

Foxconn Precision Co. Inc.

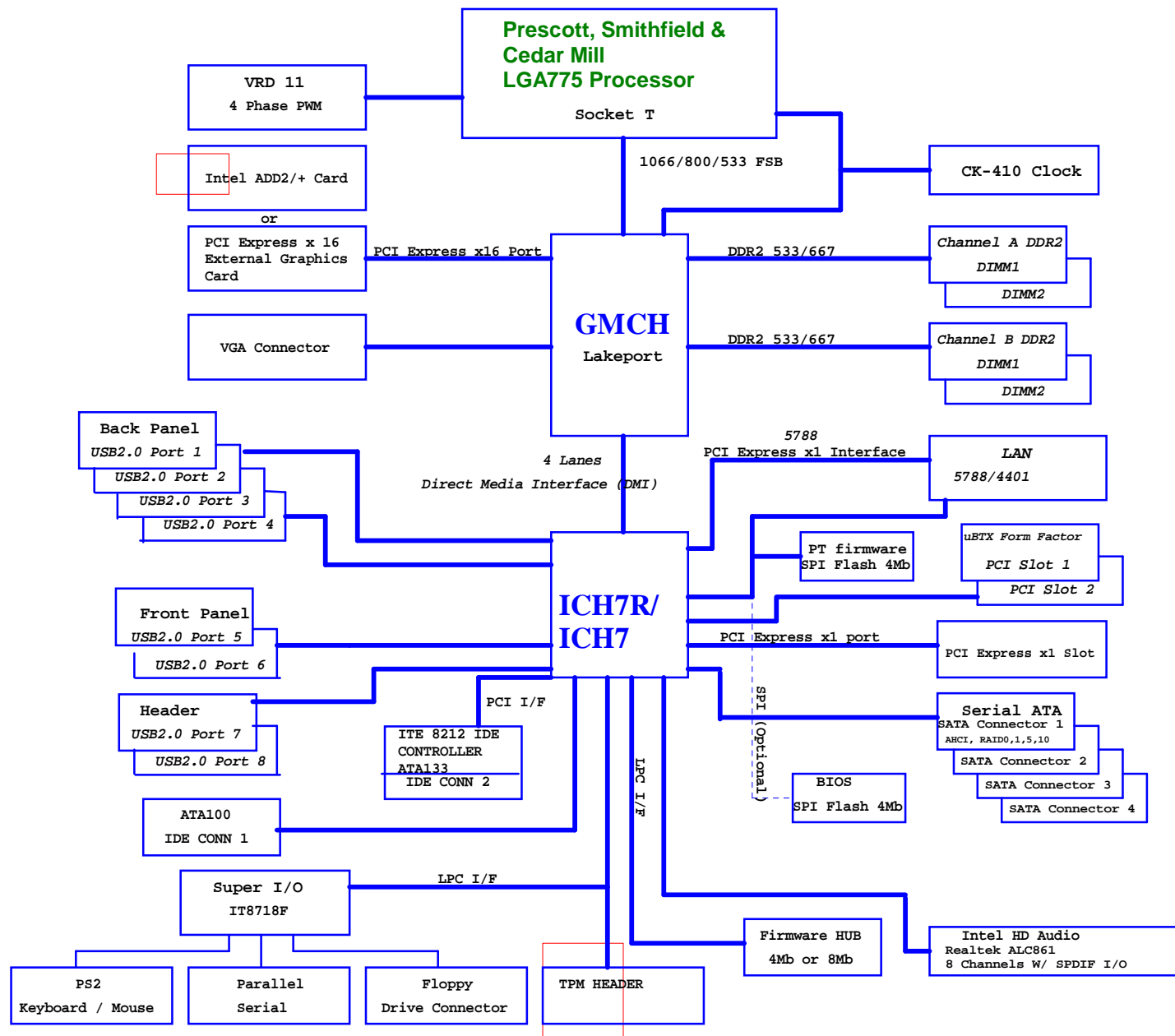
945M03 Schematic

Fab.B
Data: 2006/08/18

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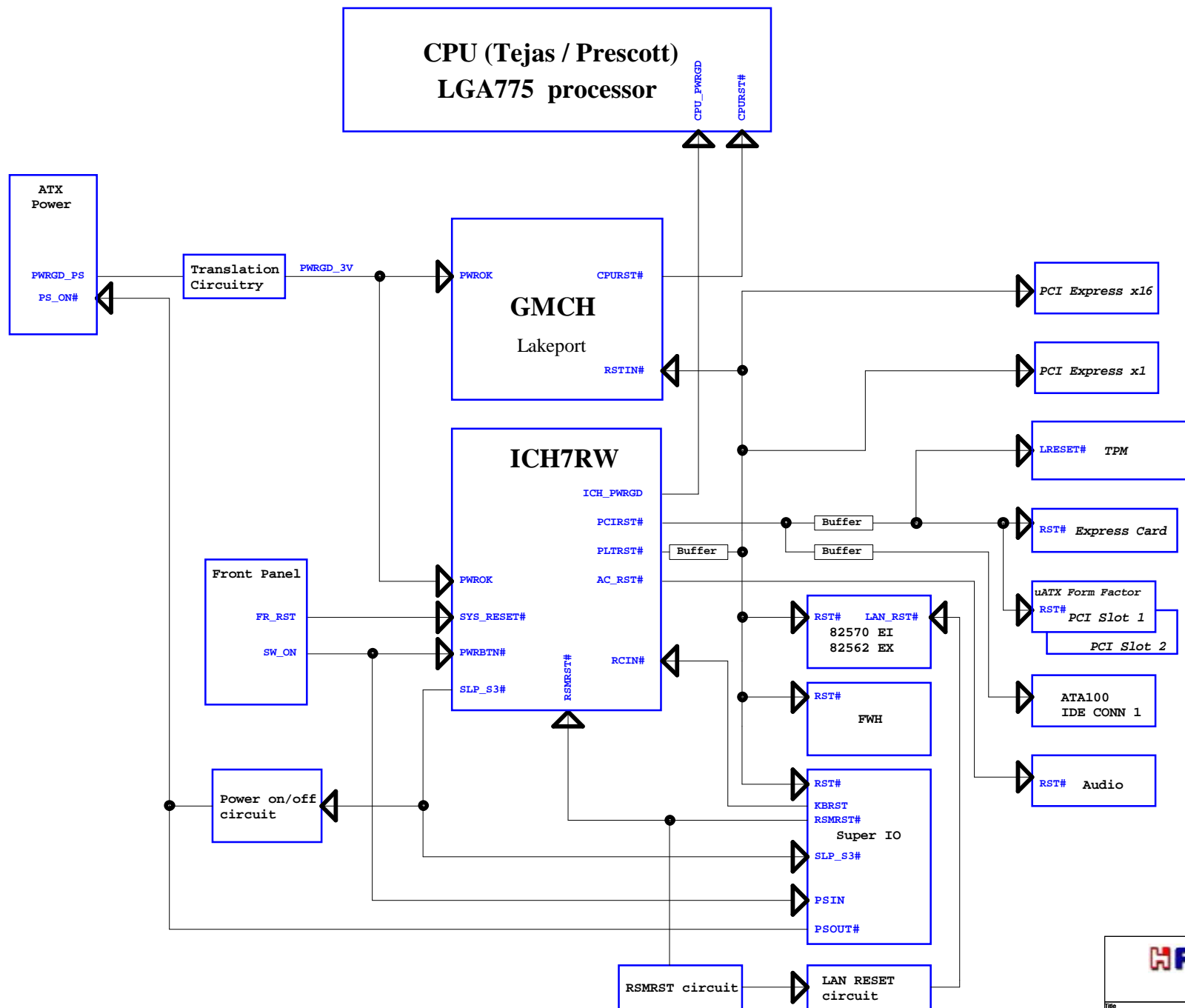
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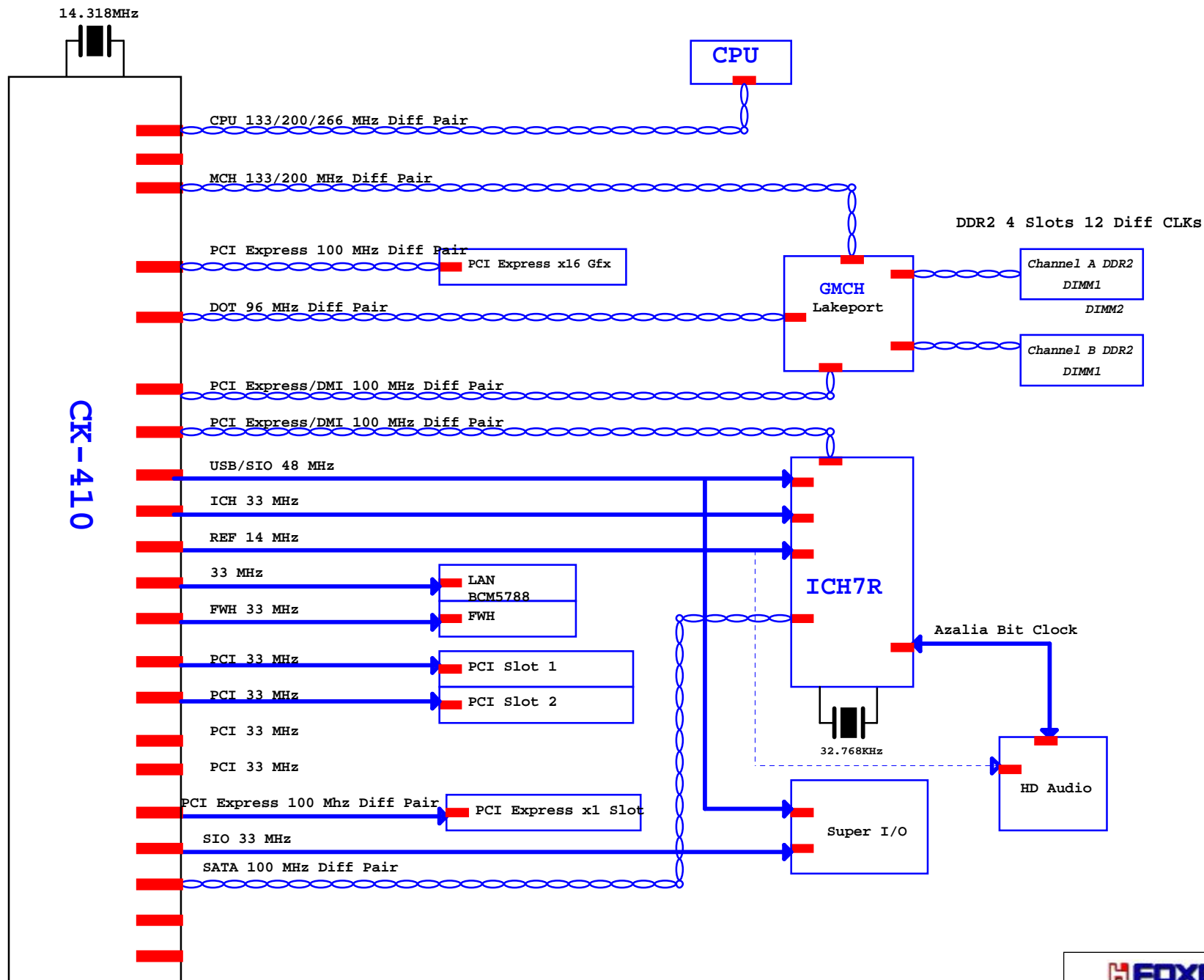
FOXCONN [®]	
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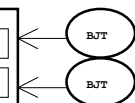
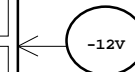
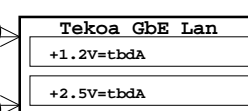
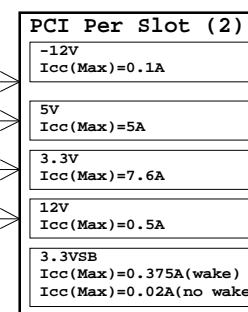
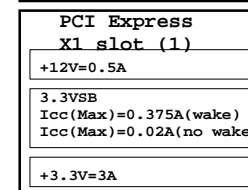
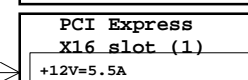
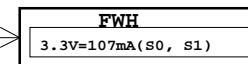
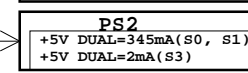
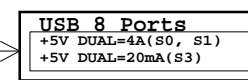
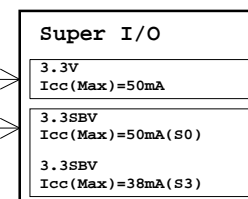
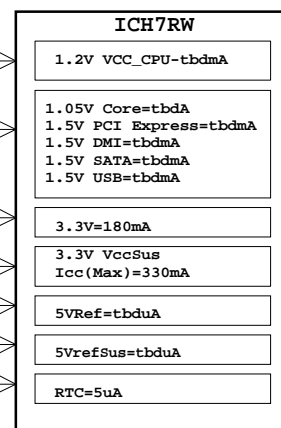
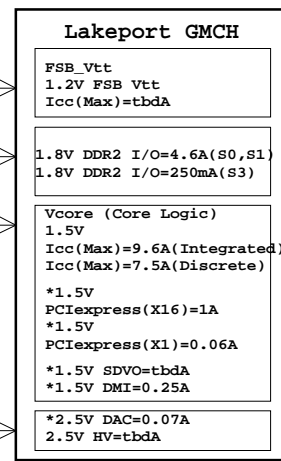
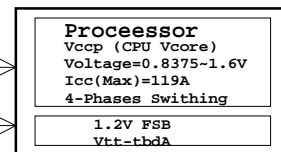
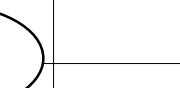
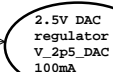
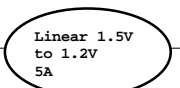
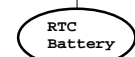
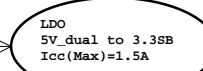
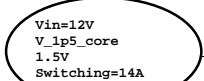
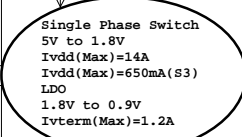
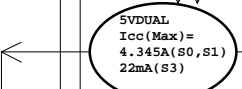
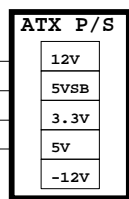
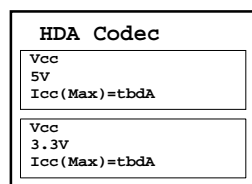
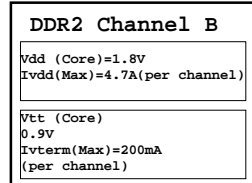
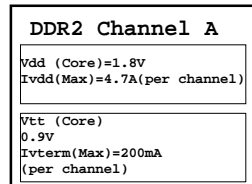
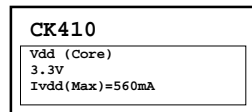


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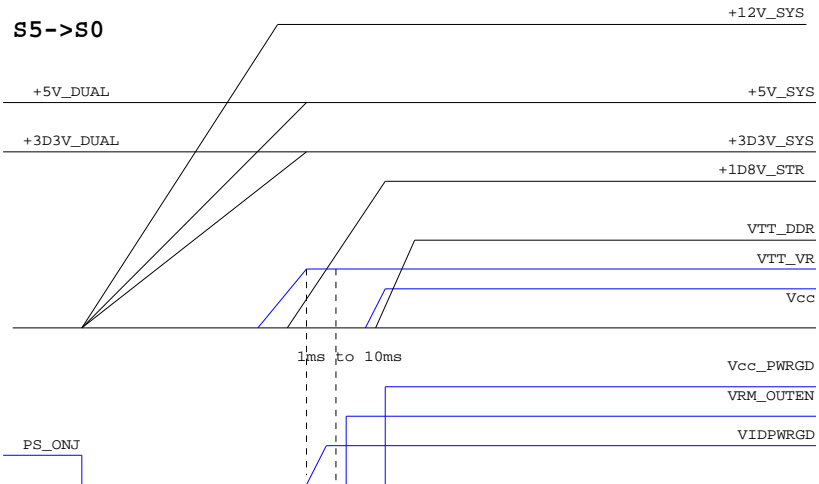




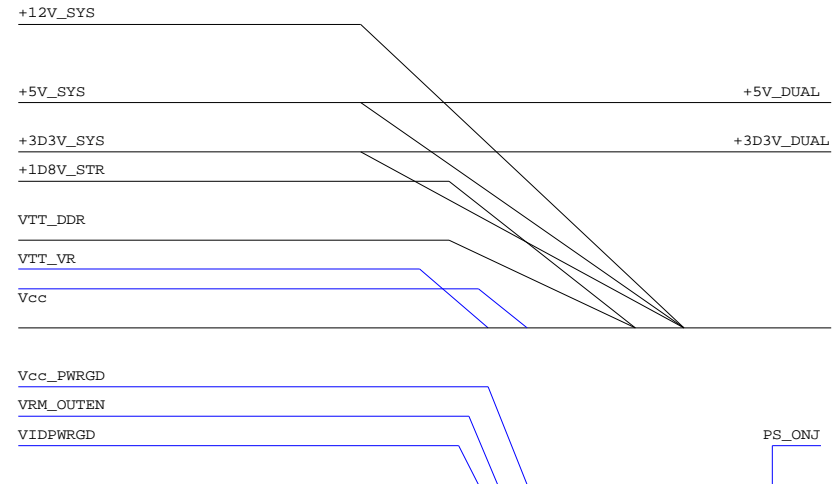
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*Power derived through filter

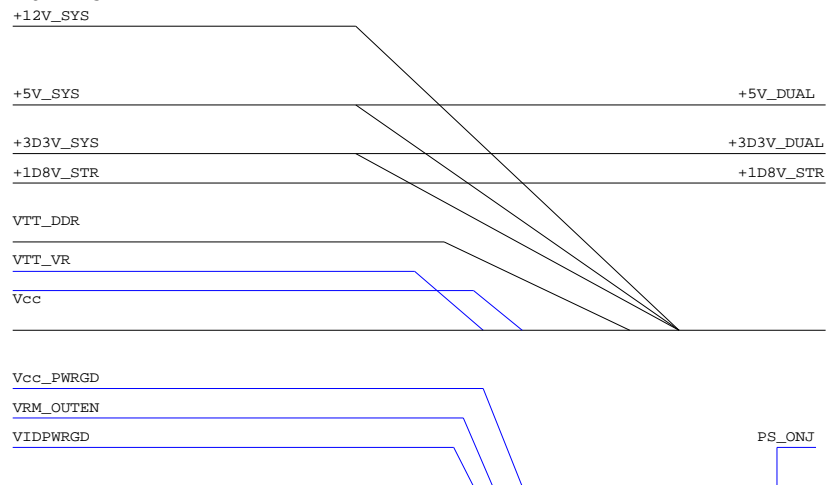
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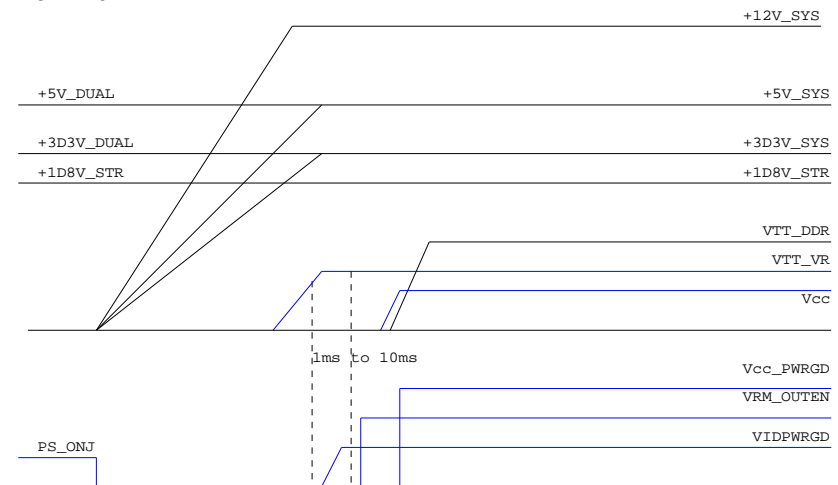
S0->S5



S0->S3

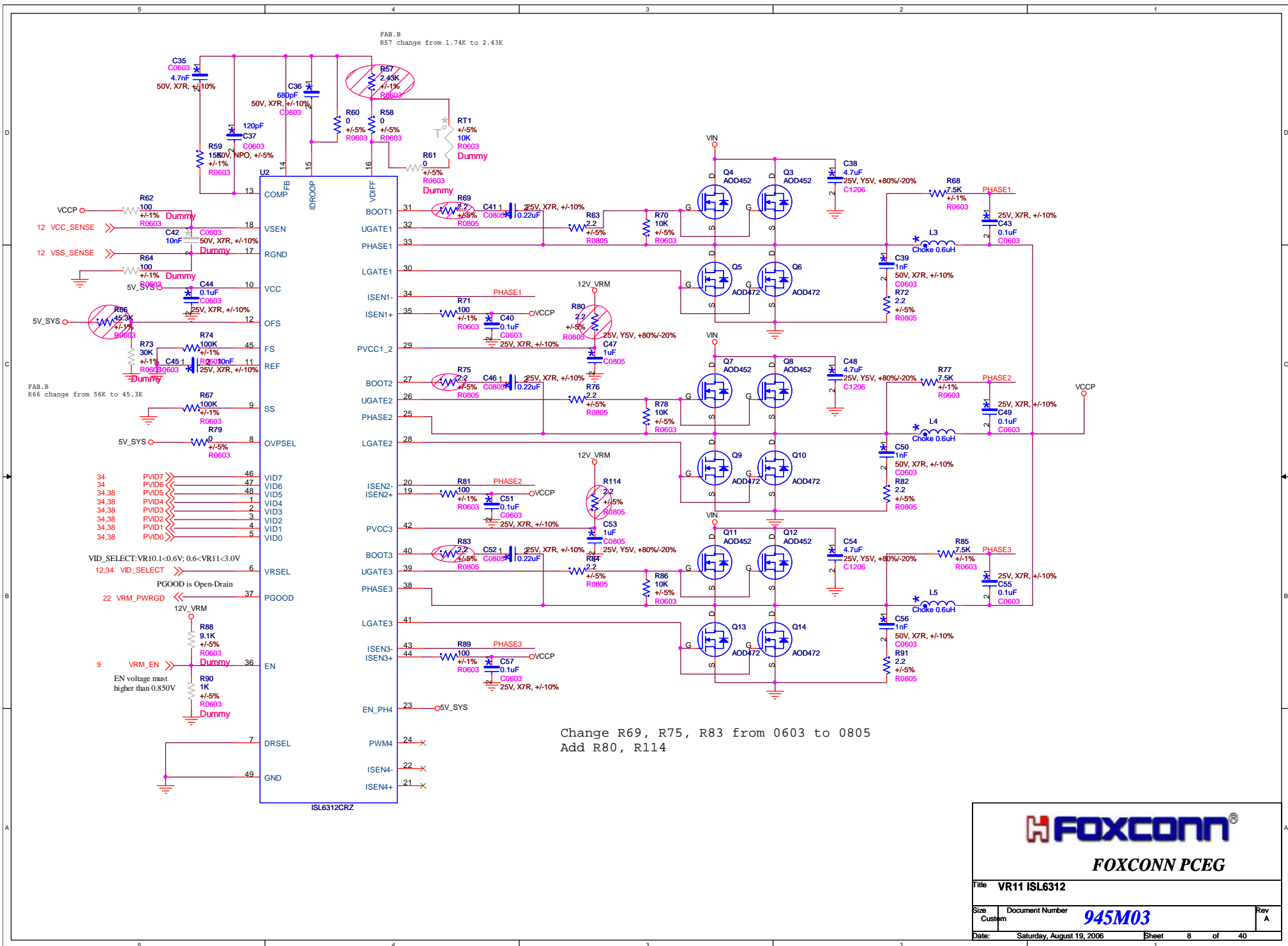


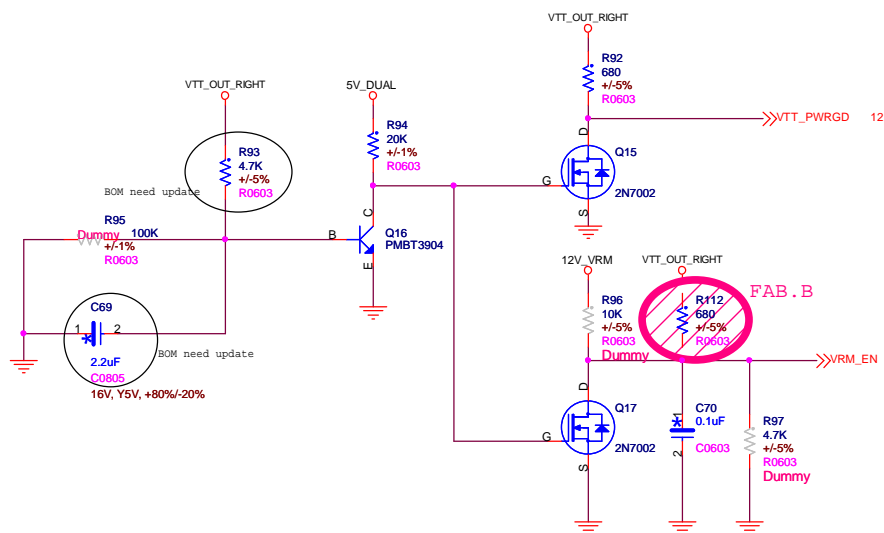
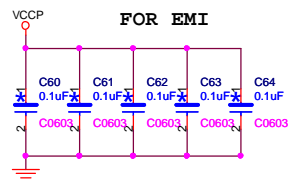
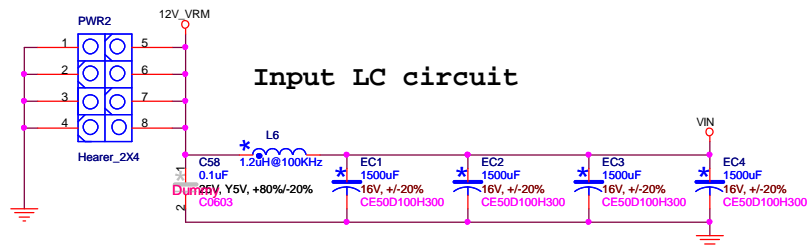
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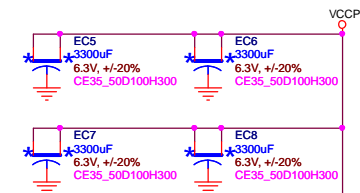
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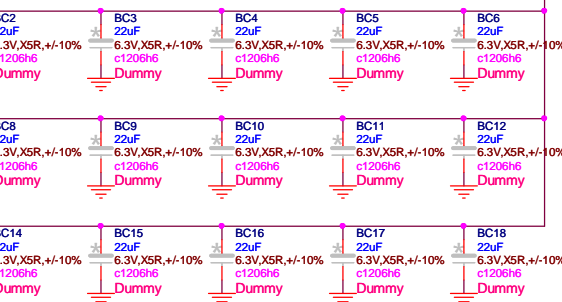
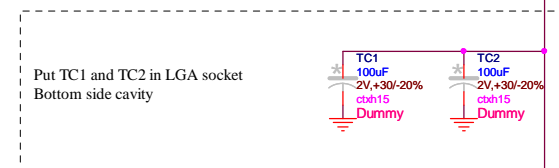
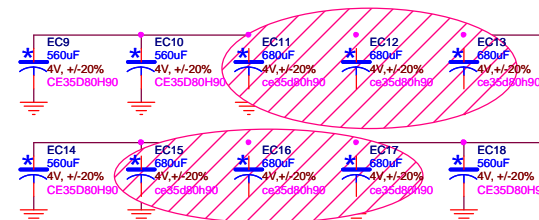




Output Ecip



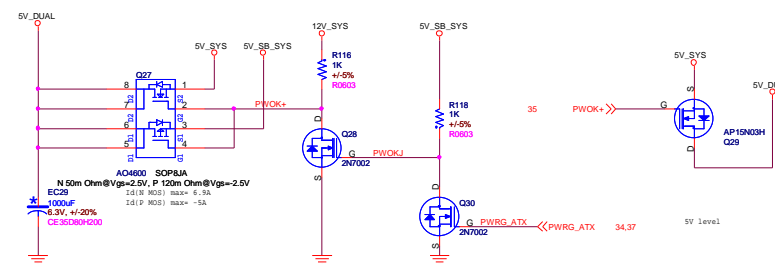
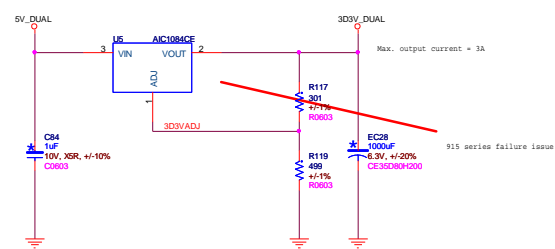
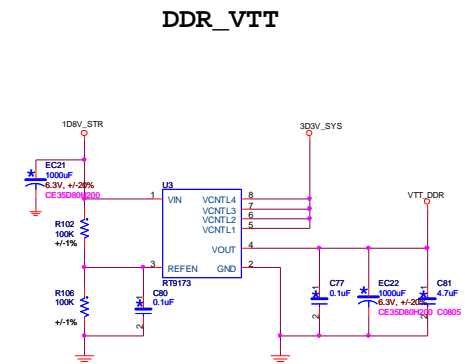
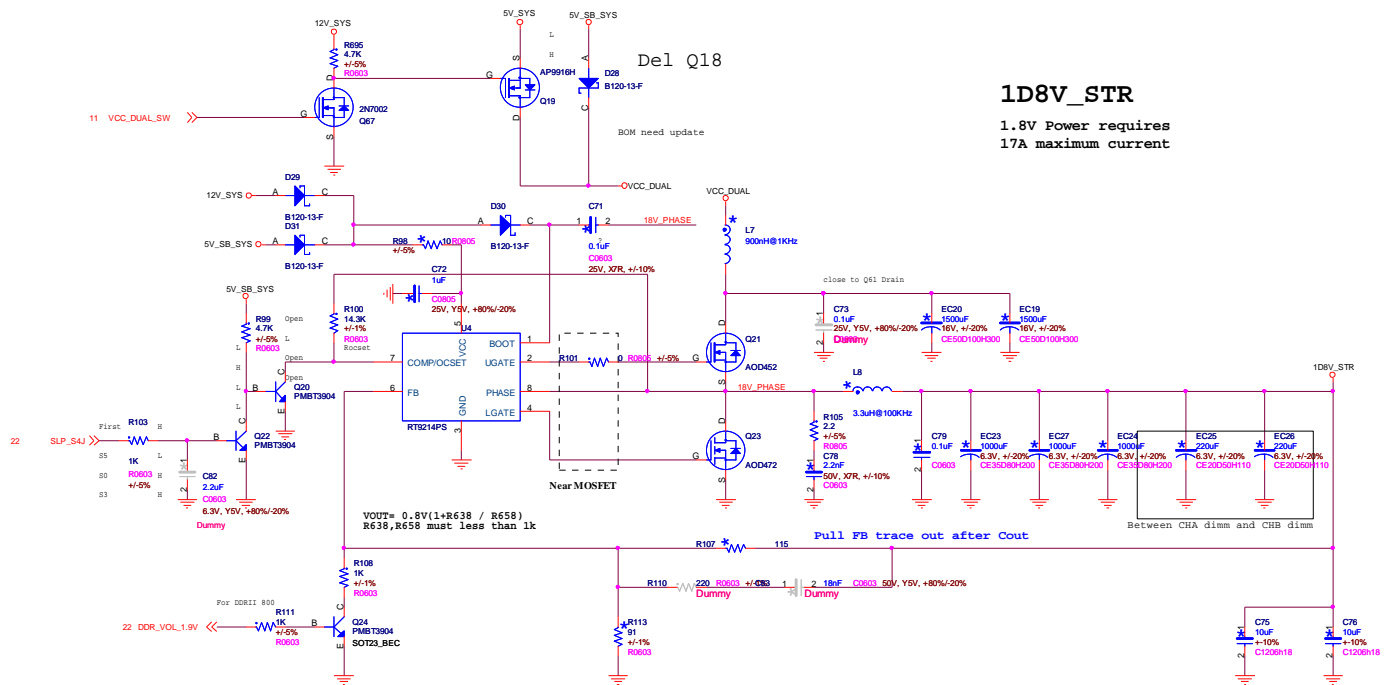
FAB.B
Change EC12, EC13, EC16, EC17 560uF to EC11, EC12, EC13, EC15, EC16, EC17 680uF

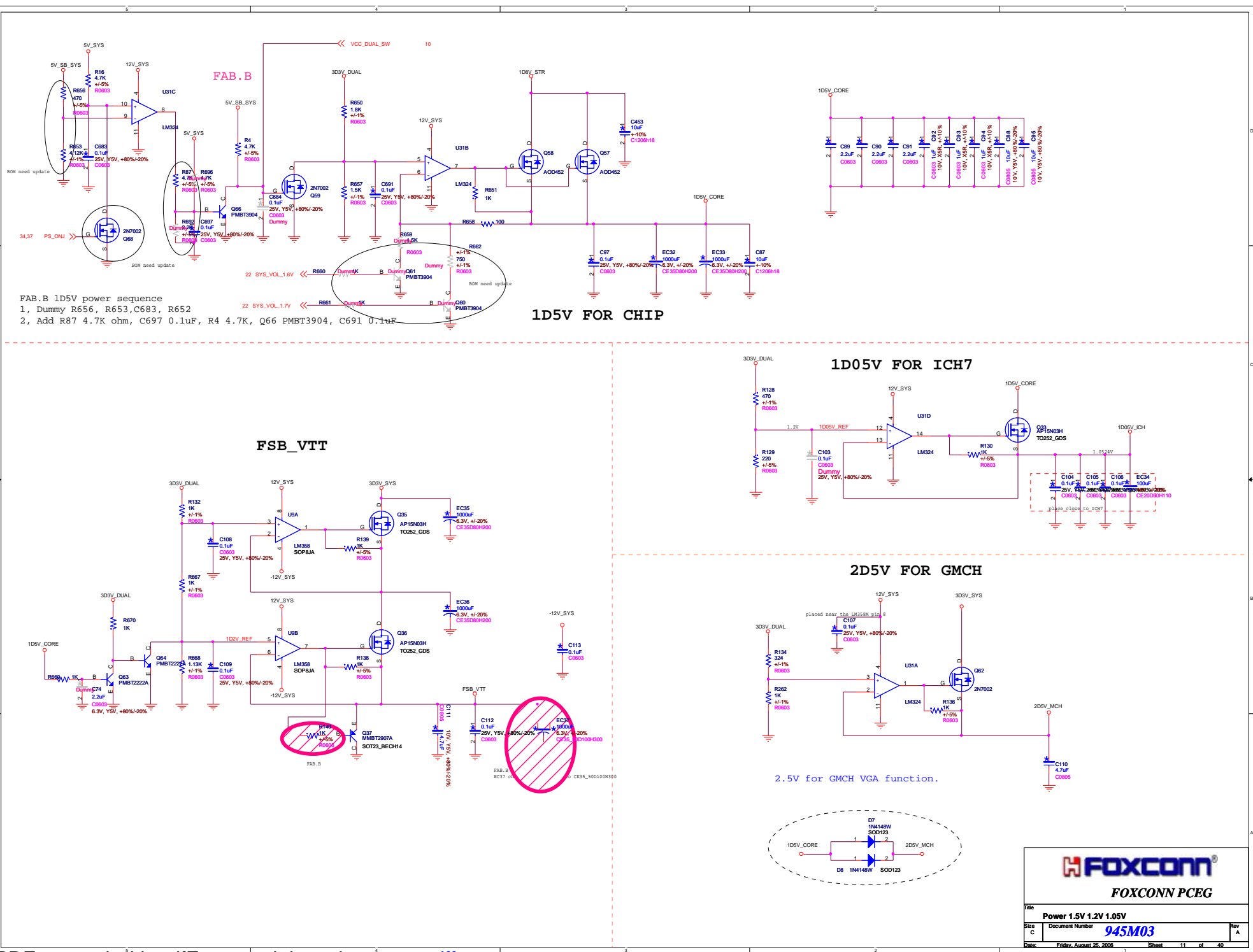


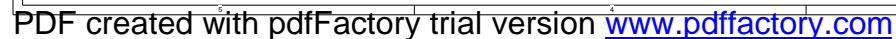
Put all MLCC in LGA socket Top 8 side cavity

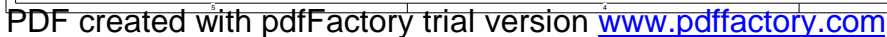


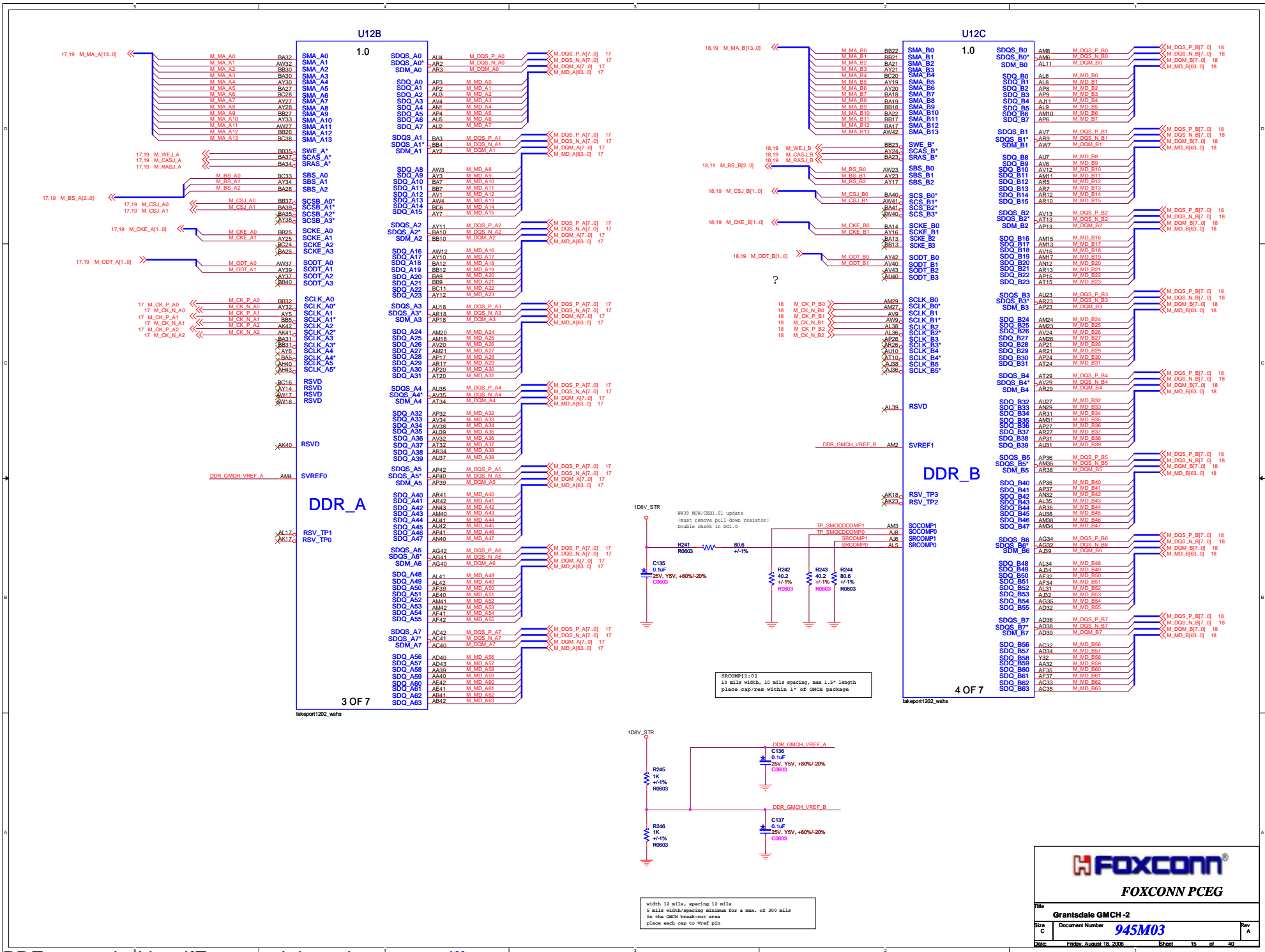
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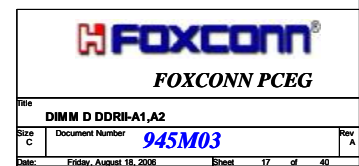


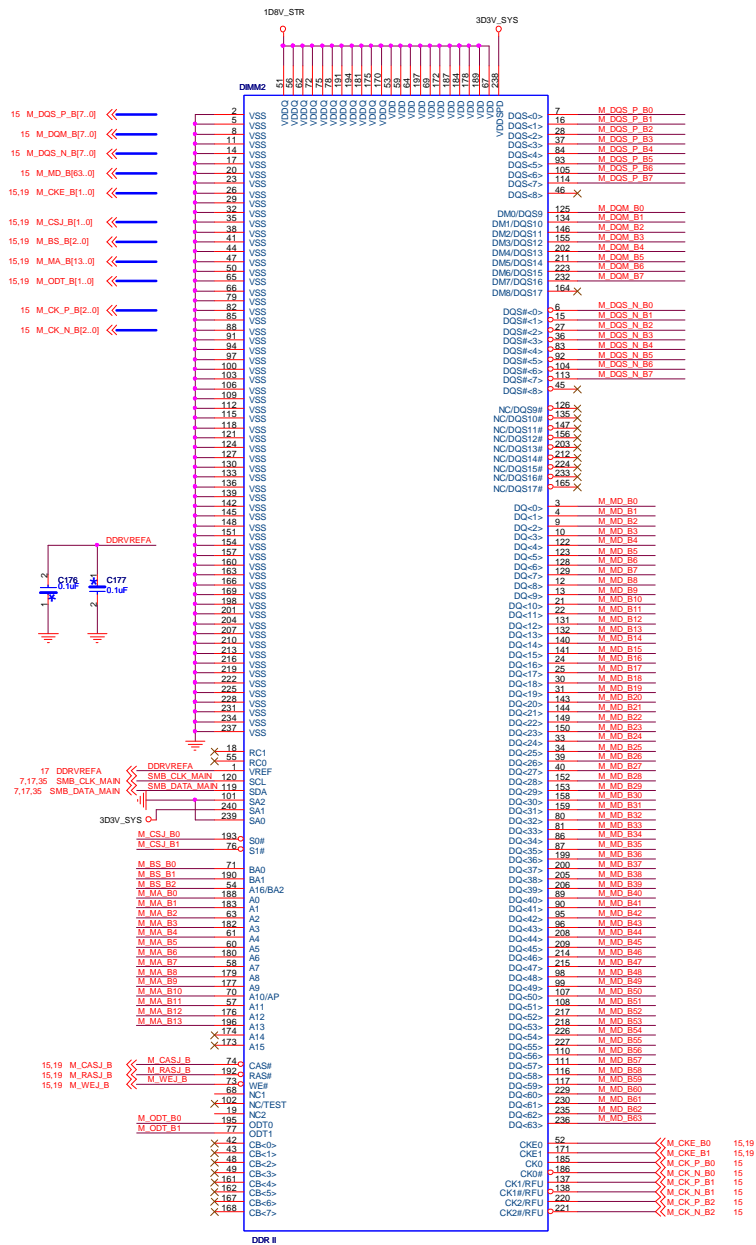






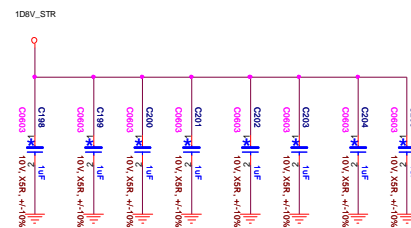
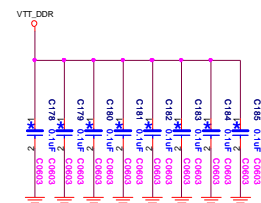
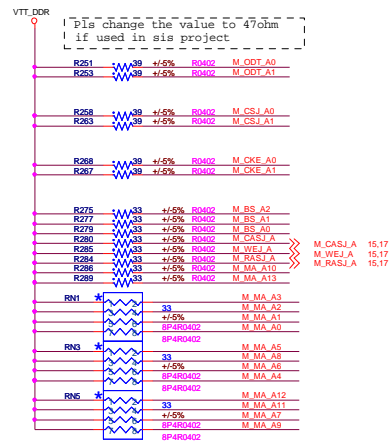






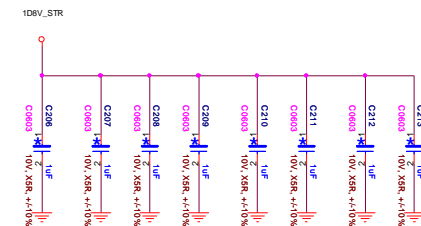
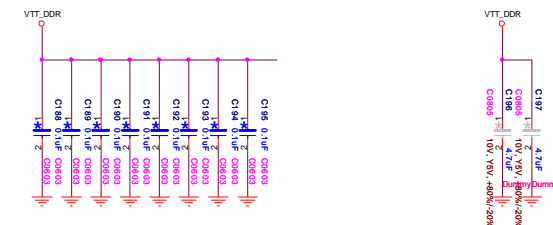
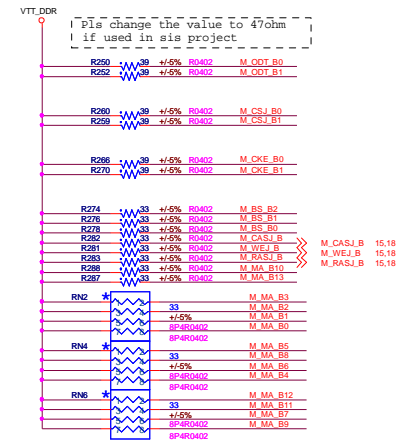
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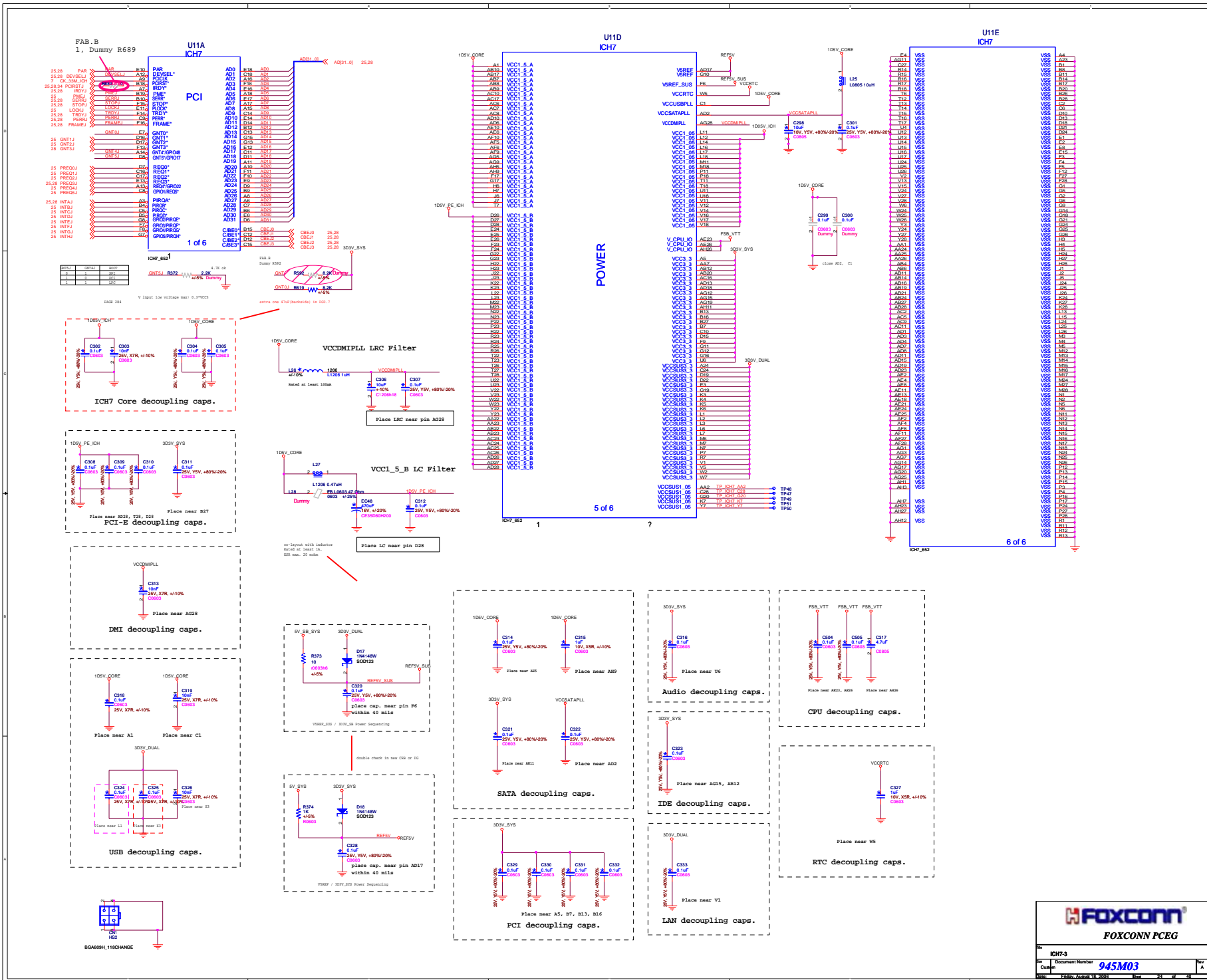
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15,17 M_CSJ_A[1..0] <<
15,17 M_BS_A[2..0] <<
15,17 M_MA_A[13..0] <<
15,17 M_ODT_A[1..0] <<

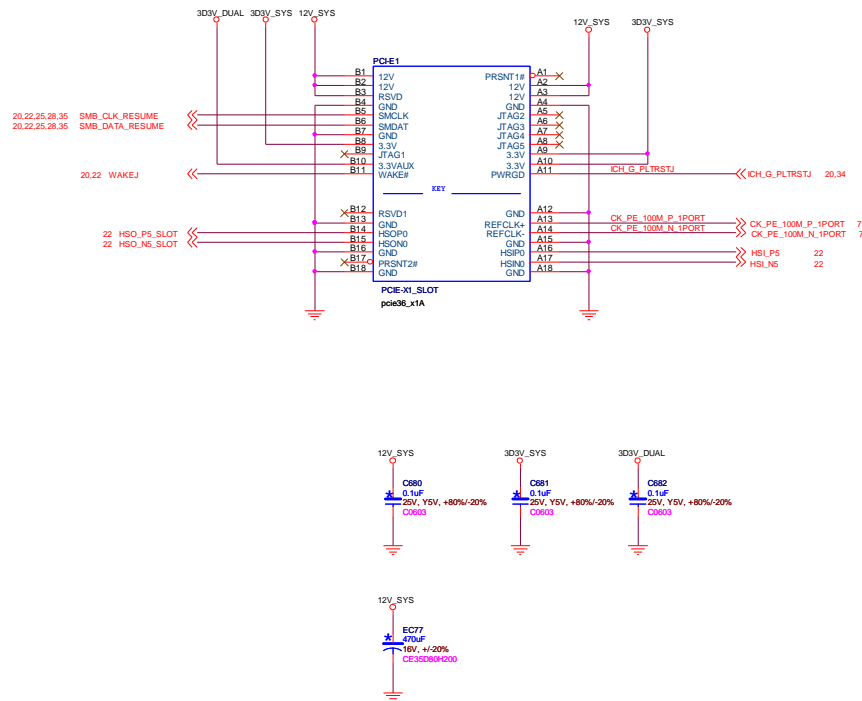


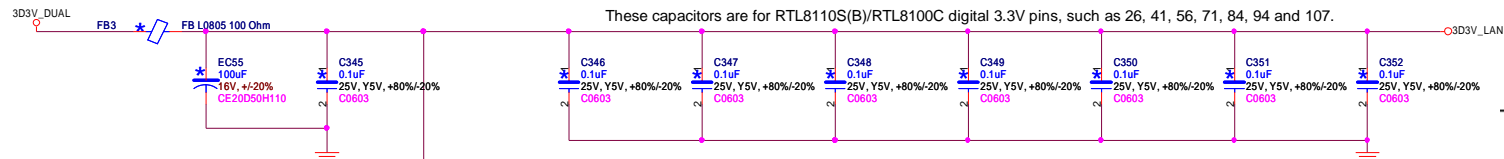
channel B

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15,18 M_CSJ_B[1..0] <<
15,18 M_BS_B[2..0] <<
15,18 M_MA_B[13..0] <<
15,18 M_ODT_B[1..0] <<

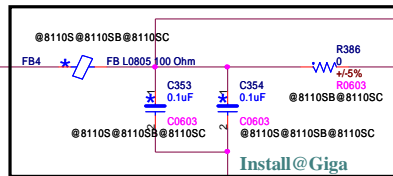








At RTL8100C application, keep FB19;
At RTL8110S(B) application, remove
FB19, pop Q8, EC2, C77.



For RTL8110S(B)/RTL8100C pin 12
When use RT8100C, 2D5V_LAN is 3.3V

	RTL8100C	RTL8110S / RTL8169S	RTL8110SB / RTL8169SB	RTL8110SC
AVDDH	N/A	3.3AVDD	3.3AVDD	3.3AVDD
V_12P	2.5AVDD	N/A	3.3AVDD	3.3AVDD
2D5V_LAN	3.3AVDD	2.5AVDD	2.5AVDD	1.8AVDD
V_DAC	N/A	2.5AVDD	2.5AVDD	N/A
1D8V_LAN	2.5VDD	1.8VDD	1.2VDD	1.5VDD
DVDD_A	N/A	1.8AVDD	1.2AVDD	1.5AVDD

2D5V_LAN for RTL
8110SB, 3D3V_LAN for RTL
8100C & 8110SC



Power quality should be check
(change from 22uF to 10uF)

FB(72-01010125-00) for 8100S, 0欧姆 for 8100C

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Title
LAN POWER

Size
Custom

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Rev
A

BACK PANEL (LAN + 2 USB Connector)

USE CONNECTOR(Foxconn P/N: JFM31U1A-01U5W) WITH GIGABIT DESIGN
USE CONNECTOR(Foxconn P/N: JFM25U13-01U5W) WITH 10/100 DESIGN

modify the EEPROM LED register
for the LED issue

Fail:(default) Pass: LEDS0= NOTUSED LEDS1=USED
LEDS = USED LEDS1= NOTUSED LEDS1=USED

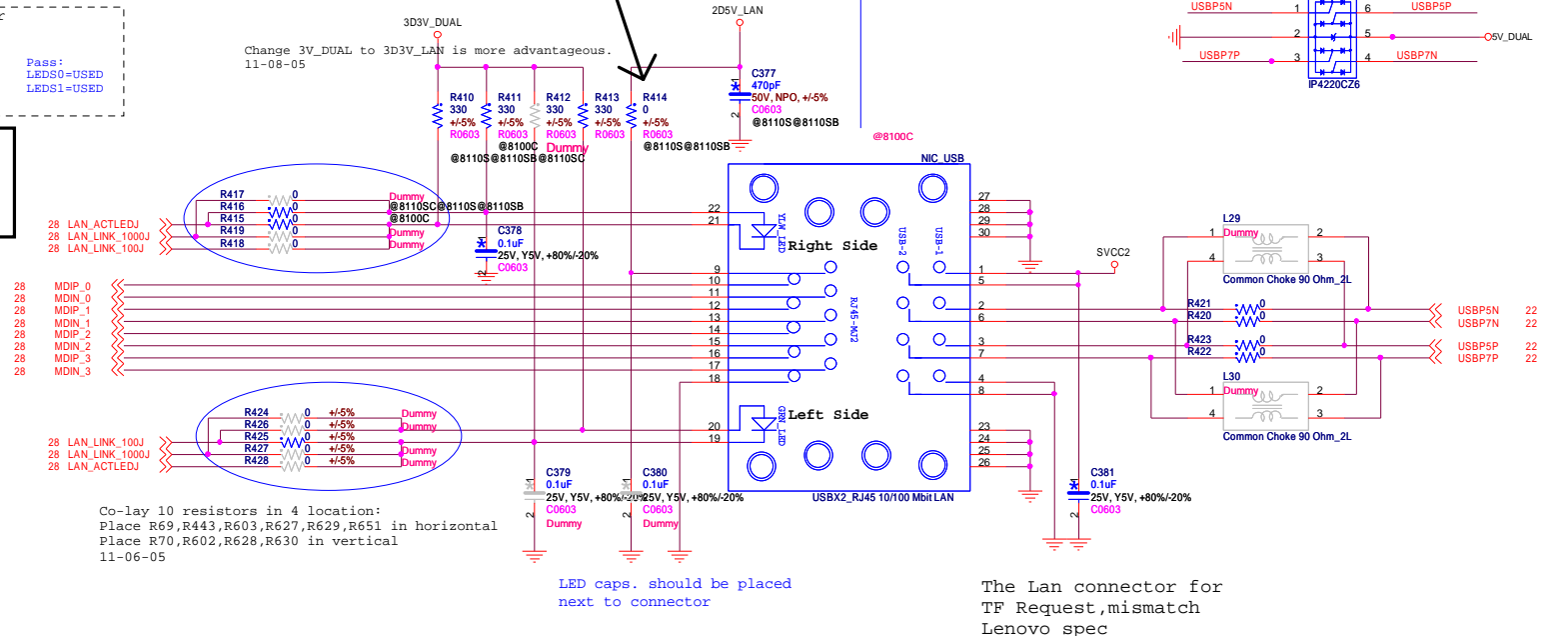
LED Definition:

1000: Yellow and Green LED
100: Yellow and Green LED
10: Only Green LED

Stuff R287 for
8110S&8110SB,Dummy
for 8100C&8110SC

Can be change to cost down conn
P/N = JFM31U1A-01U5W For GIGA LAN

Change 3V_DUAL to 3D3V_LAN is more advantageous.
11-08-05



NIC_USB1

Gigabit LAN
Connector

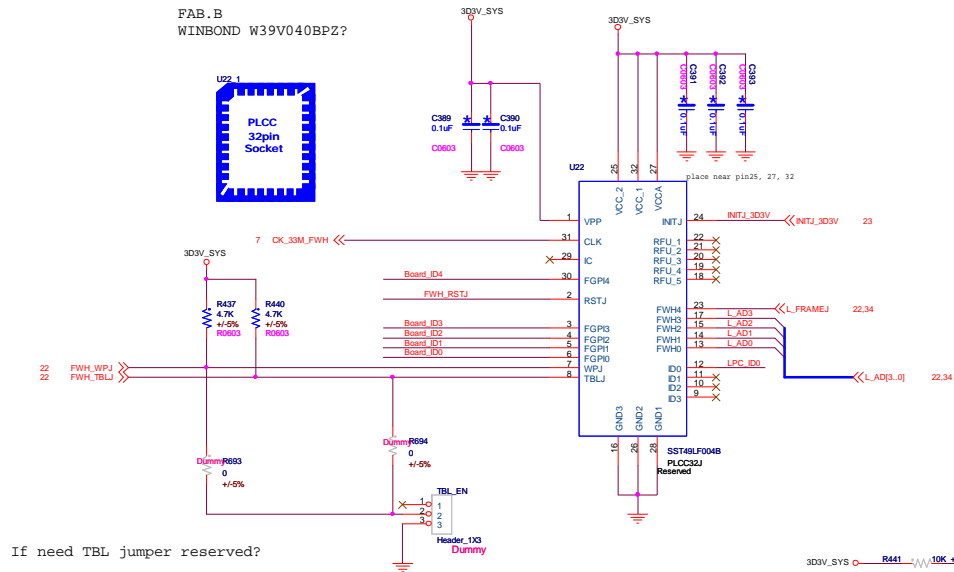
USBX2_RJ45 Gigabit LAN
@8110SC

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FOXCONN PCEG	
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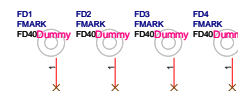
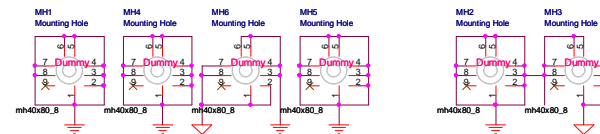
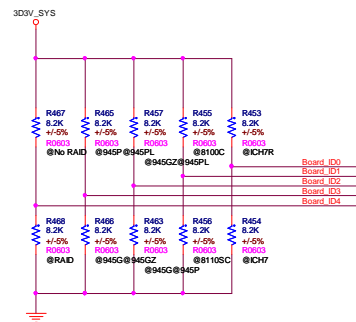
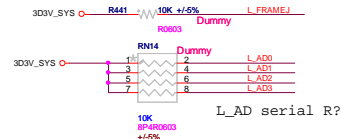
Quantity

FWH

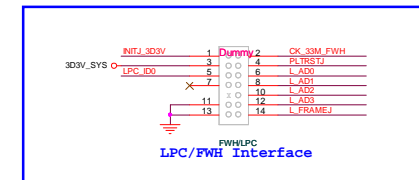
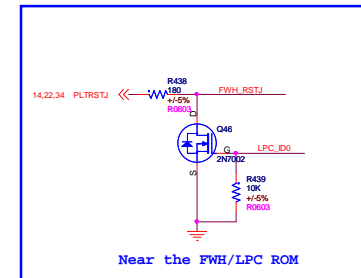
FAB.B
WINBOND W39V040BPZ?



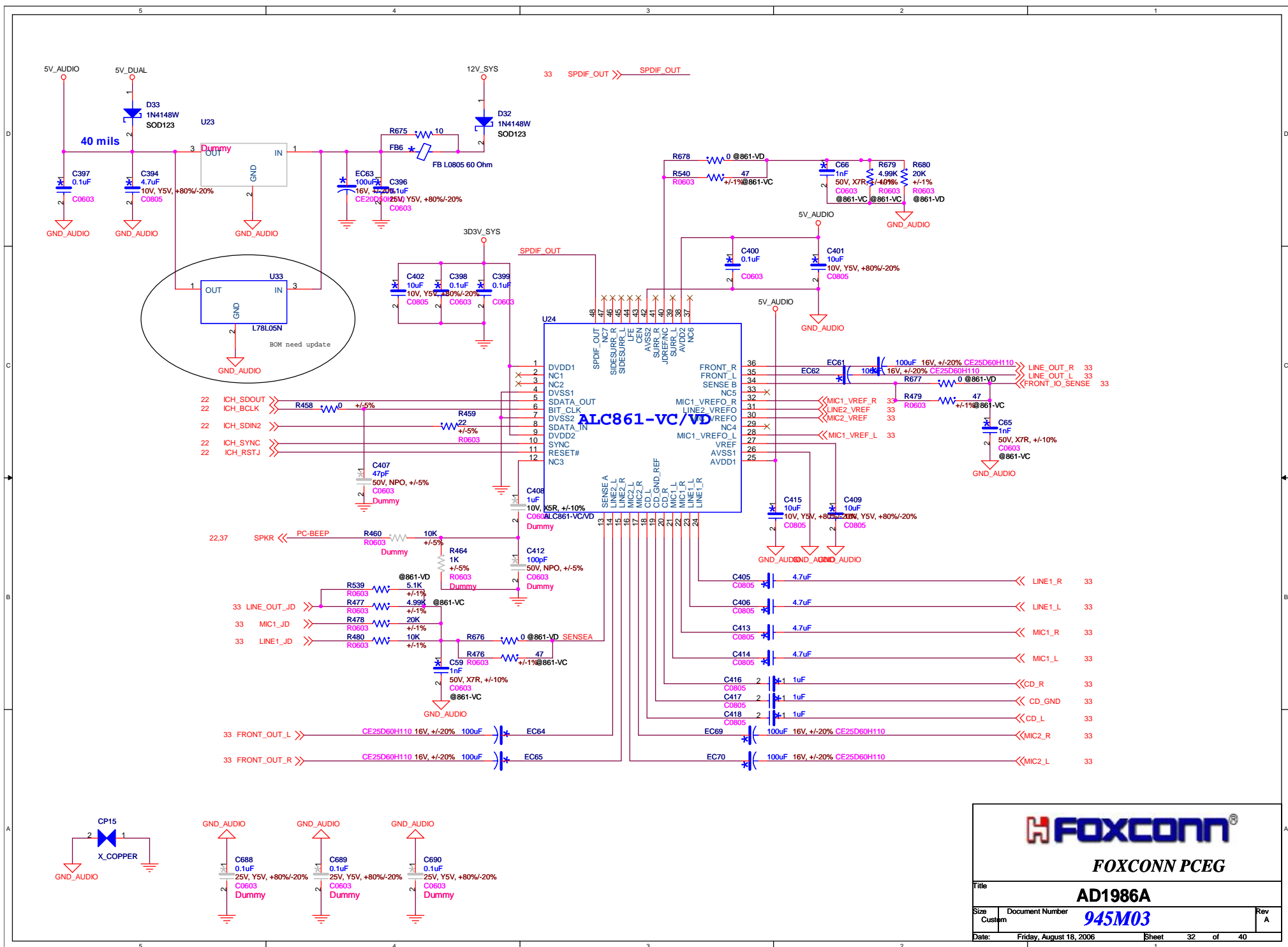
If need TBL jumper reserved?



ON BOARD HEADER



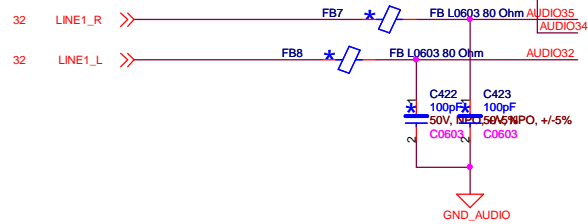
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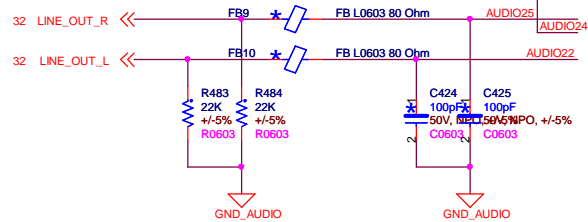
FAB.B
BOM AUDIO CON change
from JA33331-H21P-4F-G to JA33331-HA1P-4F-G

apply CIS

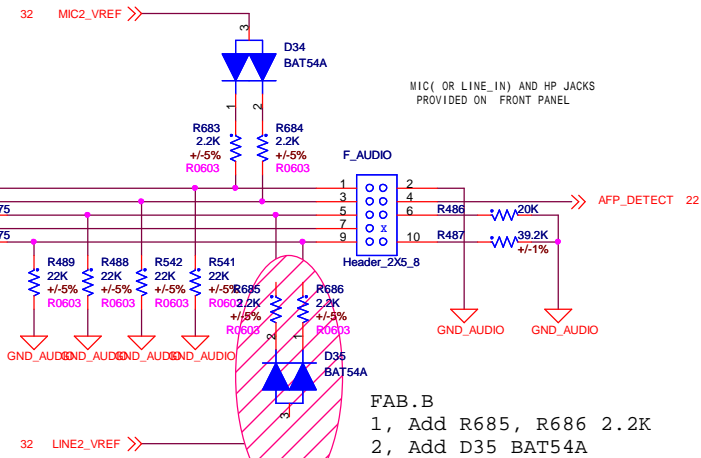
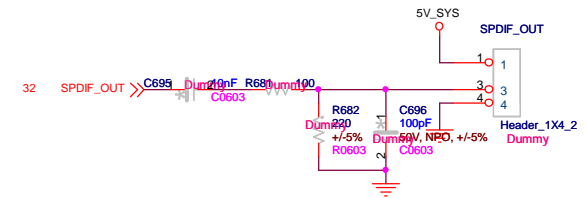
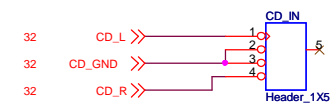
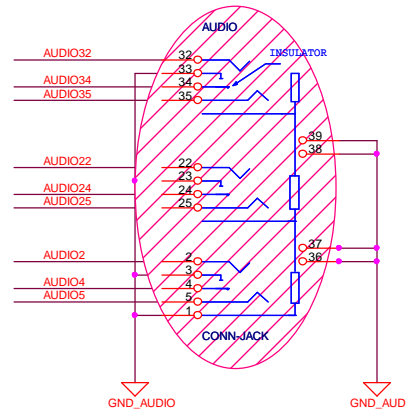
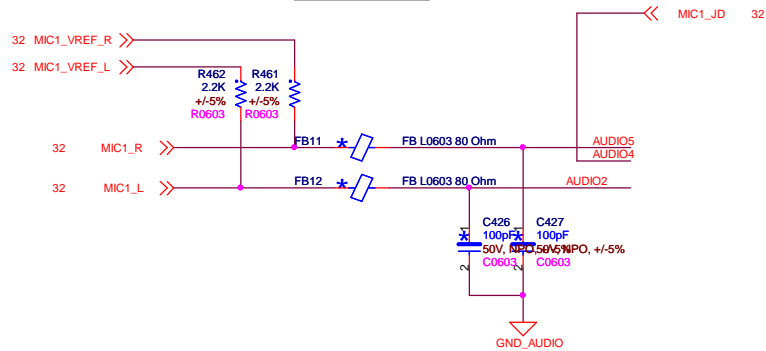
LINE IN
(SURR_OUT)
UP



LINE OUT
MIDDLE



MIC IN
(CEN/LFE)
BOTTOM

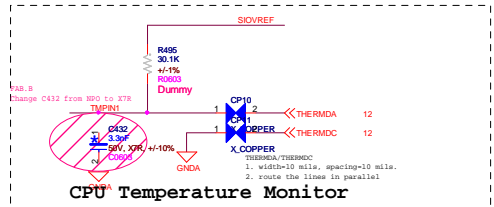
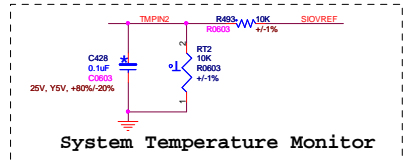


FAB.B
1, Add R685, R686 2.2K
2, Add D35 BAT54A

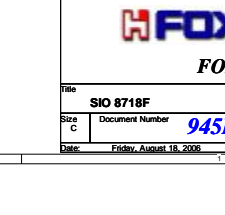
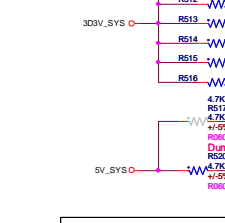
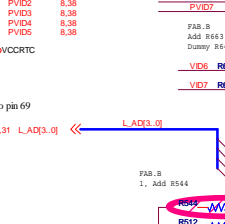
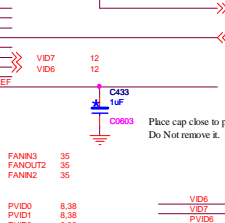
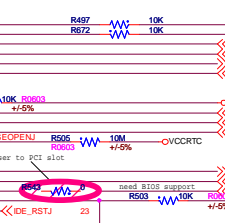
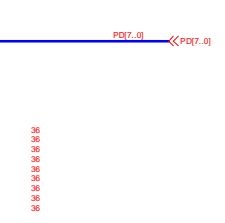
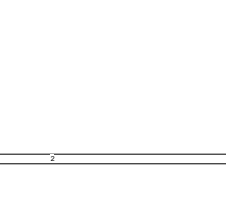
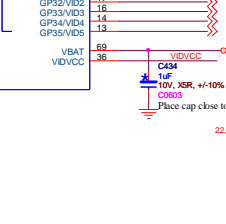
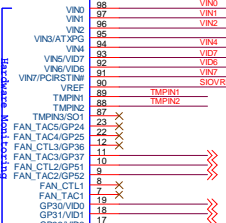
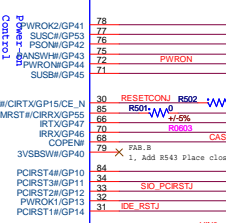
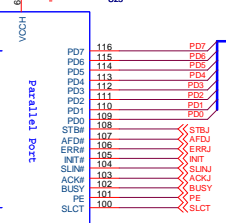
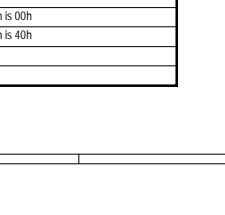
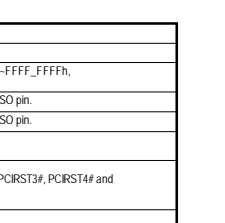
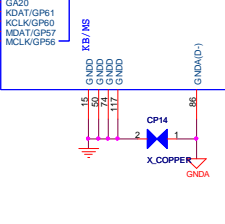
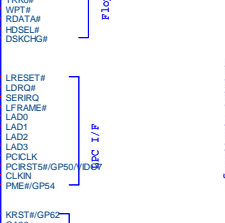
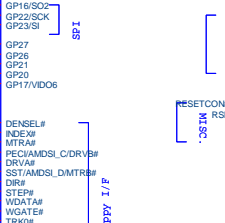
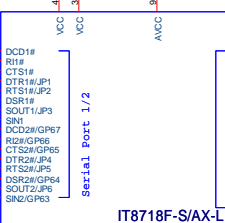
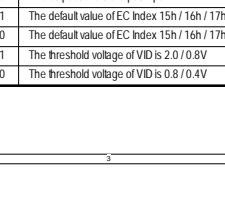
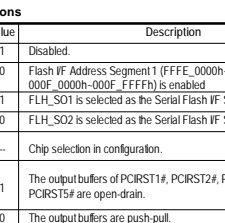
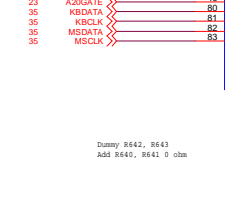
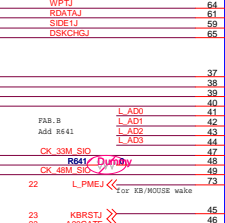
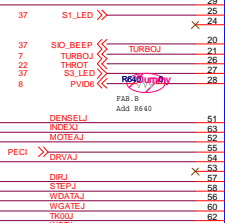
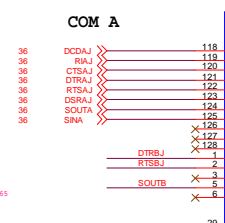
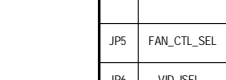
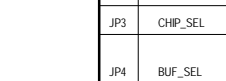
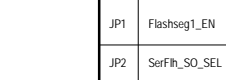
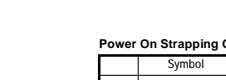
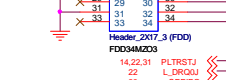
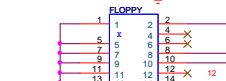
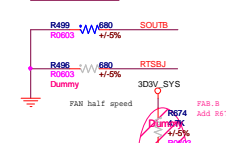
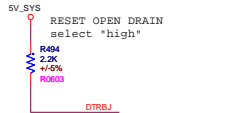
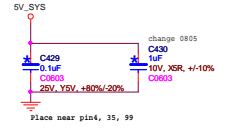
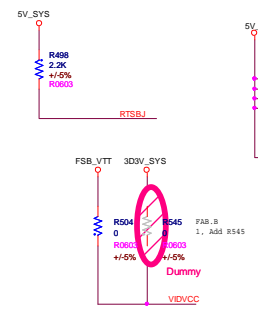
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Title			
AUDIO			
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Update by ITE Gary 0202



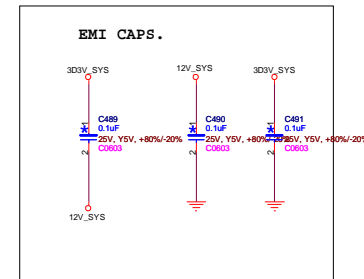
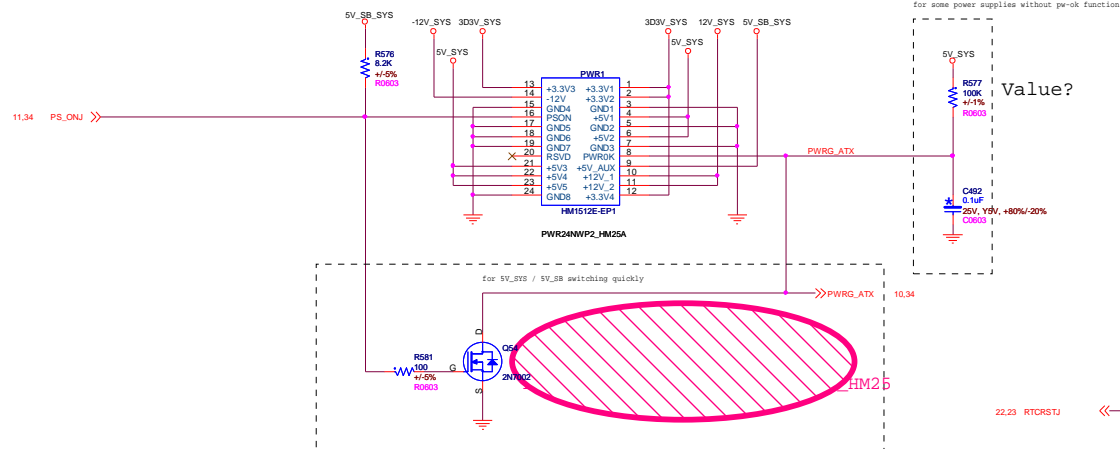
Symbol	value	Description
JP1	Flashseg1_EN	0 Disabled.
JP2	SerFlh_SO_SEL	0 Flash IF Address Segment 1 (FFFF_0000h-FFFF_FFFFh, 000F_0000h-000F_FFFFh) is enabled.
JP3	CHIP_SEL	-- Chip selection in configuration.
JP4	BUF_SEL	1 The output buffers of PCIRST1#, PCIRST2#, PCIRST3#, PCIRST4# and PCIRST5# are open-drain.
JP5	FAN_CTL_SEL	0 The output buffers are push-pull.
JP6	VID_ISEL	1 The default value of EC Index 15h / 16h / 17h is 00h.
		0 The default value of EC Index 15h / 16h / 17h is 40h.
		1 The threshold voltage of VID is 2.0 / 0.8V.
		0 The threshold voltage of VID is 0.8 / 0.4V.

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File: **SIO 8718F**

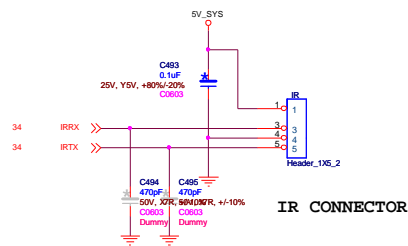
Size: **C** Document Number: **945M03** Rev: **A**

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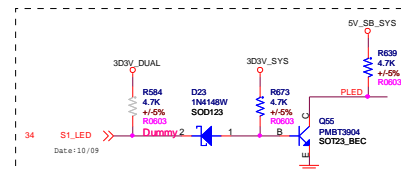


JP6	CMOS
Clear	(1-2)
Normal	(2-3) Default

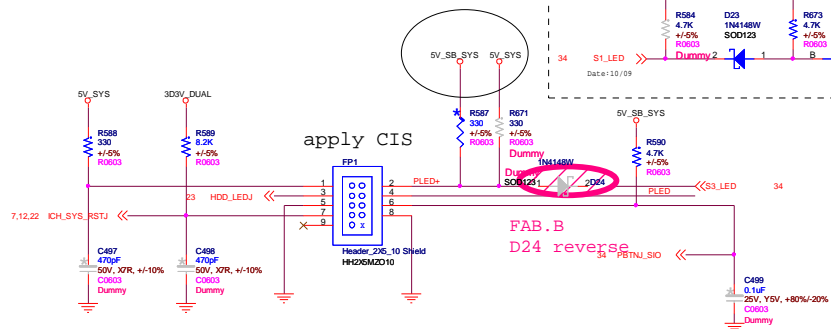
CLR_CMOS(2-3)
Jumper_2P-Blue
NA



IR CONNECTOR



S1_LED



Front Panel Switch/LED

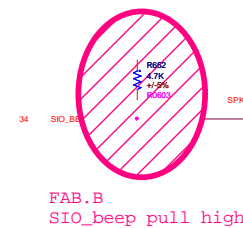
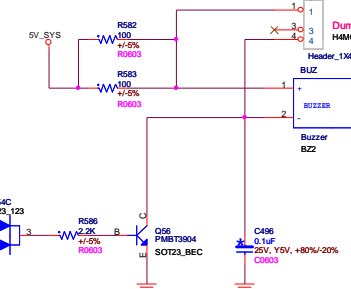
RD_LED+	1	2	Power
RD_LED-	3	4	Power LED(Green)
QND	5	6	Power button
Reset button	7	8	QND
NC	9	10	Key

S0: steady light
S1: blinking
S3-S9: off

22.23 RTCSTJ
prevent clearing CMOS when power-on

Chassis Intruder

SPEAKER HEADER



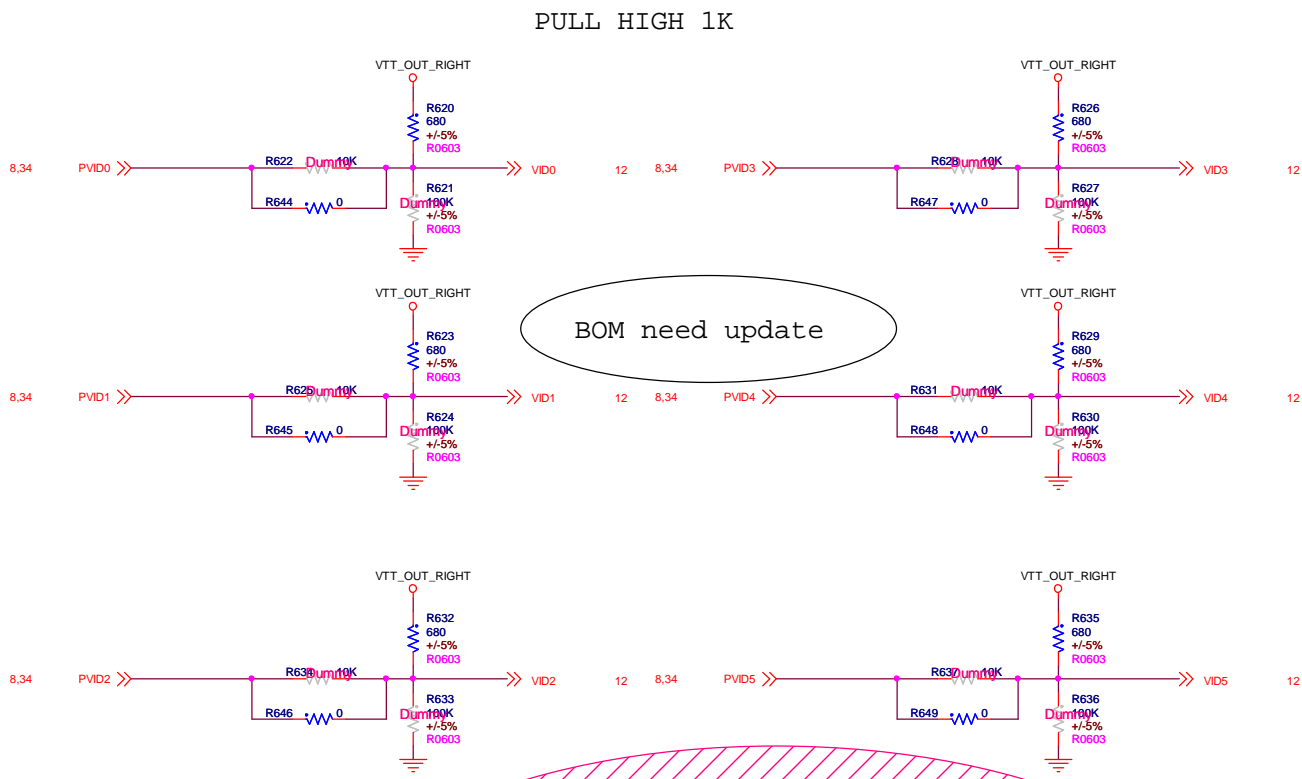
FAB.B
SIO_beep pull high

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Title: **Power / MISC Connector**


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7, Add R65 1K, R74 4.7K
8, Add Q65 PMBT3904

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Title VID CONTROLLER		
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ICH7 GPIO Summary

Name	Power Well	Type	Description
GPIO0	Vcc3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO1	V5REF	I/O	REQ_5#
GPIO2	V5REF	I/OD	PIRQE#
GPIO3	V5REF	I/OD	PIRQF#
GPIO4	V5REF	I/OD	PIRQG#
GPIO5	V5REF	I/OD	PIRQH#
GPIO6	Vcc3_3	I/O	THROT
GPIO7	Vcc3_3	I/O	FWH_WPJ
GPIO8	VccSus3_3	I/O	LPC_PME#
GPIO9	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO10	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO11	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO12	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO13	VccSus3_3	I/O	Wake On LAN
GPIO14	VccSus3_3	I/O	AFF_DETECT
GPIO15	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO16	Vcc3_3	I/O	(Unused)
GPIO17	Vcc3_3	I/O	GNT_5#
GPIO18	Vcc3_3	I/O	(Unused)
GPIO19	Vcc3_3	I/O	SATA_1GP
GPIO20	Vcc3_3	I/O	(Unused)
GPIO21	Vcc3_3	I/O	SATA_0GP
GPIO22	Vcc3_3	I/O	REQ_4#
GPIO23	Vcc3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO24	VccSus3_3	I/O	(Unused)
GPIO25	VccSus3_3	I/O	(Unused)
GPIO26	VccSus3_3	I/O	DDR_VOL_1.9V
GPIO27	VccSus3_3	I/O	SYS_VOL_1.6V
GPIO28	VccSus3_3	I/O	SYS_VOL_1.7V
GPIO29	VccSus3_3	I/O	USB_OC5#
GPIO30	VccSus3_3	I/O	USB_OC6#
GPIO31	VccSus3_3	I/O	USB_OC7#
GPIO32	Vcc3_3	I/O	(Unused)
GPIO33	Vcc3_3	I/O	IDE1 Cable Detection(33 or 66/100)
GPIO34	Vcc3_3	I/O	(Unused)
GPIO35	Vcc3_3	I/O	(Unused)
GPIO36	Vcc3_3	I/O	SATA_2GP
GPIO37	Vcc3_3	I/O	SATA_3GP
GPIO38	Vcc3_3	I/O	FWH_TBLJ
GPIO39	VccSus3_3	I/O	Pull-up through 10K resistor(Unused)
GPIO40	N/A	N/A	Not Implemented
GPIO41	N/A	N/A	Not Implemented
GPIO42	N/A	N/A	Not Implemented
GPIO43	N/A	N/A	Not Implemented
GPIO44	N/A	N/A	Not Implemented
GPIO45	N/A	N/A	Not Implemented
GPIO46	N/A	N/A	Not Implemented
GPIO47	N/A	N/A	Not Implemented
GPIO48	Vcc3_3	I/O	GNT_4#
GPIO49	V_CPU_IO	I/O	CPU_PWRGD

Super I/O GPIO Summary

Name	Power Plane	Type	Description
GPIO27	SUS	I/O	BEEP
GPIO26	SUS	I/O	TURBOJ
GPIO21	SUS	I/O	THROT
GPIO20	SUS	I/O	S3_LED
GPIO22	SUS	I/O	S1_LED
GPIO16	MAIN	I/O	VID_SELECT
		I/O	
		I/O	
		I/O	

FWH GPIO Summary

Name	Power Plane	Type	Description
FGPIO	Main	I	BOARD_ID0
FGPI1	Main	I	BOARD_ID1
FGPI2	Main	I	BOARD_ID2
FGPI3	Main	I	BOARD_ID3
FGPI4	Main	I	BOARD_ID4

PCI Routing Summary

	PCI1	PCI2	LAN	
INTAJ	D		C	A
INTBJ	A		D	
INTCJ	B		A	
INTDJ	C		B	
INTEJ		C		
INTFJ		B		
INTGJ		A		
INTHJ		D		
REG#/GNT#	2	1	0	3
IDSEL	18	17	21	19



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New Card Header and Riser Card		
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- 1, Dummy R148
- 2, CPU PIN.AL3 floating
- 3, Dummy R213, R215
- 4, VGA on 945G@945GZ
Dummy C249, C254, C259
Change L19, L21, L23 to Res 0 Ohm
Change C252, C255, C260 to 10pF
Change L20, L22, L24 to inductor 47nH
Del R301 Add R302
- 5, Add R104, R109 4.7K
- 6, Dummy R592
- 7, Change R369 from 5.6K to 2.49K on RTL8110SC
- 8, for AUDIO on all sku
Add R685, R686 2.2K
Add D35 BAT54A
AUDIO CON change from JA33331-H21P-4F-G to JA33331-HA1P-4F-G
- 9, Change C432 from NPO to X7R for material issue on all SKU
- 10, For PCIRSTJ
Add R689 Dummy.
Add R543 0 ohm, R544 4.7K
- 11, FAB.B for VID adjust on all SKU
Add R621, R627, R624, R630, R633, R636 100K
Change R644, R645, R646, R647, R648, R649 to 1K
Add R663, R664 680 ohm
Dummy R642, R643
Add R640, R641 0 ohm
Add R545 0 ohm
Add R65 1K, R74 4.7K
Add Q65 PMBT3904
- 12, Reverse CPU_FAN con
- 13, change POW CON(PWR1) PCB footprint from pwr24nwhl28 to PWR24NWP2_HM25
- 14, Add R652 4.7K ohm
- 15, Reverse D24
- 16, CPU power
- 17, 1D5V power sequence
- 18, Add R140 1K ohm
- 19, Change EC37 PCB FOOTPRINT TO CE35_50D100H300
- 20, Add R112, Dummy R96, R97



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Title			
Modify List			
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