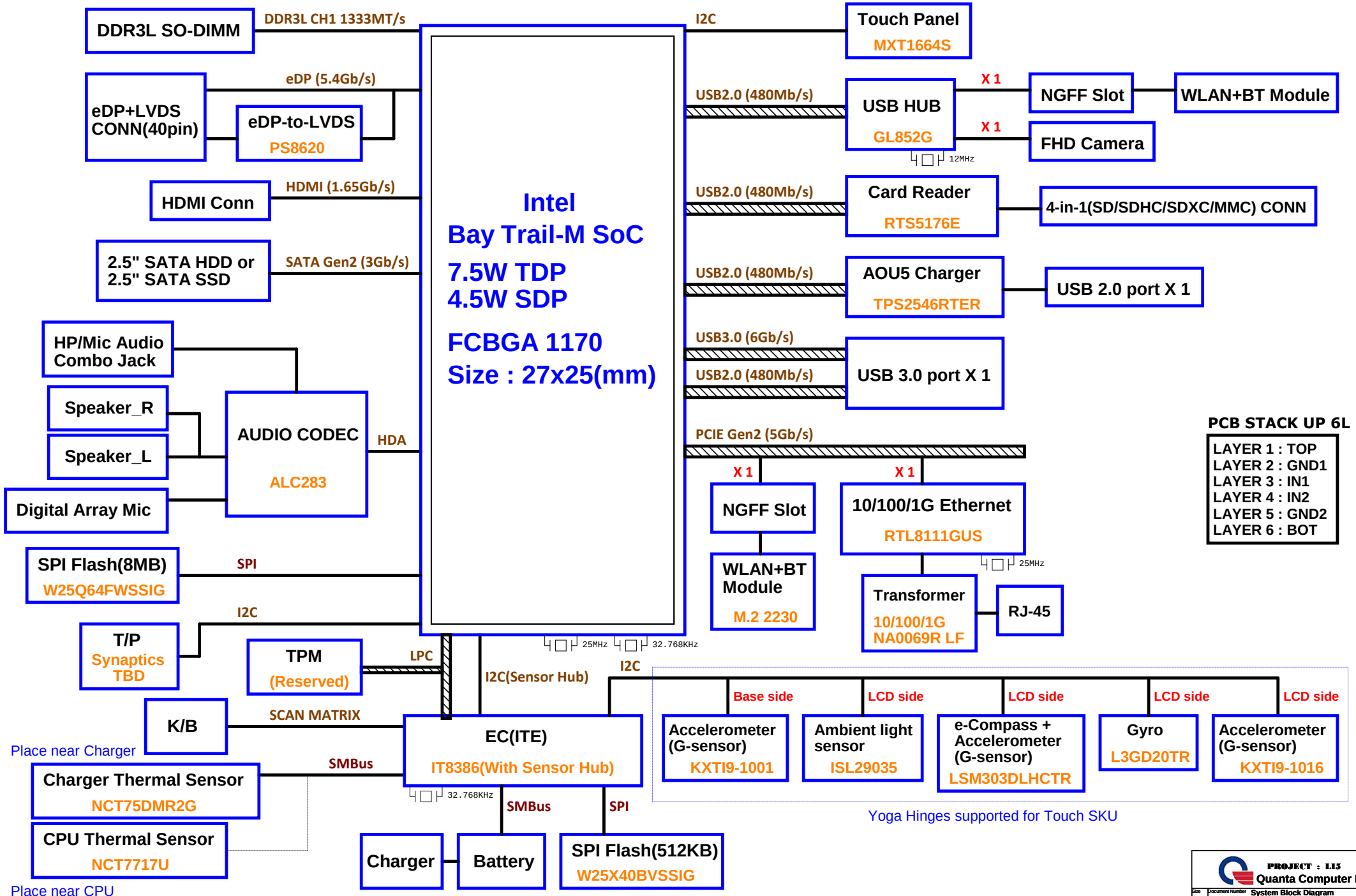
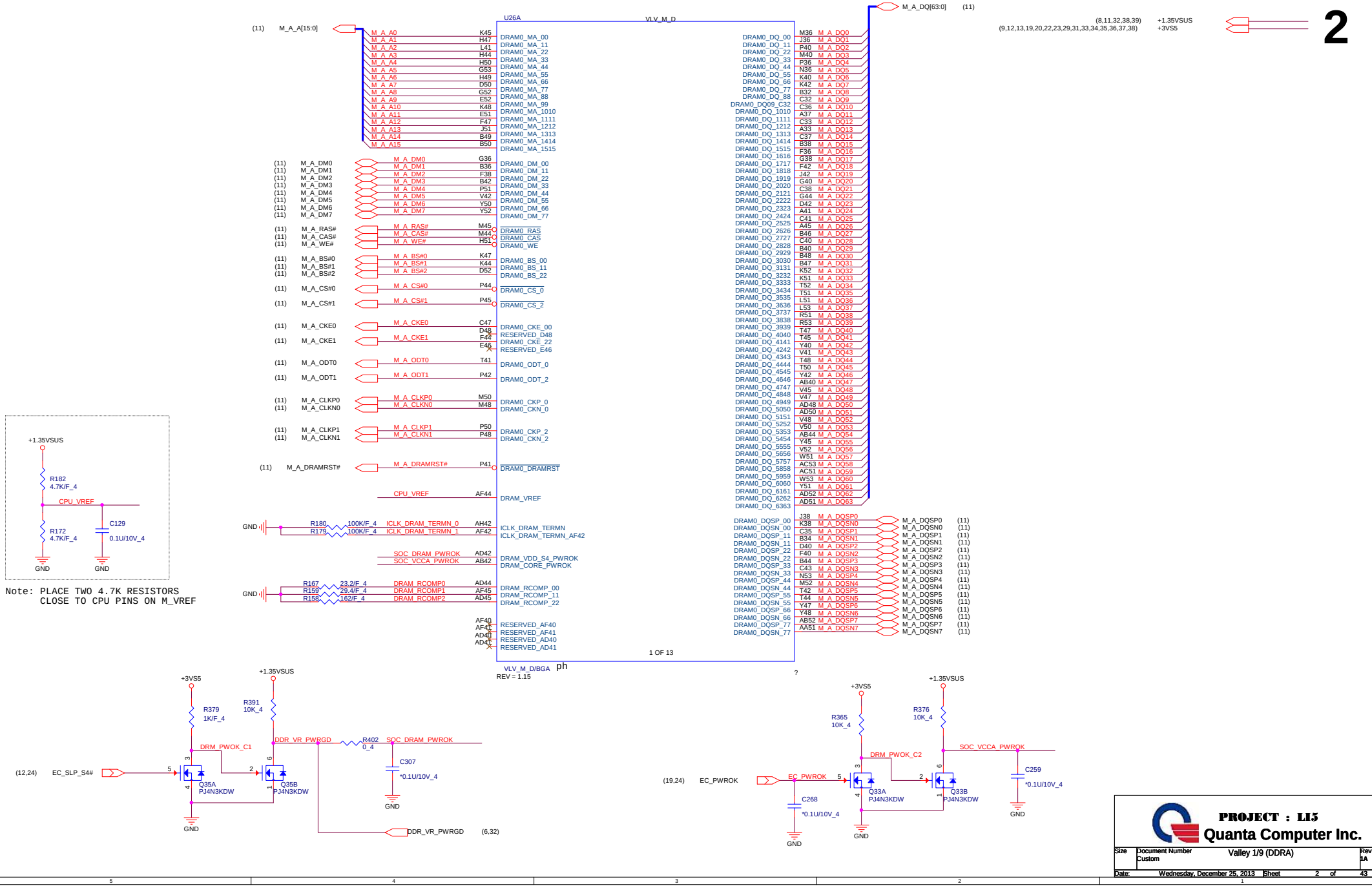
MR01 Intel Bay Trail-M Platform UMA Block Diagram (Windows)




U26A
VLV_M_D
(11) M_A_A[15:0]
M_A_A0 K45
M_A_A1 H47
M_A_A2 L41
M_A_A3 H44
M_A_A4 H50
M_A_A5 G53
M_A_A6 H49
M_A_A7 D50
M_A_A8 G52
M_A_A9 E52
M_A_A10 K48
M_A_A11 E51
M_A_A12 F47
M_A_A13 J51
M_A_A14 B49
M_A_A15 B50
DRAM0_MA_00
DRAM0_MA_11
DRAM0_MA_22
DRAM0_MA_33
DRAM0_MA_44
DRAM0_MA_55
DRAM0_MA_66
DRAM0_MA_77
DRAM0_MA_88
DRAM0_MA_99
DRAM0_MA_1010
DRAM0_MA_1111
DRAM0_MA_1212
DRAM0_MA_1313
DRAM0_MA_1414
DRAM0_MA_1515
(11) M_A_DM0 M_A_DM0 G36
(11) M_A_DM1 M_A_DM1 B36
(11) M_A_DM2 M_A_DM2 F38
(11) M_A_DM3 M_A_DM3 B42
(11) M_A_DM4 M_A_DM4 P51
(11) M_A_DM5 M_A_DM5 V42
(11) M_A_DM6 M_A_DM6 Y50
(11) M_A_DM7 M_A_DM7 Y52
DRAM0_DM_00
DRAM0_DM_11
DRAM0_DM_22
DRAM0_DM_33
DRAM0_DM_44
DRAM0_DM_55
DRAM0_DM_66
DRAM0_DM_77
(11) M_A_RAS# M_A_RAS# M45
(11) M_A_CAS# M_A_CAS# M44
(11) M_A_WE# M_A_WE# H51
DRAM0_RAS
DRAM0_CAS
DRAM0_WE
(11) M_A_BS#0 M_A_BS#0 K47
(11) M_A_BS#1 M_A_BS#1 K44
(11) M_A_BS#2 M_A_BS#2 D52
DRAM0_BS_00
DRAM0_BS_11
DRAM0_BS_22
(11) M_A_CS#0 M_A_CS#0 P44
DRAM0_CS_0
(11) M_A_CS#1 M_A_CS#1 P45
DRAM0_CS_2
(11) M_A_CKE0 M_A_CKE0 C47
DRAM0_CKE_00
RESERVED_D48
(11) M_A_CKE1 M_A_CKE1 F44
DRAM0_CKE_22
RESERVED_E46
(11) M_A_ODT0 M_A_ODT0 T41
DRAM0_ODT_0
(11) M_A_ODT1 M_A_ODT1 P42
DRAM0_ODT_2
(11) M_A_CLKP0 M_A_CLKP0 M50
(11) M_A_CLKN0 M_A_CLKN0 M48
DRAM0_CKP_0
DRAM0_CKN_0
(11) M_A_CLKP1 M_A_CLKP1 P50
(11) M_A_CLKN1 M_A_CLKN1 P48
DRAM0_CKP_2
DRAM0_CKN_2
(11) M_A_DRAMRST# M_A_DRAMRST# P41
DRAM0_DRAMRST
CPU_VREF AF44
DRAM_VREF
GND R180 100K/F_4 ICLK_DRAM_TERMN_0 AH42
R179 100K/F_4 ICLK_DRAM_TERMN_1 AF42
ICLK_DRAM_TERMN
ICLK_DRAM_TERMN_AF42
SOC_DRAM_PWROK AD42
SOC_VCCA_PWROK AB42
DRAM_VDD_S4_PWROK
DRAM_CORE_PWROK
GND R167 23.2/F_4 DRAM_RCOMP0 AD44
R159 29.4/F_4 DRAM_RCOMP1 AF45
R158 162/F_4 DRAM_RCOMP2 AD45
DRAM_RCOMP_00
DRAM_RCOMP_11
DRAM_RCOMP_22
AF40 RESERVED_AF40
AF41 RESERVED_AF41
AD40 RESERVED_AD40
AD41 RESERVED_AD41
1 OF 13
VLV_M_D/BGA
REV = 1.15
ph
M_A_DQ[63:0] (11)
DRAM0_DQ_00 M36 M_A_DQ0
DRAM0_DQ_11 J36 M_A_DQ1
DRAM0_DQ_22 P40 M_A_DQ2
DRAM0_DQ_33 M40 M_A_DQ3
DRAM0_DQ_44 P36 M_A_DQ4
DRAM0_DQ_55 N36 M_A_DQ5
DRAM0_DQ_66 K40 M_A_DQ6
DRAM0_DQ_77 K42 M_A_DQ7
DRAM0_DQ_88 B32 M_A_DQ8
DRAM0_DQ09_C32 C32 M_A_DQ9
DRAM0_DQ_1010 C36 M_A_DQ10
DRAM0_DQ_1111 A37 M_A_DQ11
DRAM0_DQ_1212 C33 M_A_DQ12
DRAM0_DQ_1313 A33 M_A_DQ13
DRAM0_DQ_1414 C37 M_A_DQ14
DRAM0_DQ_1515 B38 M_A_DQ15
DRAM0_DQ_1616 F36 M_A_DQ16
DRAM0_DQ_1717 G38 M_A_DQ17
DRAM0_DQ_1818 F42 M_A_DQ18
DRAM0_DQ_1919 J42 M_A_DQ19
DRAM0_DQ_2020 G40 M_A_DQ20
DRAM0_DQ_2121 C38 M_A_DQ21
DRAM0_DQ_2222 G44 M_A_DQ22
DRAM0_DQ_2323 D42 M_A_DQ23
DRAM0_DQ_2424 A41 M_A_DQ24
DRAM0_DQ_2525 C41 M_A_DQ25
DRAM0_DQ_2626 A45 M_A_DQ26
DRAM0_DQ_2727 B46 M_A_DQ27
DRAM0_DQ_2828 C40 M_A_DQ28
DRAM0_DQ_2929 B40 M_A_DQ29
DRAM0_DQ_3030 B48 M_A_DQ30
DRAM0_DQ_3131 B47 M_A_DQ31
DRAM0_DQ_3232 K52 M_A_DQ32
DRAM0_DQ_3333 K51 M_A_DQ33
DRAM0_DQ_3434 T52 M_A_DQ34
DRAM0_DQ_3535 T51 M_A_DQ35
DRAM0_DQ_3636 L51 M_A_DQ36
DRAM0_DQ_3737 L53 M_A_DQ37
DRAM0_DQ_3838 R51 M_A_DQ38
DRAM0_DQ_3939 R53 M_A_DQ39
DRAM0_DQ_4040 T47 M_A_DQ40
DRAM0_DQ_4141 T45 M_A_DQ41
DRAM0_DQ_4242 Y40 M_A_DQ42
DRAM0_DQ_4343 V41 M_A_DQ43
DRAM0_DQ_4444 T48 M_A_DQ44
DRAM0_DQ_4545 T50 M_A_DQ45
DRAM0_DQ_4646 Y42 M_A_DQ46
DRAM0_DQ_4747 AB40 M_A_DQ47
DRAM0_DQ_4848 V45 M_A_DQ48
DRAM0_DQ_4949 V47 M_A_DQ49
DRAM0_DQ_5050 AD48 M_A_DQ50
DRAM0_DQ_5151 AD50 M_A_DQ51
DRAM0_DQ_5252 V48 M_A_DQ52
DRAM0_DQ_5353 V50 M_A_DQ53
DRAM0_DQ_5454 AB44 M_A_DQ54
DRAM0_DQ_5555 Y45 M_A_DQ55
DRAM0_DQ_5656 V52 M_A_DQ56
DRAM0_DQ_5757 W51 M_A_DQ57
DRAM0_DQ_5858 AC53 M_A_DQ58
DRAM0_DQ_5959 AC51 M_A_DQ59
DRAM0_DQ_6060 W53 M_A_DQ60
DRAM0_DQ_6161 Y51 M_A_DQ61
DRAM0_DQ_6262 AD52 M_A_DQ62
DRAM0_DQ_6363 AD51 M_A_DQ63
DRAM0_DQSP_00 J38 M_A_DQSP0
DRAM0_DQSN_00 K38 M_A_DQSN0
DRAM0_DQSP_11 C35 M_A_DQSP1
DRAM0_DQSN_11 B34 M_A_DQSN1
DRAM0_DQSP_22 D40 M_A_DQSP2
DRAM0_DQSN_22 F40 M_A_DQSN2
DRAM0_DQSP_33 B44 M_A_DQSP3
DRAM0_DQSN_33 C43 M_A_DQSN3
DRAM0_DQSP_44 N53 M_A_DQSP4
DRAM0_DQSN_44 M52 M_A_DQSN4
DRAM0_DQSP_55 T42 M_A_DQSP5
DRAM0_DQSN_55 T44 M_A_DQSN5
DRAM0_DQSP_66 Y47 M_A_DQSP6
DRAM0_DQSN_66 Y48 M_A_DQSN6
DRAM0_DQSP_77 AB52 M_A_DQSP7
DRAM0_DQSN_77 AA51 M_A_DQSN7
M_A_DQSP0 (11)
M_A_DQSN0 (11)
M_A_DQSP1 (11)
M_A_DQSN1 (11)
M_A_DQSP2 (11)
M_A_DQSN2 (11)
M_A_DQSP3 (11)
M_A_DQSN3 (11)
M_A_DQSP4 (11)
M_A_DQSN4 (11)
M_A_DQSP5 (11)
M_A_DQSN5 (11)
M_A_DQSP6 (11)
M_A_DQSN6 (11)
M_A_DQSP7 (11)
M_A_DQSN7 (11)
(8,11,32,38,39) +1.35VSUS
(9,12,13,19,20,22,23,29,31,33,34,35,36,37,38) +3VS5
2
+1.35VSUS
R182 4.7K/F_4
CPU_VREF
R172 4.7K/F_4
C129 0.1U/10V_4
GND
GND
Note: PLACE TWO 4.7K RESISTORS
CLOSE TO CPU PINS ON M_VREF
+3VS5
+1.35VSUS
R379 1K/F_4
R391 10K_4
DRM_PWOK_C1
DDR_VR_PWRGD
R402 0_4
SOC_DRAM_PWROK
C307 *0.1U/10V_4
(12,24) EC_SLP_S4#
Q35A PJ4N3KDW
Q35B PJ4N3KDW
GND
GND
DDR_VR_PWRGD (6,32)
?
+3VS5
+1.35VSUS
R365 10K_4
R376 10K_4
DRM_PWOK_C2
SOC_VCCA_PWROK
C259 *0.1U/10V_4
(19,24) EC_PWROK
EC_PWROK
C268 *0.1U/10V_4
Q33A PJ4N3KDW
Q33B PJ4N3KDW
GND
GND
GND
PROJECT : LI5
Quanta Computer Inc.
Size Document Number Custom
Valley 1/9 (DDRA)
Rev 1A
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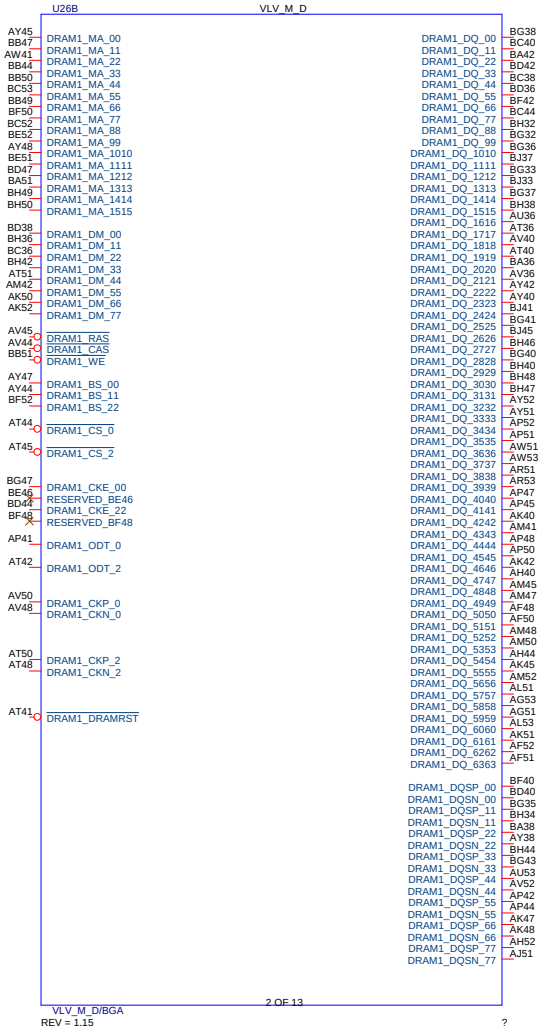

PROJECT : LI5

Quanta Computer Inc.

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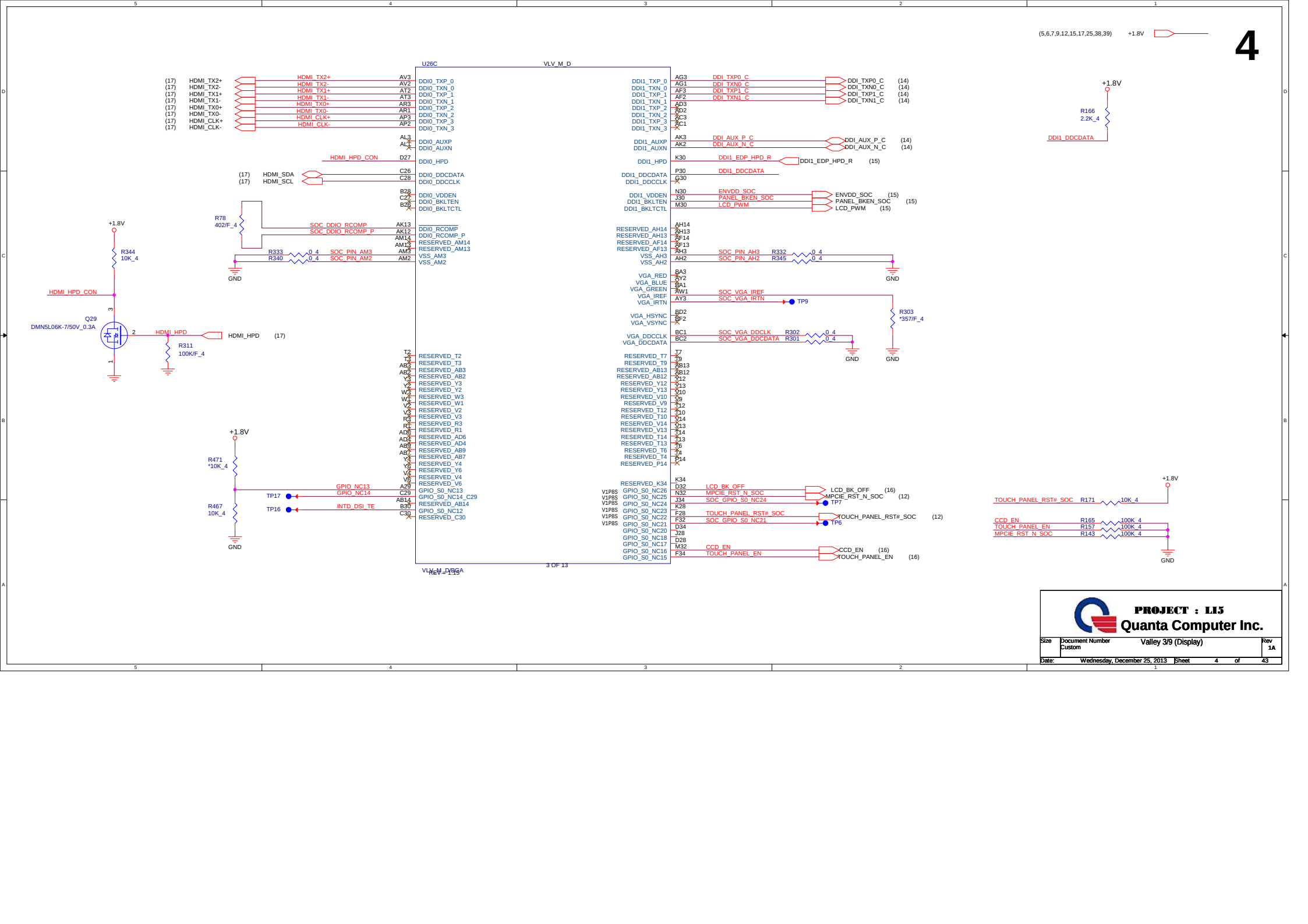
Date:	Wednesday, December 25, 2013	Sheet 3 of 43	


(5,6,7,9,12,15,17,25,38,39) +1.8V
4
U26C
VLV_M_D
(17) HDMI_TX2+
(17) HDMI_TX2-
(17) HDMI_TX1+
(17) HDMI_TX1-
(17) HDMI_TX0+
(17) HDMI_TX0-
(17) HDMI_CLK+
(17) HDMI_CLK-
HDMI_TX2+ AV3 DDI0_TXP_0
HDMI_TX2- AV2 DDI0_TXN_0
HDMI_TX1+ AT2 DDI0_TXP_1
HDMI_TX1- AT3 DDI0_TXN_1
HDMI_TX0+ AR3 DDI0_TXP_2
HDMI_TX0- AR1 DDI0_TXN_2
HDMI_CLK+ AP3 DDI0_TXP_3
HDMI_CLK- AP2 DDI0_TXN_3
AL3 DDI0_AUXP
AL1 DDI0_AUXN
HDMI_HPD_CON D27 DDI0_HPD
(17) HDMI_SDA C26 DDI0_DDCDATA
(17) HDMI_SCL C28 DDI0_DDCCLK
B28 DDI0_VDDEN
C27 DDI0_BKLTEN
B26 DDI0_BKLTCTL
R78 402/F_4
SOC_DDIO_RCOMP AK13 DDI0_RCOMP
SOC_DDIO_RCOMP_P AK12 DDI0_RCOMP_P
AM14 RESERVED_AM14
AM13 RESERVED_AM13
R333 0_4 SOC_PIN_AM3 AM3 VSS_AM3
R340 0_4 SOC_PIN_AM2 AM2 VSS_AM2
GND
+1.8V
R344 10K_4
HDMI_HPD_CON
Q29
DMN5L06K-7/50V_0.3A
HDMI_HPD
HDMI_HPD (17)
R311 100K/F_4
T2 RESERVED_T2
T3 RESERVED_T3
AB3 RESERVED_AB3
AB2 RESERVED_AB2
Y3 RESERVED_Y3
Y2 RESERVED_Y2
W3 RESERVED_W3
W2 RESERVED_W1
V2 RESERVED_V2
V3 RESERVED_V3
R3 RESERVED_R3
R1 RESERVED_R1
AD6 RESERVED_AD6
AD4 RESERVED_AD4
AB9 RESERVED_AB9
AB7 RESERVED_AB7
Y4 RESERVED_Y4
Y6 RESERVED_Y6
V4 RESERVED_V4
V6 RESERVED_V6
+1.8V
R471 *10K_4
R467 10K_4
GPIO_NC13 A29 GPIO_S0_NC13
GPIO_NC14 C29 GPIO_S0_NC14_C29
TP17
TP16
INTD_DSI_TE AB14 RESERVED_AB14
B30 GPIO_S0_NC12
C30 RESERVED_C30
GND
VLV_M_DBGA
REV = 1.13
3 OF 13
DDI1_TXP_0 AG3 DDI1_TXP0_C
DDI1_TXN_0 AG1 DDI1_TXN0_C
DDI1_TXP_1 AF3 DDI1_TXP1_C
DDI1_TXN_1 AF2 DDI1_TXN1_C
DDI1_TXP_2 AD3
DDI1_TXN_2 AD2
DDI1_TXP_3 AC3
DDI1_TXN_3 AC1
DDI1_AUXP AK3 DDI1_AUX_P_C
DDI1_AUXN AK2 DDI1_AUX_N_C
DDI1_HPD K30 DDI1_EDP_HPD_R
DDI1_DDCDATA P30 DDI1_DDCDATA
DDI1_DDCCLK G30
DDI1_VDDEN N30 ENVDD_SOC
DDI1_BKLTEN J30 PANEL_BKEN_SOC
DDI1_BKLTCTL M30 LCD_PWM
RESERVED_AH14 AH14
RESERVED_AH13 AH13
RESERVED_AF14 AF14
RESERVED_AF13 AF13
VSS_AH3 AH3 SOC_PIN_AH3 R332 0_4
VSS_AH2 AH2 SOC_PIN_AH2 R345 0_4
GND
VGA_RED BA3
VGA_BLUE AY2
VGA_GREEN BA1
VGA_IREF AW1 SOC_VGA_IREF
VGA_IRTN AY3 SOC_VGA_IRTN
TP9
R303 *357/F_4
VGA_HSYNC BD2
VGA_VSYNC BF2
VGA_DDCCLK BC1 SOC_VGA_DDCLK R302 0_4
VGA_DDCDATA BC2 SOC_VGA_DDCDATA R301 0_4
GND
GND
RESERVED_T7 J7
RESERVED_T9 J9
RESERVED_AB13 AB13
RESERVED_AB12 AB12
RESERVED_Y12 Y12
RESERVED_Y13 Y13
RESERVED_V10 V10
RESERVED_V9 V9
RESERVED_T12 T12
RESERVED_T10 T10
RESERVED_V14 V14
RESERVED_V13 V13
RESERVED_T14 T14
RESERVED_T13 T13
RESERVED_T6 T6
RESERVED_T4 T4
RESERVED_P14 P14
RESERVED_K34 K34
V1P8S GPIO_S0_NC26 D32 LCD_BK_OFF
V1P8S GPIO_S0_NC25 N32 MPCIE_RST_N_SOC
V1P8S GPIO_S0_NC24 J34 SOC_GPIO_S0_NC24
TP7
V1P8S GPIO_S0_NC23 K28
V1P8S GPIO_S0_NC22 F28 TOUCH_PANEL_RST#_SOC
V1P8S GPIO_S0_NC21 F32 SOC_GPIO_S0_NC21
TP6
GPIO_S0_NC20 D34
GPIO_S0_NC18 J28
GPIO_S0_NC17 D28
GPIO_S0_NC16 M32 CCD_EN
GPIO_S0_NC15 F34 TOUCH_PANEL_EN
LCD_BK_OFF (16)
MPCIE_RST_N_SOC (12)
TOUCH_PANEL_RST#_SOC (12)
CCD_EN (16)
TOUCH_PANEL_EN (16)
DDI_TXP0_C (14)
DDI_TXN0_C (14)
DDI_TXP1_C (14)
DDI_TXN1_C (14)
DDI_AUX_P_C (14)
DDI_AUX_N_C (14)
DDI1_EDP_HPD_R (15)
ENVDD_SOC (15)
PANEL_BKEN_SOC (15)
LCD_PWM (15)
+1.8V
R166 2.2K_4
DDI1_DDCDATA
+1.8V
TOUCH_PANEL_RST#_SOC R171 10K_4
CCD_EN R165 100K_4
TOUCH_PANEL_EN R157 100K_4
MPCIE_RST_N_SOC R143 100K_4
GND
PROJECT : LI5
Quanta Computer Inc.
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Valley 3/9 (Display)
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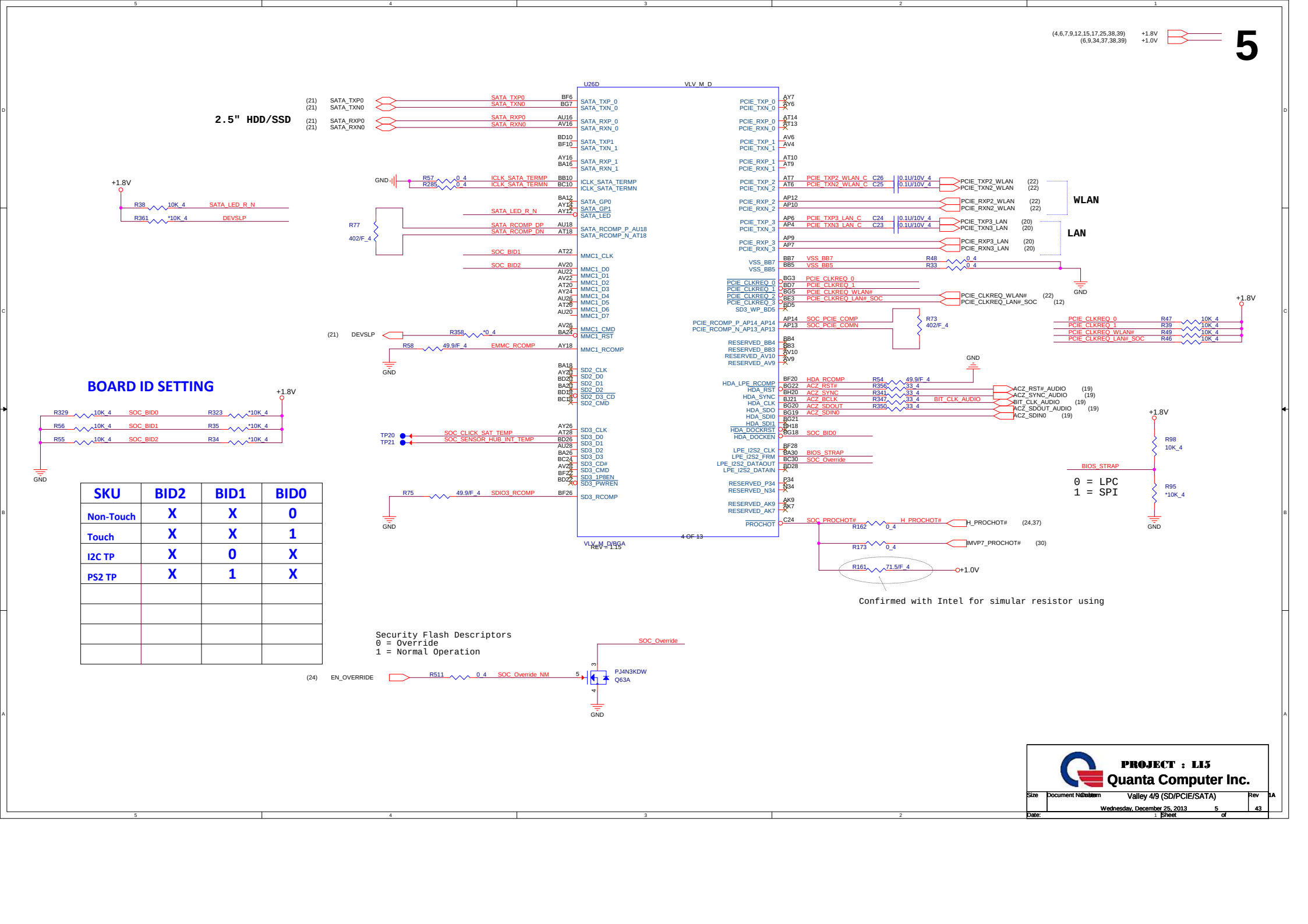
(4,6,7,9,12,15,17,25,38,39) +1.8V
(6,9,34,37,38,39) +1.0V
5
2.5" HDD/SSD
U26D
VLV_M_D
SATA_TXP0
SATA_TXN0
SATA_RXP0
SATA_RXN0
SATA_TXP1
SATA_TXN1
SATA_RXP_1
SATA_RXN_1
ICLK_SATA_TERMP
ICLK_SATA_TERMN
SATA_GP0
SATA_GP1
SATA_LED
SATA_RCOMP_P_AU18
SATA_RCOMP_N_AT18
MMC1_CLK
MMC1_D0
MMC1_D1
MMC1_D2
MMC1_D3
MMC1_D4
MMC1_D5
MMC1_D6
MMC1_D7
MMC1_CMD
MMC1_RST
MMC1_RCOMP
SD2_CLK
SD2_D0
SD2_D1
SD2_D2
SD2_D3_CD
SD2_CMD
SD3_CLK
SD3_D0
SD3_D1
SD3_D2
SD3_D3
SD3_CD#
SD3_CMD
SD3_1P8EN
SD3_PWREN
SD3_RCOMP
PCIE_TXP_0
PCIE_TXN_0
PCIE_RXP_0
PCIE_RXN_0
PCIE_TXP_1
PCIE_TXN_1
PCIE_RXP_1
PCIE_RXN_1
PCIE_TXP_2
PCIE_TXN_2
PCIE_RXP_2
PCIE_RXN_2
PCIE_TXP_3
PCIE_TXN_3
PCIE_RXP_3
PCIE_RXN_3
VSS_BB7
VSS_BB5
PCIE_CLKREQ_0
PCIE_CLKREQ_1
PCIE_CLKREQ_2
PCIE_CLKREQ_3
SD3_WP_BD5
PCIE_RCOMP_P_AP14_AP14
PCIE_RCOMP_N_AP13_AP13
RESERVED_BB4
RESERVED_BB3
RESERVED_AV10
RESERVED_AV9
HDA_LPE_RCOMP
HDA_RST
HDA_SYNC
HDA_CLK
HDA_SDO
HDA_SDI0
HDA_SDI1
HDA_DOCKRST
HDA_DOCKEN
LPE_I2S2_CLK
LPE_I2S2_FRM
LPE_I2S2_DATAOUT
LPE_I2S2_DATAIN
RESERVED_P34
RESERVED_N34
RESERVED_AK9
RESERVED_AK7
PROCHOT
4 OF 13
VLV_M_D/BGA
REV = 1.15
WLAN
LAN
SOC_PROCHOT#
H_PROCHOT#
IMVP7_PROCHOT#
+1.0V
Confirmed with Intel for simular resistor using
+1.8V
GND
BOARD ID SETTING
SOC_BID0
SOC_BID1
SOC_BID2
SKU
BID2
BID1
BID0
Non-Touch
Touch
I2C TP
PS2 TP
Security Flash Descriptors
0 = Override
1 = Normal Operation
SOC_Override
EN_OVERRIDE
PJ4N3KDW
Q63A
BIOS_STRAP
0 = LPC
1 = SPI
ACZ_RST#_AUDIO
ACZ_SYNC_AUDIO
BIT_CLK_AUDIO
ACZ_SDOUT_AUDIO
ACZ_SDIN0
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Quanta Computer Inc.
Valley 4/9 (SD/PCIE/SATA)
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of

(7,9,12,35,36,38,39) +1.8VS5
(9,24) +3V_RTC
(4,5,7,9,12,15,17,25,38,39) +1.8V
(5,9,34,37,38,39) +1.0V

DDR_VR_PWRGD (2,32)

Q47
*METR3904-G

SLP_S3# R → SOC_SIO_SLP_S3# (12)
R430 0_4

+1.8VS5
PMU_BATLOW# R168 10K_4
SUS_PWRDOWNACK R178 10K_4
SOC_PMC_WAKE R177 10K_4
AC_PRESENT R187 10K_4

+1.8V
SOC_REST_BTN R295 10K_4

AC Present: This input pin indicates when the platform is plugged into AC power.

AC_PRESENT
(24) AC_PRESENT_EC
R507 0_4 AC_PRESENT_NM
Q59B PJ4N3KDW

C20 12P/50V_4
XTAL25_OUT
Y1
25MHZ +-10PPM
R59 1M_4
XTAL25_IN
C28 12P/50V_4
GND

U26E VLV_M_D

XTAL25_IN AH12 ICLK_OSCIN
XTAL25_OUT AH10 ICLK_OSCOUT
AD9 RESERVED_AD9
R88 4.02K/F_4 ICLK_ICOMP AD14 ICLK_ICOMP
R81 47.5/F_4 ICLK_RCOMP AD13 ICLK_RCOMP
AD10 RESERVED_AD10
AD12 RESERVED_AD12
AF6 PCIE_CLKN_00
AF5 PCIE_CLKP_00
AF9 PCIE_CLKN_11
AF8 PCIE_CLKP_11
(22) CLK_PCIE_WLANN → CLK_PCIE_WLANN AK4 PCIE_CLKN_22
(22) CLK_PCIE_WLANP → CLK_PCIE_WLANP AK6 PCIE_CLKP_22
(20) CLK_PCIE_LANN → CLK_PCIE_LANN AM4 PCIE_CLKN_33
(20) CLK_PCIE_LANP → CLK_PCIE_LANP AM6 PCIE_CLKP_33
AM10 RESERVED_AM10
AM9 RESERVED_AM9

SIO_UART1_RXD AU34
SIO_UART1_TXD AV34
SIO_UART1_RTS BA34
SIO_UART1_CTS AY34
SIO_UART2_RXD BF34
SIO_UART2_TXD BD34
SIO_UART2_RTS BD32
SIO_UART2_CTS BF32

PMC_SUSPWRDNACK D26 SUS_PWRDOWNACK R164 *0_4 → SOC_SUSACK# (12)
PMC_SUSCLK0_G24 G24 PMC_SUSCLK0 → PMC_SUSCLK0 (12)
PMC_SLP_S0IX F18 SOC_SLP_S0IX# → SOC_SLP_S0IX# (12)
PMC_SLP_S4 F22 SOC_SLP_S4# → SOC_SLP_S4# (12)
PMC_SLP_S3 D22 SLP_S3# R
J20
GPIO_S514_J20 D20 AC_PRESENT
PMC_ACPRESENT F26 SOC_PMC_WAKE_C R163 0_4 → SOC_PMC_WAKE (12)
PMC_WAKE_PCIE_0 K26 PMU_BATLOW# R176 *0_4 → PM_BATLOW_N (12)
PMC_BATLOW J26 SOC_PWRBTN# → SOC_PWRBTN# (12)
PMC_PWRBTN BG9 SOC_REST_BTN
PMC_RSTBTN F20 SOC_PLTRST# → SOC_PLTRST# (12)
PMC_PLTRST J24
GPIO_S517_J24 G18 → PCH_SLP_S0# (12)
PMC_SUS_STAT

ILB_RTC_TEST C11 SOC_RTEST#

PMC_RSMRST B10 SOC_RSMRST# → SOC_RSMRST# (24)
PMC_CORE_PWROK B7 CORE_PWROK → CORE_PWROK (24)

ILB_RTC_X1 C9 RTC_X1
ILB_RTC_X2 A9 RTC_X2
ILB_RTC_EXTPAD B8 BRTC_EXTPAD C274 0.1U/10V_4 → GND

SVID_ALERT B24 SVID_ALERT# SOC R458 20/F_4 VR_SVID_ALERT# → VR_SVID_ALERT# (37)
SVID_DATA A25 SVID_DATA_SOC R462 16.9/F_4 VR_SVID_DATA → VR_SVID_DATA (37)
SVID_CLK C25 SVID_CLK_SOC R453 0_4 VR_SVID_CLK → VR_SVID_CLK (37)

+1.0V
VR_SVID_ALERT# R319 71.5/F_4
placed near CPU

SIO_PWM_00 AU32
SIO_PWM_11 AT32

GPIO_S5_22 K24 → LED_MIC_MUTE# (27)
GPIO_S5_23 N24 → LED_SPK_MUTE# (27)
GPIO_S5_24 M20 → LED_FN_KEY# (27)
GPIO_S5_25 U18
GPIO_S5_26 M18
GPIO_S5_27 K18
GPIO_S5_28 K20
GPIO_S5_29 M22
GPIO_S5_30 M24
EC-DV-01

SIO_SPI_CS AV32
SIO_SPI_MISO BA28
SIO_SPI_MOSI AY28
SIO_SPI_CLK AY30

3.3V RTC
1.8V

+1.8VS5
R131 *51/F_4 XDP_H_TDO
R133 *51/F_4 XDP_H_TMS
R108 *51/F_4 XDP_H_TDI
R132 *200/F_4 XDP_H_PREQ#
R92 *51/F_4 XDP_H_TRST#
R124 *51/F_4 XDP_H_TCK
GND

SRT_CRST# C12 ILB_RTC_RST
XDP_H_TCK D14 TAP_TCK
XDP_H_TRST# G12 TAP_TRST
XDP_H_TMS F14 TAP_TMS
XDP_H_TDI F12 TAP_TDI
XDP_H_TDO G16 TAP_TDO
XDP_H_PRDY# D18 TAP_PRDY
XDP_H_PREQ# F16 TAP_PREQ
AT34 RESERVED
TP5

PMC_PLT_CLK_00 BH7
PMC_PLT_CLK_11 BH5
PMC_PLT_CLK_22 BH6
PMC_PLT_CLK_33 BH3
PMC_PLT_CLK_44 BH4
PMC_PLT_CLK_55 BJ3

+1.8VS5
R456 10K_4 PCIE_WAKE# WLAN_SOC
R485 10K_4 Rotate_BTN#
R439 *10K_4 SOC_SENSOR_HUB_INT
EC-DV-21

SOC_SPI_CS# C23 PCU_SPI_CS_00
C21 PCU_SPI_CS_11
SOC_SPI_MISO B22 PCU_SPI_MISO
SOC_SPI_MOSI A21 PCU_SPI_MOSI
SOC_SPI_CLK C22 PCU_SPI_CLK

(12) SOC_CLICK_SAT
(12) SOC_SENSOR_HUB_INT
B18 GPIO_S5_0
B16 GPIO_S5_1
(12) PCIE_WAKE#_WLAN_SOC → PCIE_WAKE# WLAN_SOC C18 GPIO_S5_2
SOC_PMC_WAKE R445 *0_4 SOC_JTAG2_TDI A17 GPIO_S5_3
(12) CHG_SOC C17 GPIO_S5_4
(27) Rotate_BTN# C16 GPIO_S5_5
(12) SOC_RUNTIME_SCI# R435 0_4 SOC_KBC_SCI B14 GPIO_S5_6
(12) SOC_EXTSMI# R436 0_4 SOC_KBC_SMI C15 GPIO_S5_7

SPI_3P R418 *0_4 SPI_3P_R C13 GPIO_S5_8
SPI_7P R426 *0_4 SPI_7P_R A13 GPIO_S5_9
C19 GPIO_S5_10

R455 49.9/F_4 SOC_GPIO_RCOMP N26 GPIO_RCOMP
GND

5 OF 13
VLV_M_D9BGA
REV = 1.15

Vender	Size	P/N
WND	8MB	AKE5EZN0N00 (W25Q64FWSSIG)
MXIC	8MB	
Socket (208mil)		DFHS08FS023 50960-0084n-001-8p-socket

RTC Circuitry(RTC)

30mils
+3V_RTC
100 uA
RTC Power trace width 20mils.
3VPCU
D35 RB500V-40
1K_4 R530 +3V_RTC_0
D36 RB500V-40
R529 20K/F_4 SOC_RTEST#
C363 1U/6.3V_4
R527 20K/F_4 SRT_CRST#
C359 1U/6.3V_4
C360 1U/6.3V_4
EC-DV-10
CN16 CONN_RTC
GND

RTC Clock 32.768KHz

RTC_X1 C289 12P/50V_4
R392 10M_4
Y4 32.768KHz
RTC_X2 C304 12P/50V_4
GND

SPI NOR FLASH

+1.8VS5
C347 0.1U/10V_4
U40
VCC SPI_SI
SPI_SO
CS#
WP# SPI_SCK
SPI_HOLD GND
SPI_Socket_208mil
soic8-8-1_27
AKE5EZN0N00
IC FLASH (8P) W25Q64FWSSIG (SOIC)
R483 3.3K/F_4 SPI_3P
R482 3.3K/F_4 SPI_7P
SOC_SPI_MOSI_R R492 22_4 SOC_SPI_MOSI
SOC_SPI_MISO_R R497 22_4 SOC_SPI_MISO
SOC_SPI_CS#_R R509 22_4 SOC_SPI_CS#
SOC_SPI_CLK_R R489 22_4 SOC_SPI_CLK
R502 3.3K/F_4 SOC_SPI_CS#
GND

EMI reserve
SOC_SPI_CLK
*15P/50V_4 C350
GND

PROJECT : LI5
Quanta Computer Inc.

Size	Document Number		Rev
Custom	Valley 5/9 (SPI/GPIO/CLK)		1A
Date: Wednesday, December 25, 2013	Sheet 6 of 43		

(6,9,12,35,36,38,39) +1.8VS5
(4,5,6,9,12,15,17,25,38,39) +1.8V
(9,11,12,13,14,15,16,18,19,20,21,22,24,25,26,29,30,32,38,39) +3.3V

BT_OFF# 10K_4 R364
RF_OFF# 10K_4 R366

U26F VLV_M_D

USB 2.0 Port 0 should be routed to USB3.0 port.
USB 2.0 Port 1 can be used as a debug port.

External USB 3.0 Port
External USB 2.0 Port (AOU5 supported)
To card reader
To USB HUB

Top Swap (A16 Override)
0 = Top address bit is unchanged
1 = Top address bit is inverted

Un-Stuff for Test Only

3.3V supported
1.8V only

EMI reserve

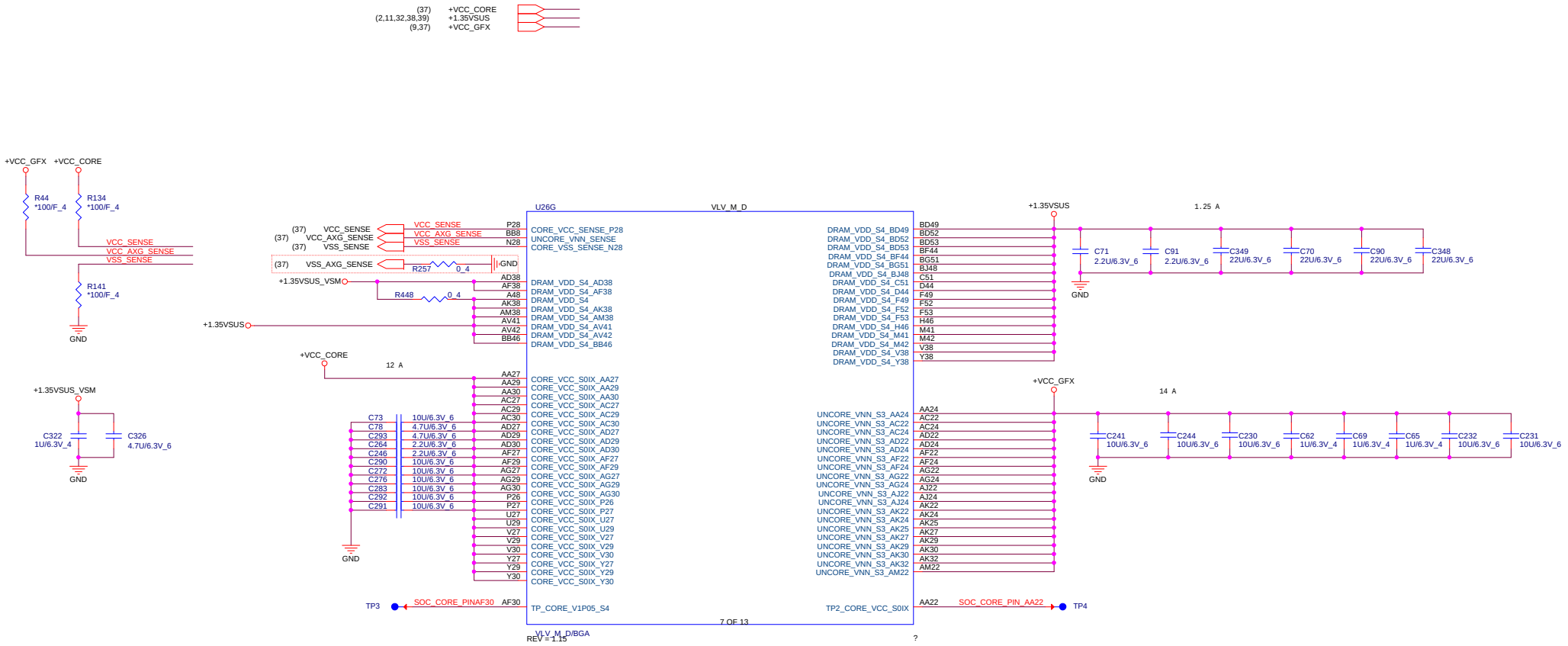
EC-ME SIT-09 EC-DV-18

VLV_M_D/BGA
REV = 1.15
6 OF 13

PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Valley 6/9 (USB/LPC/I2C)	1A

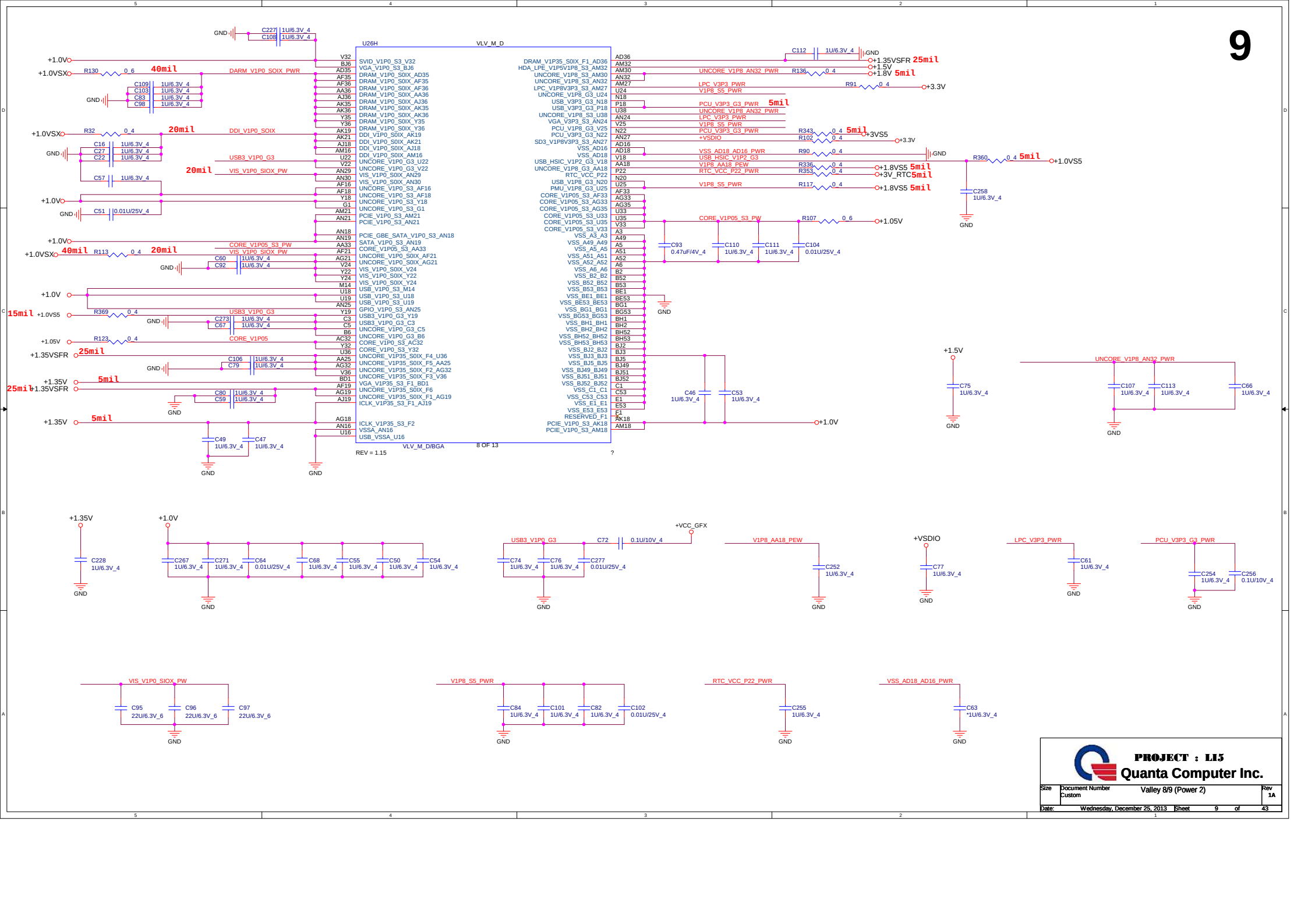
Date: Wednesday, December 25, 2013 Sheet 7 of 43



PROJECT : LI5

Quanta Computer Inc.

Size	Document Number		Rev
	Custom	Valley 7/9 (Power 1)	1A
Date:	Wednesday, December 25, 2013	Sheet 8 of 43	


9
U26H
VLV_M_D
REV = 1.15
VLV_M_D/BGA
8 OF 13
?
PROJECT : LI5
Quanta Computer Inc.
Valley 8/9 (Power 2)
Size
Document Number
Custom
Rev
1A
Date: Wednesday, December 25, 2013
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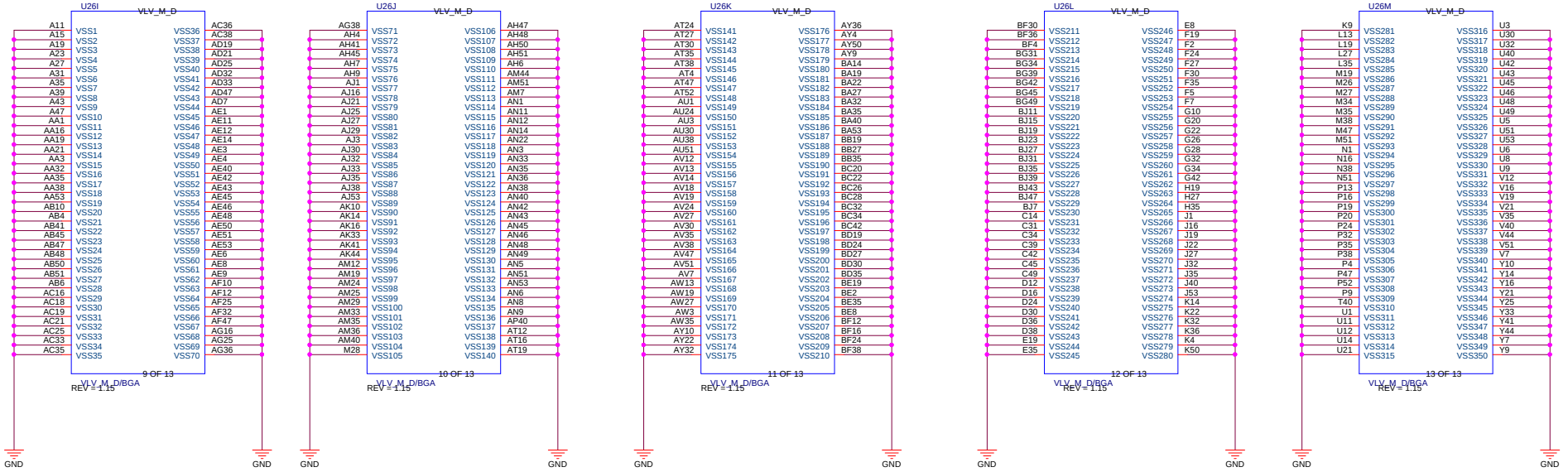
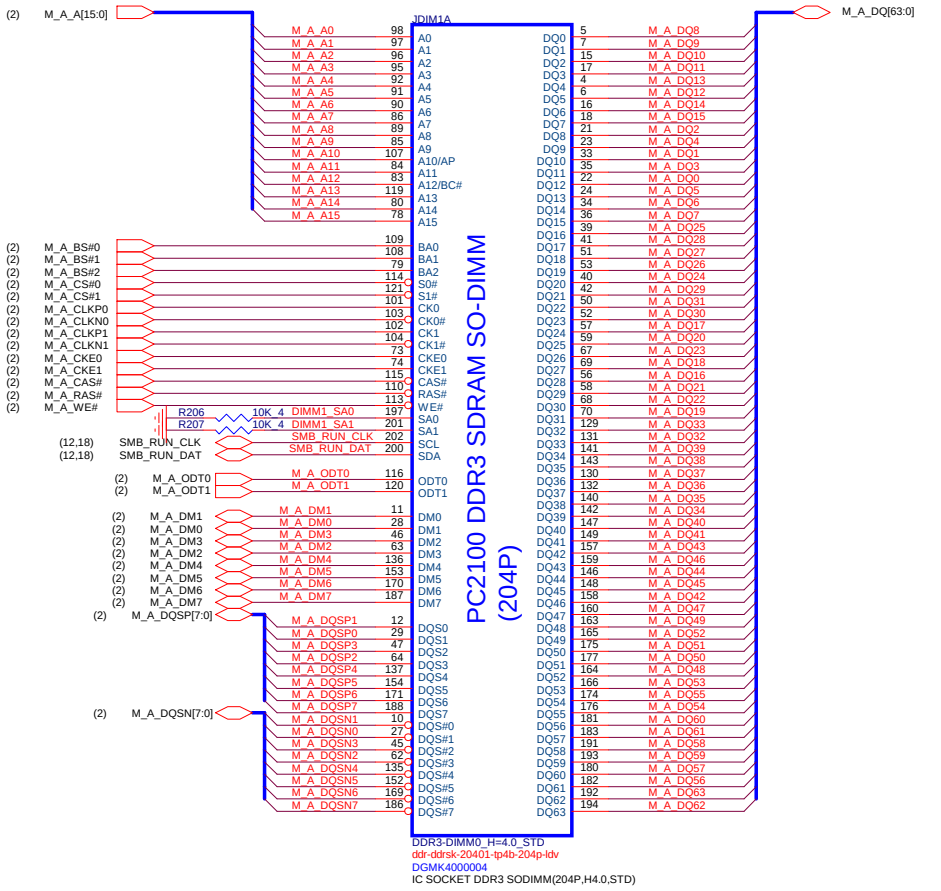
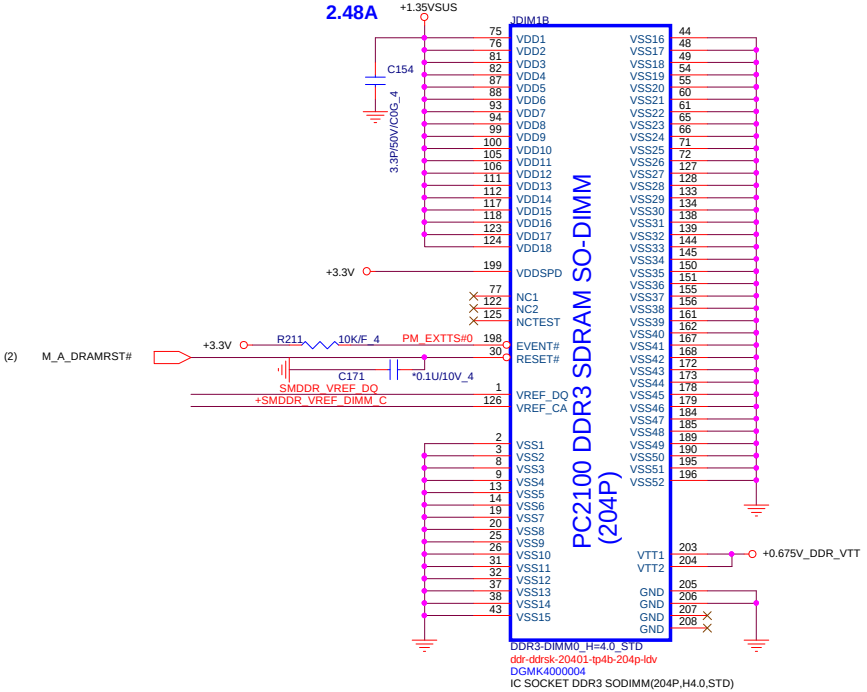


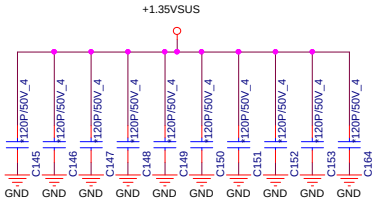
PROJECT : LI5

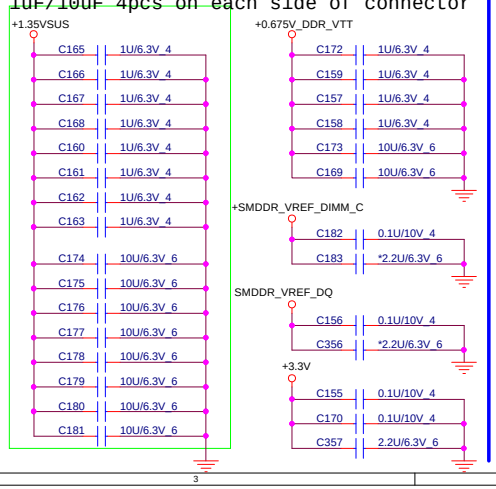
Quanta Computer Inc.

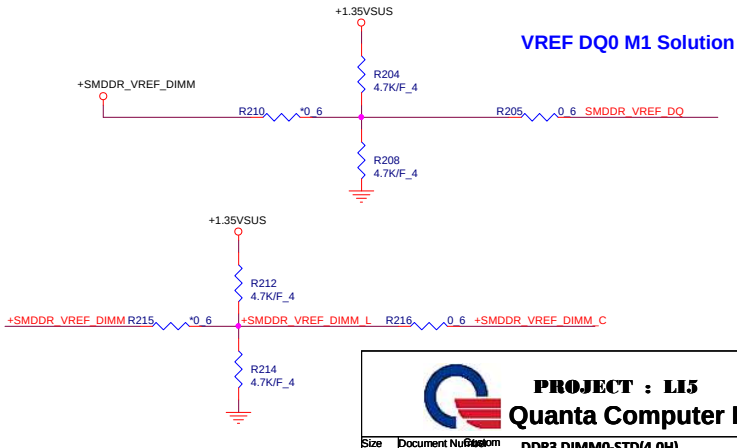
Size	Document Number		Rev
	Custom	Valley 9/9 (GND)	1A
Date:	Wednesday, December 25, 2013	Sheet 10 of 43	







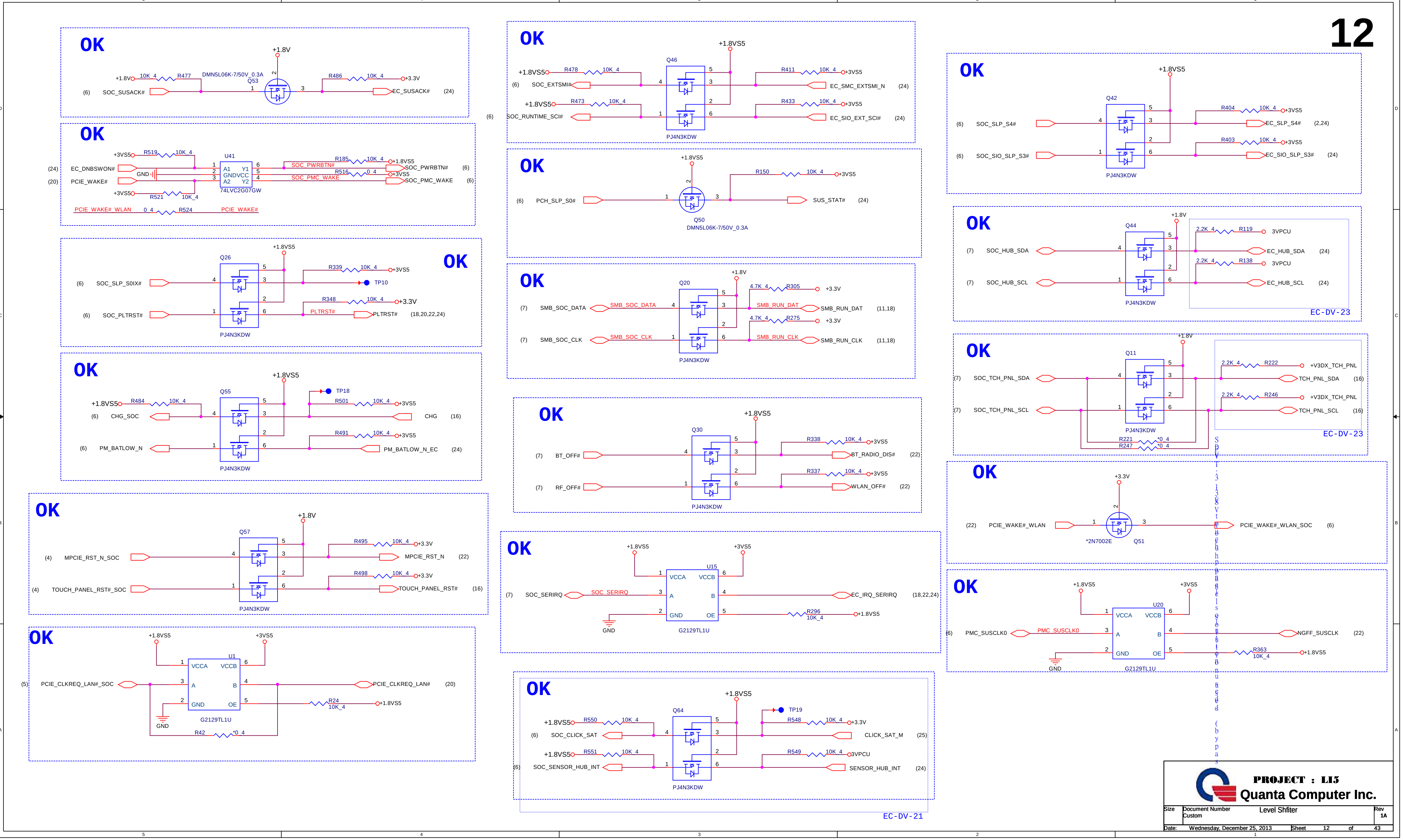




PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	DDR3 DIMM0-STD(4.0H)	Rev
			1A

Date: Wednesday, December 25, 2013 Sheet 11 of 43


12
OK
+1.8V
SOC_SUSACK#
R477 10K_4
DMN5L06K-7/50V_0.3A
Q53
R486 10K_4
+3.3V
EC_SUSACK#
OK
U41
74LVC2G07GW
EC_DNBSWON#
PCIE_WAKE#
R519 10K_4
R521 10K_4
R185 10K_4
R516 0_4
SOC_PWRBTN#
SOC_PMC_WAKE
PCIE_WAKE#_WLAN
R524 0_4
OK
Q26
PJ4N3KDW
SOC_SLP_S0IX#
SOC_PLTRST#
R339 10K_4
R348 10K_4
TP10
PLTRST#
(18,20,22,24)
OK
Q55
+1.8VS5
CHG_SOC
PM_BATLOW_N
R484 10K_4
R501 10K_4
R491 10K_4
TP18
CHG
PM_BATLOW_N_EC
OK
Q57
MPCIE_RST_N_SOC
TOUCH_PANEL_RST#_SOC
R495 10K_4
R498 10K_4
MPCIE_RST_N
TOUCH_PANEL_RST#
OK
U1
G2129TL1U
PCIE_CLKREQ_LAN#_SOC
PCIE_CLKREQ_LAN#
R24 10K_4
R42 *0_4
GND
OK
Q46
SOC_EXTSMI#
SOC_RUNTIME_SCI#
R478 10K_4
R473 10K_4
R411 10K_4
R433 10K_4
EC_SMC_EXTSMI_N
EC_SIO_EXT_SCI#
OK
Q50
DMN5L06K-7/50V_0.3A
PCH_SLP_S0#
R150 10K_4
SUS_STAT#
OK
Q20
SMB_SOC_DATA
SMB_SOC_CLK
R305 4.7K_4
R275 4.7K_4
SMB_RUN_DAT
SMB_RUN_CLK
(11,18)
OK
Q30
BT_OFF#
RF_OFF#
R338 10K_4
R337 10K_4
BT_RADIO_DIS#
WLAN_OFF#
OK
U15
G2129TL1U
SOC_SERIRQ
EC_IRQ_SERIRQ
(18,22,24)
R296 10K_4
OK
Q64
SOC_CLICK_SAT
SOC_SENSOR_HUB_INT
R550 10K_4
R551 10K_4
R548 10K_4
R549 10K_4
TP19
CLICK_SAT_M
SENSOR_HUB_INT
3VPCU
EC-DV-21
OK
Q42
SOC_SLP_S4#
SOC_SIO_SLP_S3#
R404 10K_4
R403 10K_4
EC_SLP_S4#
EC_SIO_SLP_S3#
(2,24)
OK
Q44
SOC_HUB_SDA
SOC_HUB_SCL
R119 2.2K_4
R138 2.2K_4
EC_HUB_SDA
EC_HUB_SCL
EC-DV-23
OK
Q11
SOC_TCH_PNL_SDA
SOC_TCH_PNL_SCL
R222 2.2K_4
R246 2.2K_4
+V3DX_TCH_PNL
TCH_PNL_SDA
TCH_PNL_SCL
R221 *0_4
R247 *0_4
EC-DV-23
OK
Q51
*2N7002E
PCIE_WAKE#_WLAN
PCIE_WAKE#_WLAN_SOC
OK
U20
G2129TL1U
PMC_SUSCLK0
NGFF_SUSCLK
R363 10K_4
PROJECT : LI5
Quanta Computer Inc.
Size Custom
Document Number
Level Shfiter
Rev 1A
Date: Wednesday, December 25, 2013
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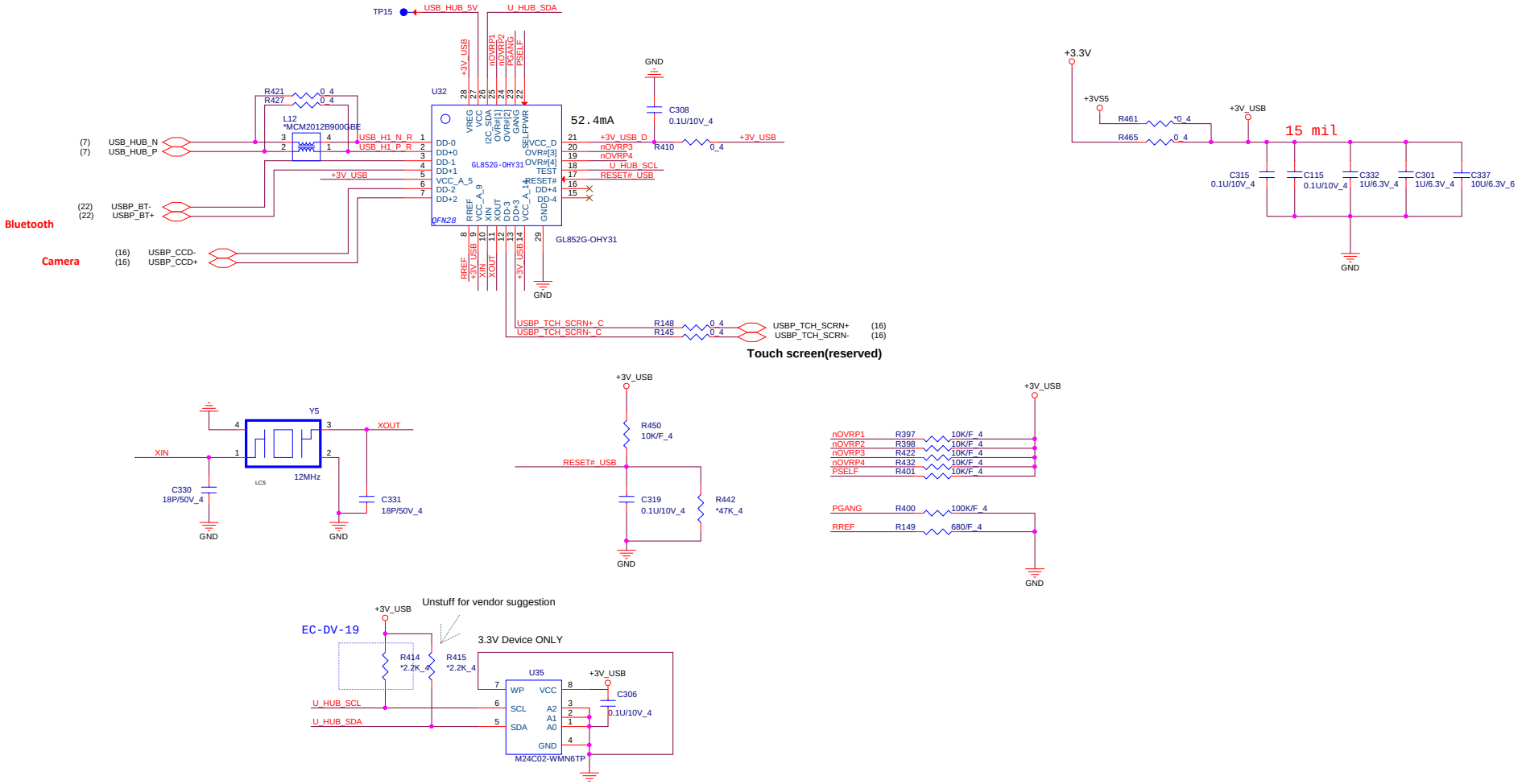

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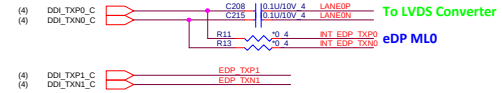
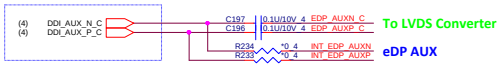
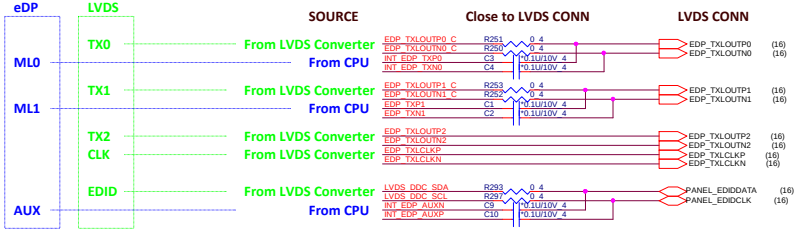
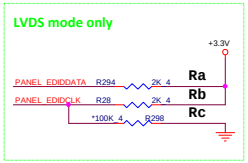
Quanta Computer Inc.

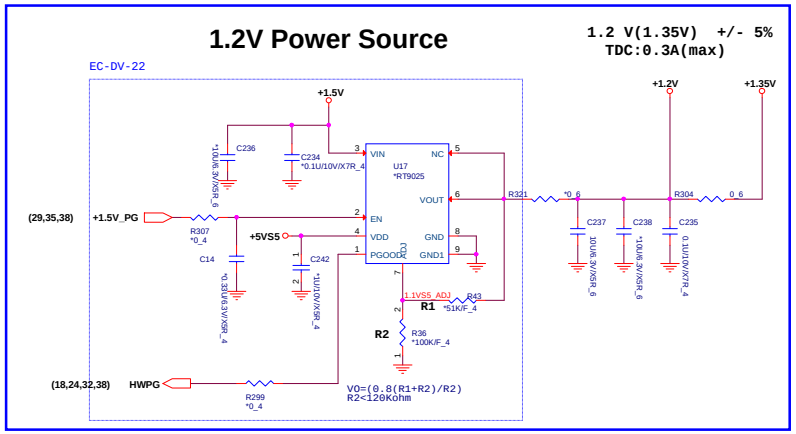
Size	Document Number		Rev
	Custom	USB HUB - 1	1A
Date:	Wednesday, December 25, 2013	Sheet 13 of 43	

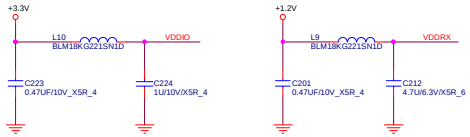


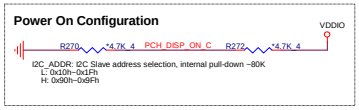


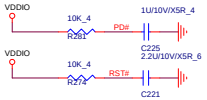


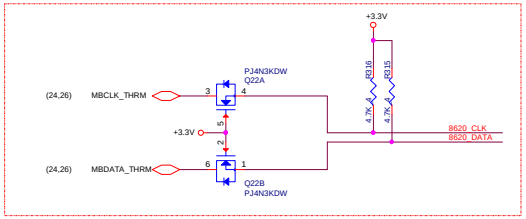






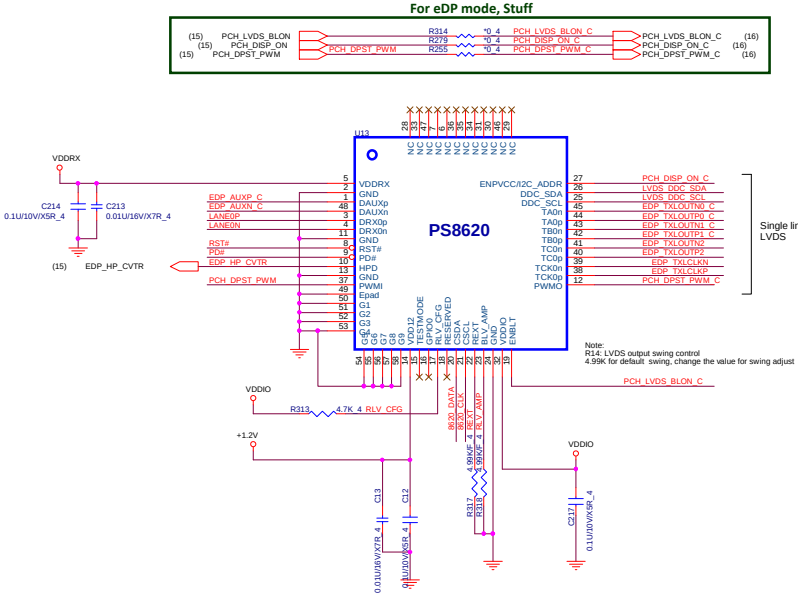




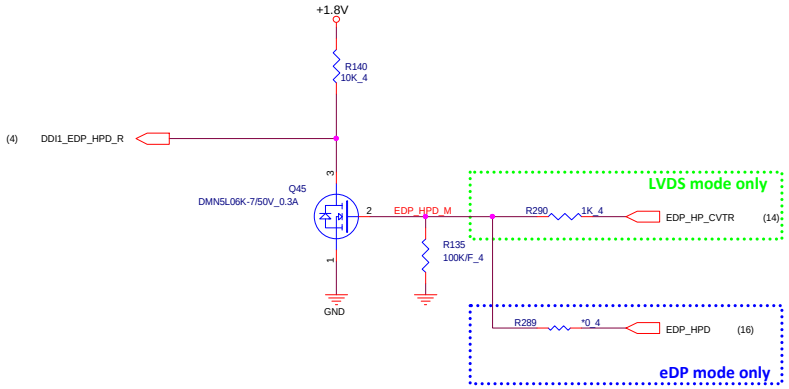


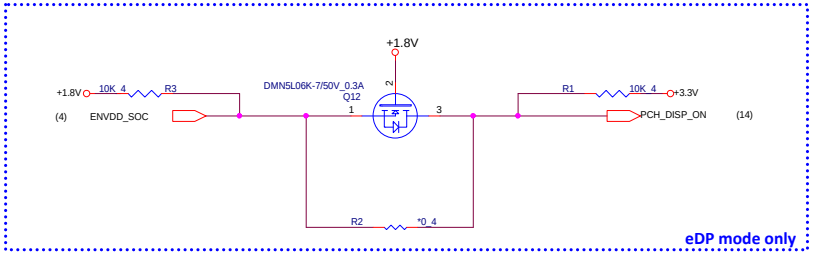
Switching Regulator Layout Guideline

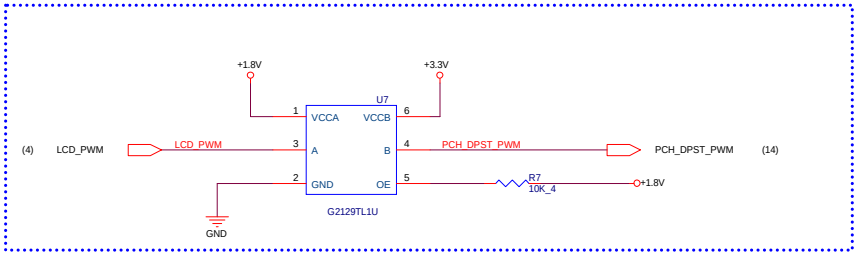
1. Place the switching regulator inductor (L3) close to SW_OUT Pin (Pin13).
2. The SW_OUT output traces should be as wide as possible.
3. The GNDX pin (Pin14) should be connected to the main PCB ground plane, with the device GND pins of the PS8622 connected to separate GND island (GNDA) for the device. The GND island (GNDA) should be connected to the main GND plane (GND) with a single-point connection by use of a wide PCB trace.
4. Place the 4.7uF decoupling Capacitor (C4) for VDDIOX close to VDDIOX pin.
5. The GND of the 4.7uF capacitor (C4) for VDDIOX should be placed close to the GND of 4.7uF capacitor (C5) behind Inductor.
6. Place the bead (L2) for VDDIOX close to PS8622.

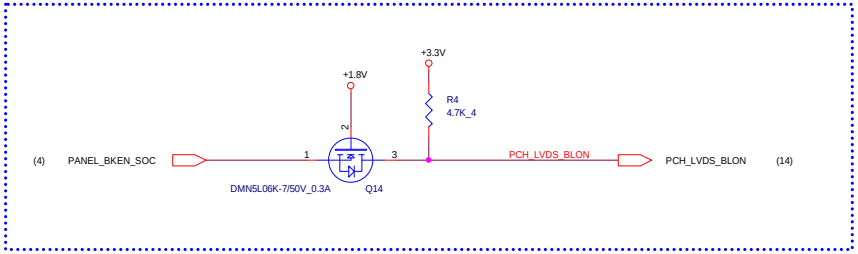


(9,11,12,13,14,16,18,19,20,21,22,24,25,26,29,30,32,38,39) +3.3V
(4,5,6,7,9,12,17,25,38,39) +1.8V









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Quanta Computer Inc.

Size	Document Number		Rev
	Custom	RTD2132R	1A
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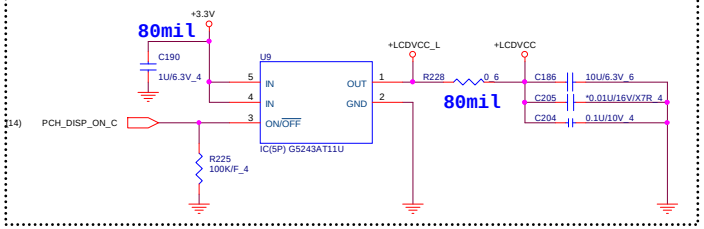
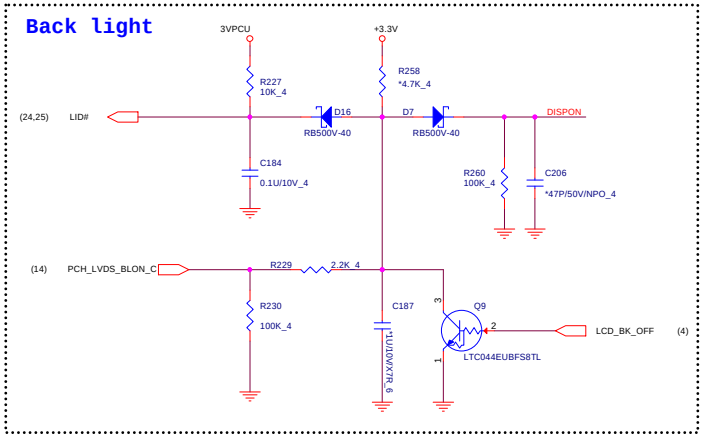
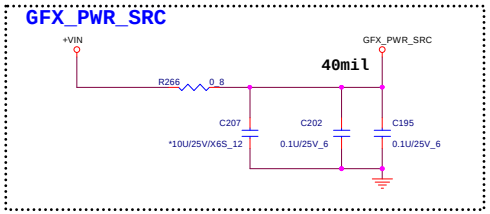
LCDVCC

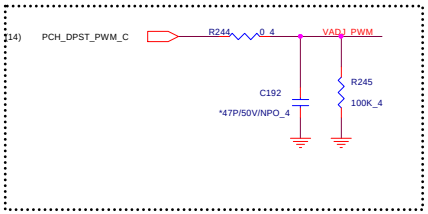


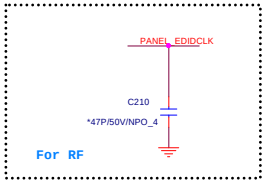
Back light



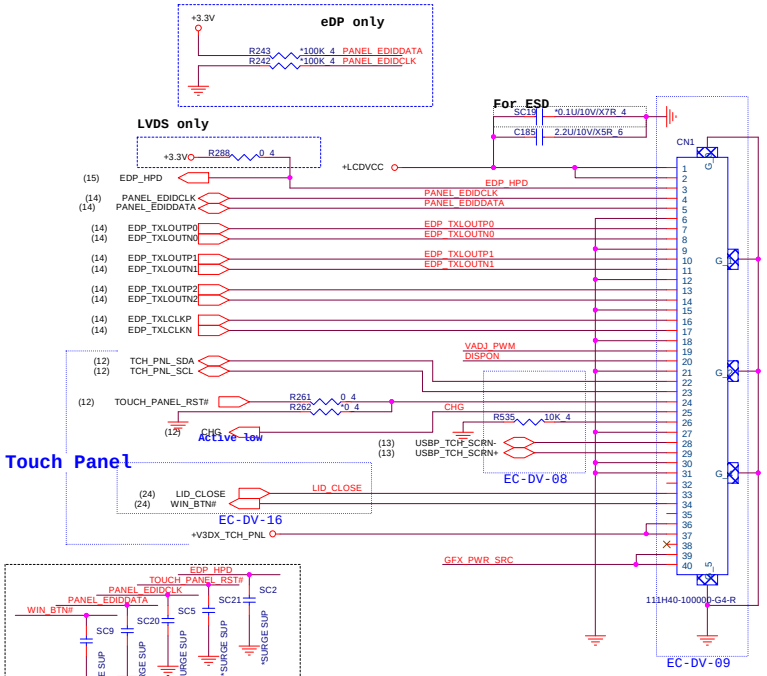
GFX_PWR_SRC

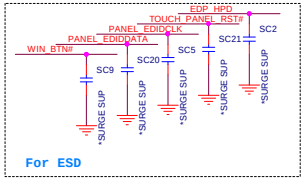




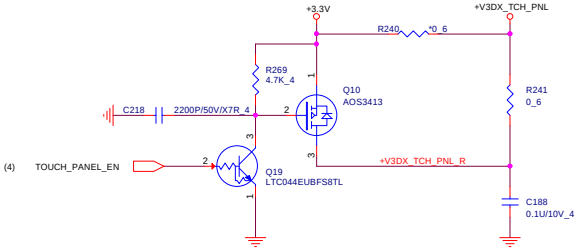


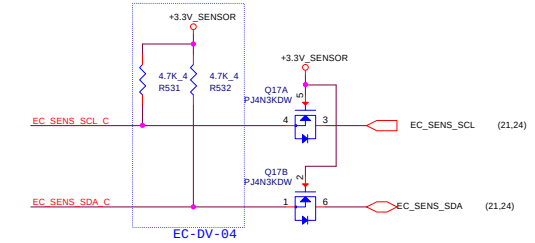
Touch Panel



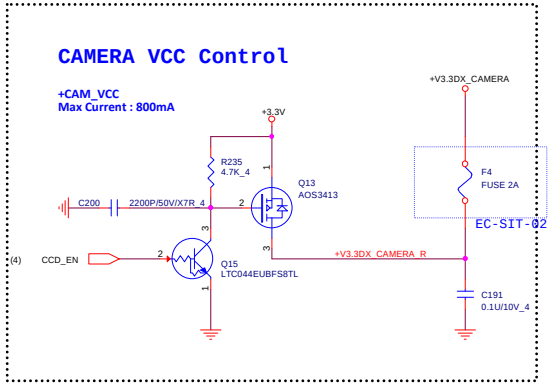


Touch Panel VCC Control

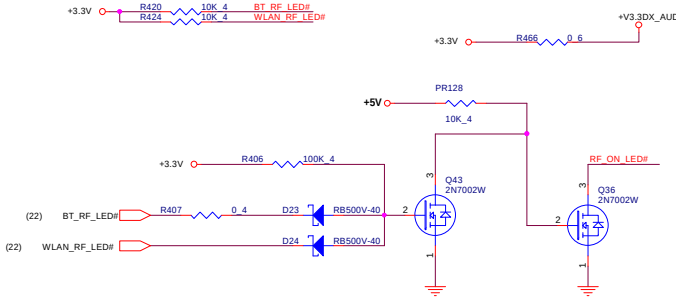




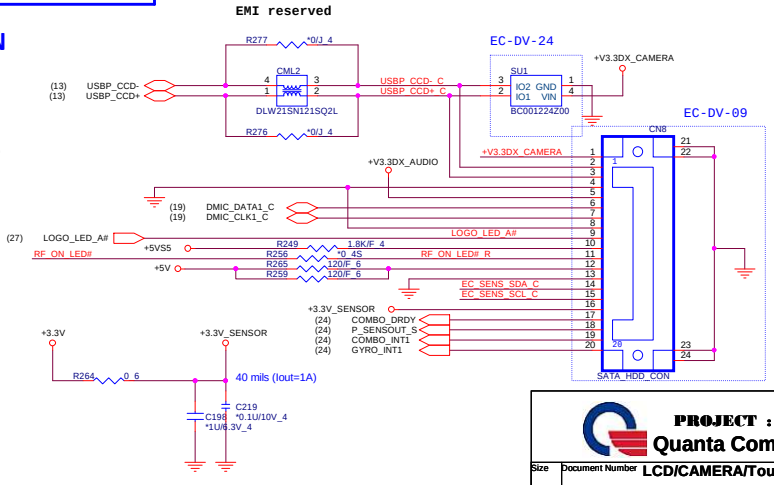
CAMERA VCC Control



CCD+MIC+LOGO+WLAN LED CONN



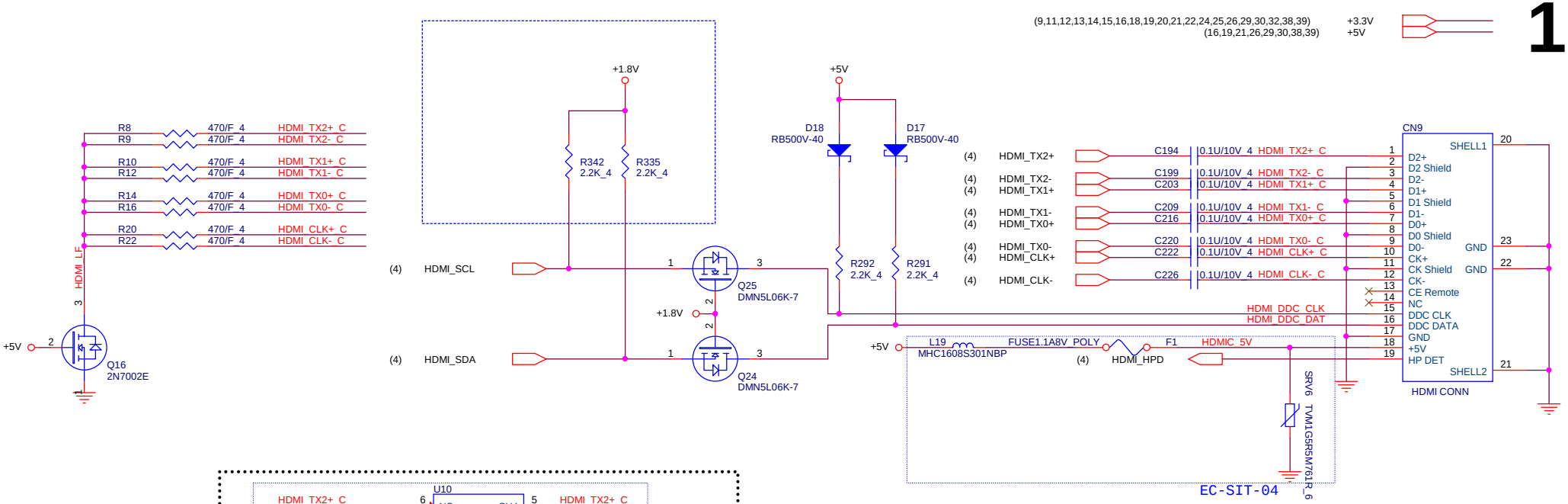
EMI reserved

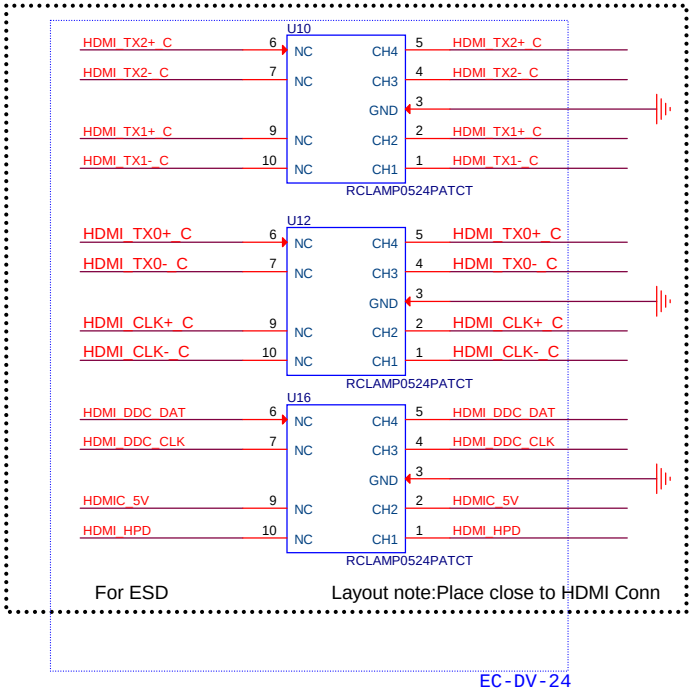


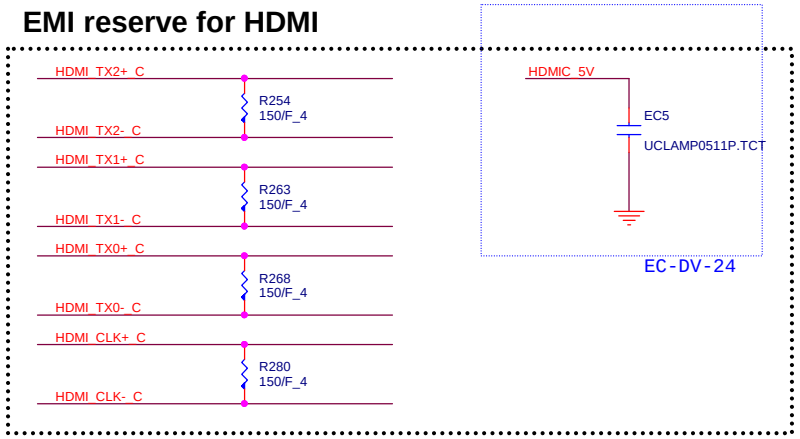
PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	Rev
	LCD/CAMERA/Touch Panel	1A

Date: Wednesday, December 25, 2013 Sheet 16 of 43







PROJECT : LI5

Quanta Computer Inc.

Size	Document Number	Rev
	HDMI CONN	1A

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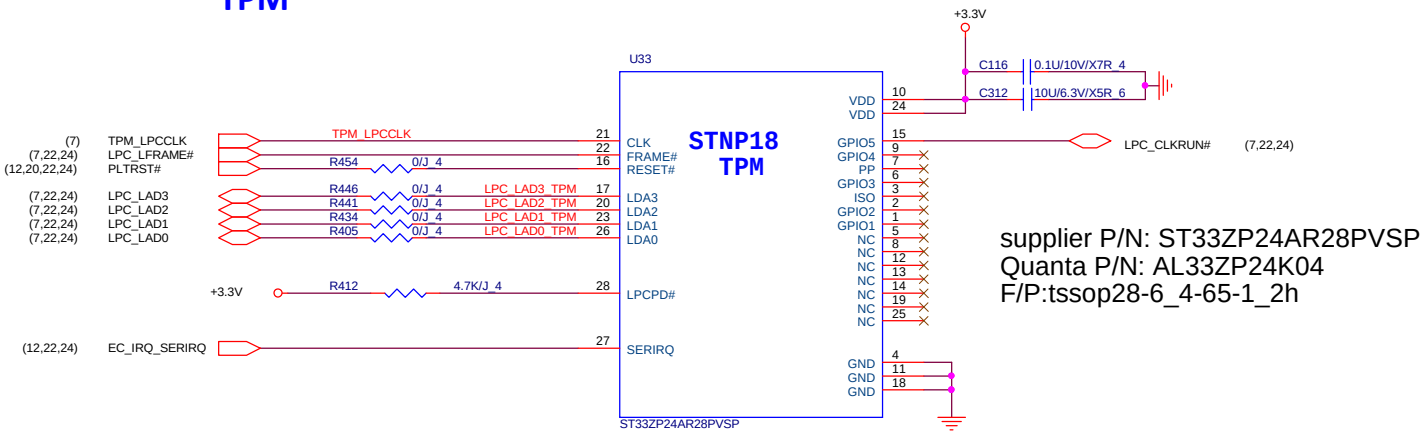
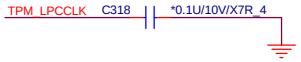
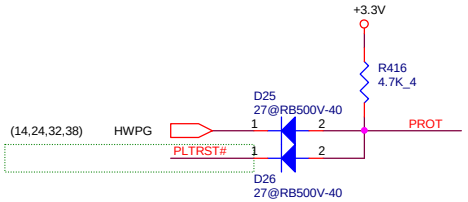
TPM

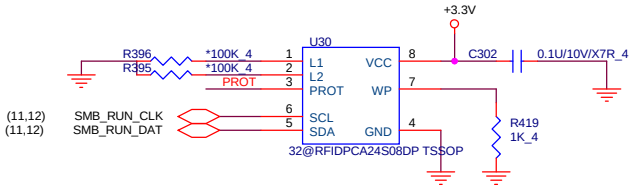


supplier P/N: ST33ZP24AR28PVSP
Quanta P/N: AL33ZP24K04
F/P:tssop28-6_4-65-1_2h



RFID





PROJECT : LI5
Quanta Computer Inc.

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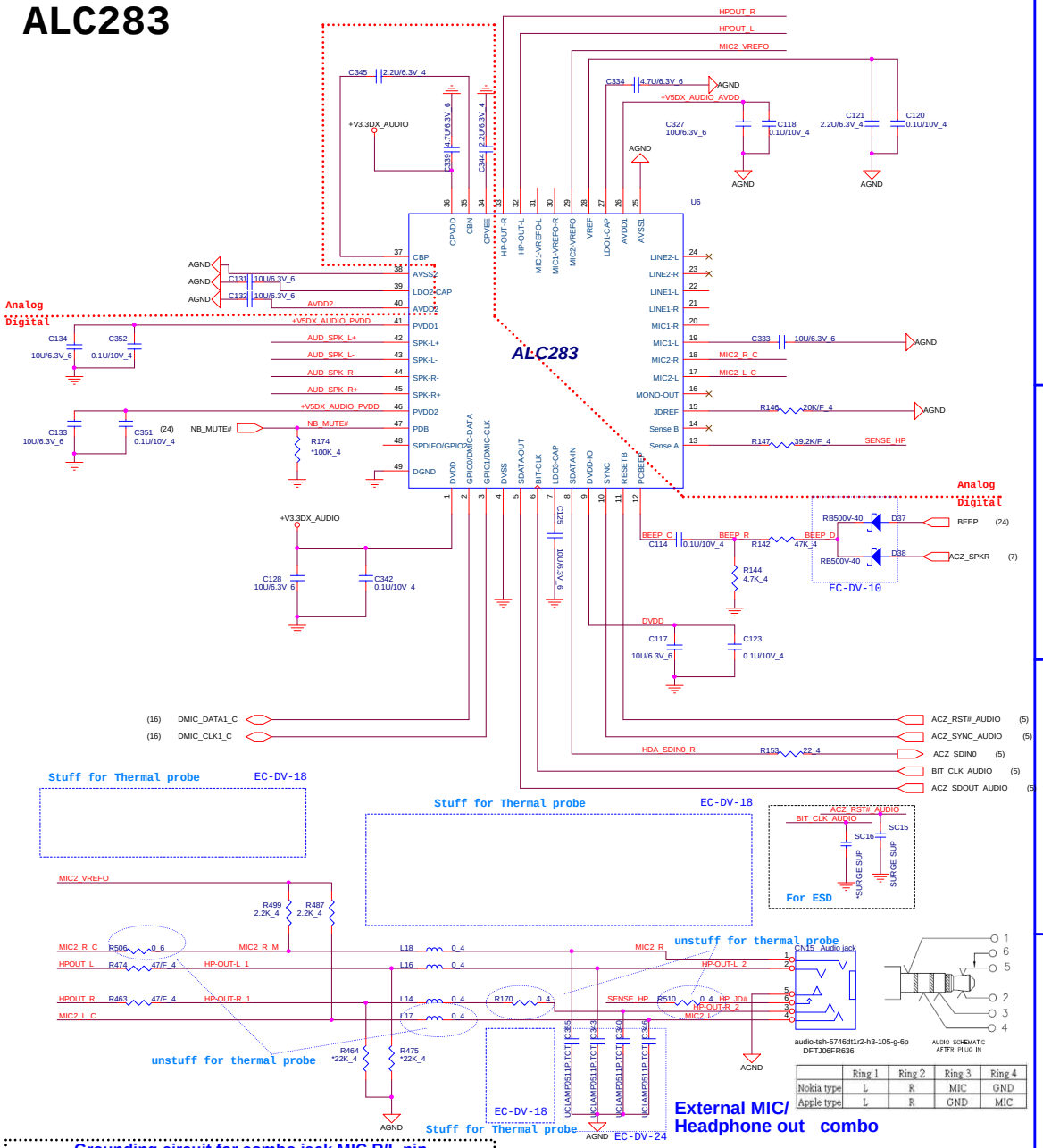
	RFID	1A
Date: Wednesday, December 25, 2013	Sheet 18 of 43	

ALC283



Stuff for Thermal probe EC-DV-18

Stuff for Thermal probe EC-DV-18

	Ring 1	Ring 2	Ring 3	Ring 4
Nokia type	L	R	MIC	GND
Apple type	L	R	GND	MIC

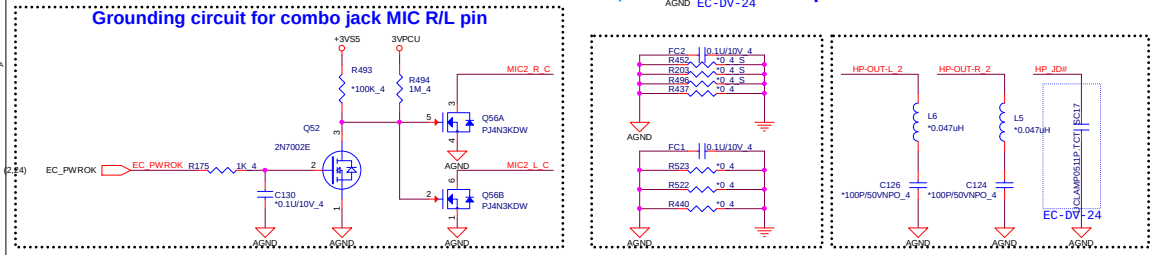
Stuff for Thermal probe EC-DV-18

EC-DV-18

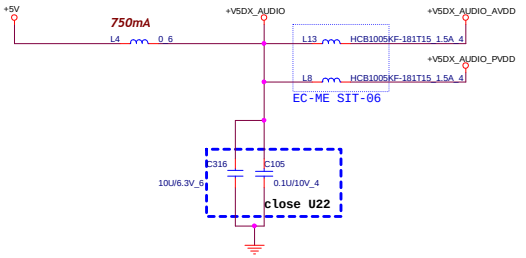
EC-DV-24

External MIC/ Headphone out combo

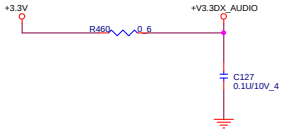
Grounding circuit for combo jack MIC R/L pin

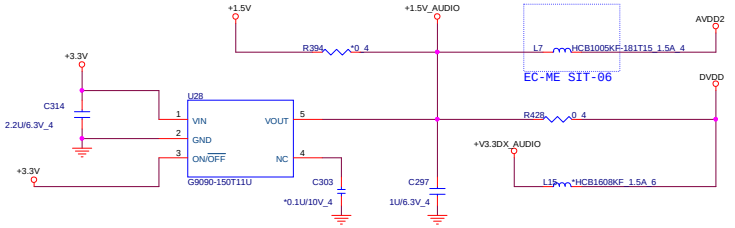


CODEC 5V POWER

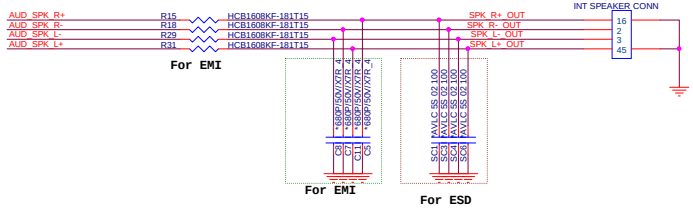


+3.3V_AUDIO_CODEC
Max Current : 419mA





INT Speaker



PROJECT :	LI5
Quanta Computer Inc.	
Size	Document Number: Audio(ALC283)
Rev	1A
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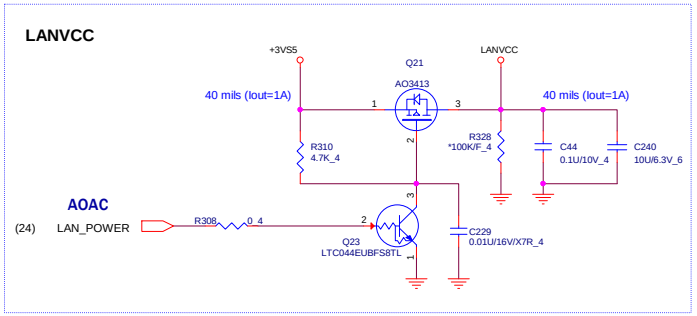
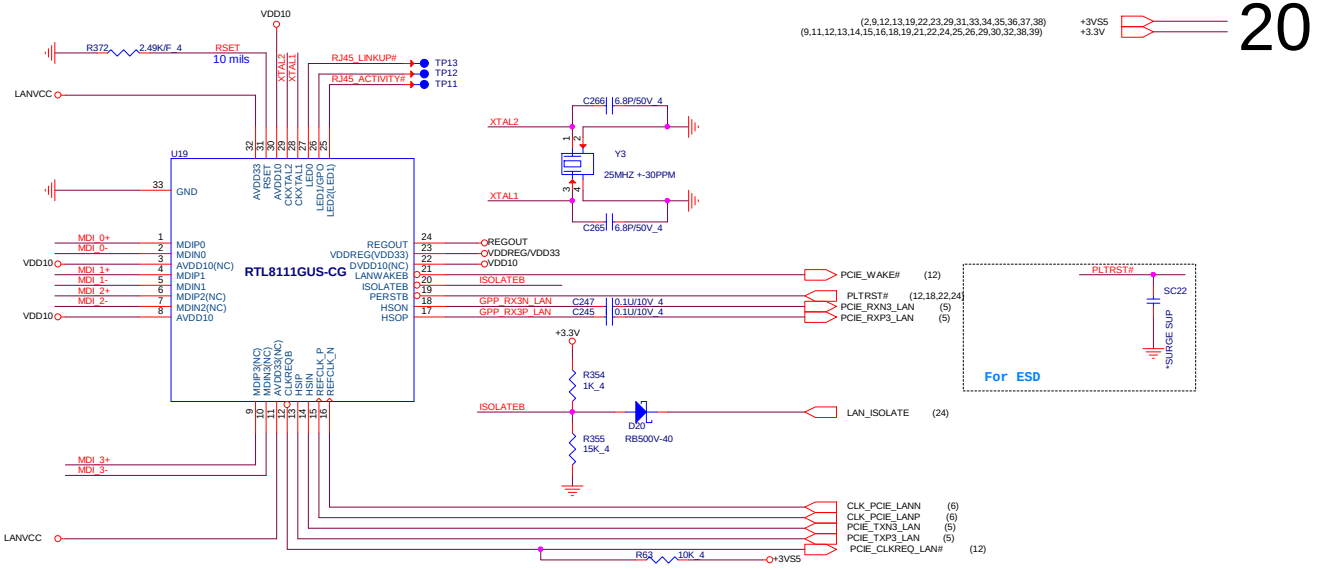
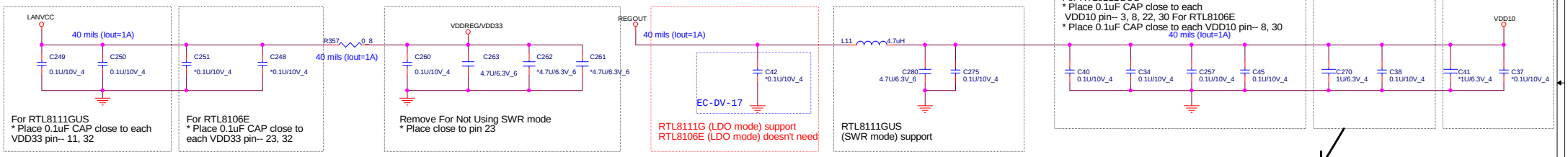


LANVCC
Trace width>60mil,
Trace length<200mil

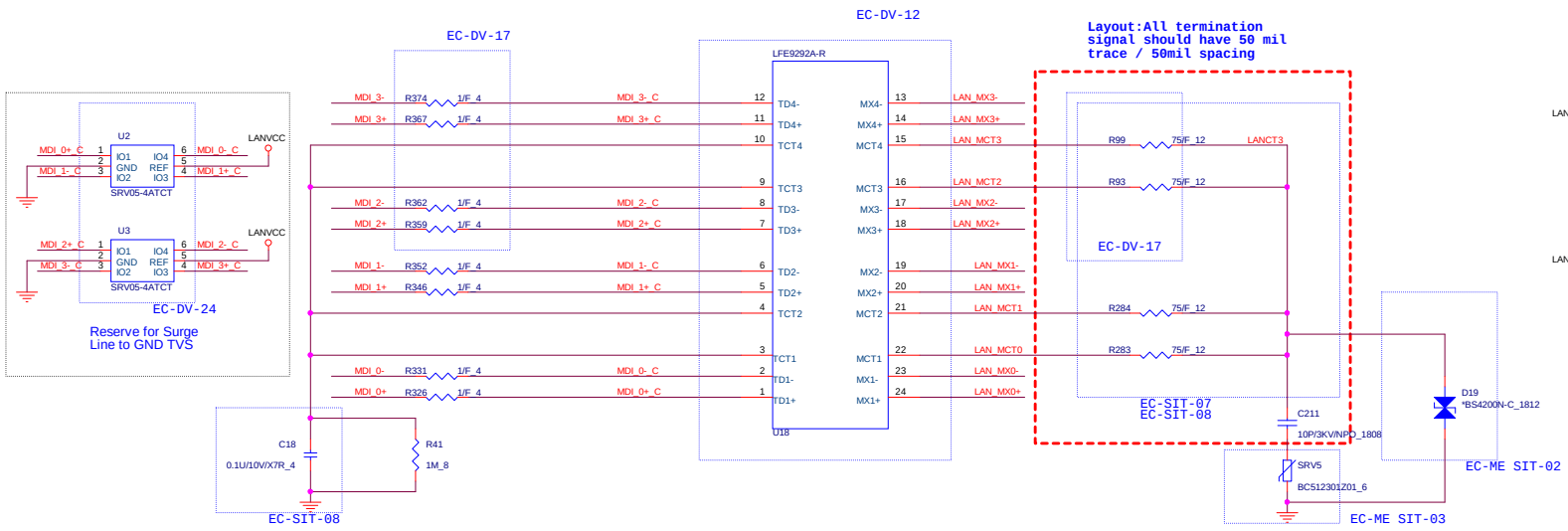
B-stage only 10/100 config.

10/100	RTL8106EUS-CG	AL008106002
1G	RTL8111GUS-CG	AL008111009

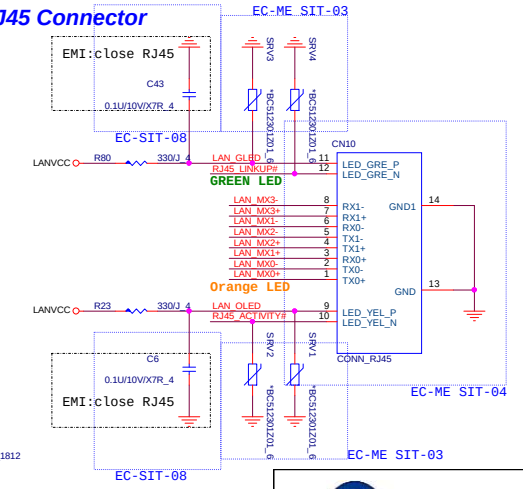




Tramsformer



RJ45 Connector



PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	LAN(RTL8111GUS)	Rev
			1A

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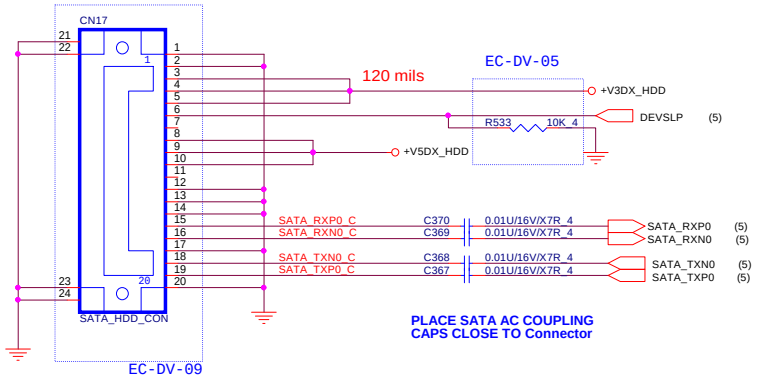
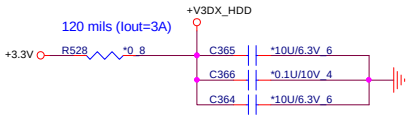
HDD

(9,11,12,13,14,15,16,18,19,20,22,24,25,26,29,30,32,38,39) +3.3V
(16,17,19,26,29,30,38,39) +5V

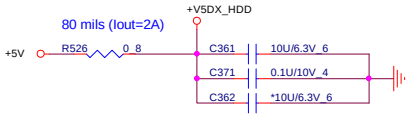
21



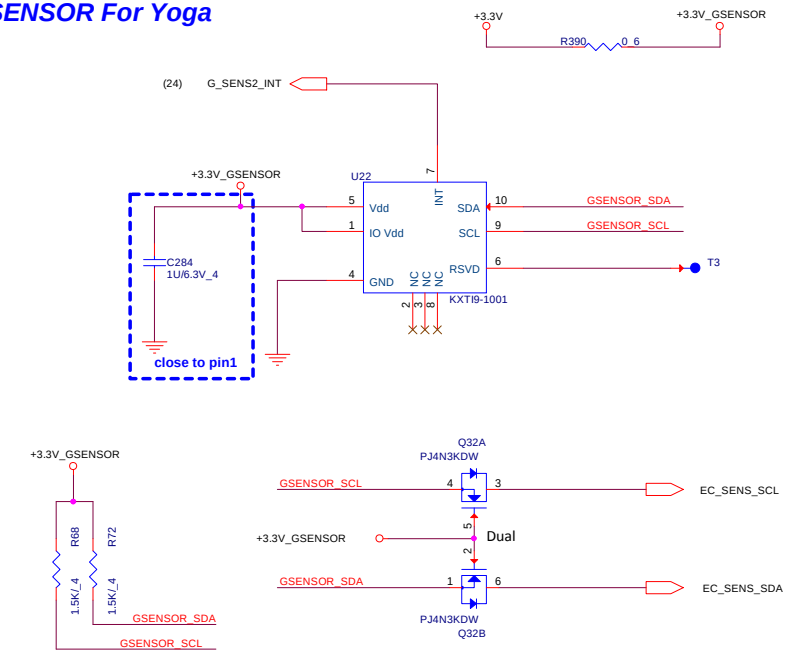
DC Current rating: 3 A (MAX)



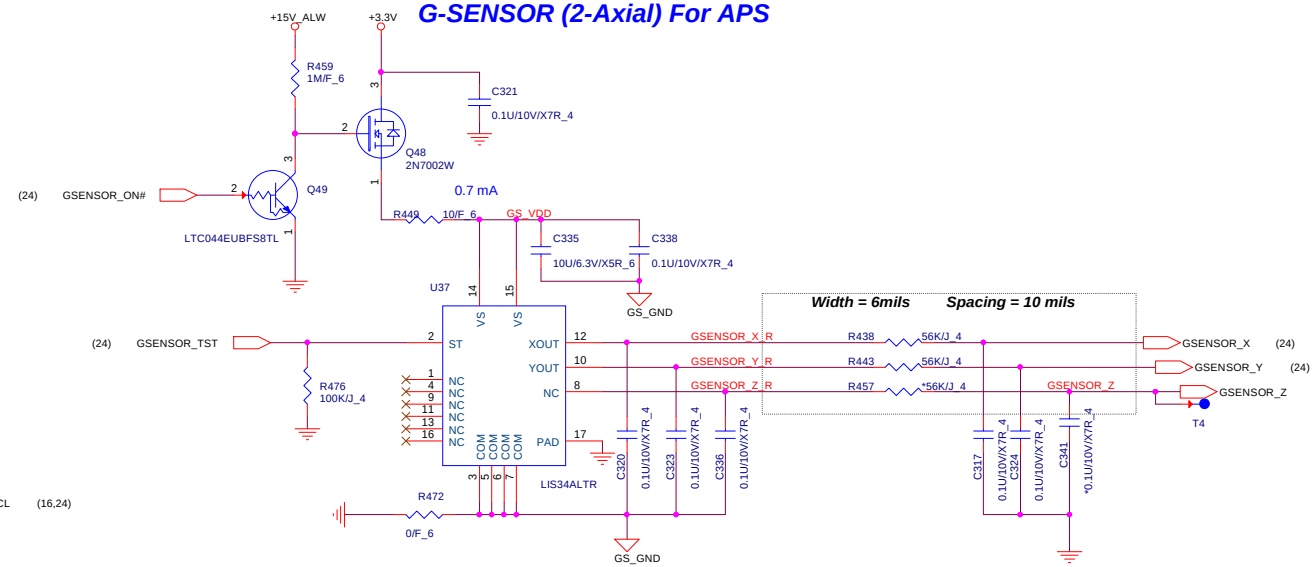
DC Current rating: 2 A (MAX)



G-SENSOR For Yoga



G-SENSOR (2-Axial) For APS



PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	SATA/G-sensor	Rev
			1A
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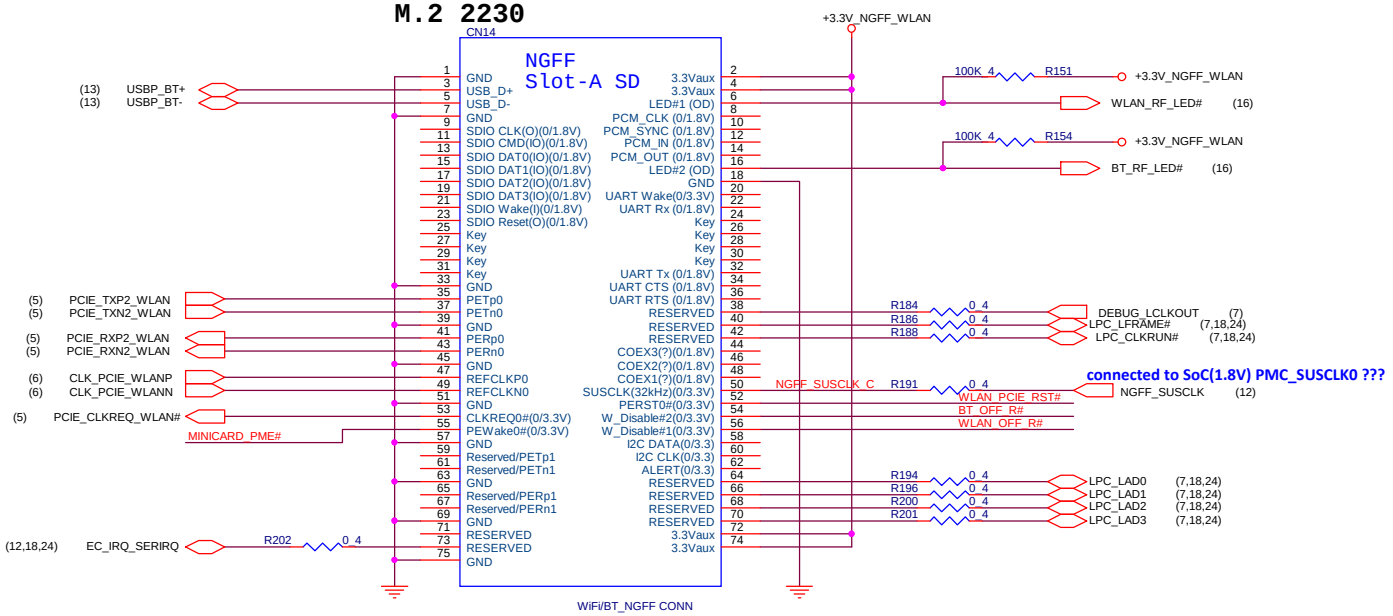
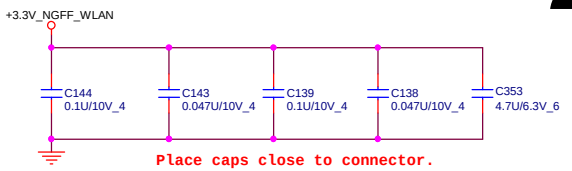
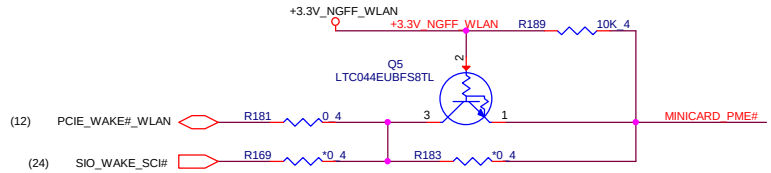
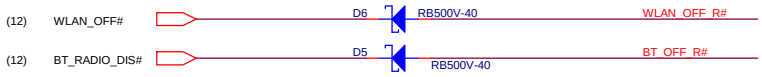
NGFF WiFi/BT connector
M.2 2230

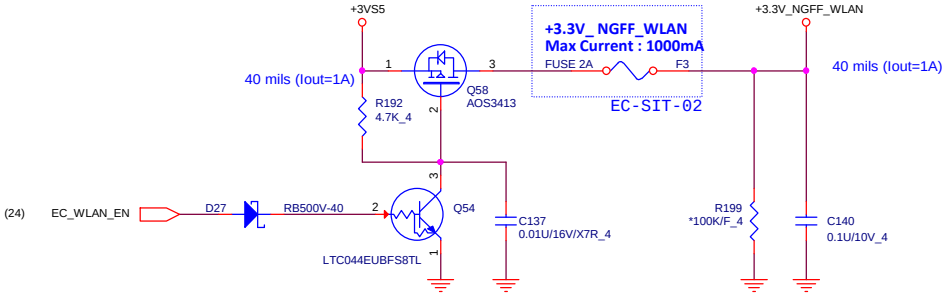


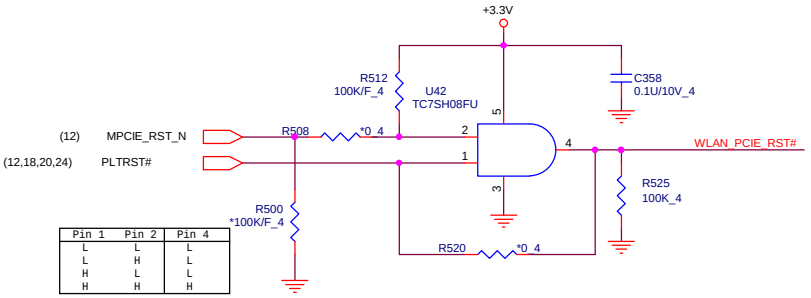
(9,11,12,13,14,15,16,18,19,20,21,24,25,26,29,30,32,38,39) +3.3V
(2,9,12,13,19,20,23,29,31,33,34,35,36,37,38) +3VS5
(9,14,19,35,39) +1.5V











Pin 1	Pin 2	Pin 4
L	L	L
L	H	L
H	L	L
H	H	H

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Quanta Computer Inc.

Size	Document Number	Wifi/BT NGFF	Rev
			1A

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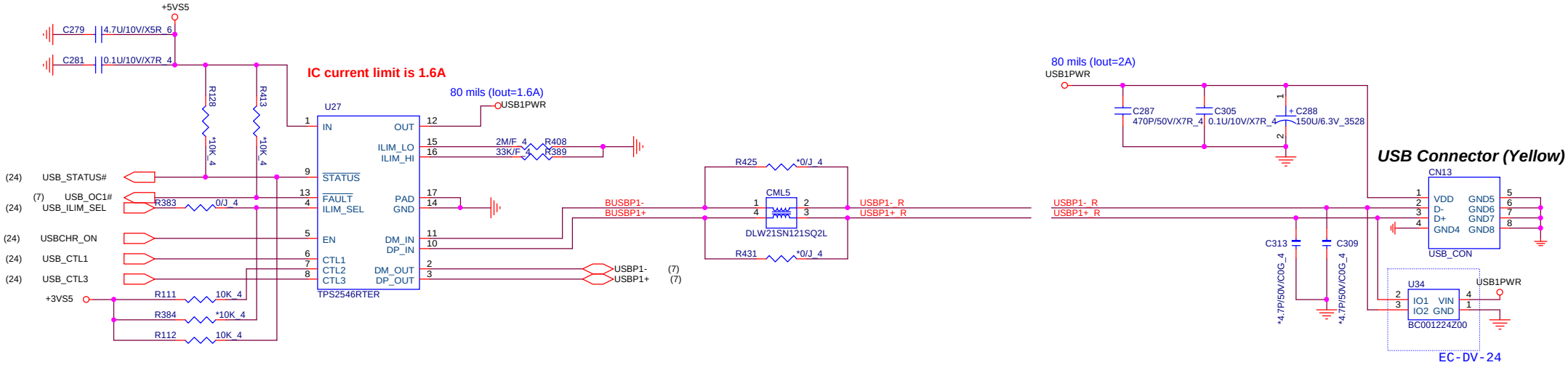
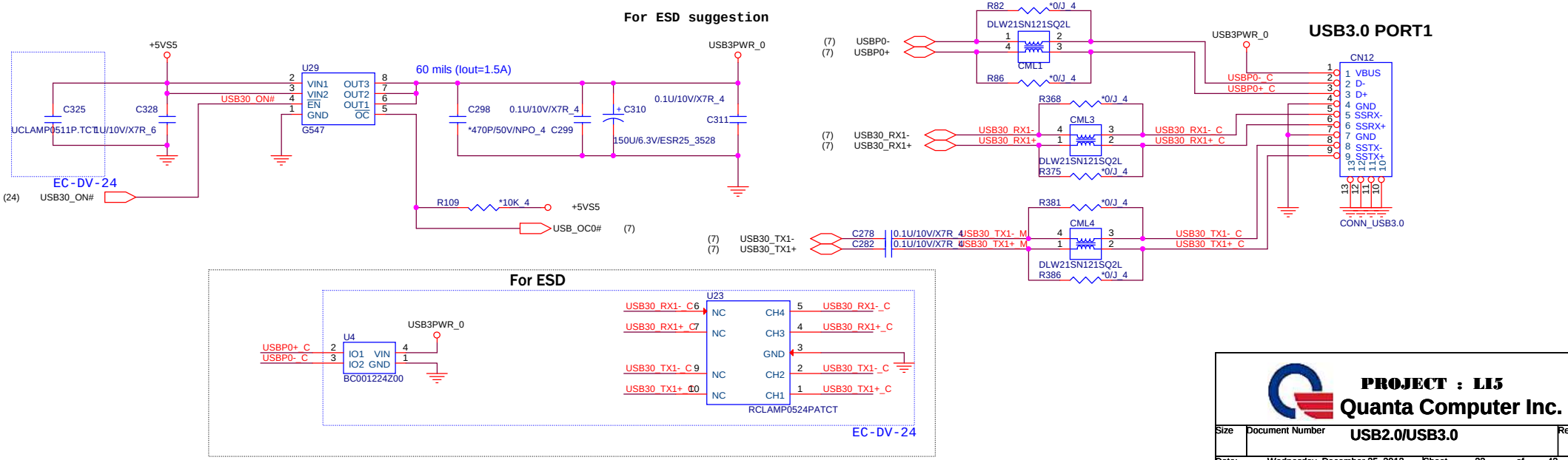
USB 2.0 Port *1

(14,16,27,29,31,32,33,35,36,37,38,39) +5VS5
(2,9,12,13,19,20,22,29,31,33,34,35,36,37,38) +3VS5
(9,11,12,13,14,15,16,18,19,20,21,22,24,25,26,29,30,32,38,39) +3.3V

USB2.0 Port1



USB 3.0 Port *1



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Quanta Computer Inc.

Size	Document Number	Rev
	USB2.0/USB3.0	1A

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ITE8386

EC Reset

Delay time(ms)=88000 x CMR(uF)

FOR EC auto load code

Need to check power rail

SPI NOR FLASH

25mA

SPI_FLASH
soic8-8-1_27
AKE37FN0N04
IC FLASH(8P) W25X10CLSSIG(SOIC)

Thermal reset function

POWER SWITCH

Quanta Computer Inc.

PROJECT : LI5

KBC IT8386

Size: Custom | Document Number | Rev 1A

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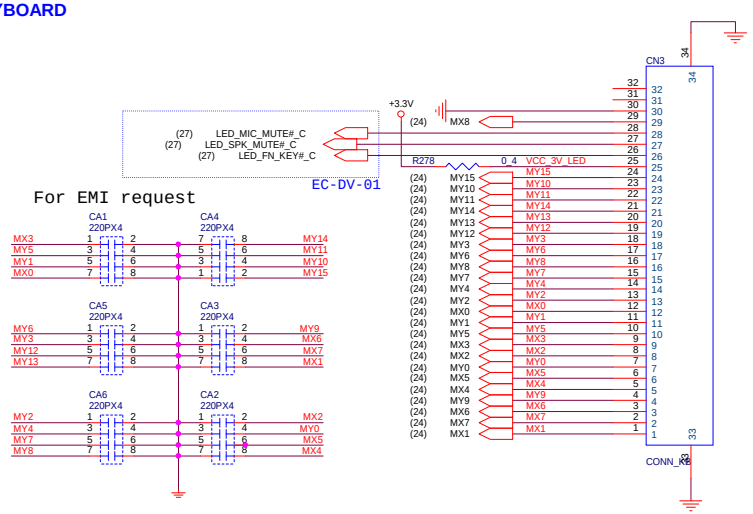
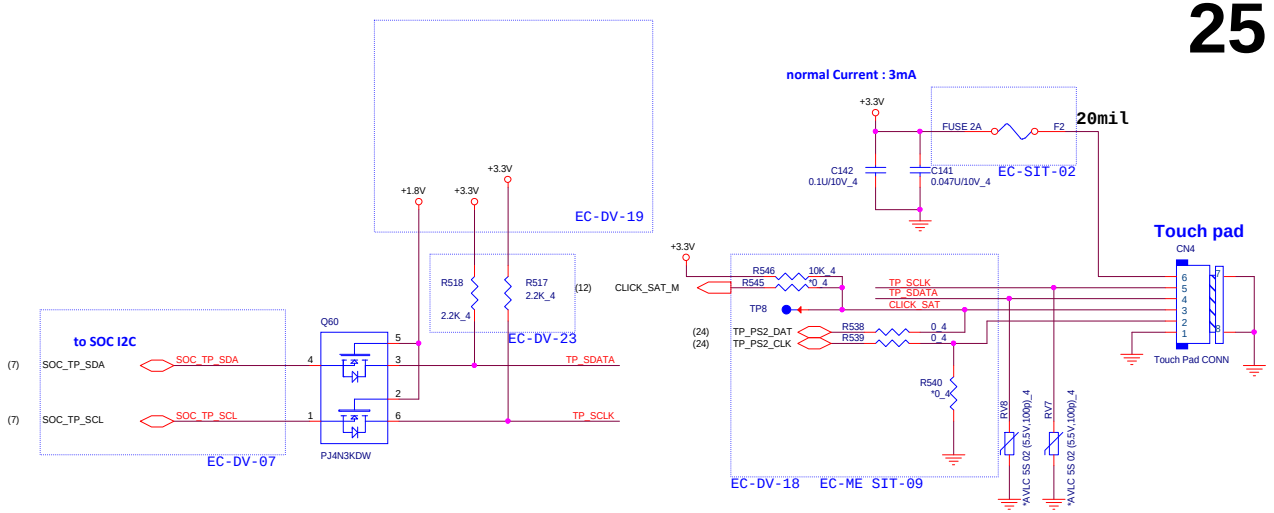
KEYBOARD



TP Control

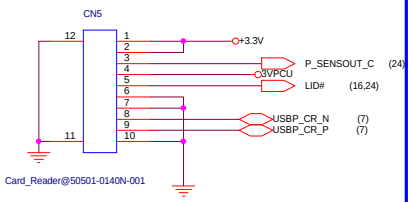


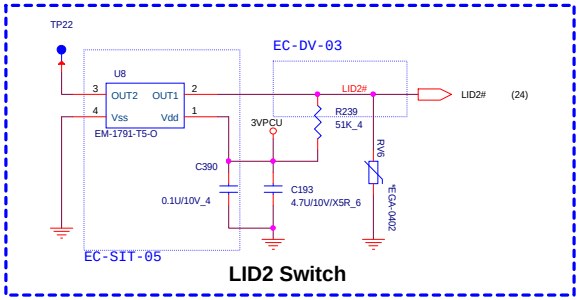
(9,11,12,13,14,15,16,18,19,20,21,22,24,26,29,30,32,38,39) +3.3V

25

Sensor/B CONN

To Card Reader Board





LID2 Switch

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Quanta Computer Inc.			
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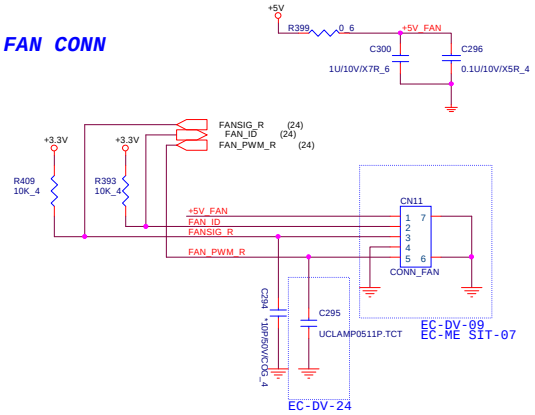
FAN CONN



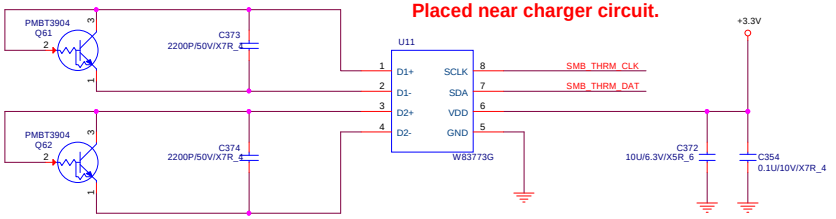
Thermal Sensor

EC-DV-11

Placed near SO-DIMM

NOTE:
Place near IC Pin

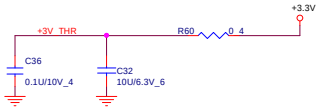
Placed near charger circuit.



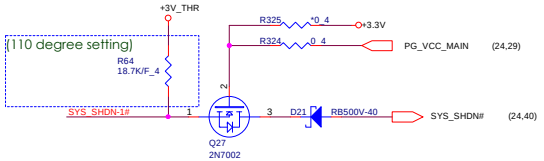
Placed near WLAN

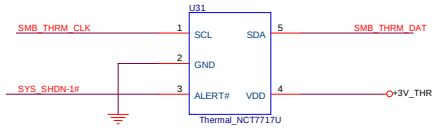
ADDRESS: 98H

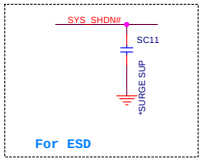
CPU Thermal Sensor

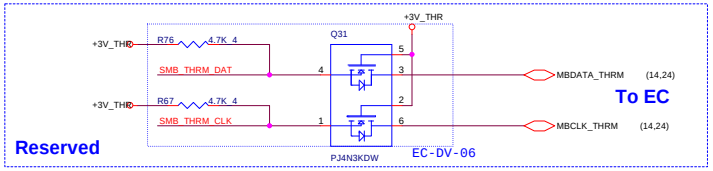


Placed near SoC. **ADDRESS: 90H**









Reserved

To EC

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Quanta Computer Inc.			
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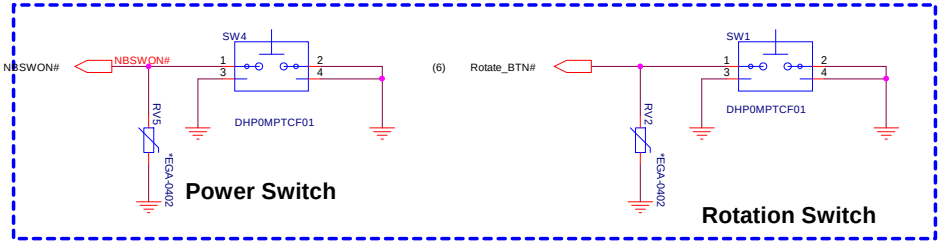
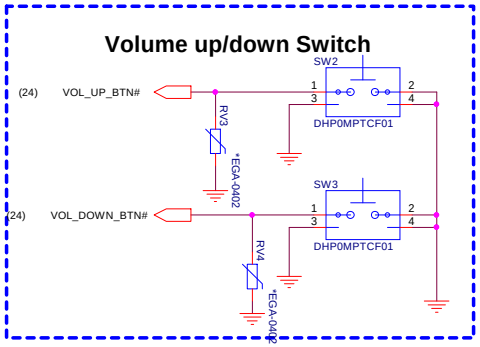
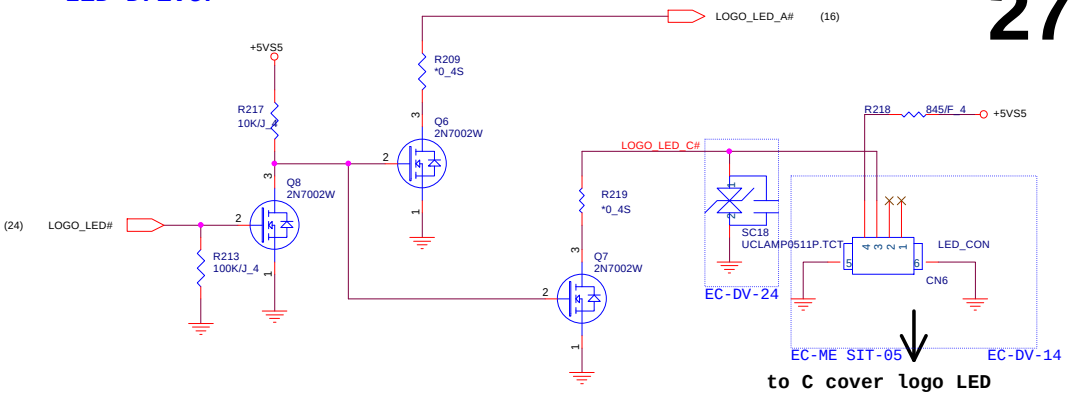
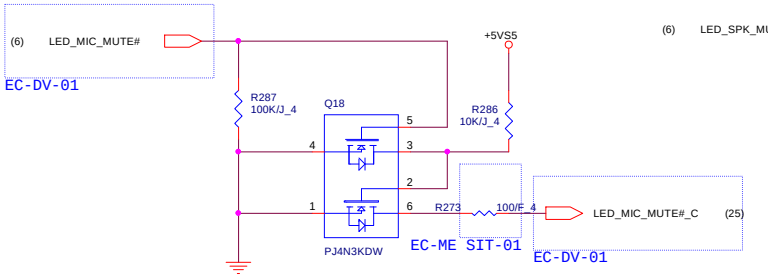
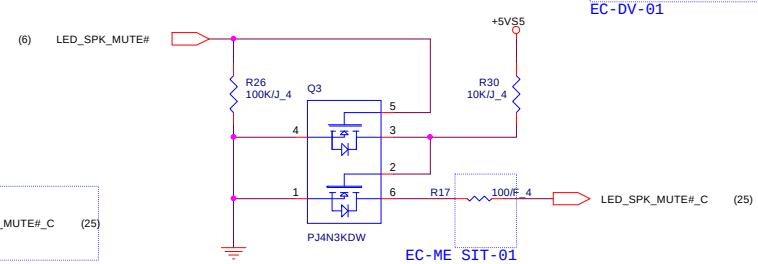
LED Driver

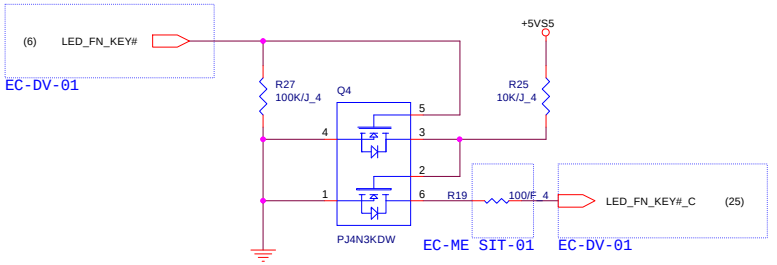












PROJECT : LI5

Quanta Computer Inc.

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	Custom	POWER BUTTON	1A
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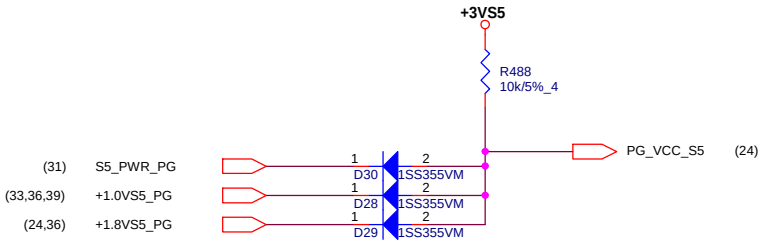
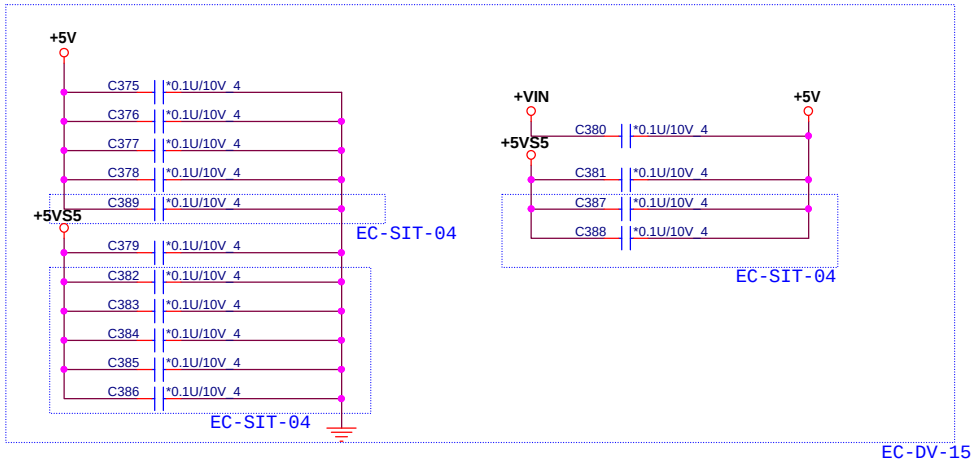
EC-DV-18

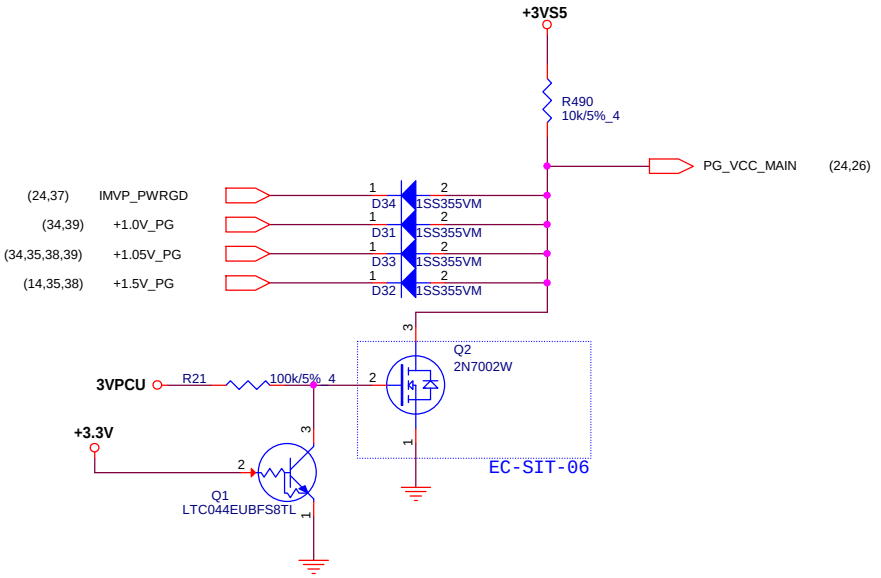
Thermal probe reference schematics by Intel

ALWAYS POWER GOOD





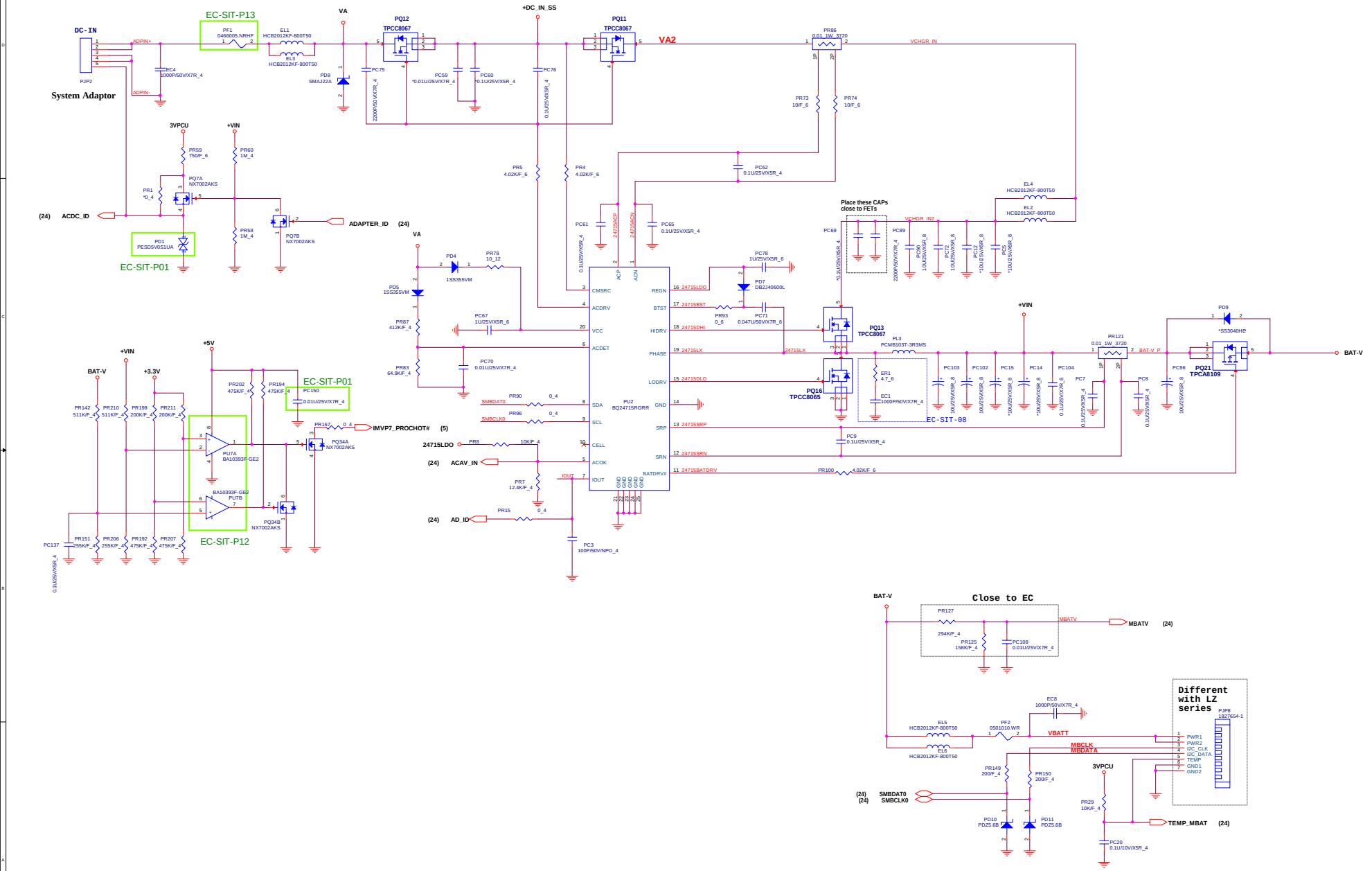
ALL SYSTEM POWER GOOD

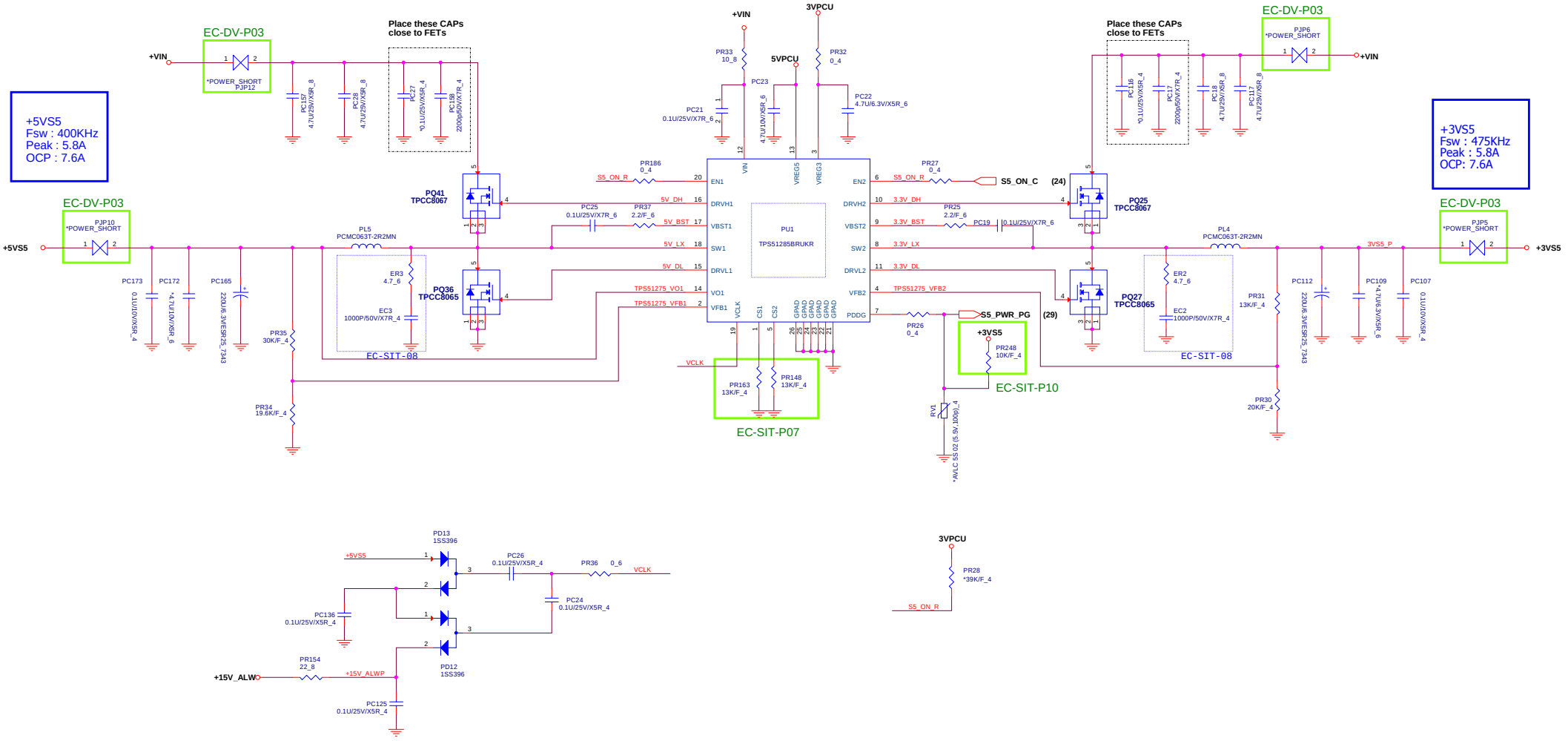


PROJECT : LI5

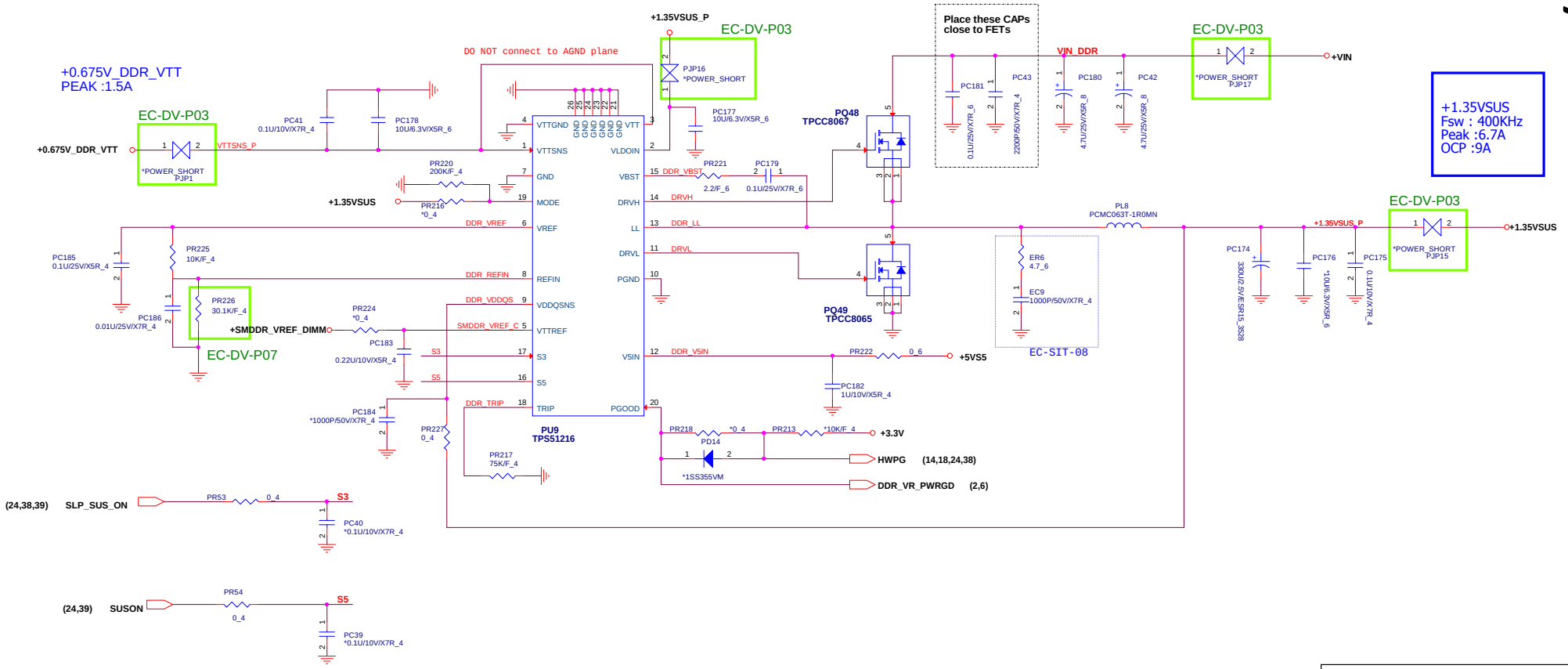
Quanta Computer Inc.

Size	Document Number	Rev
	All Power Good	1A
Date:	Wednesday, December 25, 2013	Sheet 29 of 43

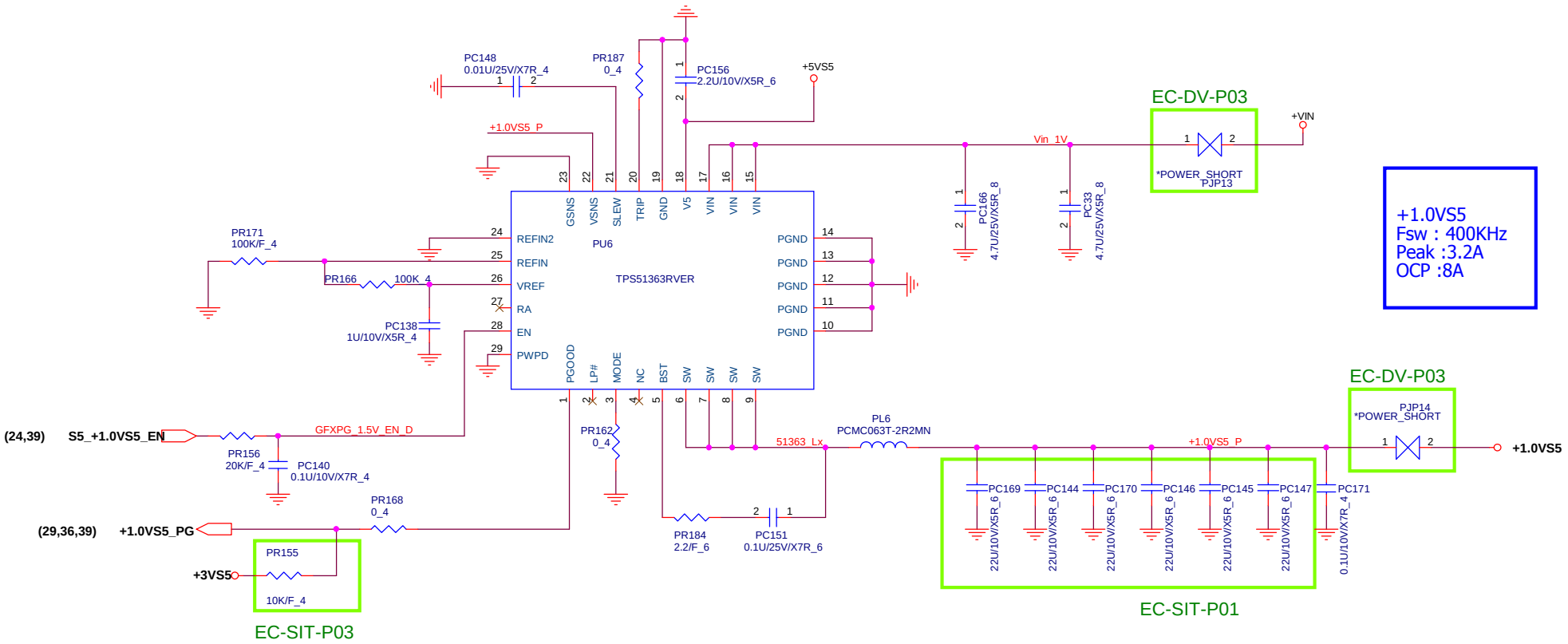

DC-IN
System Adaptor
EC-SIT-P13
EC-SIT-P01
EC-SIT-P12
EC-SIT-08
VA
VA2
+DC_IN_SS
3VPCU
+VIN
+5V
+3.3V
BAT-V
BQ24715RGRR
TPCC8067
TPCA8109
Place these CAPs close to FETs
Close to EC
Different with LZ series
ACDC_ID
ADAPTER_ID
IMVP7_PROCHOT#
ACAV_IN
AD_ID
SMBDAT0
SMBCLK0
MBATV
VBATT
MBCLK
MBDATA
TEMP_MBAT
VCHGR_IN
VCHGR_IN2
24715LDO
24715SRN
24715SRP
24715LX
24715BST
24715DHI
24715BATDRV
24715SLDO



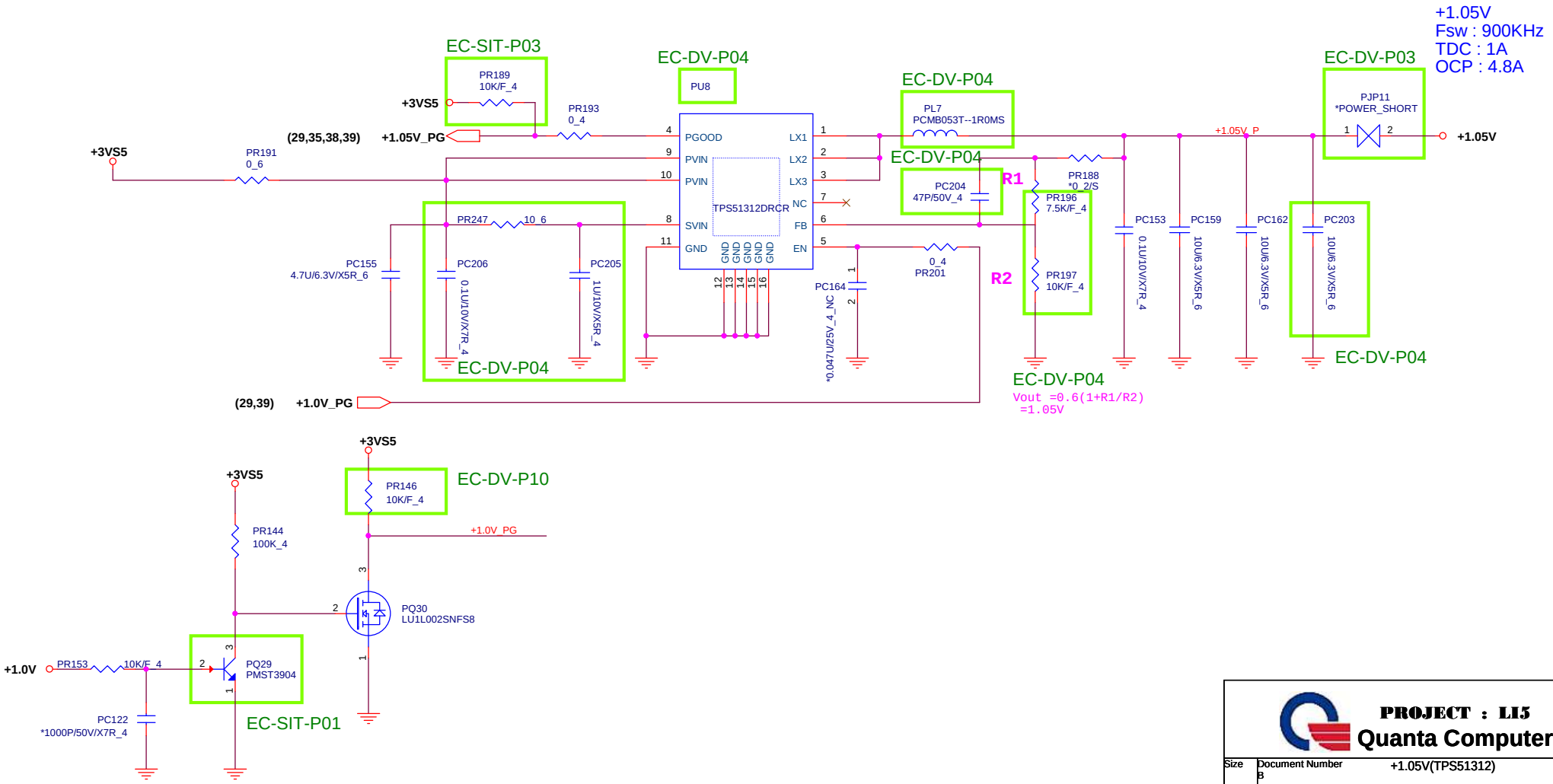
Quanta Computer Inc.	PROJECT : LI5		
Size	Document Number Custom	+3VS5/+5VS5 (TPS51285BRUKR)	Rev 1A
Date: Wednesday, December 25, 2013	Sheet 31 of 43		



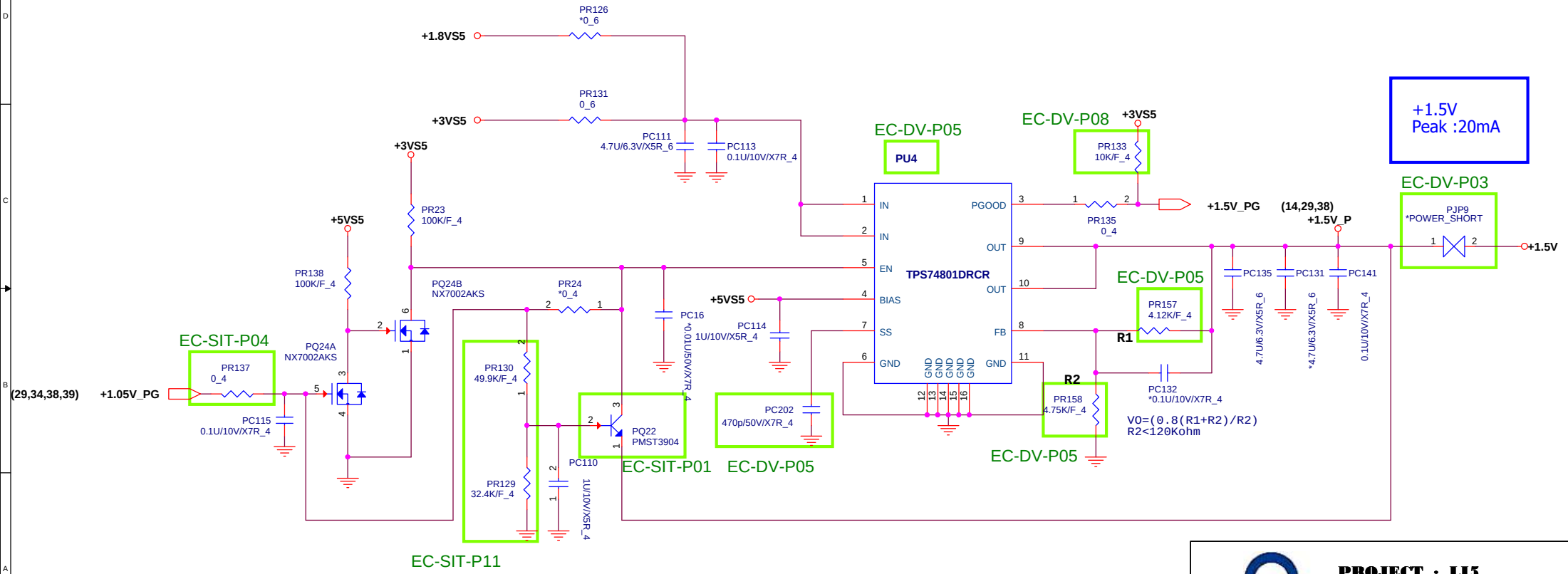
Quanta Computer Inc.	PROJECT : LI5		
Size	Document Number	1.35/0.675V(TPS51216RUKR)	Rev
	Custom		1A
Date:	Wednesday, December 25, 2013	Sheet 32 of	43



Quanta Computer Inc. PROJECT : LI5			
Size B	Document Number	+1.0VS5(RT8068AZQW)	Rev 1A
Date: Wednesday, December 25, 2013	Sheet 33 of 43		



PROJECT : LI5			
Quanta Computer Inc.			
Size: B	Document Number: +1.05V(TPS51312)		Rev: 1A
Date: Wednesday, December 25, 2013	Sheet 34 of 43		



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Quanta Computer Inc.

Size	Document Number		Rev
	Custom	+1.5V (TPS74801)	1A
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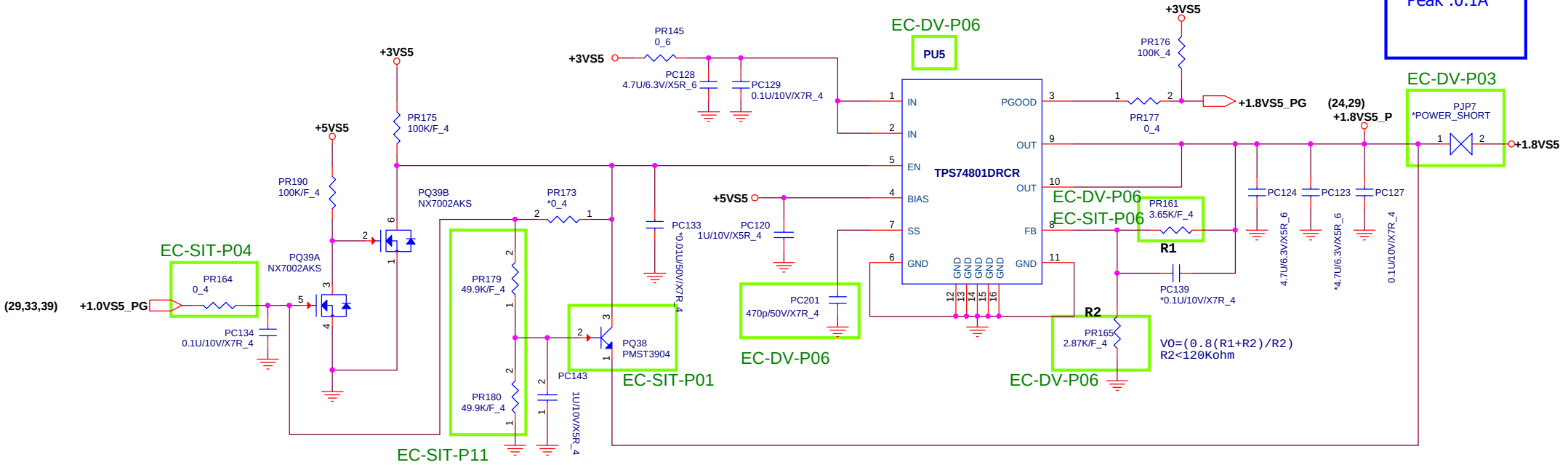
+1.8VS5
Peak :0.1A



PROJECT : LI5

Quanta Computer Inc.

Size	Document Number		Rev
	Custom	+1.8VS5(TPS74801)	1A
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Close to VR

VR_SVID_ALERT# close to CPU

VR_SVID_DATA and VR_SVID_CLK close to VR

GFX

Core

+VCC_GFX
Fsw :450kHz
Peak :14A
OCP :19A

+VCC_CORE
Fsw : 450kHz
Peak :12A
OCP :19A

GFX_CORE Load Line :
-5.9mV/A for 2.xW SDP

VCORE Load Line :
-5.9mV/A for 2.xW SDP

Parallel

Close to the CPU side.

Close to the VR side.

Close with AXG inductor

Close with phase1 inductor

EC-SIT-P05

EC-SIT-P08

EC-SIT-P09

EC-DV-P01

EC-DV-P02

EC-DV-P03

EC-SIT-08

PU3
ISL95833HRTZ-T

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Quanta Computer Inc.

Size	Document Number	Rev
C	Vcore + Vgfx (ISL95833HRTZ-T)	1A

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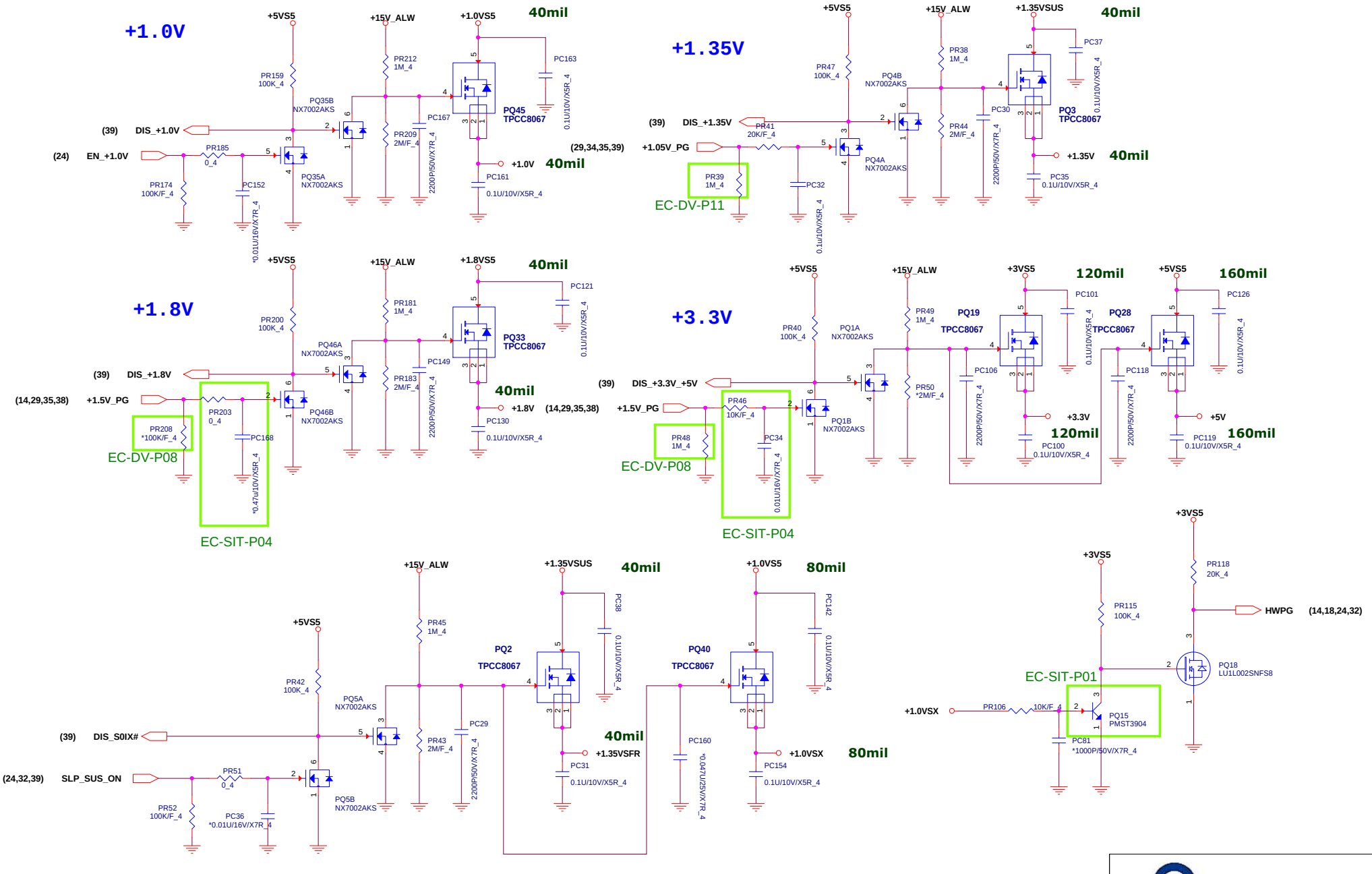
Load switch



PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	Dis-charge IC (G5934RZ1U)	Rev
	Custom		1A
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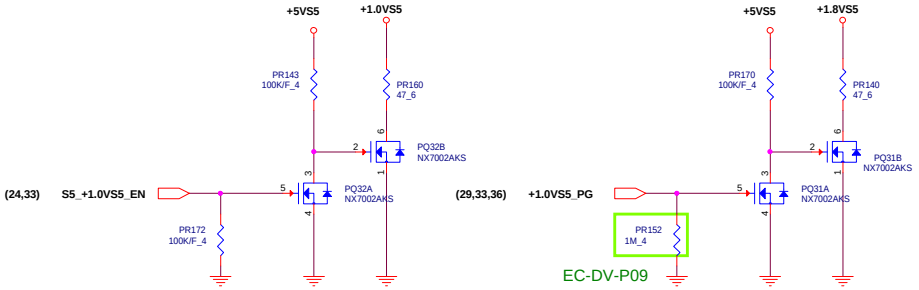
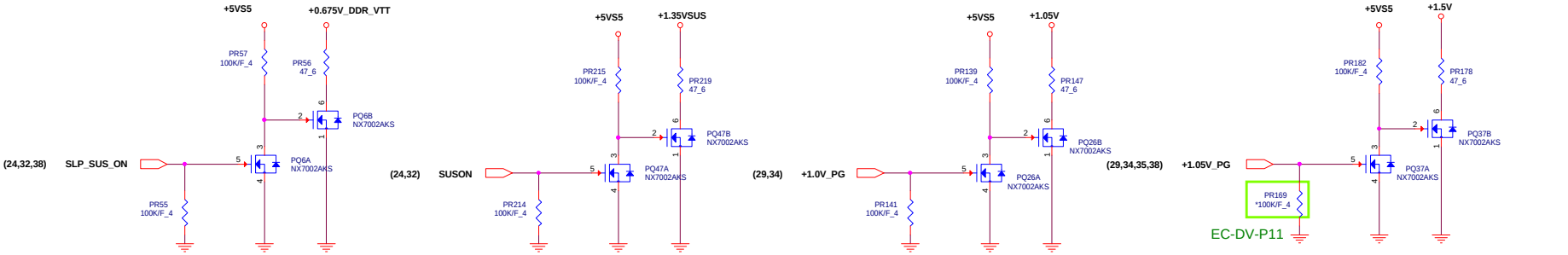
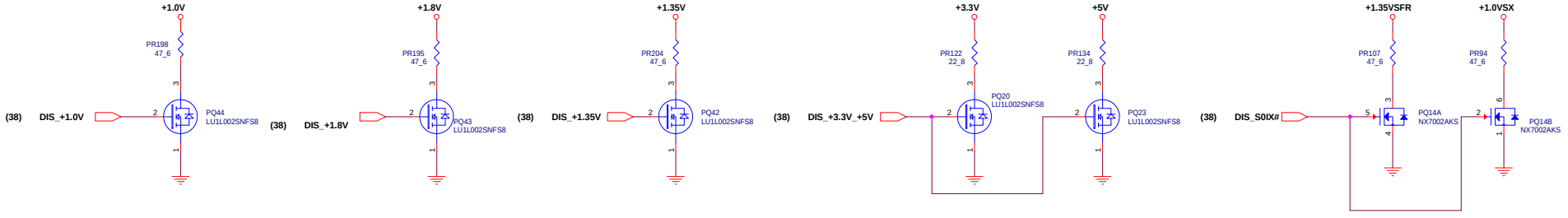
DISCHARGE







PROJECT : LI5
Quanta Computer Inc.

Size	Document Number	Rev
C	Discharge	

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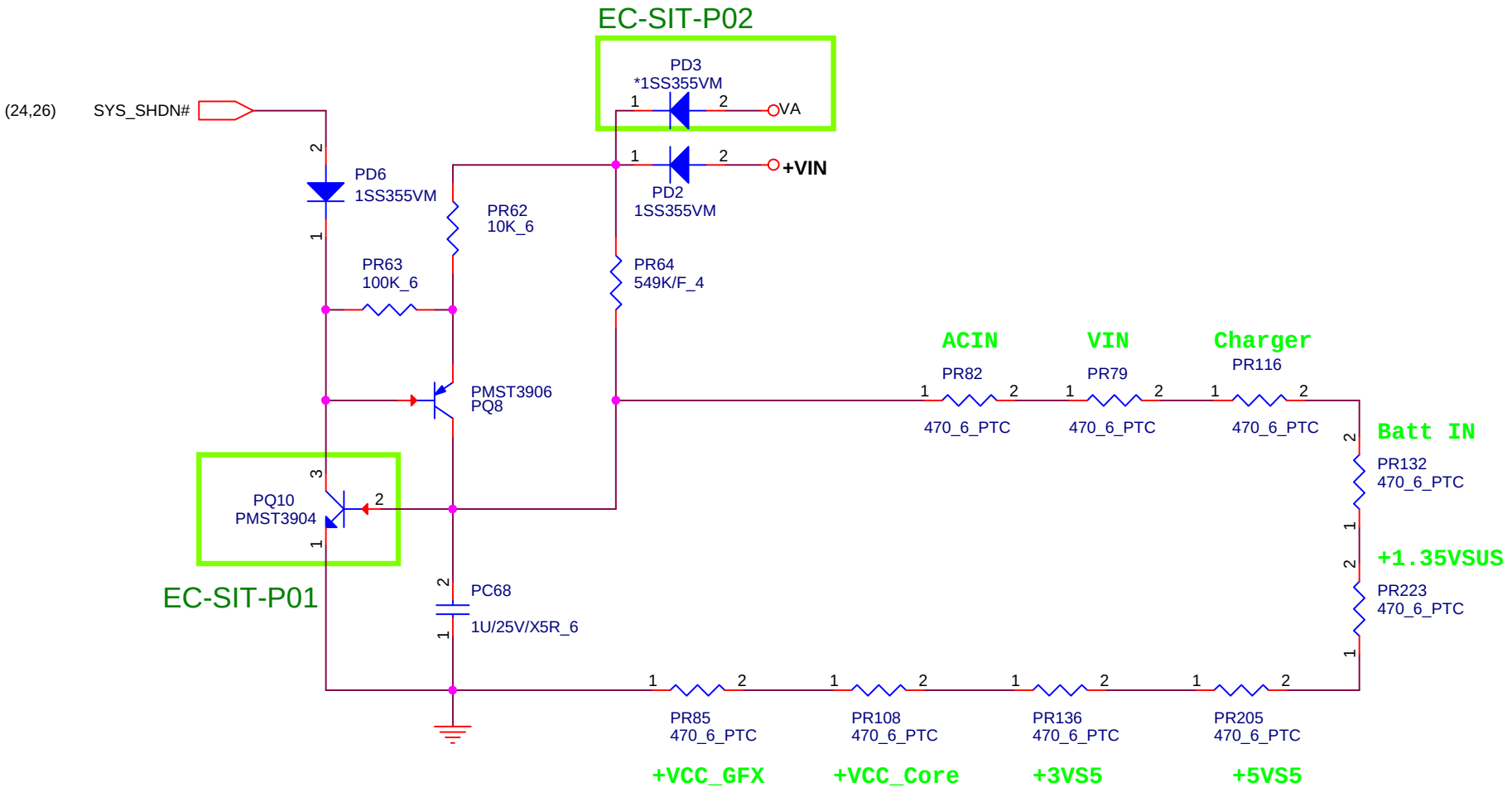

PROJECT : LI5

Quanta Computer Inc.

Size	Document Number	Rev
A	PTC	1A

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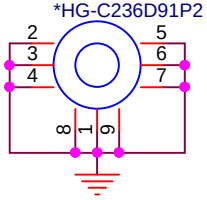
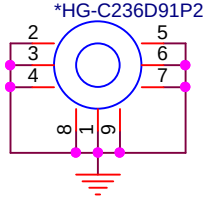
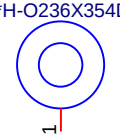
H3
*HG-C236D91P2



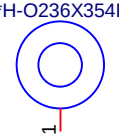
H11
*HG-C236D91P2



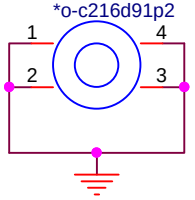
H14
*H-O236X354D236X354N



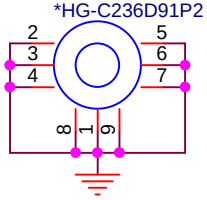
H16
*H-O236X354D236X354N



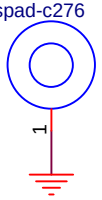
H10
*o-c216d91p2



H13
*HG-C236D91P2



H12
*spad-c276



H4
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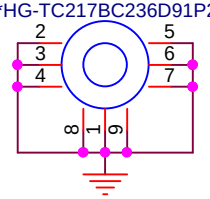
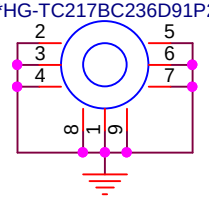
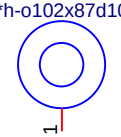


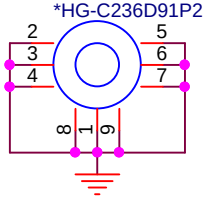
H2
*HG-TC217BC236D91P2



H1
*h-o102x87d102x87n

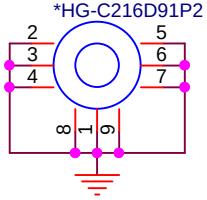


H5
*HG-C236D91P2

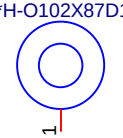


EC-ME SIT-08

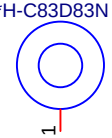
H17
*HG-C216D91P2



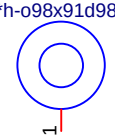
H18
*H-O102X87D102X87N



H19
*H-C83D83N

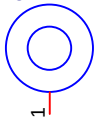


H20
*h-o98x91d98x91n

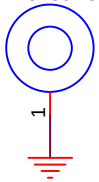


CPU BKT Holes

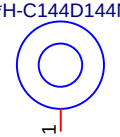
H8
*H-C144D144N



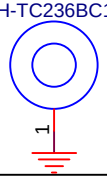
H9
*H-TC236BC197D91P2



H6
*H-C144D144N



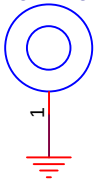
H7
*H-TC236BC197D91P2



Stuff NUT Location:

NGFF WLAN Nut

H15
H-TC217BC122D122PT



PROJECT : LI5

Quanta Computer Inc.

Size	Document Number	Rev
A	Screw Hole	1A
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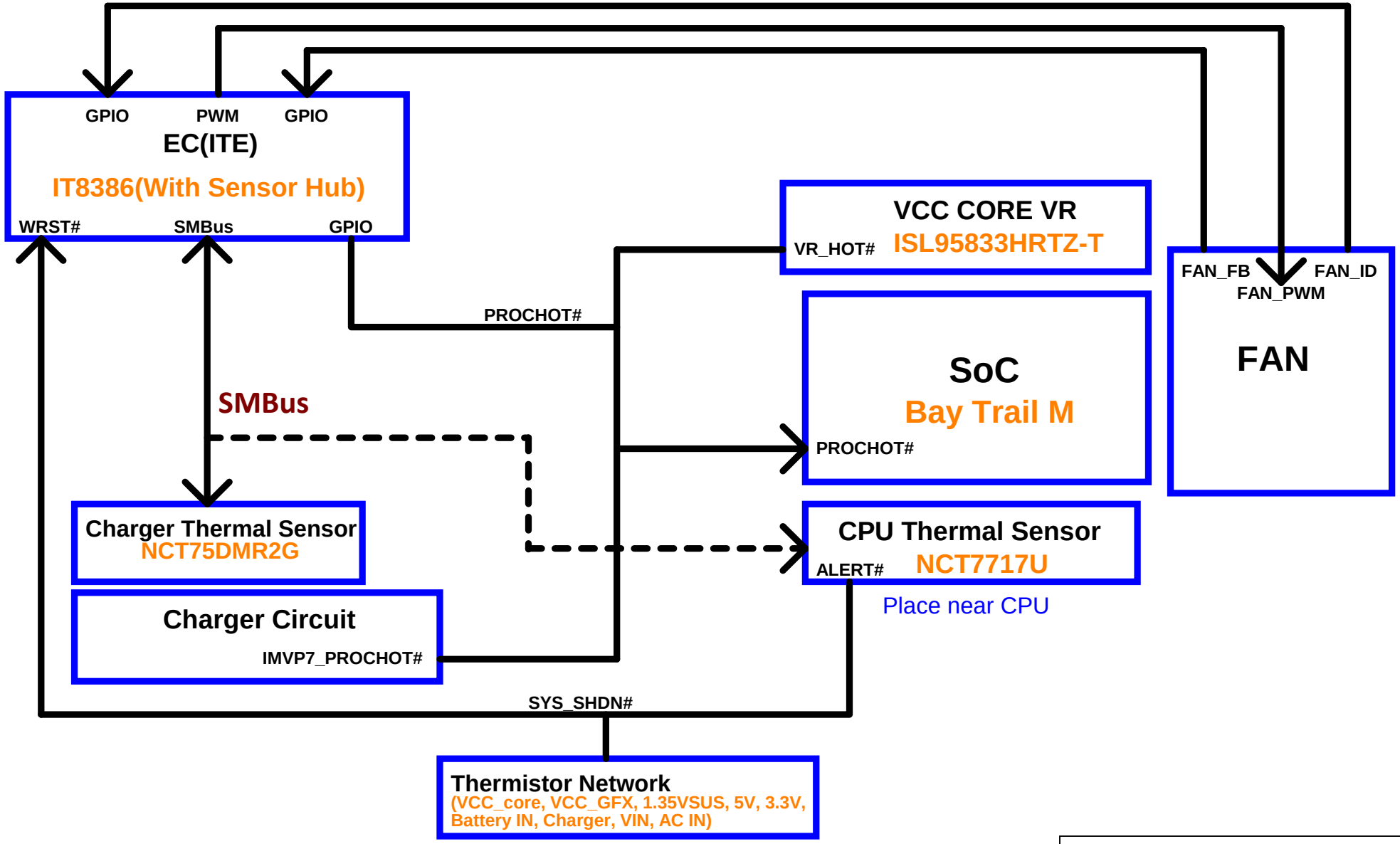

PROJECT : LI5

Quanta Computer Inc.

Size	Document Number	Rev
	Thermal Block diagram	1A

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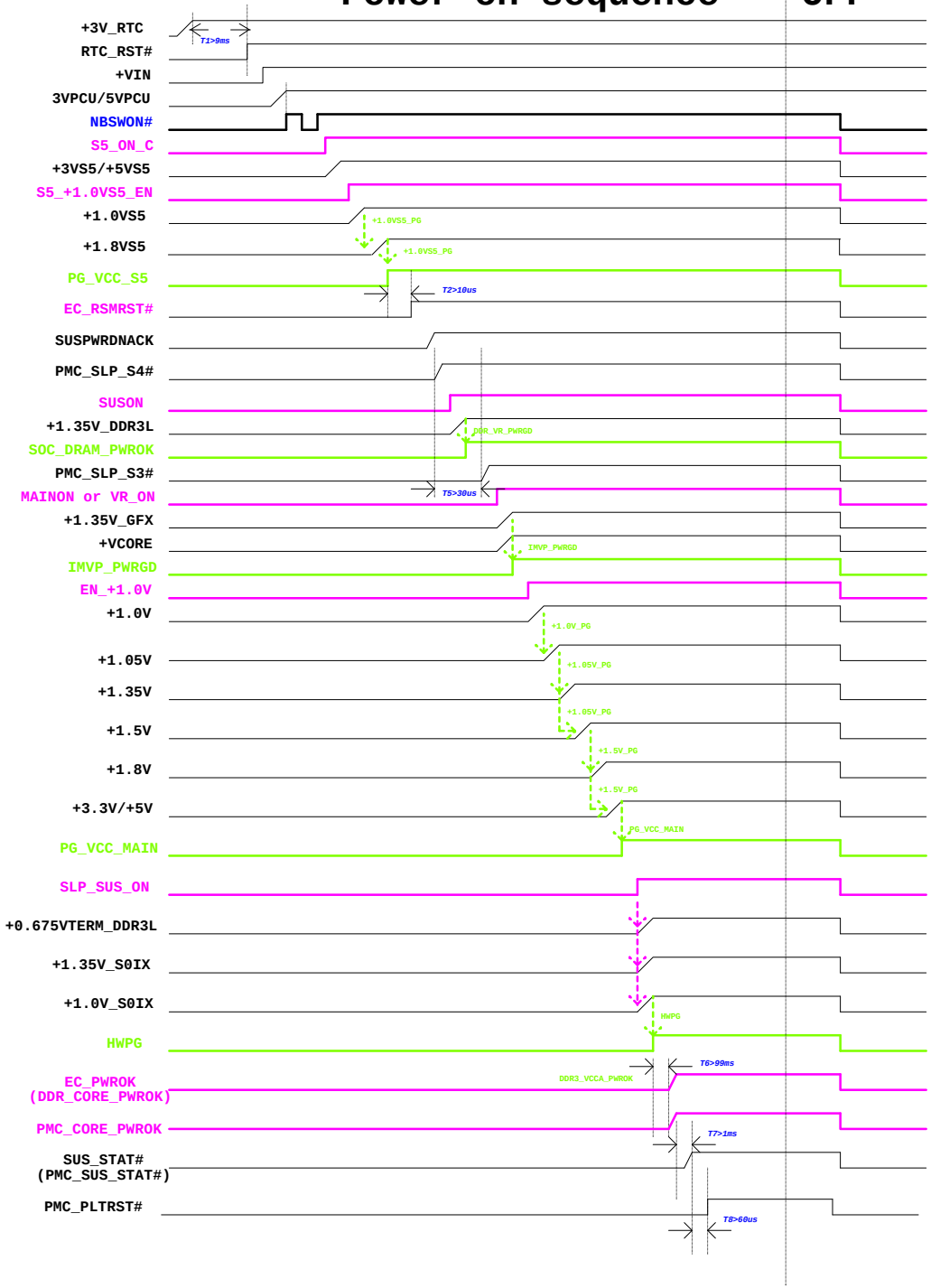
Power on sequence OFF



Green signals (PG)
Blue timing -- Intel
Pink signals from EC

PROJECT : LI5
Quanta Computer Inc.
Power Seqeunce
Size: Custom | Document Number | Rev: 1A
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LI5 Schematic EC Tracking Record A to B version(SDV/FVT Planar)

EC #	Page	Description	Part Affected
EC-DV-01	6,25,27	Swap the net name.	net name only
EC-DV-02	24	Swap the net name.	net name only
EC-DV-03	25	Correct the net name(LID2#)	net name only
EC-DV-04	16	Add pull up resistor for SMBus of sensor board	R531,R532
EC-DV-05	21	Add pull down resistor for SSD DEVSLP pin.	R533
EC-DV-06	26	Parts stuff for thermal polling.	Q31,R76,R67
EC-DV-07	25	Change touch pad to I2C from SMB	net name only
EC-DV-08	16	Add MB ID for touch screen control board by different OS(Win8 or Chrome).	R535
EC-DV-09	16,21,26	Change PN and footprint for new connector	CN1,CN17,CN11,CN8
EC-DV-10	6,19	Separate the dual diode to single diode.	D35,D36,D37,D38
EC-DV-11	26	Change Thermal solution to Nuvoton to meet ECSL	U11,Q61,Q62,C372,C373,C374 Del: R223,R224,R231,R232,R236,R237,C354,U39,R513,R514,R515,R503, R504,R505,C329,U36,R479,R480,R481,R468,R469,R470
EC-DV-12	20	Change U18(transformer) footprint	U18
EC-DV-13	14	Correct the eDP AUX P/N net	net name only
EC-DV-14	27	Change LED connector CN6 footprint and PN	CN6
EC-DV-15	29	Reserve 0402 Cap for EMC requirement.	R375,R376,R377,R378,R379,R380,R381
EC-DV-16	24,16	Change LID_CLOSE Net connection, Connect to EC from hall sensor	R226
EC-DV-17	20	Stuff for 1G LAN transformer path. Unstuff C42 for 1.0V regulator mode	R93,R99,R359,R362,R367,R374,C42
EC-DV-18	19, 28	Delete thermal probe for PS2/SMB for touch pad reserved	R127,C99,R129,R125,R126,Q41,R429,R417,C85,Q37,Q40,Q39,Q38,U5, R423,C88,C89,C86,C87 R136,R135,R193,R190,R195,R156,R160,R197,R155,R322,R351 R538,R539,R540,R541,R542,R543,R544
EC-DV-19	25	Delete R198 combine the +3V_TCH_PAD to +3.3V	Delete R198
EC-DV-20	13	Remove R414 to avoid the USB hub into test mode	R414
EC-DV-21	12,25,24	Modify CHG/ATTN interrupt signal connection, Add SENSOR_HUB_INT signal	R545,R546,R547,R548,R549,R550,R551,Q64
EC-DV-22	14	Unstuff 1.2V LDO if eDP converter.	unstuff U17,C234,C236,R307,C14,C242,R299,R36,R43
EC-DV-23	12,25	Change pull up resistor vaule 4.7K to 2.2K in I2C	R119,R138,R222,R246,R517,R518
EC-DV-24	20	Stuff ESD component	U2,U3,U34,U4,SU1,U23,U10,U12,U16,EC5,C325,C295,C343,C340,C355, C346,SC17,SC18
EC-DV-25	6	Stuff PU resistor of BIOS EEPROM chip select pin.	R502

Title	<Title>	
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LI5 Power Schematic EC Tracking Record A to B version(SDV/FVT Planar)

EC #	Page	Description	Part Affected
EC-DV-P01	37	Change PC49, PC88 to 1000p for compensation	PC49, PC88
EC-DV-P02	37	Change PC54, PC84 to 120p for compensation	PC54, PC84
EC-DV-P03	31~37	Change default open to default short	PJP5, PJP6, PJP10, PJP12, PJP15, PJP17, PJP1, PJP16, PJP13, PJP14, PJP11, PJP9, PJP7, PJP3, PJP4
EC-DV-P04	34	Change 1.05V Power IC for ECSL	PU8, PC203, PC204, PC205, PC206,PR196, PR197, PR247,PL7
EC-DV-P05	35	Change 1.5V Power IC for ECSL	PU4, PC202, PR157, PR158
EC-DV-P06	36	Change 1.8V Power IC for ECSL	PU5, PC201, PR161, PR165
EC-DV-P07	32	Fine tune output voltage	PR226
EC-DV-P08	35,38	Fine tune +1.5V_PG voltage	PR133,PR208,PR48
EC-DV-P09	33,39	Fine tune +1.0VS5_PG voltage	PR155, PR152
EC-DV-P10	34	Fine tune +1.5V_PG voltage	PR146
EC-DV-P11	34,38,39	Fine tune +1.05V_PG voltage	PR39,PR169,PR189
EC-DV-P12			
EC-DV-P13			
EC-DV-P14			
EC-DV-P15			

LI5 Schematic EC Tracking Record B to C version(ME SIT Planar)

EC #	Page	Description	Part Affected
EC-ME SIT-01	27	Change the current limit resistor 680 to 100 ohm	R17,R19,R273
EC-ME SIT-02	20	Delete the D19, due to its' function duplicate with U14,U24	D19
EC-ME SIT-03	20	Change to footprint 0603 to 0402, due to source change	SRV1,SRV2,SRV3,SRV4,SRV5
EC-ME SIT-04	20	Change to footprint of RJ45, due to source change	CN10
EC-ME SIT-05	27	Change to footprint of Logo LED conn, due to source change	CN6
EC-ME SIT-06	19	Change to footprint 0603 to 0402, due to source change	L7,L8,L13
EC-ME SIT-07	26	Reverse CN11 pin define	CN11
EC-ME SIT-08	41	Cancel the Nut.	H4
EC-ME SIT-09	07,25	Change I2C touch pad to PS2/SMB	R541,R542,R543,R544,R540,R538,R539,R545
EC-ME SIT-10	18	Add TPM function	R545,R446,R441,R434,R405

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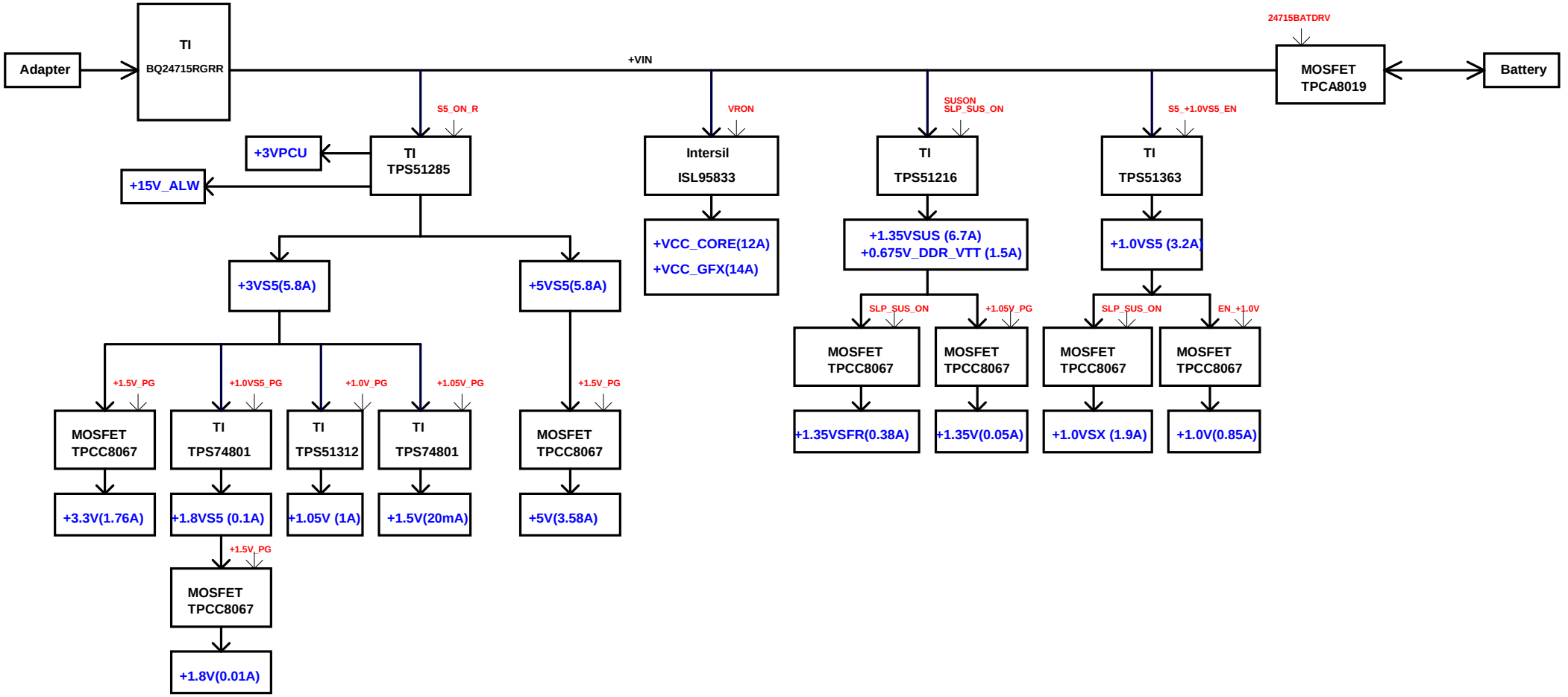
LI5 Schematic EC Tracking Record C to D version(SIT Planar)

EC #	Page	Description	Part Affected
EC-SIT-01	24	Add 100K PD resistor for S5_ON_C	R552
EC-SIT-02	25	Add Fuse in power rail.	F2,F3,F4,Del R238
EC-SIT-03	24	Add P-Sensor output path	R553,D9
EC-SIT-04	29,17	Add EMI/ESD requirement	C382,C383,C384,C385,C386,C387,C388,C389,L19,SRV6
EC-SIT-05	25	Change LID to unipolar hall sensor	U8,C390
EC-SIT-06	29	Change source for ECSL	Q2
EC-SIT-07	20	Delete ESD parts for space saving.	Del: U14,U24,R282
EC-SIT-08	20	Stuff for ESD solution	C6,C43,ER1,ER2,ER3,ER4,ER5,ER6,EC1,EC2,EC3,EC6,EC7,EC9; Change value C18,R99,R93,R283,R284

LI5 Power Schematic EC Tracking Record A to B version(SDV/FVT Planar)

EC #	Page	Description	Part Affected
EC-SIT-P01	33~36, 38,40	Change PC150,PD1,PC144,PC145,PC146,PC147,PC169,PC170 PQ10,PQ15,PQ22,PQ29,PQ38 for ECSL	PC150,PD1,PC144,PC145,PC146,PC147,PC169,PC170 PQ10,PQ15,PQ22,PQ29,PQ38
EC-SIT-P02	40	Change PD3 to reserve	PD3
EC-SIT-P03	33,34	Change PR155, PR189 for Enable threshold	PR155, PR189
EC-SIT-P04	35, 36, 38	Change PR137,PR164,PR46,PC34,PR203,PC168 to meet Power Sequence	PR137,PR164,PR46,PC34,PR203,PC168
EC-SIT-P05	37	Change PC51 to meet Ripple spec	PC51
EC-SIT-P06	36	Fine tune 1.8V output voltage	PR161
EC-SIT-P07	31	Fine +3VS5/+5VS5 OCP	PR148,PR163
EC-SIT-P08	37	Fine tune +VCC_Core and +VCC_GFX OCP	PR6,PR21
EC-SIT-P09	37	Fine tune +VCC_Core and +VCC_GFX Loadline	PR72,PR110
EC-DV-P10	31	Add PR248 for +3VS5/+5VS5 Power Good	PR248
EC-SIT-P11	35,36	Fine tune OCP trigger level	PR129,PR130,PR179,PR180
EC-SIT-P12	30	Change PU7 to Rohm for ECSL	PU7
EC-SIT-P13	30	Change PF1 to Halogen Free part	PF1



PROJECT :JWU
Quanta Computer Inc.

Size	Document Number	Rev
	Power Block Diagram	3A

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