

F3Ka/F3Ke Block Diagram

VGA VCORE
PAGE 85

CPU VCORE
PAGE 80

AMD
CPU
S1g1
PAGE 3,4,5

DDR2-800MHz

Dual Channel DDR2
SO-DIMM X 2
Up to 4GB DDRII
PAGE 7,8,9

Clock gen.
PAGE 29

Power On Sequence
PAGE 32

SYSTEM PWR
PAGE 81

BAT & CHARGER
PAGE 88

FAN + SENSOR
PAGE 50

DISCHARGE CIRCUIT
PAGE 57

LED&SW&TOUCHPAD
PAGE 58

DEBUG circuits
PAGE 58

1394
PAGE 40

4 in 1
CARD READER
PAGE 43
MMC /SD /XD
Memory Stick/MS PRO

AMD Turion 64 Mobile Dual Core(Taylor,S1 638pin,35W,DDR2,TL-50/52/56/60)
AMD Sempron(Keene,S1 638pin,25W 3200+/3400+/3500+)

Li-Ion 6 cells:4800mAh,3S2P,53.28W
(3S2P;4.2*3=12.6V;2400mAh*2=4800mAh;
3.7V*3 cells*4.8A=53.28W)
Li-Ion 9 cells:7200mAh,3S3P,79.92W
(3S3P;4.2*3=12.6V;2400mAh*3=7200mAh;
3.7V*3 cells*7.2A=79.92W)

H.T 800 MHz
1600MT/s

15.4''' active matrix color TFT
15.4''' WXGA/WSXGA+
Dual Channel LVDS I/F

LVDS & INV
PAGE 45

Switch
PAGE 78

ATI
M76M/
M64M
PAGE 70,71,72,73

VRAM * 8
PAGE 74,75

PCI-E *16

ATI
RS690M
PAGE 10,11,12

ALINK
4LANE

PCI-E *1

PCI-E GLAN
RTL8111B
PAGE 33,34

PCI-E *1

MINI PCIE CARD
WWAN
PAGE 54

PCI-E *1

MINI PCIE CARD
TVTUNER
PAGE 55

PCI-E *1

MINI PCIE CARD
WLAN
PAGE 53

PCI-E *1

NEW CARD
PAGE 42

USB

CardBus
R5C833
PAGE 40,41

ATI
SB600
PAGE 20,21

LPC 33MHz

Azalia

TPM 1.2
(OPTIONAL)
PAGE 62

KEYPAD
MATRIX
PAGE 31

INSTANT KEY
PAGE 56

LED Control,
Guage
PAGE 56

ISA
ROM (4MB)
PAGE 31

AMPLIFIER
PAGE 37

SPEAKER or
PHONE JACK
PAGE 37

EC IT8510E
PAGE 30,31

Azalia Codec
ALC 660
PAGE 36

SPDIF
PAGE 37

MDC Conn
(RJ11)
PAGE 62

SATA HDD
PAGE 51

ODD
PAGE 51

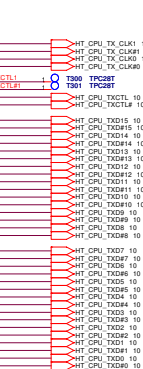
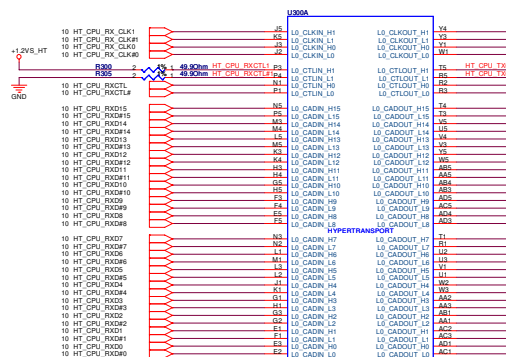
USB

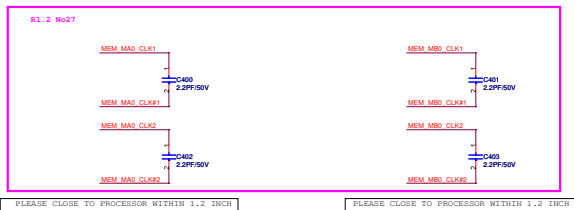
USB 2.0
CON X4
PAGE 52

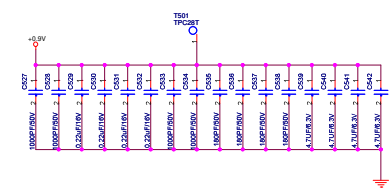
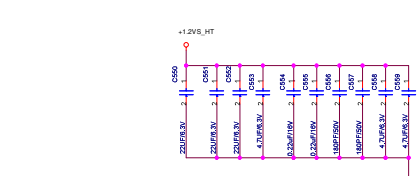
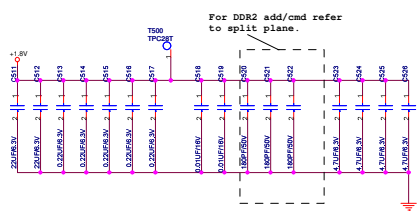
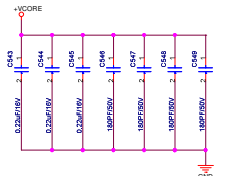
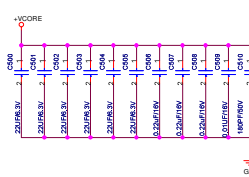
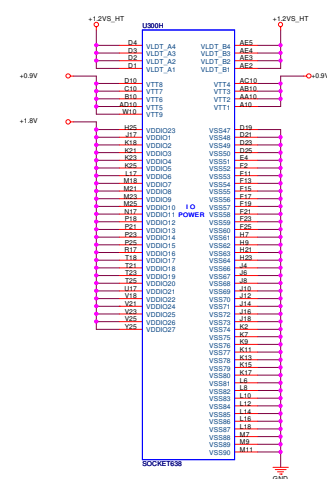
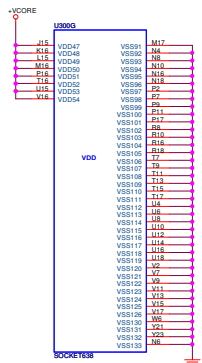
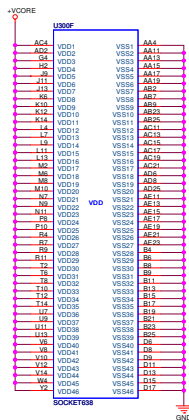
Bluetooth
USB
PAGE 53

Camera
USB
PAGE 52

Finger Print
(Optional)
PAGE 63







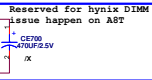
For DDR2 add/cmd refer to split plane.

U700A

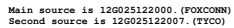


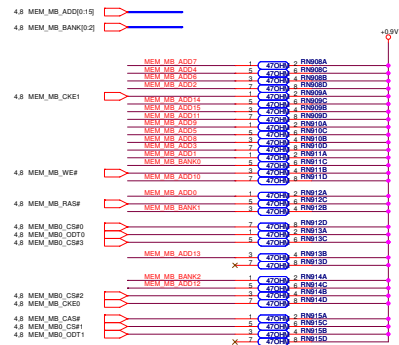
12G025332003

Main source is 12G025332003. (FOXCONN)
Second source is 12G025122006. (TYCO)



USDOA

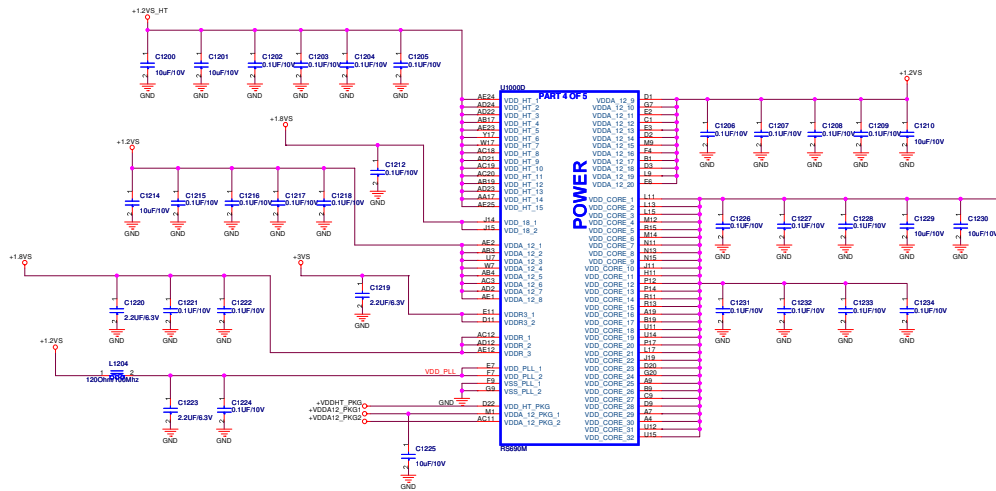


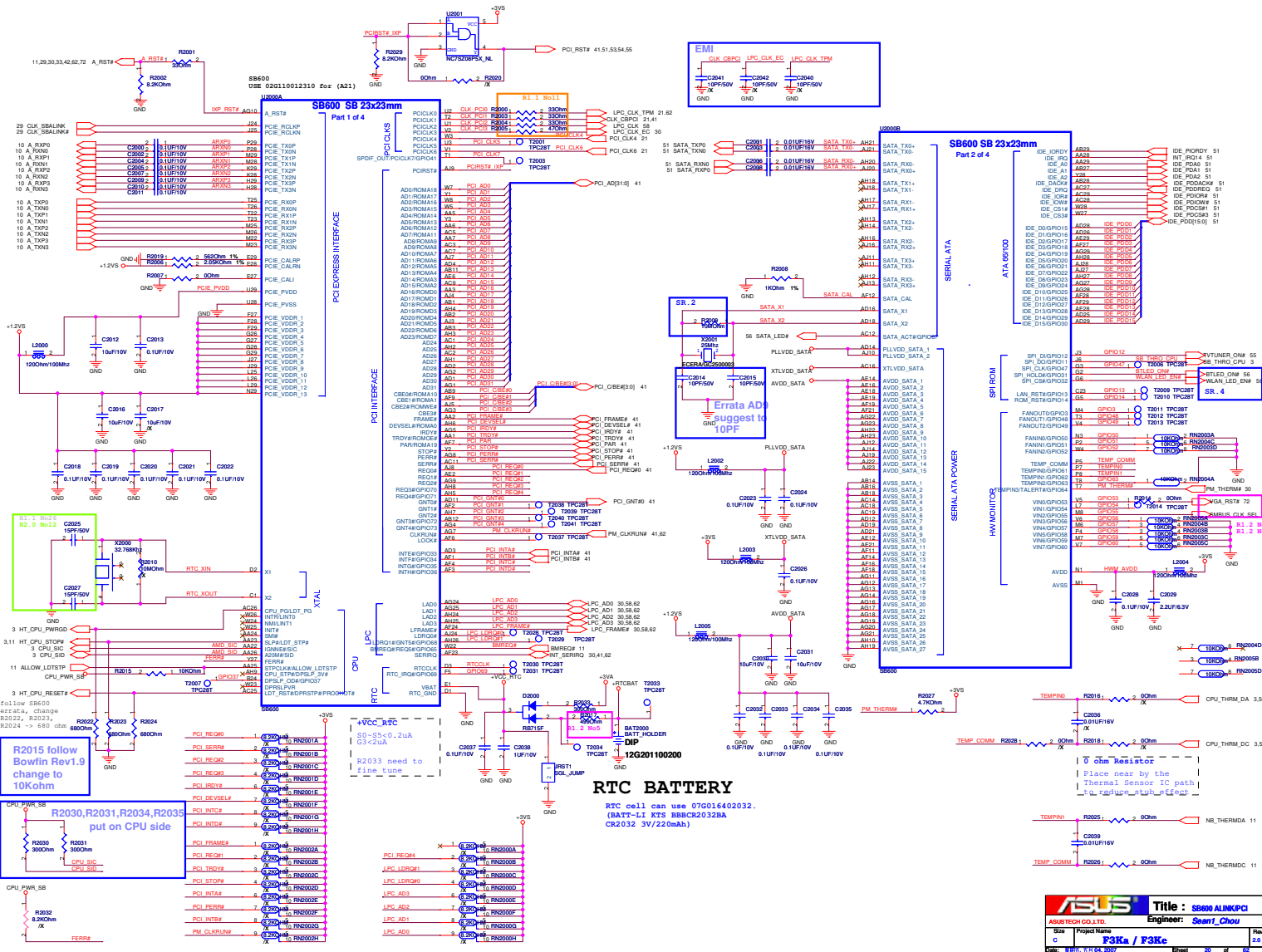


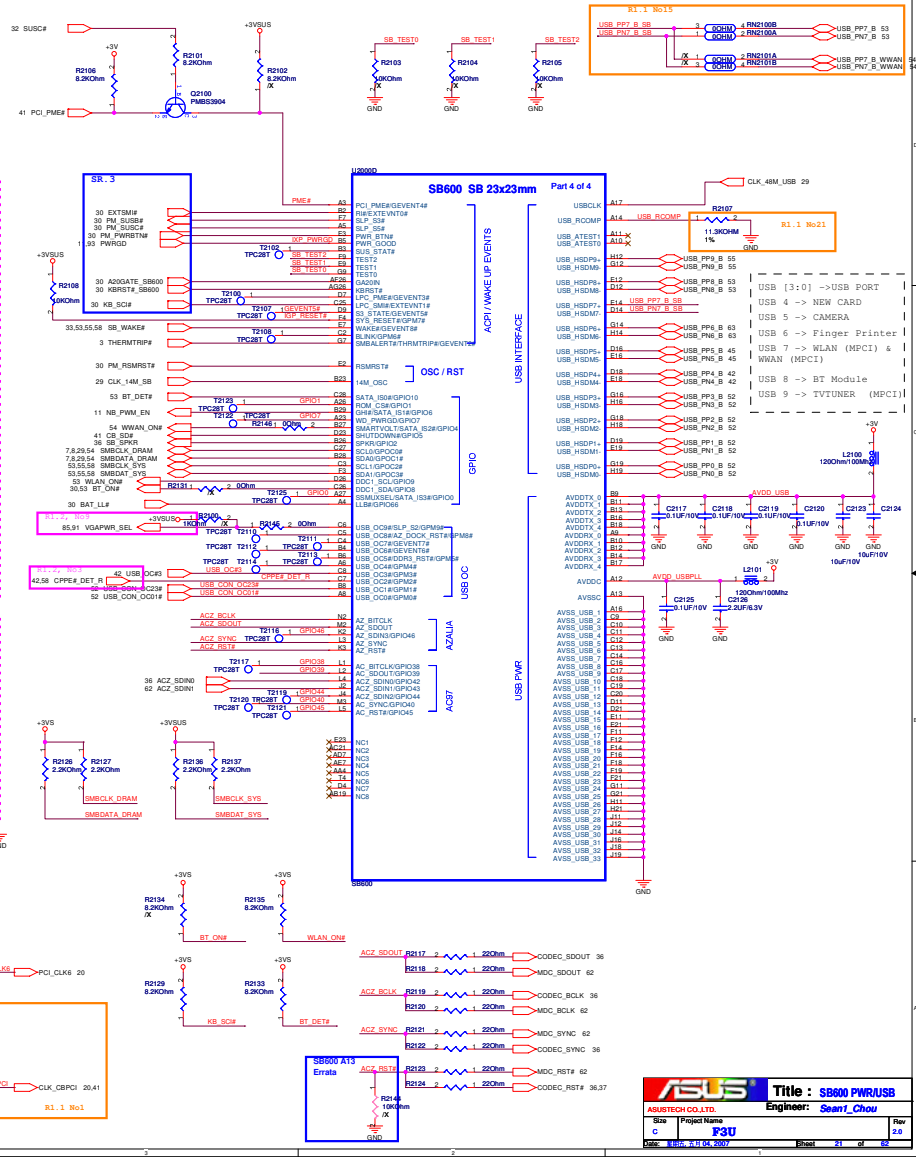
The schematic diagram illustrates a test circuit for a capacitor. It features two electrolytic capacitors, C90 and C91, connected in series. C90 is a 220µF/25V capacitor, and C91 is a 10µF/16V capacitor. The positive terminal of C90 is connected to a +5.0V supply, and the negative terminal is connected to the positive terminal of C91. The negative terminal of C91 is connected to GND. The circuit is divided into two main sections, each with a +5.0V supply and a GND connection. The left section contains components C902 through C909, and the right section contains components C901 through C908. Each component is labeled with its value and tolerance, such as 0.1µF/25V or 0.22µF/16V.



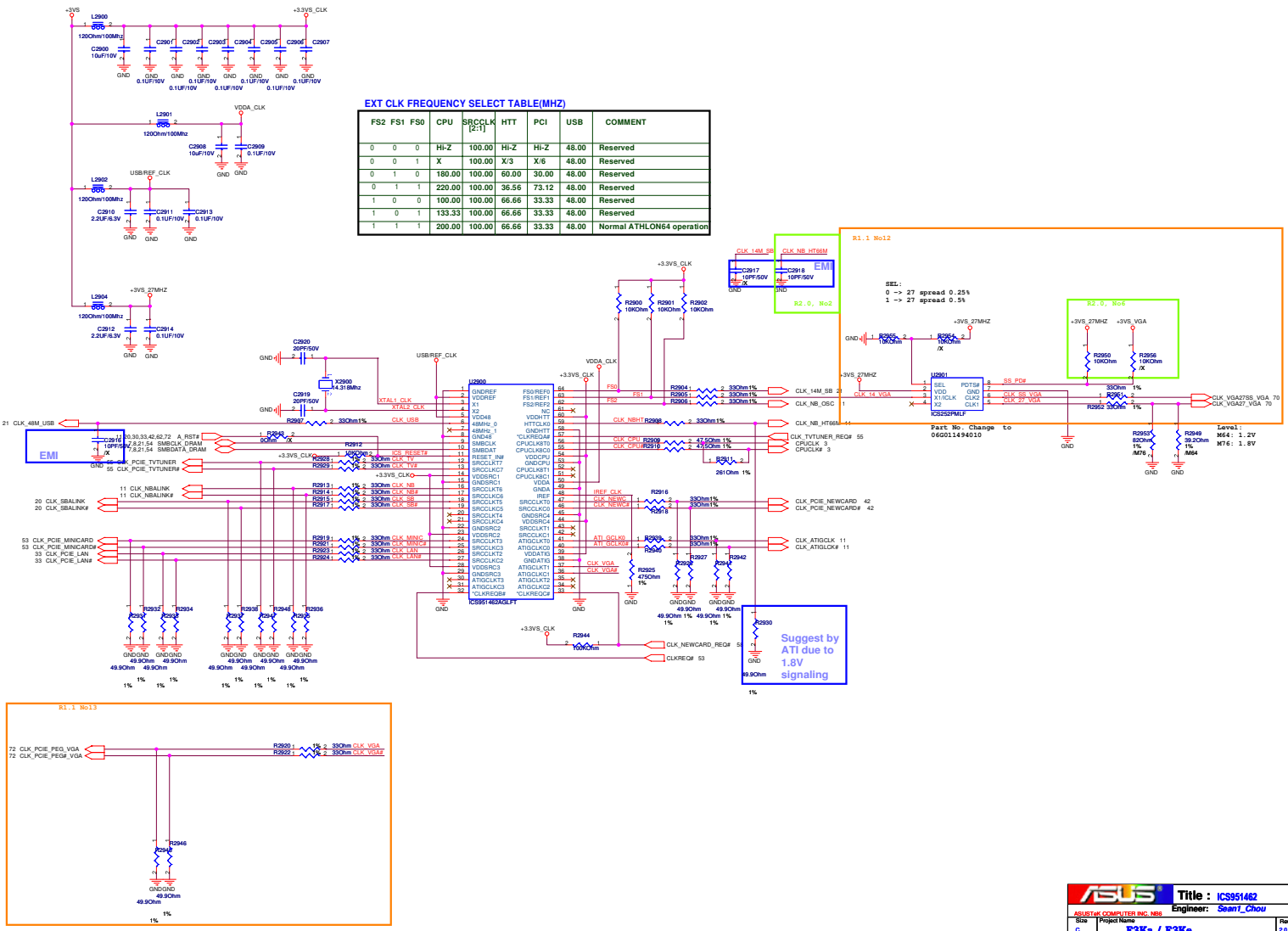




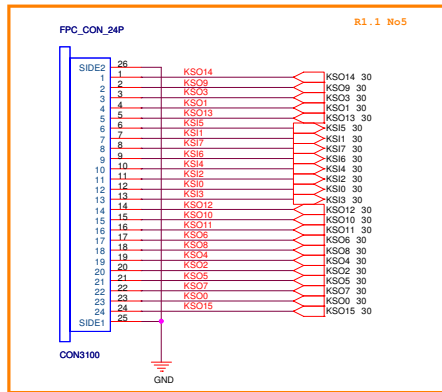




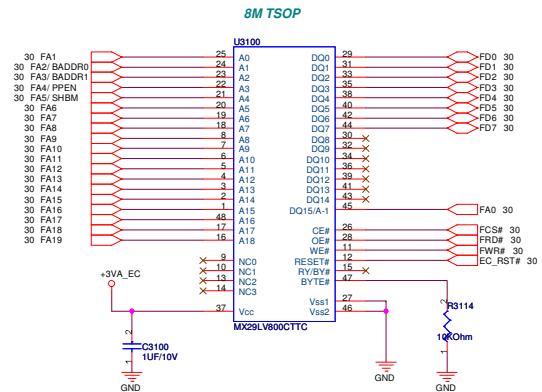
	GPIO39	PCI_CLK4	PCI_CLK6	LPC_CLK_TPM	CLK_CBPCL
PULL HIGH	USE DEBUG STRAPS	USE INT. PLL48	CPU IF=K8 DEFAULT	ROM TYPE: H, H = PCI ROM L, L = SPI ROM L, H = LPC ROM L, L = FWH ROM	DEFAULT
PULL LOW	IGNORE DEBUG STRAPS DEFAULT	USE EXT. 48MHZ DEFAULT	CPU IF=P4		



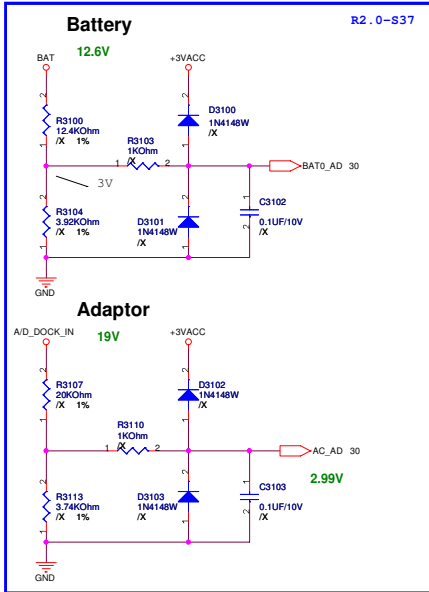
KBC connector



12G182102402

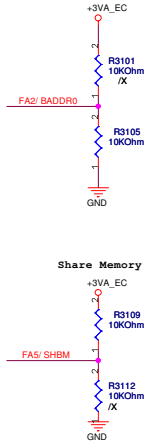


EC ADC

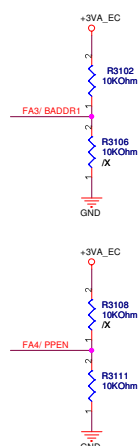


EC Hardware Strap

strap value sampled after
VSTBY power up reset



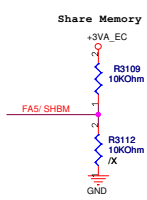
PNPCFG base address set by
SWCBAHR/SWCBALR



```

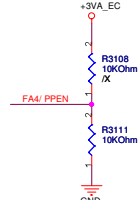
BADDR[1:0]
No pull up:
    The register pair to access PNPCFG is
    002Eh and 002Fh.
Ext 10K up on BADDR0:
    The register pair to access PNPCFG is
    004Eh and 004Fh.
Ext 10K up on BADDR1:
    The register pair to access PNPCFG is
    determined by EC domain registers
    SWCBALR and SWCBAHR.

```



Share Memory

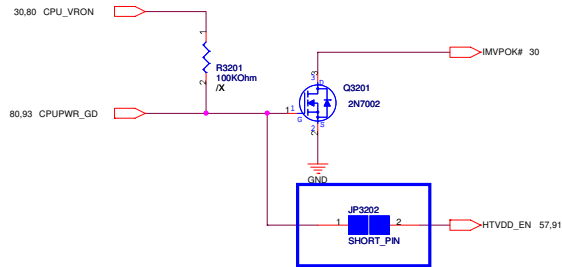
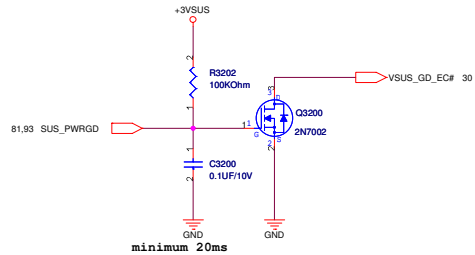
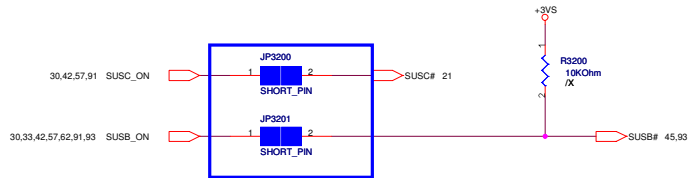
```
SHBM
No pull up:
    disable shared memory with host BIOS
Ext 10K up:
    enable shared memory with host BIOS
```



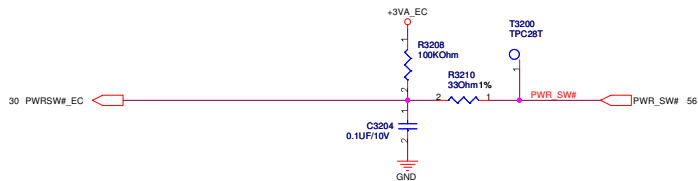
```

PPEN
No pull up:
    Normal
Ext 10K up:
    KBS interface pins are switched
    to parallel port interface for
    in-system programming.

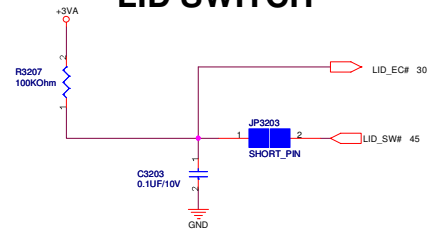
```



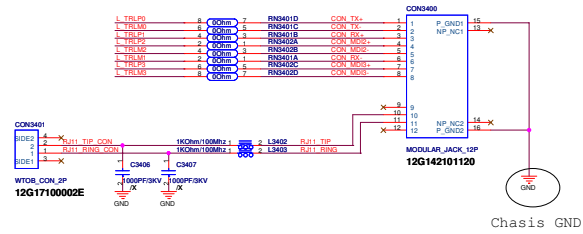
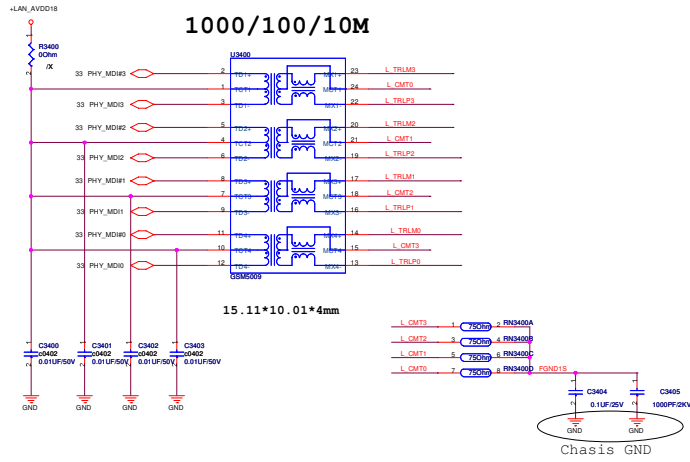
POWER SWITCH



LID SWITCH



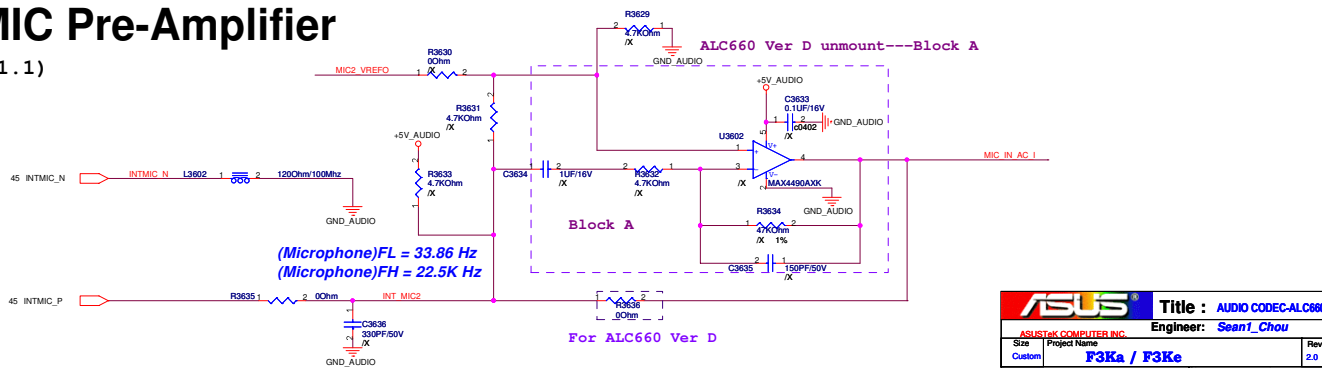
LAN PORT

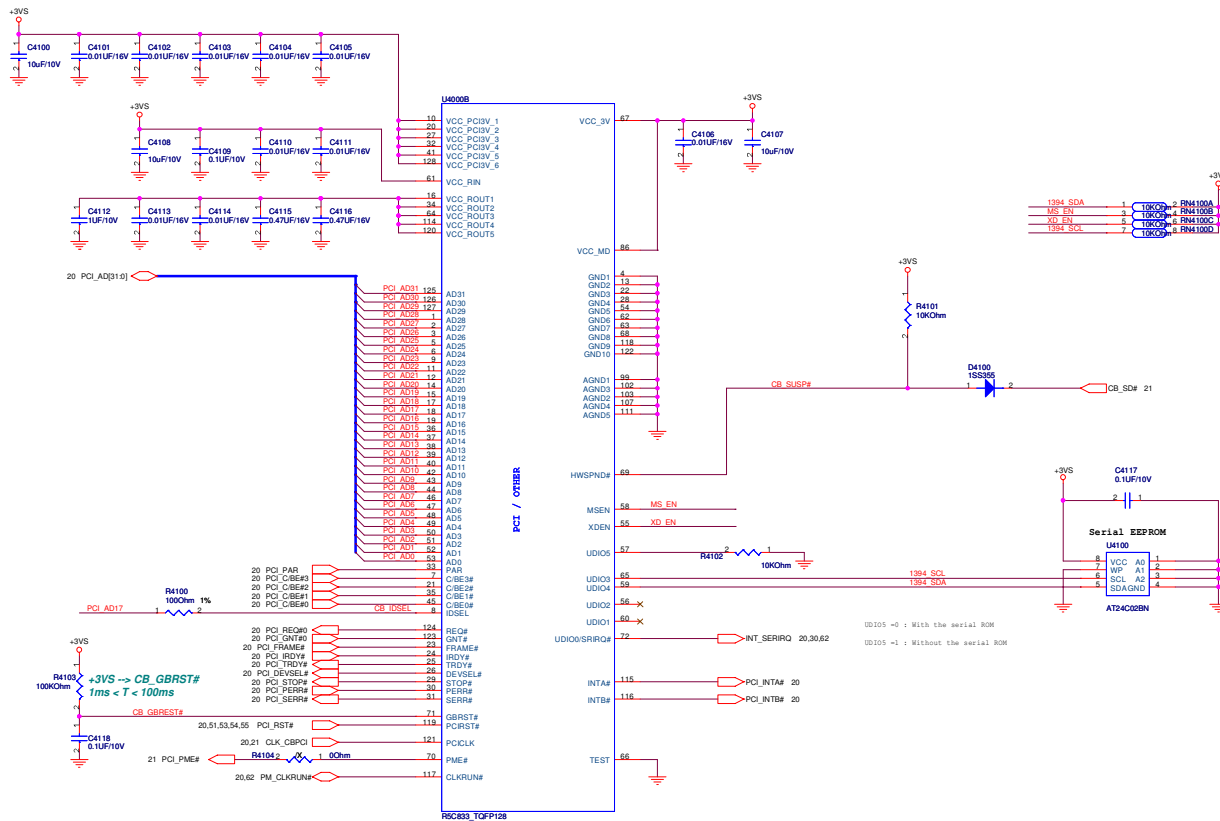


ALC660 Ver D:R3619
change to 20K ohm
1%

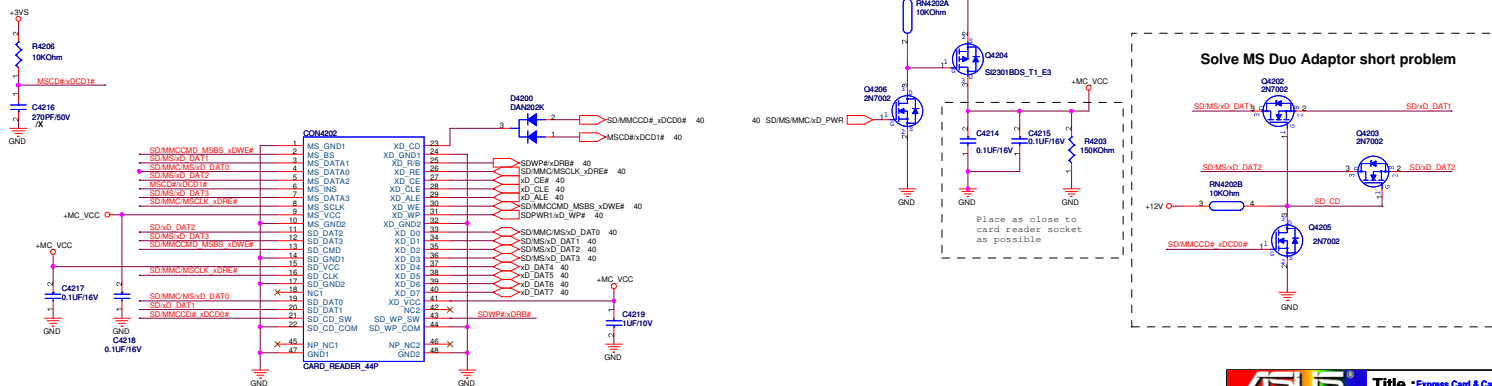
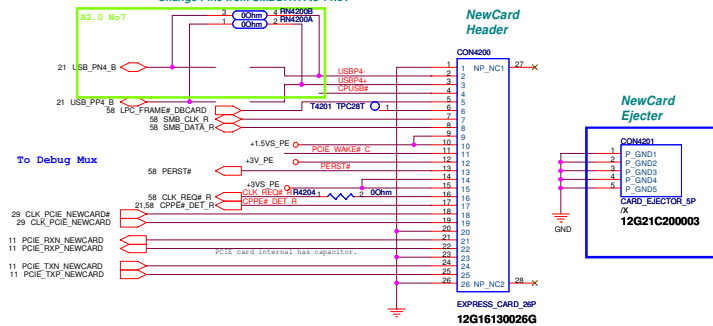


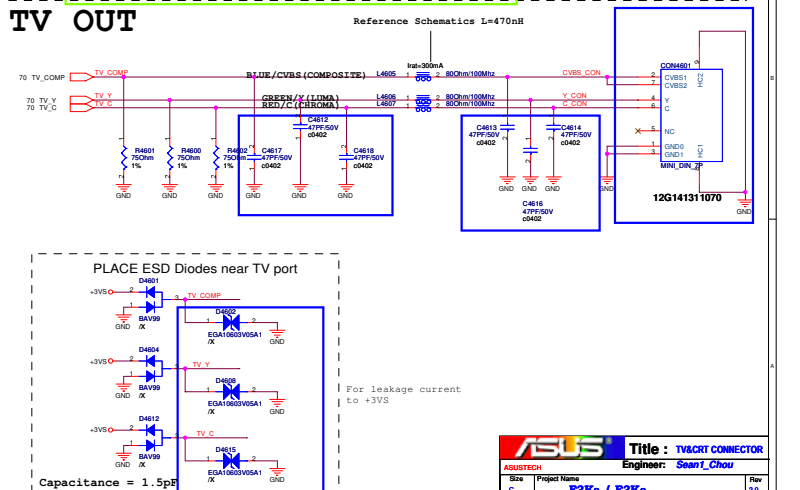
(Follow F2J R1.1)



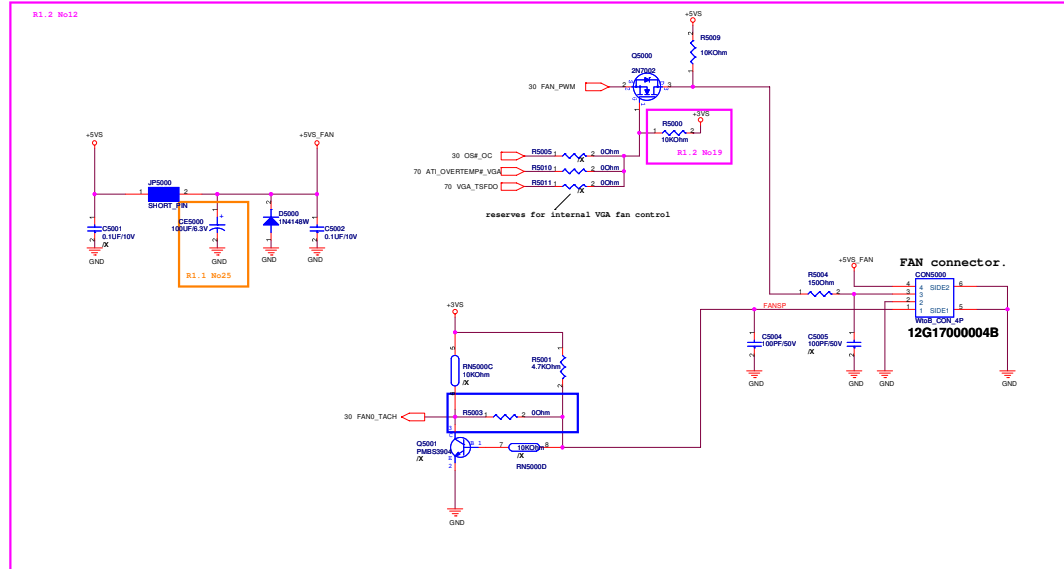


!! ExpressCard Standard 1.0:
Change Pin7 from RESERVED to SMBCLK
Change Pin8 from SMBCLK to SMBDATA
Change Pin9 from SMBDATA to +1.5V





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

[illegible]

Route CPU_THRM_DA and CPU_THRM_DC on the same layer

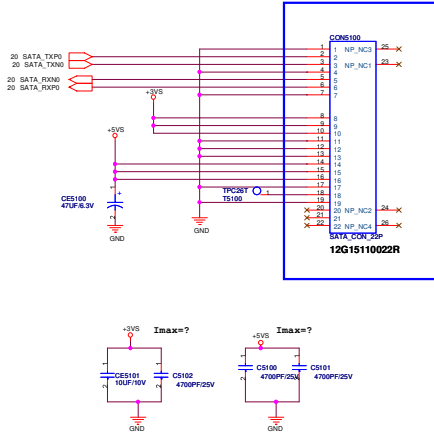
```
-----OTHER SIGNALS
15 mils
-----GND
10 mils
-----H_THERMDA(10 mils)
10 mils
-----H_THERMDC(10 mils)
10 mils
-----GND
15 mils
```

-----OTHER SIGNALS

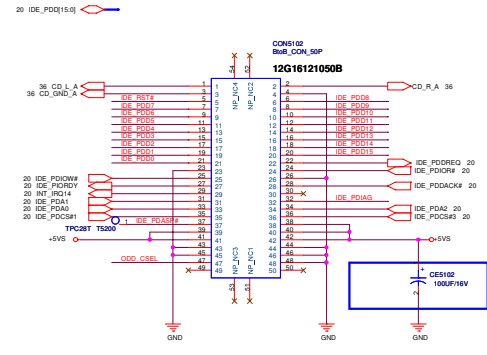
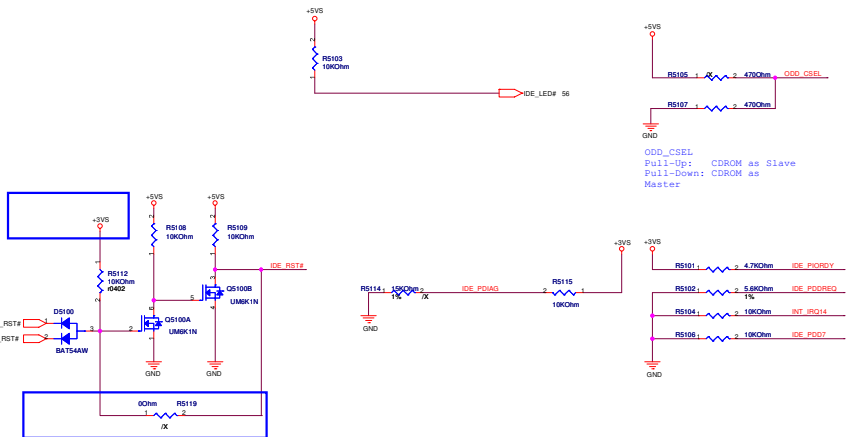
Avoid FSB Power

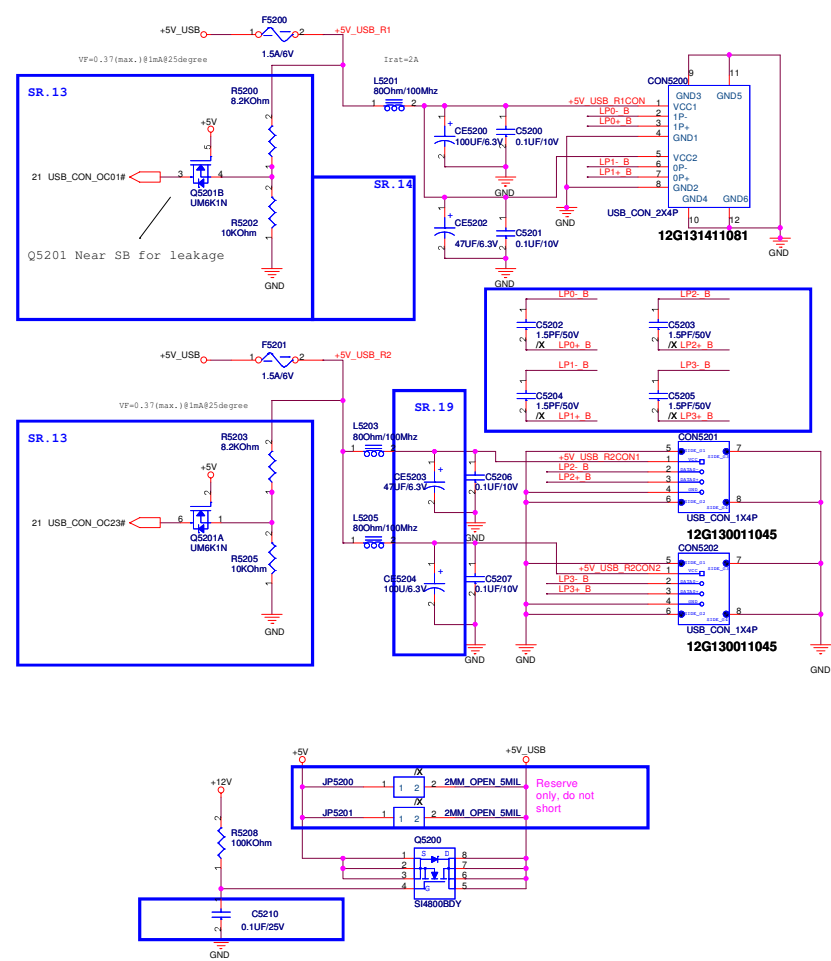
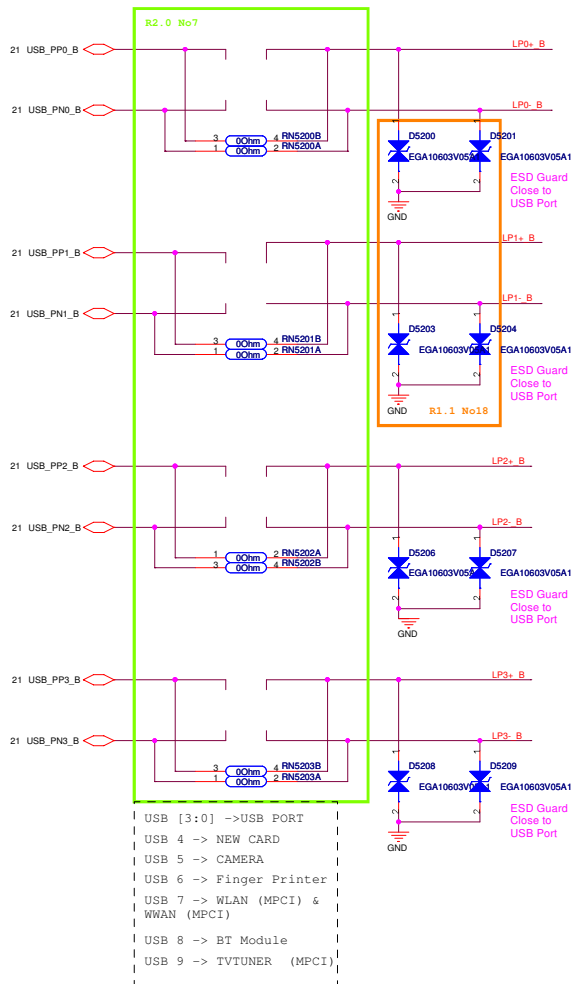
Avoid FSB,Power

SATA_HDD(Default)



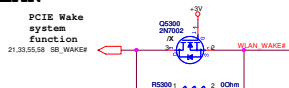
CD-ROM





WLAN

PCIE Wake system function
21.33.53.58 WLAN_WAKE#



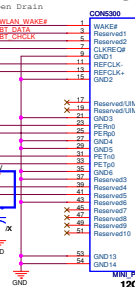
29 CLK_PCIE_MINICARD
29 CLK_PCIE_MINICARD
10 PCIE_RXN_MINICARD
10 PCIE_RXP_MINICARD
10 PCIE_TXN_MINICARD
10 PCIE_TXP_MINICARD

For New Minicard
SPIC increase power to 2.75A
CE5310
100uS/3V
High=2.9mm

MINI PCIEX CONNECTOR

H=5.2mm

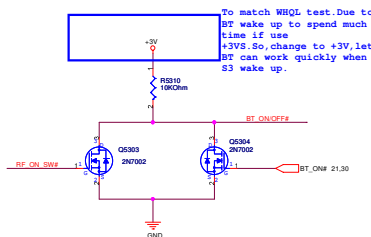
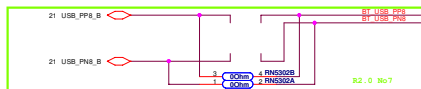
+3.003V~+3.597V
Max= 750 mA
+2V +1.5V
+1.425V~+1.575V
Max= 375 mA



MINI PCIE LATCH 30P
12G03000052A



BLUETOOTH CONNECTOR



To match WHQL test. Due to BT wake up to spend much time if use +3V. So, change to +3V, let BT can work quickly when S3 wake up.

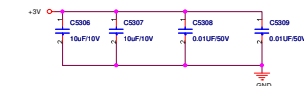
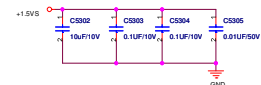
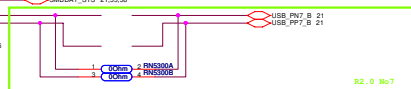
Signal direction-
CLK: BT -> WLAN;
DATA: WLAN -> BT

Instead of Mini-PCIE latch connector. For cost down.

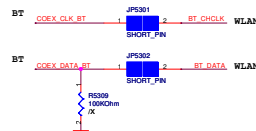


nut change
132N7510M270-1
S:1.32N7510M270

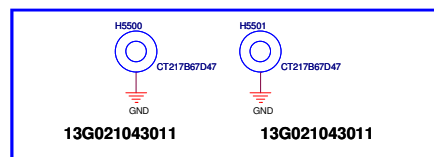
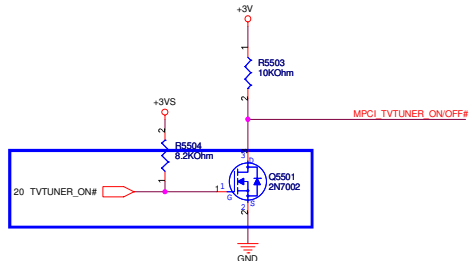
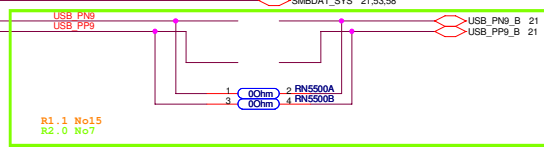
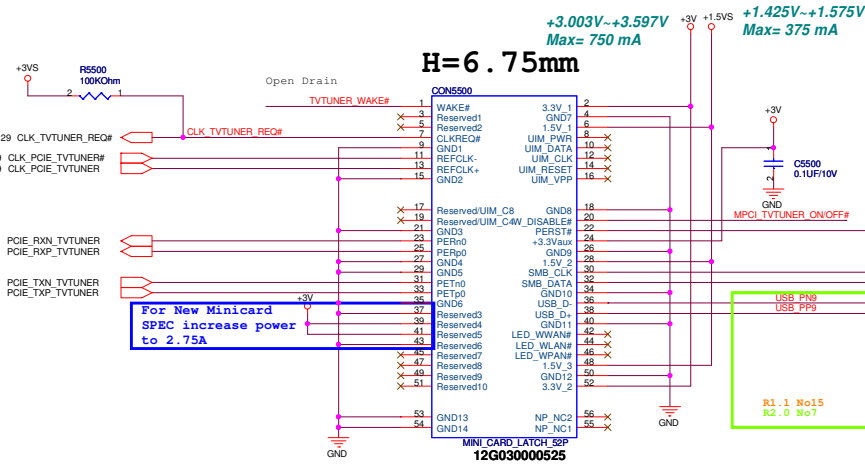
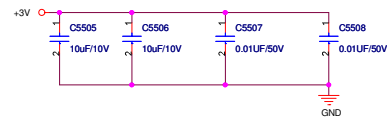
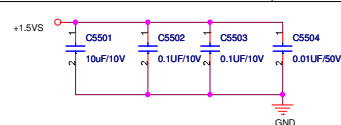
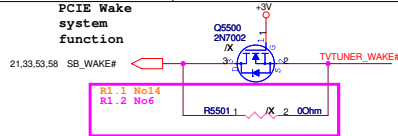
+3.003V~+3.597V
Max= 250 mA



W70B_004_10P
12G171010104

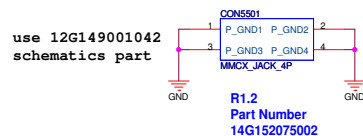


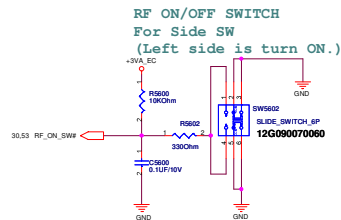
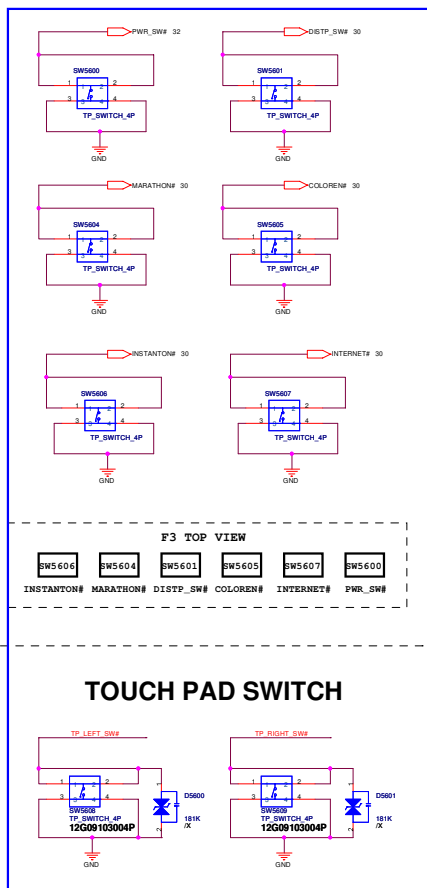
R1.1 No22
change lower CON5500 and nut

PCIE Wake
system
function

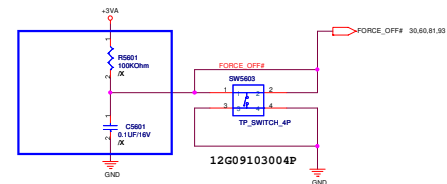
note: how to place

TV RF in Conn.

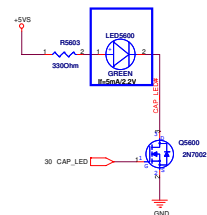




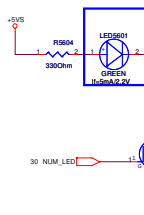
SHUT_DOWN#



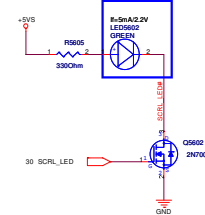
for Cap. Lock



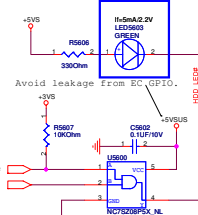
for Num Lock



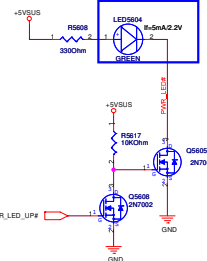
for Scroll Lock



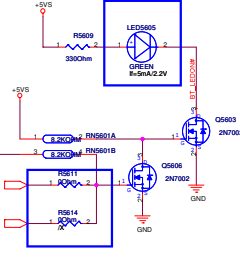
For SATA/IDE LED



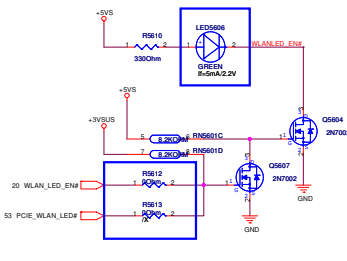
For POWER LED



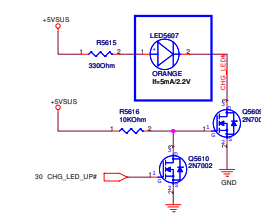
For BT LED



For WireLess LED

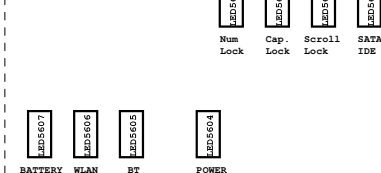


For BATTERY LED

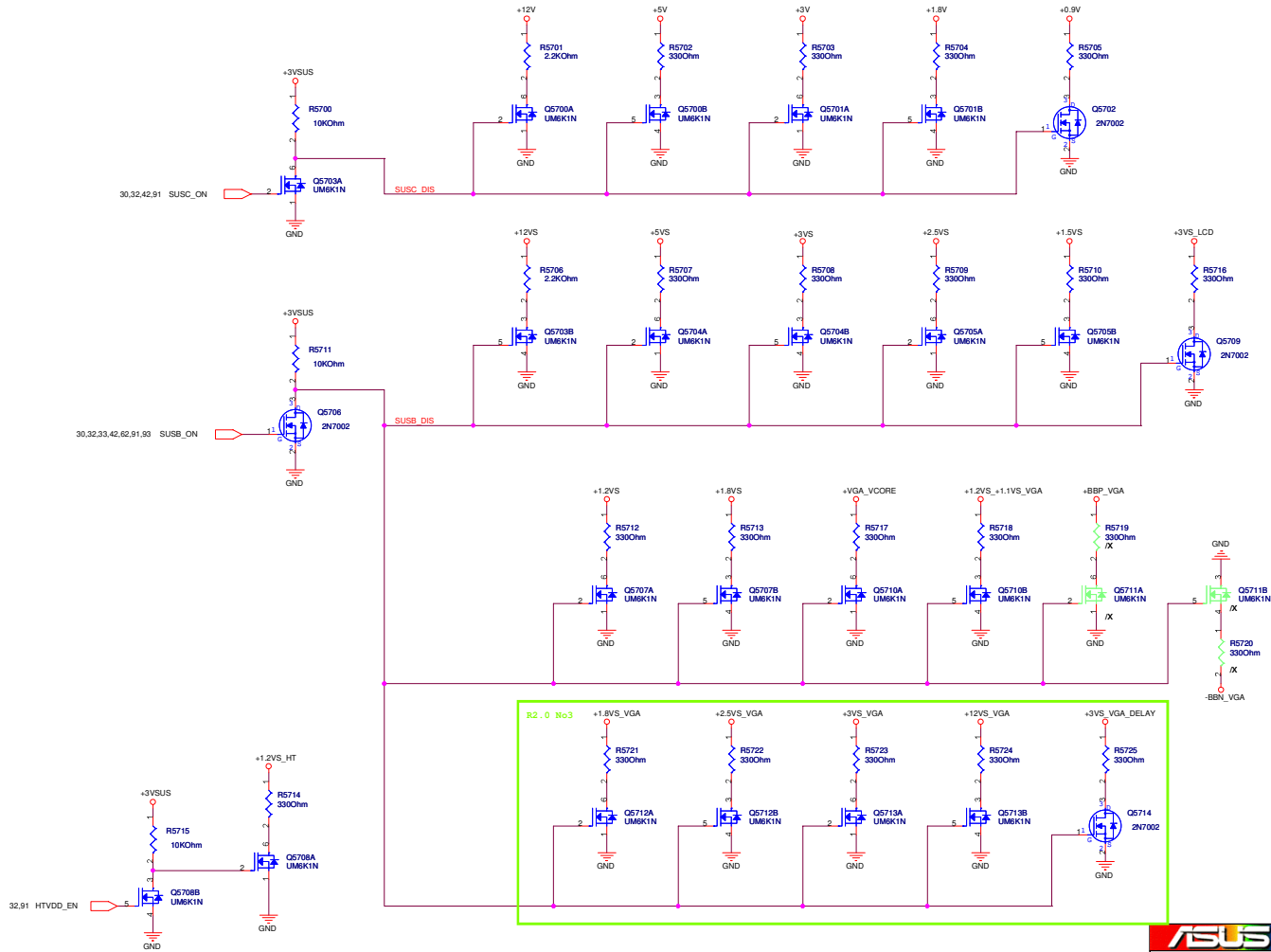


Green: 07G015700341
Orange: 07G015700064

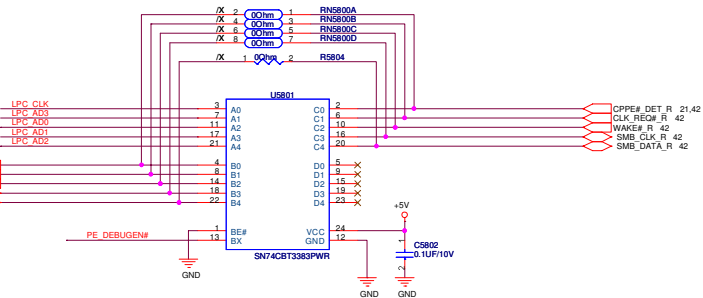
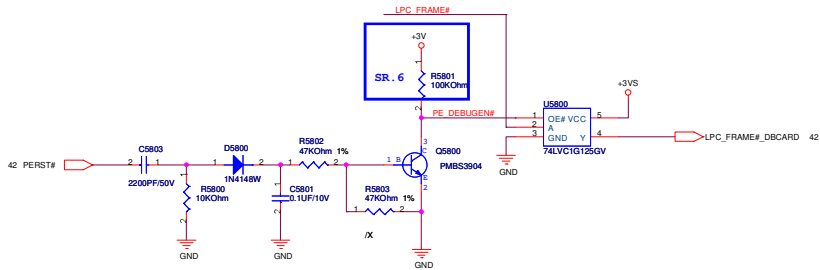
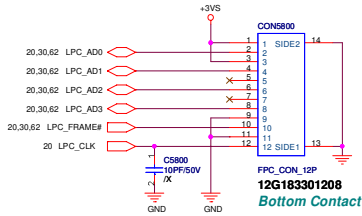
F3U TOP VIEW



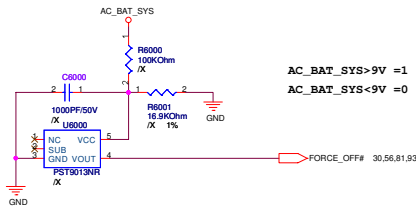
DISCHARGE CIRCUIT



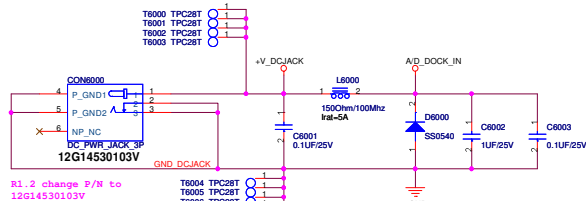
LPC DEBUG CONNECTOR



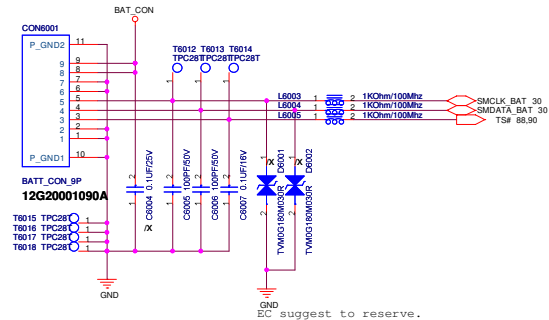
Without Battery & Pull out Adapter



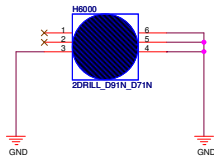
DC Power Jack



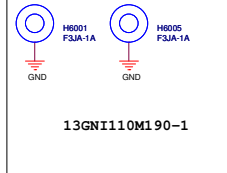
Battery Connector



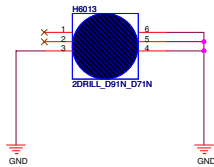
FOR LEFT UNDER



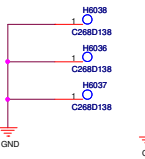
FOR FAN



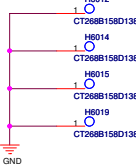
FOR RIGHT UP



FOR VGA



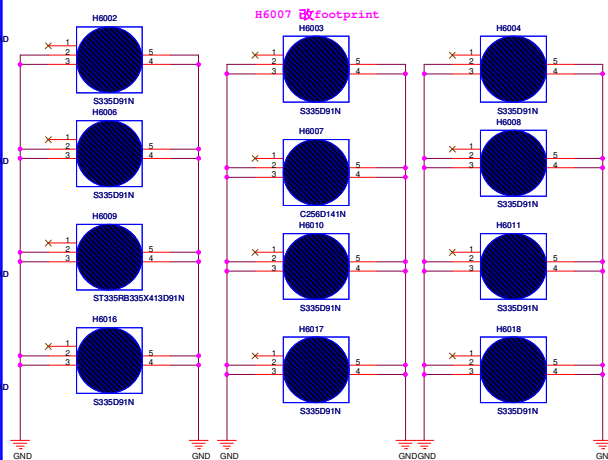
FOR CPU



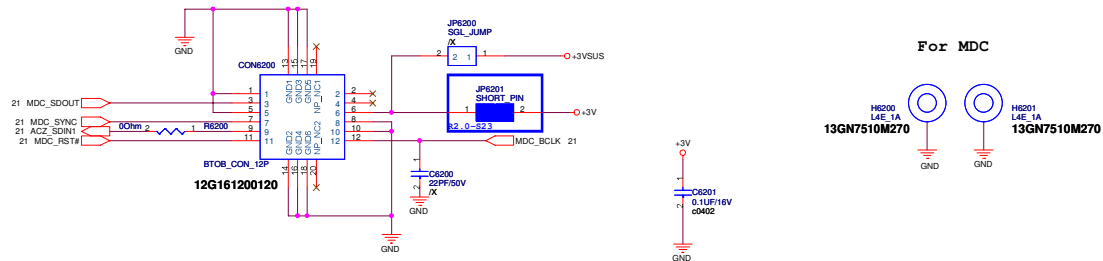
FOR FAN Fix Hole position



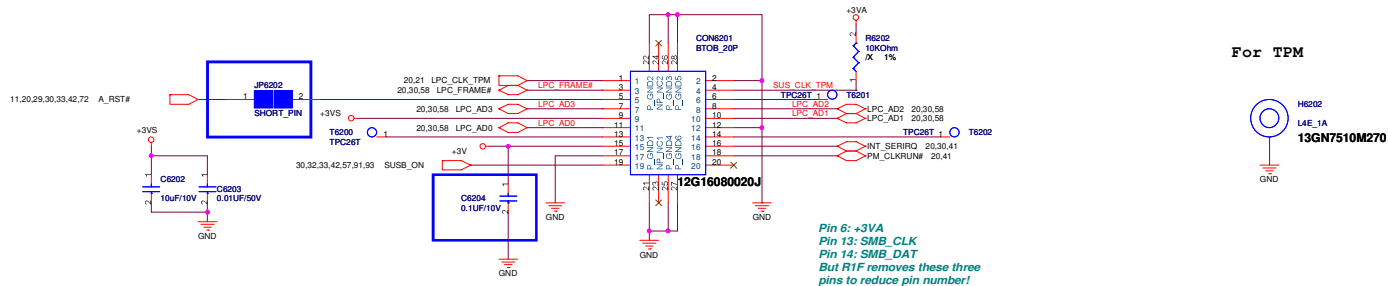
FOR SCREW HOLE

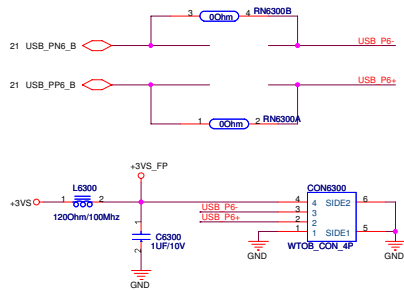


MDC CONN.



TPM CONN.



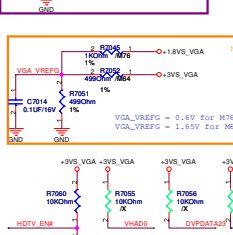
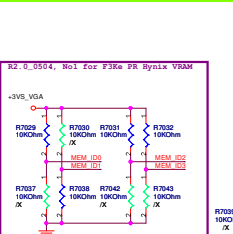


R1:1 No3
R1:0, No1

For F3K4: X8
DDR2 32M16-2.5 1.8V FBGA-84
030215133P14 HWREV:HWREV0121621CFP-25
MEM_ID[3:0] = [0000]
030215133P10 INF:INF0000/HWB1:HWB1251618P-25
MEM_ID[3:0] = [0001]

For F3K6:
DDR2 16M16-2.5 1.8V FBGA-84
030215133P14 HWREV:HWREV0121621BFP-25
MEM_ID[3:0] = [0010]
030215133P10 INF:INF0000/HWB1:HWB1251618P-25
MEM_ID[3:0] = [0011]

030215133P14 HWREV:HWREV0121621BFP-25
MEM_ID[3:0] = [0010]
030215133P10 INF:INF0000/HWB1:HWB1251618P-25
MEM_ID[3:0] = [0011]

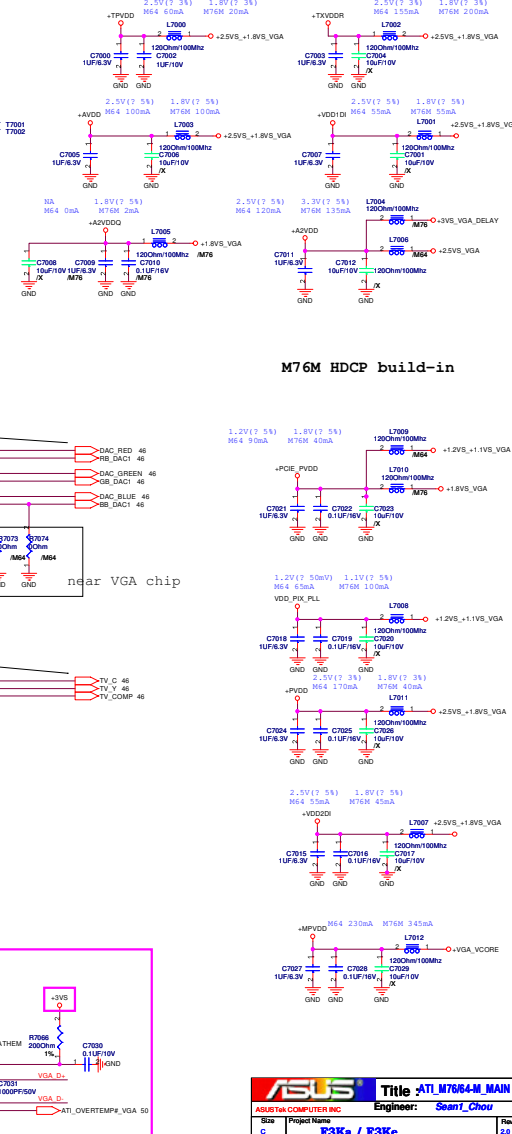
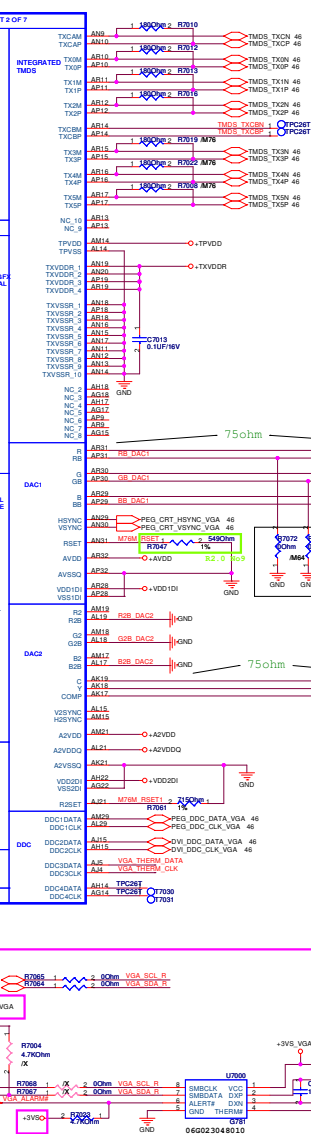
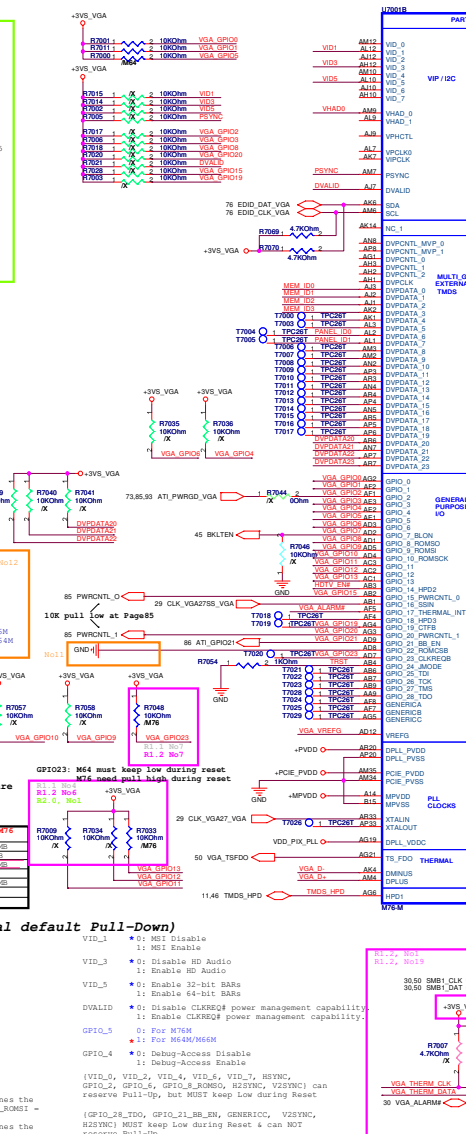


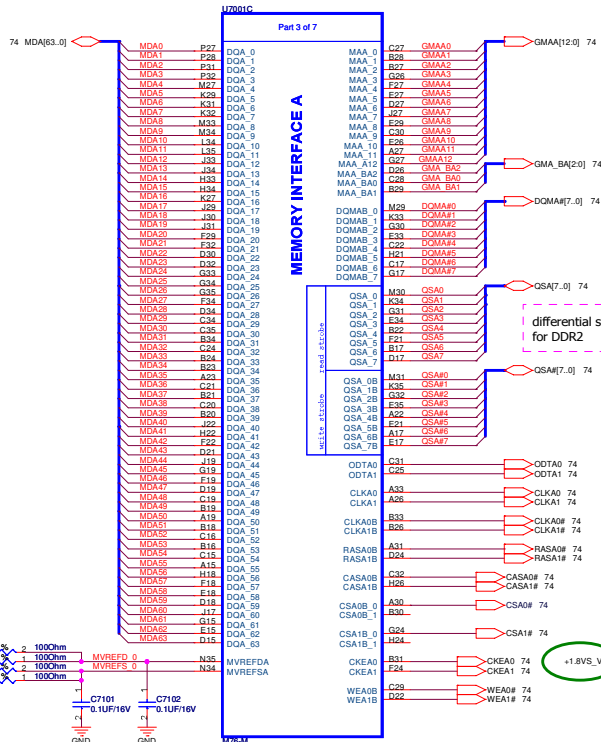
Primary Memory Aperture size requested at PCI Configuration

M64	GPIO13_0	GPIO12_0	GPIO11_0	M76
0	0	0	0	128MB
1	0	0	0	256MB
1	0	0	1	512MB
1	0	1	0	1GB
1	1	0	0	2GB
1	1	1	0	4GB

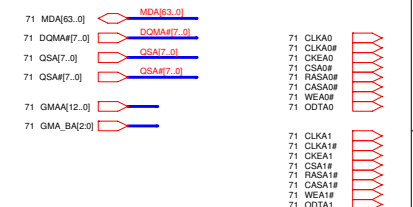
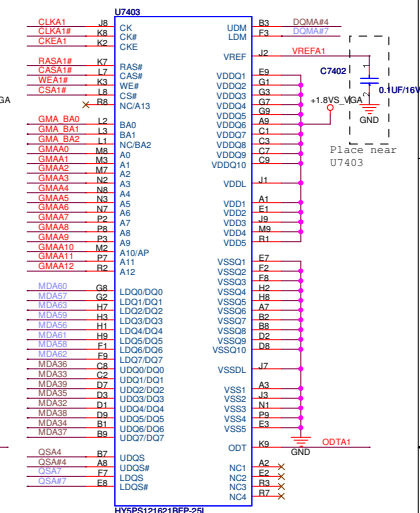
M76 Strap Pin (All internal default Pull-Down)

- VPNC**
- 0: If driver would not recognize a VIP device on the VIP Host interface
 - 1: driver would recognize a VIP device on the VIP Host interface
- VHAD0**
- 0: VIP Device Disable
 - 1: VIP Device Enable
- FPVNC**
- 0: VGA Enable
 - 1: VGA Disable
- GPIO_0**
- 0: 50k Tx Output Swing
 - 1: Full Tx Output Swing
- GPIO_1**
- 0: Tx De-emphasis Disable
 - 1: Tx De-emphasis Enable
- GPIO_22**
- 0: Disable external BIOS ROM device
 - 1: Enable external BIOS ROM device
- GPIO_12**
- 1: If GPIO_22 = 0, then Config[12:0] defines the primary memory aperture size. (GPIO13_0, GPIO11_0, don't care).
 - 1: If GPIO_22 = 1, then Config[12:0] defines the ROM type.
- GPIO_1**
- 0: Tx De-emphasis Disable
 - 1: Tx De-emphasis Enable
- GPIO_22**
- 0: Disable external BIOS ROM device
 - 1: Enable external BIOS ROM device
- GPIO_12**
- 1: If GPIO_22 = 0, then Config[12:0] defines the primary memory aperture size. (GPIO13_0, GPIO11_0, don't care).
 - 1: If GPIO_22 = 1, then Config[12:0] defines the ROM type.





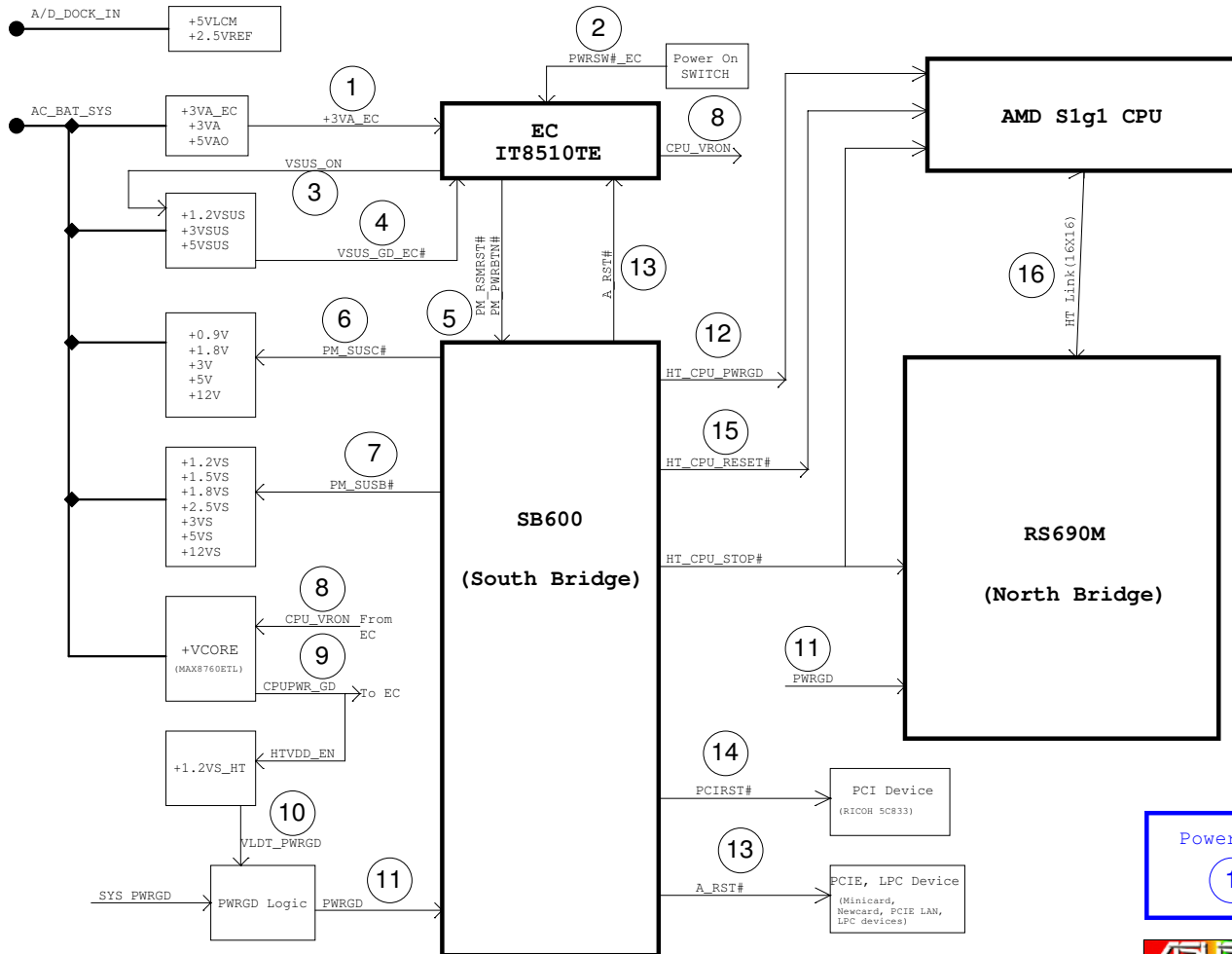
A1



Reference: F3U

F3U Power On sequence block

10 47~66ms 11



Power On Sequence

1 → 16

REVISION LIST

F3U revision list

R1.0 2006/09/13

R1.1 2006/10/02

NO1 Page3 : R321 change to pull up to +3VSUS

NO2 Page20 : Mount R2009 for SATA 25MHz crystal oscillation with 10Mohm

NO3 Page21: Exchange EXTSMI# and KB_SCI# GEVENT at SB600 for Power leakage problem

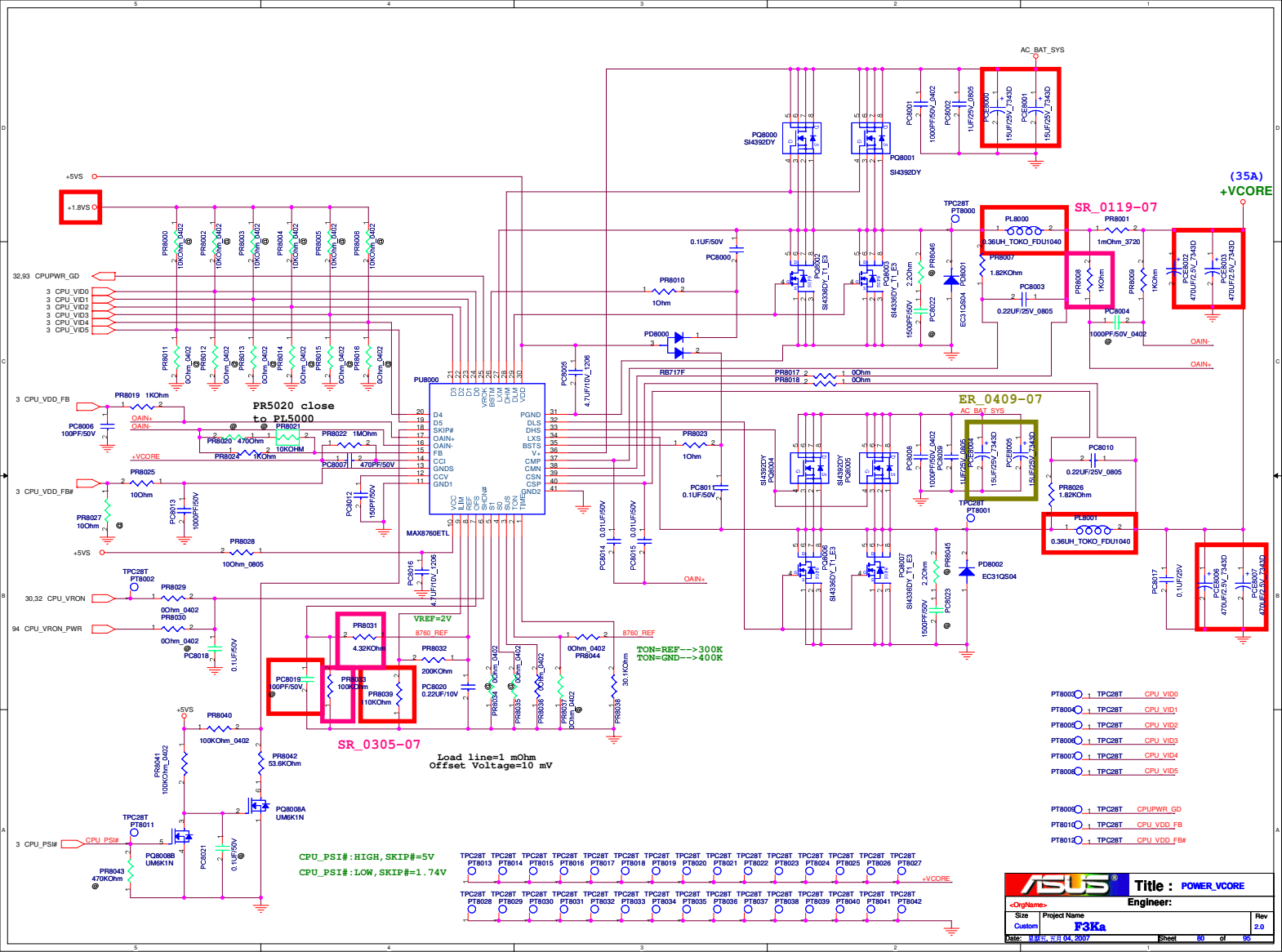
Page30: Add 10Kohm resistor pull up on EXTSMI# to follow EC pin assignment v1.13

NO4 Page20,21: Change BTLED_ON# and WLAN_LED_EN# to GPIO31, GPIO32

NO5 Page30: Cut off Force_off# path to EC_RST# logic

NO6 Page42: Add R4205 serial resistor at PERST#, SHDN# control pin change to SUSC_ON, AUXIN power change to +3V

Page58: R5801 pull up change to +3V power



(35A)
+VCORE

ASUS
Title : POWER_VCORE

Engineering

Rev
2.0

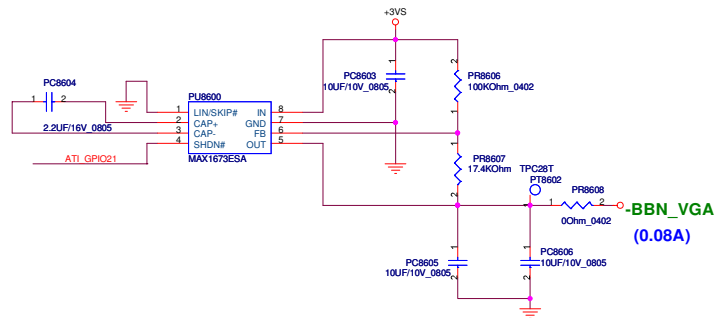
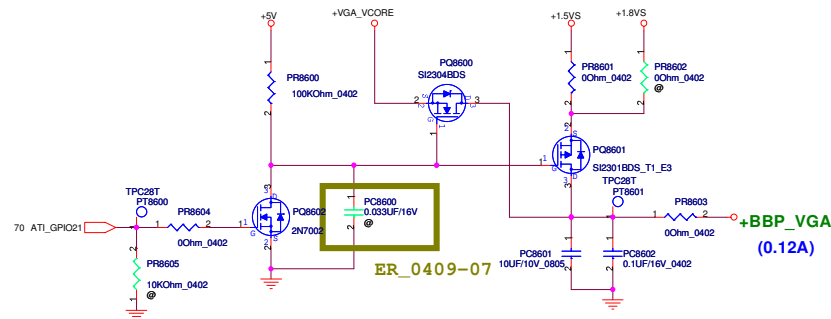
Sheet 80 of 95



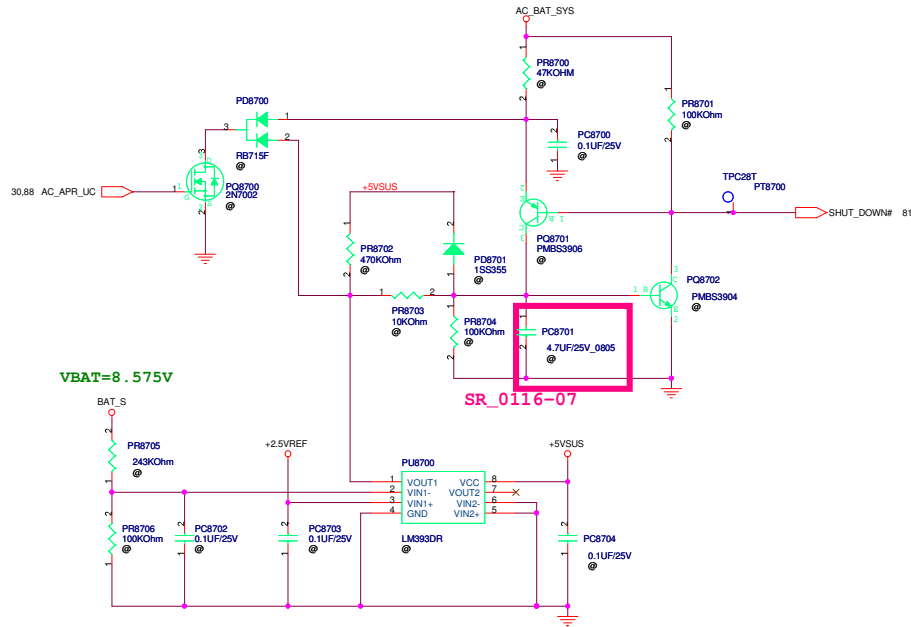


ATI_GPIO21	+BBP
0	0.95V
1	1.5V

ATI_GPIO21	-BBN
0	GND
1	-0.5V

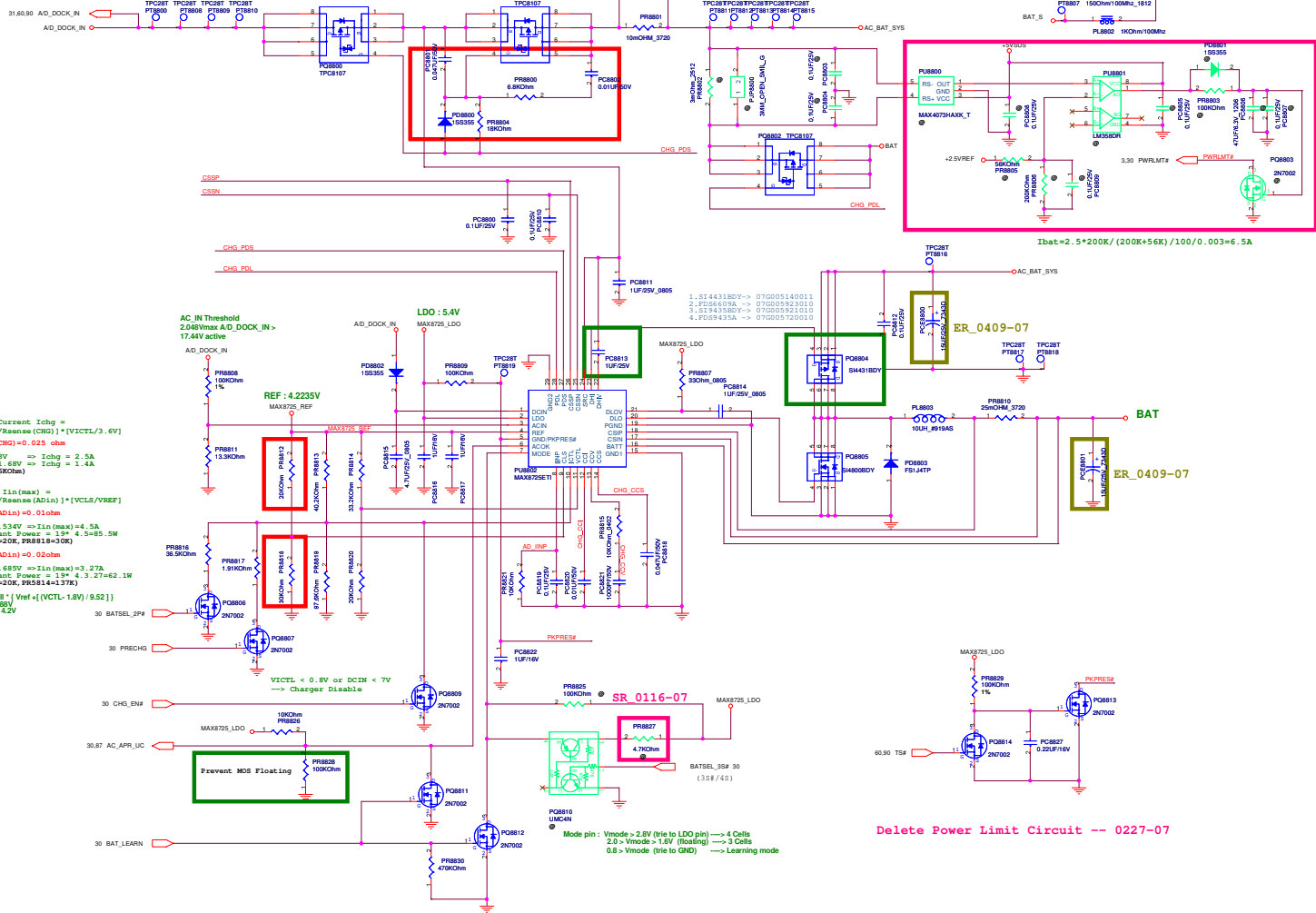


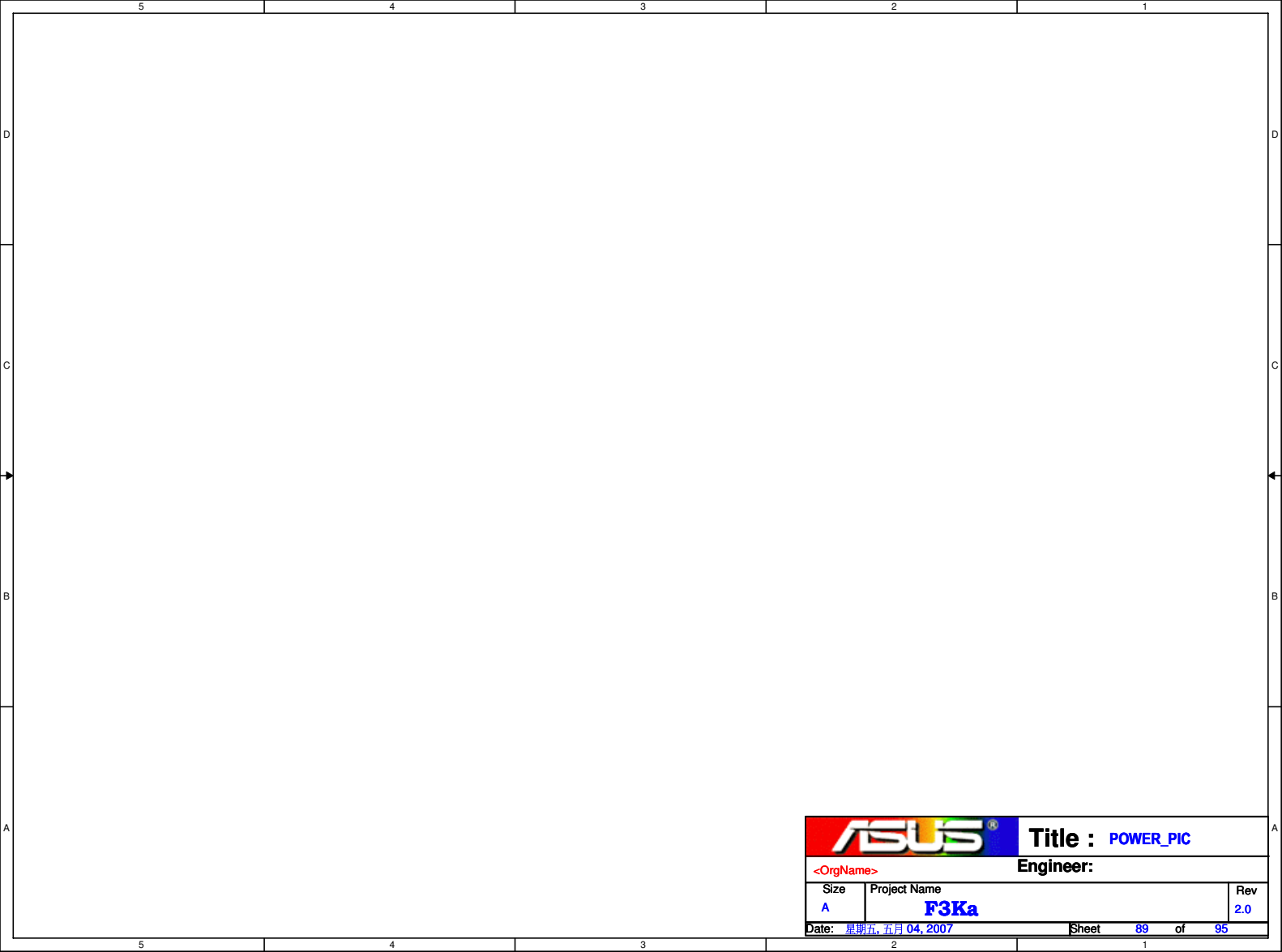
BATTERY UVP CIRCUIT



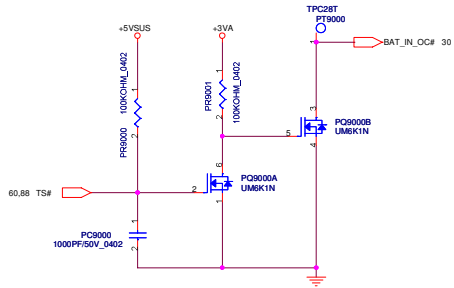
POWER PATH & BAT_LEARN

90W-->4.73A



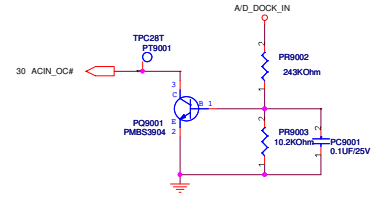


		Title : POWER_PIC	
<OrgName>		Engineer:	
Size	Project Name		Rev
A	F3Ka		2.0
Date: 星期五, 五月 04, 2007		Sheet 89 of 95	

[illegible]

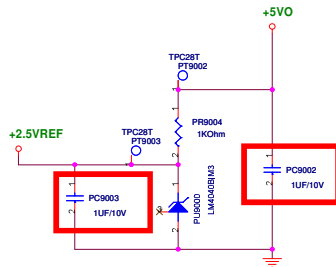
The image displays three circuit diagrams for power detection on a PCB:

- BATTERY IN DETECT:** This circuit monitors the +5VSUS and +3VA rails. It features a 60.88 TS# input connected to a network of resistors (PR9000, PR9001, PR9002) and capacitors (PC9000, PC9001). The output is BAT_IN_OC# 30, which is connected to a TPC28T PT9000 component.
- ADAPTER IN DETECT:** This circuit monitors the A/D_DOCK_IN signal. It uses a network of resistors (PR9002, PR9003) and a capacitor (PC9001) connected to a TPC28T PT9001 component. The output is ACIN_OC# 30.
- +2.5VREF:** This circuit provides a reference voltage. It includes a +5V0 input connected to a network of resistors (PR9004, PR9005) and capacitors (PC9002, PC9003). The output is +2.5VREF, which is connected to a TPC28T PT9002 component.

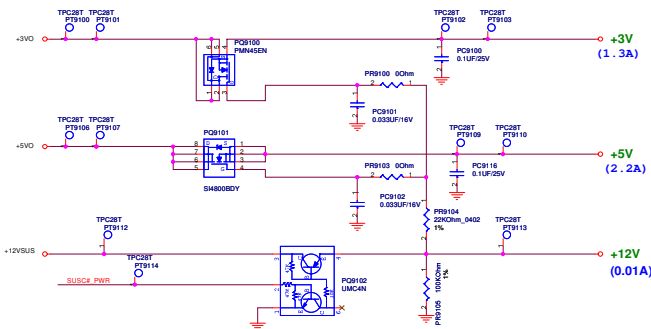


The image displays a PCB layout for power detection circuitry, divided into three main sections:

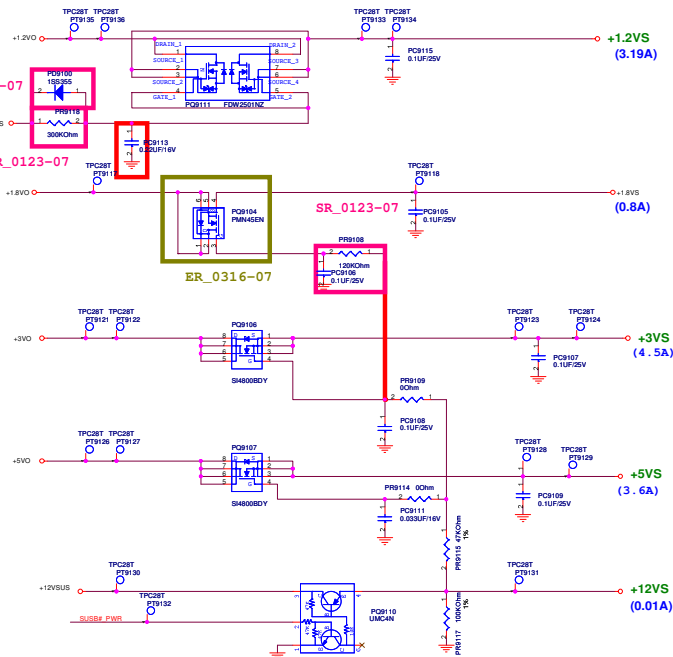
- BATTERY IN DETECT:** This section shows a circuit for detecting battery presence. It includes a +5VSUS input, a +3VA input, and a BAT_IN_OC# 30 output. The circuit features a network of resistors (PR9000, PR9001, PR9002, PR9003, PR9004), capacitors (PC9000, PC9001, PC9002, PC9003), and transistors (TPC28T PT9000, TPC28T PT9001, TPC28T PT9002, TPC28T PT9003, TPC28T PT9004, TPC28T PT9005, TPC28T PT9006, TPC28T PT9007, TPC28T PT9008, TPC28T PT9009, TPC28T PT9010, TPC28T PT9011, TPC28T PT9012, TPC28T PT9013, TPC28T PT9014, TPC28T PT9015, TPC28T PT9016, TPC28T PT9017, TPC28T PT9018, TPC28T PT9019, TPC28T PT9020, TPC28T PT9021, TPC28T PT9022, TPC28T PT9023, TPC28T PT9024, TPC28T PT9025, TPC28T PT9026, TPC28T PT9027, TPC28T PT9028, TPC28T PT9029, TPC28T PT9030, TPC28T PT9031, TPC28T PT9032, TPC28T PT9033, TPC28T PT9034, TPC28T PT9035, TPC28T PT9036, TPC28T PT9037, TPC28T PT9038, TPC28T PT9039, TPC28T PT9040, TPC28T PT9041, TPC28T PT9042, TPC28T PT9043, TPC28T PT9044, TPC28T PT9045, TPC28T PT9046, TPC28T PT9047, TPC28T PT9048, TPC28T PT9049, TPC28T PT9050, TPC28T PT9051, TPC28T PT9052, TPC28T PT9053, TPC28T PT9054, TPC28T PT9055, TPC28T PT9056, TPC28T PT9057, TPC28T PT9058, TPC28T PT9059, TPC28T PT9060, TPC28T PT9061, TPC28T PT9062, TPC28T PT9063, TPC28T PT9064, TPC28T PT9065, TPC28T PT9066, TPC28T PT9067, TPC28T PT9068, TPC28T PT9069, TPC28T PT9070, TPC28T PT9071, TPC28T PT9072, TPC28T PT9073, TPC28T PT9074, TPC28T PT9075, TPC28T PT9076, TPC28T PT9077, TPC28T PT9078, TPC28T PT9079, TPC28T PT9080, TPC28T PT9081, TPC28T PT9082, TPC28T PT9083, TPC28T PT9084, TPC28T PT9085, TPC28T PT9086, TPC28T PT9087, TPC28T PT9088, TPC28T PT9089, TPC28T PT9090, TPC28T PT9091, TPC28T PT9092, TPC28T PT9093, TPC28T PT9094, TPC28T PT9095, TPC28T PT9096, TPC28T PT9097, TPC28T PT9098, TPC28T PT9099, TPC28T PT9100, TPC28T PT9101, TPC28T PT9102, TPC28T PT9103, TPC28T PT9104, TPC28T PT9105, TPC28T PT9106, TPC28T PT9107, TPC28T PT9108, TPC28T PT9109, TPC28T PT9110, TPC28T PT9111, TPC28T PT9112, TPC28T PT9113, TPC28T PT9114, TPC28T PT9115, TPC28T PT9116, TPC28T PT9117, TPC28T PT9118, TPC28T PT9119, TPC28T PT9120, TPC28T PT9121, TPC28T PT9122, TPC28T PT9123, TPC28T PT9124, TPC28T PT9125, TPC28T PT9126, TPC28T PT9127, TPC28T PT9128, TPC28T PT9129, TPC28T PT9130, TPC28T PT9131, TPC28T PT9132, TPC28T PT9133, TPC28T PT9134, TPC28T PT9135, TPC28T PT9136, TPC28T PT9137, TPC28T PT9138, TPC28T PT9139, TPC28T PT9140, TPC28T PT9141, TPC28T PT9142, TPC28T PT9143, TPC28T PT9144, TPC28T PT9145, TPC28T PT9146, TPC28T PT9147, TPC28T PT9148, TPC28T PT9149, TPC28T PT9150, TPC28T PT9151, TPC28T PT9152, TPC28T PT9153, TPC28T PT9154, TPC28T PT9155, TPC28T PT9156, TPC28T PT9157, TPC28T PT9158, TPC28T PT9159, TPC28T PT9160, TPC28T PT9161, TPC28T PT9162, TPC28T PT9163, TPC28T PT9164, TPC28T PT9165, TPC28T PT9166, TPC28T PT9167, TPC28T PT9168, TPC28T PT9169, TPC28T PT9170, TPC28T PT9171, TPC28T PT9172, TPC28T PT9173, TPC28T PT9174, TPC28T PT9175, TPC28T PT9176, TPC28T PT9177, TPC28T PT9178, TPC28T PT9179, TPC28T PT9180, TPC28T PT9181, TPC28T PT9182, TPC28T PT9183, TPC28T PT9184, TPC28T PT9185, TPC28T PT9186, TPC28T PT9187, TPC28T PT9188, TPC28T PT9189, TPC28T PT9190, TPC28T PT9191, TPC28T PT9192, TPC28T PT9193, TPC28T PT9194, TPC28T PT9195, TPC28T PT9196, TPC28T PT9197, TPC28T PT9198, TPC28T PT9199, TPC28T PT9200, TPC28T PT9201, TPC28T PT9202, TPC28T PT9203, TPC28T PT9204, TPC28T PT9205, TPC28T PT9206, TPC28T PT9207, TPC28T PT9208, TPC28T PT9209, TPC28T PT9210, TPC28T PT9211, TPC28T PT9212, TPC28T PT9213, TPC28T PT9214, TPC28T PT9215, TPC28T PT9216, TPC28T PT9217, TPC28T PT9218, TPC28T PT9219, TPC28T PT9220, TPC28T PT9221, TPC28T PT9222, TPC28T PT9223, TPC28T PT9224, TPC28T PT9225, TPC28T PT9226, TPC28T PT9227, TPC28T PT9228, TPC28T PT9229, TPC28T PT9230, TPC28T PT9231, TPC28T PT9232, TPC28T PT9233, TPC28T PT9234, TPC28T PT9235, TPC28T PT9236, TPC28T PT9237, TPC28T PT9238, TPC28T PT9239, TPC28T PT9240, TPC28T PT9241, TPC28T PT9242, TPC28T PT9243, TPC28T PT9244, TPC28T PT9245, TPC28T PT9246, TPC28T PT9247, TPC28T PT9248, TPC28T PT9249, TPC28T PT9250, TPC28T PT9251, TPC28T PT9252, TPC28T PT9253, TPC28T PT9254, TPC28T PT9255, TPC28T PT9256, TPC28T PT9257, TPC28T PT9258, TPC28T PT9259, TPC28T PT9260, TPC28T PT9261, TPC28T PT9262, TPC28T PT9263, TPC28T PT9264, TPC28T PT9265, TPC28T PT9266, TPC28T PT9267, TPC28T PT9268, TPC28T PT9269, TPC28T PT9270, TPC28T PT9271, TPC28T PT9272, TPC28T PT9273, TPC28T PT9274, TPC28T PT9275, TPC28T PT9276, TPC28T PT9277, TPC28T PT9278, TPC28T PT9279, TPC28T PT9280, TPC28T PT9281, TPC28T PT9282, TPC28T PT9283, TPC28T PT9284, TPC28T PT9285, TPC28T PT9286, TPC28T PT9287, TPC28T PT9288, TPC28T PT9289, TPC28T PT9290, TPC28T PT9291, TPC28T PT9292, TPC28T PT9293, TPC28T PT9294, TPC28T PT9295, TPC28T PT9296, TPC28T PT9297, TPC28T PT9298, TPC28T PT9299, TPC28T PT9300, TPC28T PT9301, TPC28T PT9302, TPC28T PT9303, TPC28T PT9304, TPC28T PT9305, TPC28T PT9306, TPC28T PT9307, TPC28T PT9308, TPC28T PT9309, TPC28T PT9310, TPC28T PT9311, TPC28T PT9312, TPC28T PT9313, TPC28T PT9314, TPC28T PT9315, TPC28T PT9316, TPC28T PT9317, TPC28T PT9318, TPC28T PT9319, TPC28T PT9320, TPC28T PT9321, TPC28T PT9322, TPC28T PT9323, TPC28T PT9324, TPC28T PT9325, TPC28T PT9326, TPC28T PT9327, TPC28T PT9328, TPC28T PT9329, TPC28T PT9330, TPC28T PT9331, TPC28T PT9332, TPC28T PT9333, TPC28T PT9334, TPC28T PT9335, TPC28T PT9336, TPC28T PT9337, TPC28T PT9338, TPC28T PT9339, TPC28T PT9340, TPC28T PT9341, TPC28T PT9342, TPC28T PT9343, TPC28T PT9344, TPC28T PT9345, TPC28T PT9346, TPC28T PT9347, TPC28T PT9348, TPC28T PT9349, TPC28T PT9350, TPC28T PT9351, TPC28T PT9352, TPC28T PT9353, TPC28T PT9354, TPC28T PT9355, TPC



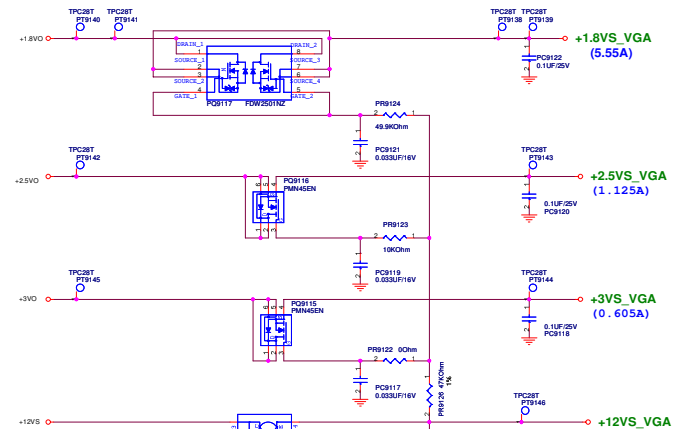
SUSC#_PWR POWER

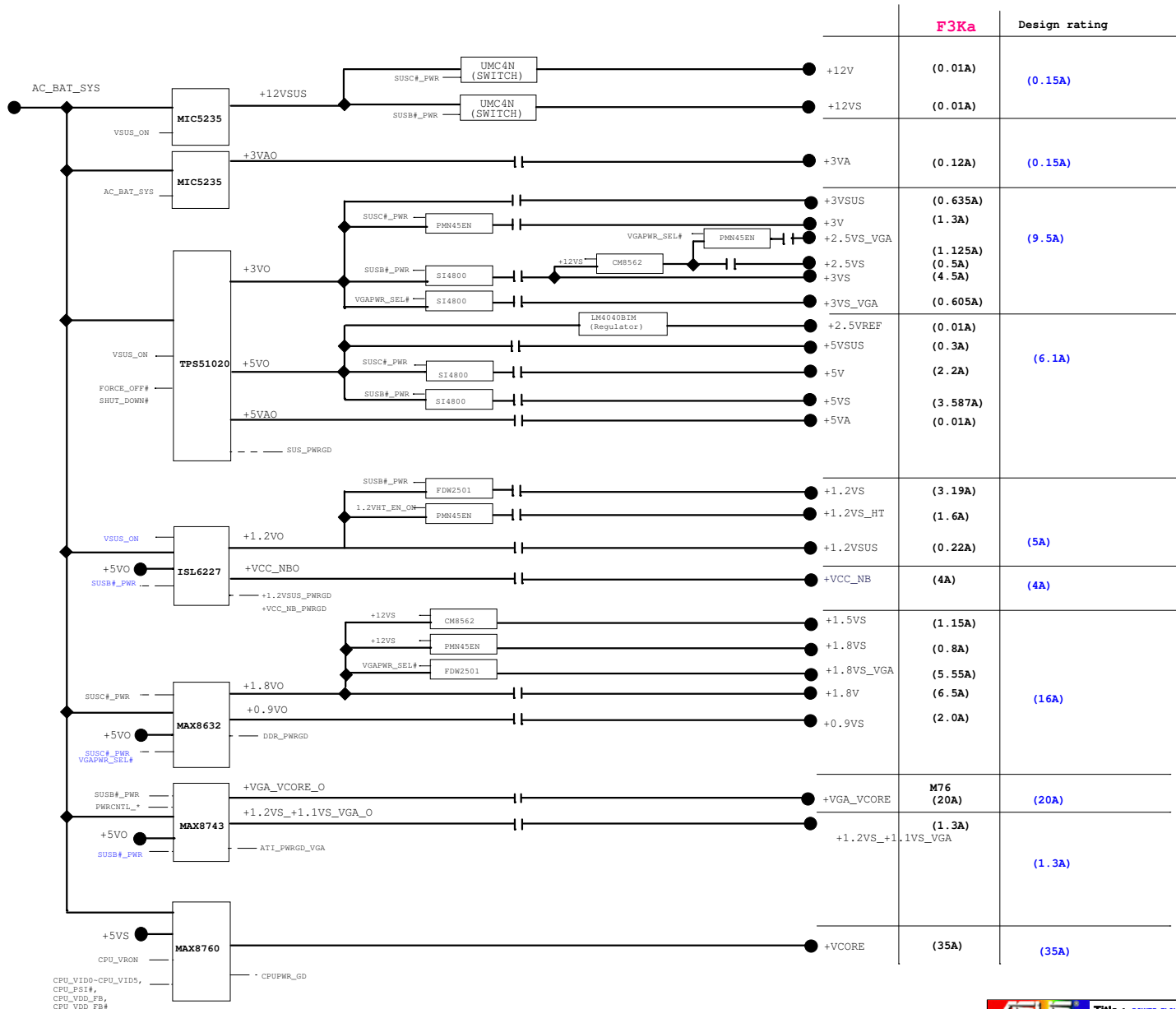


SUSB#_PWR POWER

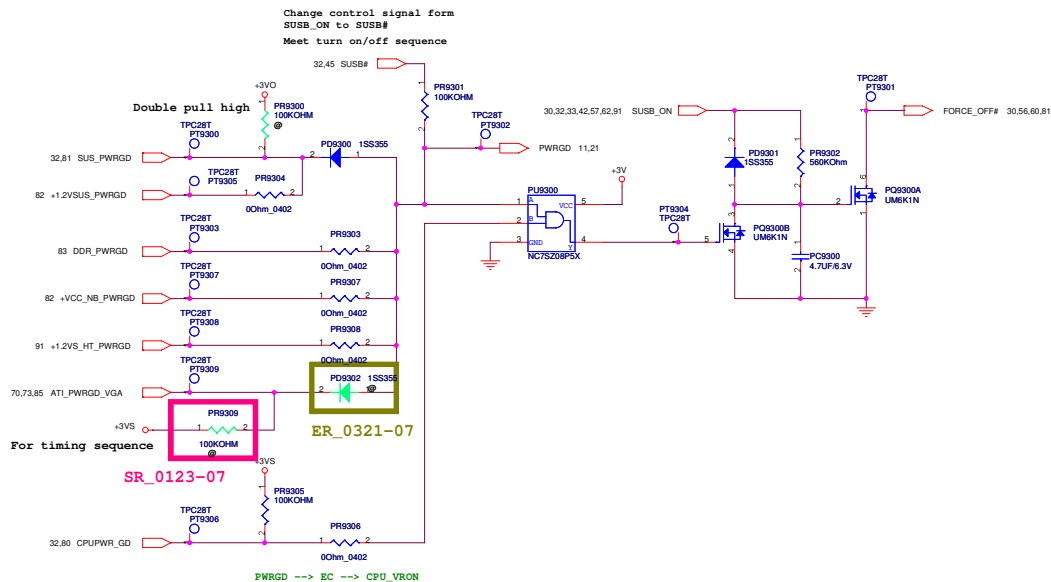


For PowerXpress



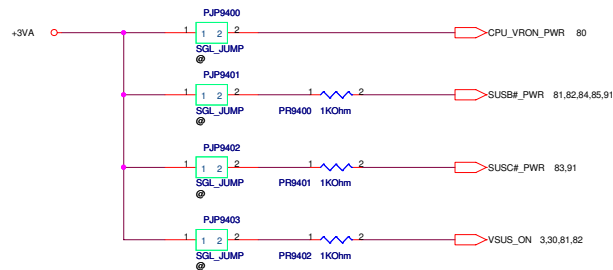


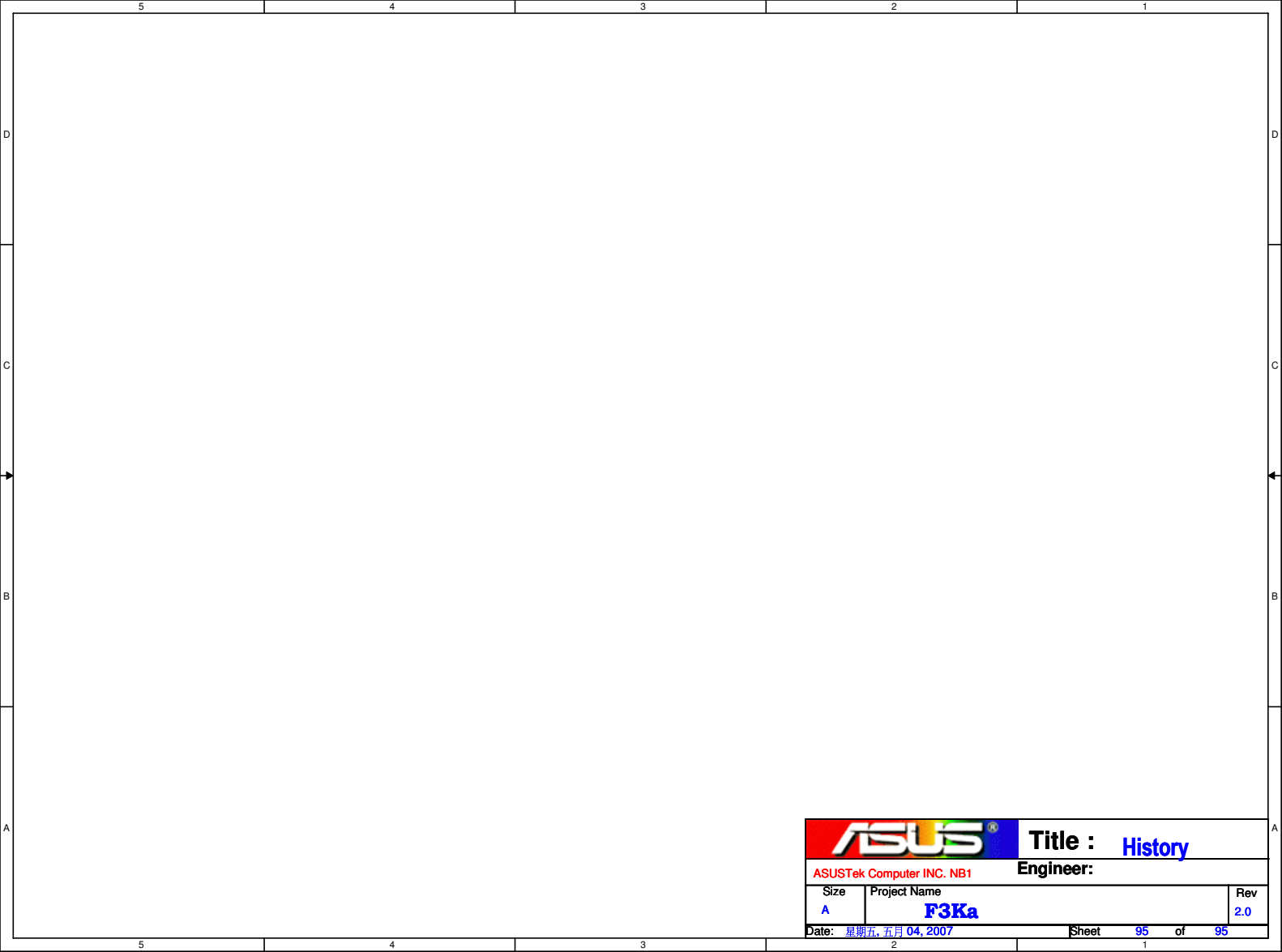
POWER GOOD DETECTOR



AC_BAT_SYS	AC_BAT_SYS	45,60,80,81,82,83,85,87,88
+3VA	+3VA	3,20,30,32,45,56,62,81,84,90
+5VA	+5VA	81,84
+5VO	+5VO	81,82,83,85,90,91
+3VO	+3VO	81,83,85,91,93
+3VSUS	+3VSUS	3,21,30,32,33,56,57,62,81
+5VSUS	+5VSUS	56,81,87,88,90
+12VSUS	+12VSUS	81,91
+12V	+12V	37,42,52,57,91
+12VS	+12VS	37,45,46,57,84,91
+3V	+3V	21,30,42,45,53,55,57,58,62,84,91,93
+3VS	+3VS	3,7,8,11,12,20,21,29,30,32,33,36,37,40,41,42,45,46,50,51,53,54,55,56,57,58,62,63,70,72,76,86,91,93
+5V	+5V	3,7,45,52,57,58,86,91
+5VS	+5VS	21,30,33,36,37,46,50,51,56,57,76,80,91
+2.5VO	+2.5VO	84,91
+2.5VS	+2.5VS	3,57,84
+1.8VO	+1.8VO	83,84,91
+1.8V	+1.8V	3,57,8,57,83
+1.8VS	+1.8VS	3,11,12,20,21,57,76,80,86,91
+0.9V	+0.9V	5,9,57,83
+2.5VREF	+2.5VREF	84,87,88,90
+VCORE	+VCORE	3,5,80
+VGA_VCORE	+VGA_VCORE	57,70,73,85,86
+1.2VS_+1.1VS_VGA	+1.2VS_+1.1VS_VGA	57,70,72,73,85
BAT	BAT	31,88
BAT_CON	BAT_CON	60,88

FOR POWER TEST





		Title : History	
ASUSTek Computer INC. NB1		Engineer:	
Size A	Project Name F3Ka		Rev 2.0
Date: 星期五, 五月 04, 2007		Sheet 95 of 95	

12/08 1. RGB circuits modify
12/11 P53,54 add common choke
3. CE5200, CE5203 change package, USB add power name
4. New card change TVC
5. delete 0 ohm on P78 switch
6. net name LDC_PAS#s -> test point; TVTUNER_ON# pull high to P55; VGND change to GND
7. change power circuits
8. delete L1200, L1201, L1202 and relative power name
9. unmount R2012 & R2114 change TVOD_SATA's bead to 2A
10. (SB) FANIN(L20) & TEMPIN2 & VIND & VIN1(L17) use LDO to GND
12/12 11. power name +3VS_VGATHEN
12. change R5C833 and unmount C4007
12/13 add power name +3VS_CB & +3VS_FF, UIM_PWR_CON
14. swap VRAM
15. swap DDR, VRAM again
16. follow F3U: Delete R1120, R1121, R1122, R1123, D1100, Q1101, Change U1101 to 74126 to reduce cost
12/15 swap USB
16. Change C2038 to mounting component to meet ATI's requirement
17. change P11 AVDD to NB_AVD0 to prevent short with P83
18. change package: U041, U701, P0803, X100, X2001, P09300, U3602
21. delete 3 unknown line at P74: N17626888, N17631382, N17658979, and 1 power line: N62696617
22. delete another unknown line at P94: N17658979, and 1 power line: N62696617
23. change CE5200 for 6032 package, CE5080 to bigger 110G41210754
24. C300 Q1100 Q2100 Q5080 change to 070003000120 for coexistence
12/20 change USB power plane
12/21 1. USB common choke swap (LP3+, 1394) & swap USB 5,6,8
2. follow F3U, Change D5206, D5207, D5208, D5209 to mounting component to Protect the SB USB ports
12/25 add C4010 for EMI
12/26 swap LPC_AD3, LPC_LDRQ#1 to termination, CLK_CBPIC1, LPC_CLK, LPC_CLK_TPM, LPC_CLK_EC to RC
30. R3701, R3626, C3629 connect to GND_AUDIO
12/30 add JP for RGB layout
12/31 1. D4200, R7200 change part
2. D4100, U5501 change part
3. C400-C403 mount
1/1/12 follow SB 600 errata, change R2022,R2023,R2024 to 680 ohm
6. C3613, C3614 unmount mistake, change to mount part
37. change power circuits

8.1.1 2007/01/23
No1. Page21, Strap correction.
No2. Page10, MEM ID from [0:19] to [3:10]
No3. Page70, MEM ID from [0:19] to [3:10]
No4. Page31, KB connector inversion.
No5. Page11, follow demo circuits - change to 1uF
No8. Page73, follow ref131-5, delete VDDR45 3.3V path & LVDDR 3.3V for M76M, 2.5V for M64M
No9. Page54, unmount R5405 (PCI_RST of WWAN) for ok function.
No10. Page45, change C4250 to 0.22uF, adding white screen from CMOS setup. change to 0.22uF
No11. Page20, modify PCI_CLK[3:0] damping
No12. Page25, CLK for P816 VGA is changed from SRCK to ATIG1
No13. Page55, unmount R5501 for not supporting IV wake function
No14. Page41, A_RST# (for optional)USB# use for WLAN & WWAN, USB9 for TVTUNER
No15. Page21, A_RST# (for optional)USB# use for WLAN & WWAN, USB9 for TVTUNER
No16. Page21 & R5, (for optional) add inverter 2: USB5 use for inverter 1 and inverter 2 and CE4501 change to H=1.1
No17. USB 501 change
No18. Page42, A_RST# to NEW_CARD, add diode for leakage issue
No19. Change R4626 & R4627 to 2.7k ohm for CRT detect issue, R4623 & R4624 for DVI function
No20. change R2107 to 11.3K for USB eye diagram
No21. change USB connector not pull lower for thermal issue
No22. Page55, L5502, L4530, RN4505, R21100 swap
No23. delete R21102 because RN4500 does the same function, change branch to page 45
No24. CE5500 change part for height issue
No25. modify R1C capacitor 18pF
No26. 21, SB600 A21 P/N 02G110012310
R1.2 100 R7679, 21, SB600 A21 P/N 02G110012310

No1. Page70, change U7000 to G781-1 and control from EC (unmount R7067, R7068, mount R7064, R7065),
VGA_ALAWM connect to EC GPU5
No2. Page40, add R4006(22 ohm) for MDIO9 damping resistor
No3. Page54, change R7679 P/N to R1310(02G110014502)
No4. Page54, change R7679 P/N to R1310(02G110014502)
No5. Page20, change C2017 to 0.22uF for All suggestion
No6. Page70, Change error -> R7009 optional /W7 has symbol error, R5405 & R5501 /X error
No7. Page41, add Force_Off# path to EC reset
No8. Page41, add VCAWPR_SEL to control external power on/off
No9. Page71, change LVDS_SEL to NB_DP1_GP104
No10. Page11, change BACK LIGHT enable pin to BLON pin(follow F3U)
No11. Page70, reserved VGA internal thermal sensor path
No12. change PM control circuits
No13. change EC reset circuits, WATCH DOG add test point
No14. Page72, for PowerPress, change RESET circuits, add DIS_VGA_RST# from SB
No15. Page11, add 2 buffer for SBUS, add DDC_CLK_NB/DDC_DAT_NB for DVI, add DACSEL/DACSDA_NB for CRT
No16. Page55, change TV tuner conn. P/N 146152075002
No17. Page11, for DVI HPD, mount R1114 and unmount R1140
No18. Page63, new finger print USB
No19. Page70, change RN7000 to discrete R, overtemp & alarm connect to +3VS for
No20. unmount R1123, delete R1122 & 036, change DIS_VGA_RST# to VGA_RST#
No21. Page53, add 10pF at B7_DET# for EMI
No22. Page11, delete R1113 & DACSEL_NB is directly driven from NB, change R1128, R1129 to R4606, R4607
No23. delete 0ohm: R1100, R1117, R1118, R2011, R2012, R2013, R2021, R2034, R2035, R2111, R2125, R2128, R2130, R2132,
R2143, R2011, R3014, R3209, R3301, R3304, R3305, R3311, R3502, R7053
delete no necessary item: Q3003

No24. Page30, delete R3000 -> JP3003, R3001 -> JP3002, R3010 -> JP3004
Page31, delete R3211 -> JP3005
Page53, delete R3507 -> JP3501, R3508 -> JP3502
No25. Page45, R4526 0 ohm, C4007
No26. Page73, follow F3U, change C4007 to 2.2pF
No1. Page70, VRAM SIZE strap VGA_GP10[13:11] changed, vendor table changed
No2. Page75, unmount all B channel for F3Ke
No3. Page57, add 5 discharge circuits for PowerPress
No4. Page57, LVDS_SEL is inversion circuits
No5. Page56, Delete D4620, add D4603 50K HPD polarity reservation.(follow F3U)
No6. Page59, change R21102 to 0 ohm, change DIS_VGA_RST# for power down when display from internal VGA
No7. change RN to 0603 size
Page, delete colaly common choke: L4200, L4523, L4530, L4608, L4609, L4611, L4613, L4614, L6301
L4615, L4616, L5200, L5202, L5204, L5206, L5300, L5301, L5400, L5502
No8. Page55, Change boss footprint
No9. change R8571 from 499 ohm to 549 ohm for RGB EA measurement
No10. Page76, connect to +3VS
No11. Page57, for leakage
No12. Page20, C2025, C2027 change 15pF
No13. Page63, change name & PCB300 -> COM300
No14. Page70, memory size table modified

Port R2.0 2007/04/17
No1. change_ all 2N7002 to 07G005000214
Page 29, change CE5202 Part No. to 06G011494010
No2. Page 70, change Hynix (16*16) Part No. to 03G151236215
No3. Page 71, modify R35_VA_DELAY timing
No5. Page 11, change Q1100 R1115, and R1116 for fast rising time
R2.0.0504 2007/05/04
No1. For F3Ke PR Hynix VRAM Resistance Strap