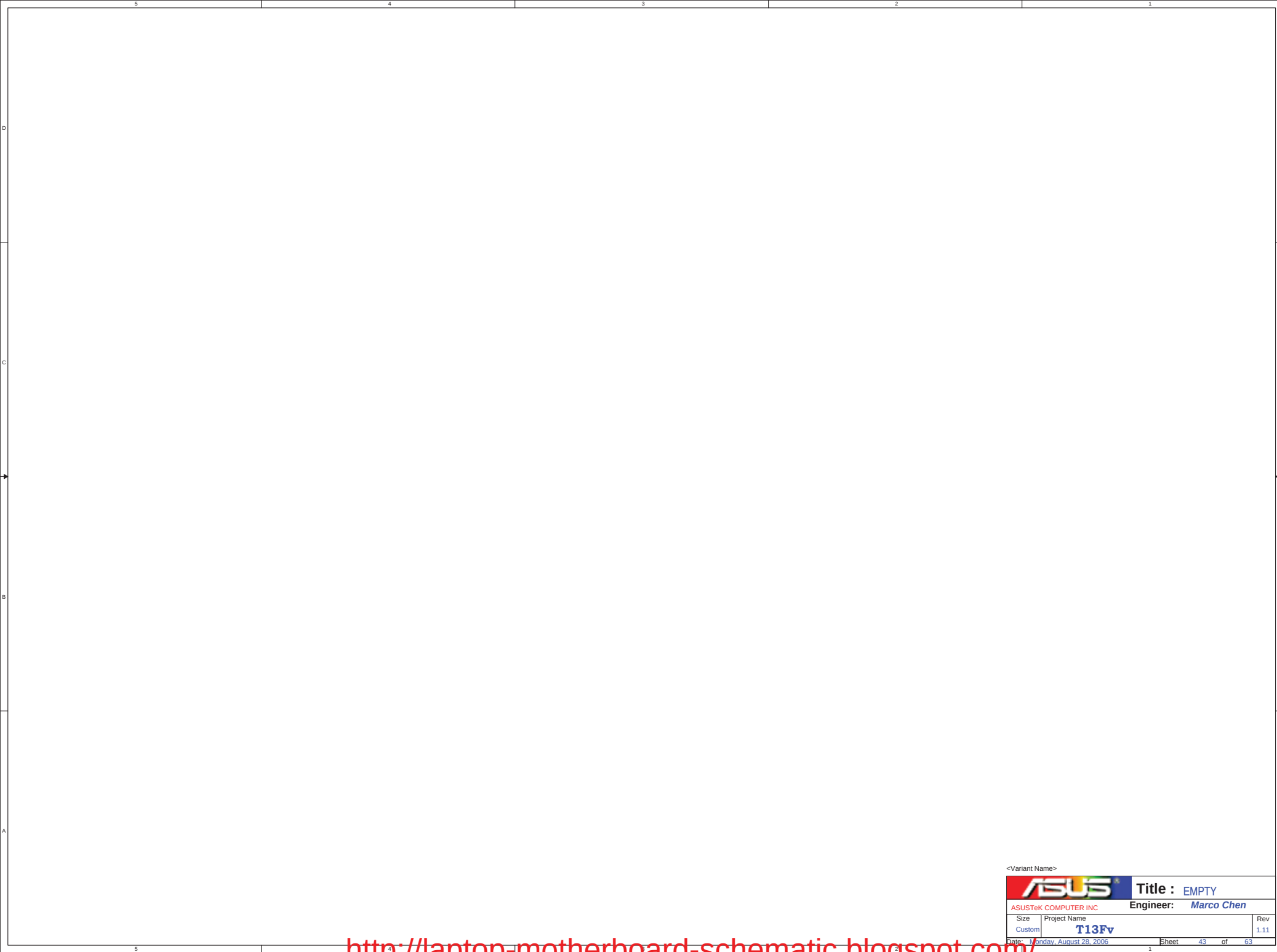
<http://laptop-motherboard-schematic.blogspot.com/>

<Variant Name>		Title : EMPTY	
ASUS		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	41 of 63



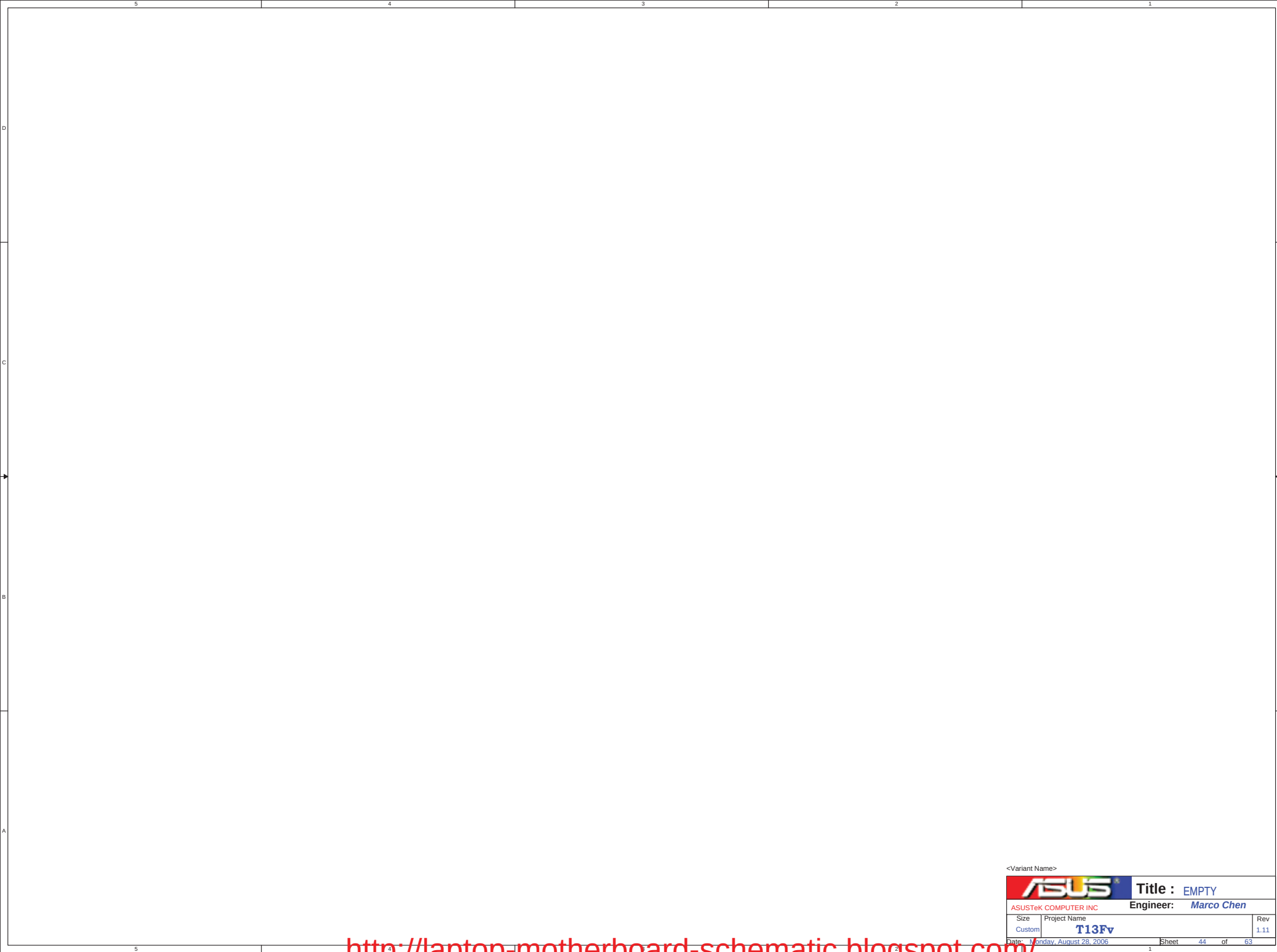
<http://laptop-motherboard-schematic.blogspot.com/>

<Variant Name>			
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ASUSTeK COMPUTER INC		Engineer: Marco Chen	
Size	Project Name		Rev
Custom	T13Fv		1.11
Date: Monday, August 28, 2006		Sheet	42 of 63

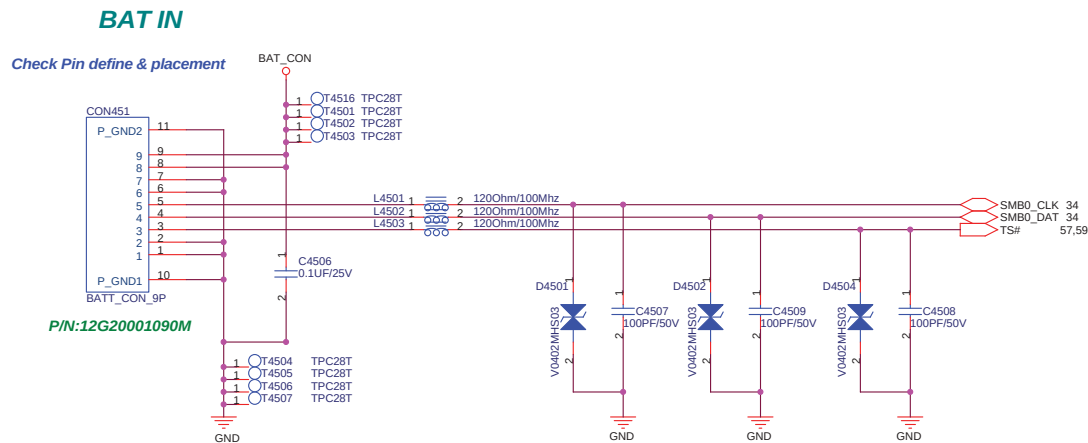
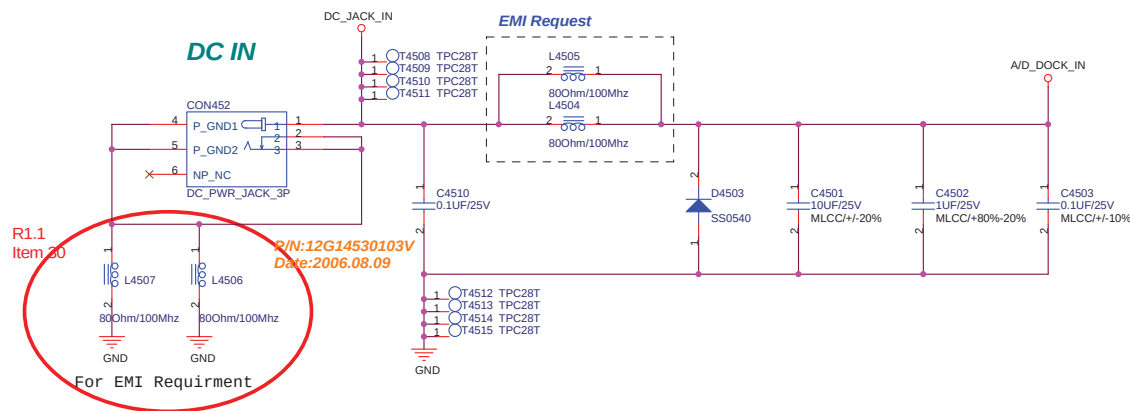


<http://laptop-motherboard-schematic.blogspot.com/>

<Variant Name>		Title : EMPTY	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	43 of 63

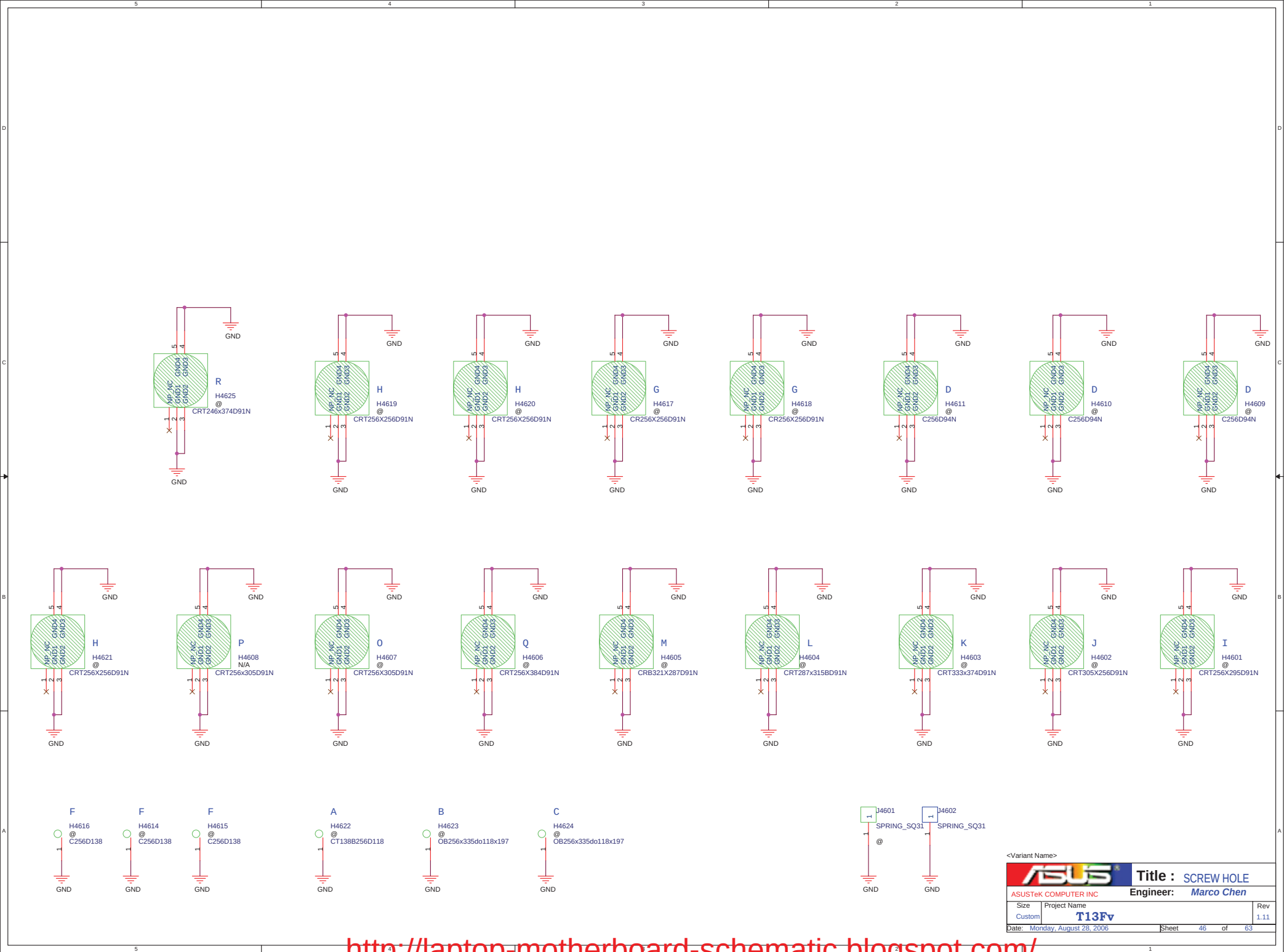


<Variant Name>		Title : EMPTY	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	44 of 63



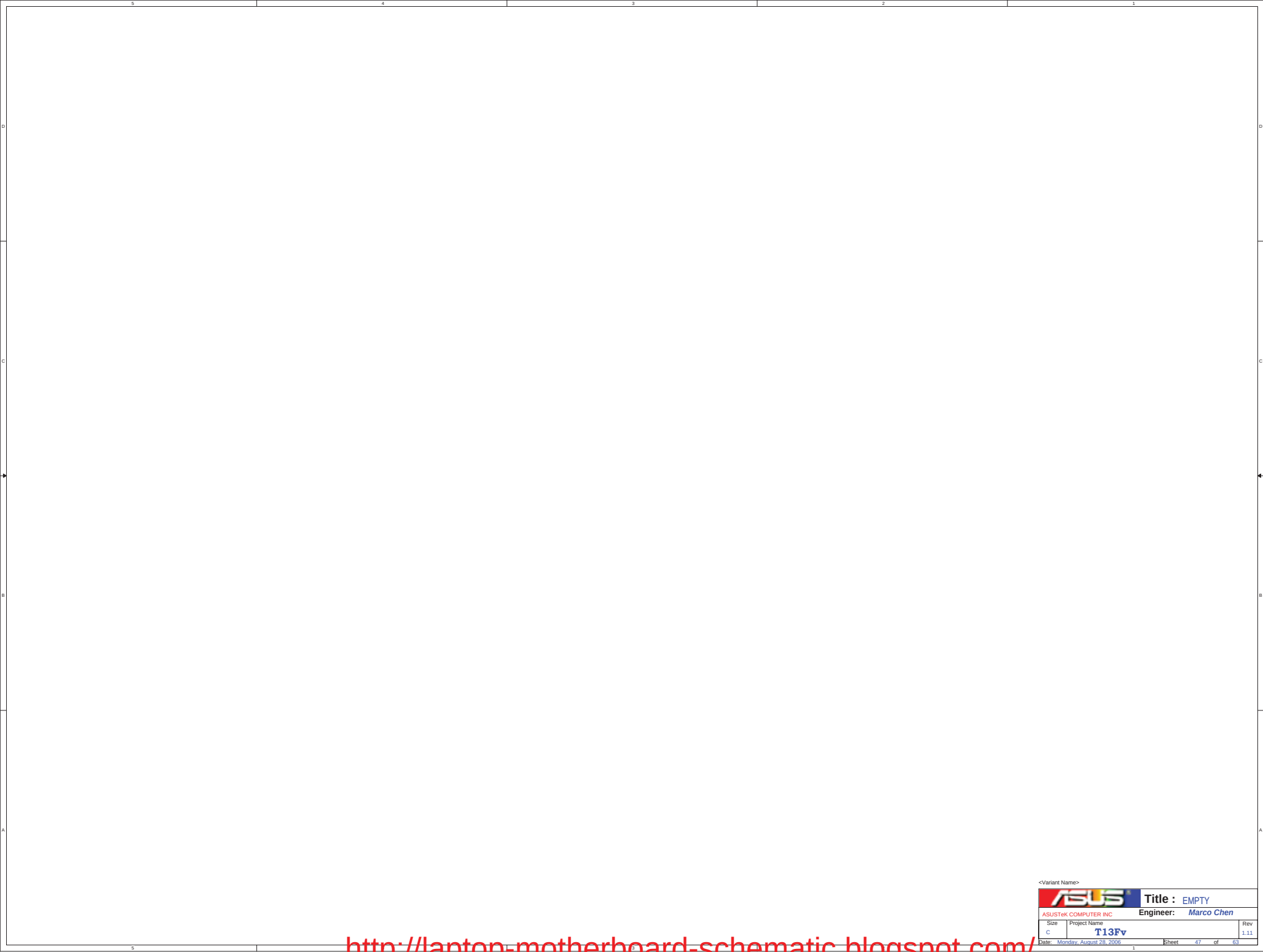
<Variant Name>

ASUS		Title :BAT&Adapter conn	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	45 of 63



<Variant Name>

ASUS		Title : SCREW HOLE	
ASUSTek COMPUTER INC		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
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<Variant Name>		
		Title : EMPTY
ASUSTek COMPUTER INC		Engineer: Marco Chen
Size C	Project Name T13Fv	Rev 1.11
Date: Monday, August 28, 2006		
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R1.0 -> R1.1

- 1. Page 6: DNI R611 because Int. pull-up resistor exists in FAN module.
- 2. Page 15: Add circuits to change DDR2 Vref from +0.9VS to +0.9V.
- 3. Page 17: Change reference name from F3602 to F1701.
- 4. Page 21: DNI U2103.
- 5. Page 23: Change reference name C4511 -> C2311, C4513 -> C2313, C4512 -> C2312, C4514 -> C2310.
- 6. Page 23: Change R2301 size from 0603 to 0402.
- 7. Page 23: Add pull high resistor R2306*DNI and pull down resistor R2307*Mount for ODD cable select.
- 8. Page 30: Change reference name L3008 -> R3020, L3009 -> R3021, L3010 -> R3022.
- 9. Page 31: Delete R3133 and connect OP_SD# to D3103.2 directly.
- 10. Page 32: Delete R3201 and connect MIC2_VREFOUT to R3203.1 directly.
- 11. Page 34: DNI D604, R3411 and mount R3408, R3418 for thermal protection.
- 12. Page 35: Add circuits to throttle CPU speed 50% when un-plug adapter and battery is 3S1P type.
- 13. Page 35: Change keyboard matrix.
- 14. Page 36: Change reference name from JP3403 to JP3601
- 15. Page 36: Change R3622 size from 0402 to 0603.
- 16. Page 39: Delete R3920 and change Q3906 and Q3907*2N7006 to Q3908*UM6K1N.
- 17. Page 17: C1701 from 0.1uF/25V to 0.22uF/25V to meet LCD power sequence.
- 18. Page 36: Change C3614 and C3614 form 15pF to 20pF for ITTI recommendation.
- 19. Page 34: Add ESD Protection*D3402 for Touch Pad.
- 20. Page 27: Add series resistor 33 ohm for PCI_FRAME# and PCI_AD13
- 21. Page 34: Change Q3403**UM6K1N to Q3404, Q3405*2N7002.
- 22. Page 18: Change L1801, L1802, and L1803 from bead to inductor.
- 23. Page 19, 30: Change R1911, R1913, R1915, R1918 and R3002 from 33ohm to 39ohm.

- 24. Page 6: Change R615 pull up from +3VS to +5VS_AUDIO.
- 25. Page 6: Change R610 from 100ohm to 200ohm and reserve 1uF decoupling CAP.
- 26. Page 27: Change R2718 from 510Kohm to 110Kohm and C2701 from 0.1uF to 0.47uF.
- 27. Page 9, 11: Reserve C903, C904, C905, C906 and R1103 for EMI requirement.
- 28. Page 21: Change R2104 from 22.6ohm to 21ohm to enhance USB driven strength.
- 29. Page 19: Change C1901, and C1903 from 15p F to 12p F for ITTI recommendation.
- 30. Page 45: Add L4506 and L4507 for EMI requirement.

<Variant Name>



ASUSTeK COMPUTER INC

Title : History(1)

Engineer: Marco Chen

Size

Custom

Project Name

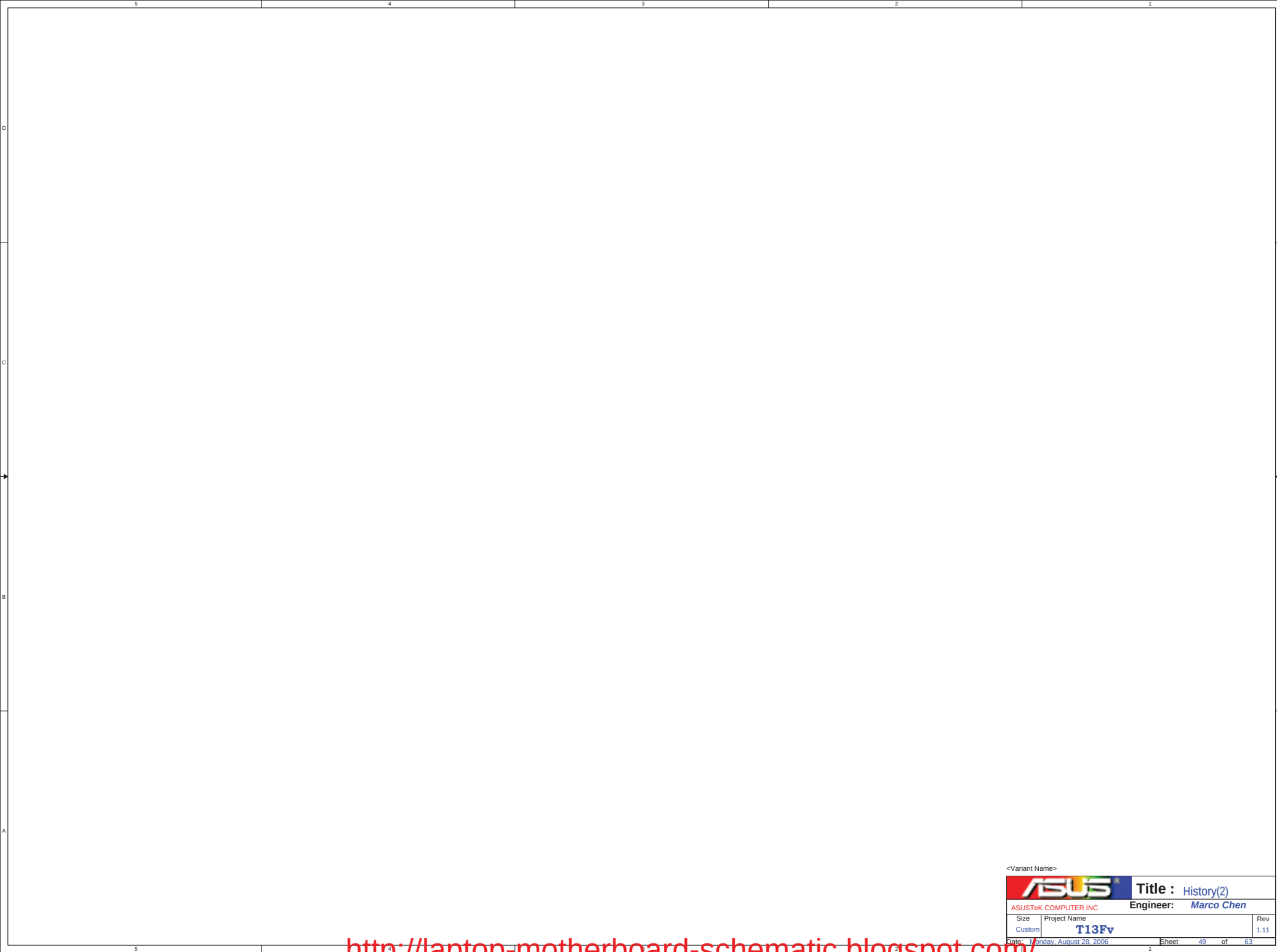
T13Fv

Rev

1.11

Date: Monday, August 28, 2006

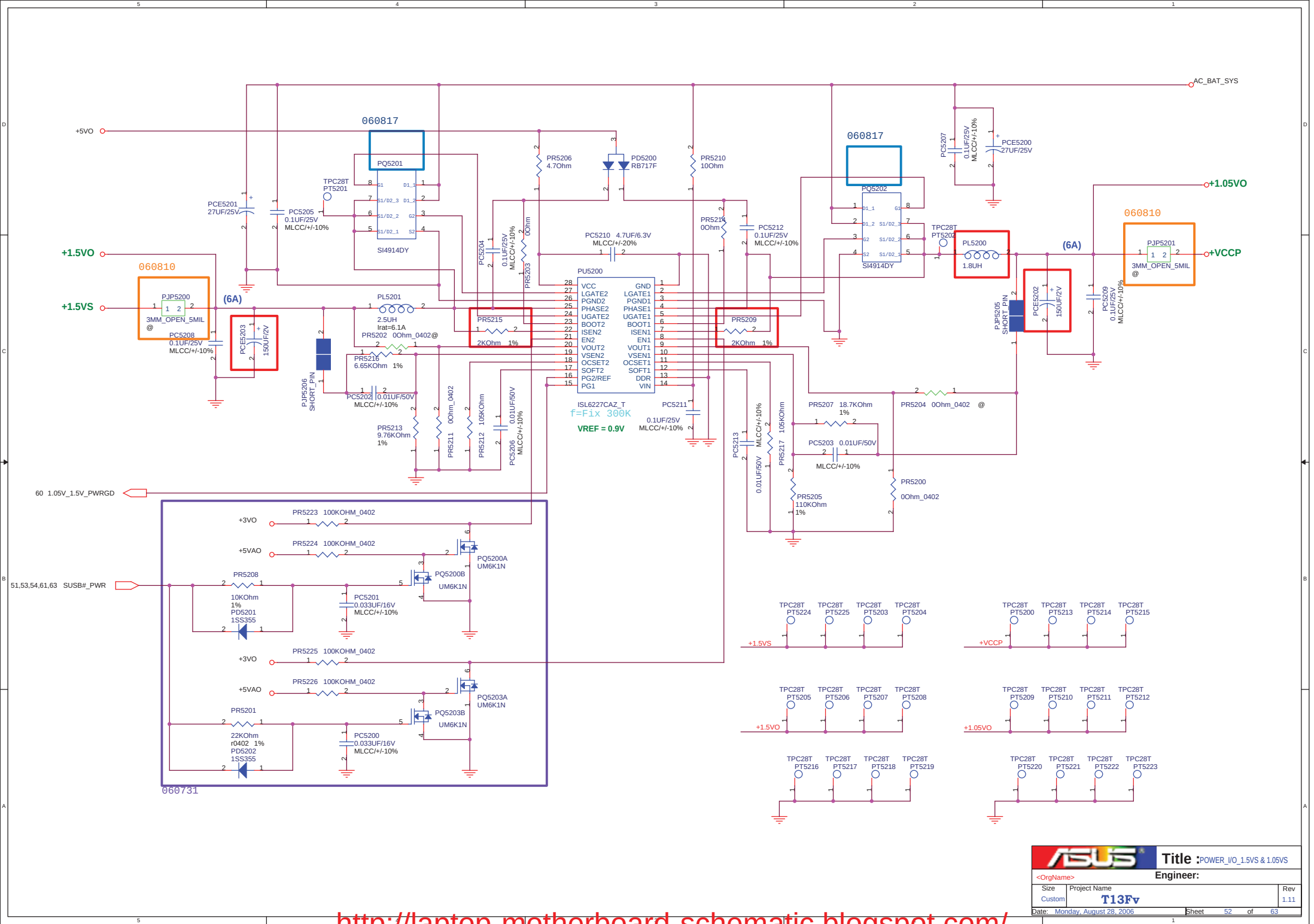
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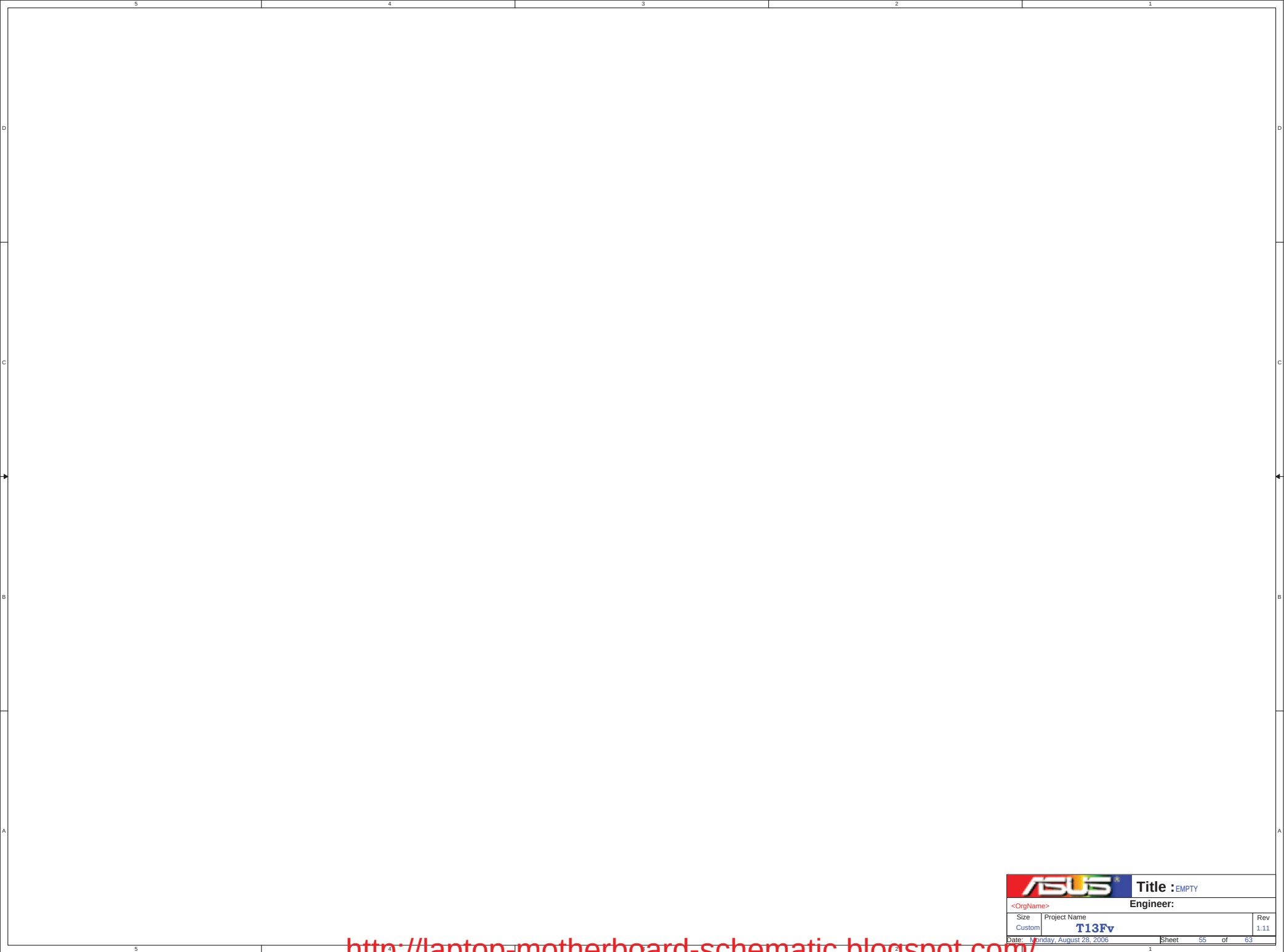


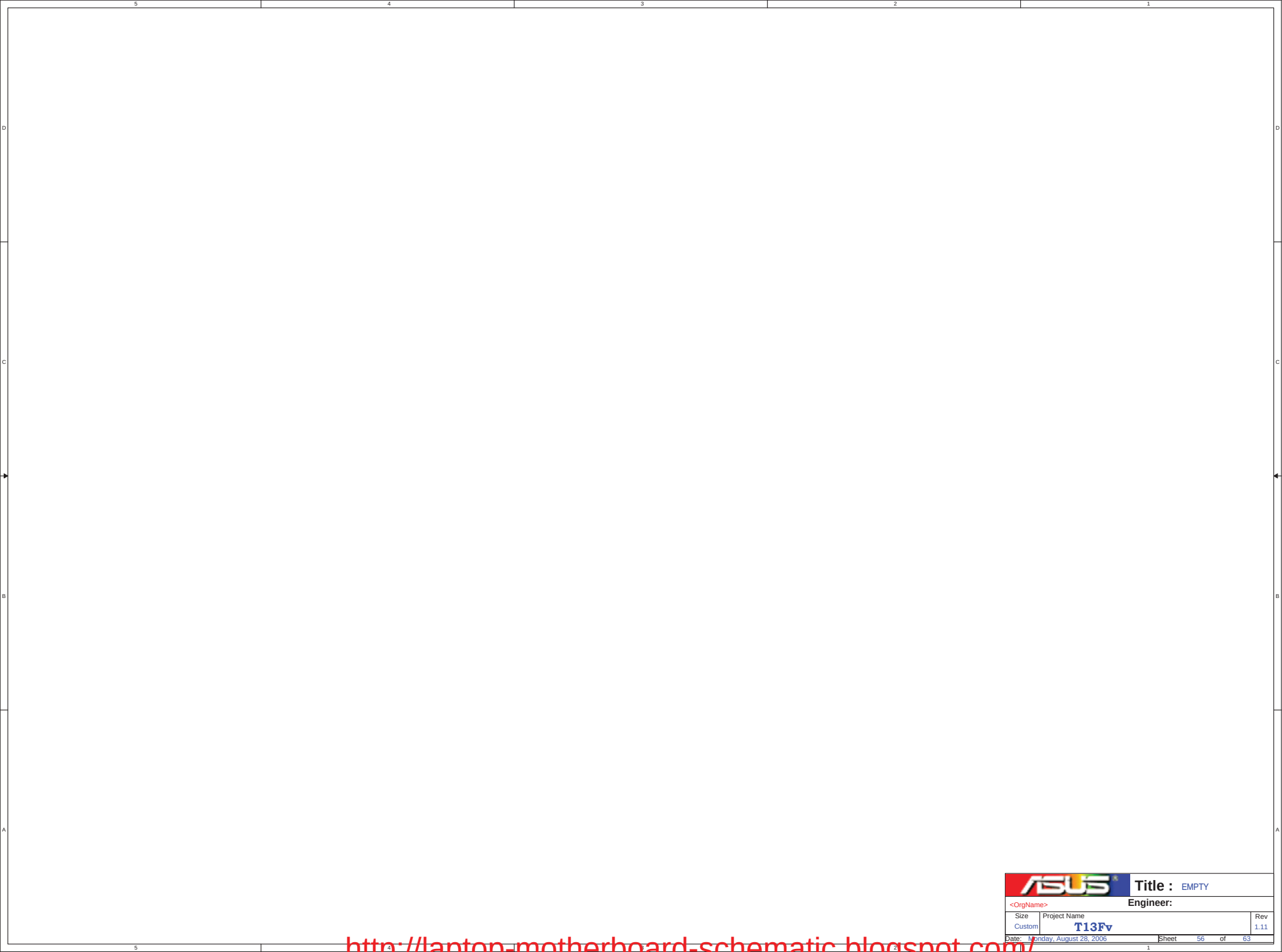
<http://laptop-motherboard-schematic.blogspot.com/>

<Variant Name>		Title : History(2)	
ASUS		Engineer: Marco Chen	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006		Sheet	49 of 63



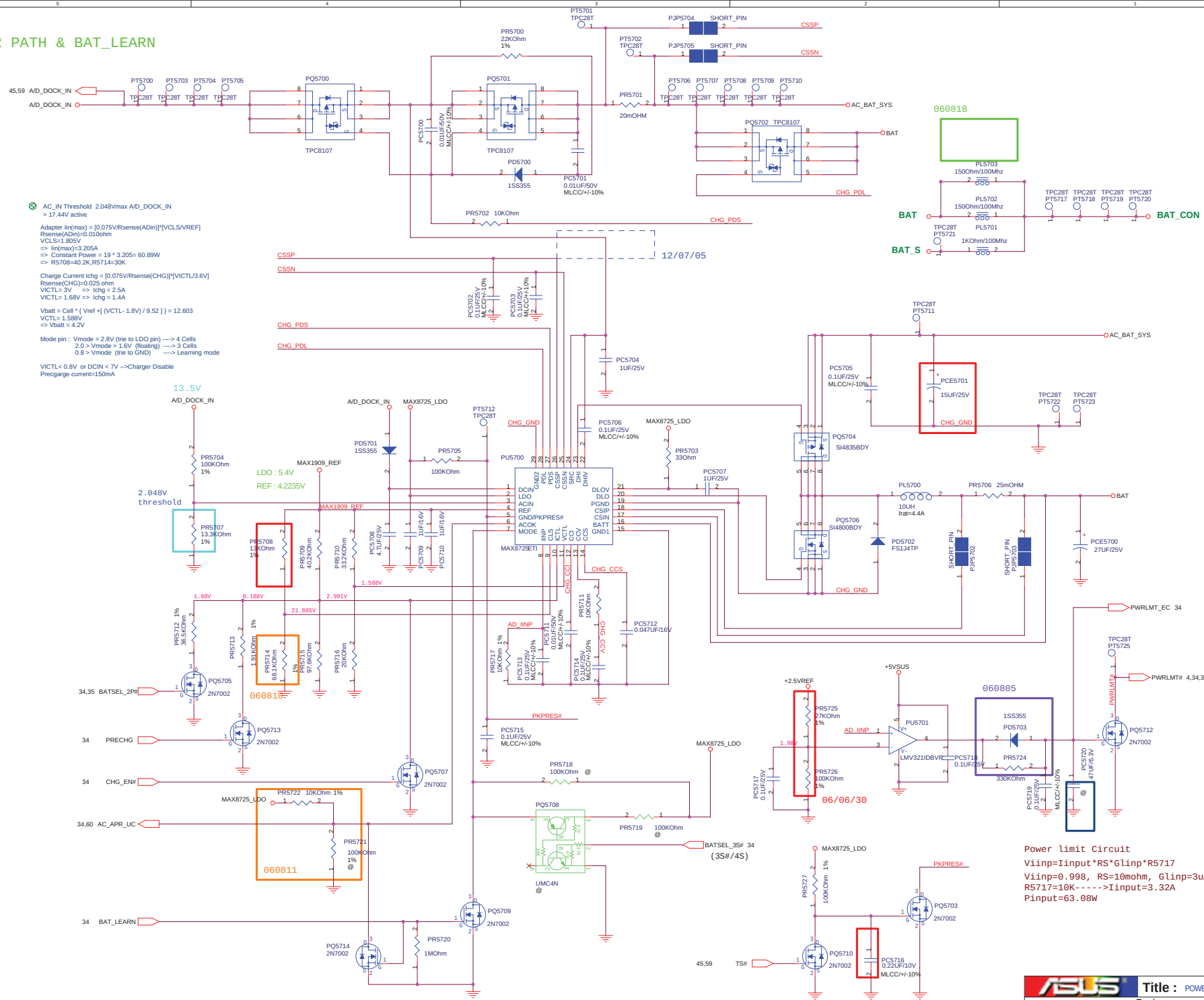




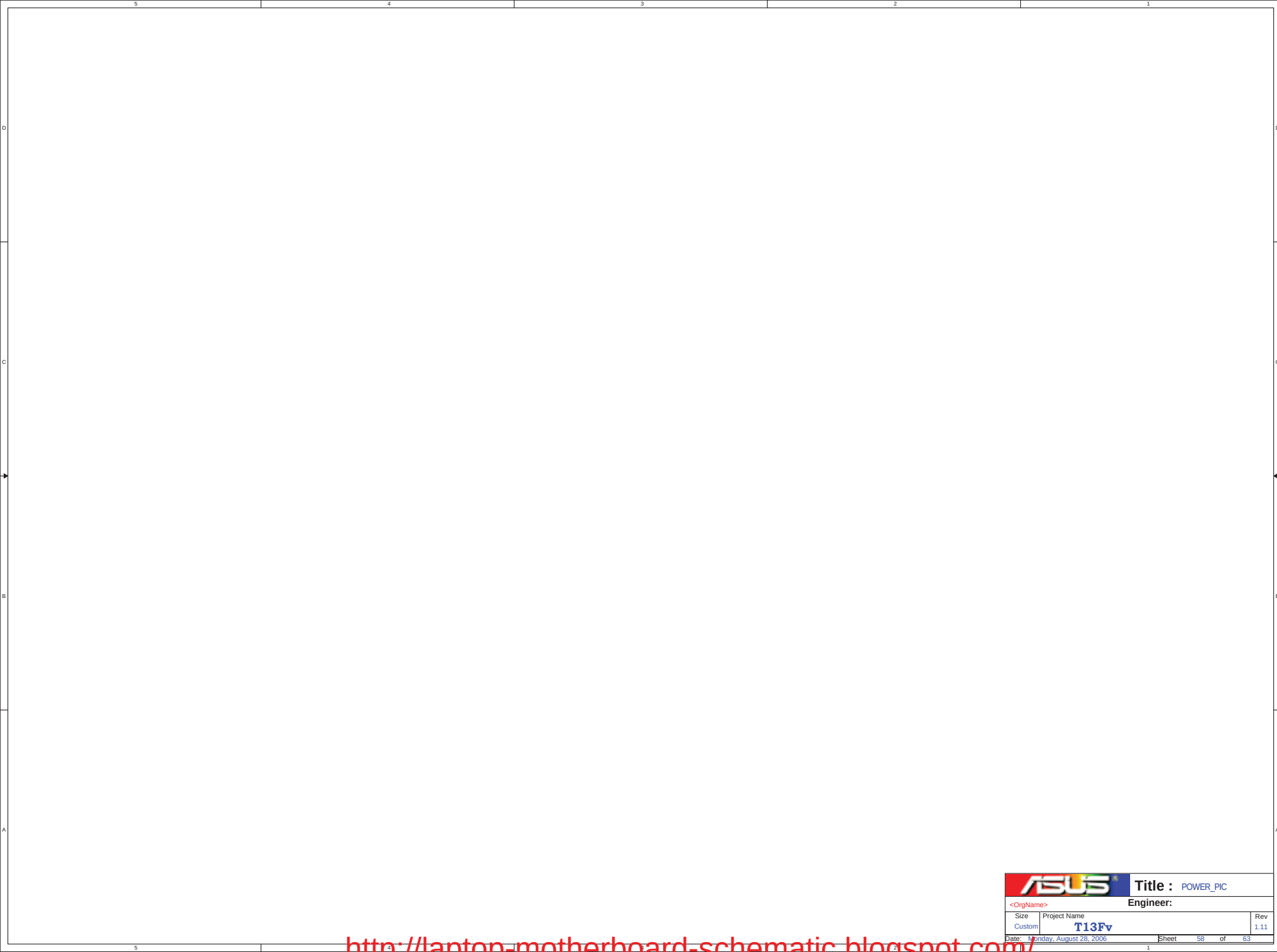


		Title : EMPTY	
<OrgName>		Engineer:	
Size	Project Name		Rev
Custom	T13Fv		1.11
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POWER PATH & BAT_LEARN

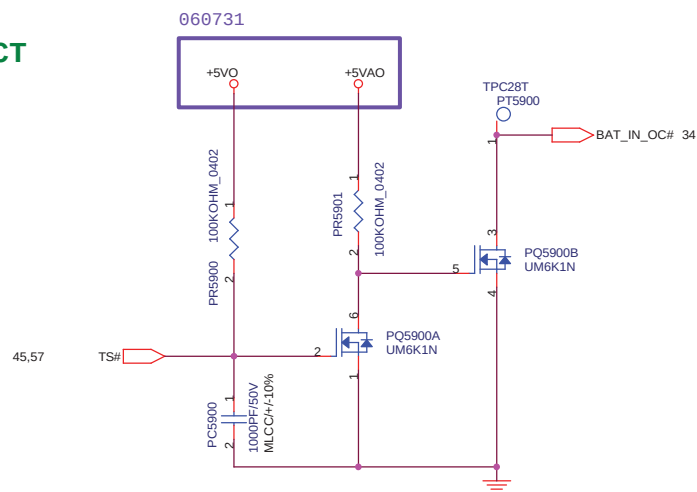


```
Power limit Circuit
Viinp=Iinput*RS*Glinp*R5717
Viinp=0.998, RS=10mohm, Glinp=3uA/mV,
R5717=10K---->Iinput=3.32A
Pinput=63.08W
```

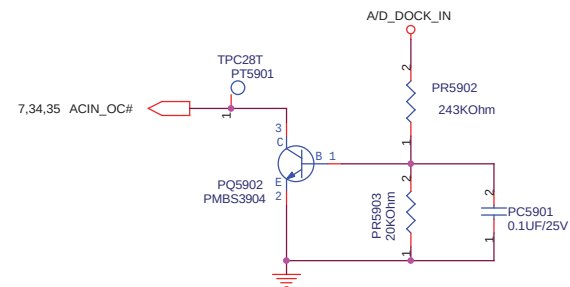


		Title : POWER_PIC	
<OrgName>		Engineer:	
Size	Project Name		Rev
Custom	T13Fv		1.11
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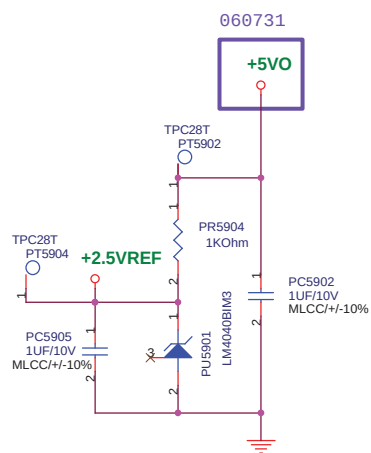
BATTERY IN DETECT



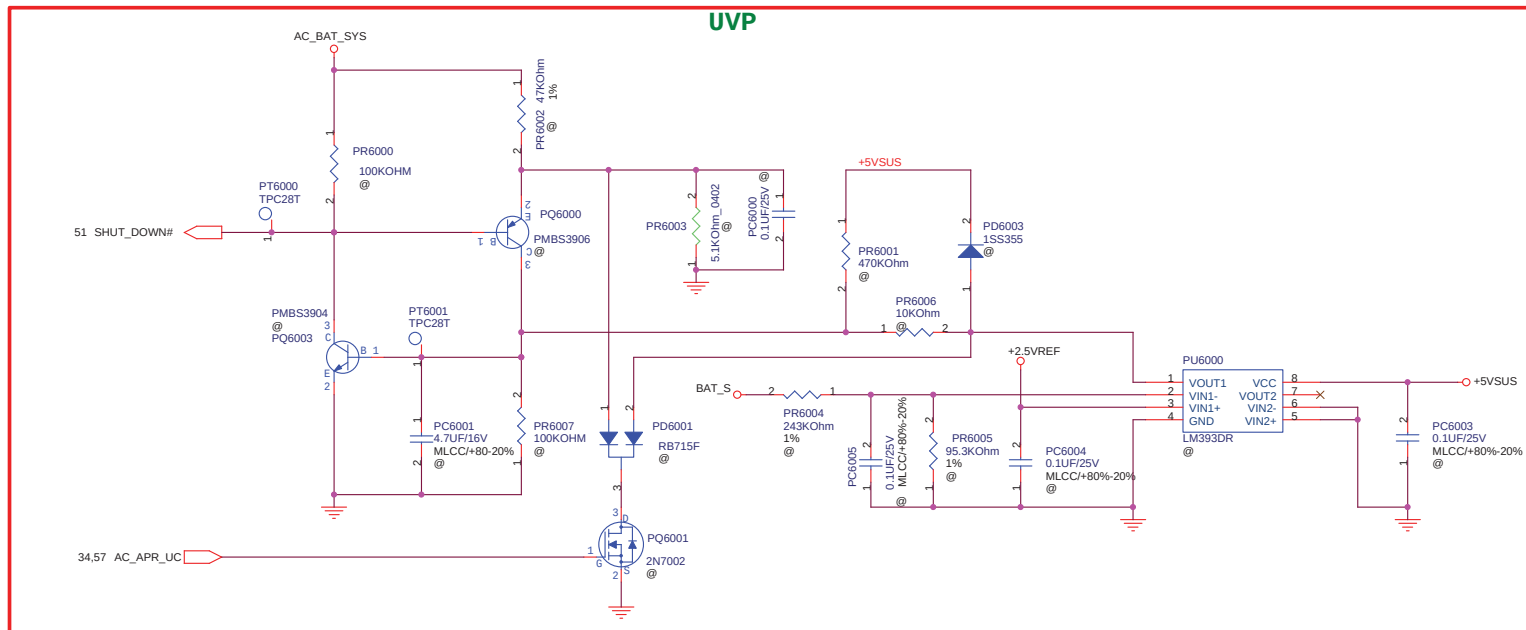
ADAPTER IN DETECT



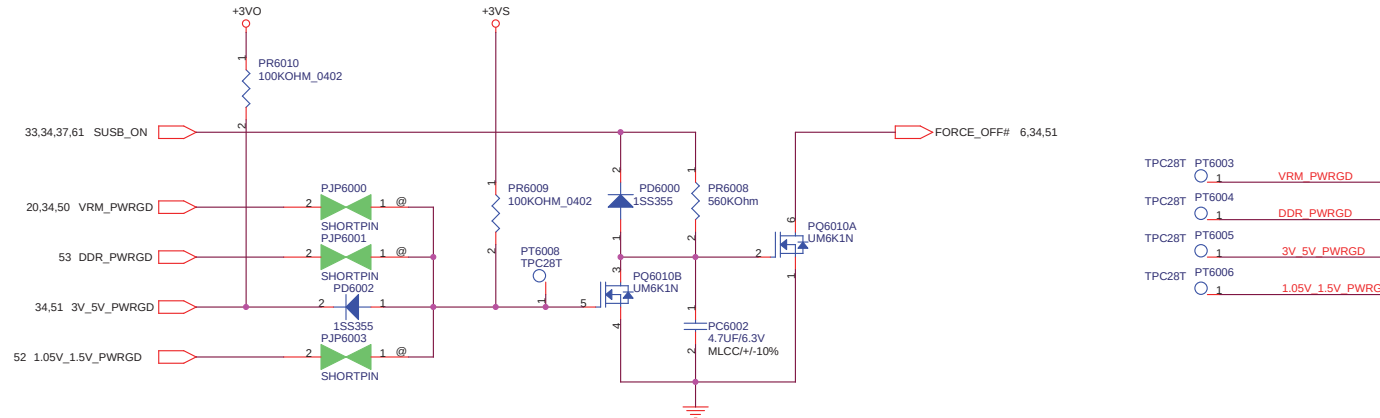
+5VLCM, +5VCHG & +2.5VREF



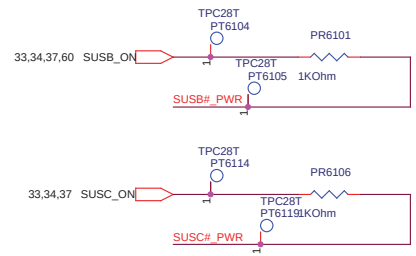
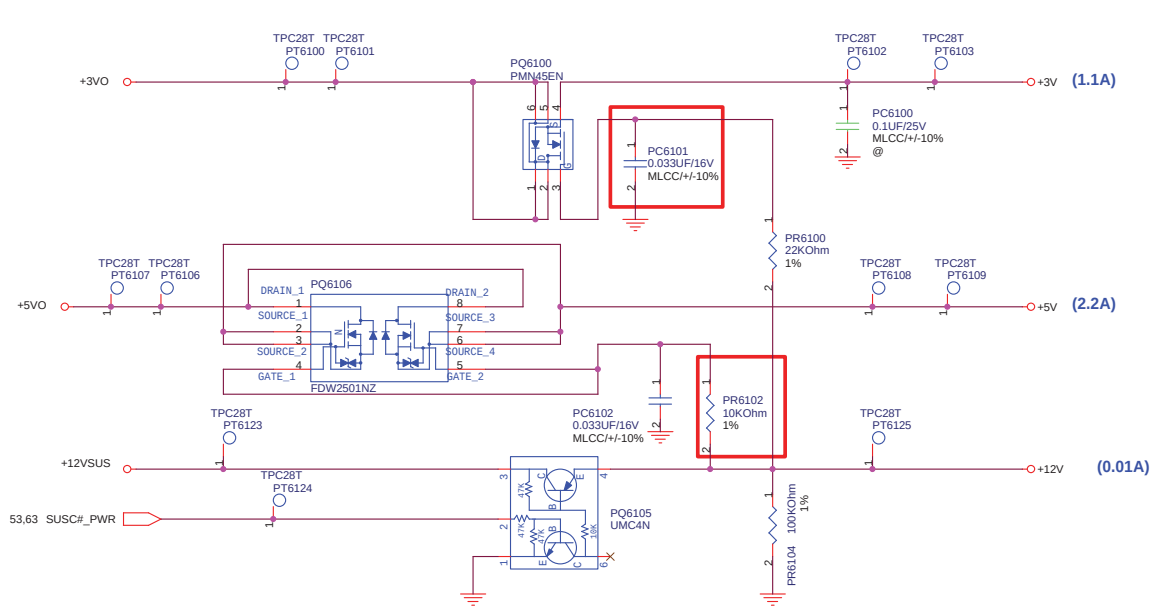
ASUS		Title : POWER_DETECT	
<OrgName>		Engineer:	
Size	Project Name	Rev	
Custom	T13Fv	1.11	
Date: Monday, August 28, 2006	Sheet	59	of 63



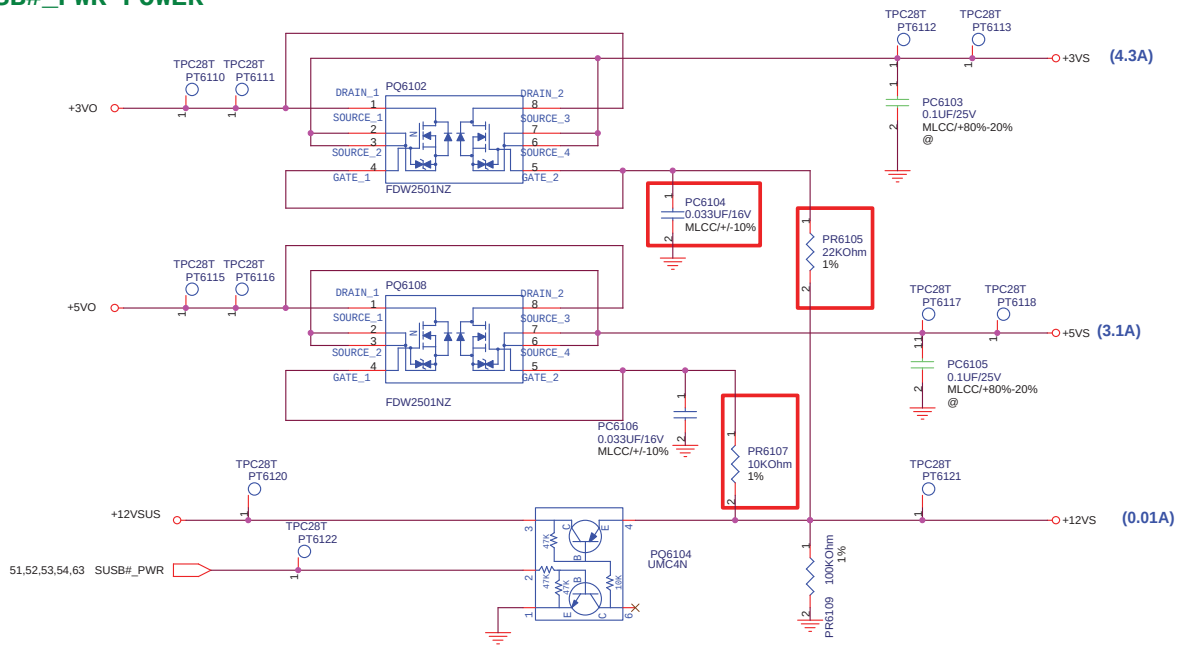
POWER GOOD DETECTOR

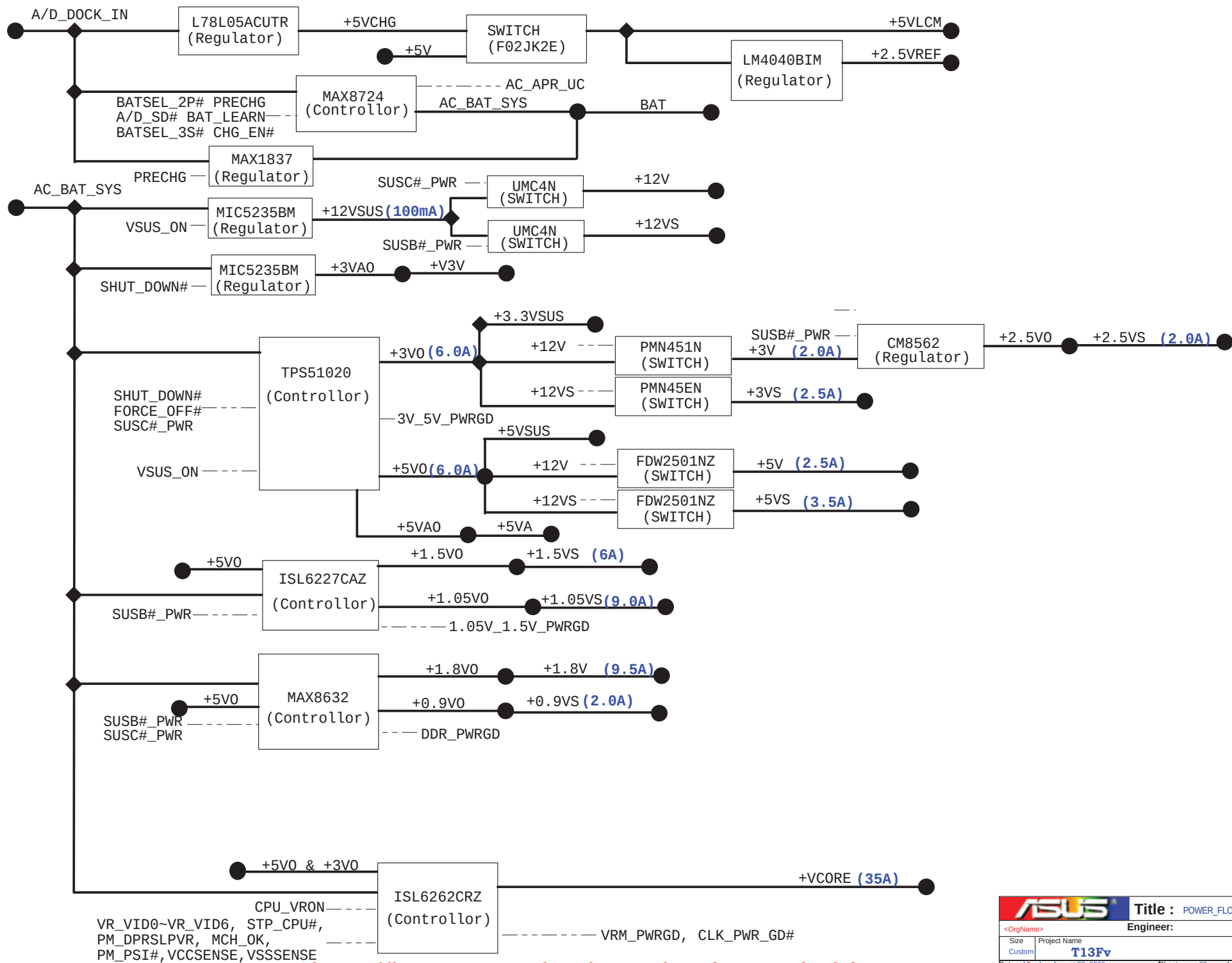


SUSC#_PWR POWER



SUSB#_PWR POWER







FOR POWER TEST

