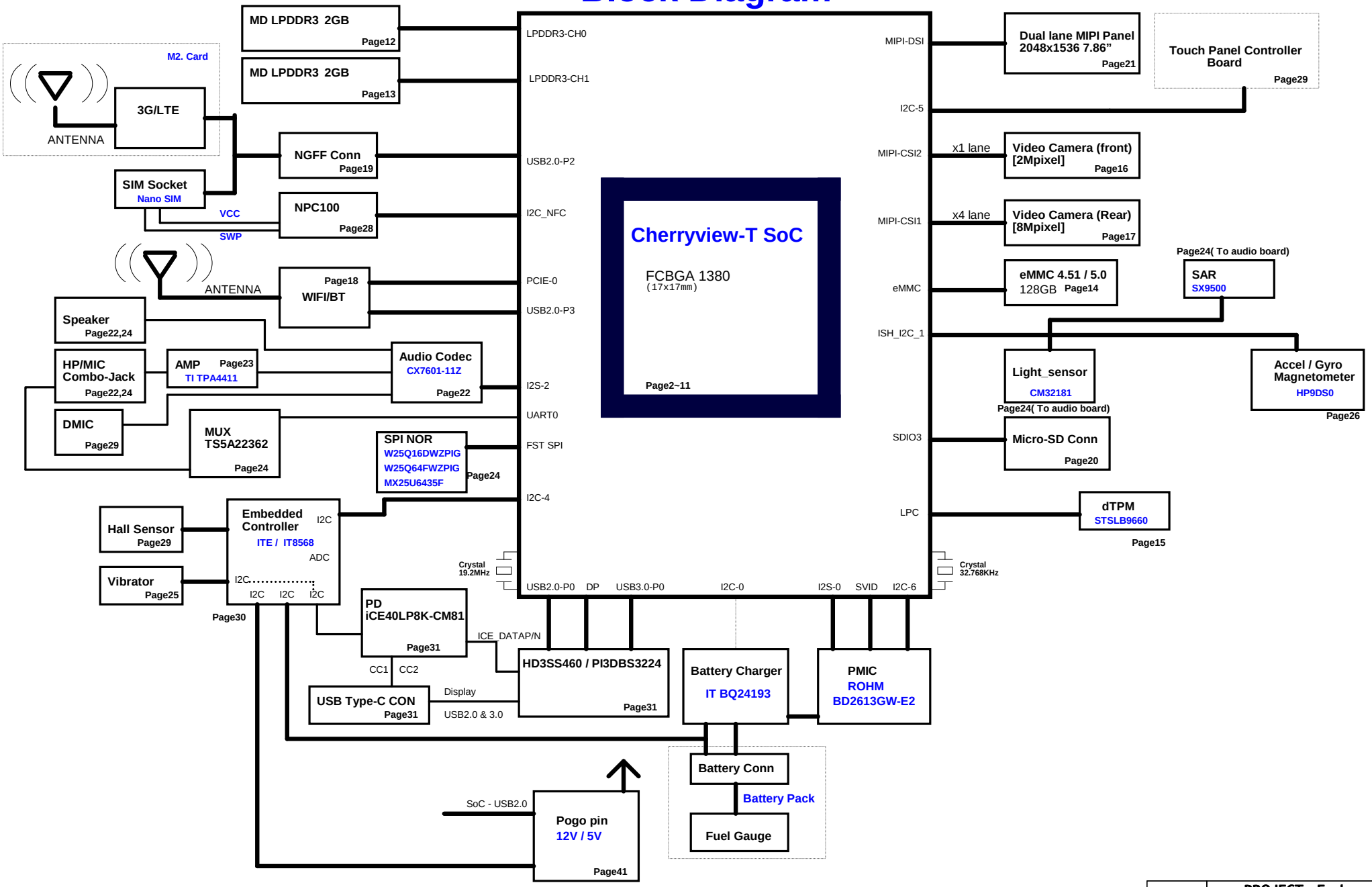
Intel Cherry Trail-T Platform Block Diagram



PROJECT : Eagle Quanta Computer Inc.		
Size	Document Number Block Diagram	Rev 1A
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U1A

SOC_CHV

12	LPDDR3_M0_CA0	LPDDR3_M0_CA0	L49	LPDDR3_M0_CA0
12	LPDDR3_M0_CA1	LPDDR3_M0_CA1	M50	LPDDR3_M0_CA1
12	LPDDR3_M0_CA2	LPDDR3_M0_CA2	P48	LPDDR3_M0_CA2
12	LPDDR3_M0_CA3	LPDDR3_M0_CA3	L51	LPDDR3_M0_CA3
12	LPDDR3_M0_CA4	LPDDR3_M0_CA4	M54	LPDDR3_M0_CA4
12	LPDDR3_M0_CA5	LPDDR3_M0_CA5	L55	LPDDR3_M0_CA5
12	LPDDR3_M0_CA6	LPDDR3_M0_CA6	N51	LPDDR3_M0_CA6
			R49	RSVD9
12	LPDDR3_M0_CA8	LPDDR3_M0_CA8	T52	LPDDR3_M0_CA8
			P50	RSVD10
			M48	RSVD11
			L53	RSVD12
			R51	RSVD13
12	LPDDR3_M0_CA9	LPDDR3_M0_CA9	R53	LPDDR3_M0_CA9
			J55	RSVD14
			H54	RSVD15
12	LPDDR3_M0_DM0_A	LPDDR3_M0_DM0_A	M46	LPDDR3_M0_DM0_A
12	LPDDR3_M0_DM1_A	LPDDR3_M0_DM1_A	G47	LPDDR3_M0_DM1_A
12	LPDDR3_M0_DM2_A	LPDDR3_M0_DM2_A	F46	LPDDR3_M0_DM2_A
12	LPDDR3_M0_DM3_A	LPDDR3_M0_DM3_A	E49	LPDDR3_M0_DM3_A
12	LPDDR3_M0_DM0_B	LPDDR3_M0_DM0_B	U55	LPDDR3_M0_DM0_B
12	LPDDR3_M0_DM1_B	LPDDR3_M0_DM1_B	AF56	LPDDR3_M0_DM1_B
12	LPDDR3_M0_DM2_B	LPDDR3_M0_DM2_B	AB50	LPDDR3_M0_DM2_B
12	LPDDR3_M0_DM3_B	LPDDR3_M0_DM3_B	AB48	LPDDR3_M0_DM3_B
			G55	
			E55	RSVD18
			F54	RSVD7
				RSVD19
			F56	RSVD5
12	LPDDR3_M0_CA7	LPDDR3_M0_CA7	L57	LPDDR3_M0_CA7
			G57	RSVD6
12	LPDDR3_M0_CS0_B	LPDDR3_M0_CS0_B	J57	LPDDR3_M0_CS0
12	LPDDR3_M0_CS1_B	LPDDR3_M0_CS1_B	B56	LPDDR3_M0_CS1
12	LPDDR3_M0_CKE0_A	LPDDR3_M0_CKE0_A	H58	LPDDR3_M0_CKE0_A
12	LPDDR3_M0_CKE1_A	LPDDR3_M0_CKE1_A	C57	LPDDR3_M0_CKE1_A
12	LPDDR3_M0_CKE0_B	LPDDR3_M0_CKE0_B	K56	LPDDR3_M0_CKE0_B
12	LPDDR3_M0_CKE1_B	LPDDR3_M0_CKE1_B	D58	LPDDR3_M0_CKE1_B
12	LPDDR3_M0_ODT_A	LPDDR3_M0_ODT_A	B54	LPDDR3_M0_ODT_A
12	LPDDR3_M0_ODT_B	LPDDR3_M0_ODT_B	C55	LPDDR3_M0_ODT_B
12	LPDDR3_M0_CLK_DP_A	LPDDR3_M0_CLK_DP_A	N57	LPDDR3_M0_CK_P_A
12	LPDDR3_M0_CLK_DN_A	LPDDR3_M0_CLK_DN_A	N55	LPDDR3_M0_CK_N_A
12	LPDDR3_M0_CLK_DP_B	LPDDR3_M0_CLK_DP_B	P56	LPDDR3_M0_CK_P_B
12	LPDDR3_M0_CLK_DN_B	LPDDR3_M0_CLK_DN_B	P54	LPDDR3_M0_CK_N_B
			E57	RSVD8
39	DRAM_PWROK	DRAM_PWROK	AK49	LPDDR3_DRAM_PWROK
39	VCCA_PWROK	VCCA_PWROK	AK51	LPDDR3_CORE_PWROK
		DDR3_M0_RCOMPPD	AD44	LPDDR3_M0_RCOMPPD
	+VDDR3_M0_ODQVREF_R		T50	LPDDR3_M0_ODQVREF
	+VDDR3_M0_OCAVREF_R		T48	LPDDR3_M0_OCAVREF
			AF45	RSVD17
			AH46	RSVD16

MEMORY-CH0

LPDDR3_M0_DQ0_A	K42	LPDDR3_M0_D0_A	LPDDR3_M0_D0_A 12
LPDDR3_M0_DQ1_A	L43	LPDDR3_M0_D1_A	LPDDR3_M0_D1_A 12
LPDDR3_M0_DQ2_A	H42	LPDDR3_M0_D2_A	LPDDR3_M0_D2_A 12
LPDDR3_M0_DQ3_A	G43	LPDDR3_M0_D3_A	LPDDR3_M0_D3_A 12
LPDDR3_M0_DQ4_A	J43	LPDDR3_M0_D4_A	LPDDR3_M0_D4_A 12
LPDDR3_M0_DQ5_A	K44	LPDDR3_M0_D5_A	LPDDR3_M0_D5_A 12
LPDDR3_M0_DQ6_A	M44	LPDDR3_M0_D6_A	LPDDR3_M0_D6_A 12
LPDDR3_M0_DQ7_A	J45	LPDDR3_M0_D7_A	LPDDR3_M0_D7_A 12
LPDDR3_M0_DQ8_A	L47	LPDDR3_M0_D8_A	LPDDR3_M0_D8_A 12
LPDDR3_M0_DQ9_A	H48	LPDDR3_M0_D9_A	LPDDR3_M0_D9_A 12
LPDDR3_M0_DQ10_A	G49	LPDDR3_M0_D10_A	LPDDR3_M0_D10_A 12
LPDDR3_M0_DQ11_A	H52	LPDDR3_M0_D11_A	LPDDR3_M0_D11_A 12
LPDDR3_M0_DQ12_A	K52	LPDDR3_M0_D12_A	LPDDR3_M0_D12_A 12
LPDDR3_M0_DQ13_A	J53	LPDDR3_M0_D13_A	LPDDR3_M0_D13_A 12
LPDDR3_M0_DQ14_A	J49	LPDDR3_M0_D14_A	LPDDR3_M0_D14_A 12
LPDDR3_M0_DQ15_A	J51	LPDDR3_M0_D15_A	LPDDR3_M0_D15_A 12
LPDDR3_M0_DQ16_A	F44	LPDDR3_M0_D16_A	LPDDR3_M0_D16_A 12
LPDDR3_M0_DQ17_A	B42	LPDDR3_M0_D17_A	LPDDR3_M0_D17_A 12
LPDDR3_M0_DQ18_A	E43	LPDDR3_M0_D18_A	LPDDR3_M0_D18_A 12
LPDDR3_M0_DQ19_A	F42	LPDDR3_M0_D19_A	LPDDR3_M0_D19_A 12
LPDDR3_M0_DQ20_A	E45	LPDDR3_M0_D20_A	LPDDR3_M0_D20_A 12
LPDDR3_M0_DQ21_A	D44	LPDDR3_M0_D21_A	LPDDR3_M0_D21_A 12
LPDDR3_M0_DQ22_A	C43	LPDDR3_M0_D22_A	LPDDR3_M0_D22_A 12
LPDDR3_M0_DQ23_A	C45	LPDDR3_M0_D23_A	LPDDR3_M0_D23_A 12
LPDDR3_M0_DQ24_A	E47	LPDDR3_M0_D24_A	LPDDR3_M0_D24_A 12
LPDDR3_M0_DQ25_A	C49	LPDDR3_M0_D25_A	LPDDR3_M0_D25_A 12
LPDDR3_M0_DQ26_A	D48	LPDDR3_M0_D26_A	LPDDR3_M0_D26_A 12
LPDDR3_M0_DQ27_A	D52	LPDDR3_M0_D27_A	LPDDR3_M0_D27_A 12
LPDDR3_M0_DQ28_A	F50	LPDDR3_M0_D28_A	LPDDR3_M0_D28_A 12
LPDDR3_M0_DQ29_A	E51	LPDDR3_M0_D29_A	LPDDR3_M0_D29_A 12
LPDDR3_M0_DQ30_A	C53	LPDDR3_M0_D30_A	LPDDR3_M0_D30_A 12
LPDDR3_M0_DQ31_A	F52	LPDDR3_M0_D31_A	LPDDR3_M0_D31_A 12
LPDDR3_M0_DQ0_B	T54	LPDDR3_M0_D0_B	LPDDR3_M0_D0_B 12
LPDDR3_M0_DQ1_B	U57	LPDDR3_M0_D1_B	LPDDR3_M0_D1_B 12
LPDDR3_M0_DQ2_B	R55	LPDDR3_M0_D2_B	LPDDR3_M0_D2_B 12
LPDDR3_M0_DQ3_B	T58	LPDDR3_M0_D3_B	LPDDR3_M0_D3_B 12
LPDDR3_M0_DQ4_B	Y54	LPDDR3_M0_D4_B	LPDDR3_M0_D4_B 12
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LPDDR3_M0_DQ13_B	AC57	LPDDR3_M0_D13_B	LPDDR3_M0_D13_B 12
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LPDDR3_M0_DQ15_B	AG57	LPDDR3_M0_D15_B	LPDDR3_M0_D15_B 12
LPDDR3_M0_DQ16_B	W49	LPDDR3_M0_D16_B	LPDDR3_M0_D16_B 12
LPDDR3_M0_DQ17_B	V48	LPDDR3_M0_D17_B	LPDDR3_M0_D17_B 12
LPDDR3_M0_DQ18_B	AA51	LPDDR3_M0_D18_B	LPDDR3_M0_D18_B 12
LPDDR3_M0_DQ19_B	V50	LPDDR3_M0_D19_B	LPDDR3_M0_D19_B 12
LPDDR3_M0_DQ20_B	Y48	LPDDR3_M0_D20_B	LPDDR3_M0_D20_B 12
LPDDR3_M0_DQ21_B	AA53	LPDDR3_M0_D21_B	LPDDR3_M0_D21_B 12
LPDDR3_M0_DQ22_B	Y52	LPDDR3_M0_D22_B	LPDDR3_M0_D22_B 12
LPDDR3_M0_DQ23_B	AB52	LPDDR3_M0_D23_B	LPDDR3_M0_D23_B 12
LPDDR3_M0_DQ24_B	AH50	LPDDR3_M0_D24_B	LPDDR3_M0_D24_B 12
LPDDR3_M0_DQ25_B	AD48	LPDDR3_M0_D25_B	LPDDR3_M0_D25_B 12
LPDDR3_M0_DQ26_B	AD50	LPDDR3_M0_D26_B	LPDDR3_M0_D26_B 12
LPDDR3_M0_DQ27_B	AE53	LPDDR3_M0_D27_B	LPDDR3_M0_D27_B 12
LPDDR3_M0_DQ28_B	AH48	LPDDR3_M0_D28_B	LPDDR3_M0_D28_B 12
LPDDR3_M0_DQ29_B	AF48	LPDDR3_M0_D29_B	LPDDR3_M0_D29_B 12
LPDDR3_M0_DQ30_B	AE49	LPDDR3_M0_D30_B	LPDDR3_M0_D30_B 12
LPDDR3_M0_DQ31_B	AF52	LPDDR3_M0_D31_B	LPDDR3_M0_D31_B 12

LPDDR3_M0_DQS0_P_A	K46	LPDDR3_M0_DQS0_P_A	LPDDR3_M0_DQS0_P_A 12
LPDDR3_M0_DQS0_N_A	J47	LPDDR3_M0_DQS0_N_A	LPDDR3_M0_DQS0_N_A 12
LPDDR3_M0_DQS1_P_A	H50	LPDDR3_M0_DQS1_P_A	LPDDR3_M0_DQS1_P_A 12
LPDDR3_M0_DQS1_N_A	G51	LPDDR3_M0_DQS1_N_A	LPDDR3_M0_DQS1_N_A 12
LPDDR3_M0_DQS2_P_A	B46	LPDDR3_M0_DQS2_P_A	LPDDR3_M0_DQS2_P_A 12
LPDDR3_M0_DQS2_N_A	C47	LPDDR3_M0_DQS2_N_A	LPDDR3_M0_DQS2_N_A 12
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LPDDR3_M0_DQS0_P_B	W55	LPDDR3_M0_DQS0_P_B	LPDDR3_M0_DQS0_P_B 12
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LPDDR3_M0_DQS2_P_B	Y50	LPDDR3_M0_DQS2_P_B	LPDDR3_M0_DQS2_P_B 12
LPDDR3_M0_DQS2_N_B	W51	LPDDR3_M0_DQS2_N_B	LPDDR3_M0_DQS2_N_B 12
LPDDR3_M0_DQS3_P_B	AF50	LPDDR3_M0_DQS3_P_B	LPDDR3_M0_DQS3_P_B 12
LPDDR3_M0_DQS3_N_B	AE51	LPDDR3_M0_DQS3_N_B	LPDDR3_M0_DQS3_N_B 12

REV = 1.0A

SOC_CHV/BGA

1 OF 11

DRAM_PWROK
VCCA_PWROK
DDR3_M0_RCOMPPD

R3 *10K_2
R4 *10K_2
R5 182/F_4

12 +VDDR3_M0_ODQVREF_R
12 +VDDR3_M0_OCAVREF_R

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
	Cherryview-T (Memory 0,1)	1A
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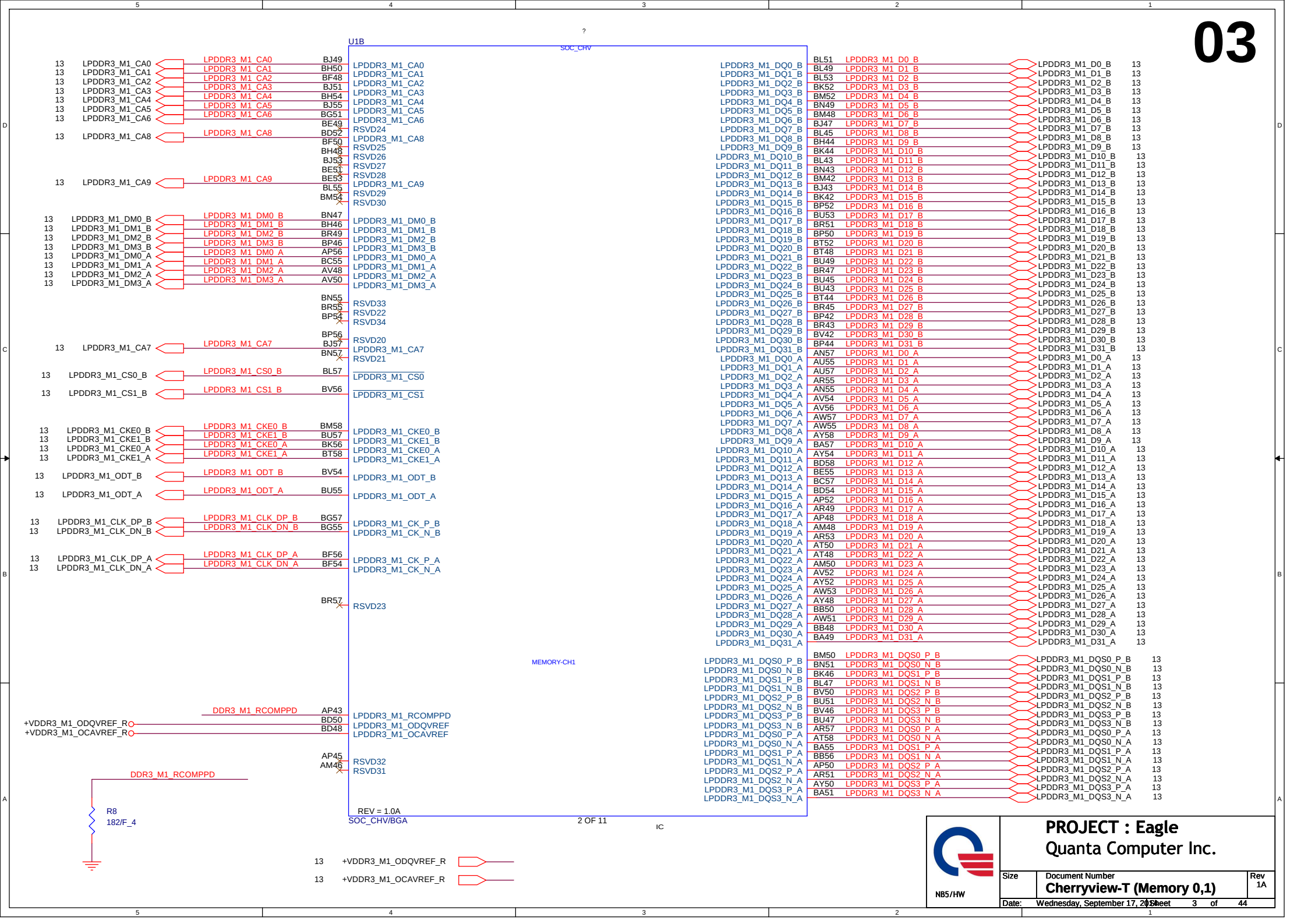
03
U1B
SOC_CHV
MEMORY-CH1
2 OF 11
IC
REV = 1.0A
SOC_CHV/BGA
R8
182/F_4
DDR3_M1_RCOMPPD
+VDDR3_M1_ODQVREF_R
+VDDR3_M1_OCAVREF_R
PROJECT : Eagle
Quanta Computer Inc.
Cherryview-T (Memory 0,1)
NB5/HW
Size
Document Number
Rev 1A
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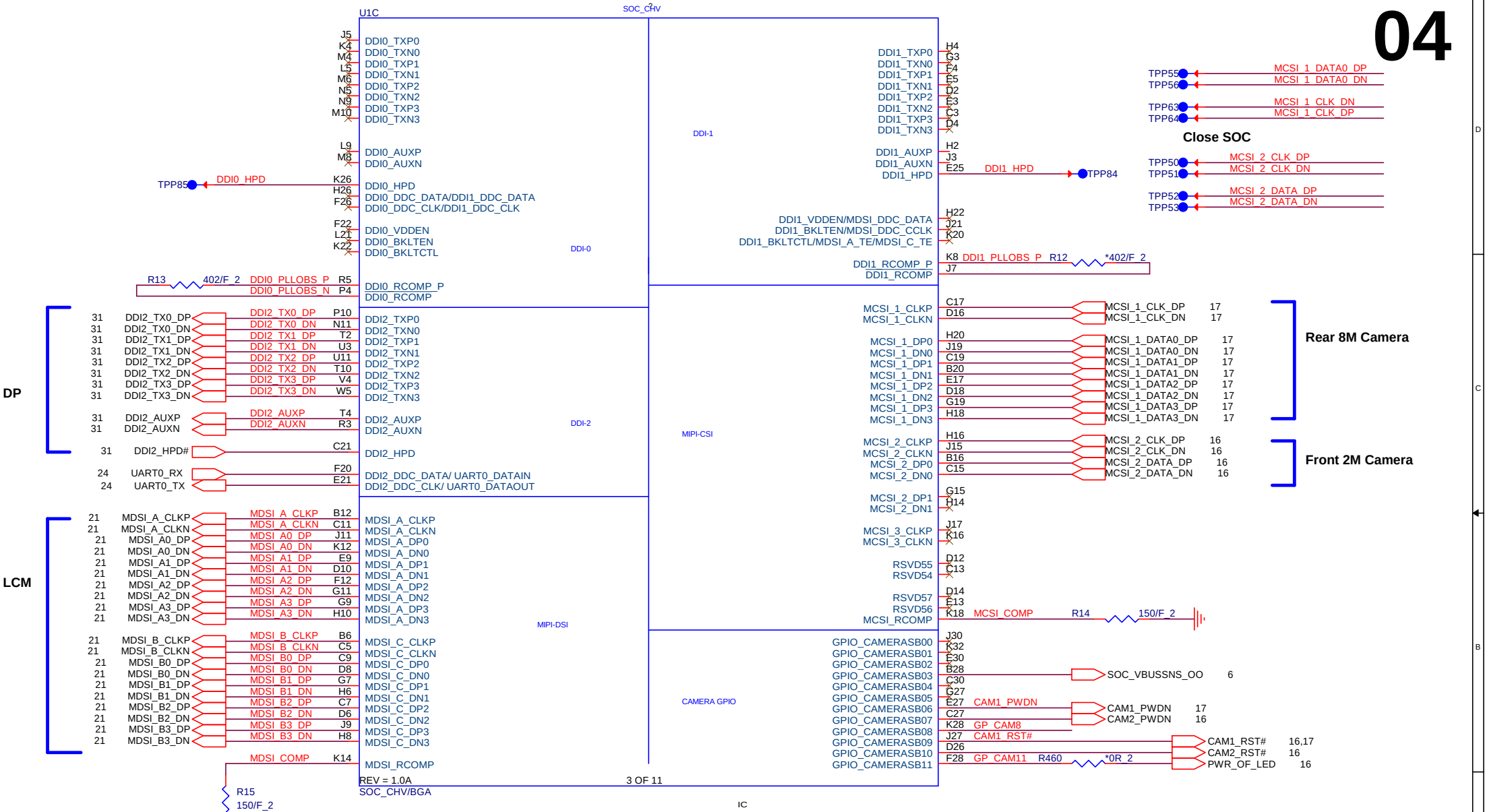
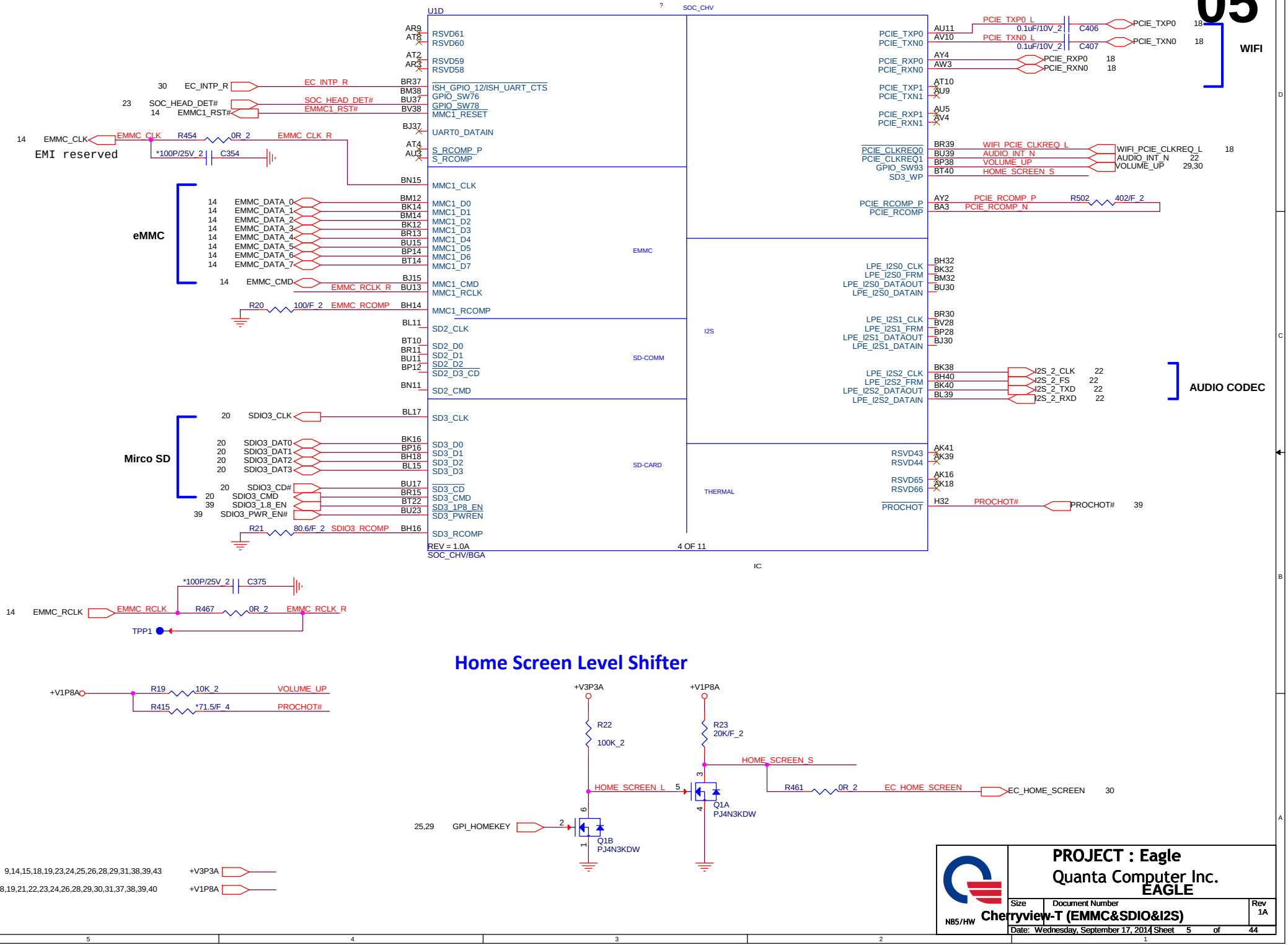

04
U1C
SOC_CHV
DDI-0
DDI-1
DDI-2
MIPI-CSI
MIPI-DSI
CAMERA GPIO
IC
REV = 1.0A
SOC_CHV/BGA
3 OF 11
DDI0_TXP0
DDI0_TXN0
DDI0_TXP1
DDI0_TXN1
DDI0_TXP2
DDI0_TXN2
DDI0_TXP3
DDI0_TXN3
DDI0_AUXP
DDI0_AUXN
DDI0_HPD
DDI0_DDC_DATA/DDI1_DDC_DATA
DDI0_DDC_CLK/DDI1_DDC_CLK
DDI0_VDDEN
DDI0_BKLTEN
DDI0_BKLTCTL
DDI0_RCOMP_P
DDI0_RCOMP
DDI1_TXP0
DDI1_TXN0
DDI1_TXP1
DDI1_TXN1
DDI1_TXP2
DDI1_TXN2
DDI1_TXP3
DDI1_TXN3
DDI1_AUXP
DDI1_AUXN
DDI1_HPD
DDI1_VDDEN/MDSI_DDC_DATA
DDI1_BKLTEN/MDSI_DDC_CCLK
DDI1_BKLTCTL/MDSI_A_TE/MDSI_C_TE
DDI1_RCOMP_P
DDI1_RCOMP
DDI2_TXP0
DDI2_TXN0
DDI2_TXP1
DDI2_TXN1
DDI2_TXP2
DDI2_TXN2
DDI2_TXP3
DDI2_TXN3
DDI2_AUXP
DDI2_AUXN
DDI2_HPD
DDI2_DDC_DATA/ UART0_DATAIN
DDI2_DDC_CLK/ UART0_DATAOUT
MDSI_A_CLKP
MDSI_A_CLKN
MDSI_A_DP0
MDSI_A_DN0
MDSI_A_DP1
MDSI_A_DN1
MDSI_A_DP2
MDSI_A_DN2
MDSI_A_DP3
MDSI_A_DN3
MDSI_C_CLKP
MDSI_C_CLKN
MDSI_C_DP0
MDSI_C_DN0
MDSI_C_DP1
MDSI_C_DN1
MDSI_C_DP2
MDSI_C_DN2
MDSI_C_DP3
MDSI_C_DN3
MDSI_RCOMP
MCSI_1_CLKP
MCSI_1_CLKN
MCSI_1_DP0
MCSI_1_DN0
MCSI_1_DP1
MCSI_1_DN1
MCSI_1_DP2
MCSI_1_DN2
MCSI_1_DP3
MCSI_1_DN3
MCSI_2_CLKP
MCSI_2_CLKN
MCSI_2_DP0
MCSI_2_DN0
MCSI_2_DP1
MCSI_2_DN1
MCSI_3_CLKP
MCSI_3_CLKN
RSVD55
RSVD54
RSVD57
RSVD56
MCSI_RCOMP
GPIO_CAMERASB00
GPIO_CAMERASB01
GPIO_CAMERASB02
GPIO_CAMERASB03
GPIO_CAMERASB04
GPIO_CAMERASB05
GPIO_CAMERASB06
GPIO_CAMERASB07
GPIO_CAMERASB08
GPIO_CAMERASB09
GPIO_CAMERASB10
GPIO_CAMERASB11
DP
LCM
TPP85
DDI0_HPD
R13 402/F_2 DDI0_PLLOBS_P R5
DDI0_PLLOBS_N P4
DDI1_HPD
TPP84
K8 DDI1_PLLOBS_P R12 *402/F_2
J7
DDI2_TX0_DP
DDI2_TX0_DN
DDI2_TX1_DP
DDI2_TX1_DN
DDI2_TX2_DP
DDI2_TX2_DN
DDI2_TX3_DP
DDI2_TX3_DN
DDI2_AUXP
DDI2_AUXN
DDI2_HPD#
UART0_RX
UART0_TX
MDSI_A_CLKP
MDSI_A_CLKN
MDSI_A0_DP
MDSI_A0_DN
MDSI_A1_DP
MDSI_A1_DN
MDSI_A2_DP
MDSI_A2_DN
MDSI_A3_DP
MDSI_A3_DN
MDSI_B_CLKP
MDSI_B_CLKN
MDSI_B0_DP
MDSI_B0_DN
MDSI_B1_DP
MDSI_B1_DN
MDSI_B2_DP
MDSI_B2_DN
MDSI_B3_DP
MDSI_B3_DN
MDSI_COMP
R15 150/F_2
MCSI_1_CLK_DP 17
MCSI_1_CLK_DN 17
MCSI_1_DATA0_DP 17
MCSI_1_DATA0_DN 17
MCSI_1_DATA1_DP 17
MCSI_1_DATA1_DN 17
MCSI_1_DATA2_DP 17
MCSI_1_DATA2_DN 17
MCSI_1_DATA3_DP 17
MCSI_1_DATA3_DN 17
Rear 8M Camera
MCSI_2_CLK_DP 16
MCSI_2_CLK_DN 16
MCSI_2_DATA_DP 16
MCSI_2_DATA_DN 16
Front 2M Camera
MCSI_COMP R14 150/F_2
SOC_VBUSSNS_OO 6
CAM1_PWDN 17
CAM2_PWDN 16
CAM1_RST# 16,17
CAM2_RST# 16
PWR_OF_LED 16
GP_CAM8
GP_CAM11 R460 *0R_2
TPP55 MCSI_1_DATA0_DP
TPP56 MCSI_1_DATA0_DN
TPP63 MCSI_1_CLK_DN
TPP64 MCSI_1_CLK_DP
Close SOC
TPP50 MCSI_2_CLK_DP
TPP51 MCSI_2_CLK_DN
TPP52 MCSI_2_DATA_DP
TPP53 MCSI_2_DATA_DN
TPP87 MDSI_A_CLKP
TPP86 MDSI_A_CLKN
TPP89 MDSI_A1_DP
TPP88 MDSI_A1_DN
TPP91 MDSI_B_CLKP
TPP90 MDSI_B_CLKN
TPP93 MDSI_B0_DP
TPP92 MDSI_B0_DN
Close SOC
Hardware Strap
GPIO_CAMERAB08 ICLK Xtal OSC Bypass 0 = No Bypass 1 = Bypass PD +V1P8A R16 *1K_2 GP_CAM8
GPIO_CAMERAB09 CCU SUS RO Bypass 0 = No Bypass 1 = Bypass PD +V1P8A R17 *1K_2 CAM1_RST#
GPIO_CAMERAB11 RTC OSC Bypass 0 = No Bypass 1 = Bypass PD +V1P8A R18 *1K_2 GP_CAM11
NB5/HW
PROJECT : Eagle
Quanta Computer Inc.
Size
Document Number
Cherryview-T (DISPLAY/CAM)
Rev 1A
Date: Wednesday, September 17, 2014 Sheet 4 of 44


05
U1D
SOC_CHV
WIFI
AUDIO CODEC
eMMC
Mirco SD
EMI reserved
EMMC
I2S
SD-COMM
SD-CARD
THERMAL
4 OF 11
IC
REV = 1.0A
SOC_CHV/BGA
Home Screen Level Shifter
Q1A
PJ4N3KDW
Q1B
PJ4N3KDW
PROJECT : Eagle
Quanta Computer Inc.
EAGLE
Cherryview-T (EMMC&SDIO&I2S)
NB5/HW
Size
Document Number
Rev
1A
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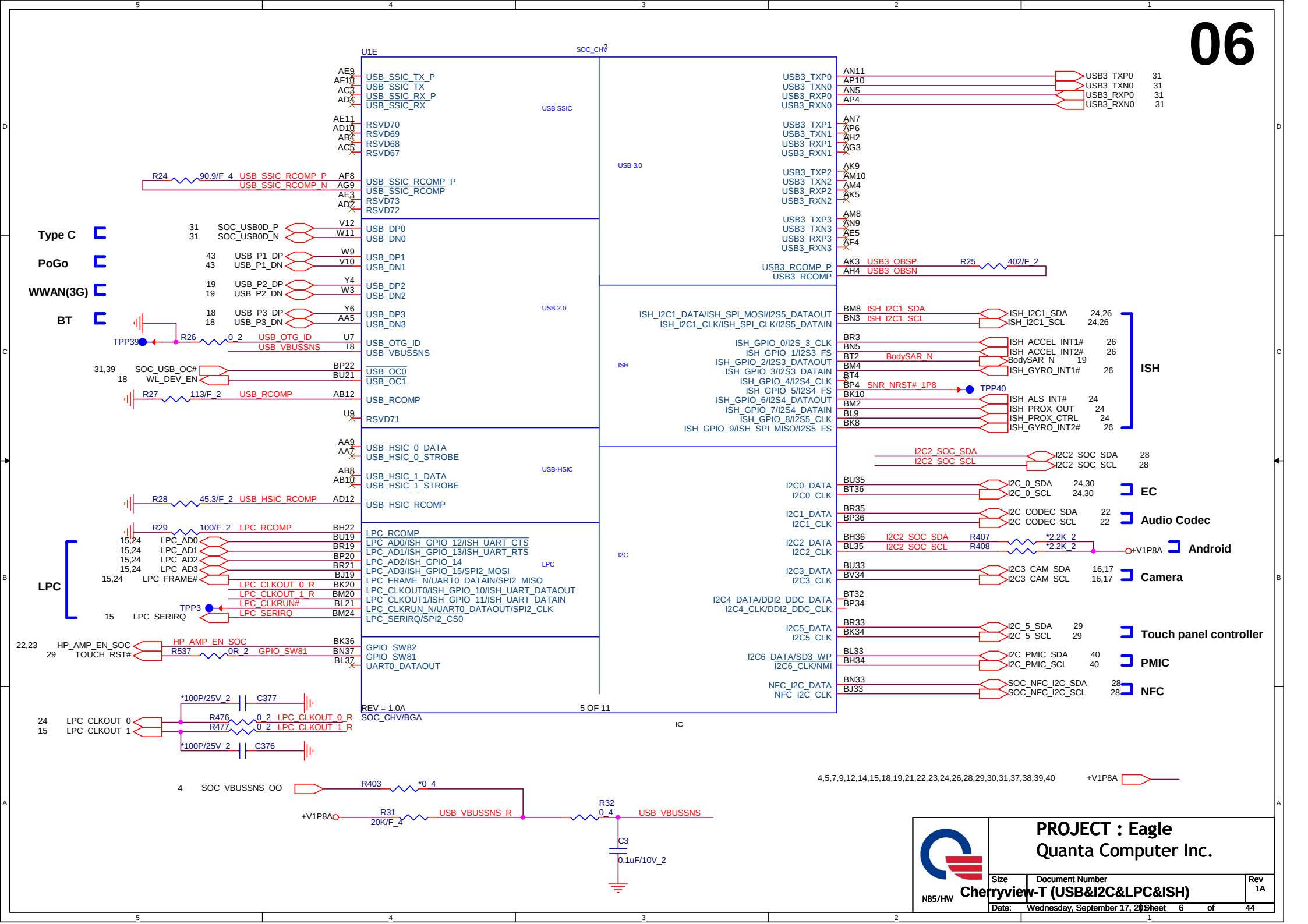
06
U1E
SOC_CHV
USB SSIC
USB 3.0
USB 2.0
USB-HSIC
ISH
LPC
I2C
USB_SSIC_TX_P
USB_SSIC_TX
USB_SSIC_RX_P
USB_SSIC_RX
RSVD70
RSVD69
RSVD68
RSVD67
R24 90.9/F_4 USB_SSIC_RCOMP_P
USB_SSIC_RCOMP_N
USB_SSIC_RCOMP_P
USB_SSIC_RCOMP
RSVD73
RSVD72
USB3_TXP0
USB3_TXN0
USB3_RXP0
USB3_RXN0
USB3_TXP1
USB3_TXN1
USB3_RXP1
USB3_RXN1
USB3_TXP2
USB3_TXN2
USB3_RXP2
USB3_RXN2
USB3_TXP3
USB3_TXN3
USB3_RXP3
USB3_RXN3
USB3_RCOMP_P
USB3_RCOMP
AK3 USB3_OBSP R25 402/F_2
AH4 USB3_OBSN
Type C
PoGo
WWAN(3G)
BT
31 SOC_USB0D_P
31 SOC_USB0D_N
43 USB_P1_DP
43 USB_P1_DN
19 USB_P2_DP
19 USB_P2_DN
18 USB_P3_DP
18 USB_P3_DN
USB_DP0
USB_DN0
USB_DP1
USB_DN1
USB_DP2
USB_DN2
USB_DP3
USB_DN3
TPP39 R26 0_2 USB_OTG_ID
USB_VBUSSNS
USB_OTG_ID
USB_VBUSSNS
31,39 SOC_USB_OC#
18 WL_DEV_EN
USB_OC0
USB_OC1
R27 113/F_2 USB_RCOMP
USB_RCOMP
RSVD71
ISH_I2C1_DATA/ISH_SPI_MOSI/I2S5_DATAOUT
ISH_I2C1_CLK/ISH_SPI_CLK/I2S5_DATAIN
ISH_GPIO_0/I2S_3_CLK
ISH_GPIO_1/I2S3_FS
ISH_GPIO_2/I2S3_DATAOUT
ISH_GPIO_3/I2S3_DATAIN
ISH_GPIO_4/I2S4_CLK
ISH_GPIO_5/I2S4_FS
ISH_GPIO_6/I2S4_DATAOUT
ISH_GPIO_7/I2S4_DATAIN
ISH_GPIO_8/I2S5_CLK
ISH_GPIO_9/ISH_SPI_MISO/I2S5_FS
BM8 ISH_I2C1_SDA
BN3 ISH_I2C1_SCL
BR3
BN5
BT2 BodySAR_N
BM4
BT4
BP4 SNR_NRST#_1P8
BK10
BM2
BL9
BK8
TPP40
ISH_I2C1_SDA 24,26
ISH_I2C1_SCL 24,26
ISH_ACCEL_INT1# 26
ISH_ACCEL_INT2# 26
BodySAR_N 19
ISH_GYRO_INT1# 26
ISH_ALS_INT# 24
ISH_PROX_OUT 24
ISH_PROX_CTRL 24
ISH_GYRO_INT2# 26
ISH
USB_HSIC_0_DATA
USB_HSIC_0_STROBE
USB_HSIC_1_DATA
USB_HSIC_1_STROBE
R28 45.3/F_2 USB_HSIC_RCOMP
USB_HSIC_RCOMP
I2C2_SOC_SDA
I2C2_SOC_SCL
I2C0_DATA
I2C0_CLK
I2C1_DATA
I2C1_CLK
I2C2_DATA
I2C2_CLK
I2C3_DATA
I2C3_CLK
I2C4_DATA/DDI2_DDC_DATA
I2C4_CLK/DDI2_DDC_DATA
I2C5_DATA
I2C5_CLK
I2C6_DATA/SD3_WP
I2C6_CLK/NMI
NFC_I2C_DATA
NFC_I2C_CLK
BU35 BT36
BR35 BP36
BH36 BL35 I2C2_SOC_SDA R407 *2.2K_2 I2C2_SOC_SCL R408 *2.2K_2
BU33 BV34
BT32 BP34
BR33 BK34
BL33 BH34
BN33 BJ33
I2C2_SOC_SDA 28
I2C2_SOC_SCL 28
I2C_0_SDA 24,30
I2C_0_SCL 24,30
I2C_CODEC_SDA 22
I2C_CODEC_SCL 22
+V1P8A
I2C3_CAM_SDA 16,17
I2C3_CAM_SCL 16,17
I2C_5_SDA 29
I2C_5_SCL 29
I2C_PMIC_SDA 40
I2C_PMIC_SCL 40
SOC_NFC_I2C_SDA 28
SOC_NFC_I2C_SCL 28
EC
Audio Codec
Android
Camera
Touch panel controller
PMIC
NFC
LPC
15,24 LPC_AD0
15,24 LPC_AD1
15,24 LPC_AD2
15,24 LPC_AD3
15,24 LPC_FRAME#
LPC_CLKOUT_0_R
LPC_CLKOUT_1_R
TPP3
15 LPC_SERIRQ
LPC_CLKRUN#
LPC_RCOMP
R29 100/F_2 LPC_RCOMP
LPC_AD0/ISH_GPIO_12/ISH_UART_CTS
LPC_AD1/ISH_GPIO_13/ISH_UART_RTS
LPC_AD2/ISH_GPIO_14
LPC_AD3/ISH_GPIO_15/SPI2_MOSI
LPC_FRAME_N/UART0_DATAIN/SPI2_MISO
LPC_CLKOUT0/ISH_GPIO_10/ISH_UART_DATAOUT
LPC_CLKOUT1/ISH_GPIO_11/ISH_UART_DATAIN
LPC_CLKRUN_N/UART0_DATAOUT/SPI2_CLK
LPC_SERIRQ/SPI2_CS0
22,23 HP_AMP_EN_SOC
29 TOUCH_RST#
HP_AMP_EN_SOC
R537 0R_2 GPIO_SW81
GPIO_SW82
GPIO_SW81
UART0_DATAOUT
*100P/25V_2 C377
24 LPC_CLKOUT_0
15 LPC_CLKOUT_1
R476 0_2 LPC_CLKOUT_0_R
R477 0_2 LPC_CLKOUT_1_R
*100P/25V_2 C376
4 SOC_VBUSSNS_OO
R403 *0_4
+V1P8A
R31 20K/F_4 USB_VBUSSNS_R
R32 0_4 USB_VBUSSNS
C3 0.1uF/10V_2
4,5,7,9,12,14,15,18,19,21,22,23,24,26,28,29,30,31,37,38,39,40 +V1P8A
REV = 1.0A
SOC_CHV/BGA
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IC
PROJECT : Eagle
Quanta Computer Inc.
NB5/HW
Cherryview-T (USB&I2C&LPC&ISH)
Size
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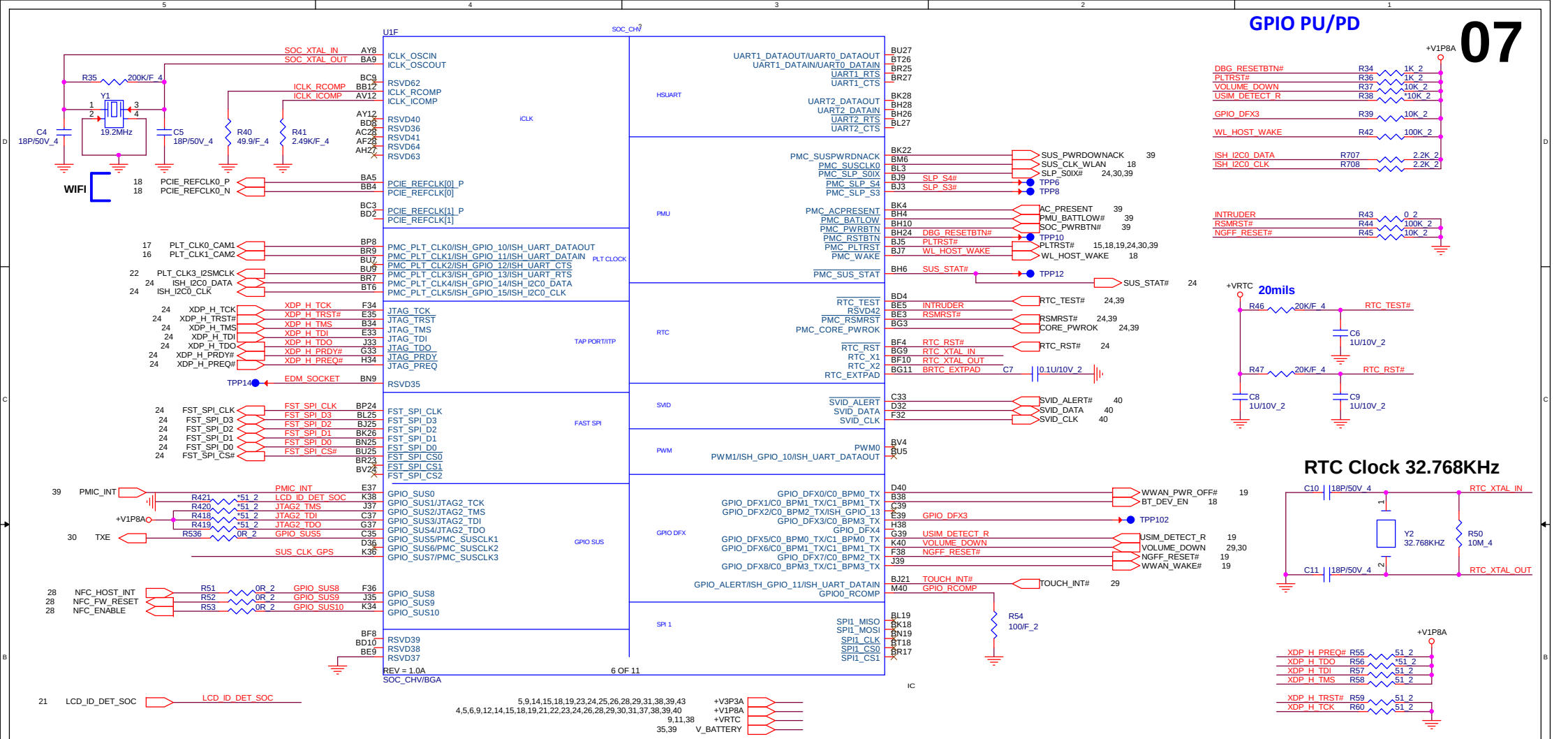

Hardware Strap (EDS1P0)

Pin Name	Purpose	Polarity	Internal PU/PD	
GPIO_SUS0	DDI0 Detected	0 = Port DDI0 is not detected 1 = Port DDI0 is detected	PD	+V1P8A R61 *10K_2 PMIC_INT
GPIO_SUS5	Flash Descriptor Security Override	0 = Override 1 = Normal Operation	PU	R64 *2K_4 GPIO_SUS5
GPIO_SUS7	DFX Sus Debug Strap	0 = SUS Debug 1 = No SUS Debug	PU	+V1P8A R66 *10K_2 R67 2K_4 SUS_CLK_GPS
GPIO_SUS8	SFR Supply Select	0 = Supply is 1.25V 1 = Supply is 1.35V	PD	+V1P8A R68 *10K_2 R69 2K_4 GPIO_SUS8
GPIO_SUS9	ICLK, USB2, DDI SFR Bypass	0 = Use LDOs 1 = Bypass LDOs (supply 1.05V on power pins)	PD	+V1P8A R71 *10K_2 GPIO_SUS9
GPIO_SUS10	POSM Select	0 = Fuse Controller 1 = PMC	PD	+V1P8A R73 *10K_2 GPIO_SUS10

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	Cherryview-T (CLK/UART/SPI/PMU)	1A

NB5/HW

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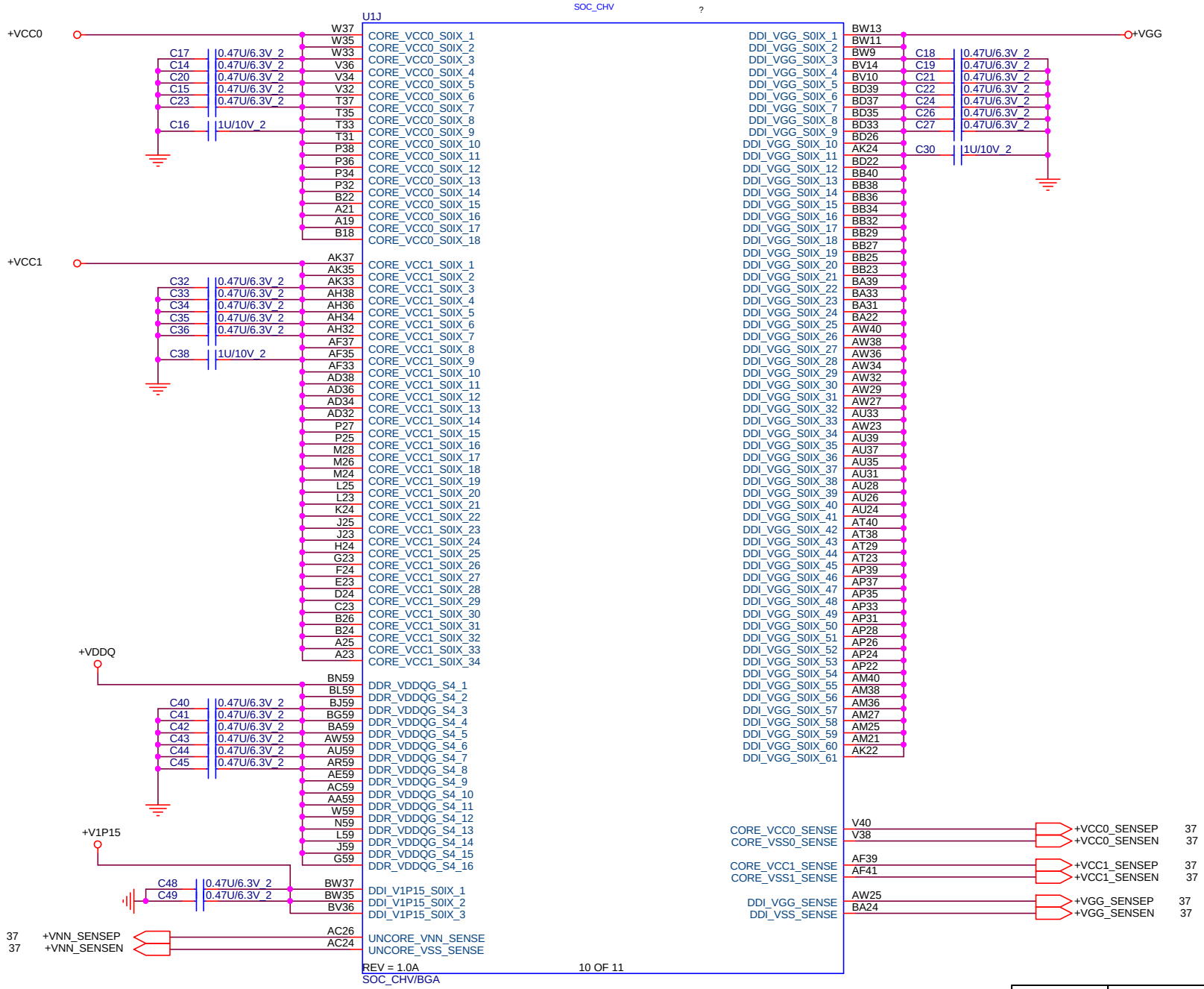

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Quanta Computer Inc.	
EAGLE	
Size	Document Number: Cherryview-T (POWER 1/2)
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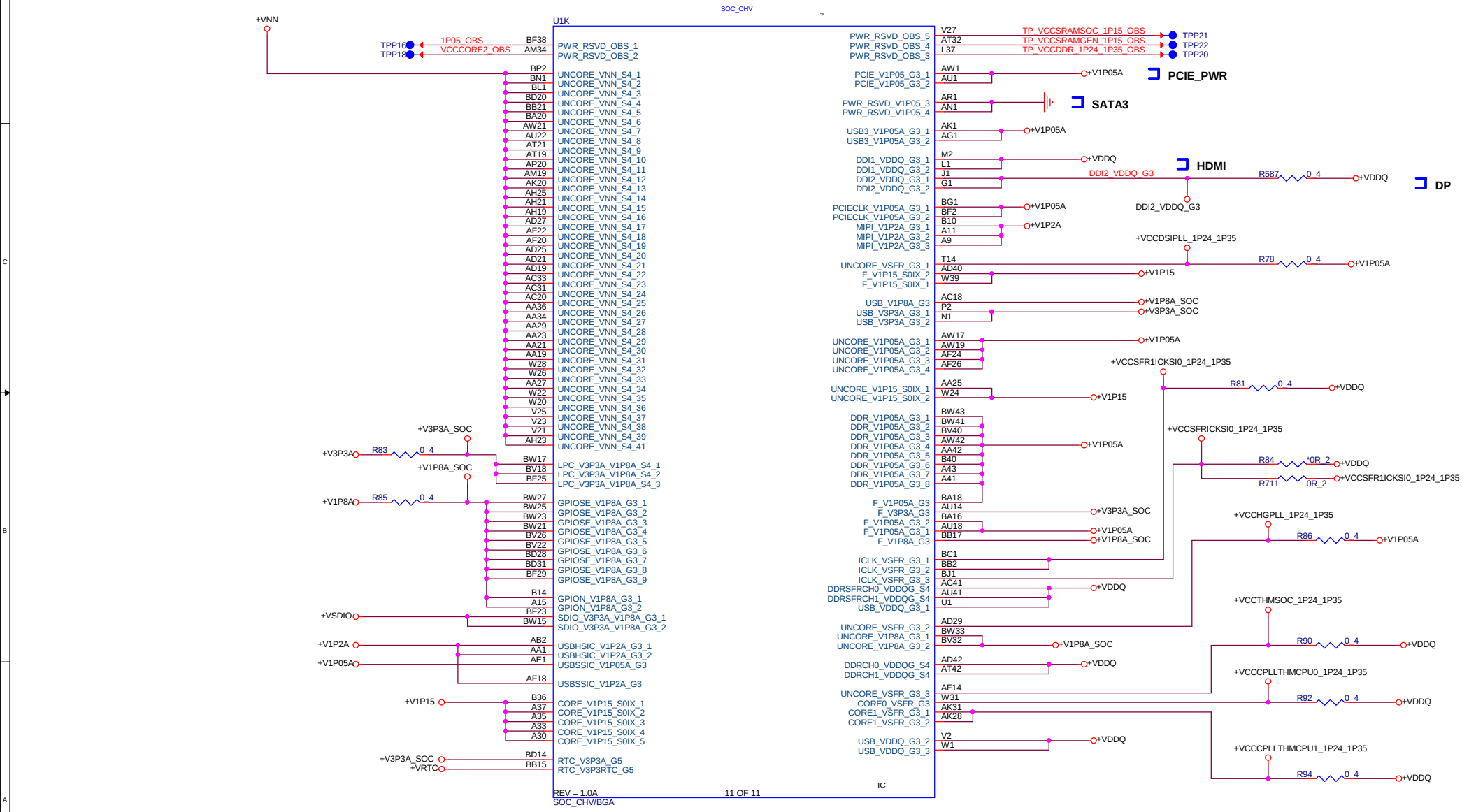
NB5/HW



11,37 +VNN
5,14,15,18,19,23,24,25,26,28,29,31,38,39,43 +V3P3A
4,5,6,7,12,14,15,18,19,21,22,23,24,26,28,29,30,31,37,38,39,40 +V1P8A
11,38 +VSDIO
11,38 +V1P2A
11,37,38 +V1P05A
8,11,24,37 +V1P15
7,11,38 +VRTC
8,11,12,13,37,38 +VDDQ

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
	Cherryview-T (POWER 2/2)	1A
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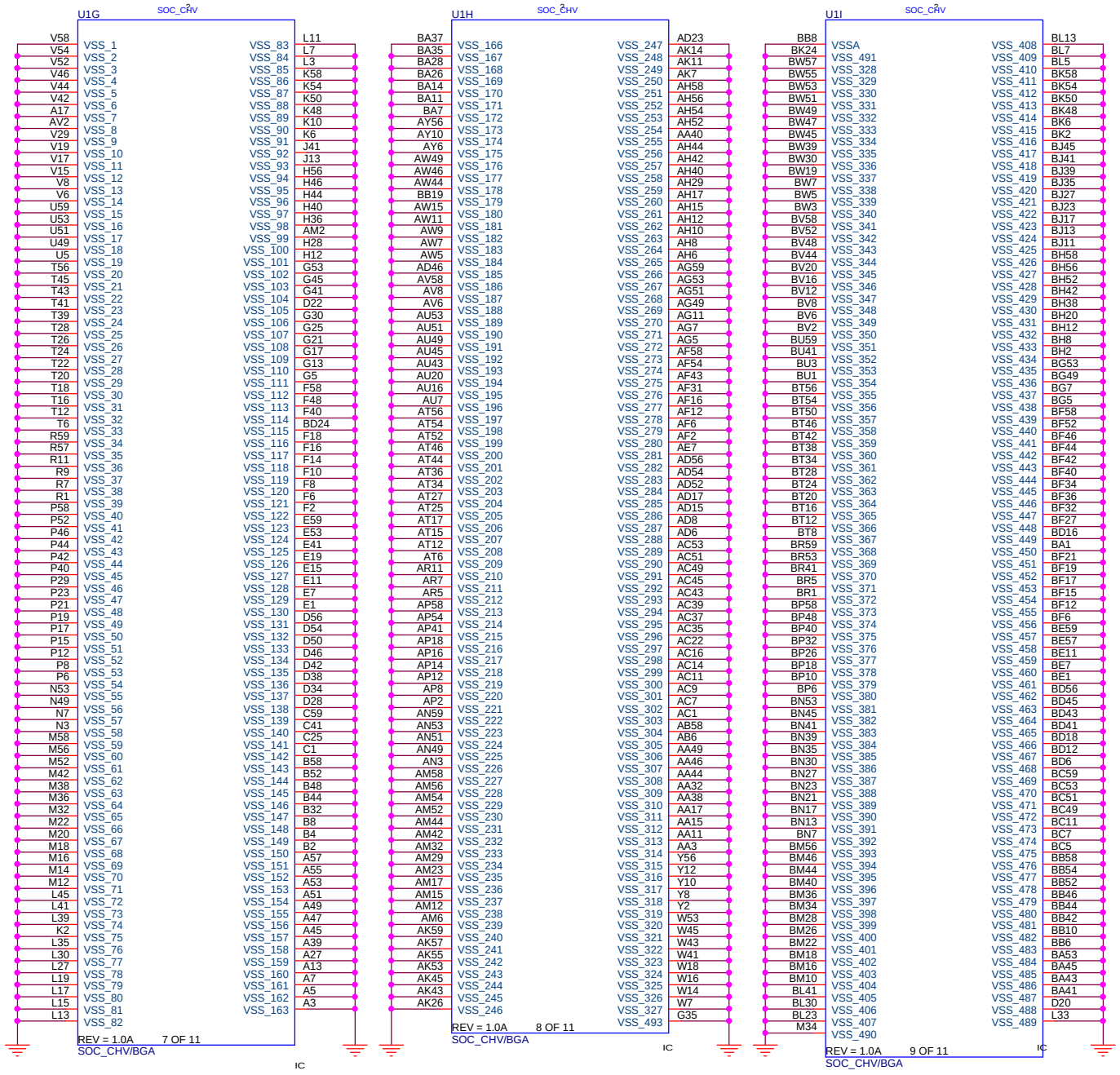

QBCON	TOPB/S	Vender PN
AJ0QH7BUT01	AJ0QH7BUT00	2.0G QH7B
AJ0QH7CUT01	AJ0QH7CUT00	2.0G QH7C
AJ0QHAUUT01	AJ0QHAUUT00	2.16G QHAU

NB5/HW

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Quanta Computer Inc.

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	Valleyview-T (GND)	1A

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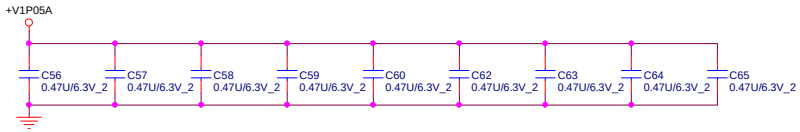

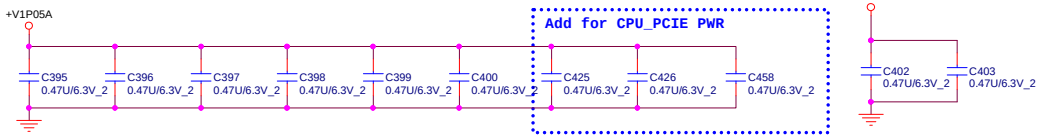

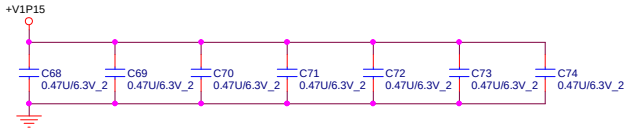

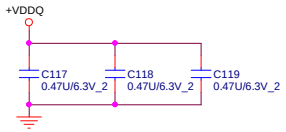

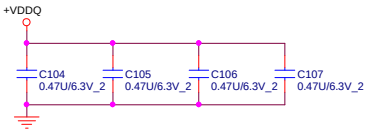

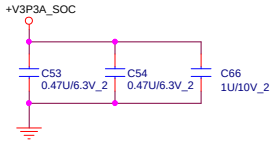

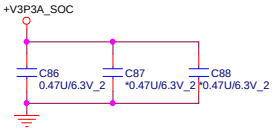

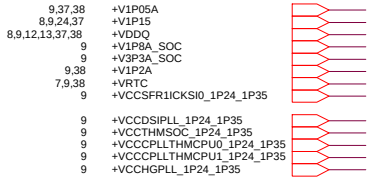

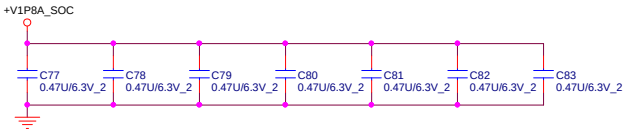

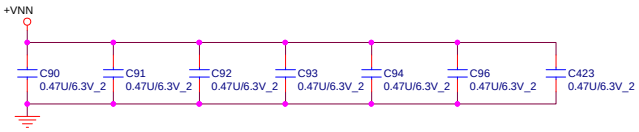

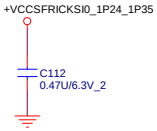

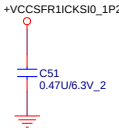

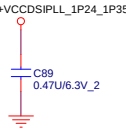

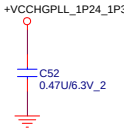

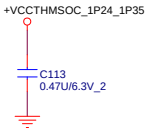

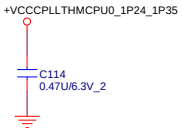

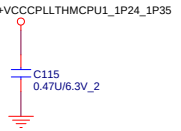

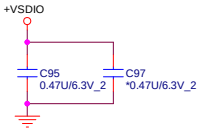

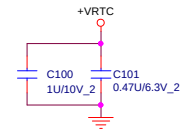

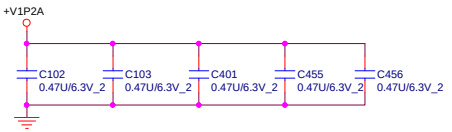

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
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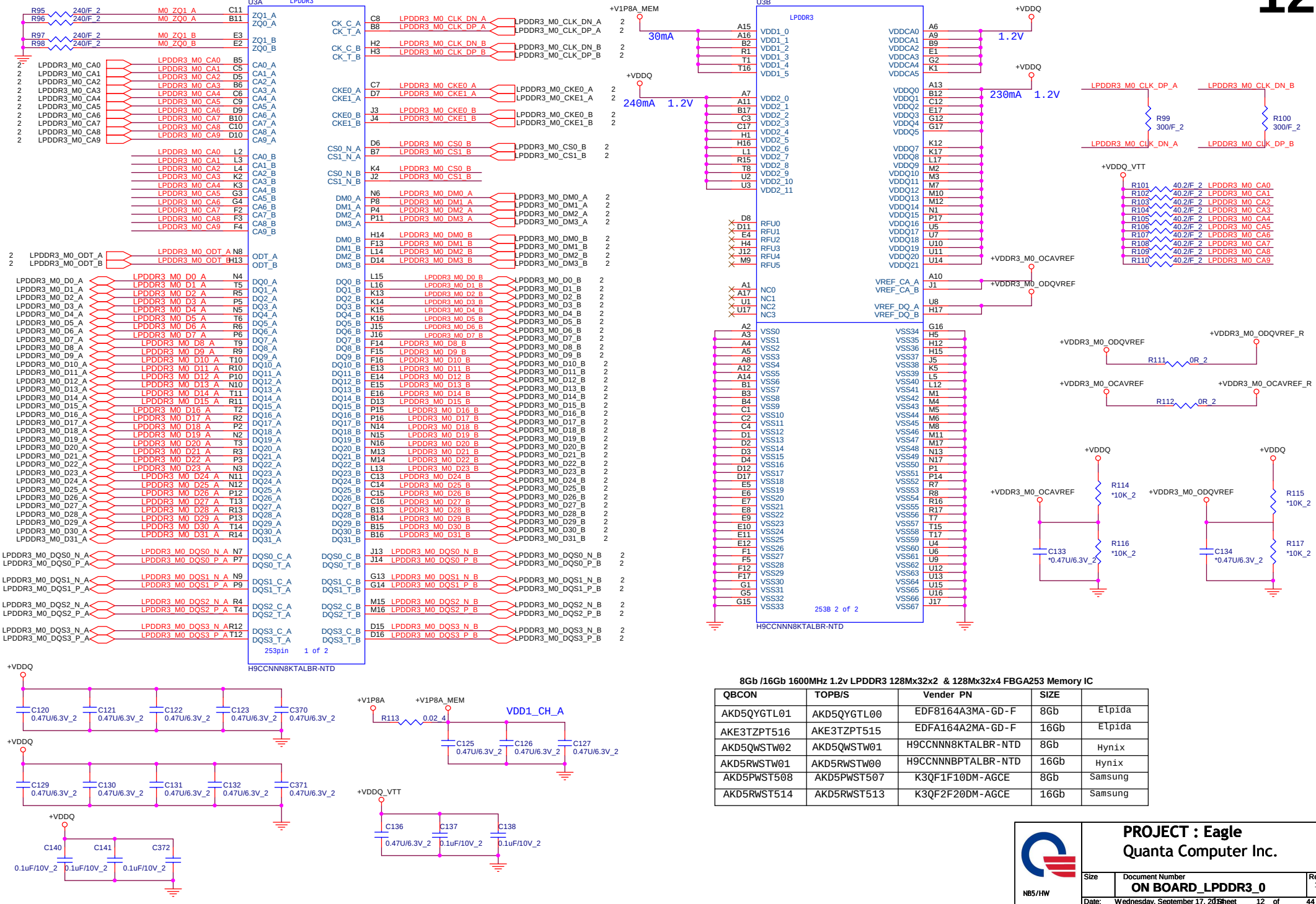

8Gb /16Gb 1600MHz 1.2v LPDDR3 128Mx32x2 & 128Mx32x4 FBGA253 Memory IC

QBCON	TOPB/S	Vender PN	SIZE	
AKD5QYGTL01	AKD5QYGTL00	EDF8164A3MA-GD-F	8Gb	Elpida
AKE3TZPT516	AKE3TZPT515	EDFA164A2MA-GD-F	16Gb	Elpida
AKD5QWSTW02	AKD5QWSTW01	H9CCNNN8KTALBR-NTD	8Gb	Hynix
AKD5RWSTW01	AKD5RWSTW00	H9CCNNNBPTALBR-NTD	16Gb	Hynix
AKD5PWST508	AKD5PWST507	K3QF1F10DM-AGCE	8Gb	Samsung
AKD5RWST514	AKD5RWST513	K3QF2F20DM-AGCE	16Gb	Samsung

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

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	ON BOARD_LPDDR3_0	1A

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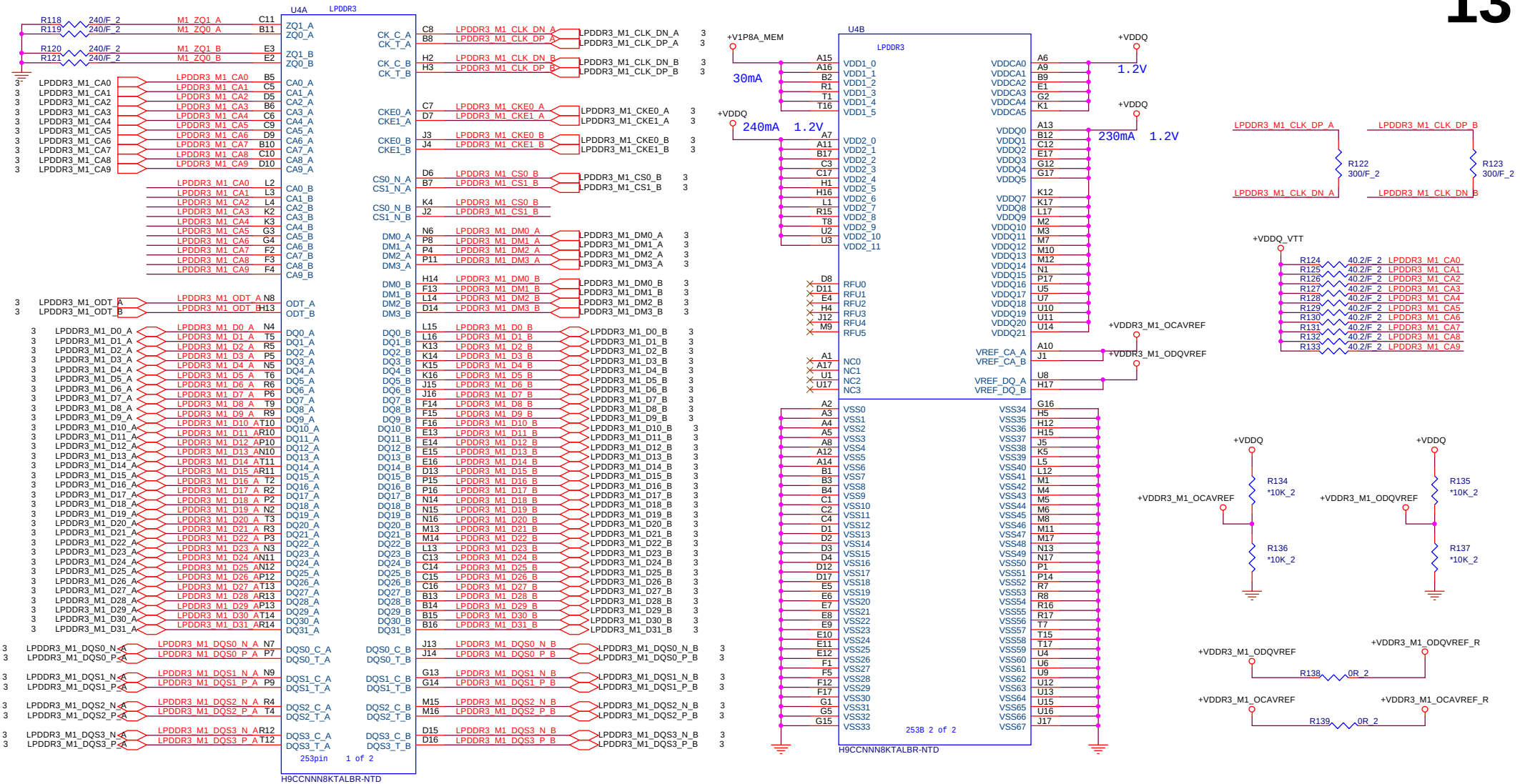

8Gb /16Gb 1600MHz 1.2v LPDDR3 128Mx32x2 & 128Mx32x4 FBGA253 Memory IC

QBCON	TOPB/S	Vender PN	SIZE	
AKD5QYGTL01	AKD5QYGTL00	EDF8164A3MA-GD-F	8Gb	Elpida
AKE3TZPT516	AKE3TZPT515	EDFA164A2MA-GD-F	16Gb	Elpida
AKD5QWSTW02	AKD5QWSTW01	H9CCNNN8KTALBR-NTD	8Gb	Hynix
AKD5RWSTW01	AKD5RWSTW00	H9CCNNNBPTALBR-NTD	16Gb	Hynix
AKD5PWST508	AKD5PWST507	K3QF1F10DM-AGCE	8Gb	Samsung
AKD5RWST514	AKD5RWST513	K3QF2F20DM-AGCE	16Gb	Samsung

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

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	ON BOARD_LPDDR3_1	1A

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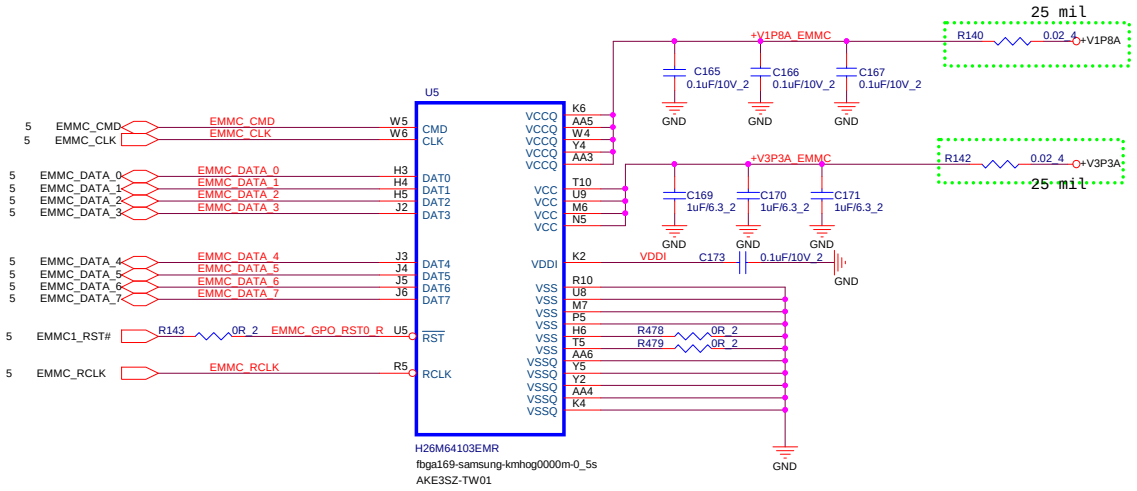
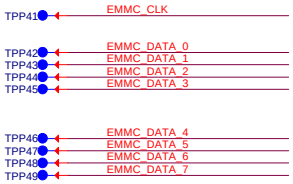
EMMC



footprint：BGA 169、BGA 153 co-lay
BGA 169 PIN：14mmX18mm
BGA 169 PIN：12mmX16mm
BGA 153 PIN：11.5mmX13mm



5,9,15,18,19,23,24,25,26,28,29,31,38,39,43 +V3P3A
4,5,6,7,9,12,15,18,19,21,22,23,24,26,28,29,30,31,37,38,39,40 +V1P8A

iNAND (eMMC 5.0)

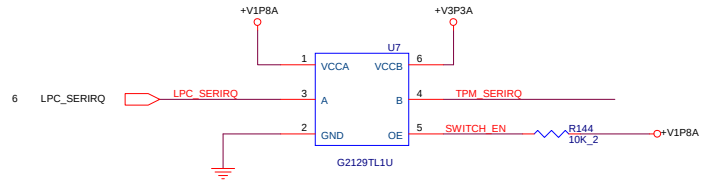
	QBCON	TOPB/S	Vender PN	SIZE	
	AKE5SZ0T507	AKE5SZ0T506	KLMBG4GEAC-B031	32G	Samsung
	AKE3TZPT516	AKE3TZPT515	KLMCG8GEAC-B031	64G	Samsung
	AKE3SZ-TW02	AKE3SZ-TW01	H26M64103EMR	32G	Hynix
	AKE3TG-TW02	AKE3TG-TW01	H26M78103CCR	64G	Hynix
eMMC 4.51	AKE3UFPT103	AKE3UFPT102	SDIN8CE4-128G	128G	Sandisk
	AKE3SFUT001	AKE3SFUT000	SDIN9DW4-32G	32G	Sandisk
	AKE3TFUT102	AKE3TFUT101	SDIN9DW4-64G	64G	Sandisk

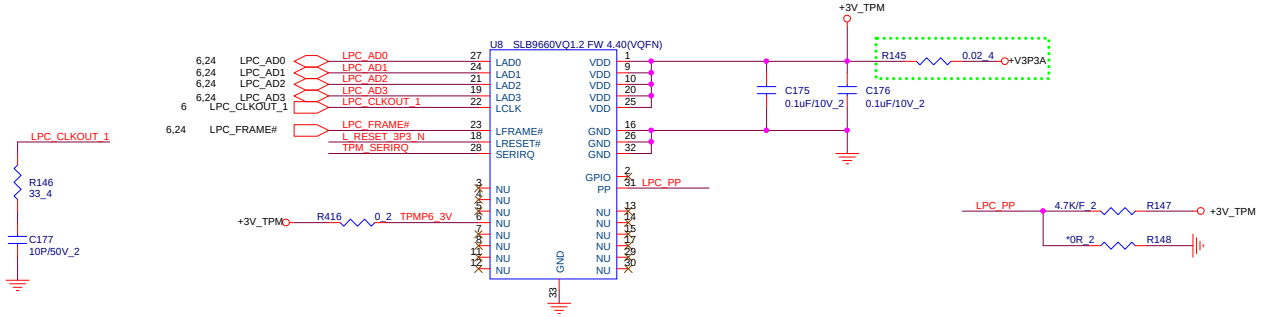
NB5/HW

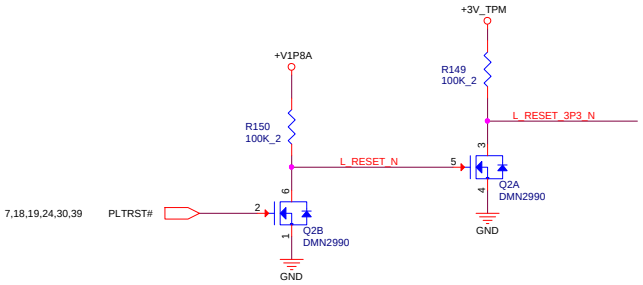
PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	eMMC/ SD	1A

Date: Wednesday, September 17, 2014 Sheet 14 of 44



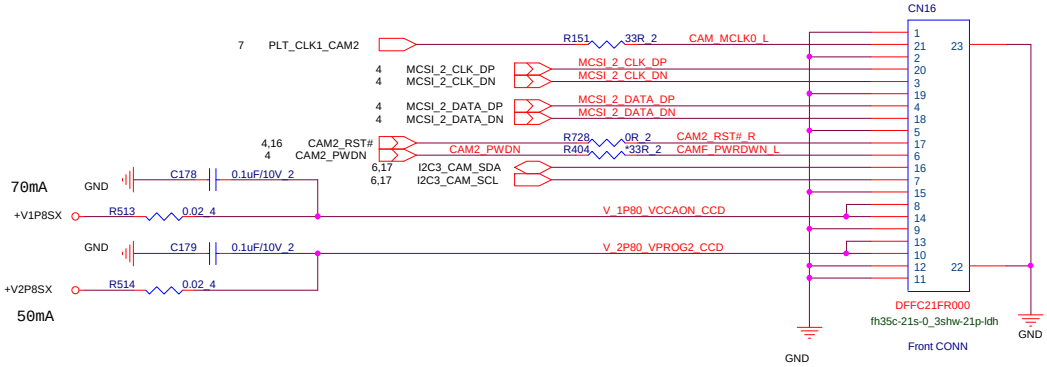


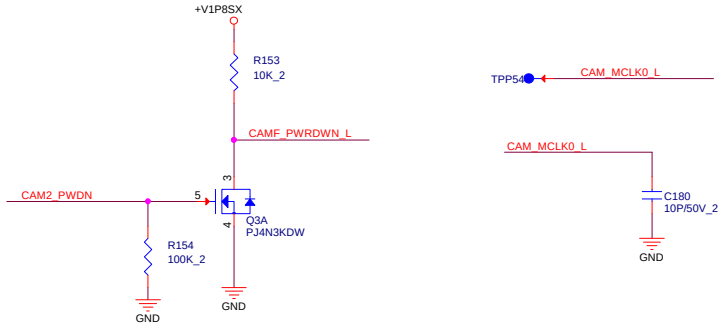


5,9,14,18,19,23,24,25,26,28,29,31,38,39,43 +V3P3A
4,5,6,7,9,12,14,18,19,21,22,23,24,26,28,29,30,31,37,38,39,40 +V1P8A

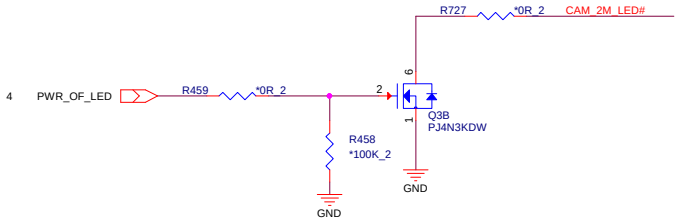
NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Custom	Document Number: TPM
	Rev: 1A	
	Date: Wednesday, September 17, 2014	Sheet 15 of 44

Front Camera Module Connector

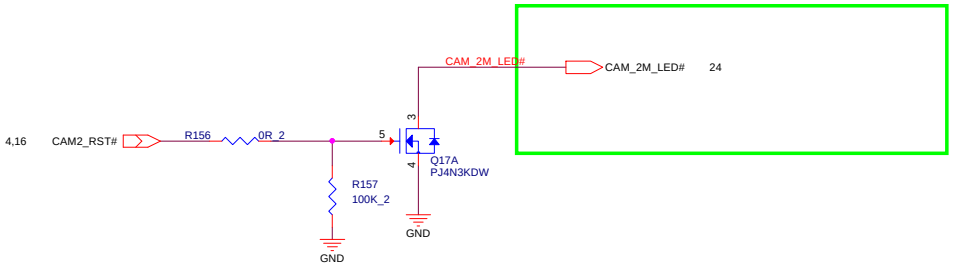


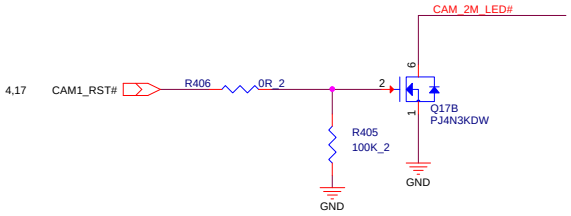


CAM_1_PWRDWN_L High --> power down



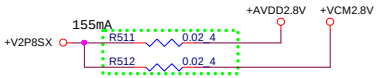
Camera 2M LED control

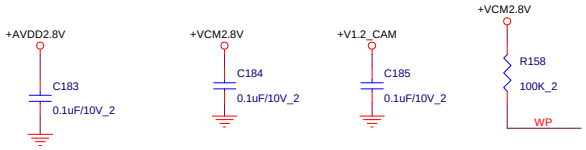


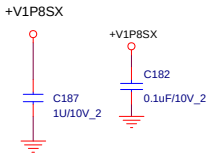


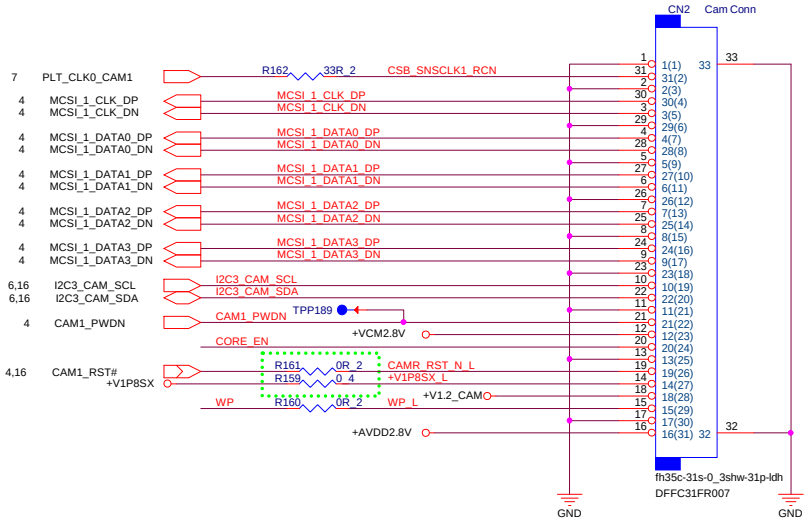
NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Custom Document Number: Front Camera	Rev: 1A
	Date: Wednesday, September 17, 2014 Sheet 16 of 44	

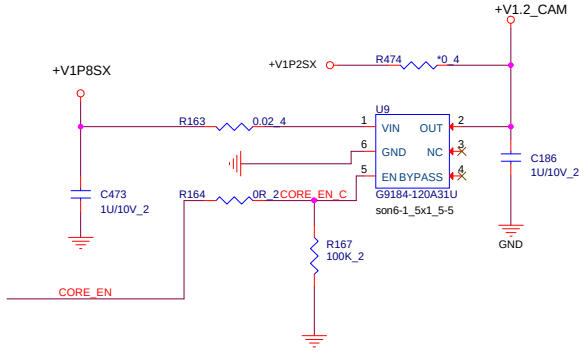
WEBCAM LED + CCD_8M CONNECTOR

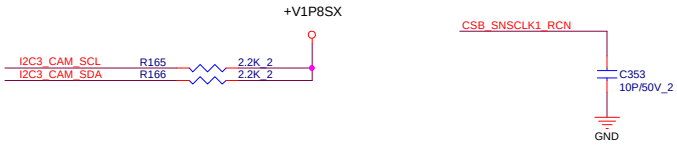












16,29,38 +V1P8SX
16,38 +V2P8SX
5,9,14,15,18,19,23,24,25,26,28,29,31,38,39,43 +V3P3A

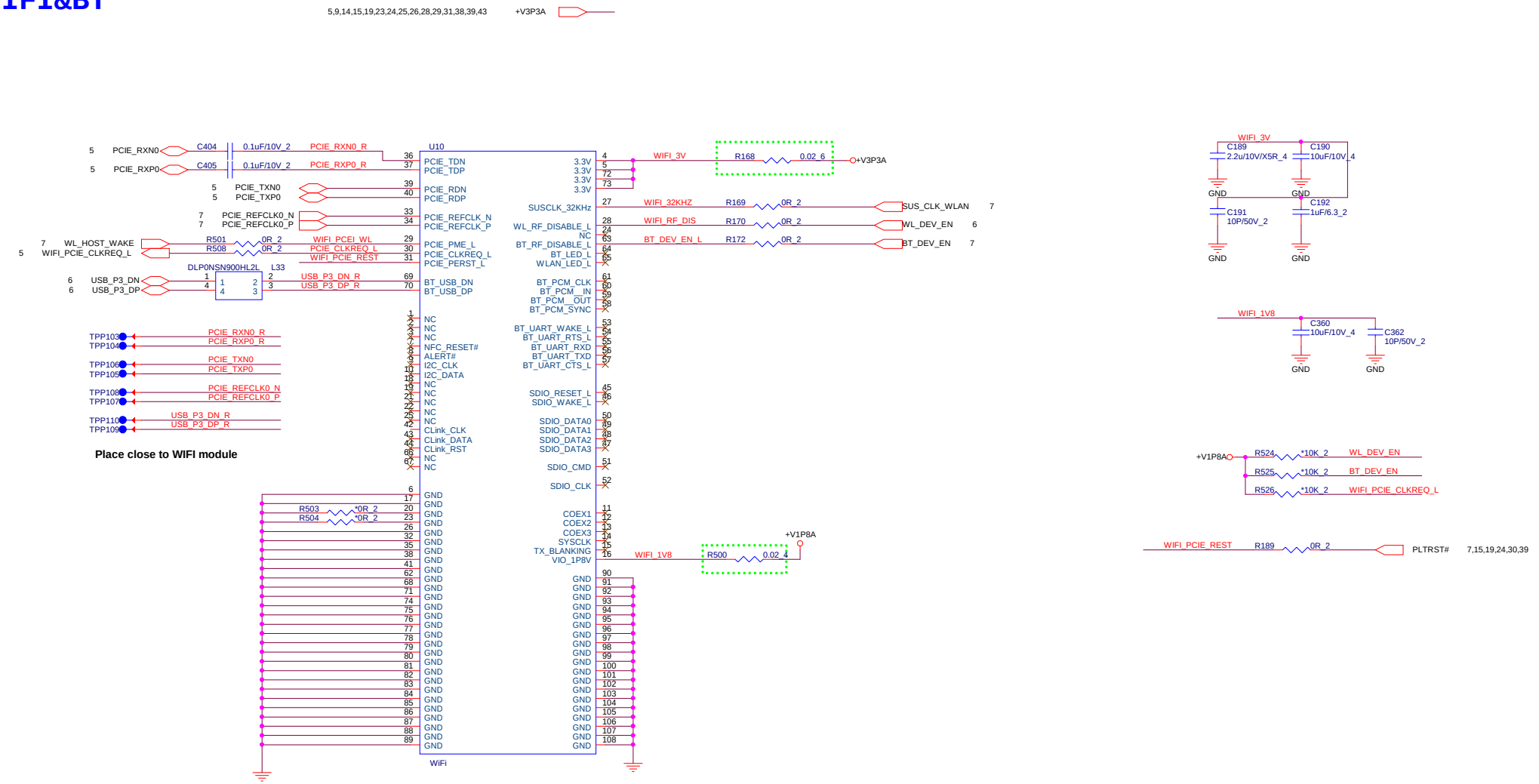
NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Rear Camera & Sensoe board	1A

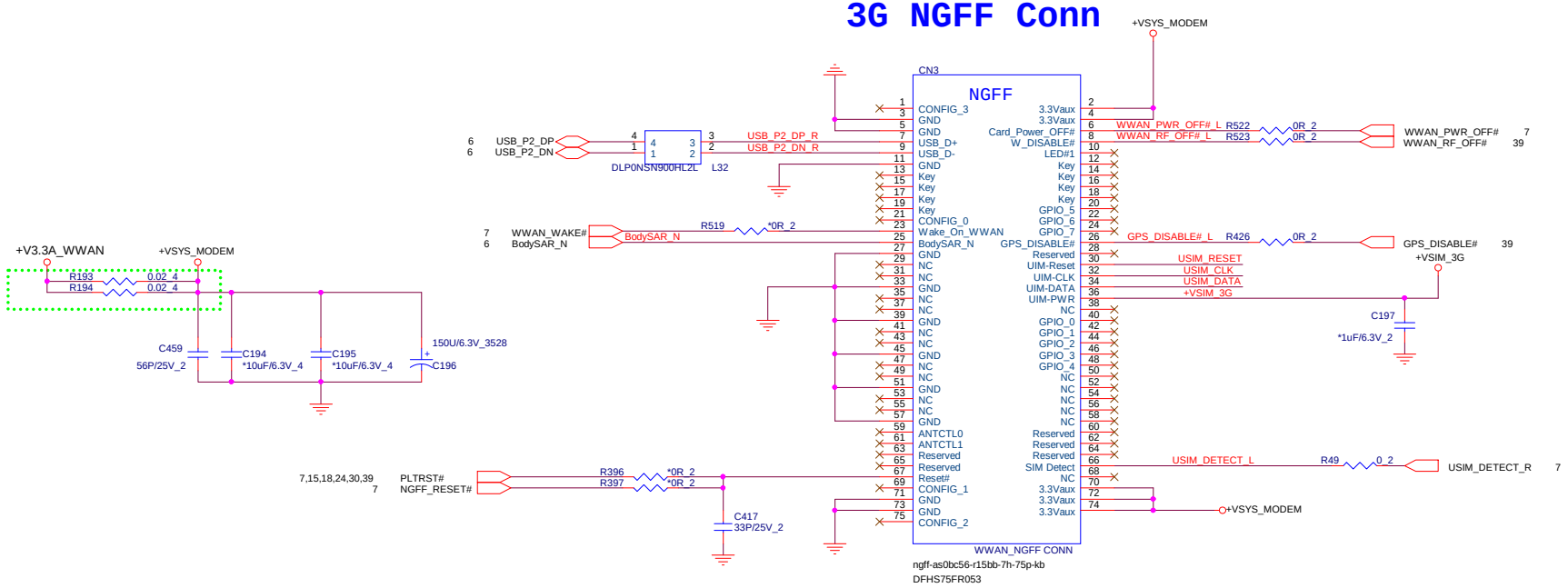
Date: Wednesday, September 17, 2014 Sheet 17 of 44

WIFI&BT

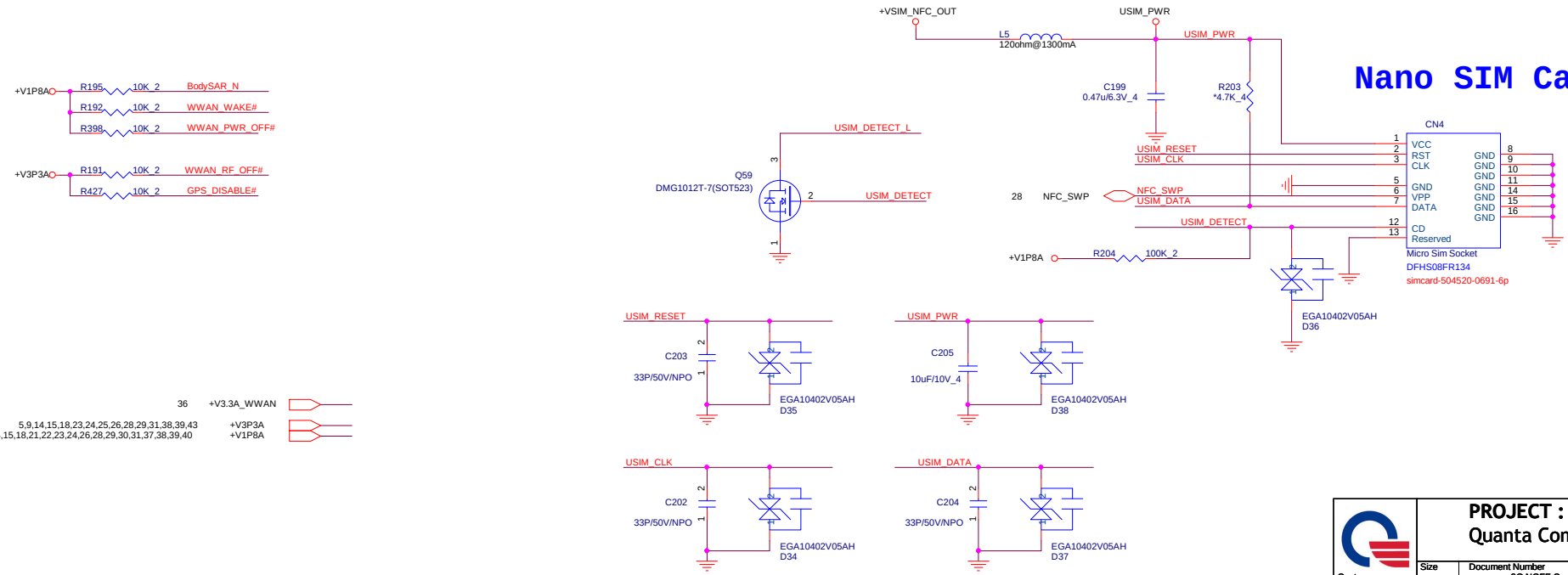


NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
Size: Custom	Document Number: WiFi +BT module (T77H360)	Rev: 1A
Date: Wednesday, September 17, 2014	Sheet 18 of 44	

3G NGFF Conn



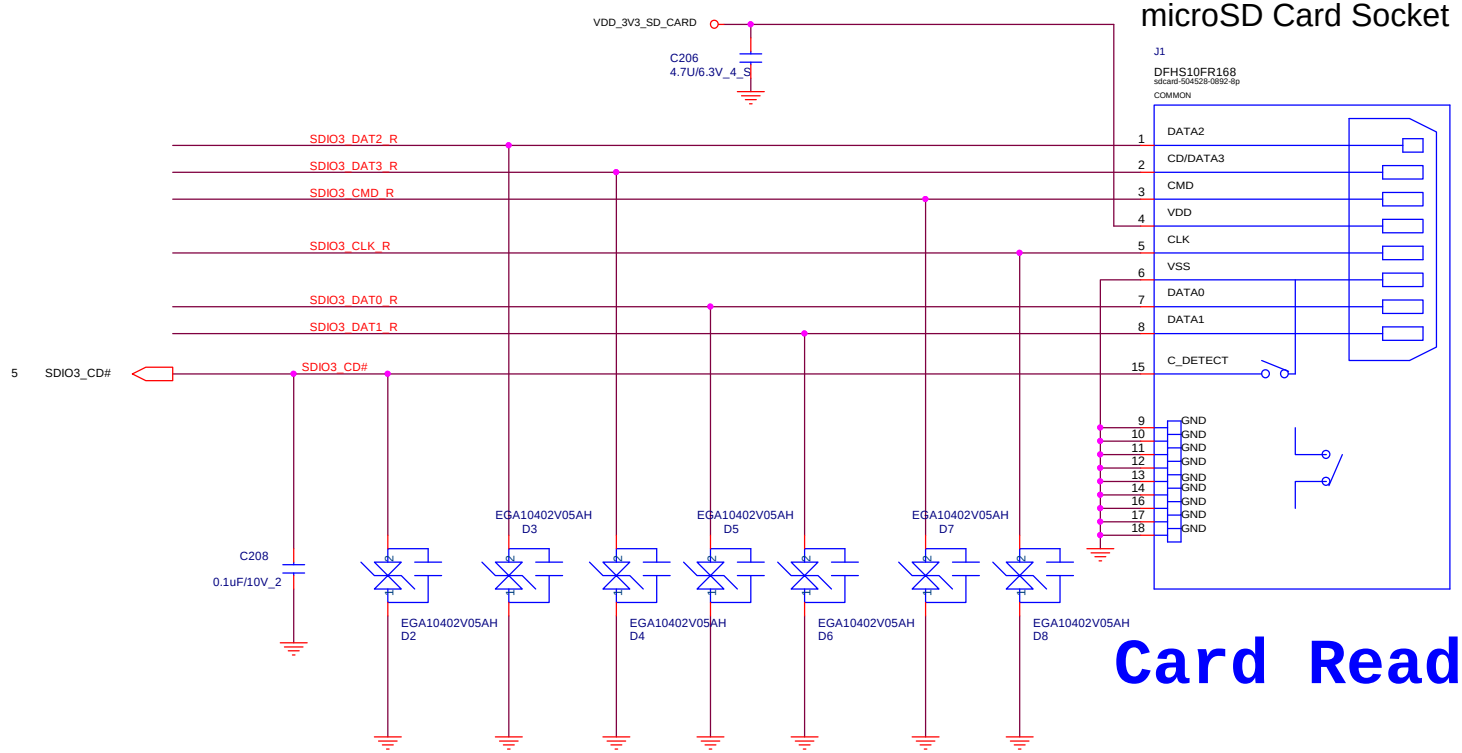
Nano SIM Card



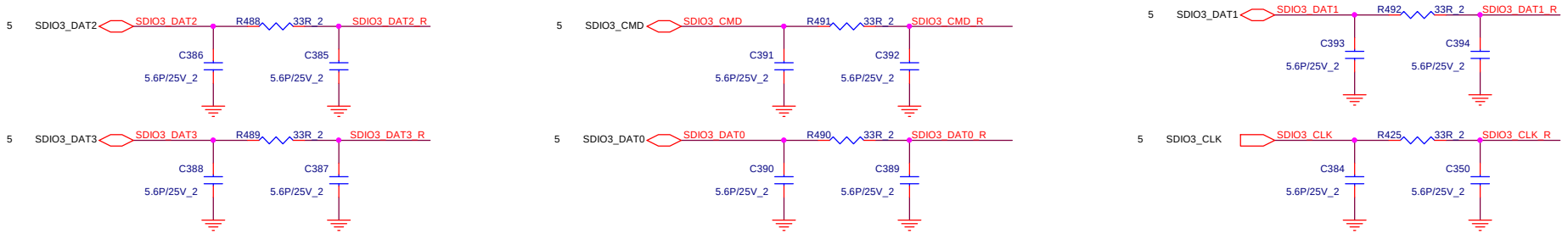
Custom N85/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Document Number: 3G NGFF Conn/SIM Conn	Rev: 1A
	Date: Wednesday, September 17, 2014	Sheet 19 of 44

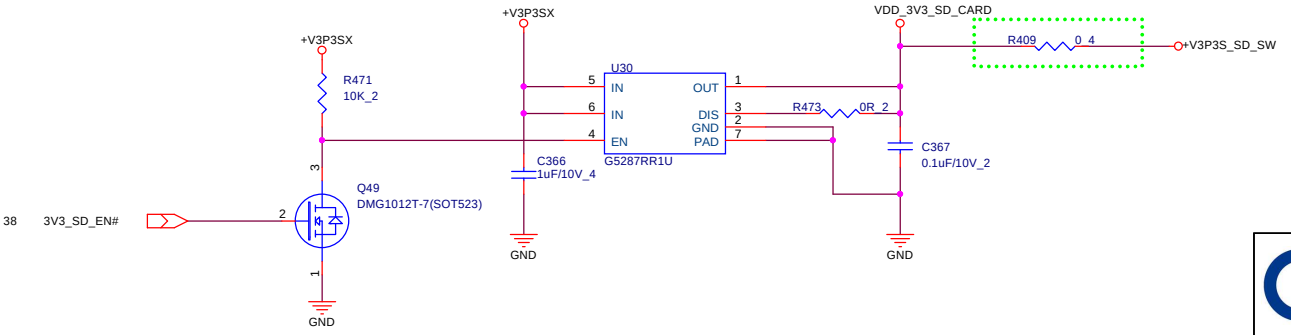
Place close to J3

microSD Card Socket



Card Reader





29,38 +V3P3SX

38 +V3P3S_SD_SW

NB5/HW	PROJECT : Eagle Quanta Computer Inc.		
	Size	Document Number MicroSD Card	Rev 1A
	Date: Wednesday, September 17, 2014	Sheet 20 of 44	

VLED — C210 3300P/50V_4

-5.6V — C213 1U/10V_2

+V1.8_LCM — C215 1U/10V_2

+5.6V — C217 1U/10V_2

U31

bga4-texas-tps22902

COMMON

+V1P8A — A2 VIN | VOUT A1 — +V1.8_LCM

30 PANEL_EN_1V8 — B2 ON | GND B1 — GND

GND — R208 1M_2

AL022902T00

IC OTHER (4P)TPS22902YFPR(DSBGA)

CN5

		26	26(2) (1)25	25	LED4	LED4 41
4	MDSI_B3_DN	27	27(4) (3)24	24	LED3	LED3 41
4	MDSI_B3_DP	28	28(6) (5)23	23	LED2	LED2 41
		29	29(8) (7)22	22	LED1	LED1 41
4	MDSI_B0_DN	30	30(10) (9)21	21	NC(aging)	
4	MDSI_B0_DP	31	31(12) (11)20	20		VLED
		32	32(14) (13)19	19		
4	MDSI_B_CLKN	33	33(16) (15)18	18		
4	MDSI_B_CLKP	34	34(18) (17)17	17		+V1.8_LCM
		35	35(20) (19)16	16		+5.6V
4	MDSI_B1_DN	36	36(22) (21)15	15		
4	MDSI_B1_DP	37	37(24) (23)14	14	NC(OTP_PWR)	
		38	38(26) (25)13	13		
4	MDSI_B2_DN	39	39(28) (27)12	12		-5.6V
4	MDSI_B2_DP	40	40(30) (29)11	11		
		41	41(32) (31)10	10		LCD_RST#
4	MDSI_A3_DN	42	42(34) (33)9	9		PWM_LCD — TPP29
4	MDSI_A3_DP	43	43(36) (35)8	8		LCD_TE(by frame) — TPP30
		44	44(38) (37)7	7		LCD_ID_DET — LCD_ID_DET 30
4	MDSI_A0_DN	45	45(40) (39)6	6		
4	MDSI_A0_DP	46	46(42) (41)5	5		MDSI_A2_DP — MDSI_A2_DP 4
		47	47(44) (43)4	4		MDSI_A2_DN — MDSI_A2_DN 4
4	MDSI_A_CLKN	48	48(46) (45)3	3		
4	MDSI_A_CLKP	49	49(48) (47)2	2		MDSI_A1_DP — MDSI_A1_DP 4
		50	50(50) (49)1	1		MDSI_A1_DN — MDSI_A1_DN 4

FH35-31S-0.3SHW

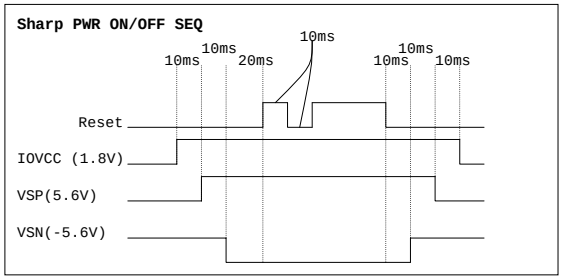
DFHS50FS058

axe350124-50p-ldh

7 LCD_ID_DET_SOC — LCD_ID_DET_SOC R469 0R_2 — LCD_ID_DET

30 LCD_GPIO_RST — R210 0R_2 — LCD_RST#

Sharp PWR ON/OFF SEQ



20,29,38	+V3P3SX
4,5,6,7,9,12,14,15,18,19,22,23,24,26,28,29,30,31,37,38,39,40	+V1P8A
41	VLED
41	+5.6V
16,17,29,38	+V1P8SX

NB5/HW

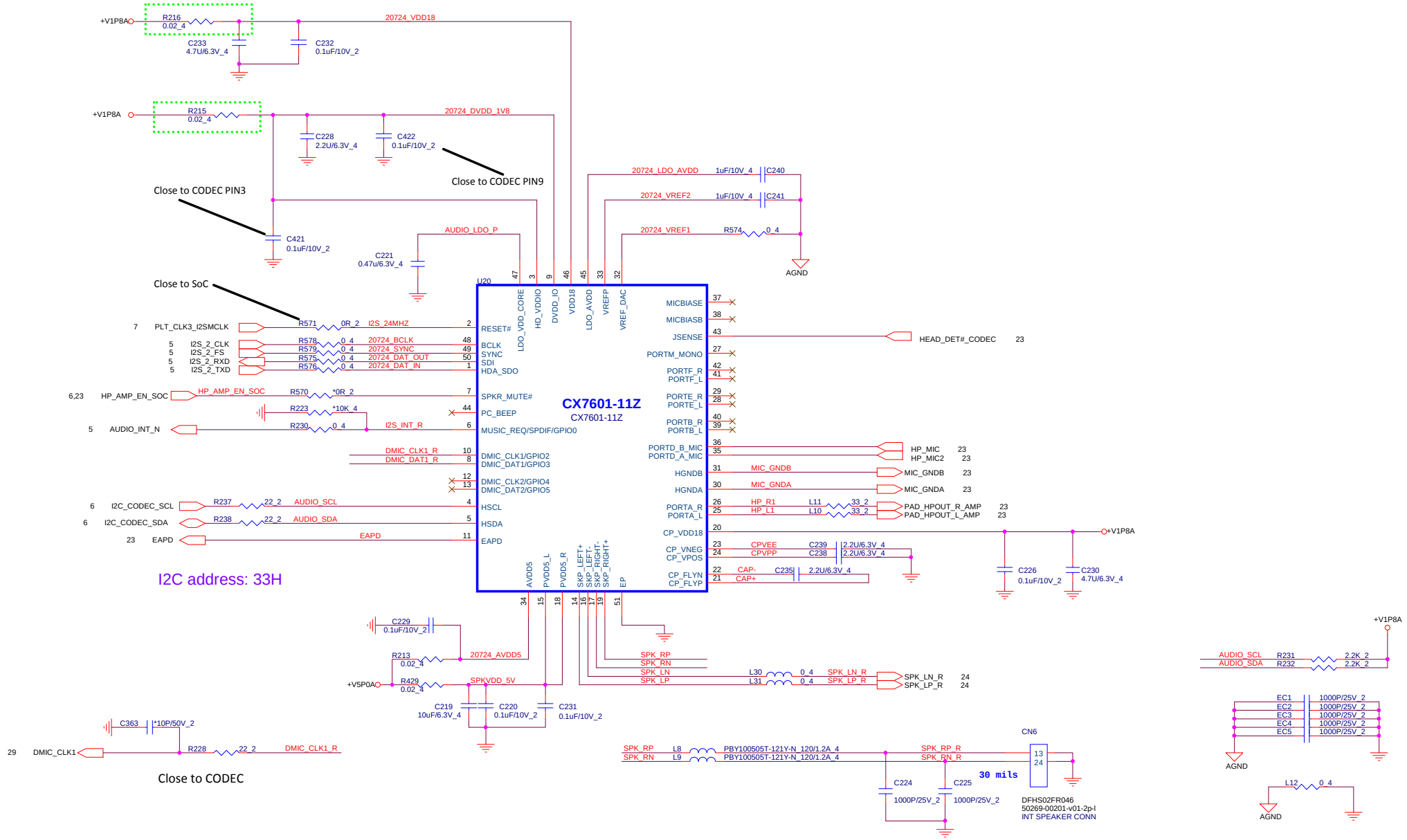
PROJECT : Eagle

Quanta Computer Inc.

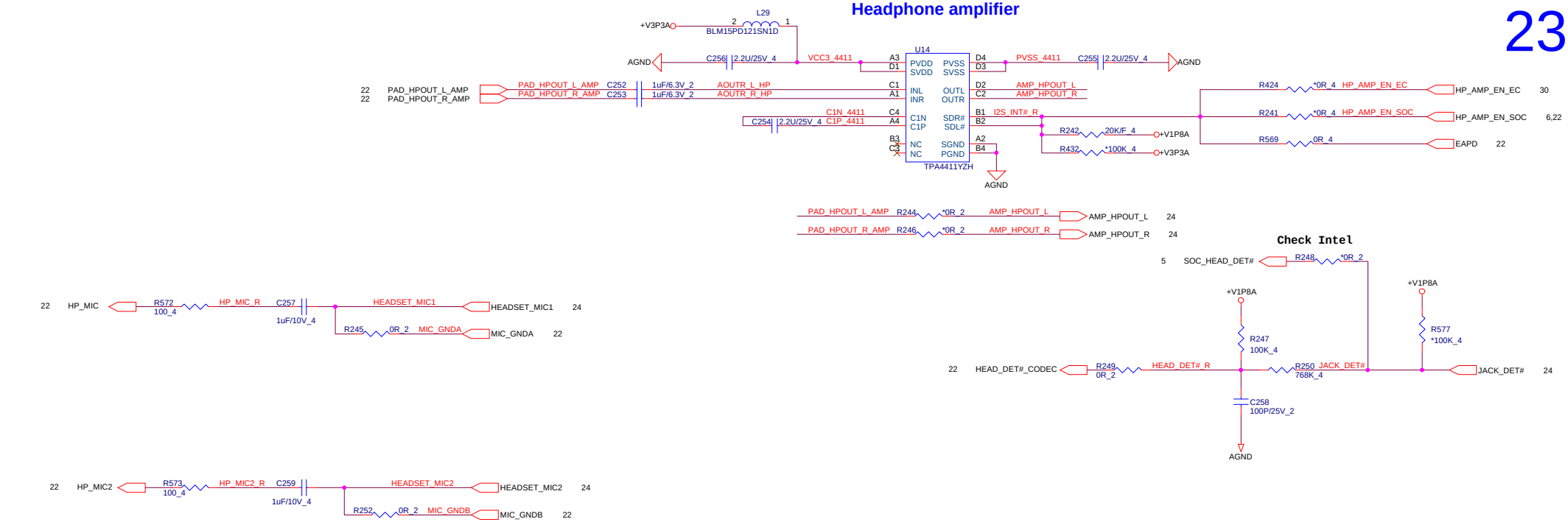
Size	Document Number	Rev
Custom	MIPI LCD	1A

Date: Wednesday, September 17, 2014 Sheet 21 of 44

Audio Codec


CX7601-11Z
CX7601-11Z
I2C address: 33H
Close to CODEC PIN3
Close to CODEC PIN9
Close to SoC
Close to CODEC
Close to CN11
Speak conn.
30 mils
DFHS02FR046
50269-00201-v01-2p-l
INT SPEAKER CONN

Headphone amplifier



Check Intel

4,5,6,7,9,12,14,15,18,19,21,22,24,26,28,29,30,31,37,38,39,40 +V1P8A
5,9,14,15,18,19,24,25,26,28,29,31,38,39,43 +V3P3A

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Audio AMP/Jack	1A

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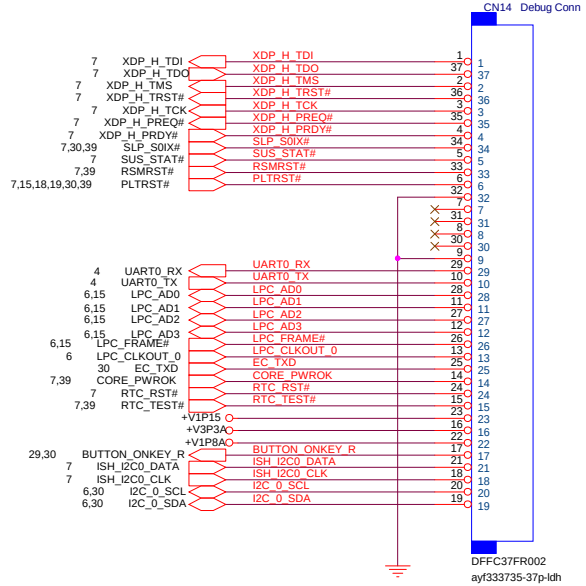
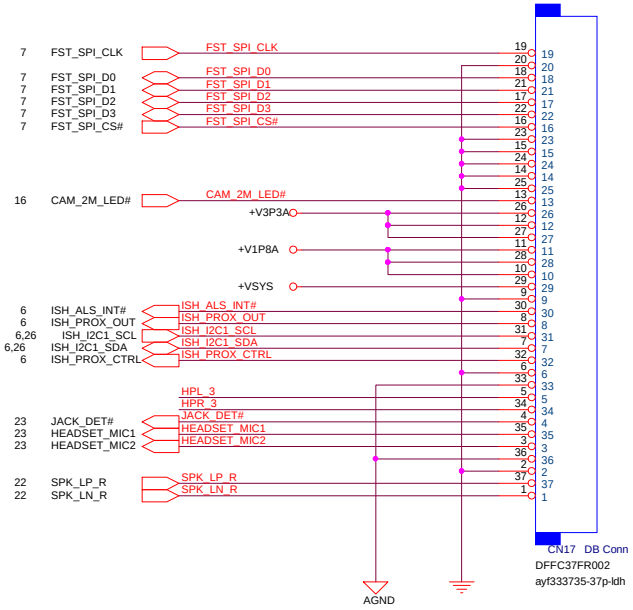
Daughter Board / Debug Con

Intel XTP

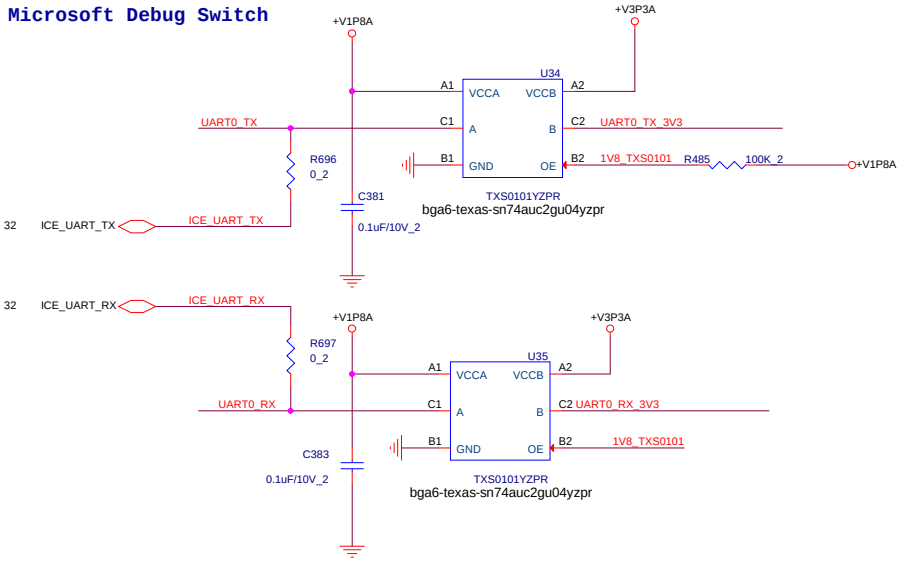
80 Port Debug

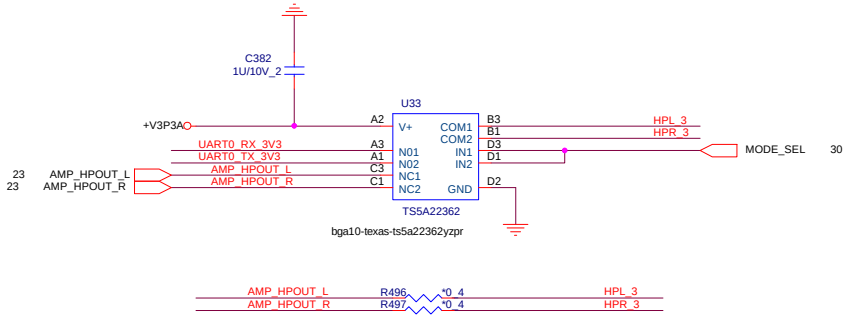
SoC UART Debug





Microsoft Debug Switch





NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
Size: Custom	Document Number: Debug	Rev: 1A
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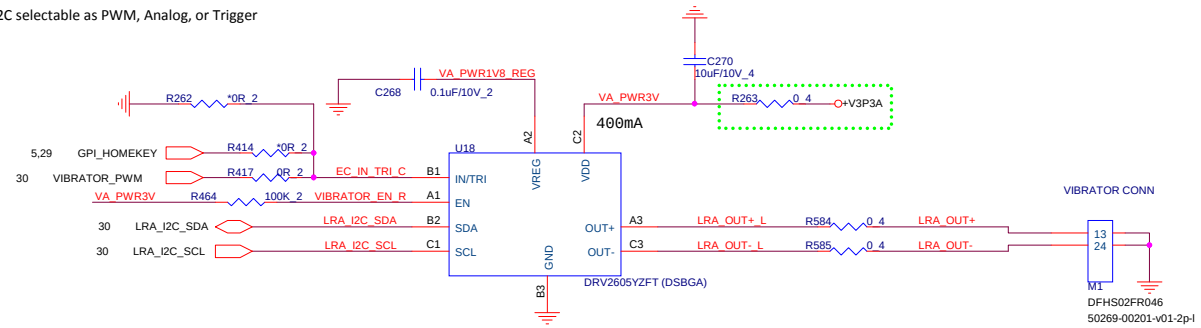
Multi-mode Input. I2C selectable as PWM, Analog, or Trigger



4,5,6,7,9,12,14,15,18,19,21,22,23,24,26,28,29,30,31,37,38,39,40 +V1P8A
5,9,14,15,18,19,23,24,26,28,29,31,38,39,43 +V3P3A

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	SPINOR, PSS	1A

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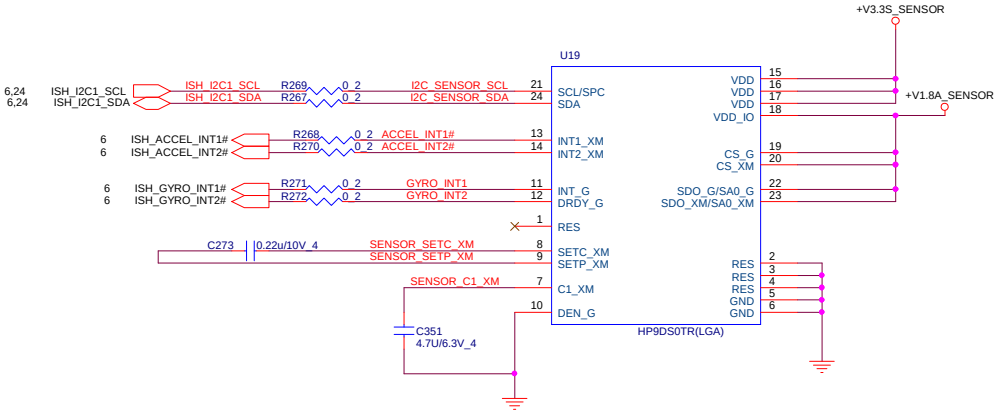
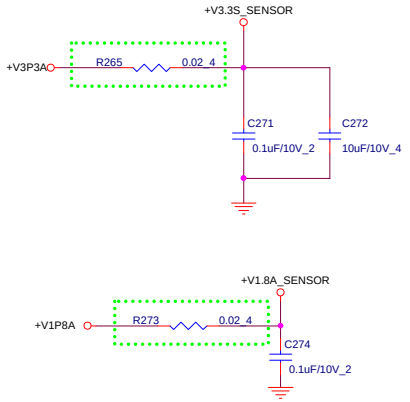
3D accelerometer, 3D gyroscope, 3D magnetometer





4,5,6,7,9,12,14,15,18,19,21,22,23,24,28,29,30,31,37,38,39,40 +V1P8A
5,9,14,15,18,19,23,24,25,28,29,31,38,39,43 +V3P3A

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	G-Sensor	1A

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Top Shielding Can using

PAD17 *RFPAD
PAD20 *RFPAD
PAD23 *RFPAD
PAD18 *RFPAD
PAD21 *RFPAD
PAD24 *RFPAD
PAD19 *RFPAD
PAD25 *RFPAD
PAD26 *RFPAD
PAD27 *RFPAD
PAD28 *RFPAD
GND

Hole

H1 *H-C236IC123D83P2
H2 *H-TC299BC142IC123D75P2
H3 *H-C236IC123D83P2
H6 *H-BC93D75PB
H11 *h-o91x51d91x51n

Aligning hole

PAD34 *H-C75D75N
H7 *H-O91X51D91X51N
H10 *H-C51D51N

BOT SHIELDING PAD

PAD30 *PAD-W0C-1-NP
H4 *PAD-Y09H-2-NP
GND

TOP SHIELDING PAD

H5 *pad-w0c-8

Nut

PAD35 SPAD-W0C-4
PAD36 SPAD-W0C-4
PAD37 SPAD-W0C-4
PAD38 SPAD-W0C-4

BOT shielding: Up

PAD8 RFPAD
PAD14 RFPAD
PAD16 RFPAD
PAD10 RFPAD
Small one
PAD4 RFPAD
PAD6 RFPAD
PAD15 RFPAD
GND

BOT shielding: Down

PAD12 RFPAD
PAD13 *RFPAD
PAD11 RFPAD
PAD7 RFPAD
PAD5 RFPAD
PAD9 RFPAD
GND

ME WIRE PAD

PAD29 SPAD-RE75X79P
USB
PAD40 SPAD-RE43X59P
PAD44 SPAD-RE43X59P
PAD42 SPAD-RE43X59P
PAD43 SPAD-RE43X59P
PAD39 SPAD-RE43X59P
PAD41 SPAD-RE43X59P
GND

TS GND PAD

PAD31 *SPAD-RE157X354NP
GND

USB3 SHIELDING

PAD32 SPAD-W0C-1
PAD33 SPAD-W0C-1

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	RFPAD	1A

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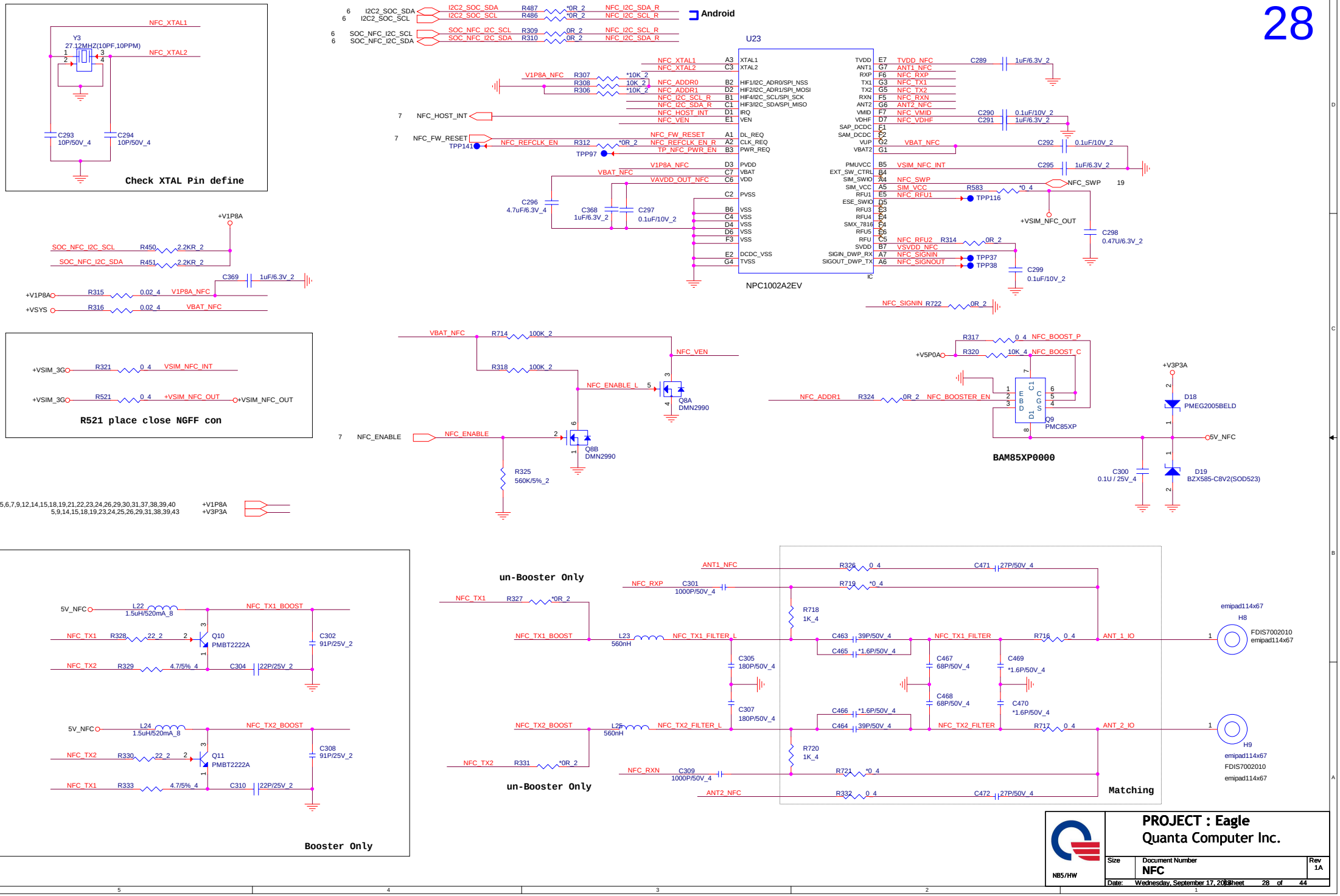
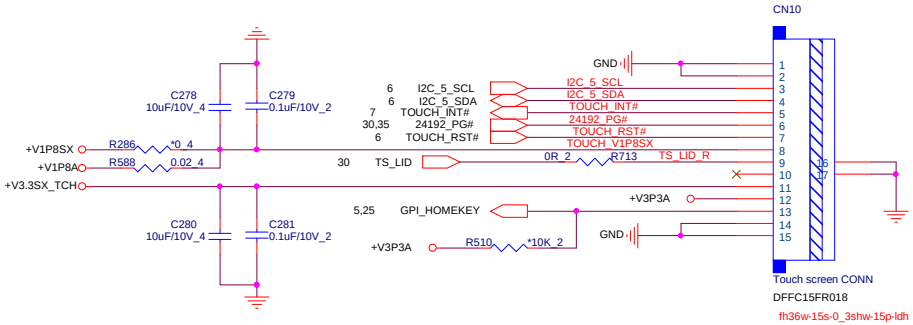
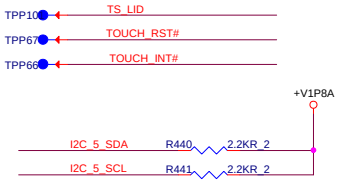
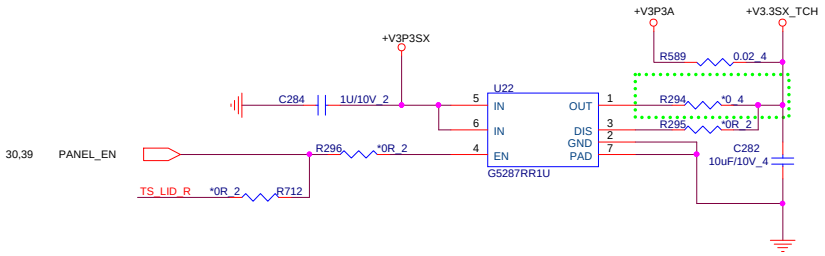
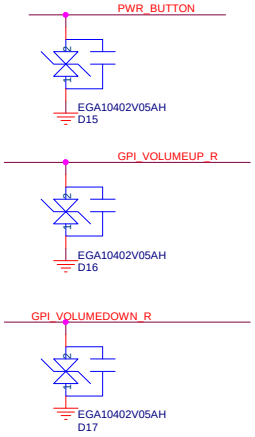
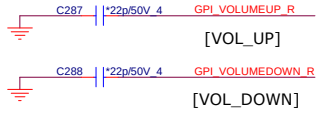

Android
U23
NPC1002A2EV
Check XTAL Pin define
R521 place close NGFF con
BAM85XP0000
un-Booster Only
un-Booster Only
Booster Only
Matching
PROJECT : Eagle
Quanta Computer Inc.
NB5/HW
Size
Document Number
NFC
Rev
1A
Date: Wednesday, September 17, 2014
Sheet 28 of 44



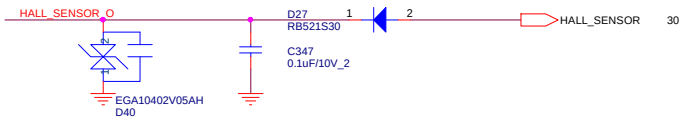


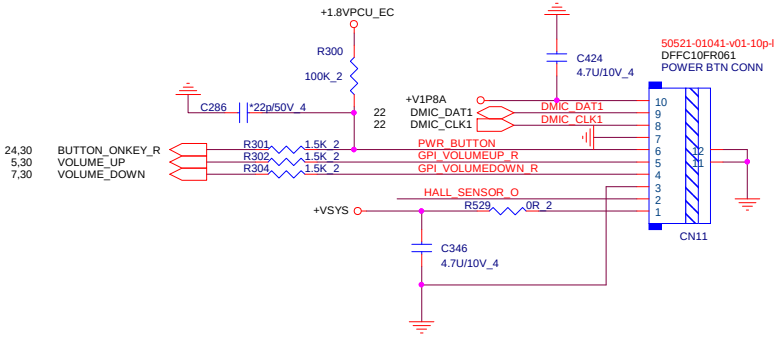






Hall Sensor

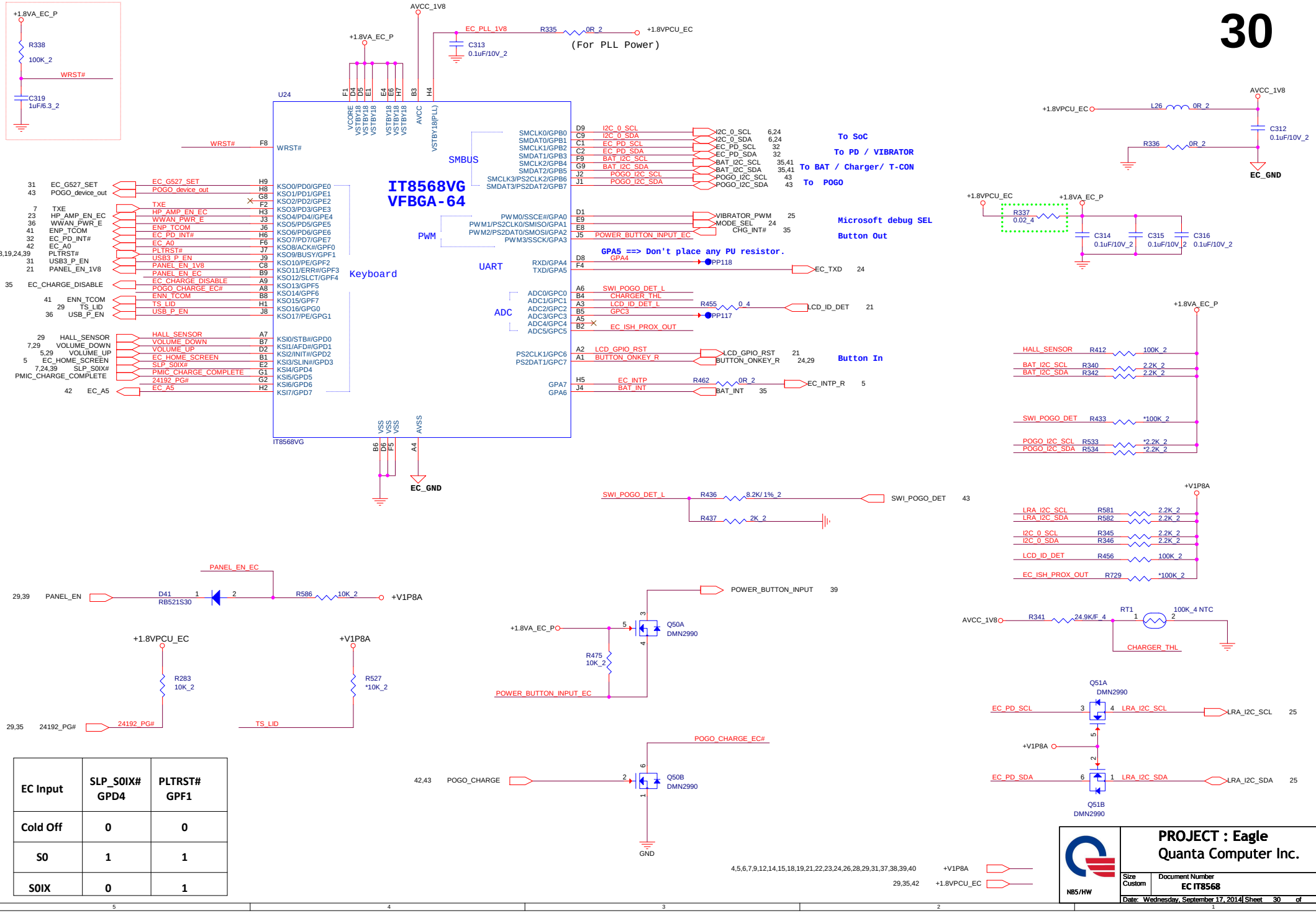




PWR & Vol Conn

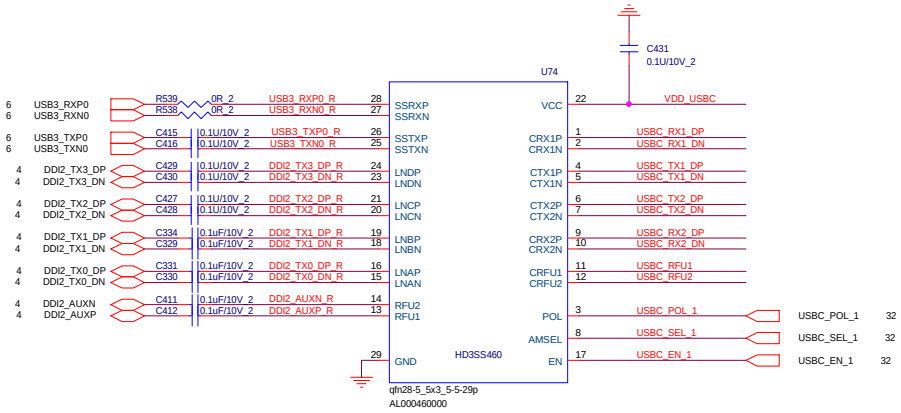
30,35,42 +1.8VPCU_EC
20,38 +V3P3SX
4,5,6,7,9,12,14,15,18,19,21,22,23,24,26,28,30,31,37,38,39,40 +V1P8A
5,9,14,15,18,19,23,24,25,26,28,31,38,39,43 +V3P3A

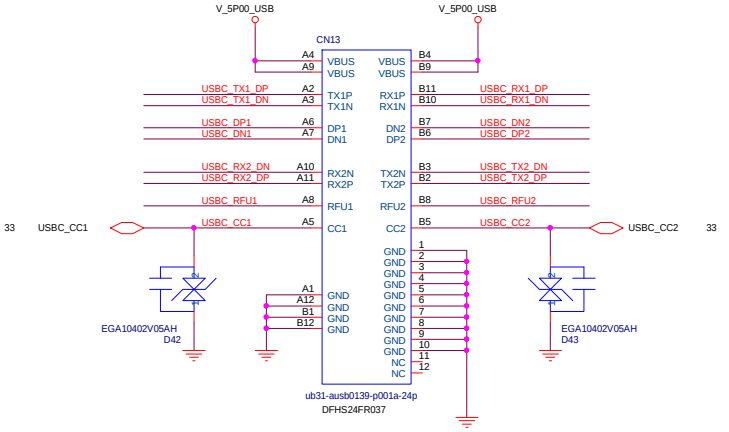
NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
Size: Custom	Document Number: Touch Board	Rev: 1A
Date: Wednesday, September 17, 2014	Sheet 29 of 44	

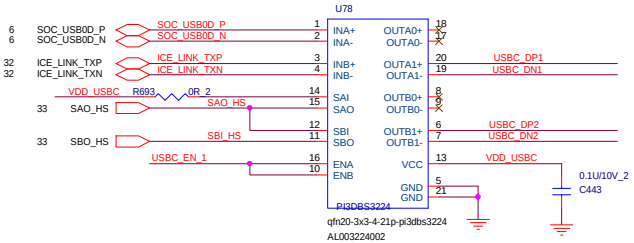


EC Input	SLP_S0IX# GPD4	PLTRST# GPF1
Cold Off	0	0
S0	1	1
S0IX	0	1

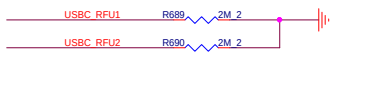
PROJECT :	Eagle
Quanta Computer Inc.	
Size: Custom	Document Number: EC IT8568
Rev: 1A	
Date: Wednesday, September 17, 2014	Sheet 30 of 44
NB5/HW	

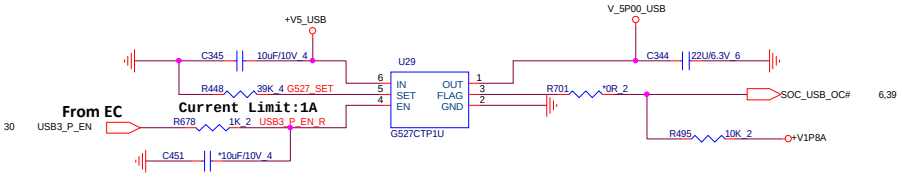


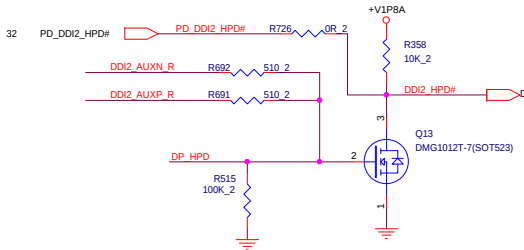


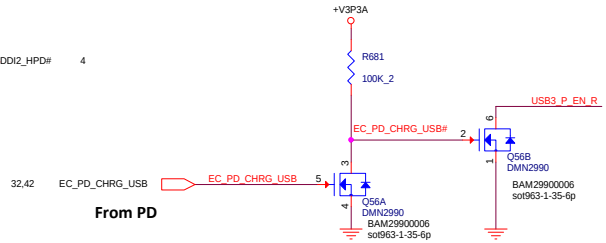


SAI/SAO/SBI/SBO	OUTA1	OUTB1
1111	INA	INB
1110	INA	
1001		INA
ENA/ENB	OUTA0/1	OUTB0/1
11	------	------

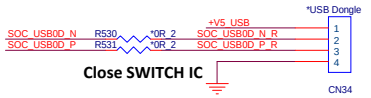




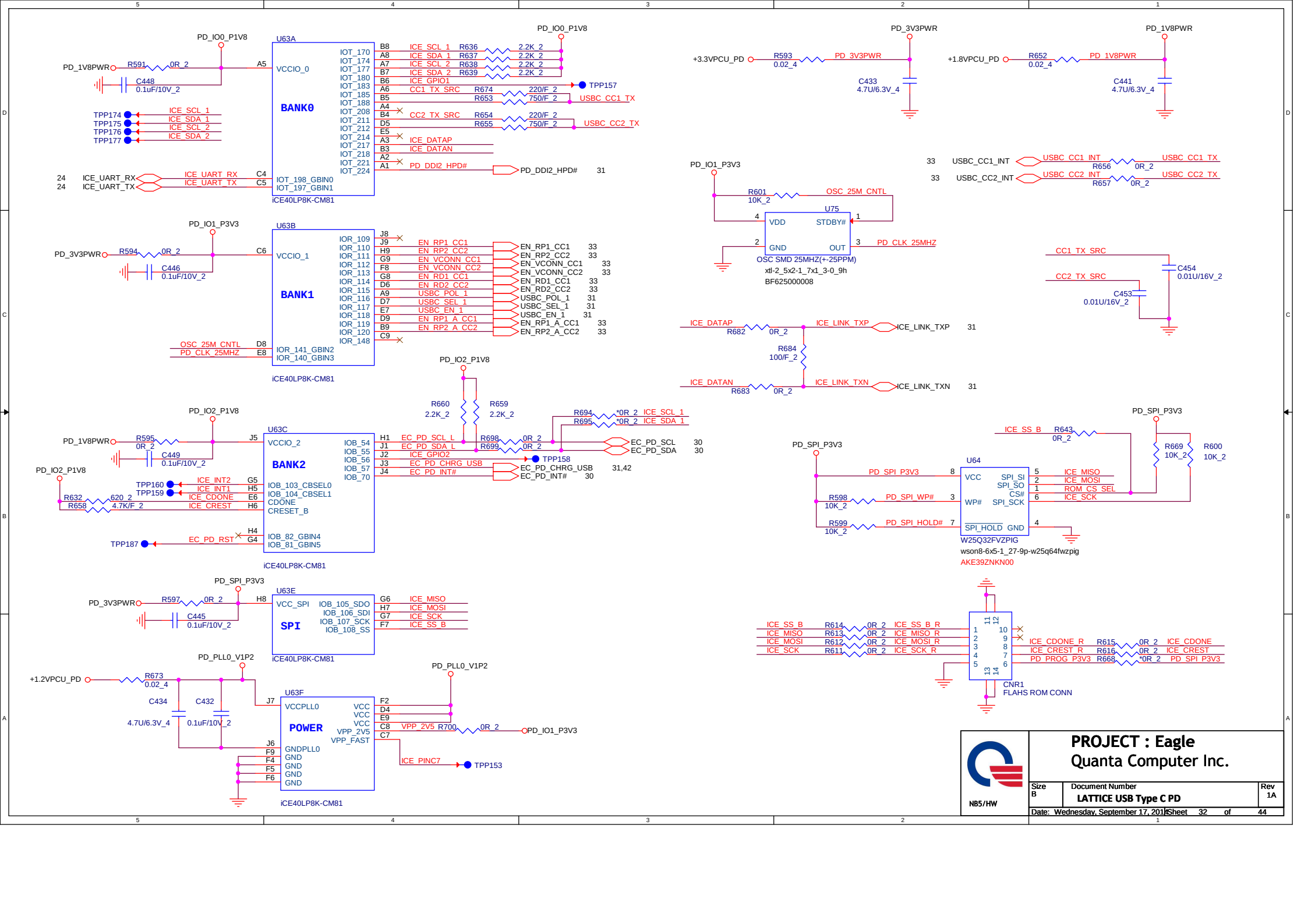




DB TEST ONLY: USB DONGLE



NB5/HW	PROJECT : Eagle Quanta Computer Inc.		
	Size	Document Number Slimport	Rev 1A
	Date: Wednesday, September 17, 2014	Sheet 31 of 44	


U63A
BANK0
iCE40LP8K-CM81
U63B
BANK1
iCE40LP8K-CM81
U63C
BANK2
iCE40LP8K-CM81
U63E
SPI
iCE40LP8K-CM81
U63F
POWER
iCE40LP8K-CM81
U75
OSC SMD 25MHZ(+-25PPM)
xtl-2_5x2-1_7x1_3-0_9h
BF625000008
U64
W25Q32FVZPIG
wson8-6x5-1_27-9p-w25q64fwzpig
AKE39ZNKN00
CNR1
FLAHS ROM CONN
PROJECT : Eagle
Quanta Computer Inc.
NB5/HW
Size B
Document Number
LATTICE USB Type C PD
Rev 1A
Date: Wednesday, September 17, 2018
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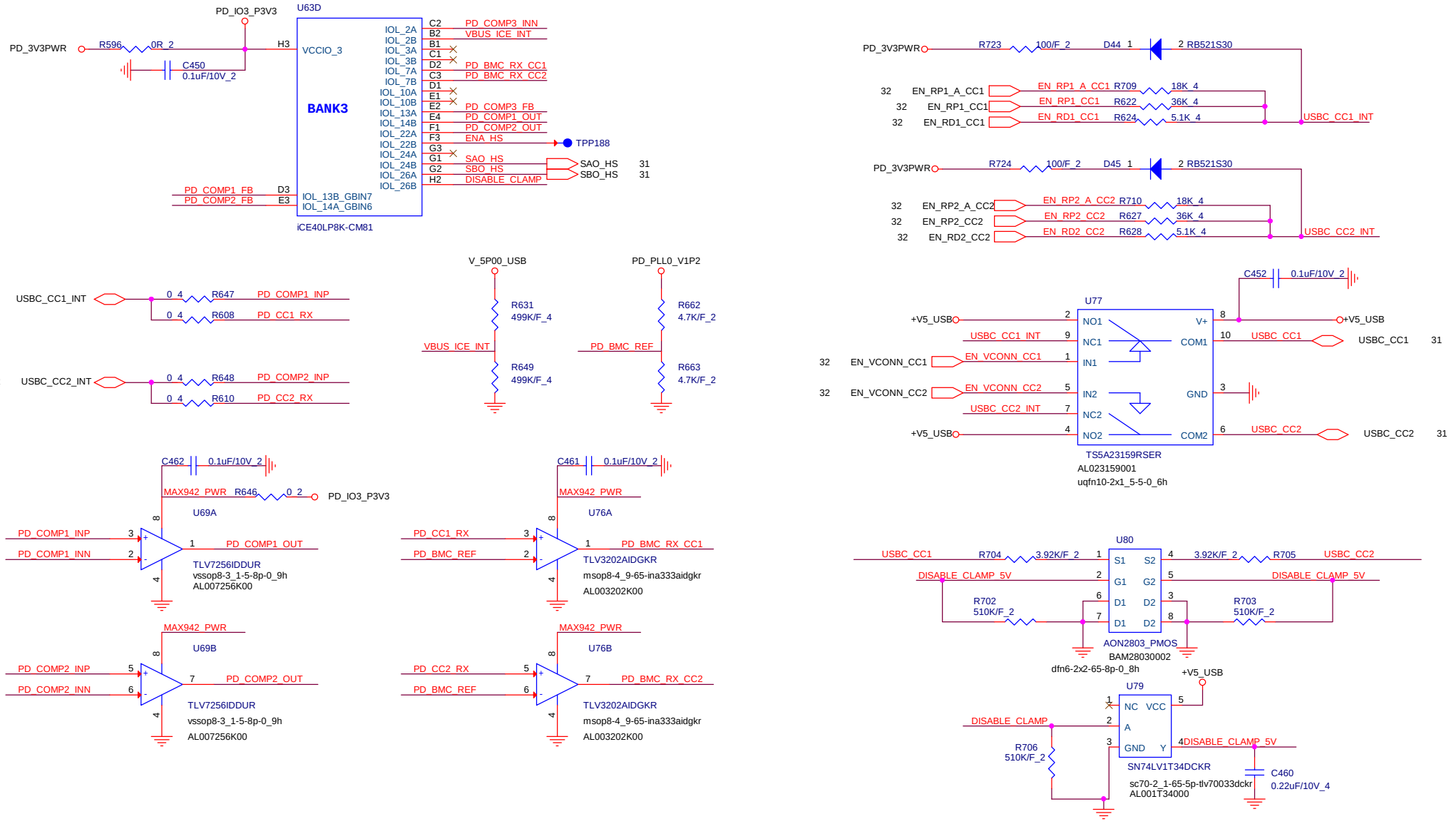
PD_IO3_P3V3
U63D
PD_3V3PWR
R596
0R_2
C450
0.1uF/10V_2
H3
VCCIO_3
BANK3
iCE40LP8K-CM81
PD_COMP1_FB
PD_COMP2_FB
D3
E3
IOL_13B_GBIN7
IOL_14A_GBIN6
C2 PD_COMP3_INN
B2 VBUS_ICE_INT
B1
C1
D2 PD_BMC_RX_CC1
C3 PD_BMC_RX_CC2
D1
E1
E2 PD_COMP3_FB
E4 PD_COMP1_OUT
F1 PD_COMP2_OUT
F3 ENA_HS
TPP188
G3
G1 SAO_HS
G2 SBO_HS
H2 DISABLE_CLAMP
SAO_HS 31
SBO_HS 31
PD_3V3PWR R723 100/F_2 D44 1 2 RB521S30
32 EN_RP1_A_CC1 EN_RP1_A_CC1 R709 18K_4
32 EN_RP1_CC1 EN_RP1_CC1 R622 36K_4
32 EN_RD1_CC1 EN_RD1_CC1 R624 5.1K_4
USBC_CC1_INT
PD_3V3PWR R724 100/F_2 D45 1 2 RB521S30
32 EN_RP2_A_CC2 EN_RP2_A_CC2 R710 18K_4
32 EN_RP2_CC2 EN_RP2_CC2 R627 36K_4
32 EN_RD2_CC2 EN_RD2_CC2 R628 5.1K_4
USBC_CC2_INT
32 USBC_CC1_INT
0_4 R647 PD_COMP1_INP
0_4 R608 PD_CC1_RX
32 USBC_CC2_INT
0_4 R648 PD_COMP2_INP
0_4 R610 PD_CC2_RX
V_5P00_USB
R631 499K/F_4
VBUS_ICE_INT
R649 499K/F_4
PD_PLL0_V1P2
R662 4.7K/F_2
PD_BMC_REF
R663 4.7K/F_2
C452 0.1uF/10V_2
U77
+V5_USB
USBC_CC1_INT
32 EN_VCONN_CC1
32 EN_VCONN_CC2
+V5_USB
NO1
NC1
IN1
IN2
NC2
NO2
V+
COM1
GND
COM2
USBC_CC1
USBC_CC2
TS5A23159RSER
AL023159001
uqfn10-2x1_5-5-0_6h
C462 0.1uF/10V_2
MAX942_PWR R646 0_2 PD_IO3_P3V3
U69A
PD_COMP1_INP
PD_COMP1_INN
PD_COMP1_OUT
TLV7256IDDUR
vssop8-3_1-5-8p-0_9h
AL007256K00
C461 0.1uF/10V_2
MAX942_PWR
U76A
PD_CC1_RX
PD_BMC_REF
PD_BMC_RX_CC1
TLV3202AIDGKR
msop8-4_9-65-ina333aidgkr
AL003202K00
MAX942_PWR
U69B
PD_COMP2_INP
PD_COMP2_INN
PD_COMP2_OUT
TLV7256IDDUR
vssop8-3_1-5-8p-0_9h
AL007256K00
MAX942_PWR
U76B
PD_CC2_RX
PD_BMC_REF
PD_BMC_RX_CC2
TLV3202AIDGKR
msop8-4_9-65-ina333aidgkr
AL003202K00
U80
USBC_CC1
R704 3.92K/F_2
DISABLE_CLAMP_5V
R702 510K/F_2
R705 3.92K/F_2
USBC_CC2
DISABLE_CLAMP_5V
R703 510K/F_2
S1 S2
G1 G2
D1 D2
D1 D2
AON2803_PMOS
BAM28030002
dfn6-2x2-65-8p-0_8h
+V5_USB
U79
DISABLE_CLAMP
R706 510K/F_2
NC VCC
A
GND Y
4DISABLE_CLAMP_5V
SN74LV1T34DCKR
sc70-2_1-65-5p-tlv70033dckr
AL001T34000
C460 0.22uF/10V_4
PD_COMP1_INN
C435 0.047U/10V_4
R676 1K_2
PD_COMP1_FB
PD_COMP2_INN
C436 0.047U/10V_4
R644 1K_2
PD_COMP2_FB
PD_COMP3_INN
C440 0.047U/10V_4
R664 1K_2
PD_COMP3_FB
EN_VCONN_CC1 R620 510K/F_2
EN_VCONN_CC2 R626 510K/F_2
NB5/HW
PROJECT : Eagle
Quanta Computer Inc.
Size B
Document Number
LATTICE USB Type C PD
Rev 1A
Date: Wednesday, September 17, 2015
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SoC I2C	Function	Address	Speed
0	EC	ACPI / WMI : 0x76 (7bit) 0xEC (8bit) Flash : 0x5B (7bit) 0xB6 (8bit)	400k Hz
1	Audio	33h	400k Hz
3	Camera	8M-->IMX219 0x20/0x21 (8bit) 2m-->OV2724 SID=0, 0x6C (8bit)	400k Hz
4	HDMI	NA	NA
5	Touch Screen	0X4B	400k Hz
6	PMIC	0x5E (8bit) 0x6E (8bit)	HS mode (3.4 MHz)
7 (NFC)	NFC	ADR:0 & ADR1: 1 W:0x54 ; R: 0x55 (8bit)	HS mode (3.4 MHz)
ISH	Combo Sensor	acceleration and magnetic (8bit) Read 0x3B Write 0x3A Angular--> Read 0xD7 Write 0xD6	400k Hz
ISH	ALS	Ra PD: 0x10 (default) Ra PU: 0x48	400k Hz
ISH	SAR	0 x 28 (Check table 8) (7bit)	400k Hz

EC I2C	Function	Address	Speed
0	SoC		HS-mode
2	TPS65132	W: 0x7C R: 0x7D (8bit)	
	Battery		
	Charger	W: 0x6A R: 0x6B (8bit)	400k Hz
3	POGO		
1	PD		
	DOCK		
	Moto Driver	W:0xB4 R: 0xB5 (8bit)	400k Hz

Table 15. I²C-bus interface addressing

I2C_ADR1	I2C_ADR0	I²C-bus address (R/W = 0, write)	²C-bus address (R/W = 1, read)
0	0	0x50	0x51
0	1	0x52	0x53
1	0	0x54	0x55
1	1	0x56	0x57

A1	A0	Address
0	0	0x28
0	1	0x29
1	0	0x2A
1	1	0x2B

Table 8: I2C Sub-Address Selection

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
Custom	I2C Mapping	1A

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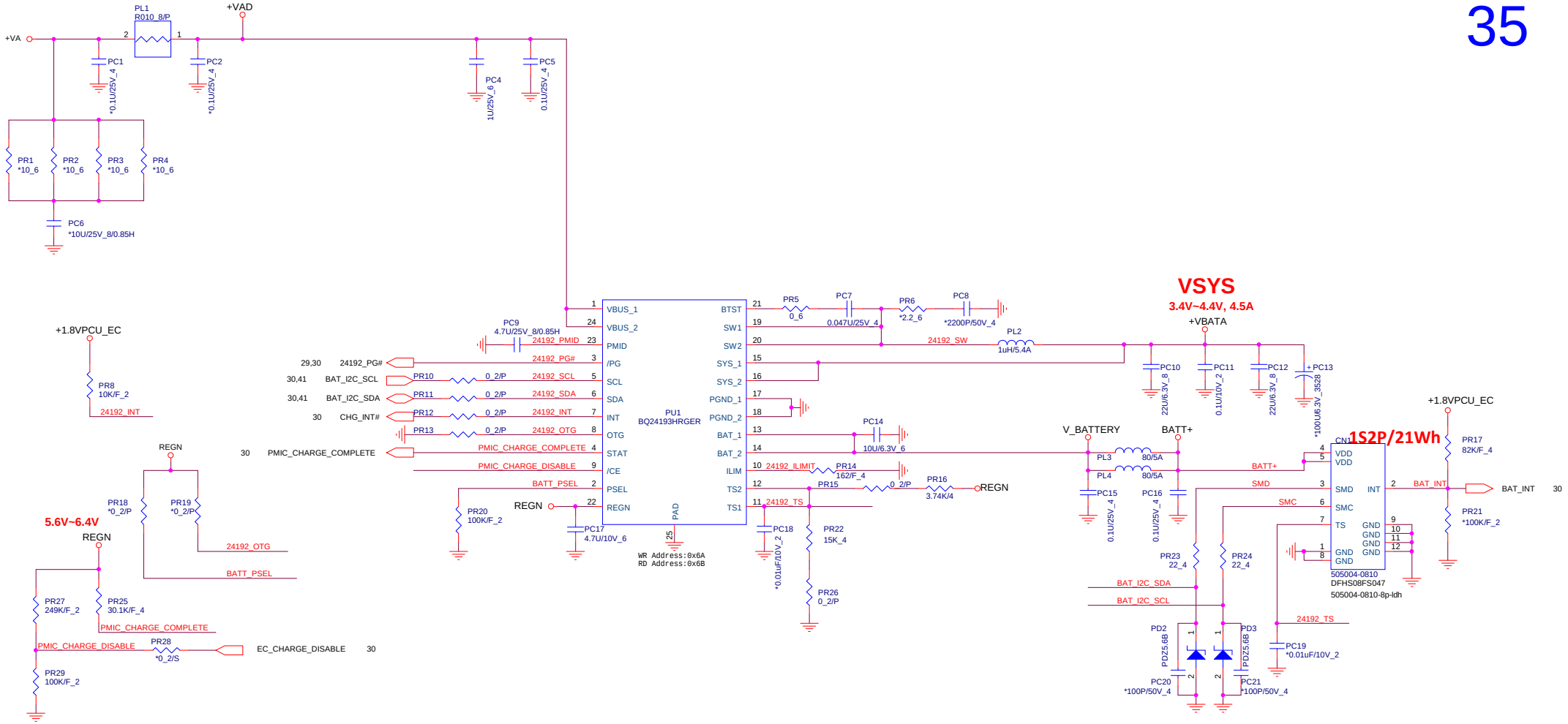
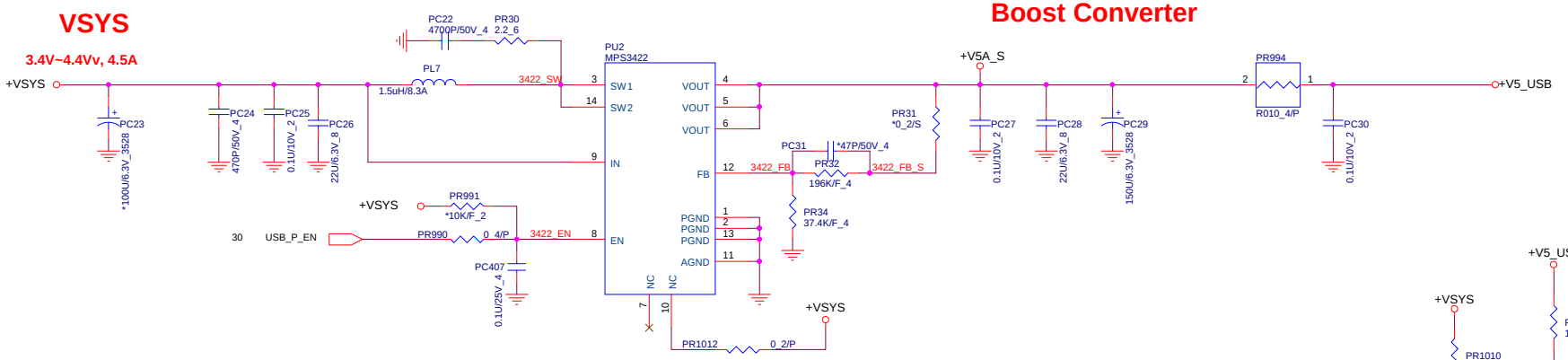
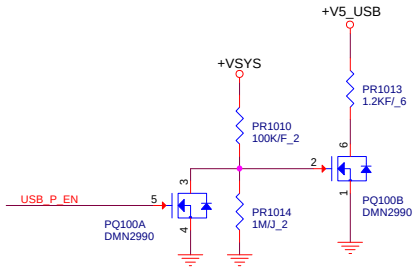


NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Document Number: Charger BQ24193	Rev: 1A
	Date: Wednesday, September 17, 2014 Sheet 35 of 44	

5V/2A
OCP: 3A
Boost Converter

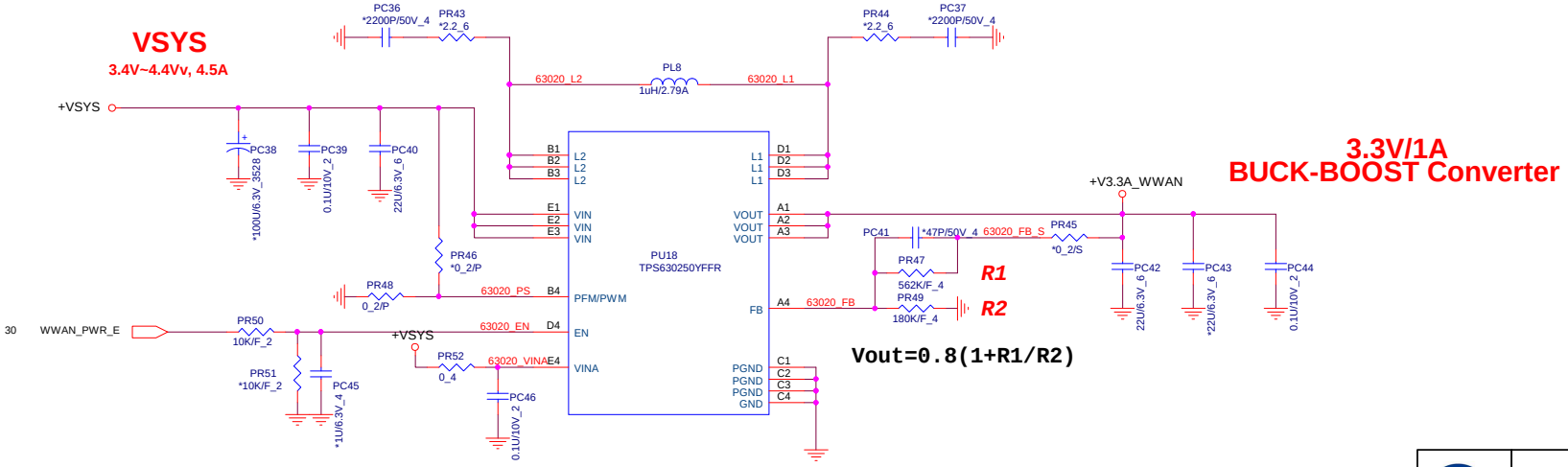
VSYS
3.4V~4.4Vv, 4.5A



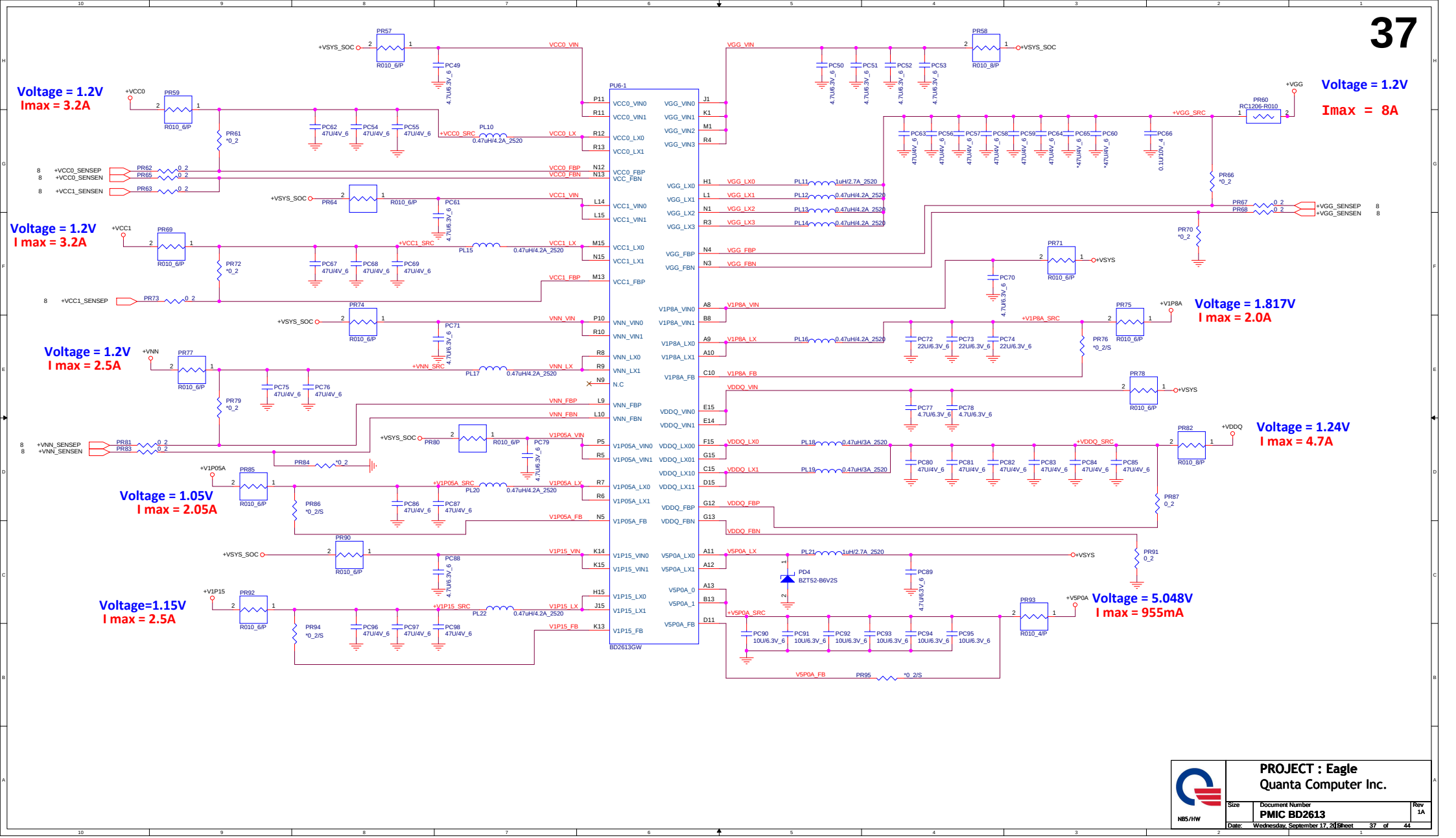


3.3V/1A
BUCK-BOOST Converter

VSYS
3.4V~4.4Vv, 4.5A



NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Document Number: +3V /+5V	Rev: 1A
	Date: Wednesday, September 17, 2014	Sheet 36 of 44


Voltage = 1.2V
Imax = 3.2A
Voltage = 1.2V
I max = 3.2A
Voltage = 1.2V
I max = 2.5A
Voltage = 1.05V
I max = 2.05A
Voltage=1.15V
I max = 2.5A
Voltage = 1.2V
Imax = 8A
Voltage = 1.817V
I max = 2.0A
Voltage = 1.24V
I max = 4.7A
Voltage = 5.048V
I max = 955mA
PU6-1
BD2613GW
+VSYS_SOC
+VCC0
+VCC1
+VNN
+V1P05A
+V1P15
+VGG
+VSYS
+V1P8A
+VDDQ
+V5P0A
PROJECT : Eagle
Quanta Computer Inc.
PMIC BD2613
Rev 1A
Wednesday, September 17, 2025
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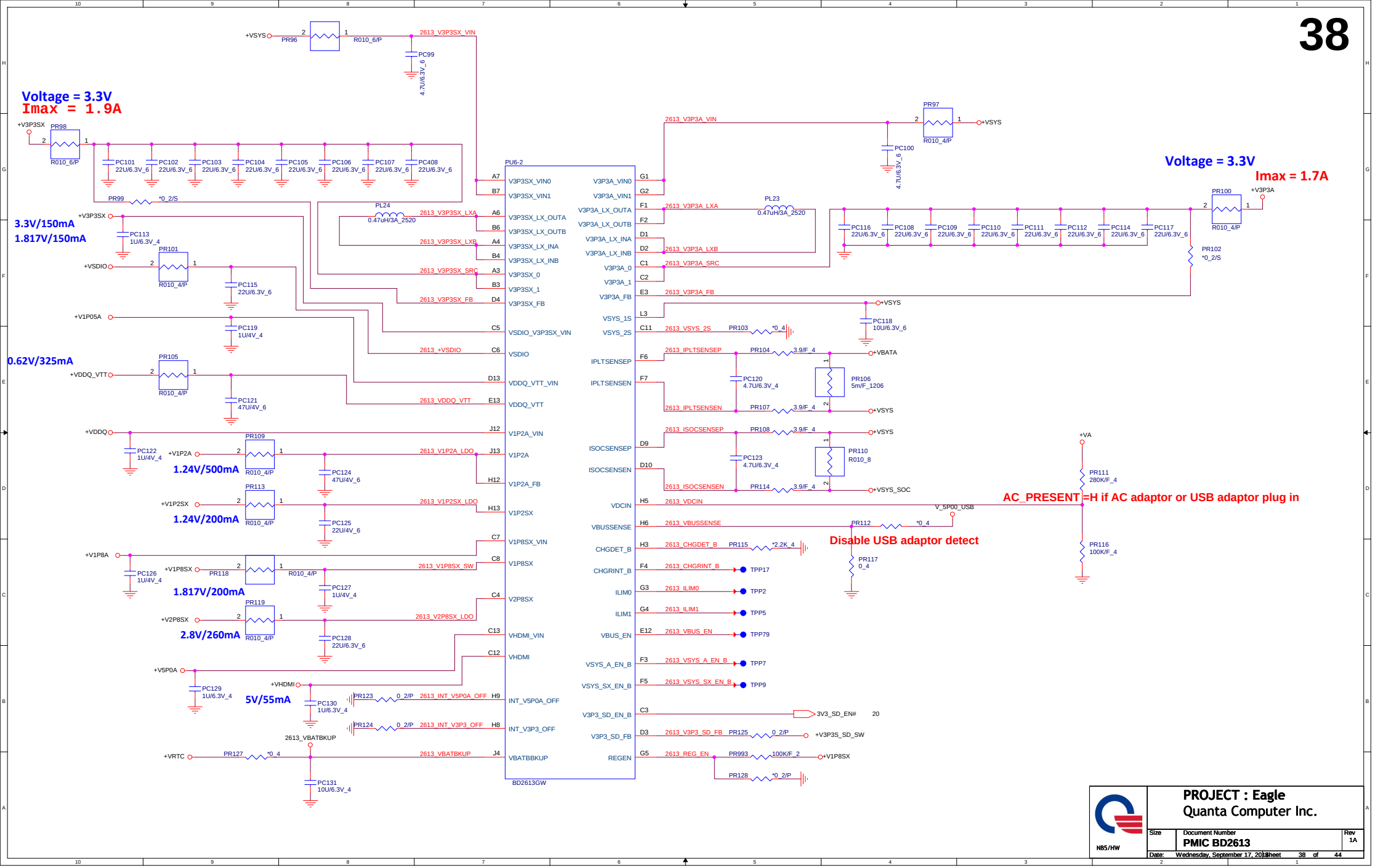
Voltage = 3.3V
Imax = 1.9A
3.3V/150mA
1.817V/150mA
0.62V/325mA
1.24V/500mA
1.24V/200mA
1.817V/200mA
2.8V/260mA
5V/55mA
Voltage = 3.3V
Imax = 1.7A
AC_PRESENT =H if AC adaptor or USB adaptor plug in
Disable USB adaptor detect
PU6-2
BD2613GW
PROJECT : Eagle
Quanta Computer Inc.
PMIC BD2613
NB5/HW
Rev 1A
Wednesday, September 17, 2013
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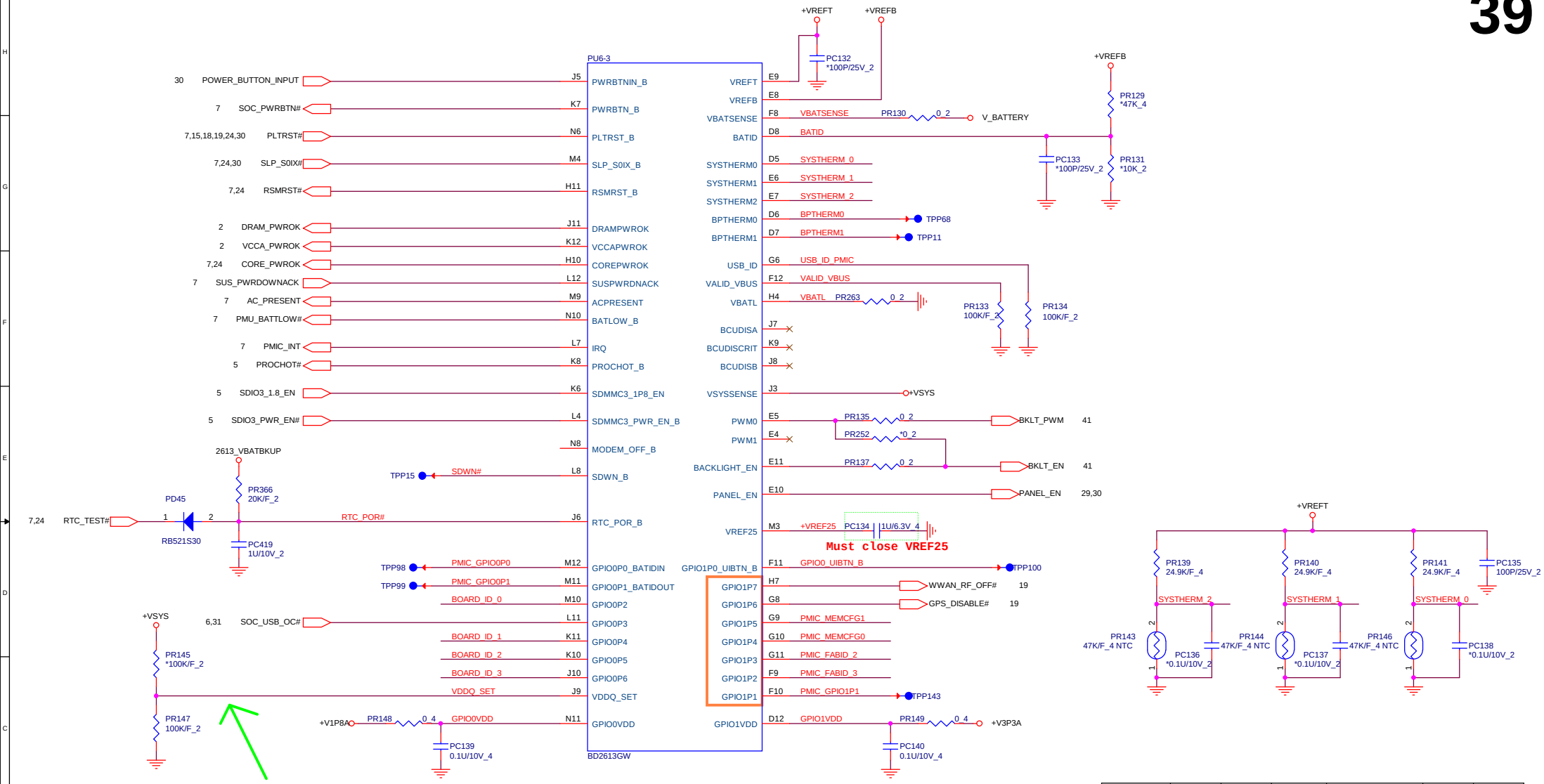
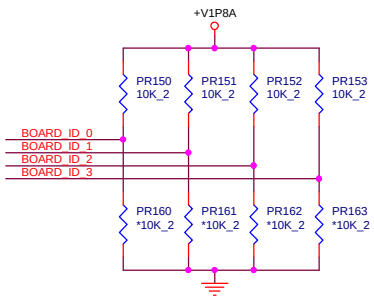
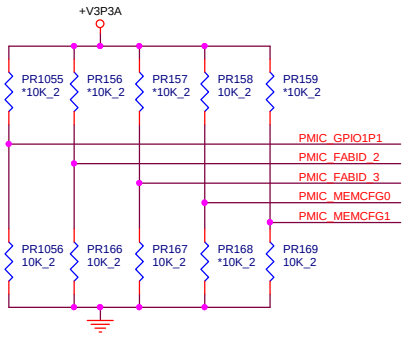


VDDQ_SET	LPDDR3	DDR3L
	GND	VSYS

Board ID	ID 2	ID 3	SKU	ID 1	ID 0
DB	1	1	WO-WAN ; WO-NFC	0	0
SI 1	0	1	WO-WAN ; W-NFC	0	1
SI 2	1	0	W-WAN ; WO-NFC	1	0
PV / MV	0	0	W- WAN ; W-NFC	1	1





Board ID	FABID_2	LPDDR3 SIZE	GPIO1P1	LPDDR3 VENDOR	MEMCFG1	MEMCFG0
Eagle	0	2G	0	SAMSUNG	0	0
Cedar 2	1	4G	1	Hynix	0	1
				Elpida	1	0
					1	1

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
	PMIC BD2613	1A

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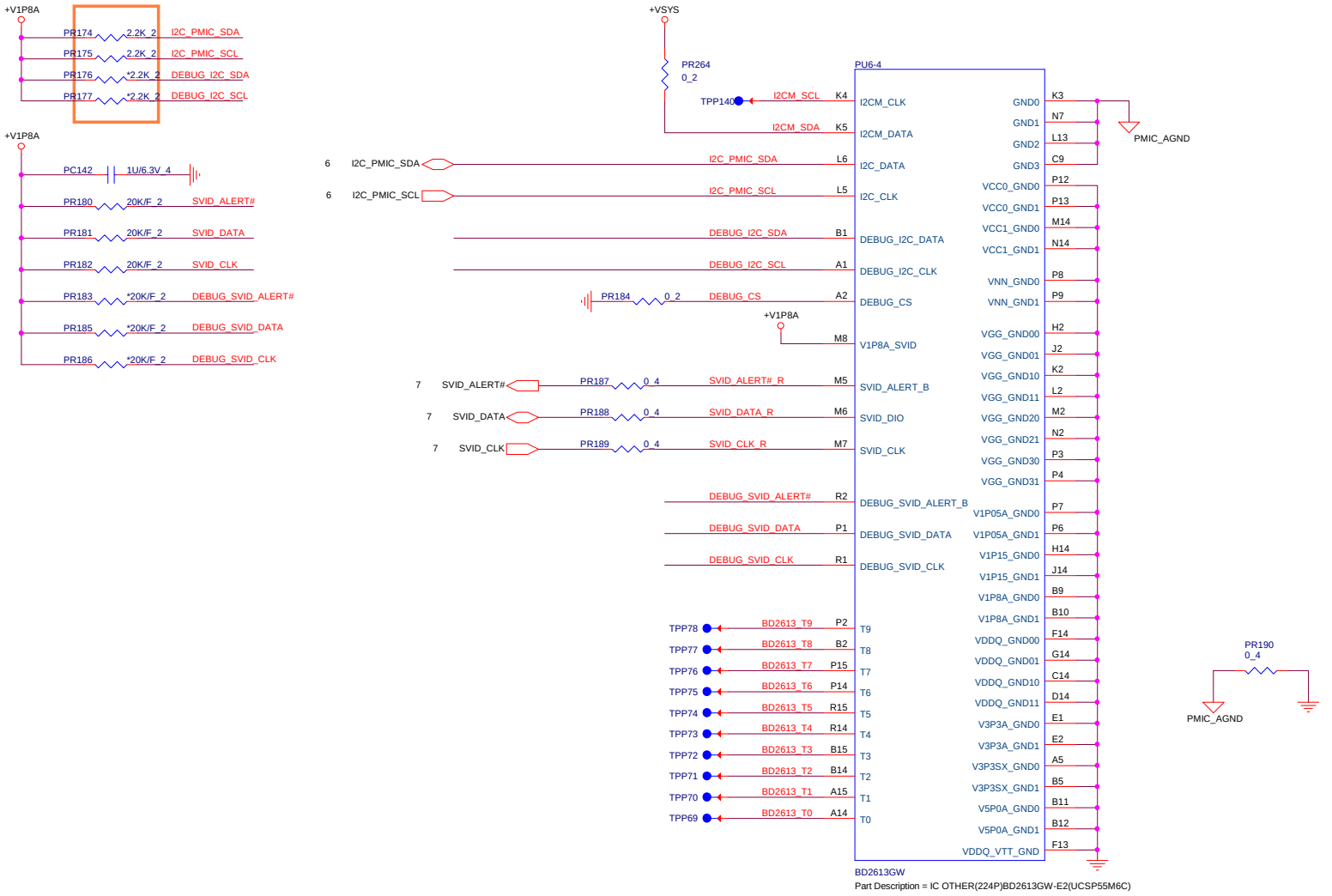
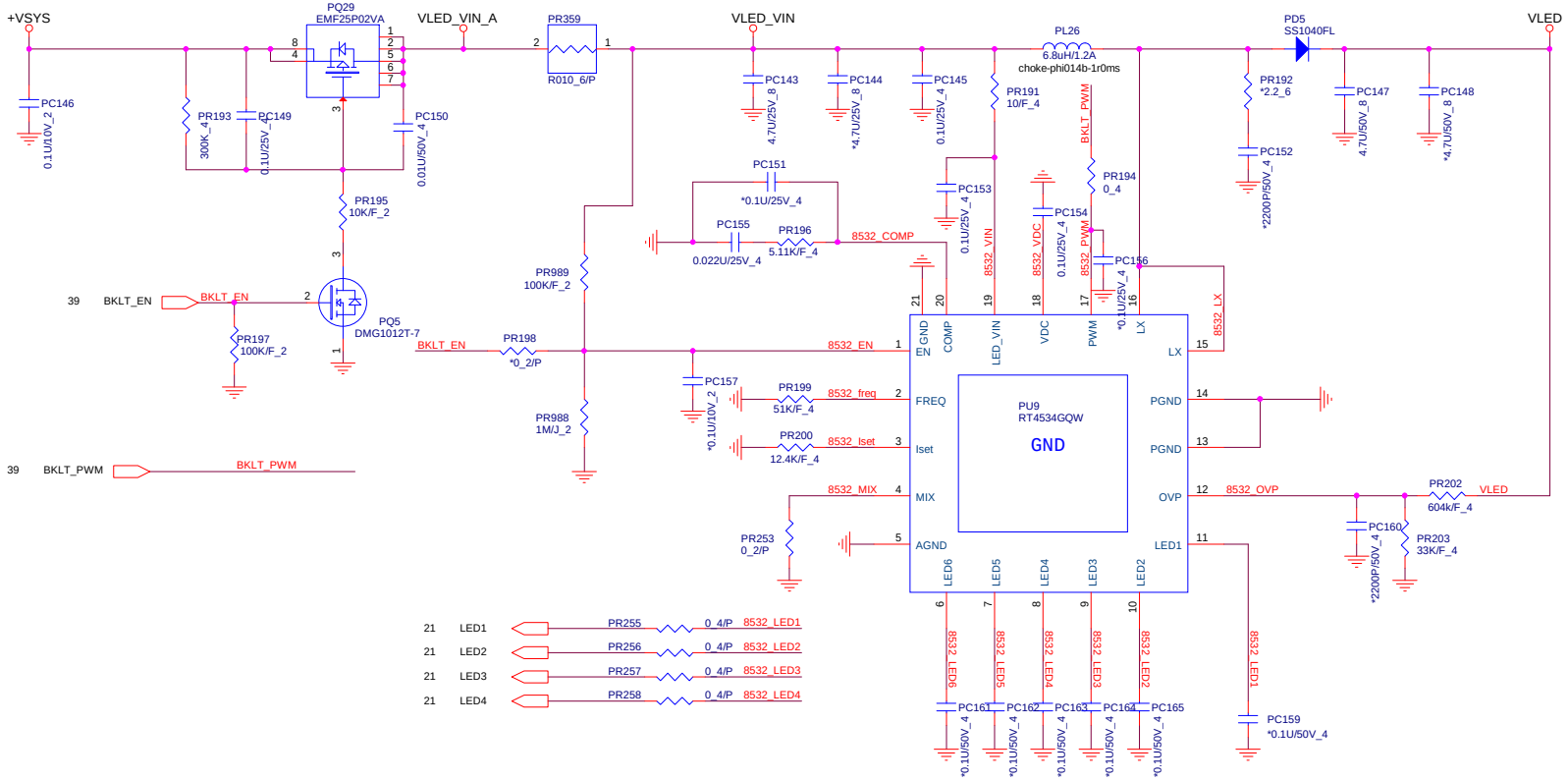
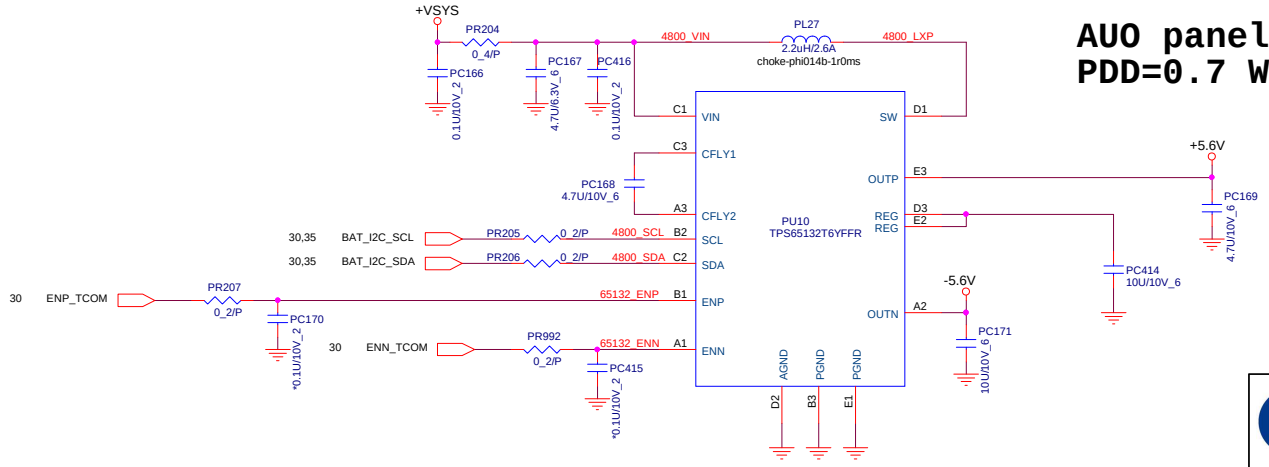


NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
Size	Document Number PMIC BD2613	Rev 1A
Date: Wednesday, September 17, 2012	Sheet 40 of 44	

AUO panel
LED: 6S4P
Vf=3.2V,If=20mA
PLED=1.48Watt
OVP=23.2V



AUO panel
PDD=0.7 Watt



NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Document Number: LED Driver	Rev: 1A
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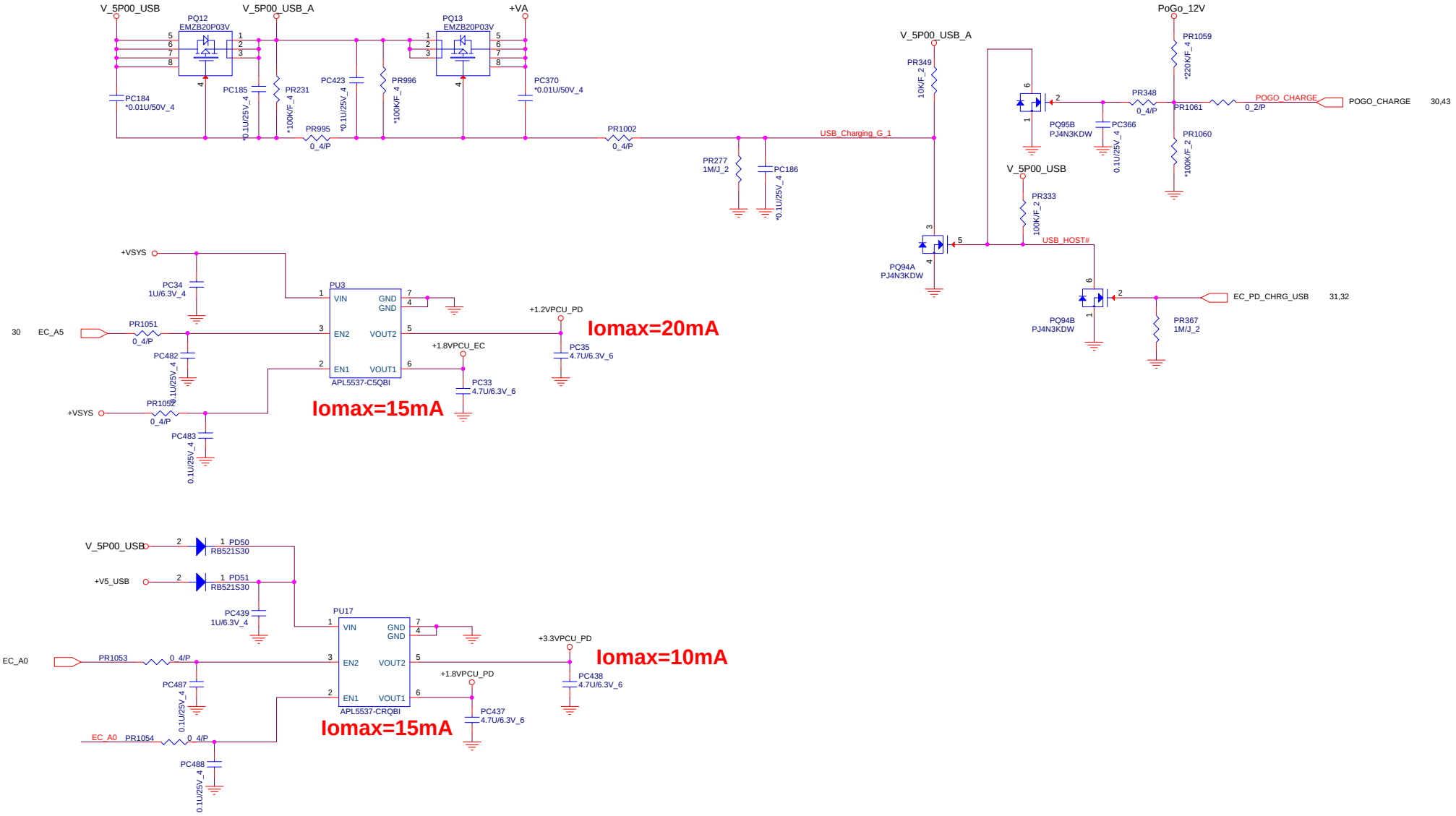
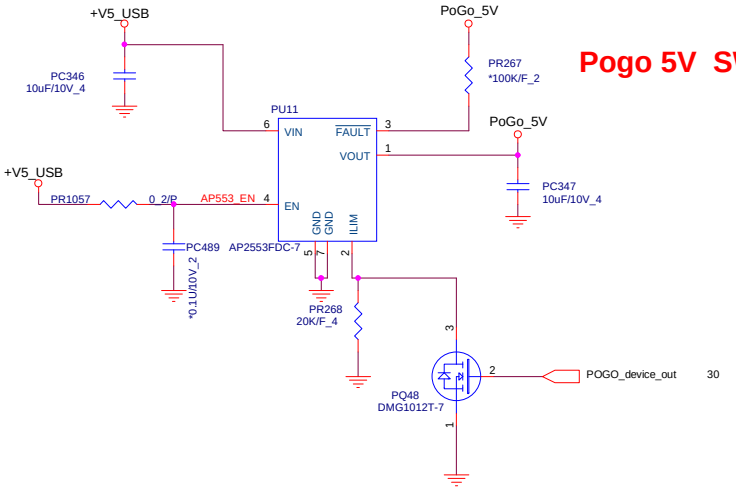
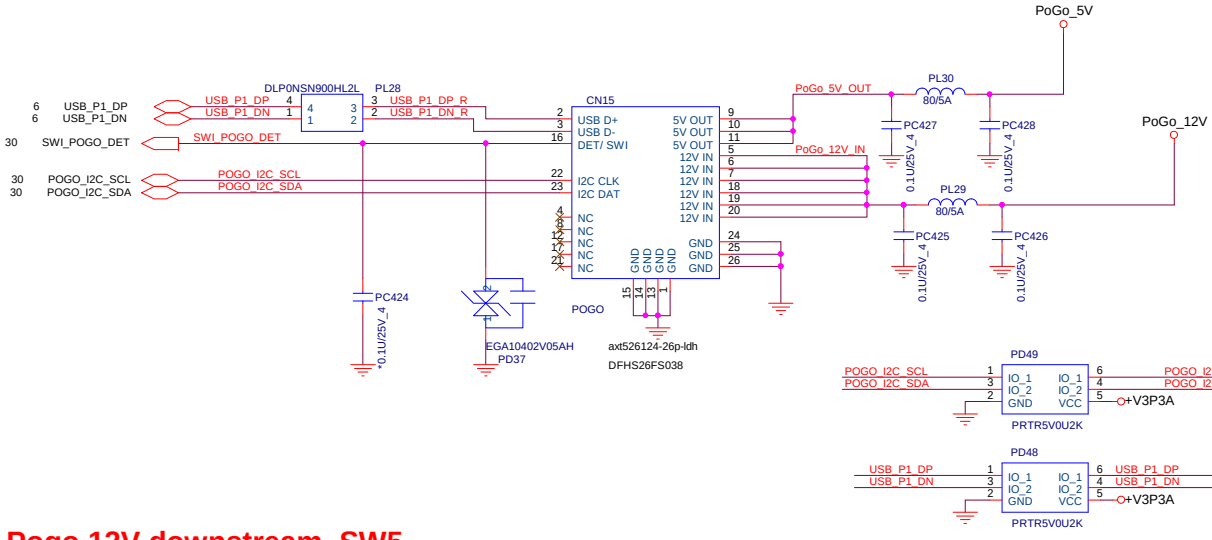
Load switch



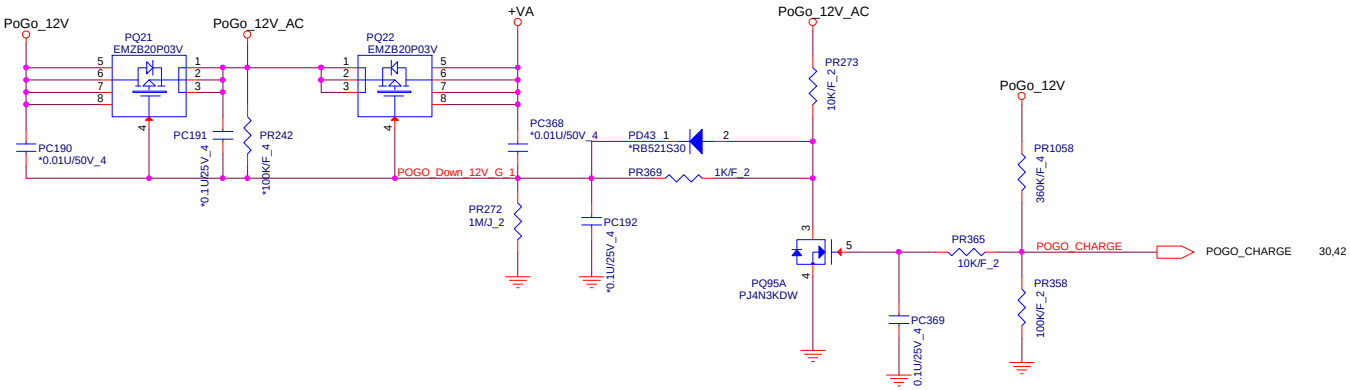
NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size: Document Number: Load Switch	Rev: 1A
	Date: Wednesday, September 17, 2014 Sheet 42 of 44	

Pogo 5V SW4





Pogo 12V downstream SW5

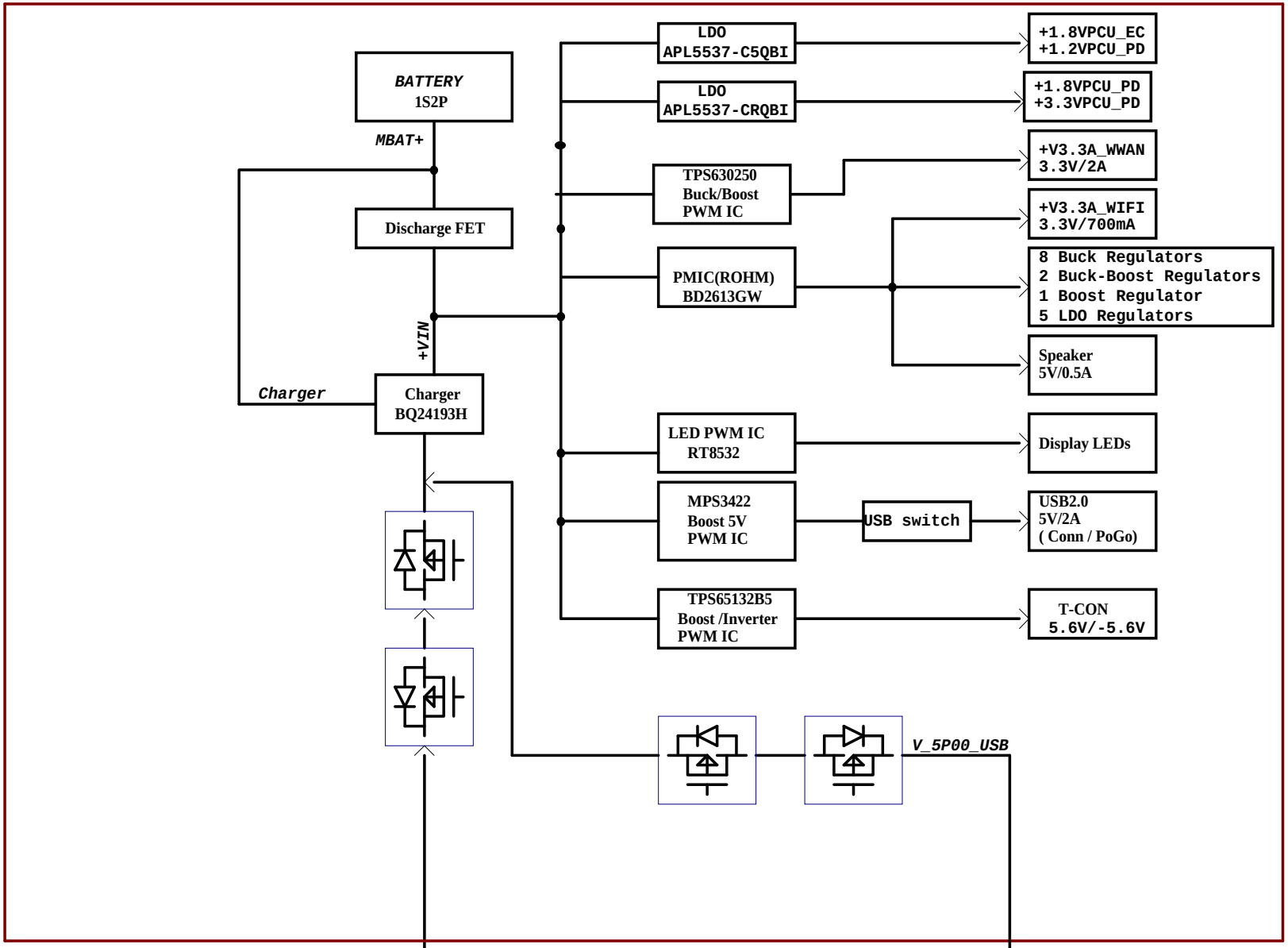


SWI_POGO_DET=1V~3V	SW5 on

NB5/HW

PROJECT : Eagle
Quanta Computer Inc.

Size	Document Number	Rev
	USB/POGO switch	1A
Date: Wednesday, September 17, 2014	Sheet 43 of 44	



NB5/HW	PROJECT : Eagle Quanta Computer Inc.	
	Size Document Number USB/POGO switch	Rev 1A
	Date: Wednesday, September 17, 2014 Sheet 44 of 44	