

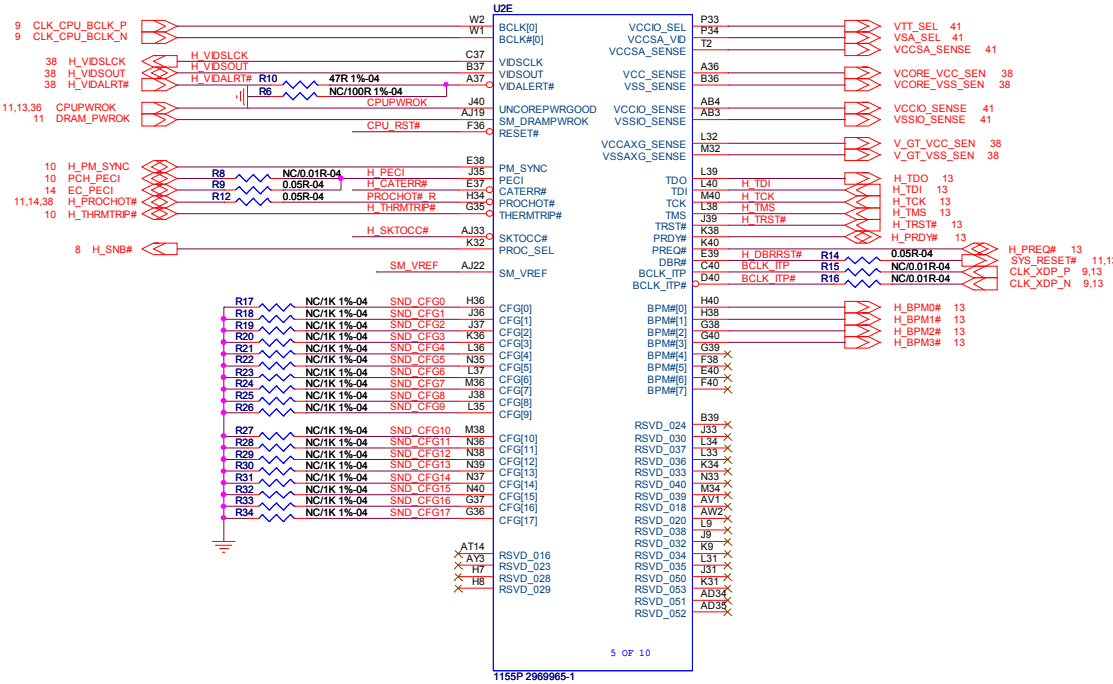
Lenovo B320 Schematics

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H2_E

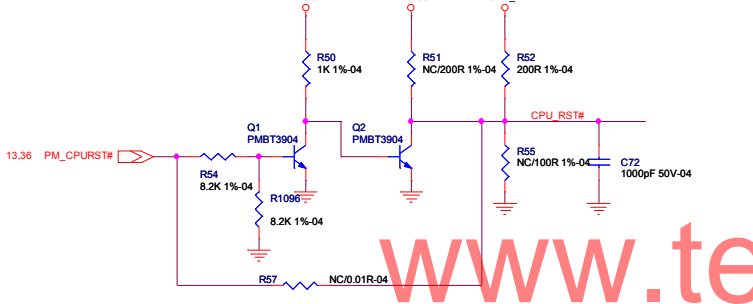


CFG	B	I	RSVD	NOTE
0	RSVD	RSVD	RSVD	
1	RSVD	RSVD	RSVD	
2	NC0R	Reverse	LANE REVERSAL[0],x16	
3	RSVD	RSVD	RSVD	
4	RSVD	RSVD	RSVD	
7	RSVD	RSVD	RSVD	
8	RSVD	RSVD	RSVD	
9	RSVD	RSVD	RSVD	
10	RSVD	RSVD	RSVD	
11	RSVD	RSVD	RSVD	
12	RSVD	RSVD	RSVD	
13	RSVD	RSVD	RSVD	
14	RSVD	RSVD	RSVD	
15	RSVD	RSVD	RSVD	
16	RSVD	RSVD	RSVD	
17	RSVD	RSVD	RSVD	

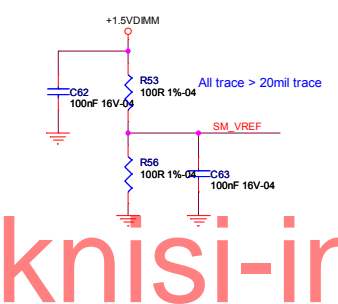
CFG6	CFG5	PCIE CONFIG
1	1	1x16, Default
1	0	2x8
0	1	RSVD
0	0	X8,X4,X4

CFG 0-17 all internal PULL-UP

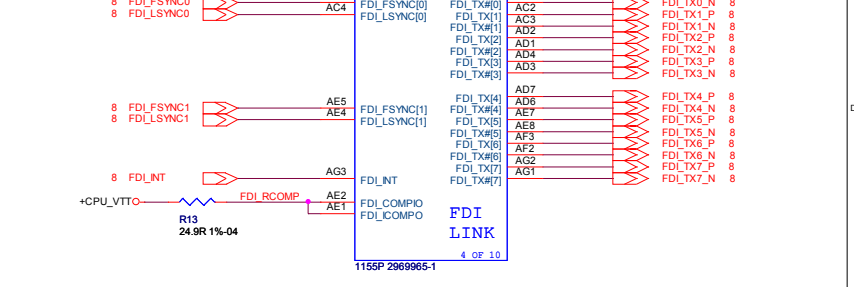
CPU_RST#



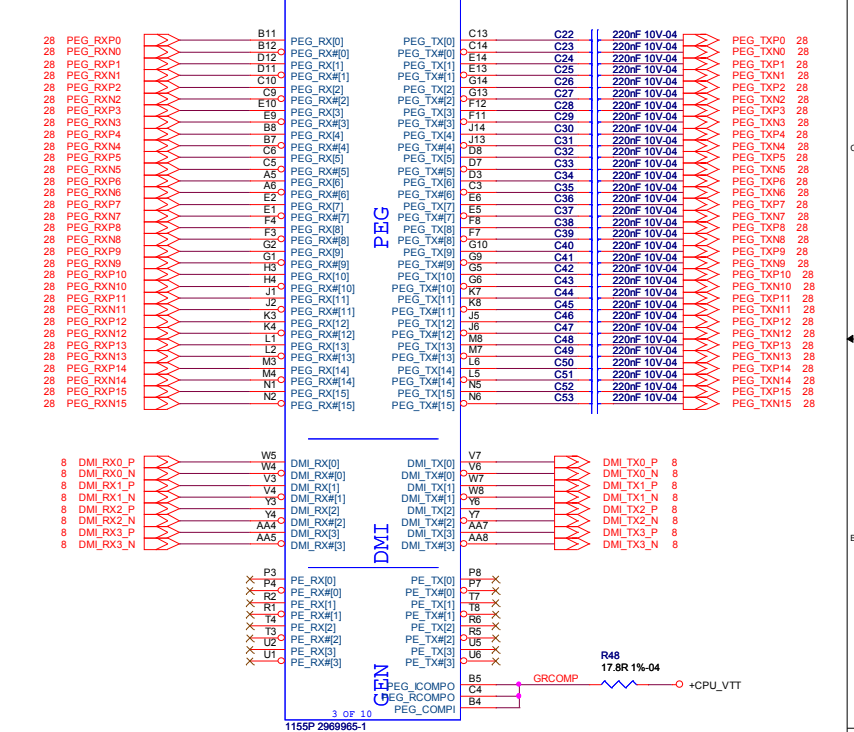
SM_VREF



FDI

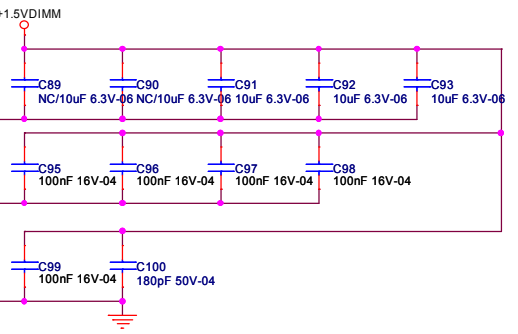
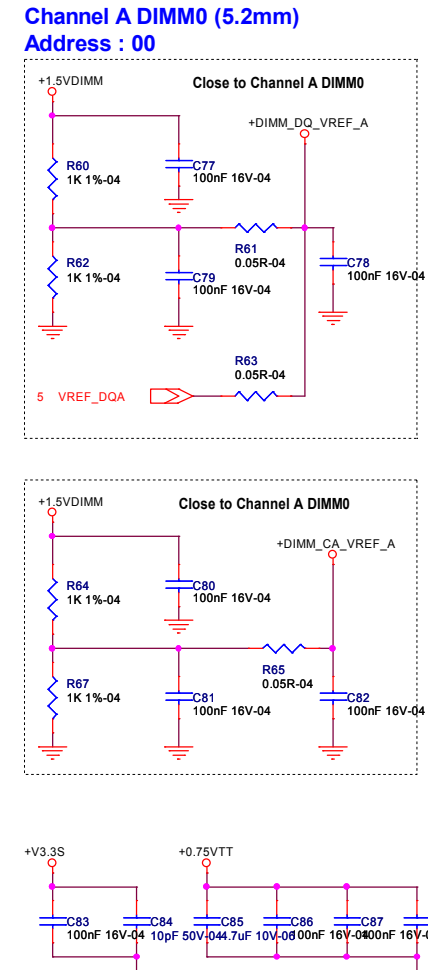
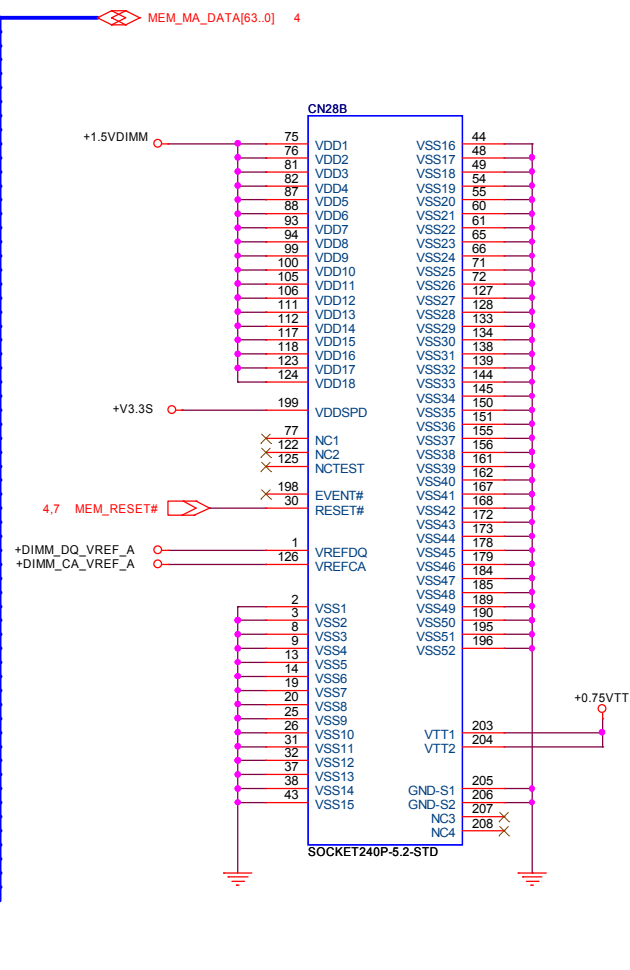
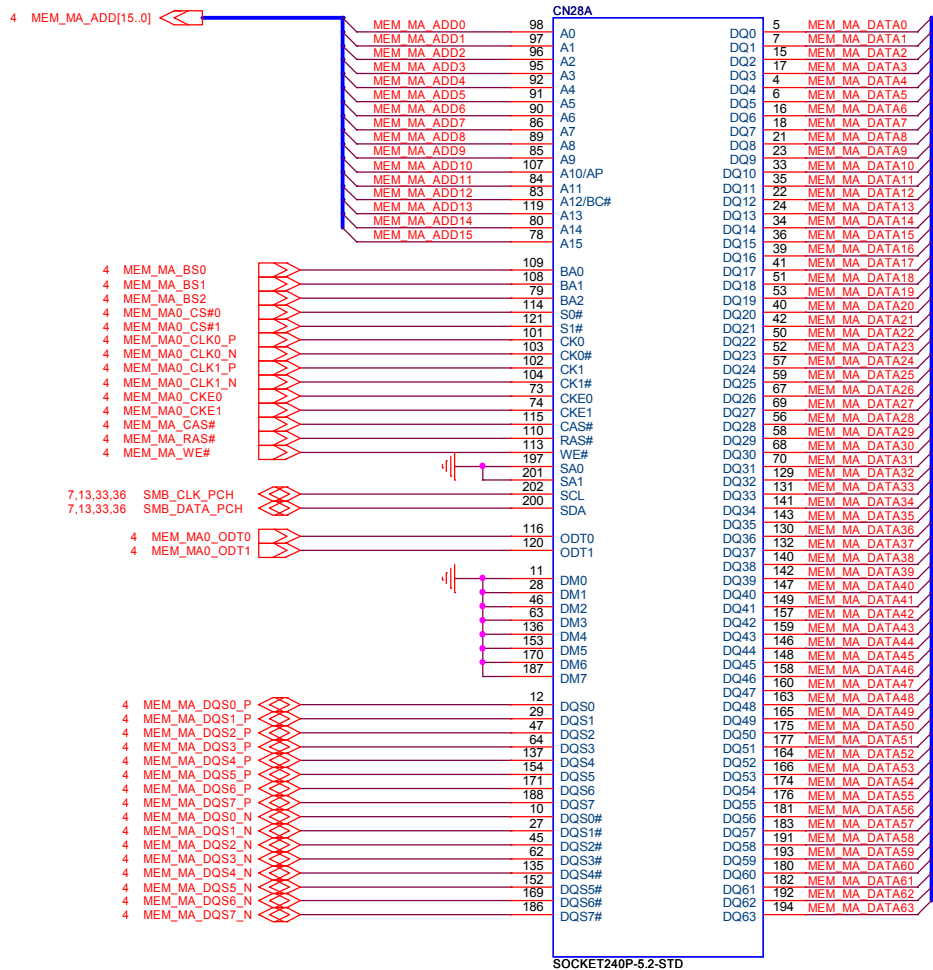


PCIE x 16 / DMI



- (1) SHORT B4 & C4 TOGETHER, ROUTE AS A SINGLE 4 MIL TRACE TO 24.9 OHM
- (2) ROUTE B5 TO 24.9 OHM AS A SEPERATE 10 MIL TRACE





T & I	OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	T&I MODEL	B320	Rev	0.3
Key Component	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	6 of 57	1

4 MEM_MB_ADD[15:0]

MEM_MB_ADD0 98
MEM_MB_ADD1 97
MEM_MB_ADD2 96
MEM_MB_ADD3 95
MEM_MB_ADD4 92
MEM_MB_ADD5 91
MEM_MB_ADD6 90
MEM_MB_ADD7 86
MEM_MB_ADD8 89
MEM_MB_ADD9 85
MEM_MB_ADD10 107
MEM_MB_ADD11 84
MEM_MB_ADD12 83
MEM_MB_ADD13 119
MEM_MB_ADD14 80
MEM_MB_ADD15 78

4 MEM_MB_BS0
4 MEM_MB_BS1
4 MEM_MB_BS2
4 MEM_MB0_CS#
4 MEM_MB0_CS#1
4 MEM_MB0_CLK0_P
4 MEM_MB0_CLK0_N
4 MEM_MB0_CLK1_P
4 MEM_MB0_CLK1_N
4 MEM_MB0_CKE0
4 MEM_MB0_CKE1
4 MEM_MB_CAS#
4 MEM_MB_RAS#
4 MEM_MB_WE#

6,13,33,36 SMB_CLK_PCH
6,13,33,36 SMB_DATA_PCH

4 MEM_MB0_ODT0
4 MEM_MB0_ODT1

4 MEM_MB_DQS0_P
4 MEM_MB_DQS1_P
4 MEM_MB_DQS2_P
4 MEM_MB_DQS3_P
4 MEM_MB_DQS4_P
4 MEM_MB_DQS5_P
4 MEM_MB_DQS6_P
4 MEM_MB_DQS7_P
4 MEM_MB_DQS0_N
4 MEM_MB_DQS1_N
4 MEM_MB_DQS2_N
4 MEM_MB_DQS3_N
4 MEM_MB_DQS4_N
4 MEM_MB_DQS5_N
4 MEM_MB_DQS6_N
4 MEM_MB_DQS7_N

CN3A

DQ0 5 MEM_MB_DATA0
DQ1 7 MEM_MB_DATA1
DQ2 15 MEM_MB_DATA2
DQ3 17 MEM_MB_DATA3
DQ4 4 MEM_MB_DATA4
DQ5 6 MEM_MB_DATA5
DQ6 16 MEM_MB_DATA6
DQ7 18 MEM_MB_DATA7
DQ8 21 MEM_MB_DATA8
DQ9 23 MEM_MB_DATA9
DQ10 33 MEM_MB_DATA10
DQ11 35 MEM_MB_DATA11
DQ12 22 MEM_MB_DATA12
DQ13 24 MEM_MB_DATA13
DQ14 34 MEM_MB_DATA14
DQ15 36 MEM_MB_DATA15
DQ16 39 MEM_MB_DATA16
DQ17 41 MEM_MB_DATA17
DQ18 51 MEM_MB_DATA18
DQ19 40 MEM_MB_DATA20
DQ20 42 MEM_MB_DATA21
DQ21 50 MEM_MB_DATA22
DQ22 52 MEM_MB_DATA23
DQ23 57 MEM_MB_DATA24
DQ24 59 MEM_MB_DATA25
DQ25 67 MEM_MB_DATA26
DQ26 69 MEM_MB_DATA27
DQ27 56 MEM_MB_DATA28
DQ28 58 MEM_MB_DATA29
DQ29 68 MEM_MB_DATA30
DQ30 70 MEM_MB_DATA31
DQ31 129 MEM_MB_DATA32
DQ32 131 MEM_MB_DATA33
DQ33 141 MEM_MB_DATA34
DQ34 143 MEM_MB_DATA35
DQ35 130 MEM_MB_DATA36
DQ36 132 MEM_MB_DATA37
DQ37 140 MEM_MB_DATA38
DQ38 142 MEM_MB_DATA39
DQ39 147 MEM_MB_DATA40
DQ40 149 MEM_MB_DATA41
DQ41 157 MEM_MB_DATA42
DQ42 159 MEM_MB_DATA43
DQ43 146 MEM_MB_DATA44
DQ44 148 MEM_MB_DATA45
DQ45 158 MEM_MB_DATA46
DQ46 160 MEM_MB_DATA47
DQ47 163 MEM_MB_DATA48
DQ48 165 MEM_MB_DATA49
DQ49 175 MEM_MB_DATA50
DQ50 177 MEM_MB_DATA51
DQ51 164 MEM_MB_DATA52
DQ52 166 MEM_MB_DATA53
DQ53 174 MEM_MB_DATA54
DQ54 176 MEM_MB_DATA55
DQ55 181 MEM_MB_DATA56
DQ56 183 MEM_MB_DATA57
DQ57 191 MEM_MB_DATA58
DQ58 193 MEM_MB_DATA59
DQ59 180 MEM_MB_DATA60
DQ60 182 MEM_MB_DATA61
DQ61 192 MEM_MB_DATA62
DQ62 194 MEM_MB_DATA63
DQ63

SOCKET240P-9.2-STD

+1.5VDIMM

+V3.3S

4,6 MEM_RESET#

+DIMM_DQ_VREF_B
+DIMM_CA_VREF_B

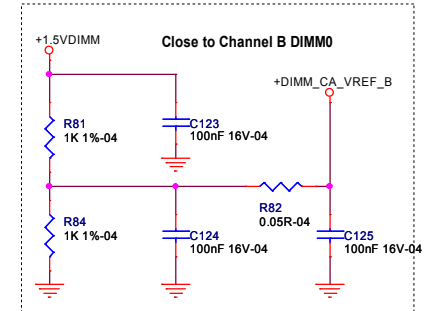
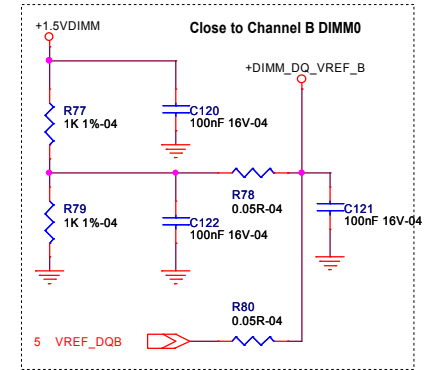
MEM_MB_DATA[63:0]

CN3B

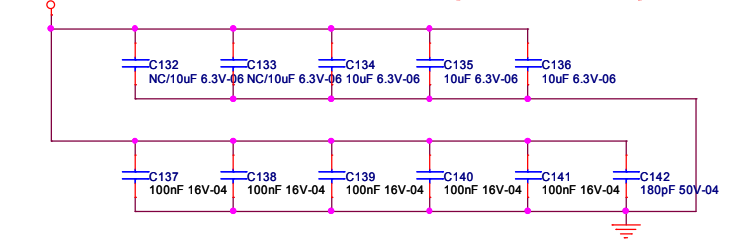
VDD1 75
VDD2 76
VDD3 81
VDD4 82
VDD5 87
VDD6 88
VDD7 93
VDD8 94
VDD9 99
VDD10 100
VDD11 105
VDD12 106
VDD13 111
VDD14 112
VDD15 117
VDD16 118
VDD17 123
VDD18 124
VDDSPD 199
VREFDQ 1
VREFCA 126
VSS1 2
VSS2 3
VSS3 8
VSS4 9
VSS5 13
VSS6 14
VSS7 19
VSS8 20
VSS9 25
VSS10 26
VSS11 31
VSS12 32
VSS13 37
VSS14 38
VSS15 43
VSS16 44
VSS17 48
VSS18 49
VSS19 54
VSS20 55
VSS21 60
VSS22 61
VSS23 65
VSS24 66
VSS25 71
VSS26 72
VSS27 127
VSS28 128
VSS29 133
VSS30 134
VSS31 138
VSS32 144
VSS33 145
VSS34 150
VSS35 151
VSS36 155
VSS37 156
VSS38 161
VSS39 162
VSS40 167
VSS41 168
VSS42 172
VSS43 173
VSS44 178
VSS45 179
VSS46 184
VSS47 185
VSS48 189
VSS49 190
VSS50 195
VSS51 196
VSS52 196
VTT1 203
VTT2 204
GND-S1 205
GND-S2 206
NC3 207
NC4 208

SOCKET240P-9.2-STD

Channel B DIMM0 (5.2mm)
Address : 10

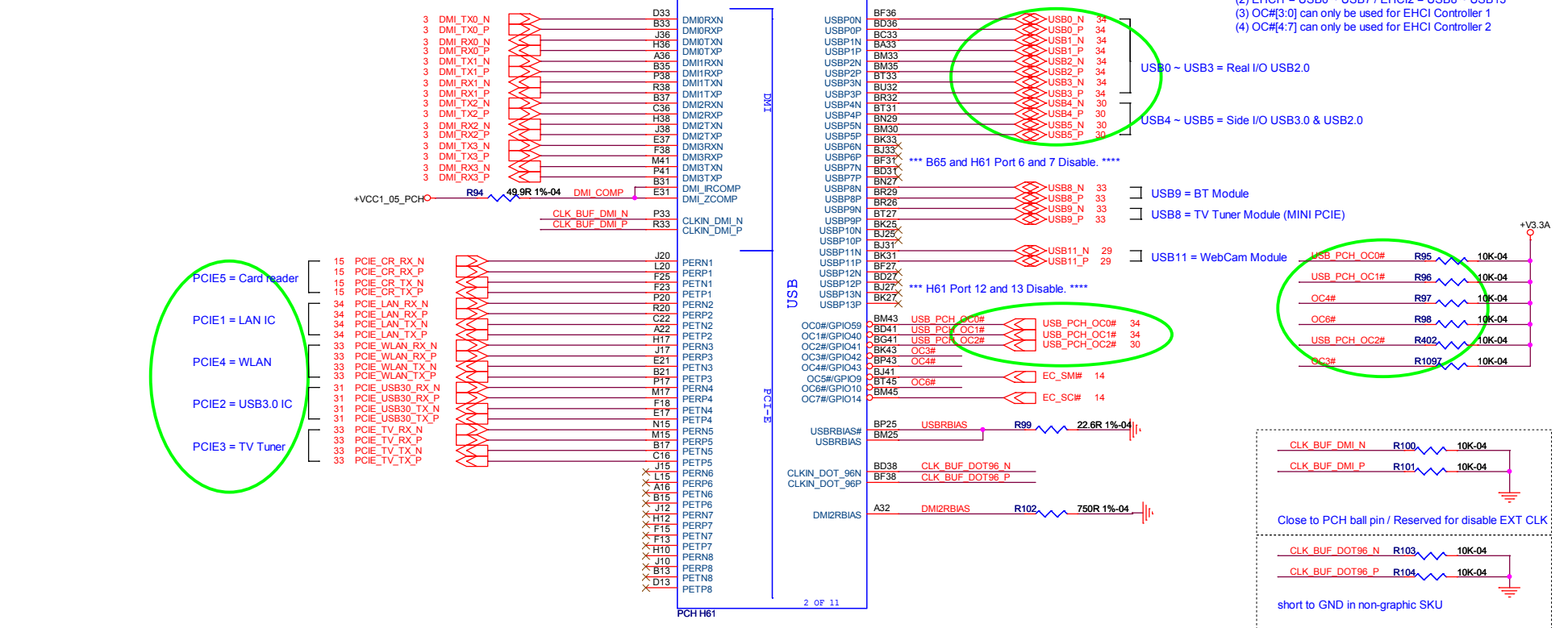


+1.5VDIMM

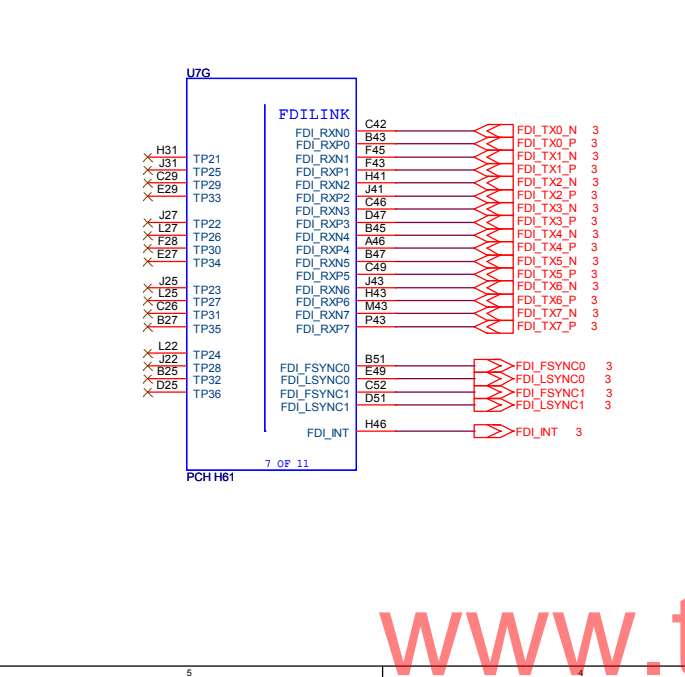


T & I		OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	DDR3 DIMM MB-CH0 5.2mm	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	7 of 57		

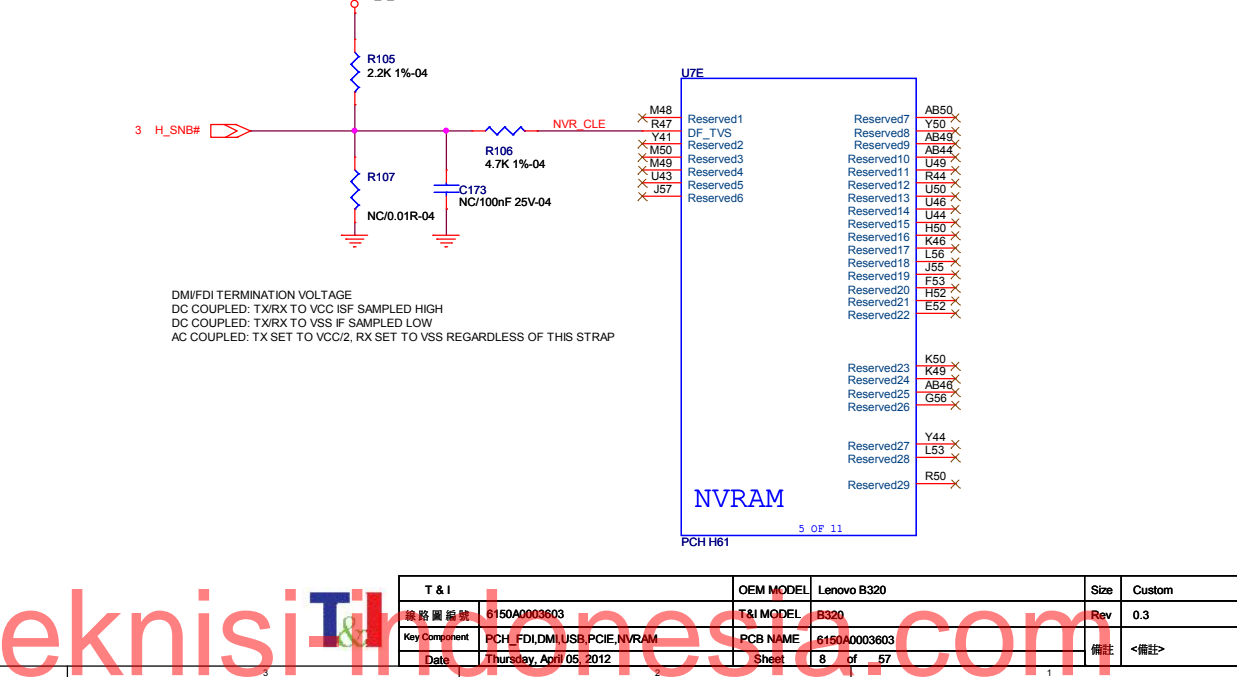
PCH DMI / PCIE / USB



PCH FDI

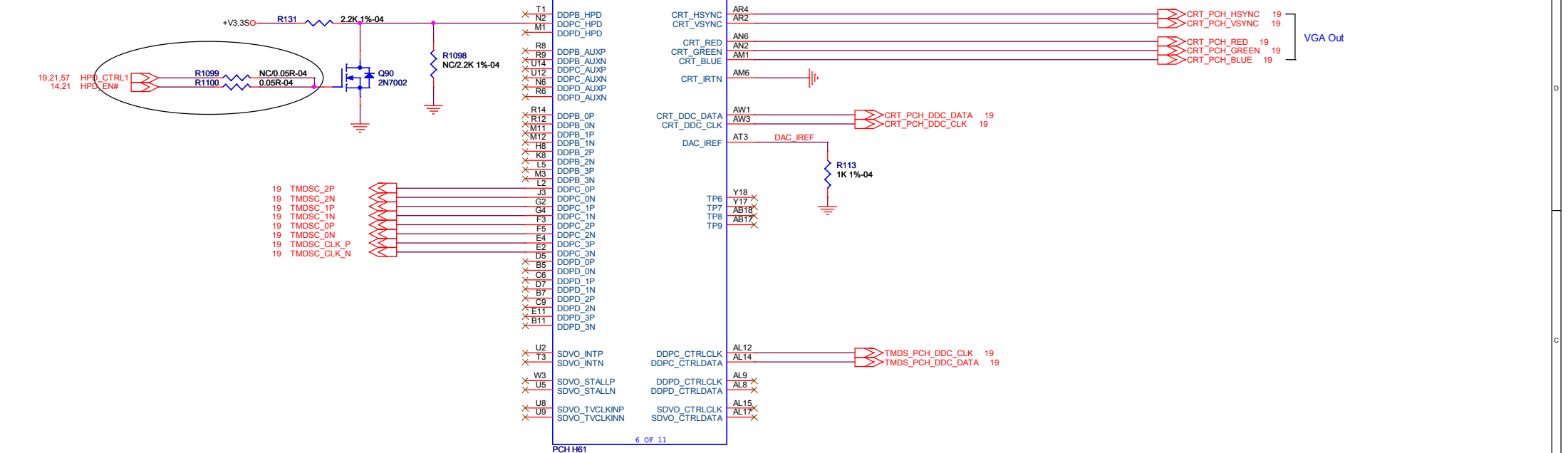


PCH ONFI

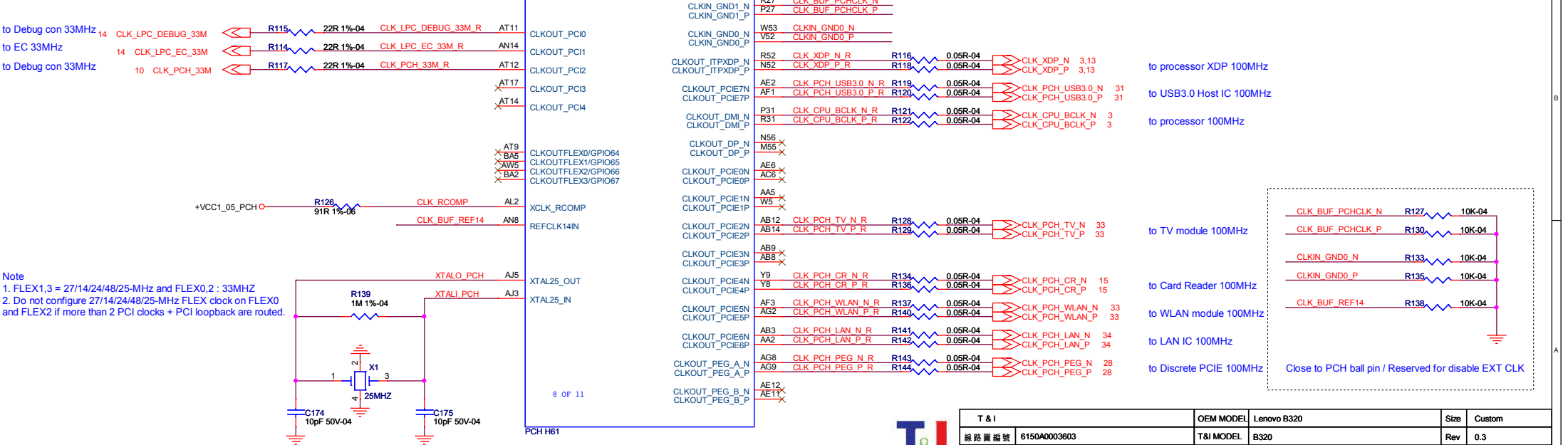


T & I	OEM MODEL	Lenovo B320	Size	Custom
繪圖編號	T&I MODEL	B320	Rev	0.3
Key Component	PCB NAME	6150A0003603	備註	<備註>
Date	Sheet	8 of 57		

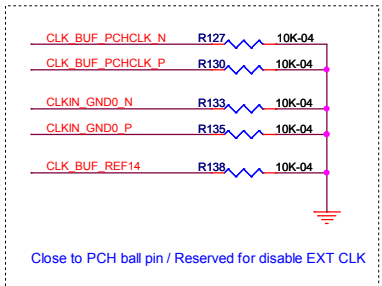
PCH Display



PCH Clock

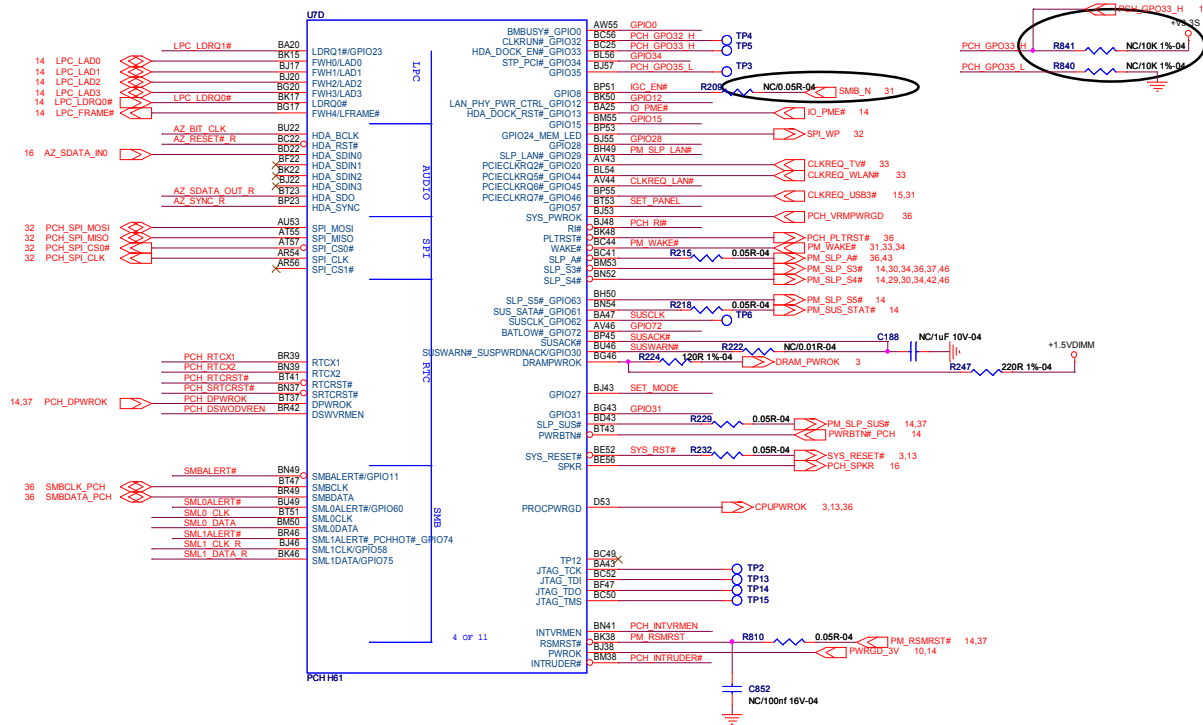
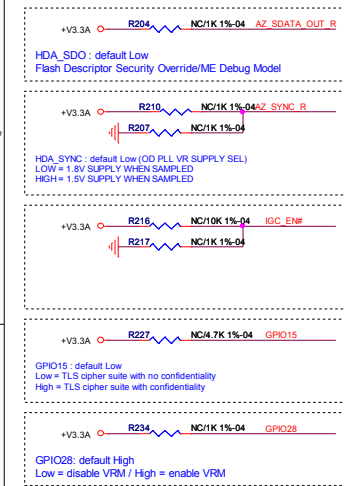


Note
1. FLEX1,3 = 27/14/24/48/25-MHz and FLEX0,2 : 33MHz
2. Do not configure 27/14/24/48/25-MHz FLEX clock on FLEX0 and FLEX2 if more than 2 PCI clocks + PCI loopback are routed.

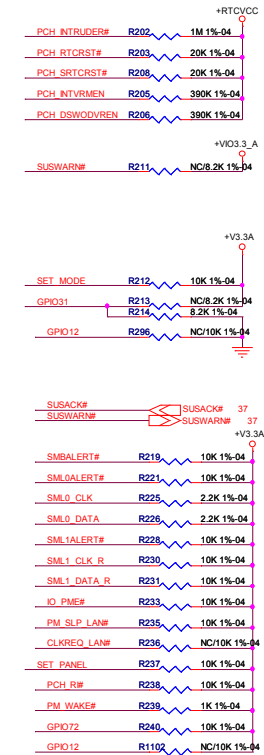


T & I	OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	6150A0003603	T&I MODEL	B320	Rev
Key Component	PCH_DP, CLK BUFFER	PCB NAME	6150A0003603	備註
Date	Thursday, April 05, 2012	Sheet	9 of 57	<備註>

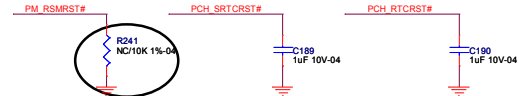
PCH HDA / SPI / LPC / MISC



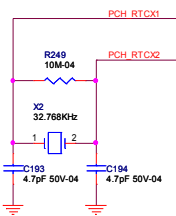
R841 Change Pu-down
to Pu-high



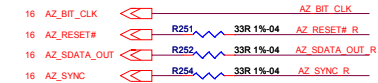
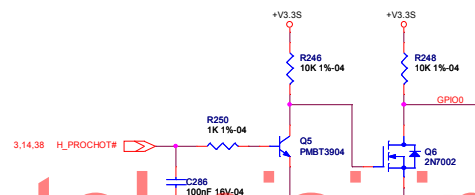
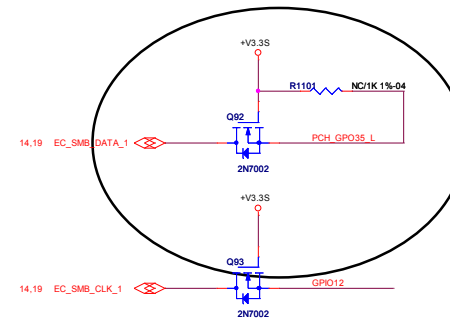
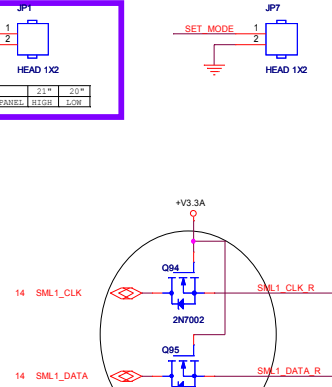
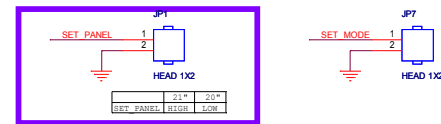
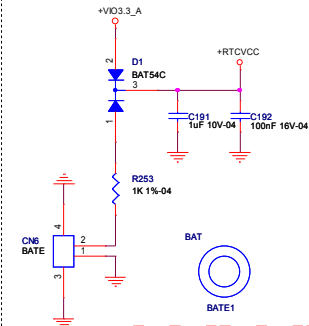
R241 NC Deep Mode



Crystal



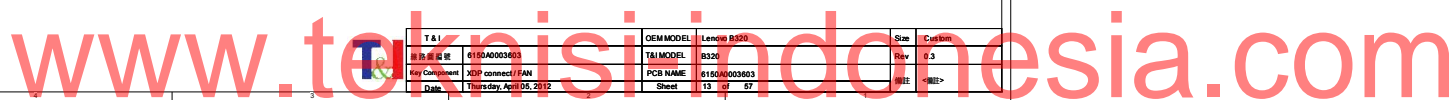
RTC Battery

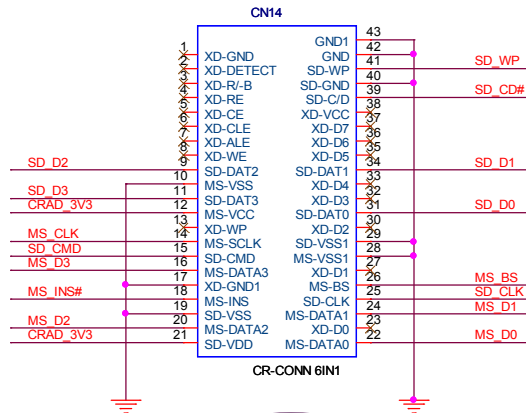


T & I		OEM MODEL		Lefono B320		Size		C	
道路環境機		6150A0003603		T&I MODEL		B320		Rev	
Key Component		PCH GPIO, CTRL., AUDIO		PCB NAME		6150A0003603		0.3	
Date		Thursday, April 05, 2012		Sheet		11 of 57		備註	
								<確認>	



Close to H2 Socket



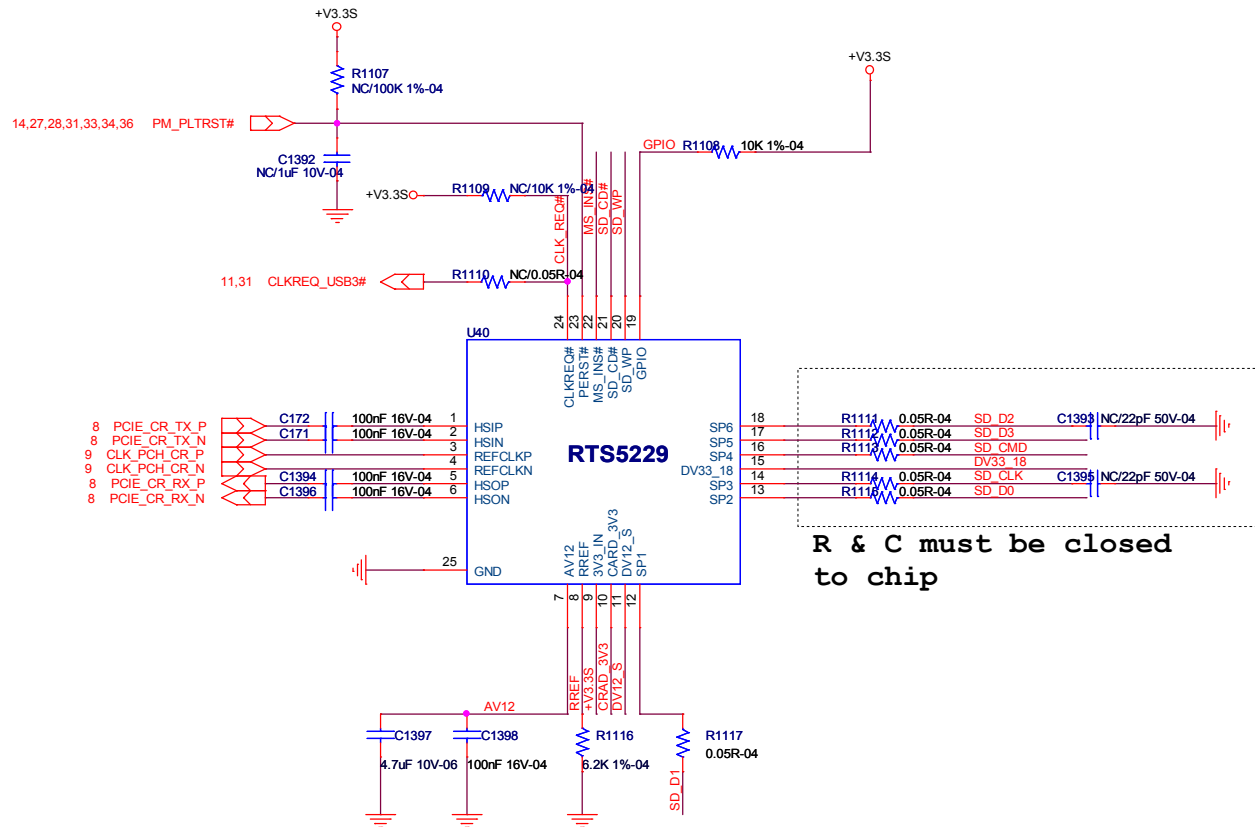
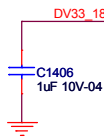
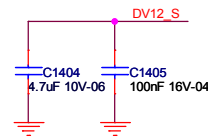
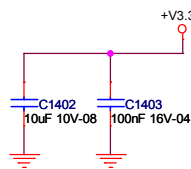
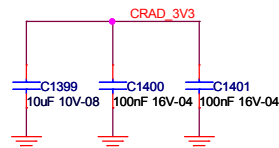


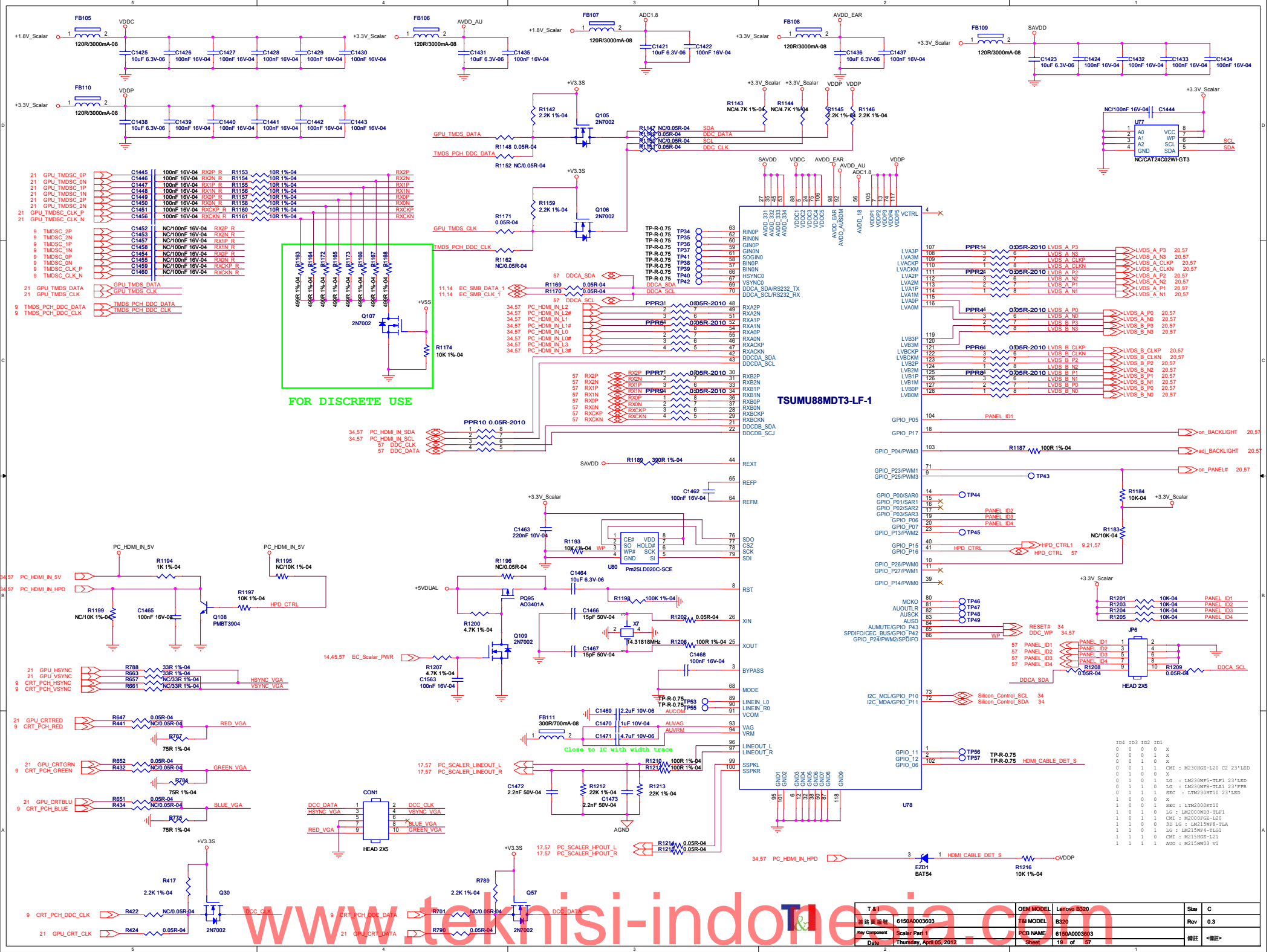
Share Pin

SP1	SD D1	MS D1
SP2	SD D0	MS D0
SP3	SD CLK	MS D0
SP4	SD CMD	MS D2
SP5	SD D3	MS D3
SP6	SD D2	MS CLK
SP7	SD WP	MS BS

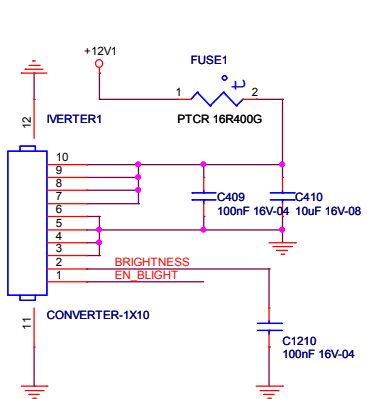
Share Pin

0224 based on vendor's request

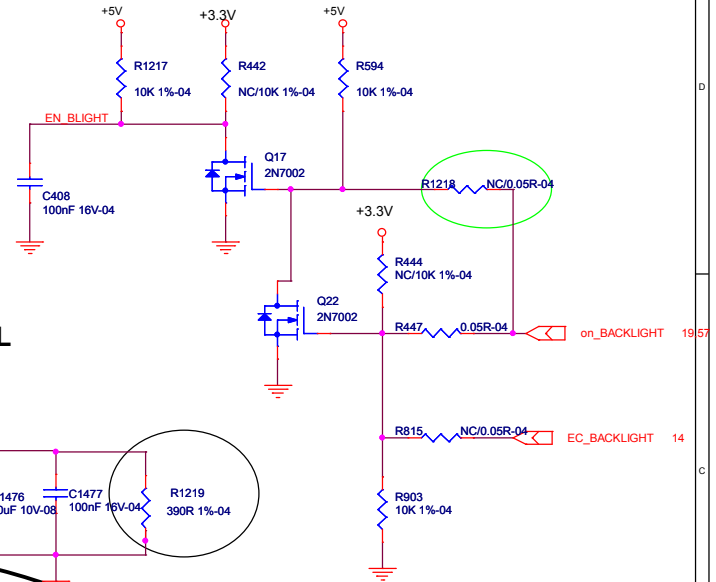




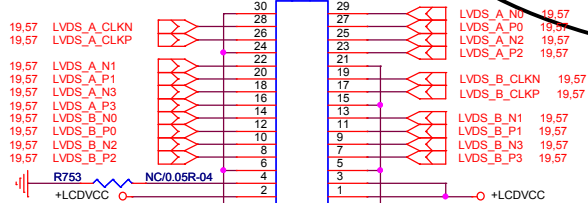
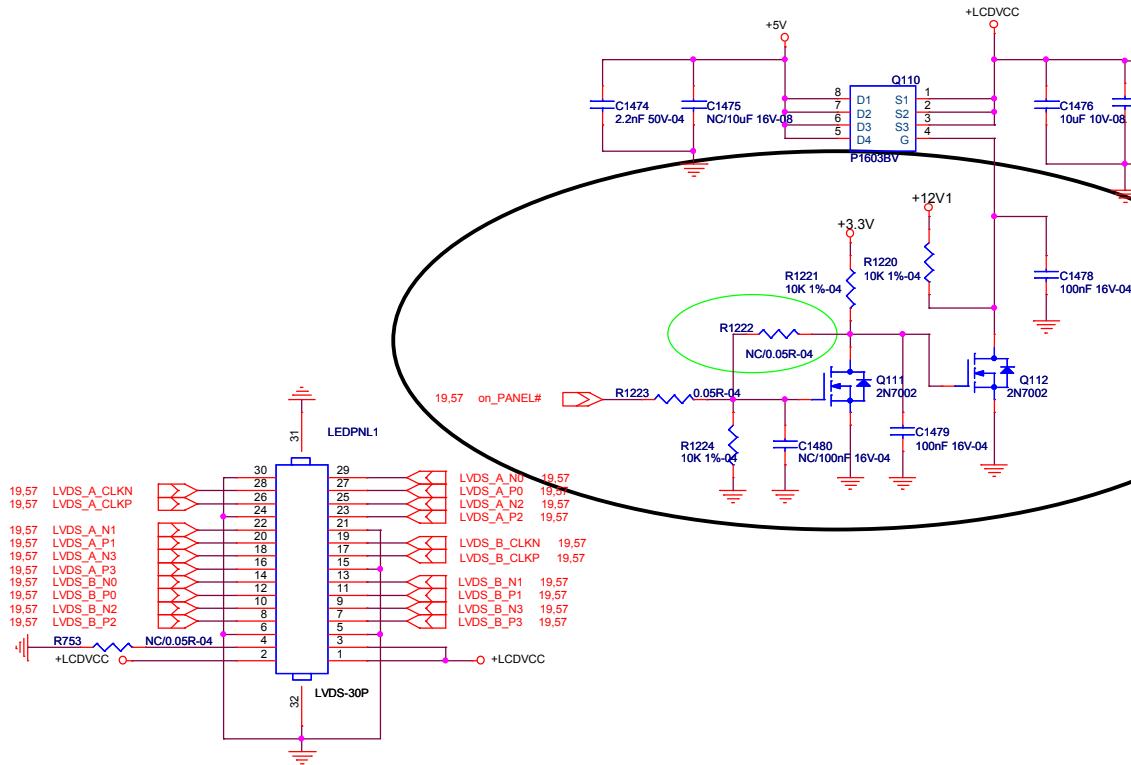
BRIGHTNESS CONTROL



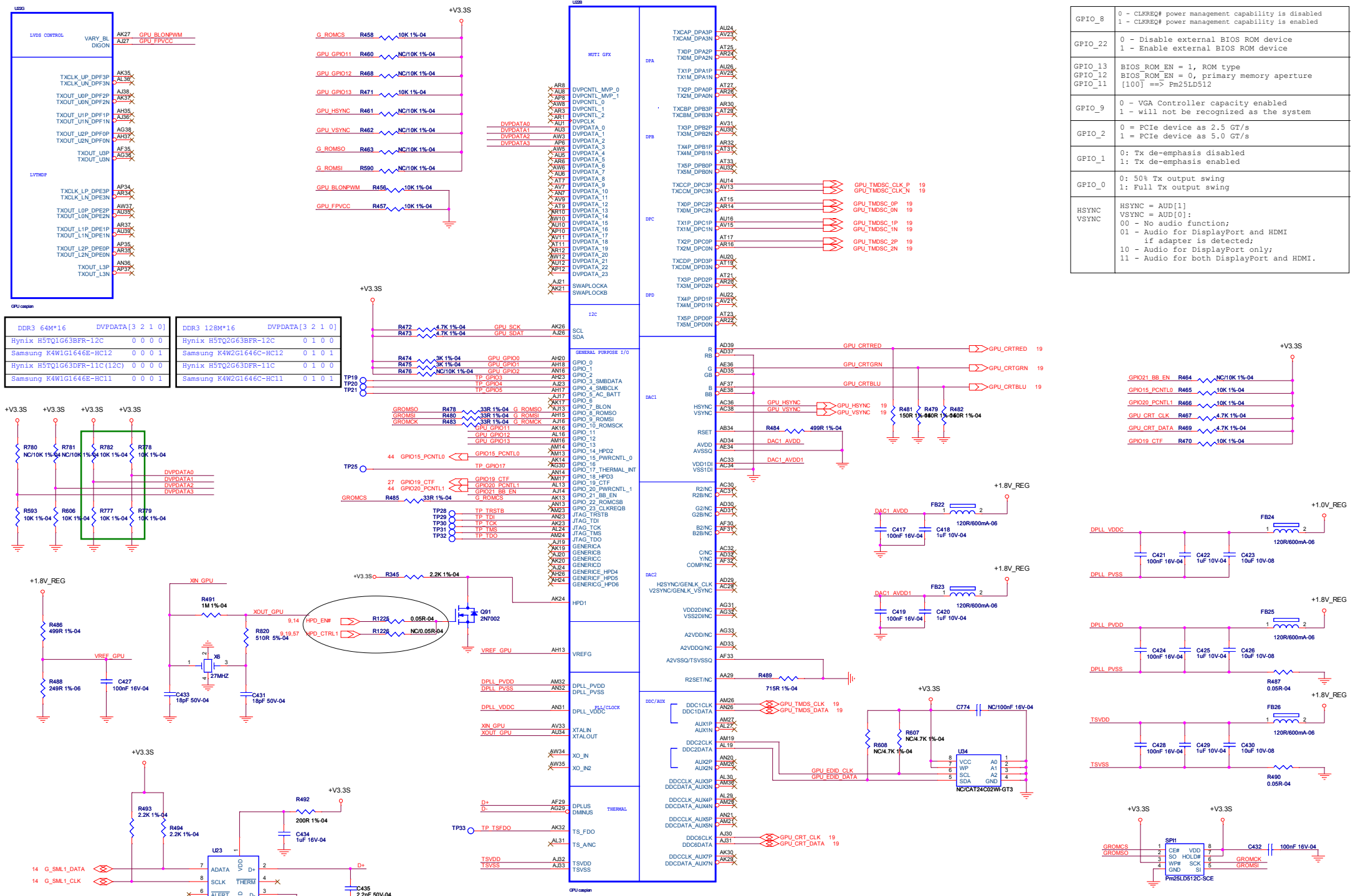
BACKLIGHT ENABLE



PANEL VCC CONTROL



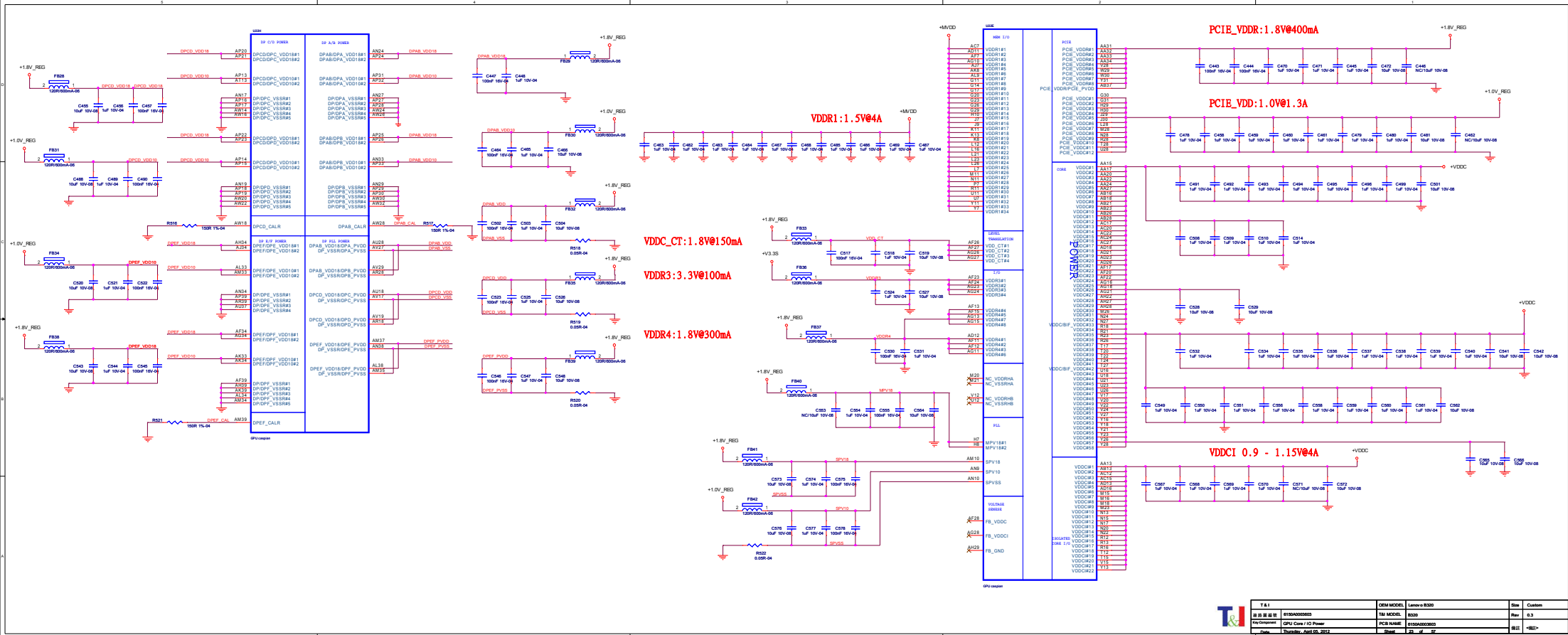
T & I	OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	T&I MODEL	B320	Rev	0.3
Key Component	PCB NAME	6150A0003603	備註	<備註>
Date	Sheet	20 of 57		

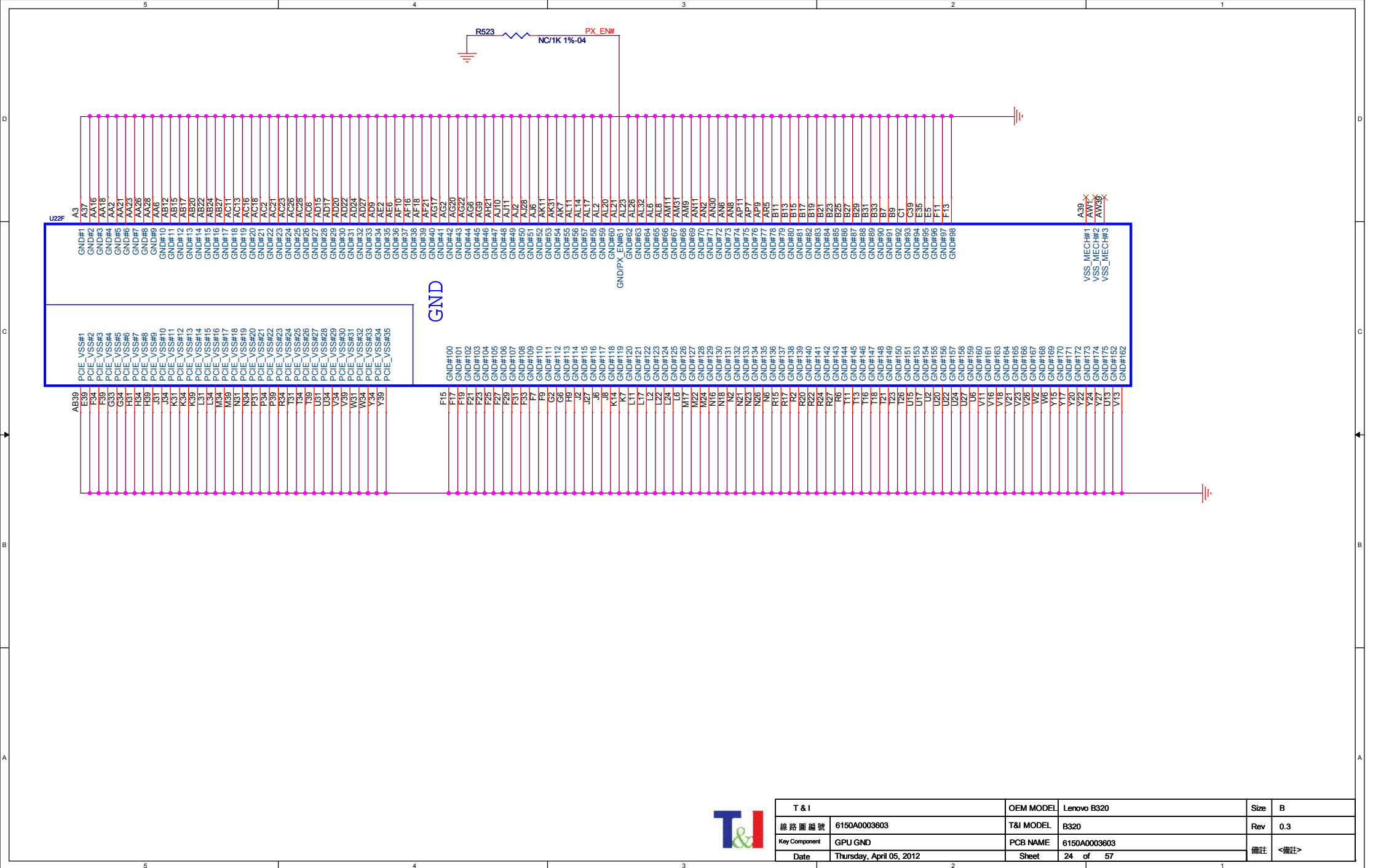


GPIO_8	0 - CLKREQ# power management capability is disabled 1 - CLKREQ# power management capability is enabled
GPIO_22	0 - Disable external BIOS ROM device 1 - Enable external BIOS ROM device
GPIO_13 GPIO_12 GPIO_11	BIOS_ROM_EN = 1, ROM type BIOS_ROM_EN = 0, primary memory aperture [100] ==> Fm25LD512
GPIO_9	0 - VGA Controller capacity enabled 1 - will not be recognized as the system
GPIO_2	0 = PCIe device as 2.5 GT/s 1 = PCIe device as 5.0 GT/s
GPIO_1	0: Tx de-emphasis disabled 1: Tx de-emphasis enabled
GPIO_0	0: 50% Tx output swing 1: Full Tx output swing
HSYNC VSYNC	HSYNC = AUD[1] VSYNC = AUD[0]: 00 - No audio function; 01 - Audio for DisplayPort and HDMI if adapter is detected; 10 - Audio for DisplayPort only; 11 - Audio for both DisplayPort and HDMI.

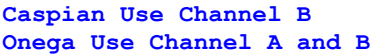
DDR3 64M*16	DVPDATA[3 2 1 0]	DDR3 128M*16	DVPDATA[3 2 1 0]
Hynix H5TQ1G63BFR-12C	0 0 0 0	Hynix H5TQ2G63BFR-12C	0 1 0 0
Samsung K4W1G1646E-HC12	0 0 0 1	Samsung K4W2G1646C-HC12	0 1 0 1
Hynix H5TQ1G63DFR-11C(12C)	0 0 0 0	Hynix H5TQ2G63DFR-11C	0 1 0 0
Samsung K4W1G1646E-HC11	0 0 0 1	Samsung K4W2G1646C-HC11	0 1 0 1






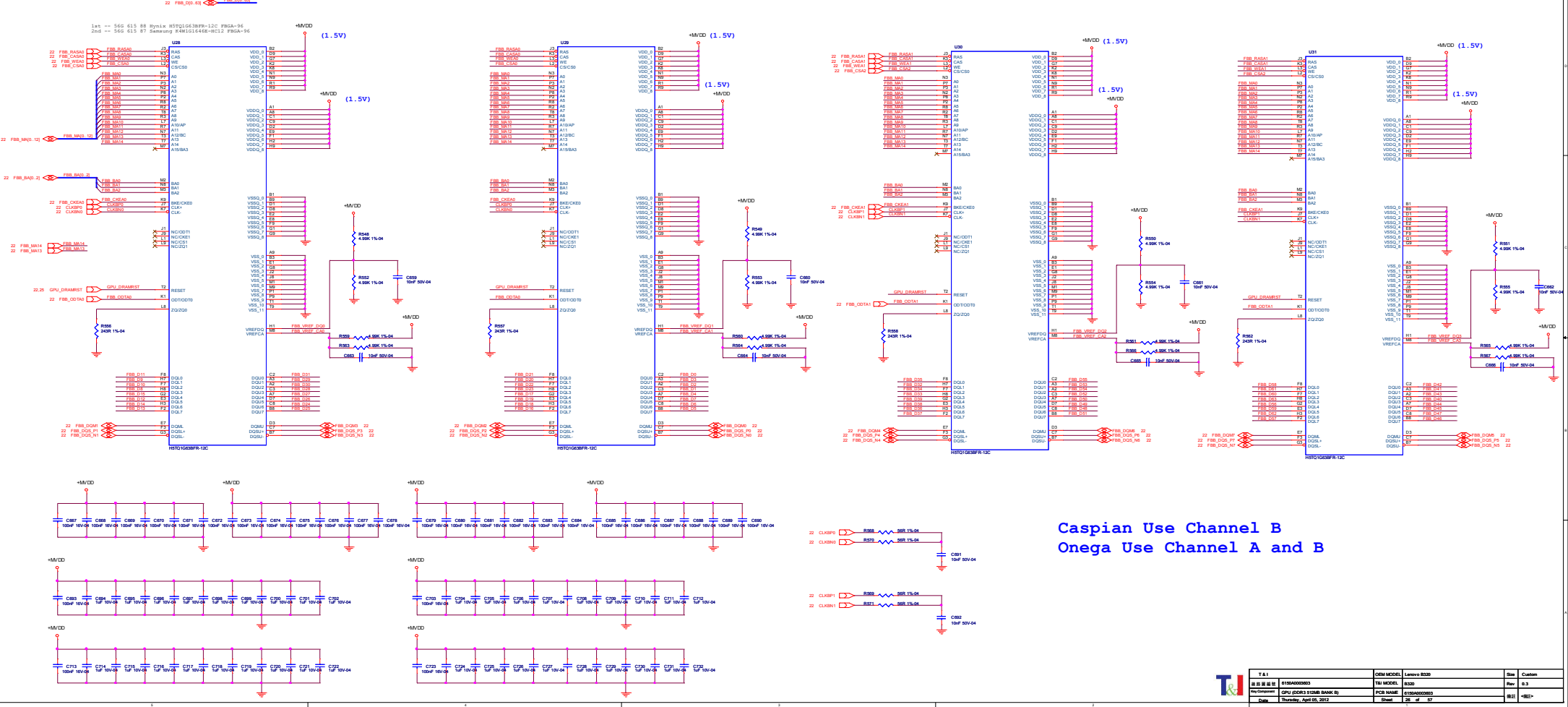


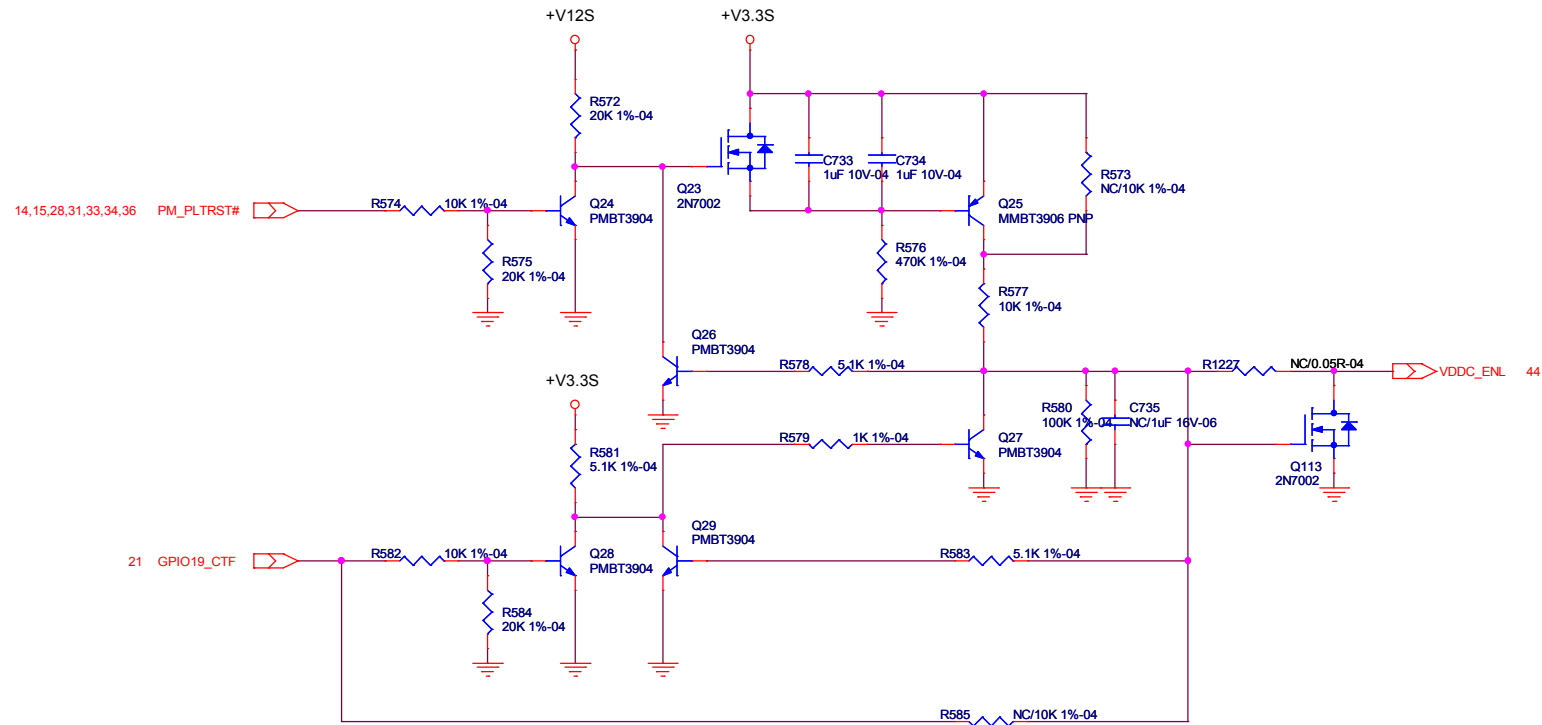
T & I		OEM MODEL	Lenovo B320	Size	B
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	GPU GND	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	24 of 57		



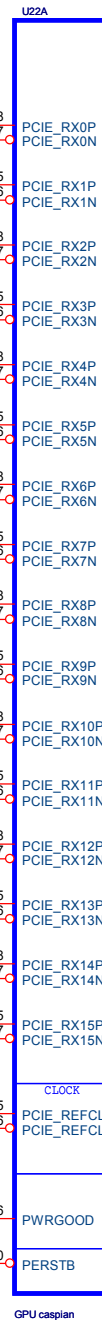
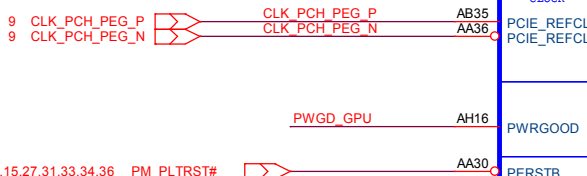
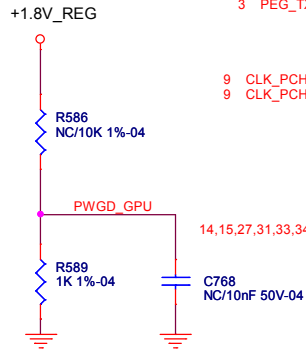
	T & I		OEM MODEL		Lenovo R330		Size	Custom	
	物料編號		6150A0002603		T&I MODEL		R330	Rev	0.3
	Key Component		GPU (DDR3 12GB BANK A)		PCB NAME		6150A0002603	備註	<REV>
	Date		Thursday, April 05, 2012		Sheet		25 of 37		

CHANNEL B

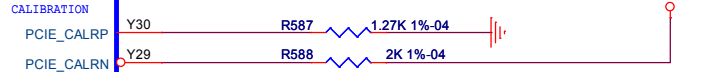
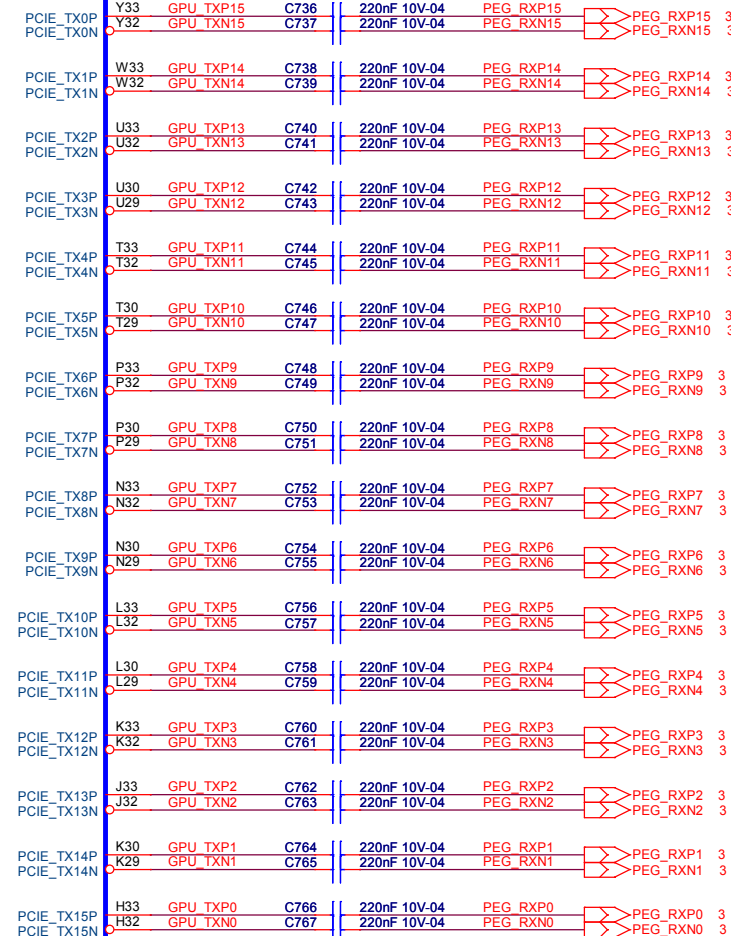




T & I	OEM MODEL	Lenovo B320	Size	B
線路圖編號	6150A0003603	T&I MODEL	B320	Rev
Key Component	GPU CTF	PCB NAME	6150A0003603	備註
Date	Thursday, April 05, 2012	Sheet	27 of 57	<備註>

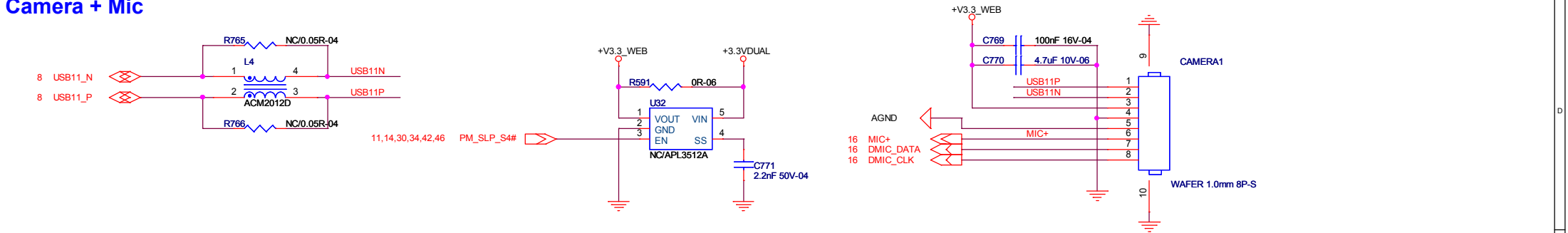


PCI EXPRESS INTERFACE



T & I		OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	GPU PCI-E Interface	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	28 of 57		

Camera + Mic

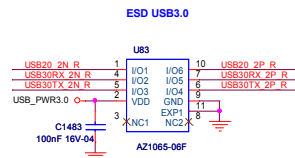
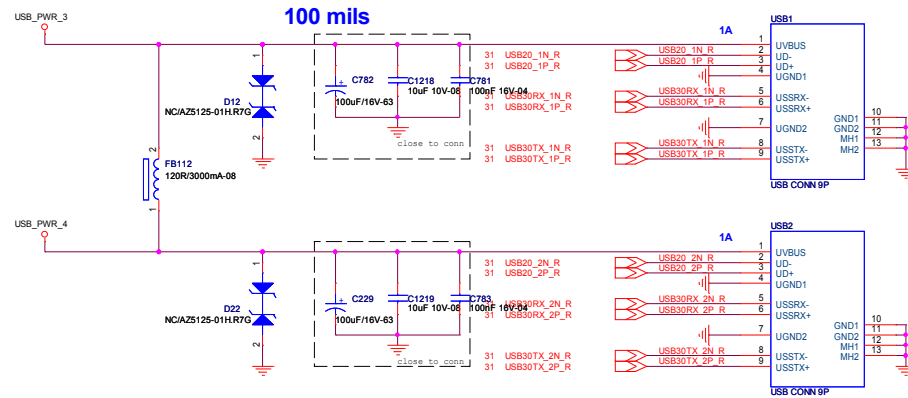
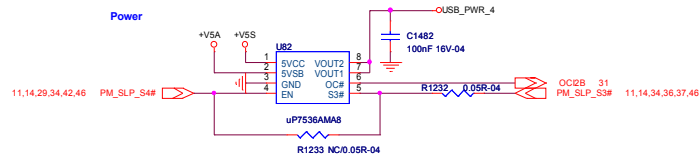
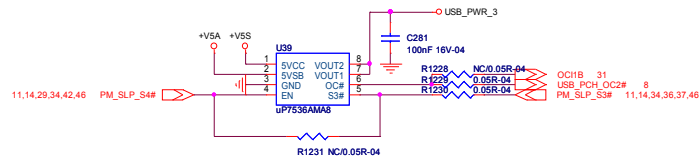
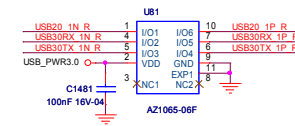
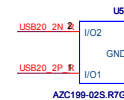
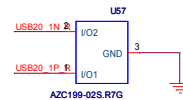
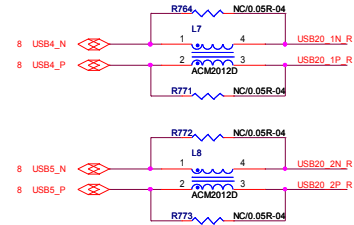


BT

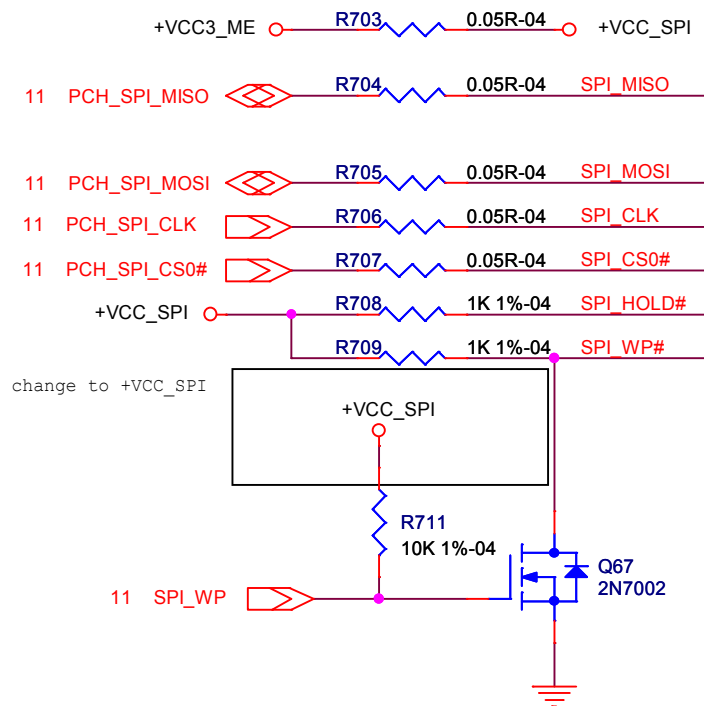


T & I		OEM MODEL	Lenovo B320	Size	B
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	Webcam, BT, Touch Pad	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	29 of 57		

SIDE USBx2 2.0&3.0 Co-Lay

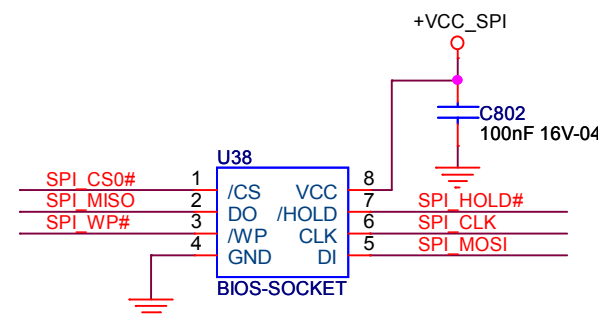
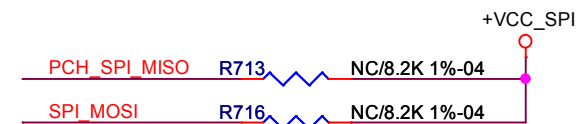
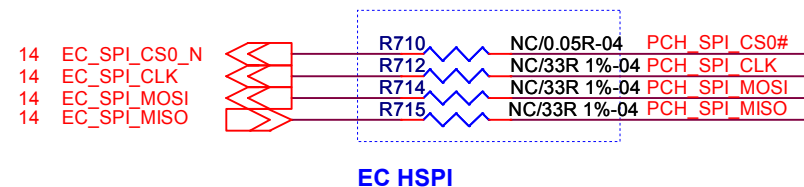


BIOS SPI ROM

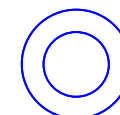


8MB SPI ROM

1st -- 056G2233 16 Winbond W25Q64BVSSIG
2nd -- 056G2233 15 MXIC MX25L6445EM2I-10G



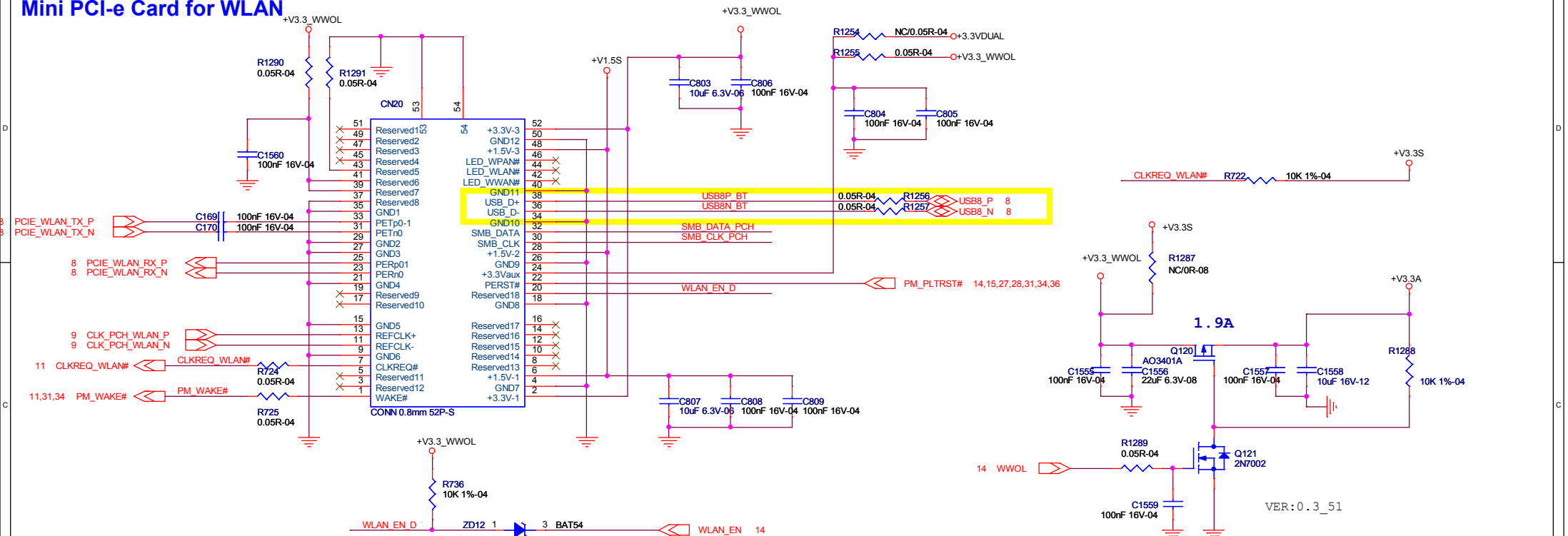
U38A



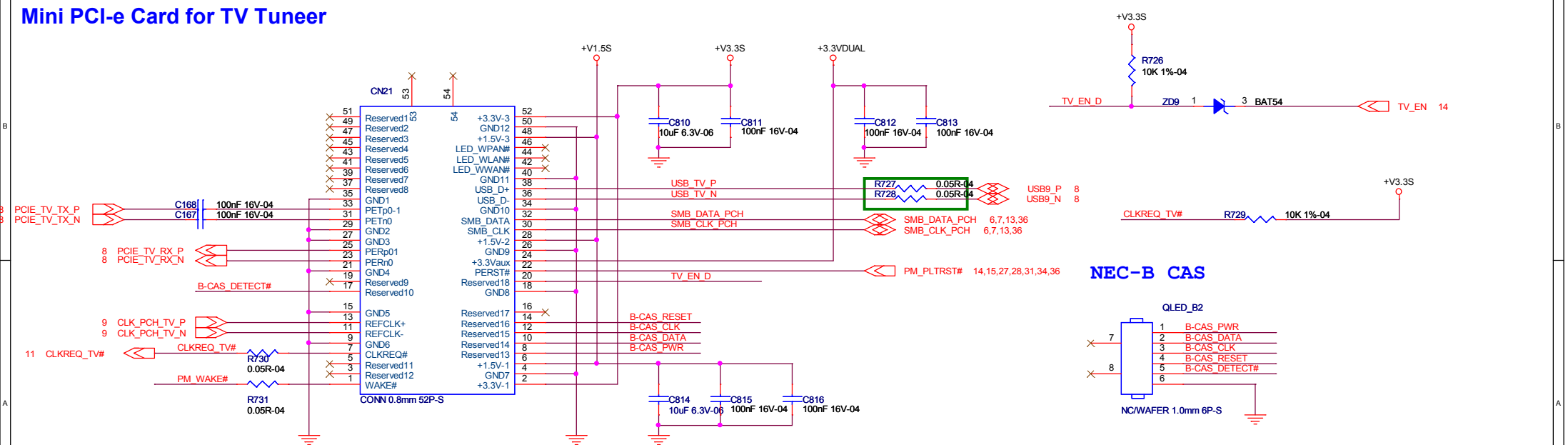
MX25L6406EM2I-12G

T & I		OEM MODEL	Lenovo B320	Size	A
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	SPI ROM SYS	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	32 of 57		

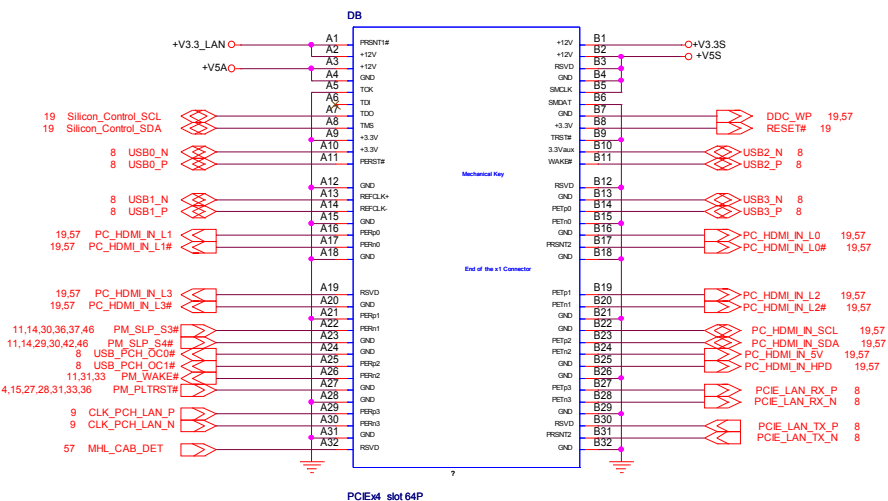
Mini PCI-e Card for WLAN



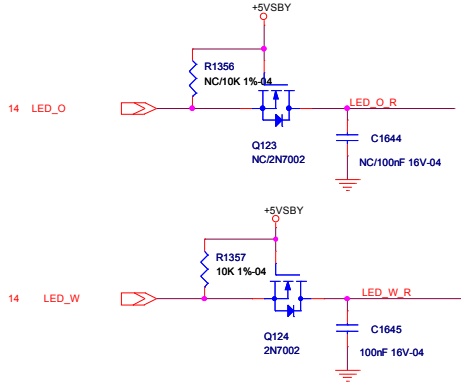
Mini PCI-e Card for TV Tuner



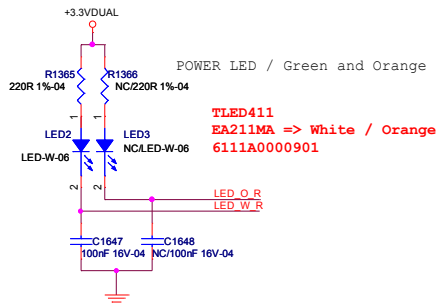
T & I		OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	Mini-PCI-Express x 2	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	33 of 57		



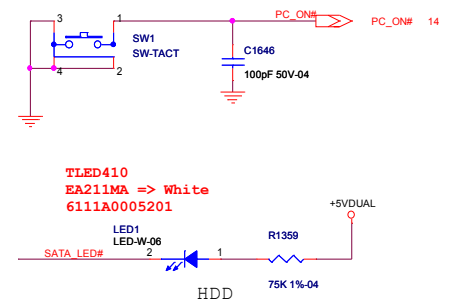
FUNCTION LED CONN



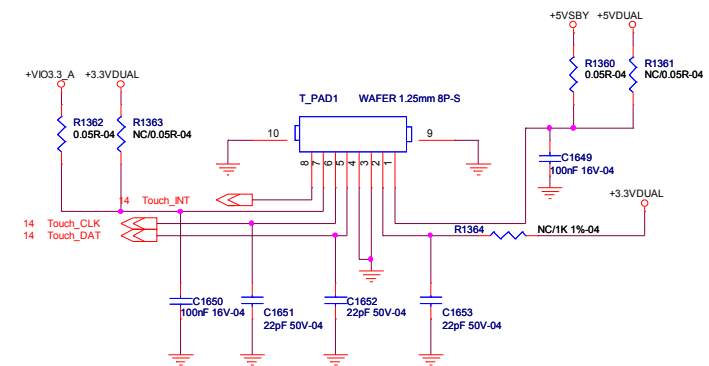
PC PWM



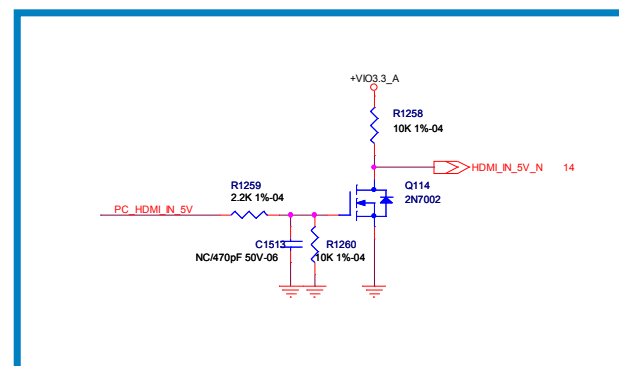
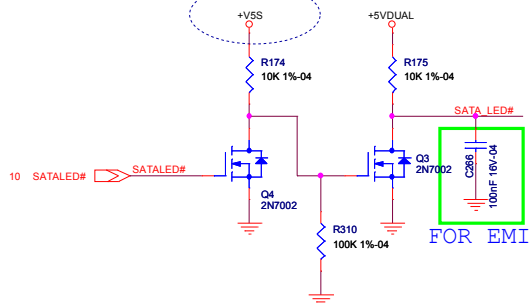
TSW2 need to be confirmed



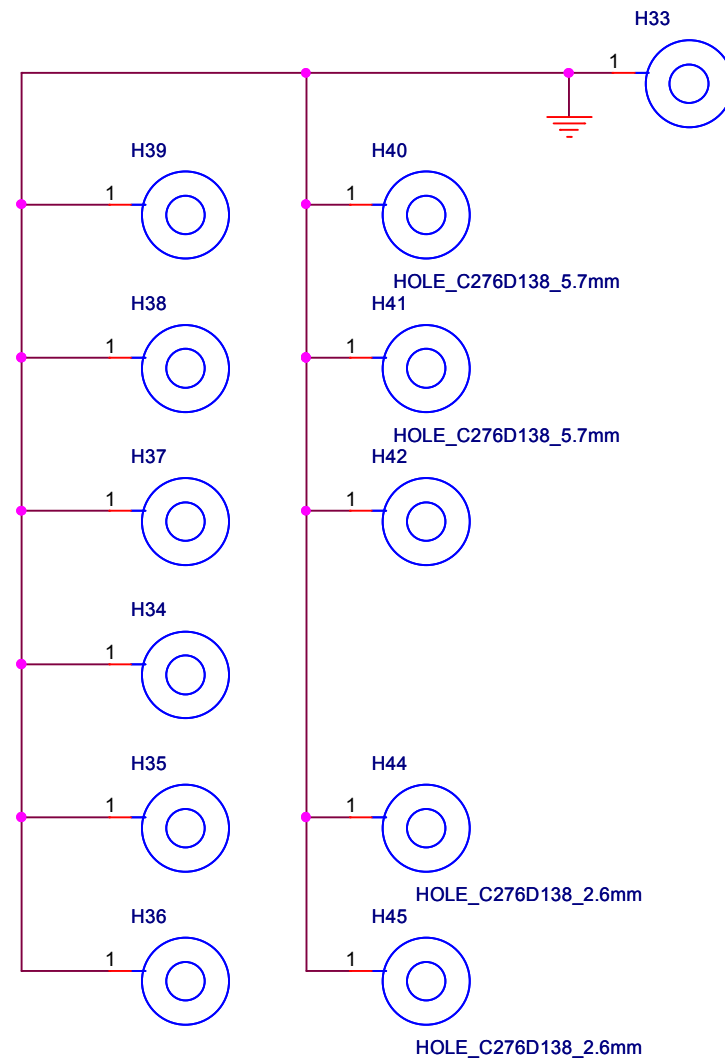
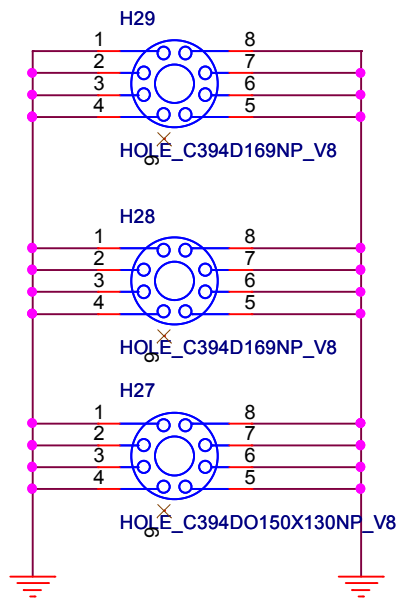
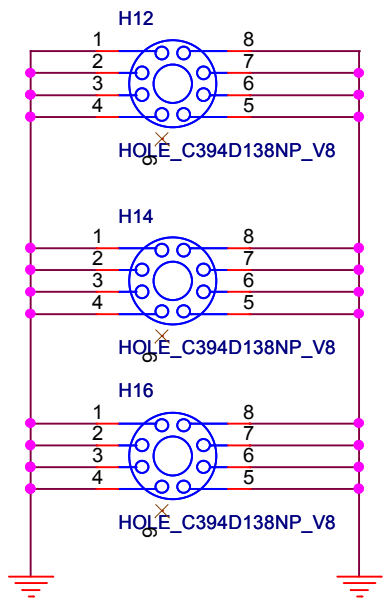
FUNCTION TOUCH PAD CONN



MA10

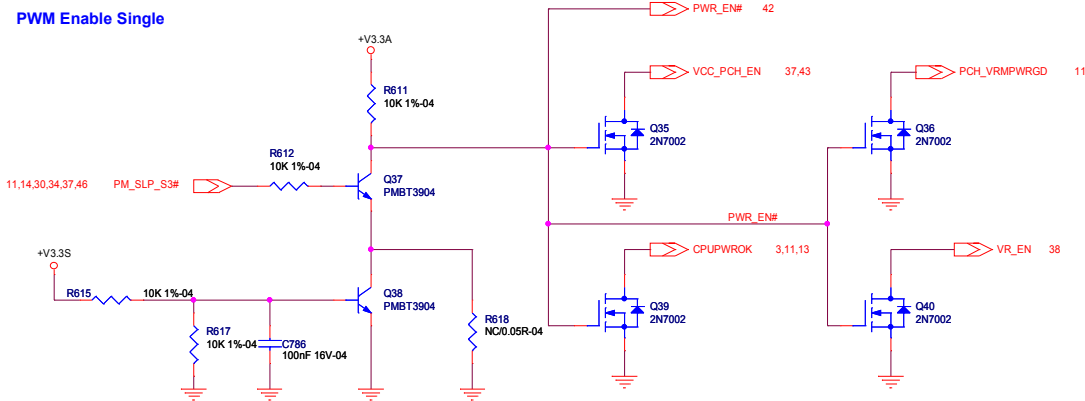


T & I	OEM MODEL	Lenovo B320	Size	Custom
線路圖編號	T&I MODEL	B320	Rev	0.3
Key Component	PCB NAME	6150A0003603	備註	<備註>
Date	Sheet	34 of 57		

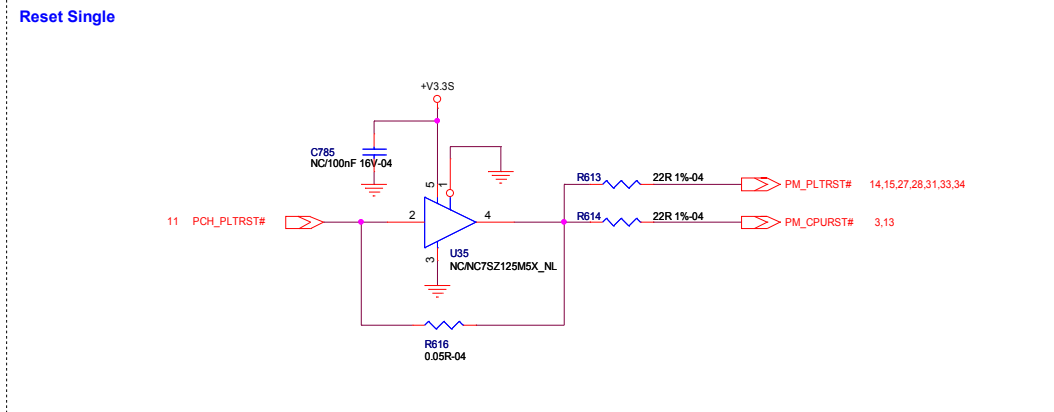


T & I		OEM MODEL	Lenovo B320		Size	A
線路圖編號	6150A0003603	T&I MODEL	B320		Rev	0.3
Key Component	Screw	PCB NAME	6150A0003603		備註	<備註>
Date	Thursday, April 05, 2012	Sheet	35 of 57			

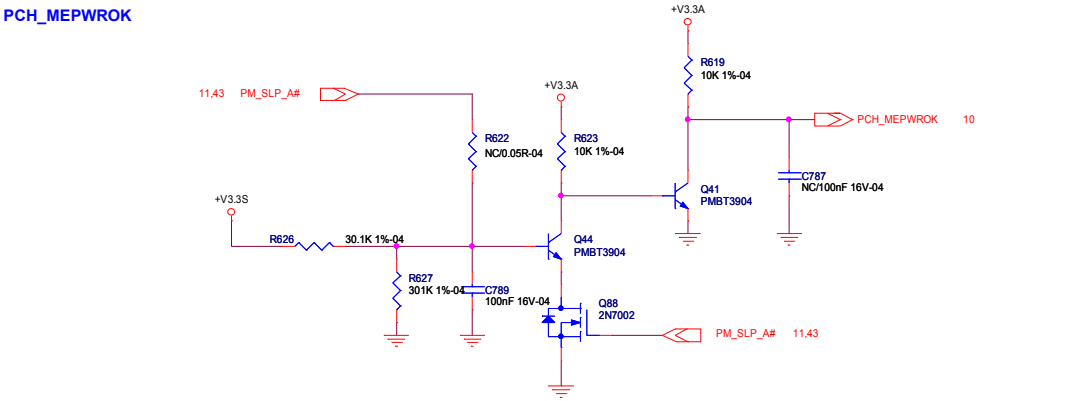
PWM Enable Single



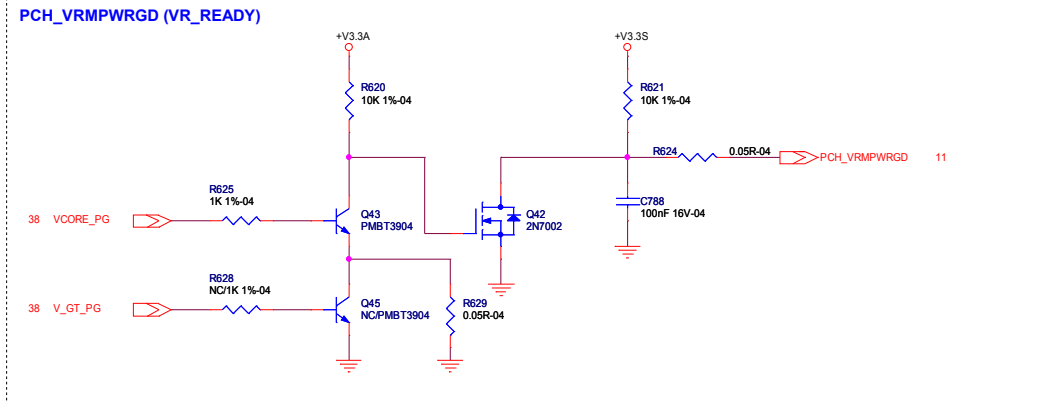
Reset Single



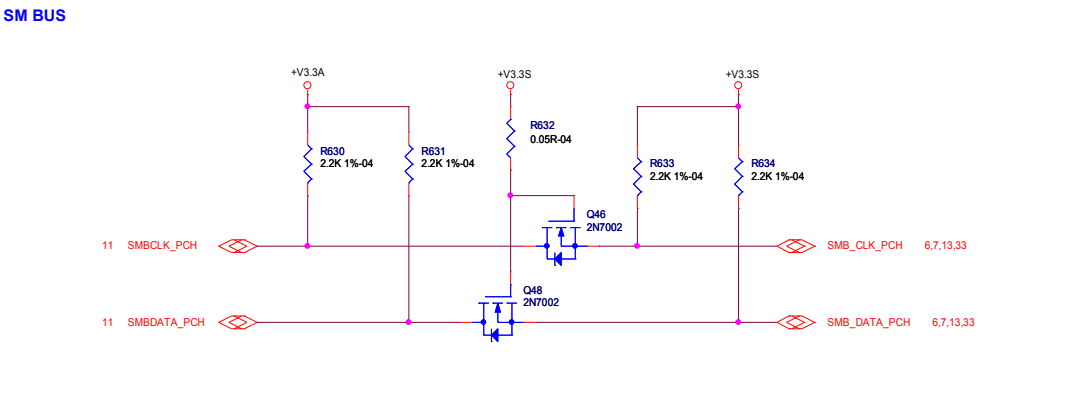
PCH_MEPWROK



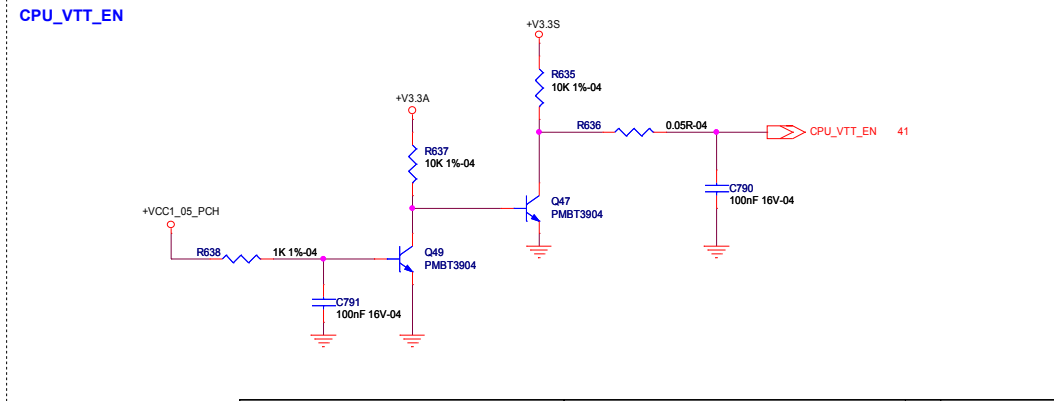
PCH_VRMPWRGD (VR_READY)



SM BUS

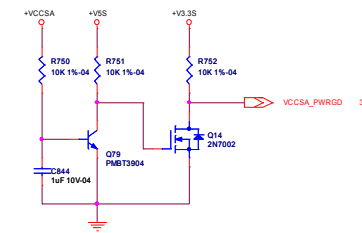


CPU_VTT_EN

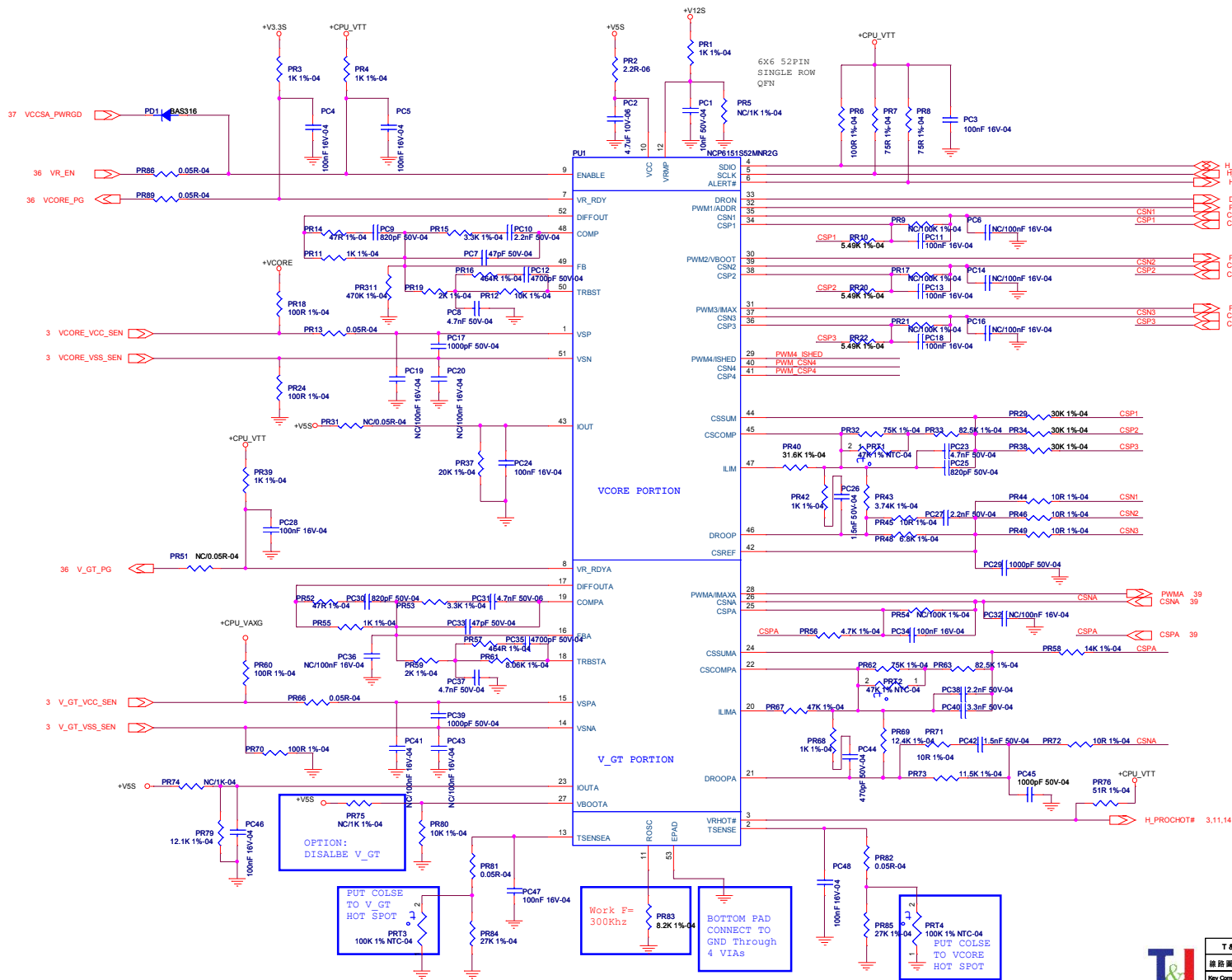


T & I		OEM MODEL	Lenovo B320	Size	Custom
繪圖編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	Controller 1	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	36 of 57		

This is an input signal to the PCH from power monitoring circuit to indicate that all deep sleep power rail, VccDSW3_3 is stable on the platform. Connect to VccDSW3_3 power rail monitoring circuit on mother board. For platform not supporting deep sleep connect directly to RSMRST#. The DSW rails must be stable for at least 10 ms before DPNWOK is asserted to PCH.

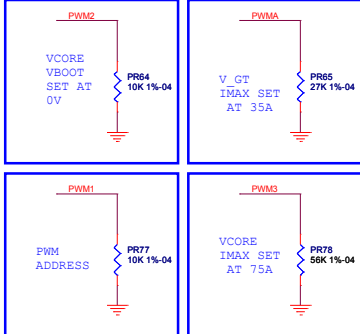
[illegible][illegible]

T&I		DEM MODEL	Linnova B320	Size	Custom
產品編號	6150A0003603	T&I MODEL	B320	Rev	0.3
Key Component	Controller 2, 45V0UAL	PCB NAME	6150A0003603		
Date	Thursday, April 05, 2012	Sheet	37 of 57	備註	<備註>

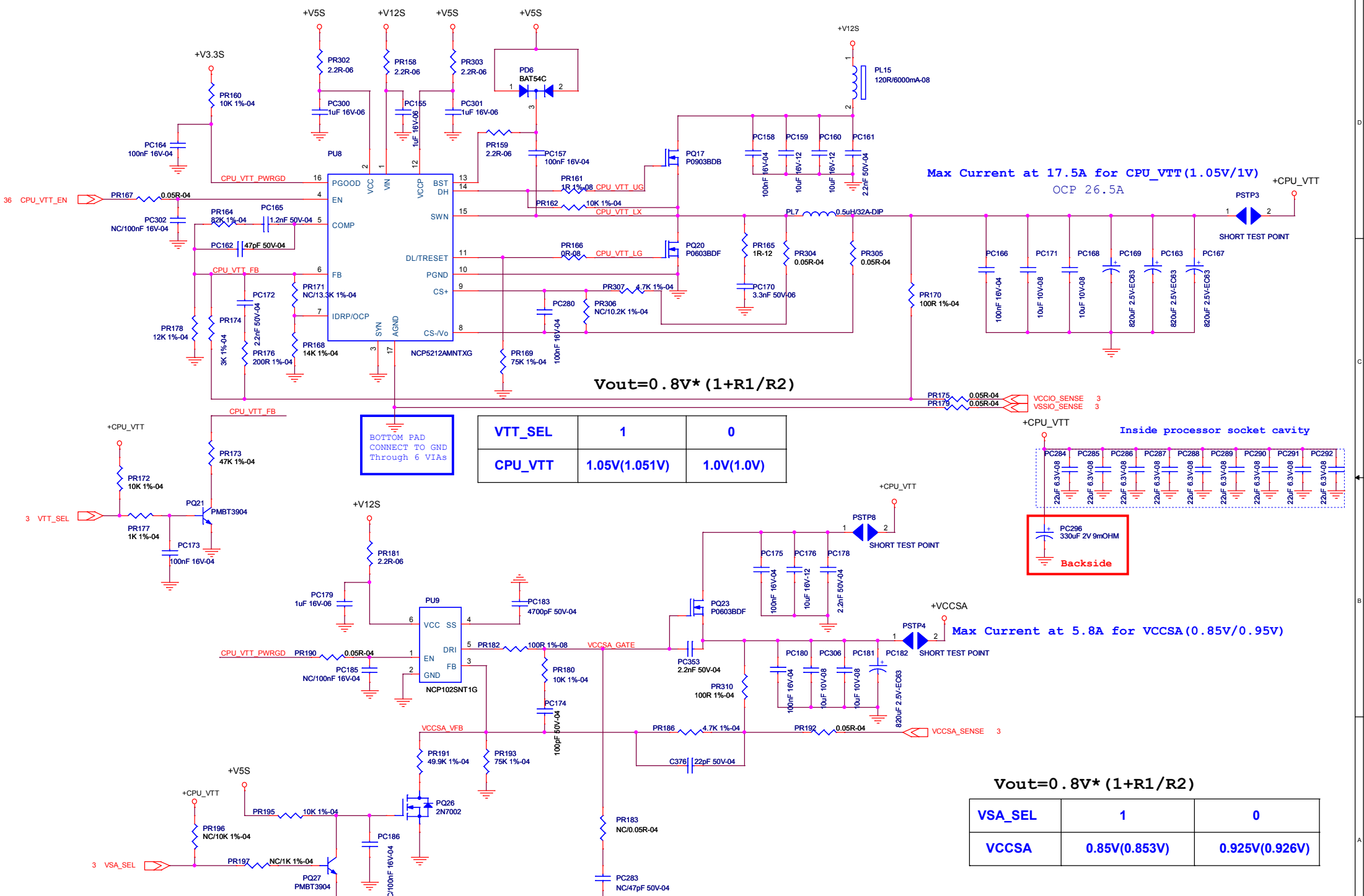


PWM ADDRESS		
RESISTOR VALUE	SVID ADDRESS FOR Vcore RAIL	SVID ADDRESS FOR V_GT RAIL
10K	0000	0001
25K	0010	0011
45K	0100	0101
70K	0110	0111
95K	1000	1001
125K	1010	1011
165K	1100	1101

BOOT VOLTAGE	
RESISTOR VALUE	BOOT VOLTAGE
10K	0V
25K	0.9V
45K	1.0V
70K	1.1V
95K	1.2V
125K	1.35V
165K	1.5V

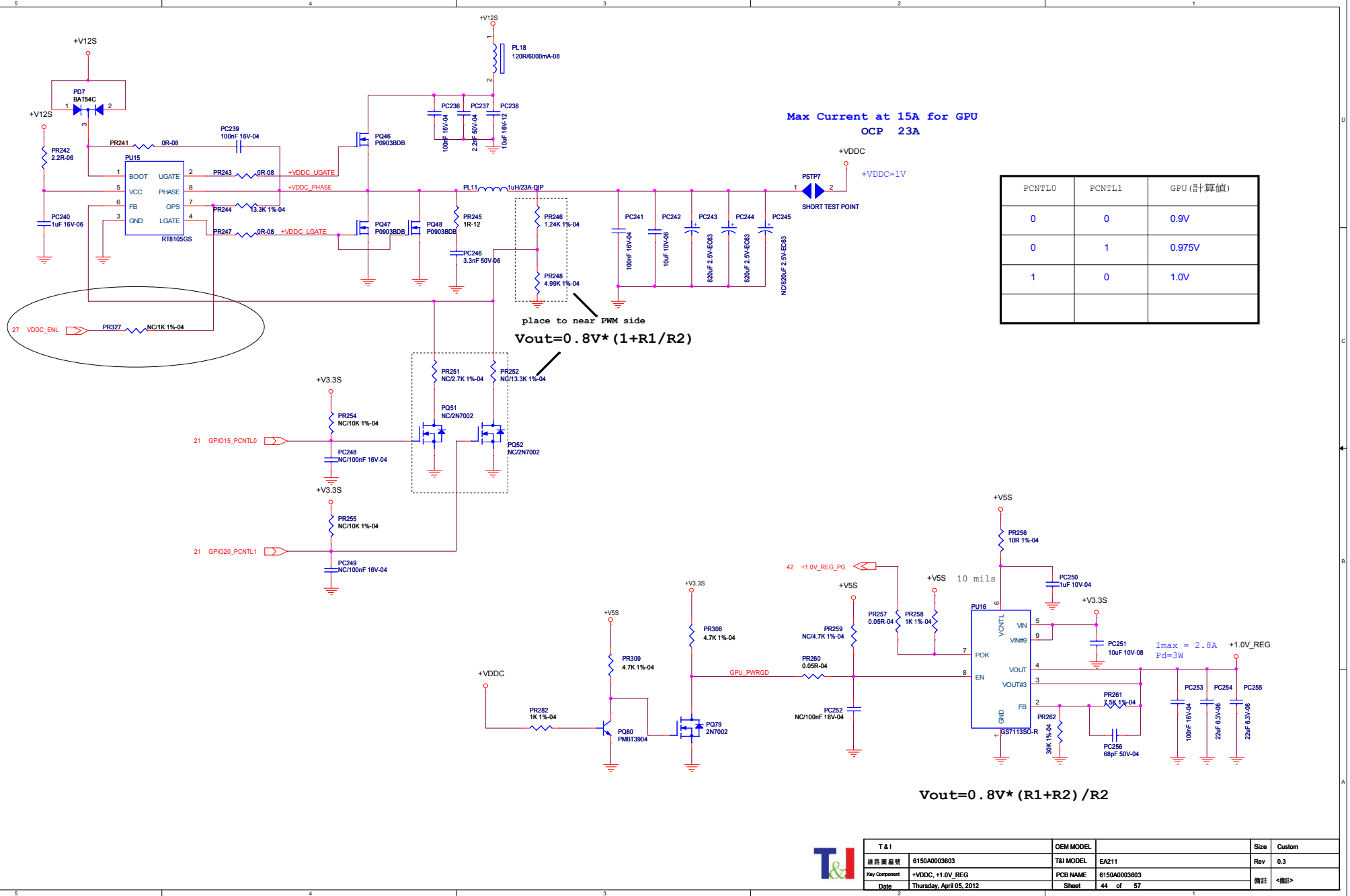


T & I	OEM MODEL	Size	Custom
總代理商	6150A0003603	T&I MODEL	EA211
Key Component	Sugar Bay-CPU 1/2	PCB NAME	6150A0003603
Date	Thursday, April 05, 2012	Sheet	38 of 57



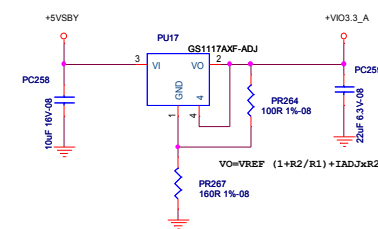
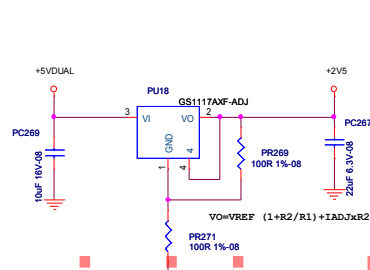
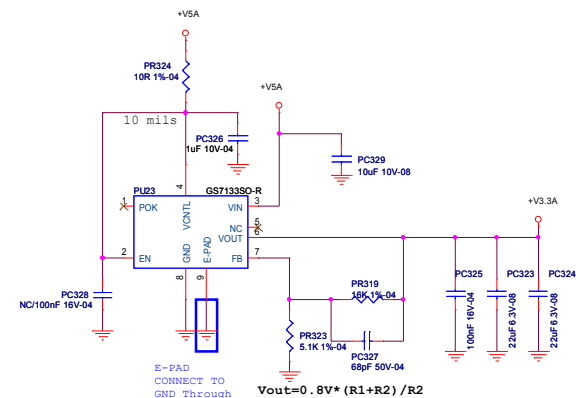
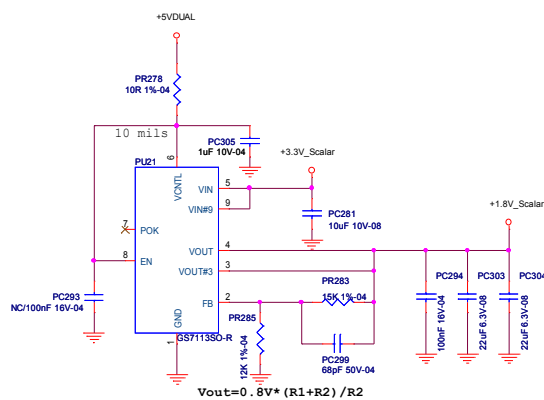
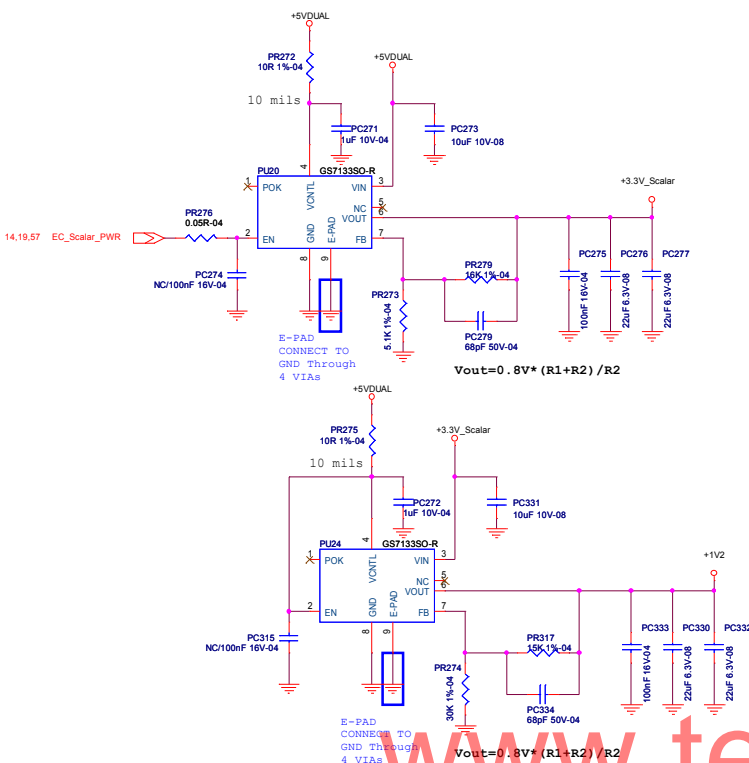
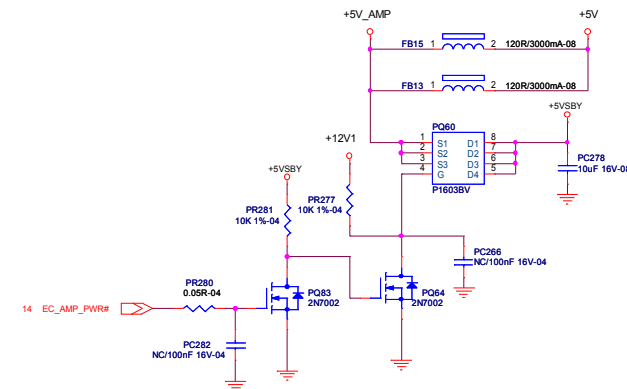
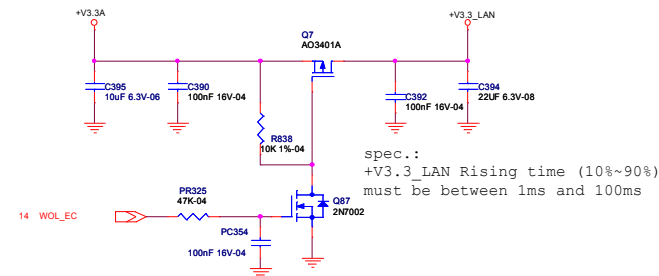
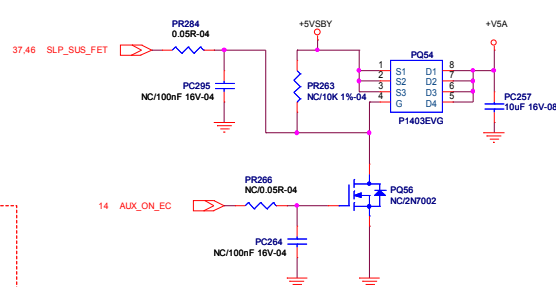
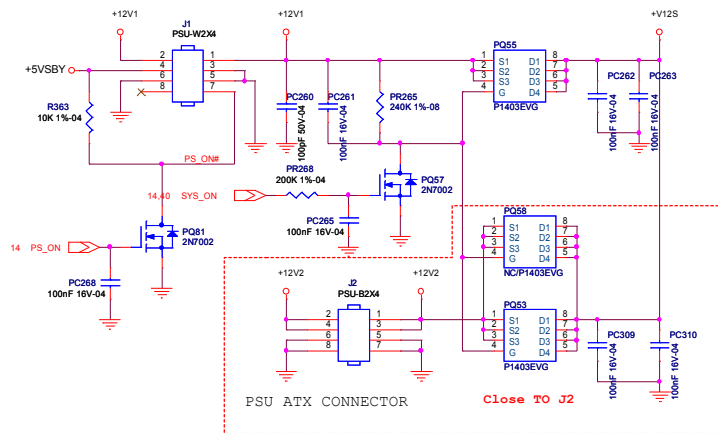
VTT_SEL	1	0
CPU_VTT	1.05V(1.051V)	1.0V(1.0V)

VSA_SEL	1	0
VCCSA	0.85V(0.853V)	0.925V(0.926V)

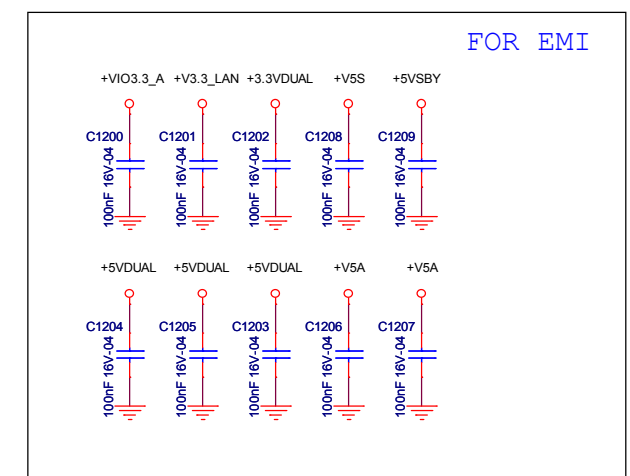
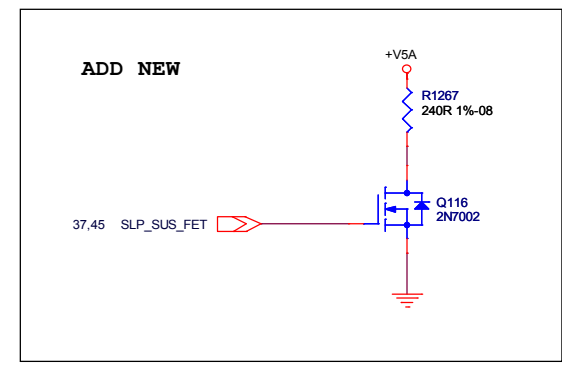
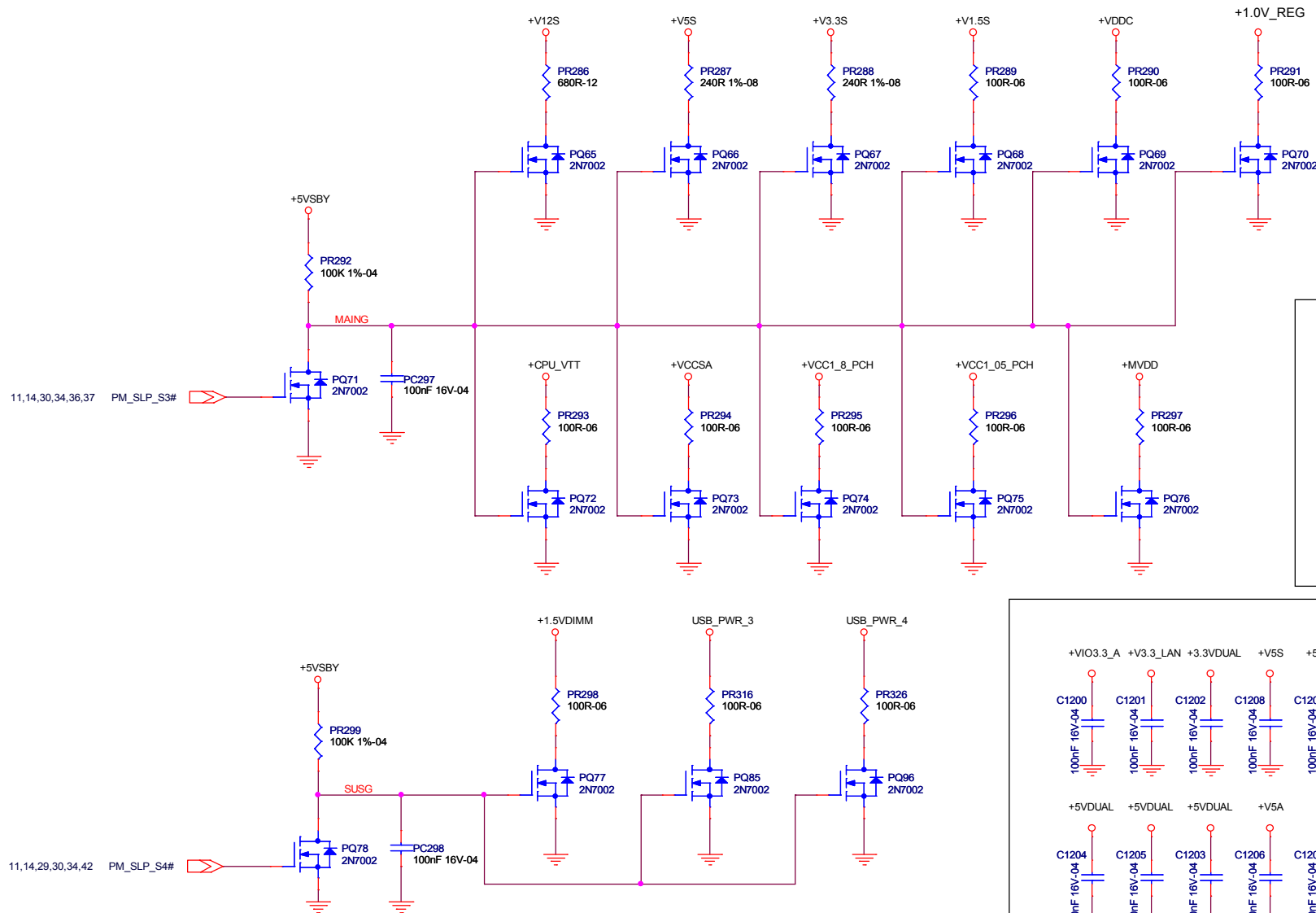


T & I	OEM MODEL	Size	Custom
線路圖編號	T&I MODEL	Rev	0.3
Key Component	PCB NAME	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	44 of 57

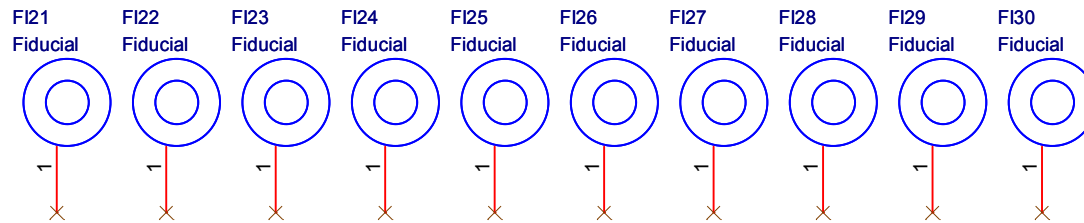
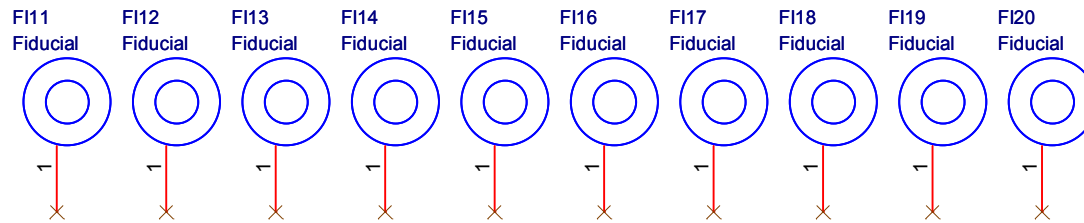
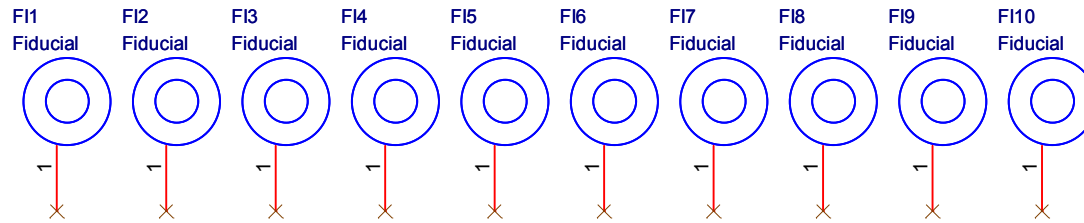
PSU ATX CONNECTOR



T A I	OEM MODEL	Rev	C
6150A0003603	E2311	0.3	
Key Component	PCB NAME	6150A0003603	
Date	Thursday, April 05, 2012	Sheet	45 of 87
		備註	<備註>

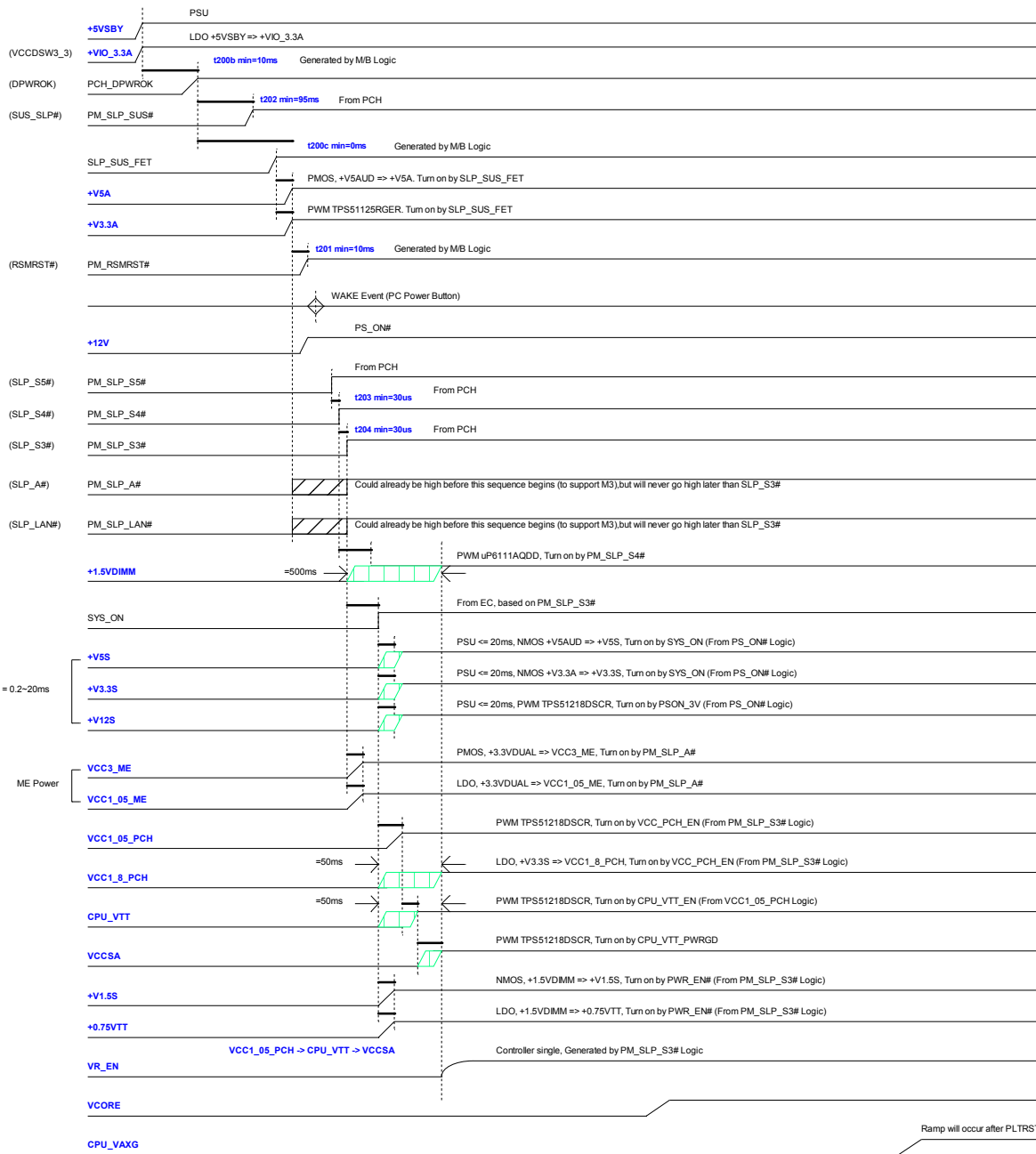


T & I		OEM MODEL		Size	B
線路圖編號	6150A0003603	T&I MODEL	EA211	Rev	0.3
Key Component	Discharge Circuit	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	46 of 57		

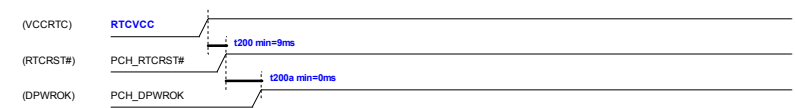


T & I		OEM MODEL	<Title>	Size	A
線路圖編號	<線路圖編號>	T&I MODEL	<Doc>	Rev	<RevCode>
Key Component	<Key Component>	PCB NAME	<PCB name>	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	47 of 57		

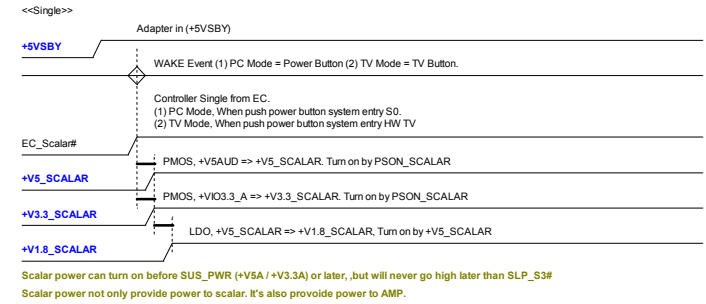
System Power



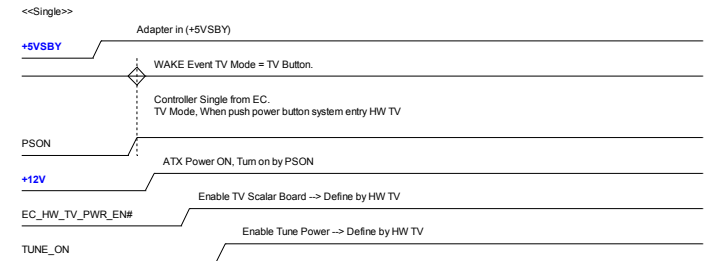
RTC Power




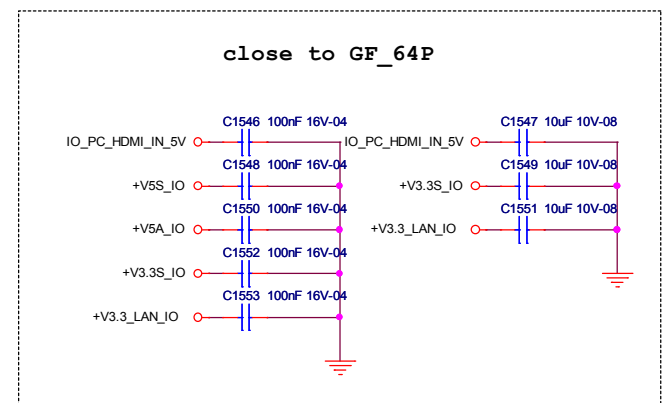
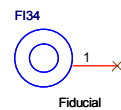
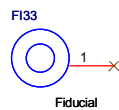
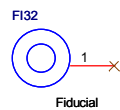
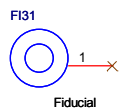
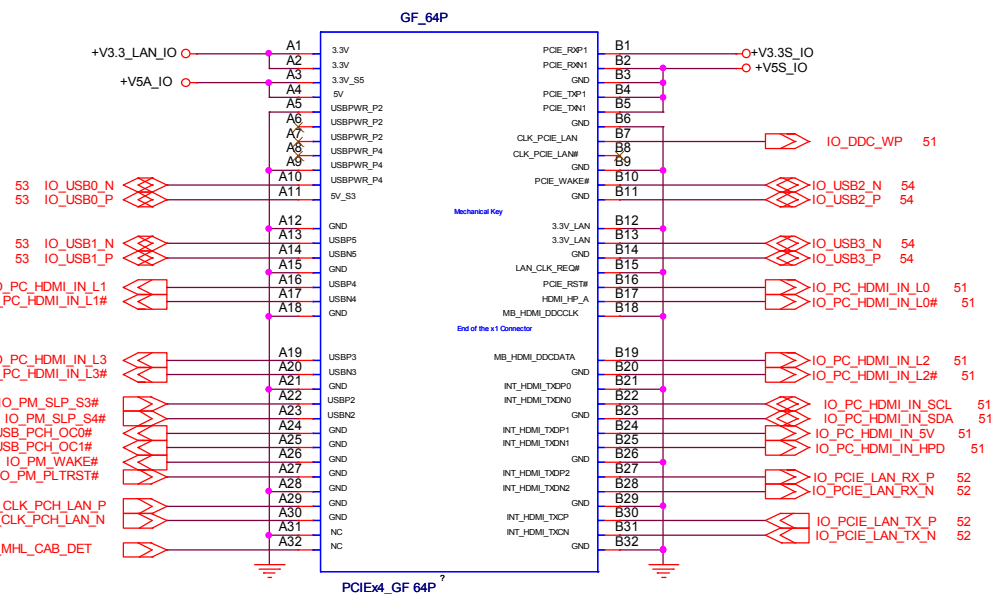
Scalar Power



TV Power



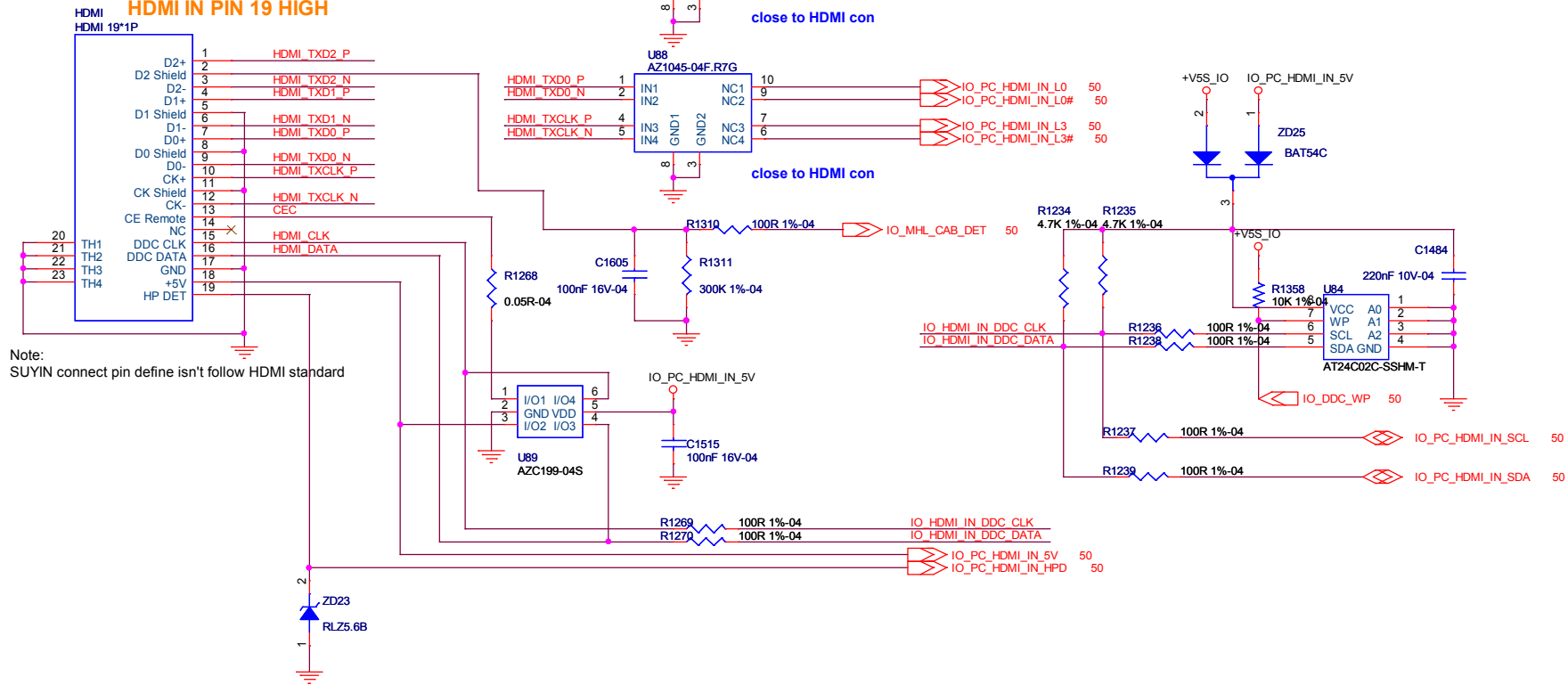
	T & I		OEM MODEL		Lenovo B320	Size	Custom
	產品圖檔號	6150A0003603	T&I MODEL		B320	Rev	0.3
	Key Component	Power Sequence	PCB NAME		6150A0003603		
	Date	Thursday, April 05, 2012	Sheet		49 of 57	備註	<備註>



T & I	OEM MODEL	EA211	Size	B
線路圖編號	6150A0003603	T&I MODEL	B320	Rev
Key Component	PCB NAME	6150A0003603	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	50 of 57	

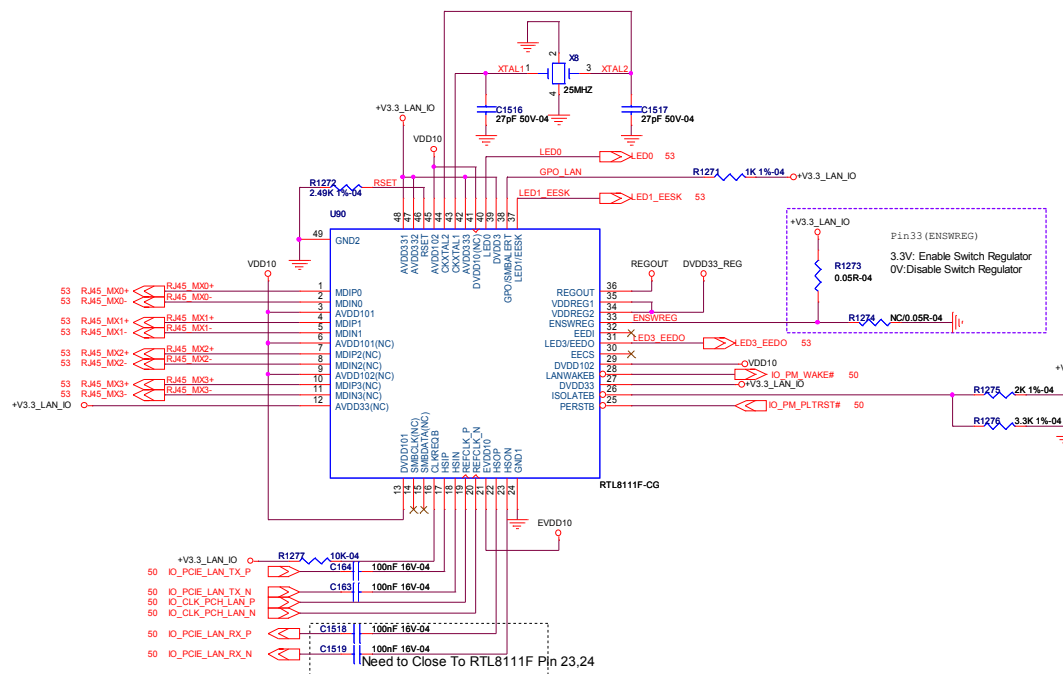
Scalar Input HDMI

HDMI IN PIN 19 HIGH

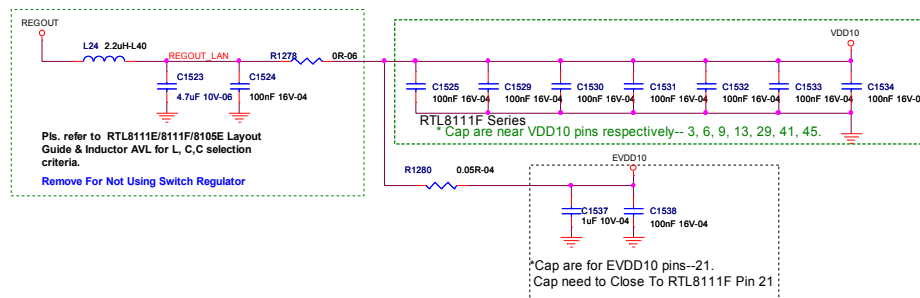
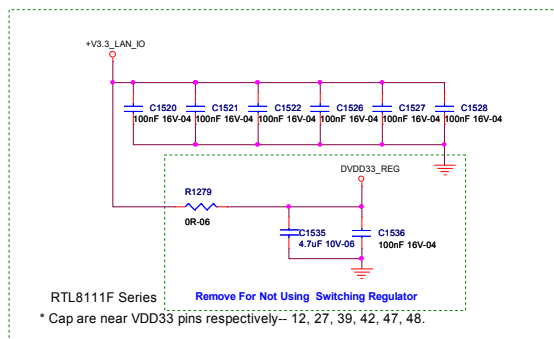


T&I (TPV-INVENTA TECHNOLOGY CO., LTD)	OEM MODEL	CA202M	Size	B
Circuit diagram NO.	<Circuit diagram NO.>	T&I MODEL	CA202M	Rev
Key Component	Scalar_Input / Detect 1/3	PCB NAME	715G4993-M0A-000-0060/6150A0008201	remark
Date	Thursday, April 05, 2012	Sheet	51 of 57	<remark>

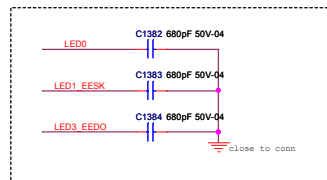
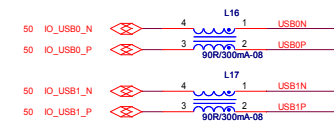
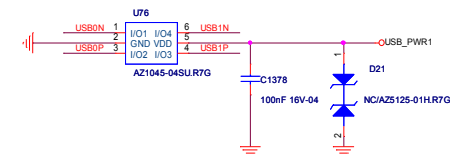
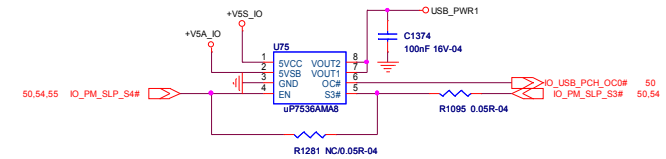
Ivan0302 Change from RTL8111E to 8111F, and connector



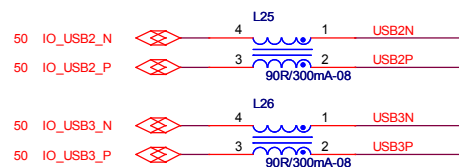
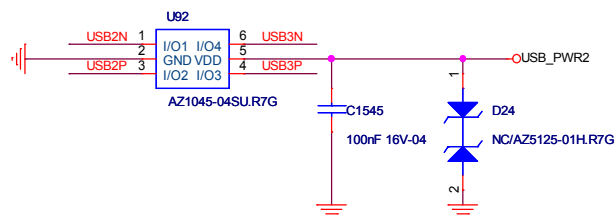
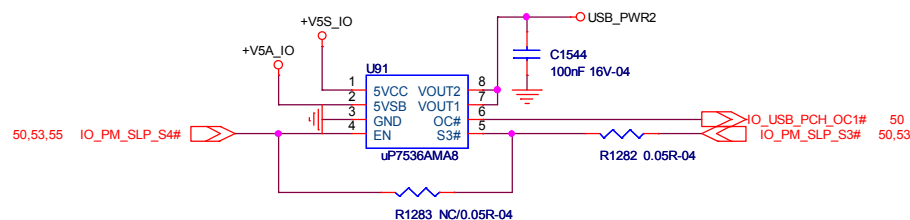
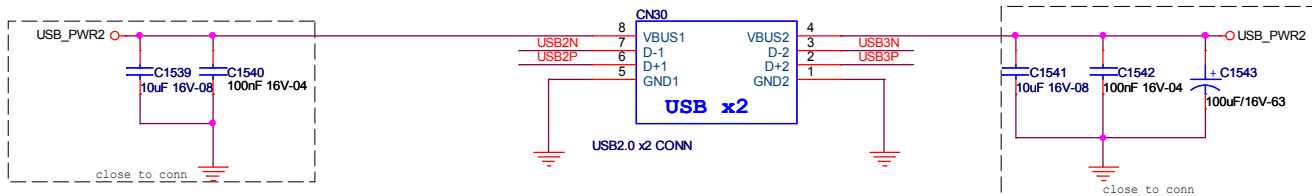
spec.:
+V3.3 LAN Rising time (10%~90%)
must be between 1ms and 100ms



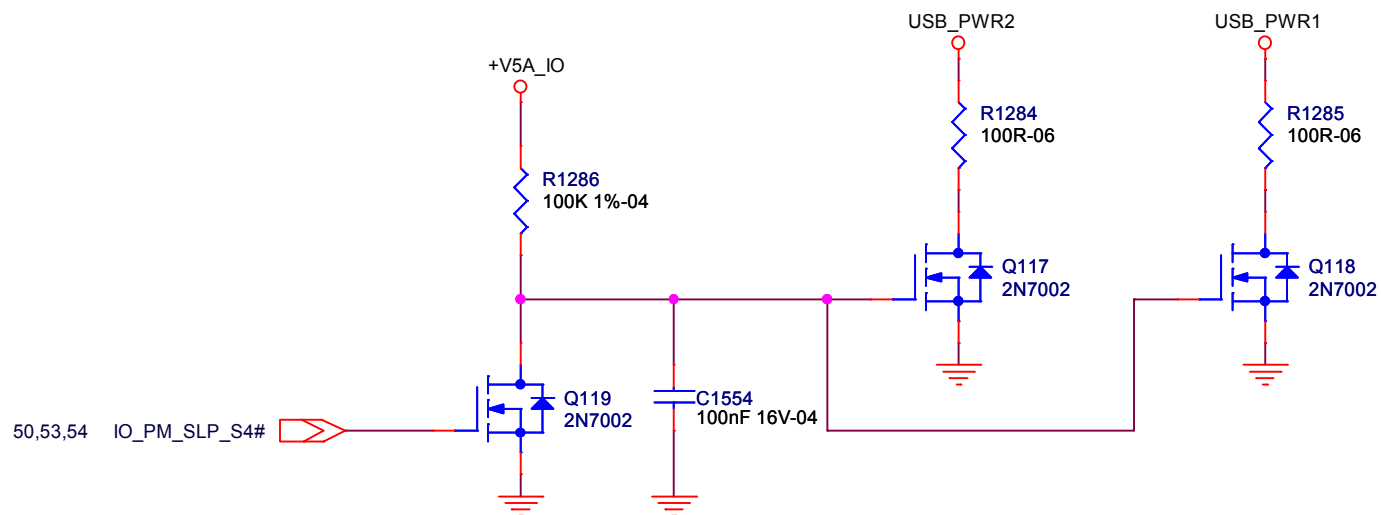
T & I	OEM MODEL	EA211	Size	C
產品編號	T&I MODEL	EA211	Rev	0.1
Key Component	PCB NAME	6150A0000001	備註	<備註>
Date	Sheet	52 of 57		

[illegible]

T & I		OEM MODEL	EA211	Size	C
線路圖編號		TM MODEL	EA211	Rev	1.0
Key Component	01 DB Conn / BT / AV IN	PCB NAME	71504690-T0D-000-0060		
Date	Thursday, April 05, 2012	Sheet	53 of 57	備註	<備註>

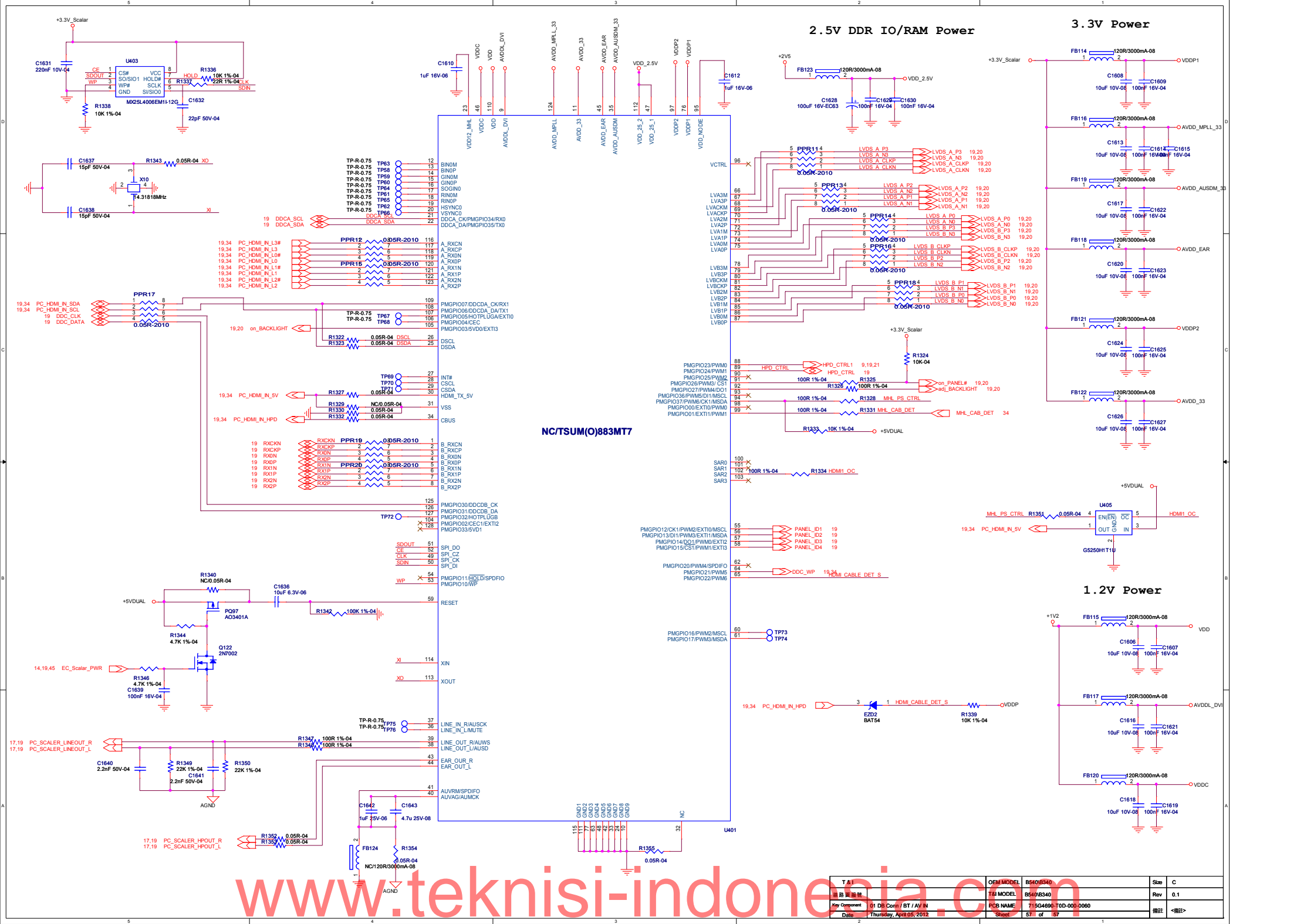


T & I	OEM MODEL	EA211	Size	B
線路圖編號	T&I MODEL	EA211	Rev	1.0
Key Component	DB USB2.0 x2	PCB NAME	715G4690-T0D-000-0060	備註
Date	Thursday, April 05, 2012	Sheet	54 of 57	<備註>



T & I		OEM MODEL	B540\B340	Size	A
線路圖編號		T&I MODEL	B540\B340	Rev	1.0
Key Component	01 DB Conn / BT / AV IN	PCB NAME	715G4690-T0D-000-0060	備註	<備註>
Date	Thursday, April 05, 2012	Sheet	55 of 57		

REVISION HISTORY					C:\Change / D: Delete / A: Add				
Symbol	Description	Reason	Page	Note	Symbol	Description	Reason	Page	Note
MA01	C J1,J2	Change PSU Power from 1 conn to 2 conn. From Lenovo request	47	Version 02	MC1	C Change Power Solution	Change +3.3VDUAL,+V3.3A,+3.3V_Scalar Power Solution	42,47	Version 03
MA02	C PR283,PR285,PR279,PR273	LDO Voltage divider value mistake. Change PR283 to 15K, PR285 to 12K,PR279 to 47K,PR273 to 15K	47		MC2	A Q82,R825	Add VCC_PCH_EN,Q82,R825 to solve S3 issue	39	
MA03	A R372	Add R372 10K to reserve pull high mute#	19		MC3	A R402	USB_PCH_OC4# add R402 to +V3.3A	10	
MA04	C R359	Change R359 NC to 20K to solve always mute	18		MC4	C SYS_ON from P94 to P89	Change SYS_ON from P94 to P89 of the EC	16	
MA05	C R352	Change R352 39.1k to 5.1K to solve HP plug in detect	18		MC5	A PCH_GPO33_H to EC	Add PCH_GPO33_H to EC Pin 30, add ZD21,R404	13,16	
MA06	A PQ81	ADD PQ61 and change PS_ON# to PS_ON to solve EC didn't supply 5V tolerance	16,47		MC6	C Touch Panel I2C	Change Touch Panel I2C signal to EC Pin 94 an 95	16	
MA07	C Power Plan	Change Power Plan from +5VBSY to +V5A for solve Power on resume reset error.	39		MC7	C Audio SW Schematic	Change Audio SW solution	19	
MA08	C Power Plan	Change Power Plan from +V5A to +5VBSY to follow demo board	39		MC8	C Power plan	Change Power Plan from +3.3V_Scalar to +3.3VDUAL	35	
MA09	C PCIe Port	Change PCIe Port. Lan <-> CR to solve PCIe can't used	10		MC9	A Scalar EDID circuit	Add Scalar EDID circuit	21	
MA10	C Power Plan	Change R174,R220 to solve LED flash when AC plug in	35		MC10	A Q30,Q34	Add Q30,Q34 to solve leakage	21	
MA11	A R223	Add R223 10K to solve USB output OD	35		MC11	A ZD22,EC_BACKLIGHT	Add EC_BACKLIGHT control LCD backlight and ZD22 to solve leakage	16,22	
MA12	A PR282	Add PR282 1K. Design mistake for RJT control	46		MC12	A C284,C341	Add C284,C341 for Levono schematic review	15	
MA13	C PR207	Change PR207 from 0ohm to 1K. Design mistake for RJT control	44		MC13	A Q59,Q61	Add Q59,Q61 for protection design	15	
MA14	D PR208,PQ61	Detect PR208,PQ61. Logic design mistake	44		MC14	A discharge circuit	Add PR316,PQ85 for USB power discharge circuit	48	
MA15	C PR250	Change PR250 from 0ohm to 1K. Design mistake for RJT control	46		MC15	A PM_SLP_83#	Add PM_SLP_83# to DB1 conn	35	
MA16	A R594,Q17 C R442,R602	To solve VDD power enable inverter	22		MC16	A D17,D18	Add D17,D18 for protection design	15	
MA17	C PR234	To pull high enable signal	45		MC17	C LAN Power circuit	Changel +V3.3_LAN Power solution	47	
MA18	A PQ82,PQ84 C PR227, D PQ41,PQ39	Add PQ82,PQ84 and Change PR227 NC to 10K to pull +V3.3#	45		MC18	A IR_SEL# circuit	Add Q75,Q85,Q86,R410 for control IR source	35	
MA19	A PQ83, D PQ63	Change RJT to FET to control power enable	47		MC19	A R438	Add R438 bypass from EC_HW_TV_PWR_EN_R to EC_HW_TV_PWR_EN	16	
MA20	C Power Plan	Change Power Plan from +V3.3A to +V3.3# to solve leakage	12		MC20	A TV_LCDVCC	Add TV_LCDVCC to HW/TV connector (TVS2)	22	
MA21	C Power Plan	Change Power Plan from +V3.3A to +V103.3A to solve leakage	14		MC21	C TVS1 and TVS2 conn	Modify TVS1 and TVS2 CONN and Pin define	36	
MA22	C Power Plan	Change Power Plan from +V3.3A to +V103.3A to solve leakage	13		MC22	C VCC1_05_ME to +V3.3#	Change VCC1_05_ME to +V3.3# to solve Power off Sequence (t232) Add Q88.	38	
MA23	C SATA Conn	Change SATA Conn from ME Request.	12		MC23	A R820	Add R820 on GPU XTAL for fine tune	23	
MA24	A R131	Add R131 to + V3.3# TO enable DDPC HPD	11		MC24	A R900	Add R900 to pull high TV_ON# for non-HW TV SKU.	16	
MA25	A R785,Q74,Q73	Add Protect Circuit FOR PCH SMBUS_1 and GPU Thermal IC SMBUS to EC	16,23		MC25	C AMP Solution	Change AMP Solution.	36	
MA26	A R810,C852	Add RC delay on PM_RSMRST#	13		MC26	D DB2 C DB1	Detect DB2 combine to DB1 for Assembly request.	35	
MA27	C C189,C190	Change C189,C190 NC to 1UF	13		MC27	A R902	Change R444 to NC and Add R902 to pull low to solve power on flash.	22	
MA28	C Q6	Change PMBT3904 to 2N7002	13		MC28	A CN29,C905,C906	ADD HW TV Fan.	15	
MA29	C CN26	Change WAFER 2.0MM 4P to WAFER 1.25MM 4P	15		MC29	C Conn PC_FWM1	Change conn to prevent make mistake.	35	
MA30	C CN7	Change CN7 to NC	15		MC30	A Q90,R345,Q91	Add Discrete and UMA HPD Pin control	11	
MA31	C R314	Change R314 OR to NC	16		MC31	A R425	Add HPD_EN# to control Discrete and UMA HPD	16	
MA32	C CN10,CN15,CN19,CN8	Change CN10,CN15,CN19,CN8 to NC	16,23,33		MC32	A R824,R852	Add R824 and R852 Pull +3.3VDUAL	16	
MA33	C NET Name	Change TV_ON to TV_ON#	16,36		MC33	A Bypass R	Add Bypass Resistance	18	
MA34	A ZD12,ZD15,ZD16,ZD17 ZD18,ZD19,ZD20	Add ZD12 BAT54 to solve leakage of electricity	16		MC34	A C329,C330,C1216,C1217	Add C329,C330,C1216,C1217 from TV_HPOUT to SW	19	
MA35	A R312	Add R312 10K pull high +V103.3_A	16		MC35	A Discrete DVI	Add Discrete DVI to Internal scalar	21	
MA36	C NET Name	Change SMB_CLK_VGA to EC_SMB_CLK_1, Change SMB_DATA_VGA to EC_SMB_DATA_1	16		MC36	A JP4	Add JP4 to setup Internal scalar panel ID	21	
MA37	A R794,R795,R796,R797 R798,Q83,Q84	Add Protect Circuit FOR EC SMBUS_1 to HW/TV and Touch Board	16		MC37	A R364	Add R364 Pull GND	35	
MA38	C NET Name	Change EC_HW_TV_PWR_EN to TUNE_ON	35		MC38	A R830,R832	Add R830 and R832 Bypass Resistance	36	
MA39	C NET Name	Change GS_DSUB_SCL to EC_SMB_CLK_1. Change GS_DSUB_SDA to EC_SMB_DATA_1	21		MC39	A D15,C817	Add D15 and C817, RC Delay Function	39	
MA40	A ZD13,ZD14	Add ZD13,ZD14 BAT54 to solve leakage of electricity	21		MC40	A C331	Add C331	39	
MA41	C DB1,DB2	Modify 2x32 Pin Header to 2x26 and 2x8 SPEC	35		MD01	A R910, R911	Reserve system flash on board scalar function.	13,21	Version 04
MA42	C IVERTER1	Change CONN SPEC FOR ME Issue	22		MD02	A R912, R913	To Slove EC can't link with HW TV.	16,36	
MA43	C Power Plan	Change Power Plan from +V58 to +5VBSY to solve leakage of electricity	48		MD03	C TVP1 conn	TVP1 conn change +12V1 to GND	36	
MA44	A R237,R212	SETTING LED PANEL and MIC	13						
MA45	C +3.3V_LAN Solution	Change +3.3V_LAN Power Solution	47						
MA46	C POWER SOLUTION	Change 1117 to APL5930	47						
MA47	A R840,R841	Add R840 and R841 to GND	13						
MA48	A R397,R398	Add R397 and R398	16						
MA49	A HW/TV ID SET Circuit	Add HW/TV Scalar board strap ID setting	16						
MA50	C CN12,CN13 JACK SPEC	Change CN12 and CN13 JACK SPEC	20						
MA51	A Discrete RGB Circuit	Add Discrete RGB to Internal Scalar Circuit (DEL)	21						
MA52	A R803,R805	Add R803 and R805 for Touch reset pin option	35						
MA53	A OP_Circuit for Audio	Add OP Circuit for HW/TV Scalar Lineout on PC_MB	36						
MA54	C C787	Change C787 100nF to NC	38						
MA55	C +3.3VDUAL Solution	Change +3.3VDUAL Power Solution	42						



T A I	OEM MODEL	B540/B340	Size	C
總代理商	T&I MODEL	B540/B340	Rev	0.1
Key Component	PCB NAME	71504690-T0D-000-0060	備註	<備註>
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