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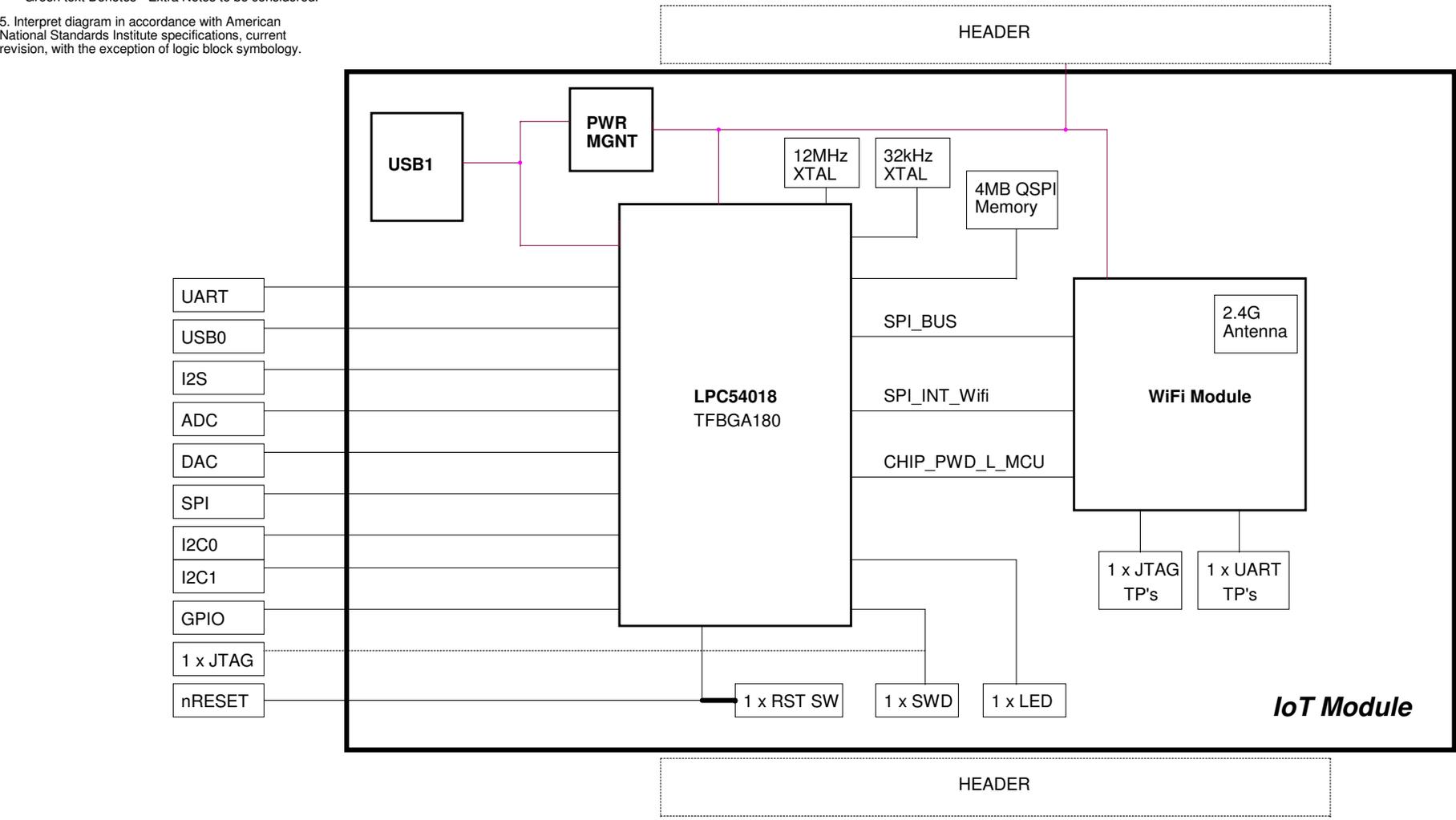
Revisions				
Rev	Description	Date	Designer	Approver
X1	FIRST DRAFT	02-AUG-17	Antonio Quiroz	
X2	WiFi module in place	09-AUG-17	Antonio Quiroz	
X3	Prototype release	23-AUG-17	Antonio Quiroz	
X4	Connected P1_0 to SPI_INT_WiFi	06-OCT-17	Jorge Ramirez	
A	Released	28-NOV-17	Antonio Quiroz	

LPC540xx IoT Module

OM40007

		Microcontroller Product Group 6501 William Cannon Drive West Austin, TX 78735-8598	
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Designer: Jorge Ramirez	Drawing Title: OM40007		
Drawn by: Antonio Quiroz	Page Title: Table of Contents, Revisions		
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- Unless Otherwise Specified:
 All resistors are in ohms, 5%
 All voltages are DC
 All polarized capacitors are aluminum electrolytic
- Interrupted lines coded with the same letter or letter combinations are electrically connected.
- Device type number is for reference only. The number varies with the manufacturer.
- Special signal usage:
 _B Denotes - Active-Low Signal
 <> or [] Denotes - Vectored Signals
 Green text Denotes - Extra Notes to be considered.
- Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.



U22C			
6	P0_0HSP_FC3_SCK	<<> P0_0HSP_FC3_SCK	D6
6	P0_1HSP_FC3_SSEL0	<<> P0_1HSP_FC3_SSEL0	A1
6	P0_2HSP_FC3_MISOEMC_D0	<<> P0_2HSP_FC3_MISOEMC_D0	E9
6	P0_3HSP_FC3_MISOEMC_D1	<<> P0_3HSP_FC3_MISOEMC_D1	A10
6	P0_4EMC_D2	<<> P0_4EMC_D2	C8
5.6	P0_5EMC_D3	<<> P0_5EMC_D3	A5
5.6	P0_6EMC_D4	<<> P0_6EMC_D4	H12
6	P0_7EMC_D5	<<> P0_7EMC_D5	H10
6	P0_8EMC_D6	<<> P0_8EMC_D6	G12
6	P0_9EMC_D7	<<> P0_9EMC_D7	P2
5.6	SWO_TRGT	<<> SWO_TRGT	G12
5.6	SWDCLK_TRGT	<<> SWDCLK_TRGT	L3
6	IF_SWDOG	<<> IF_SWDOG	F11
6	P0_13HSP_FC1_SDAK	<<> P0_13HSP_FC1_SDAK	E13
6	P0_14HSP_FC1_SCLX	<<> P0_14HSP_FC1_SCLX	M4
6	P0_15EMC_WER	<<> P0_15EMC_WER	M4
6	P0_16EMC_A0	<<> P0_16EMC_A0	M4
6	P0_17ENET_TXD1	<<> P0_17ENET_TXD1	E14
6	P0_18EMC_A1	<<> P0_18EMC_A1	C8
6	P0_19EMC_A2	<<> P0_19EMC_A2	G12
6	P0_20EMC_A3	<<> P0_20EMC_A3	C13
6	P0_21EMC_A4	<<> P0_21EMC_A4	D13
6	P0_22USDB_VBUS	<<> P0_22USDB_VBUS	B12
6	P0_23SPI1_CS0_MCLK	<<> P0_23SPI1_CS0_MCLK	M7
6	P0_24SPI1_I0	<<> P0_24SPI1_I0	K8
6	P0_25SPI1_O1	<<> P0_25SPI1_O1	L3
6	P0_26SPI1_CLK	<<> P0_26SPI1_CLK	L3
6	P0_27SPI1_I02	<<> P0_27SPI1_I02	M3
6	P0_28SPI1_I02_USDB_OCURREN	<<> P0_28SPI1_I02_USDB_OCURREN	M3
6	P0_29SPI1_F02_RXD	<<> P0_29SPI1_F02_RXD	A9
6	P0_30SPI1_F02_TXD	<<> P0_30SPI1_F02_TXD	M5
6	P0_31_ADDONS	<<> P0_31_ADDONS	M5

U22C

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U22D			
3	P1_0	<<> P1_0	N0
6	P1_1USER_PB_USBI_OVRCURR	<<> P1_1USER_PB_USBI_OVRCURR	K12
6	P1_2PDM1_CLK	<<> P1_2PDM1_CLK	L14
6	P1_3PDM1_DATA	<<> P1_3PDM1_DATA	J13
6	P1_4EMC_D11	<<> P1_4EMC_D11	D4
6	P1_5EMC_A4	<<> P1_5EMC_A4	E4
6	P1_6EMC_A5	<<> P1_6EMC_A5	G4
6	P1_7EMC_A6	<<> P1_7EMC_A6	N1
6	P1_8EMC_A7	<<> P1_8EMC_A7	P8
6	P1_9EMC_CAS0	<<> P1_9EMC_CAS0	K6
6	P1_10EMC_RAS0	<<> P1_10EMC_RAS0	N9
6	P1_11EMC_CLK0	<<> P1_11EMC_CLK0	B4
6	P1_12EMC_DYCS0	<<> P1_12EMC_DYCS0	G10
6	P1_13EMC_DQM0	<<> P1_13EMC_DQM0	C12
6	P1_14EMC_CKE0	<<> P1_14EMC_CKE0	A11
6	P1_15EMC_CK0	<<> P1_15EMC_CK0	B7
6	P1_16EMC_A10	<<> P1_16EMC_A10	N12
6	P1_17CAN0_TX	<<> P1_17CAN0_TX	D1
6	P1_18EMC_D8	<<> P1_18EMC_D8	L1
6	P1_19EMC_D9	<<> P1_19EMC_D9	M1
6	P1_20EMC_D0	<<> P1_20EMC_D0	N8
6	P1_21EMC_D1	<<> P1_21EMC_D1	M10
3.6	P1_22FC0_SSEL1	<<> P1_22FC0_SSEL1	P11
6	P1_23EMC_A11	<<> P1_23EMC_A11	N14
6	P1_24EMC_A12	<<> P1_24EMC_A12	M12
6	P1_25EMC_A13	<<> P1_25EMC_A13	J10
6	P1_26EMC_A8	<<> P1_26EMC_A8	F10
6	P1_27EMC_A9	<<> P1_27EMC_A9	E12
6	P1_28EMC_D12	<<> P1_28EMC_D12	C11
6	P1_29EMC_D13	<<> P1_29EMC_D13	E12
6	P1_30EMC_D14	<<> P1_30EMC_D14	A8
6	P1_31EMC_D15	<<> P1_31EMC_D15	C5

U22D

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U22E			
6	P2_0ADC0IN7_PMOD2_INTR	<<> P2_0ADC0IN7_PMOD2_INTR	P3
6	P2_1CTIMAT0	<<> P2_1CTIMAT0	C4
6	P2_2CTIMAT1	<<> P2_2CTIMAT1	C5
6	P2_3SD_CLK	<<> P2_3SD_CLK	B1
6	P2_4SD_CMD	<<> P2_4SD_CMD	D3
6	P2_5SD_POW_EN	<<> P2_5SD_POW_EN	D3
6	P2_6SD_D0	<<> P2_6SD_D0	J2
6	P2_7SD_D1	<<> P2_7SD_D1	J2
6	P2_8SD_D2	<<> P2_8SD_D2	J2
6	P2_9SD_D3	<<> P2_9SD_D3	J2
6	P2_10SD_Cdn	<<> P2_10SD_Cdn	K1
6	P2_11LCD_PWR	<<> P2_11LCD_PWR	K1
6	P2_12SPI1_RSTn	<<> P2_12SPI1_RSTn	K3
6	P2_13LCD_DCLK	<<> P2_13LCD_DCLK	L7
6	P2_14LCD_FP	<<> P2_14LCD_FP	L7
6	P2_15LCD_AC_ENAB_M	<<> P2_15LCD_AC_ENAB_M	M6
6	P2_16LCD_LP	<<> P2_16LCD_LP	L3
6	P2_17CTCAP1_F08_RXD	<<> P2_17CTCAP1_F08_RXD	P10
6	P2_18F07_I2S_RX_SCK	<<> P2_18F07_I2S_RX_SCK	N10
6	P2_19F07_I2S_RX_DAT	<<> P2_19F07_I2S_RX_DAT	N10
6	P2_20F07_I2S_RX_WS	<<> P2_20F07_I2S_RX_WS	P12
6	P2_21LCD_V03	<<> P2_21LCD_V03	L10
6	P2_22LCD_V04	<<> P2_22LCD_V04	M14
6	P2_23LCD_V05	<<> P2_23LCD_V05	K10
6	P2_24LCD_V06	<<> P2_24LCD_V06	R14
6	P2_25LCD_V07	<<> P2_25LCD_V07	H11
6	P2_26ENET_PHY_RSTn	<<> P2_26ENET_PHY_RSTn	E13
6	P2_27CT_RSTn	<<> P2_27CT_RSTn	H14
6	P2_28LCD_V010	<<> P2_28LCD_V010	G11
6	P2_29LCD_V011	<<> P2_29LCD_V011	F12
6	P2_30LCD_V012	<<> P2_30LCD_V012	D14
6	P2_31LCD_V013	<<> P2_31LCD_V013	D14

U22E

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U22F			
6	P3_0LCD_V014_PDM0_CLK	<<> P3_0LCD_V014_PDM0_CLK	D12
6	P3_1LCD_V015_PDM0_DATA	<<> P3_1LCD_V015_PDM0_DATA	D11
6	P3_2FC0_MISOCT1MAT2	<<> P3_2FC0_MISOCT1MAT2	C10
6	P3_3USH_LED2	<<> P3_3USH_LED2	A13
6	P3_4ACCL_INTR	<<> P3_4ACCL_INTR	B11
6	P3_5LCD_V019	<<> P3_5LCD_V019	C9
6	P3_6LCD_V020	<<> P3_6LCD_V020	B10
6	P3_7LCD_V021	<<> P3_7LCD_V021	B8
6	P3_8LCD_V022	<<> P3_8LCD_V022	C7
6	P3_9LCD_V023	<<> P3_9LCD_V023	C7
6	P3_10CT3MAT0	<<> P3_10CT3MAT0	A3
6	P3_11MCLK_PMOD2_GPI0	<<> P3_11MCLK_PMOD2_GPI0	L2
6	P3_12CLKOUT	<<> P3_12CLKOUT	H4
5.6	P3_13BRIDGE_GPI0_USR_LED2	<<> P3_13BRIDGE_GPI0_USR_LED2	H4
6	P3_14CT3MAT1_USR_LED1	<<> P3_14CT3MAT1_USR_LED1	E3
6	P3_15FC0_MOSI	<<> P3_15FC0_MOSI	D2
6	P3_16FC0_MOSI	<<> P3_16FC0_MOSI	M1
3.6	P3_17FC0_MOSI	<<> P3_17FC0_MOSI	M6
6	P3_18CAN0_H0	<<> P3_18CAN0_H0	J3
6	P3_19CAN0_R0	<<> P3_19CAN0_R0	N2
6	P3_20FC0_SCK	<<> P3_20FC0_SCK	P8
6	P3_21FC0_MISO	<<> P3_21FC0_MISO	N5
6	P3_22FC0_SDAK	<<> P3_22FC0_SDAK	C5
6	P3_23FC0_SCLK	<<> P3_23FC0_SCLK	E2
6	P3_24FC0_SDAK	<<> P3_24FC0_SDAK	F9
6	P3_25EMC_A14	<<> P3_25EMC_A14	K5
6	P3_26FC0_RXD	<<> P3_26FC0_RXD	P14
6	P3_27FC0_TXD	<<> P3_27FC0_TXD	M11
6	P3_28FC0_RTS_SDAK	<<> P3_28FC0_RTS_SDAK	L13
6	P3_29FC0_RTS_SCLK	<<> P3_29FC0_RTS_SCLK	K13
6	P3_30FC0_SSELN0	<<> P3_30FC0_SSELN0	J14
6	P3_31_SCT0_OUTS_CT3MAT2	<<> P3_31_SCT0_OUTS_CT3MAT2	J14

U22F

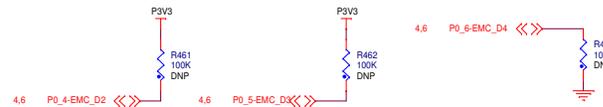
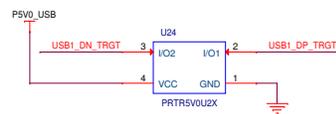
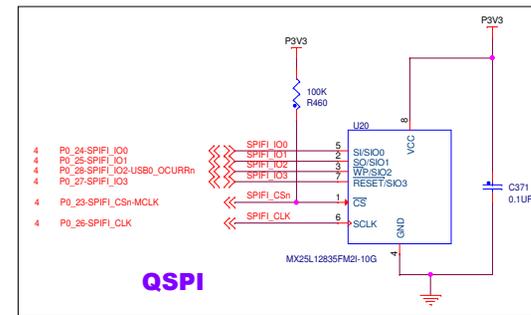
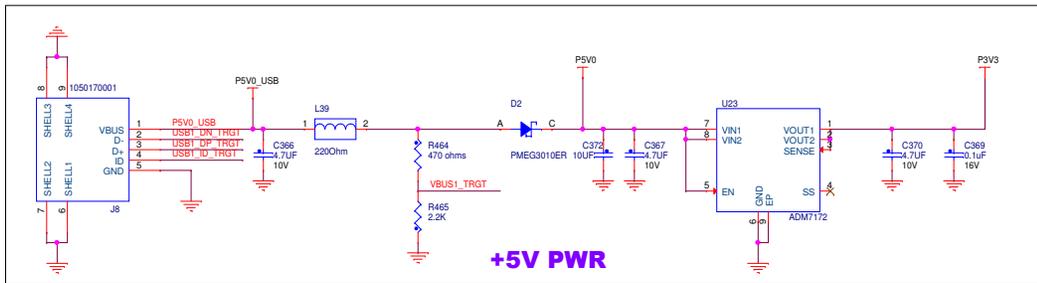
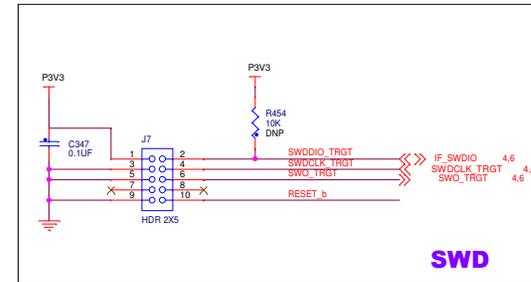
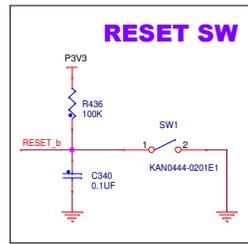
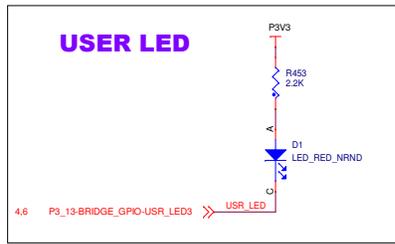
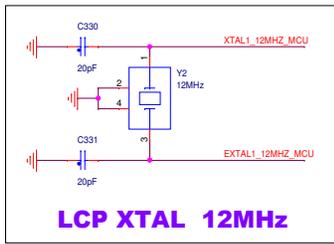
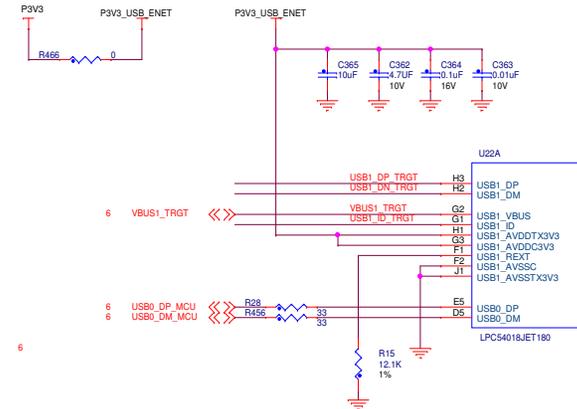
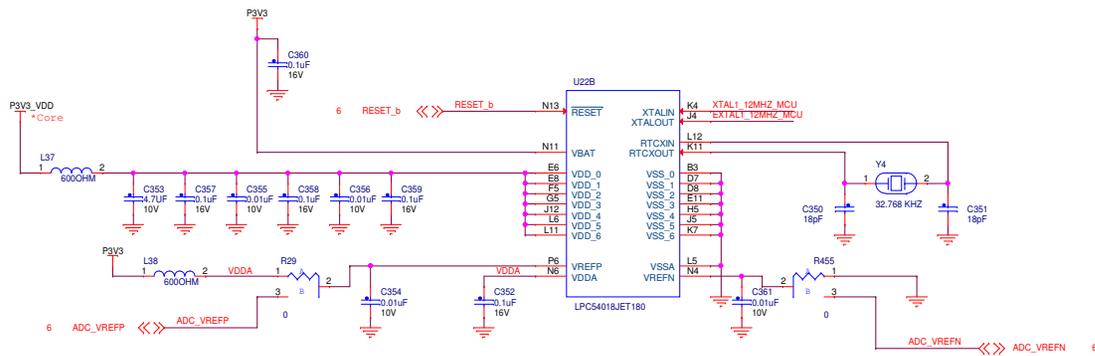
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U22G			
6	P4_0CT_INTR	<<> P4_0CT_INTR	H13
6	P4_1F08_I2S_TX_SCK	<<> P4_1F08_I2S_TX_SCK	G14
6	P4_2F08_I2S_TX_DATA	<<> P4_2F08_I2S_TX_DATA	F13
6	P4_3F08_I2S_TX_WS	<<> P4_3F08_I2S_TX_WS	F13
6	P4_4CT3MAT3	<<> P4_4CT3MAT3	D9
6	P4_5F09_SSELN1	<<> P4_5F09_SSELN1	D10
6	P4_6ENET_TXD0_USBI_OVRCURR	<<> P4_6ENET_TXD0_USBI_OVRCURR	A14
6	P4_7ENET_TXD0_USBI_OVRCURR	<<> P4_7ENET_TXD0_USBI_OVRCURR	B14
6	P4_8ENET_TXD0_USBI_OVRCURR	<<> P4_8ENET_TXD0_USBI_OVRCURR	A12
6	P4_9ENET_TXD0_USBI_OVRCURR	<<> P4_9ENET_TXD0_USBI_OVRCURR	B9
6	P4_10ENET_TXD0_USBI_OVRCURR	<<> P4_10ENET_TXD0_USBI_OVRCURR	A6
6	P4_11ENET_TXD0_USBI_OVRCURR	<<> P4_11ENET_TXD0_USBI_OVRCURR	B6
6	P4_12ENET_TXD0_USBI_OVRCURR	<<> P4_12ENET_TXD0_USBI_OVRCURR	B6
6	P4_13ENET_TXD0_USBI_OVRCURR	<<> P4_13ENET_TXD0_USBI_OVRCURR	A4
6	P4_14ENET_TXD0_USBI_OVRCURR	<<> P4_14ENET_TXD0_USBI_OVRCURR	A4
6	P4_15ENET_TXD0_USBI_OVRCURR	<<> P4_15ENET_TXD0_USBI_OVRCURR	C4

U22G

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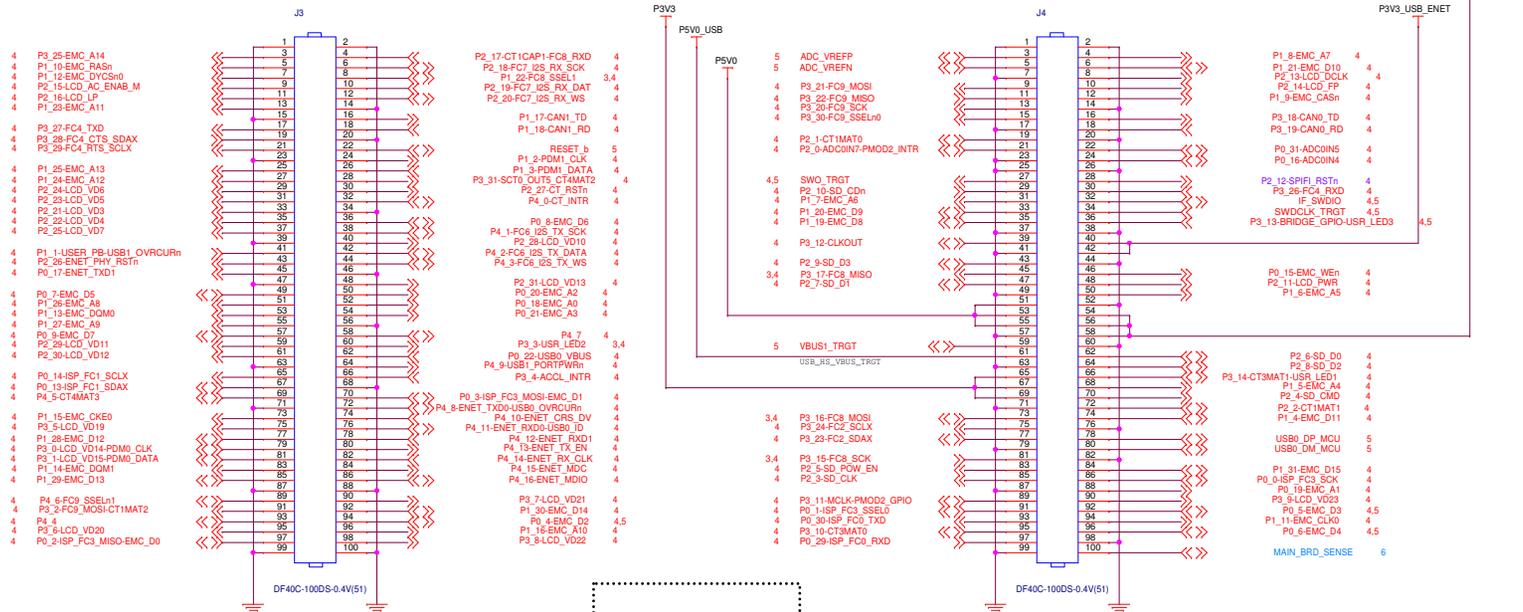
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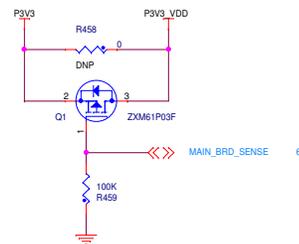
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WiFi Module





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