LPC54018 UART Server Board

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Revision History

Rev. Code	Date	Description
X1	07/25/2019	Rev X1 Draft Version Release.

GENERAL DESIGN NOTES

1. Unless Otherwise Specified:
   All resistors are in ohms, 5%, 1/16 Watt
   All capacitors are in uF, 20%, 50V
   All voltages are DC

2. Critical compenents that require tolerances tighter than listed in Note 1are labeled with required tolerance on schematic. Non-critical components may be filled with tighter tolerance parts for BOM consolidation purposes, but may be changed to meet the general tolerances of Note 1 if desired.

3. Interrupted lines coded with the same letter or letter combinations are electrically connected.

4. Device type number is for reference only. The number varies with the manufacturer.

5. Special signal usage:
   _B or 'n' Denotes - Active-Low Signal
   <> or [] Denotes - Vectored Signals

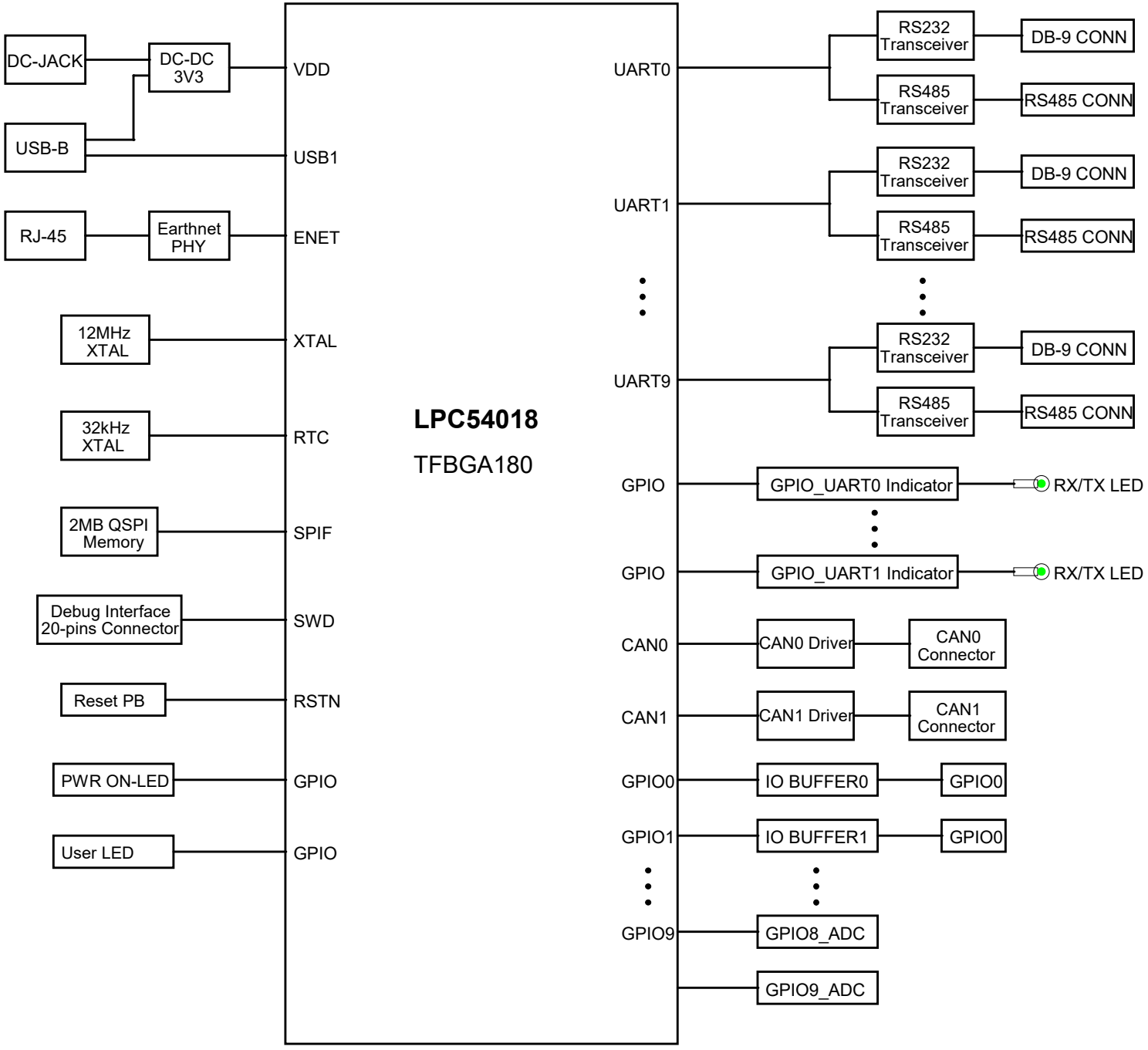
6. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

Microcontroller Product Group
6501 William Cannon Drive West
Austin, TX 78735-8598

ICAP Classification: CP: X IUO: PUBI:

Designer: Tony Li	Drawing Title: LPC UART Server Board		
Drawn by: Tony Li	Page Title: Table of Contents, Revisions		
Approved: CK Phua	Size C	Document Number SCH-XXXXX, PDF: SPF-XXXXX	Rev A
	Date: Friday, August 02, 2019	Sheet 1 of 10	

BLOCK DIAGRAM



ICAP Classification:	CP: X	IUO: PUBI:
Drawing Title:	LPC UART Server Board	
Page Title:	BLOCK DIAGRAM	
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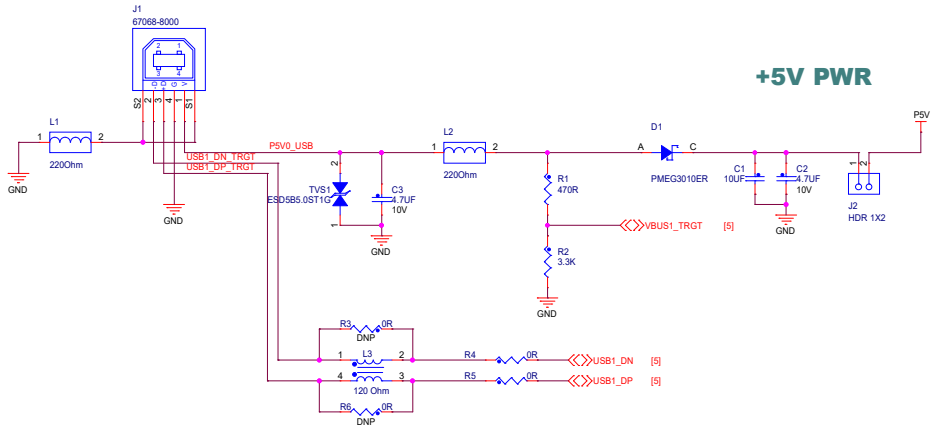
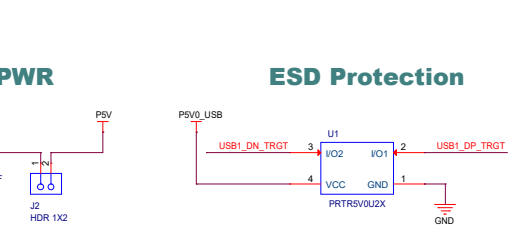
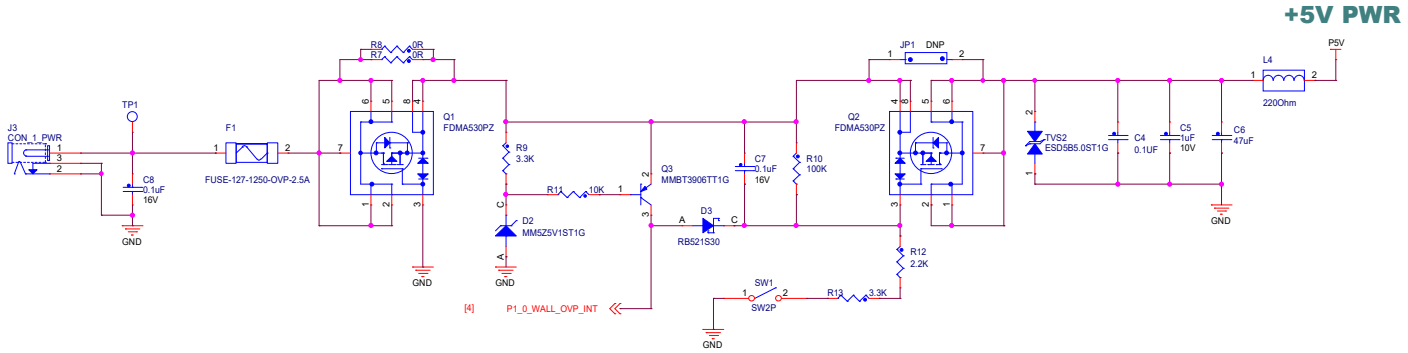
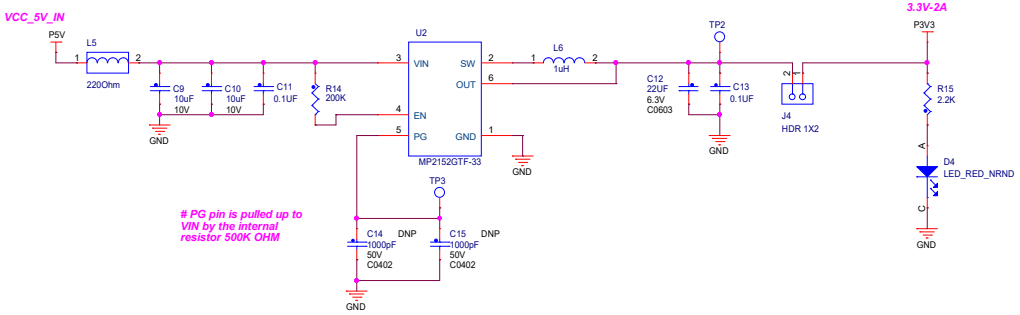
Power Supply









ICAP Classification:	CP: X	IUO:	PUBI: ___
Drawing Title:	LPC UART SERVER BOARD		
Page Title:	PWR		
Size: C	Document Number: SCH-XXXXX, PDF: SPF-XXXXX		Rev: A
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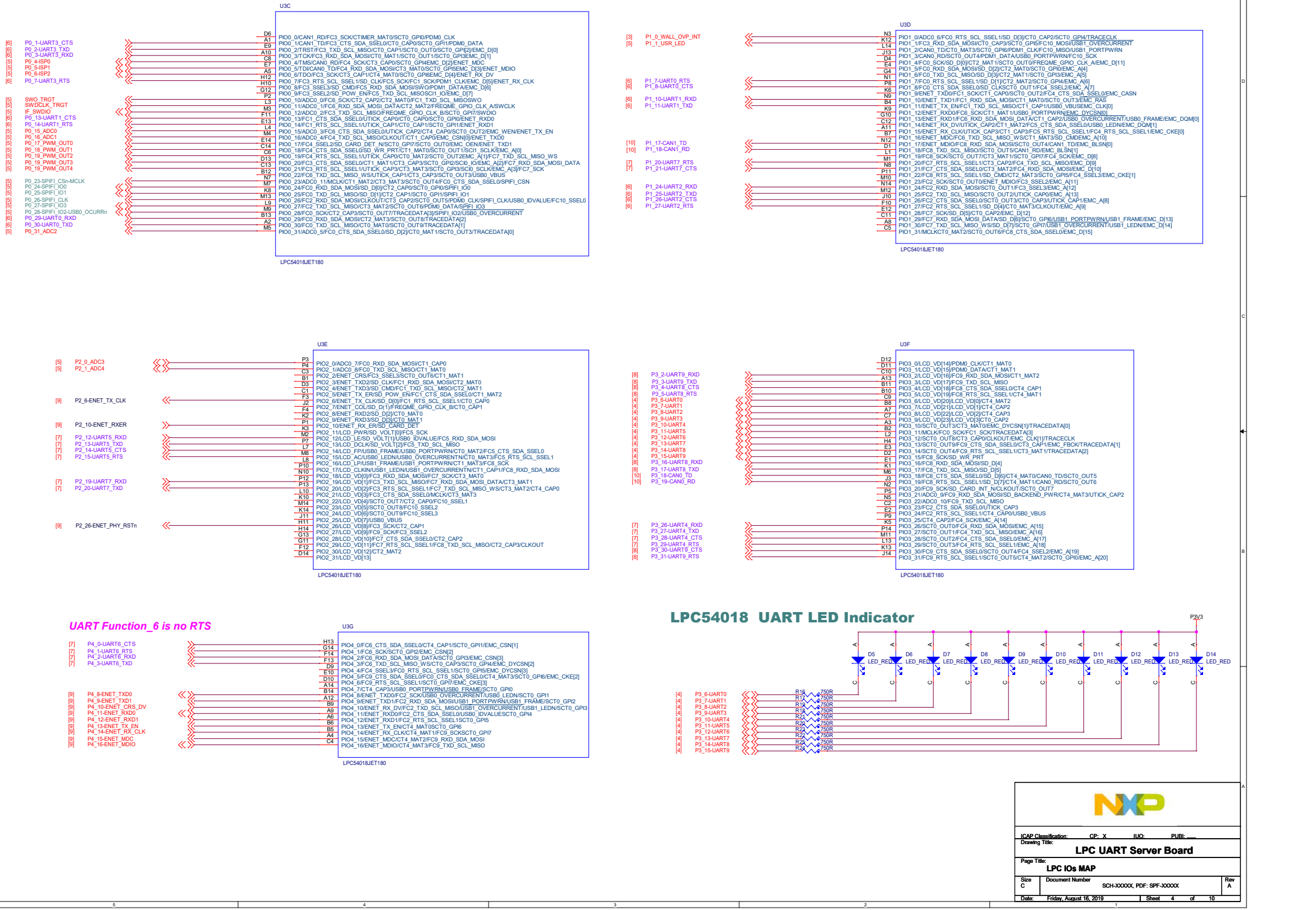
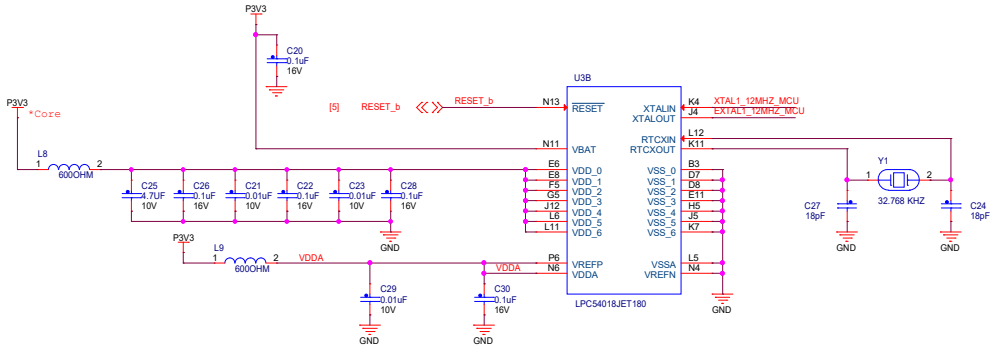
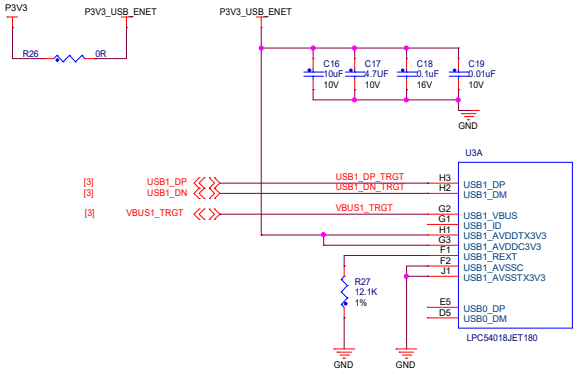
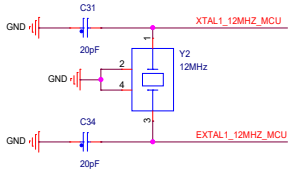

U3C
[6] P0_1-UART3_CTS
[6] P0_2-UART3_TXD
[6] P0_3-UART3_RXD
[5] P0_4-ISP0
[5] P0_5-ISP1
[5] P0_6-ISP2
[6] P0_7-UART3_RTS
[5] SWO_TRGT
[5] SWDCLK_TRGT
[5] IF_SWDIO
[6] P0_13-UART1_CTS
[6] P0_14-UART1_RTS
[5] P0_15_ADC0
[5] P0_16_ADC1
[5] P0_17_PWM_OUT0
[5] P0_18_PWM_OUT1
[5] P0_19_PWM_OUT2
[5] P0_19_PWM_OUT3
[5] P0_19_PWM_OUT4
[5] P0_23-SPIFI_CSn-MCLK
[5] P0_24-SPIFI_IO0
[5] P0_25-SPIFI_IO1
[5] P0_26-SPIFI_CLK
[5] P0_27-SPIFI_IO3
[5] P0_28-SPIFI_IO2-USB0_OCURRn
[6] P0_29-UART0_RXD
[6] P0_30-UART0_TXD
[5] P0_31_ADC2
D6 A1 E9 A10 C8 E7 A5 H12 H10 G12 P2 L3 M3 F11 E13 L4 M4 E14 C14 C6 D13 C13 B12 N7 M7 K8 M13 L9 M6 B13 A2 M5
PIO0_0/CAN1_RD/FC3_SCK/CTIMER_MAT0/SCT0_GPI0/PDM0_CLK
PIO0_1/CAN1_TD/FC3_CTS_SDA_SSEL0/CT0_CAP0/SCT0_GPI1/PDM0_DATA
PIO0_2/TRST/FC3_TXD_SCL_MISO/CT0_CAP1/SCT0_OUT0/SCT0_GPI[2]/EMC_D[0]
PIO0_3/TCK/FC3_RXD_SDA_MOSI/CT0_MAT1/SCT0_OUT1/SCT0_GPI3/EMC_D[1]
PIO0_4/TMS/CAN0_RD/FC4_SCK/CT3_CAP0/SCT0_GPI4/EMC_D[2]/ENET_MDC
PIO0_5/TDI/CAN0_TD/FC4_RXD_SDA_MOSI/CT3_MAT0/SCT0_GPI5/EMC_D[3]/ENET_MDIO
PIO0_6/TDO/FC3_SCK/CT3_CAP1/CT4_MAT0/SCT0_GPI6/EMC_D[4]/ENET_RX_DV
PIO0_7/FC3_RTS_SCL_SSEL1/SD_CLK/FC5_SCK/FC1_SCK/PDM1_CLK/EMC_D[5]/ENET_RX_CLK
PIO0_8/FC3_SSEL3/SD_CMD/FC5_RXD_SDA_MOSI/SWO/PDM1_DATA/EMC_D[6]
PIO0_9/FC3_SSEL2/SD_POW_EN/FC5_TXD_SCL_MISOSCI1_IO/EMC_D[7]
PIO0_10/ADC0_0/FC6_SCK/CT2_CAP2/CT2_MAT0/FC1_TXD_SCL_MISOSWO
PIO0_11/ADC0_1/FC6_RXD_SDA_MOSI_DATA/CT2_MAT2/FREQME_GPIO_CLK_A/SWCLK
PIO0_12/ADC0_2/FC3_TXD_SCL_MISO/FREQME_GPIO_CLK_B/SCT0_GPI7/SWDIO
PIO0_13/FC1_CTS_SDA_SSEL0/UTICK_CAP0/CT0_CAP0/SCT0_GPI0/ENET_RXD0
PIO0_14/FC1_RTS_SCL_SSEL1/UTICK_CAP1/CT0_CAP1/SCT0_GPI1/ENET_RXD1
PIO0_15/ADC0_3/FC6_CTS_SDA_SSEL0/UTICK_CAP2/CT4_CAP0/SCT0_OUT2/EMC_WEN/ENET_TX_EN
PIO0_16/ADC0_4/FC4_TXD_SCL_MISO/CLKOUT/CT1_CAP0/EMC_CSN[0]/ENET_TXD0
PIO0_17/FC4_SSEL2/SD_CARD_DET_N/SCT0_GPI7/SCT0_OUT0/EMC_OEN/ENET_TXD1
PIO0_18/FC4_CTS_SDA_SSEL0/SD_WR_PRT/CT1_MAT0/SCT0_OUT1/SCI1_SCLK/EMC_A[0]
PIO0_19/FC4_RTS_SCL_SSEL1/UTICK_CAP0/CT0_MAT2/SCT0_OUT2/EMC_A[1]/FC7_TXD_SCL_MISO_WS
PIO0_20/FC3_CTS_SDA_SSEL0/CT1_MAT1/CT3_CAP3/SCT0_GPI2/SCI0_IO/EMC_A[2]/FC7_RXD_SDA_MOSI_DATA
PIO0_21/FC3_RTS_SCL_SSEL1/UTICK_CAP3/CT3_MAT3/SCT0_GPI3/SCI0_SCLK/EMC_A[3]/FC7_SCK
PIO0_22/FC6_TXD_SCL_MISO_WS/UTICK_CAP1/CT3_CAP3/SCT0_OUT3/USB0_VBUS
PIO0_23/ADC0_11/MCLK/CT1_MAT2/CT3_MAT3/SCT0_OUT4/FC0_CTS_SDA_SSEL0/SPIFI_CSN
PIO0_24/FC0_RXD_SDA_MOSI/SD_D[0]/CT2_CAP0/SCT0_GPI0/SPIFI_IO0
PIO0_25/FC0_TXD_SCL_MISO/SD_D[1]/CT2_CAP1/SCT0_GPI1/SPIFI_IO1
PIO0_26/FC2_RXD_SDA_MOSI/CLKOUT/CT3_CAP2/SCT0_OUT5/PDM0_CLK/SPIFI_CLK/USB0_IDVALUE/FC10_SSEL0
PIO0_27/FC2_TXD_SCL_MISO/CT3_MAT2/SCT0_OUT6/PDM0_DATA/SPIFI_IO3
PIO0_28/FC0_SCK/CT2_CAP3/SCT0_OUT7/TRACEDATA[3]/SPIFI_IO2/USB0_OVERCURRENT
PIO0_29/FC0_RXD_SDA_MOSI/CT2_MAT3/SCT0_OUT8/TRACEDATA[2]
PIO0_30/FC0_TXD_SCL_MISO/CT3_MAT0/SCT0_OUT9/TRACEDATA[1]
PIO0_31/ADC0_5/FC0_CTS_SDA_SSEL0/SD_D[2]/CT0_MAT1/SCT0_OUT3/TRACEDATA[0]
LPC54018JET180
U3D
[3] P1_0_WALL_OVP_INT
[5] P1_1_USR_LED
[6] P1_7-UART0_RTS
[6] P1_8-UART0_CTS
[6] P1_10-UART1_RXD
[6] P1_11-UART1_TXD
[10] P1_17-CAN1_TD
[10] P1_18-CAN1_RD
[7] P1_20-UART7_RTS
[7] P1_21-UART7_CTS
[6] P1_24-UART2_RXD
[6] P1_25-UART2_TXD
[6] P1_26-UART2_CTS
[6] P1_27-UART2_RTS
N3 K12 L14 J13 D4 E4 G4 N1 P8 K6 N9 B4 K9 G10 C12 A11 B7 N12 D1 L1 M1 N8 P11 M10 N14 M12 J10 F10 E12 C11 A8 C5
PIO1_0/ADC0_6/FC0_RTS_SCL_SSEL1/SD_D[3]/CT0_CAP2/SCT0_GPI4/TRACECLK
PIO1_1/FC3_RXD_SDA_MOSI/CT0_CAP3/SCT0_GPI5/FC10_MOSI/USB1_OVERCURRENT
PIO1_2/CAN0_TD/CT0_MAT3/SCT0_GPI6/PDM1_CLK/FC10_MISO/USB1_PORTPWRN
PIO1_3/CAN0_RD/SCT0_OUT4/PDM1_DATA/USB0_PORTPWRN/FC10_SCK
PIO1_4/FC0_SCK/SD_D[0]/CT2_MAT1/SCT0_OUT0/FREQME_GPIO_CLK_A/EMC_D[11]
PIO1_5/FC0_RXD_SDA_MOSI/SD_D[2]/CT2_MAT0/SCT0_GPI0/EMC_A[4]
PIO1_6/FC0_TXD_SCL_MISO/SD_D[3]/CT2_MAT1/SCT0_GPI3/EMC_A[5]
PIO1_7/FC0_RTS_SCL_SSEL1/SD_D[1]/CT2_MAT2/SCT0_GPI4/EMC_A[6]
PIO1_8/FC0_CTS_SDA_SSEL0/SD_CLKSCT0_OUT1/FC4_SSEL2/EMC_A[7]
PIO1_9/ENET_TXD0/FC1_SCK/CT1_CAP0/SCT0_OUT2/FC4_CTS_SDA_SSEL0/EMC_CASN
PIO1_10/ENET_TXD1/FC1_RXD_SDA_MOSI/CT1_MAT0/SCT0_OUT3/EMC_RAS
PIO1_11/ENET_TX_EN/FC1_TXD_SCL_MISO/CT1_CAP1/USB0_VBUSEMC_CLK[0]
PIO1_12/ENET_RXD0/FC6_SCK/CT1_MAT1/USB0_PORTPWRN/EMC_DYCSN[0]
PIO1_13/ENET_RXD1/FC6_RXD_SDA_MOSI_DATA/CT1_CAP2/USB0_OVERCURRENT/USB0_FRAME/EMC_DQM[0]
PIO1_14/ENET_RX_DV/UTICK_CAP2/CT1_MAT2/FC5_CTS_SDA_SSEL0/USB0_LEDN/EMC_DQM[1]
PIO1_15/ENET_RX_CLK/UTICK_CAP3/CT1_CAP3/FC5_RTS_SCL_SSEL1/FC4_RTS_SCL_SSEL1/EMC_CKE[0]
PIO1_16/ENET_MDC/FC6_TXD_SCL_MISO_WS/CT1_MAT3/SD_CMDEMC_A[10]
PIO1_17/ENET_MDIO/FC8_RXD_SDA_MOSI/SCT0_OUT4/CAN1_TD/EMC_BLSN[0]
PIO1_18/FC8_TXD_SCL_MISO/SCT0_OUT5/CAN1_RD/EMC_BLSN[1]
PIO1_19/FC8_SCK/SCT0_OUT7/CT3_MAT1/SCT0_GPI7/FC4_SCK/EMC_D[8]
PIO1_20/FC7_RTS_SCL_SSEL1/CT3_CAP2/FC4_TXD_SCL_MISO/EMC_D[9]
PIO1_21/FC7_CTS_SDA_SSEL0/CT3_MAT2/FC4_RXD_SDA_MOSI/EMC_D[10]
PIO1_22/FC8_RTS_SCL_SSEL1/SD_CMD/CT2_MAT3/SCT0_GPI5/FC4_SSEL3/EMC_CKE[1]
PIO1_23/FC2_SCK/SCT0_OUT0/ENET_MDIO/FC3_SSEL2/EMC_A[11]
PIO1_24/FC2_RXD_SDA_MOSI/SCT0_OUT1/FC3_SSEL3/EMC_A[12]
PIO1_25/FC2_TXD_SCL_MISO/SCT0_OUT2/UTICK_CAP0/EMC_A[13]
PIO1_26/FC2_CTS_SDA_SSEL0/SCT0_OUT3/CT0_CAP3/UTICK_CAP1/EMC_A[8]
PIO1_27/FC2_RTS_SCL_SSEL1/SD_D[4]/CT0_MAT3/CLKOUT/EMC_A[9]
PIO1_28/FC7_SCK/SD_D[5]/CT0_CAP2/EMC_D[12]
PIO1_29/FC7_RXD_SDA_MOSI_DATA/SD_D[6]/SCT0_GPI6/USB1_PORTPWRN/USB1_FRAME/EMC_D[13]
PIO1_30/FC7_TXD_SCL_MISO_WS/SD_D[7]/SCT0_GPI7/USB1_OVERCURRENT/USB1_LEDN/EMC_D[14]
PIO1_31/MCLKCT0_MAT2/SCT0_OUT6/FC8_CTS_SDA_SSEL0/EMC_D[15]
LPC54018JET180
U3E
[5] P2_0_ADC3
[5] P2_1_ADC4
[9] P2_6-ENET_TX_CLK
[9] P2_10-ENET_RXER
[7] P2_12-UART5_RXD
[7] P2_13-UART5_TXD
[7] P2_14-UART5_CTS
[7] P2_15-UART5_RTS
[7] P2_19-UART7_RXD
[7] P2_20-UART7_TXD
[9] P2_26-ENET_PHY_RSTn
P3 P4 C3 B1 D3 C1 F3 J2 F4 K2 P1 K3 M2 P7 L7 M8 L8 P10 N10 P12 P13 L10 K10 M14 K14 J11 H11 H14 G13 G11 F12 D14
PIO2_0/ADC0_7/FC0_RXD_SDA_MOSI/CT1_CAP0
PIO2_1/ADC0_8/FC0_TXD_SCL_MISO/CT1_MAT0
PIO2_2/ENET_CRS/FC3_SSEL3/SCT0_OUT6/CT1_MAT1
PIO2_3/ENET_TXD2/SD_CLK/FC1_RXD_SDA_MOSI/CT2_MAT0
PIO2_4/ENET_TXD3/SD_CMD/FC1_TXD_SCL_MISO/CT2_MAT1
PIO2_5/ENET_TX_ER/SD_POW_EN/FC1_CTS_SDA_SSEL0/CT1_MAT2
PIO2_6/ENET_TX_CLK/SD_D[0]/FC1_RTS_SCL_SSEL1/CT0_CAP0
PIO2_7/ENET_COL/SD_D(1)/FREQME_GPIO_CLK_B/CT0_CAP1
PIO2_8/ENET_RXD2/SD_D[2]/CT0_MAT0
PIO2_9/ENET_RXD3/SD_D[3]/CT0_MAT1
PIO2_10/ENET_RX_ER/SD_CARD_DET
PIO2_11/LCD_PWR/SD_VOLT[0]/FC5_SCK
PIO2_12/LCD_LE/SD_VOLT[1]/USB0_IDVALUE/FC5_RXD_SDA_MOSI
PIO2_13/LCD_DCLK/SD_VOLT[2]/FC5_TXD_SCL_MISO
PIO2_14/LCD_FP/USB0_FRAME/USB0_PORTPWRN/CT0_MAT2/FC5_CTS_SDA_SSEL0
PIO2_15/LCD_AC/USB0_LEDN/USB0_OVERCURRENTN/CT0_MAT3/FC5_RTS_SCL_SSEL1
PIO2_16/LCD_LP/USB1_FRAME/USB1_PORTPWRN/CT1_MAT3/FC8_SCK
PIO2_17/LCD_CLKIN/USB1_LEDN/USB1_OVERCURRENTN/CT1_CAP1/FC8_RXD_SDA_MOSI
PIO2_18/LCD_VD[0]/FC3_RXD_SDA_MOSI/FC7_SCK/CT3_MAT0
PIO2_19/LCD_VD[1]/FC3_TXD_SCL_MISO/FC7_RXD_SDA_MOSI_DATA/CT3_MAT1
PIO2_20/LCD_VD[2]/FC3_RTS_SCL_SSEL1/FC7_TXD_SCL_MISO_WS/CT3_MAT2/CT4_CAP0
PIO2_21/LCD_VD[3]/FC3_CTS_SDA_SSEL0/MCLK/CT3_MAT3
PIO2_22/LCD_VD[4]/SCT0_OUT7/CT2_CAP0/FC10_SSEL1
PIO2_23/LCD_VD[5]/SCT0_OUT8/FC10_SSEL2
PIO2_24/LCD_VD[6]/SCT0_OUT9/FC10_SSEL3
PIO2_25/LCD_VD[7]/USB0_VBUS
PIO2_26/LCD_VD[8]/FC3_SCK/CT2_CAP1
PIO2_27/LCD_VD[9]/FC9_SCK/FC3_SSEL2
PIO2_28/LCD_VD[10]/FC7_CTS_SDA_SSEL0/CT2_CAP2
PIO2_29/LCD_VD[11]/FC7_RTS_SCL_SSEL1/FC8_TXD_SCL_MISO/CT2_CAP3/CLKOUT
PIO2_30/LCD_VD[12]/CT2_MAT2
PIO2_31/LCD_VD[13]
LPC54018JET180
U3F
[8] P3_2-UART9_RXD
[8] P3_3-UART9_TXD
[8] P3_4-UART8_CTS
[8] P3_5-UART8_RTS
[4] P3_6-UART0
[4] P3_7-UART1
[4] P3_8-UART2
[4] P3_9-UART3
[4] P3_10-UART4
[4] P3_11-UART5
[4] P3_12-UART6
[4] P3_13-UART7
[4] P3_14-UART8
[4] P3_15-UART9
[8] P3_16-UART8_RXD
[8] P3_17-UART8_TXD
[10] P3_18-CAN0_TD
[10] P3_19-CAN0_RD
[7] P3_26-UART4_RXD
[7] P3_27-UART4_TXD
[7] P3_28-UART4_CTS
[7] P3_29-UART4_RTS
[8] P3_30-UART9_CTS
[8] P3_31-UART9_RTS
D12 D11 C10 A13 B11 B10 C9 B8 A7 C7 A3 B2 L2 H4 E3 D2 E1 K1 M6 J3 N2 P5 N5 C2 E2 P9 K5 P14 M11 L13 K13 J14
PIO3_0/LCD_VD(14)/PDM0_CLK/CT1_MAT0
PIO3_1/LCD_VD(15)/PDM0_DATA/CT1_MAT1
PIO3_2/LCD_VD(16)/FC9_RXD_SDA_MOSI/CT1_MAT2
PIO3_3/LCD_VD(17)/FC9_TXD_SCL_MISO
PIO3_4/LCD_VD(18)/FC8_CTS_SDA_SSEL0/CT4_CAP1
PIO3_5/LCD_VD(19)/FC8_RTS_SCL_SSEL1/CT4_MAT1
PIO3_6/LCD_VD(20)/LCD_VD(0)/CT4_MAT2
PIO3_7/LCD_VD(21)/LCD_VD(1)/CT4_CAP2
PIO3_8/LCD_VD(22)/LCD_VD(2)/CT4_CAP3
PIO3_9/LCD_VD(23)/LCD_VD(3)/CT0_CAP2
PIO3_10/SCT0_OUT3/CT3_MAT0/EMC_DYCSN[1]/TRACEDATA[0]
PIO3_11/MCLK/FC0_SCK/FC1_SCK/TRACEDATA[3]
PIO3_12/SCT0_OUT8/CT3_CAP0/CLKOUT/EMC_CLK[1]/TRACECLK
PIO3_13/SCT0_OUT9/FC9_CTS_SDA_SSEL0/CT3_CAP1/EMC_FBCK/TRACEDATA[1]
PIO3_14/SCT0_OUT4/FC9_RTS_SCL_SSEL1/CT3_MAT1/TRACEDATA[2]
PIO3_15/FC8_SCK/SD_WR_PRT
PIO3_16/FC8_RXD_SDA_MOSI/SD_D[4]
PIO3_17/FC8_TXD_SCL_MISO/SD_D[5]
PIO3_18/FC8_CTS_SDA_SSEL0/SD_D[6]/CT4_MAT0/CAN0_TD/SCT0_OUT5
PIO3_19/FC8_RTS_SCL_SSEL1/SD_D[7]/CT4_MAT1/CAN0_RD/SCT0_OUT6
PIO3_20/FC9_SCK/SD_CARD_INT_N/CLKOUT/SCT0_OUT7
PIO3_21/ADC0_9/FC9_RXD_SDA_MOSI/SD_BACKEND_PWR/CT4_MAT3/UTICK_CAP2
PIO3_22/ADC0_10/FC9_TXD_SCL_MISO
PIO3_23/FC2_CTS_SDA_SSEL0/UTICK_CAP3
PIO3_24/FC2_RTS_SCL_SSEL1/CT4_CAP0/USB0_VBUS
PIO3_25/CT4_CAP2/FC4_SCK/EMC_A[14]
PIO3_26/SCT0_OUT0/FC4_RXD_SDA_MOSI/EMC_A[15]
PIO3_27/SCT0_OUT1/FC4_TXD_SCL_MISO/EMC_A[16]
PIO3_28/SCT0_OUT2/FC4_CTS_SDA_SSEL0/EMC_A[17]
PIO3_29/SCT0_OUT3/FC4_RTS_SCL_SSEL1/EMC_A[18]
PIO3_30/FC9_CTS_SDA_SSEL0/SCT0_OUT4/FC4_SSEL2/EMC_A[19]
PIO3_31/FC9_RTS_SCL_SSEL1/SCT0_OUT5/CT4_MAT2/SCT0_GPI0/EMC_A[20]
LPC54018JET180
UART Function_6 is no RTS
U3G
[7] P4_0-UART6_CTS
[7] P4_1-UART6_RTS
[7] P4_2-UART6_RXD
[7] P4_3-UART6_TXD
[9] P4_8-ENET_TXD0
[9] P4_9-ENET_TXD1
[9] P4_10-ENET_CRS_DV
[9] P4_11-ENET_RXD0
[9] P4_12-ENET_RXD1
[9] P4_13-ENET_TX_EN
[9] P4_14-ENET_RX_CLK
[9] P4_15-ENET_MDC
[9] P4_16-ENET_MDIO
H13 G14 F14 F13 D9 E10 D10 A14 B14 A12 B9 A9 A8 B6 B5 A4 C4
PIO4_0/FC6_CTS_SDA_SSEL0/CT4_CAP1/SCT0_GPI1/EMC_CSN[1]
PIO4_1/FC6_SCK/SCT0_GPI2/EMC_CSN[2]
PIO4_2/FC6_RXD_SDA_MOSI_DATA/SCT0_GPI3/EMC_CSN[3]
PIO4_3/FC6_TXD_SCL_MISO_WS/CT0_CAP3/SCT0_GPI4/EMC_DYCSN[2]
PIO4_4/FC4_SSEL3/FC0_RTS_SCL_SSEL1/SCT0_GPI5/EMC_DYCSN[3]
PIO4_5/FC9_CTS_SDA_SSEL0/FC0_CTS_SDA_SSEL0/CT4_MAT3/SCT0_GPI6/EMC_CKE[2]
PIO4_6/FC9_RTS_SCL_SSEL1/SCT0_GPI7/EMC_CKE[3]
PIO4_7/CT4_CAP3/USB0_PORTPWRN/USB0_FRAME/SCT0_GPI0
PIO4_8/ENET_TXD0/FC2_SCK/USB0_OVERCURRENT/USB0_LEDN/SCT0_GPI1
PIO4_9/ENET_TXD1/FC2_RXD_SDA_MOSI/USB1_PORTPWRN/USB1_FRAME/SCT0_GPI2
PIO4_10/ENET_RX_DV/FC2_TXD_SCL_MISO/USB1_OVERCURRENT/USB1_LEDN/SCT0_GPI3
PIO4_11/ENET_RXD0/FC2_CTS_SDA_SSEL0/USB0_IDVALUESCT0_GPI4
PIO4_12/ENET_RXD1/FC2_RTS_SCL_SSEL1SCT0_GPI5
PIO4_13/ENET_TX_EN/CT4_MAT0SCT0_GPI6
PIO4_14/ENET_RX_CLK/CT4_MAT1/FC9_SCKSCT0_GPI7
PIO4_15/ENET_MDC/CT4_MAT2/FC9_RXD_SDA_MOSI
PIO4_16/ENET_MDIO/CT4_MAT3/FC9_TXD_SCL_MISO
LPC54018JET180
LPC54018 UART LED Indicator
P3V3
D5 LED_RED D6 LED_RED D7 LED_RED D8 LED_RED D9 LED_RED D10 LED_RED D11 LED_RED D12 LED_RED D13 LED_RED D14 LED_RED
[4] P3_6-UART0
[4] P3_7-UART1
[4] P3_8-UART2
[4] P3_9-UART3
[4] P3_10-UART4
[4] P3_11-UART5
[4] P3_12-UART6
[4] P3_13-UART7
[4] P3_14-UART8
[4] P3_15-UART9
R16 750R R17 750R R19 750R R18 750R R21 750R R20 750R R22 750R R23 750R R25 750R R24 750R
ICAP Classification: CP: X IUO: PUBI:
Drawing Title:
LPC UART Server Board
Page Title:
LPC IOs MAP
Size C
Document Number SCH-XXXXX, PDF: SPF-XXXXX
Rev A
Date: Friday, August 16, 2019
Sheet 4 of 10

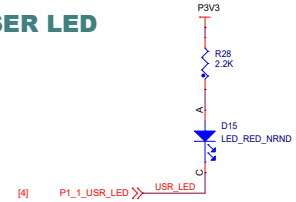




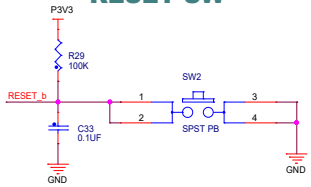
LCP XTAL 12MHz



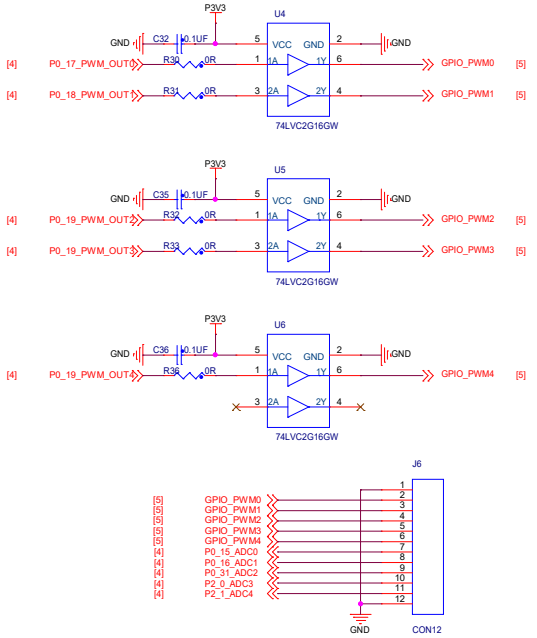
USER LED



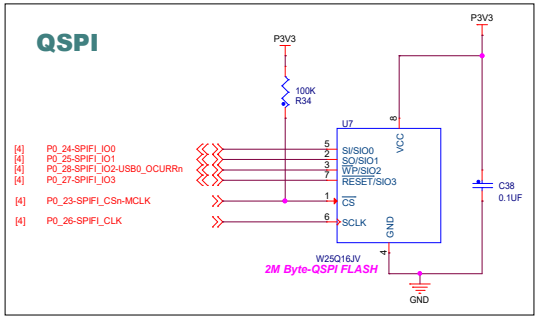
RESET SW



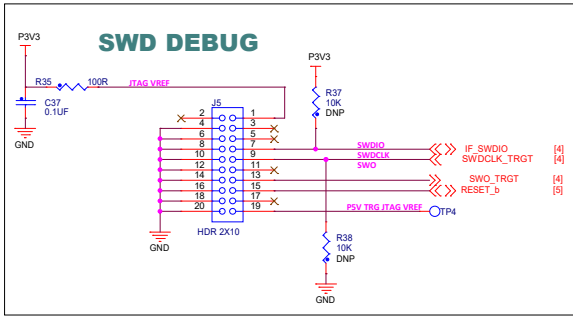
LPC54018 GPIO Buffer



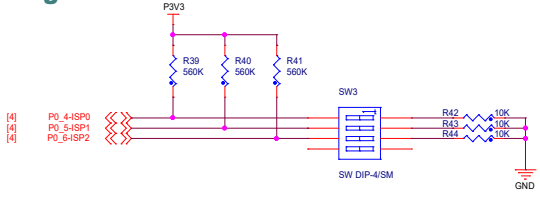
QSPI



SWD DEBUG



BOOT Settings



BOOT SETTINGS			
BOOT MODE	ISP2	ISP1	ISP0
RESERVED	1	0	0
SPIFI BOOT	0	1	1
USB0 ISP DFU	0	1	0
USB1 ISP DFU	0	0	1

ICAP Classification: CP: X IUO: PUBI:

Drawing Title: **LPC UART Server Board**

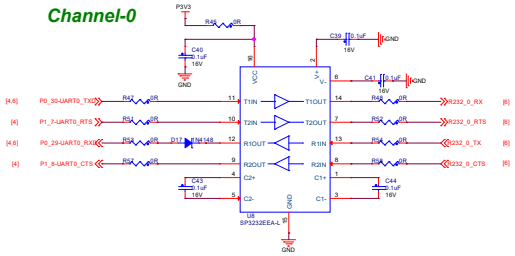
Page Title: **LPC INTERFACE 2**

Size	Document Number	Rev
C	SCH-XXXXX, PDF: SPF-XXXXX	A

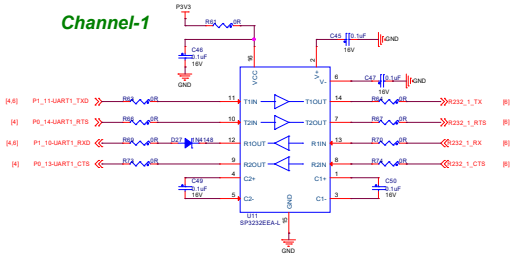
Date: Wednesday, August 07, 2019 Sheet 5 of 10

RS-232 Interface

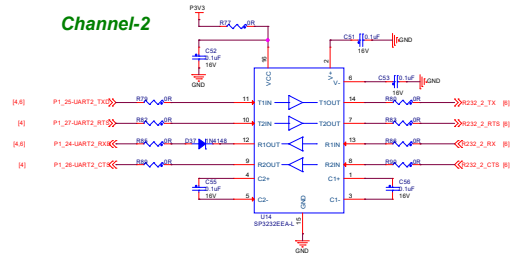
Channel-0



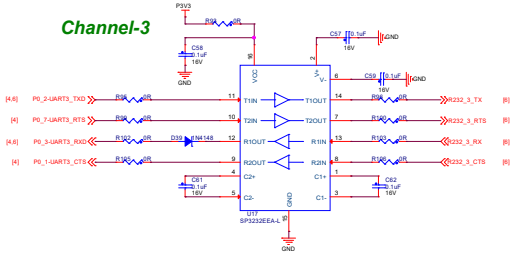
Channel-1



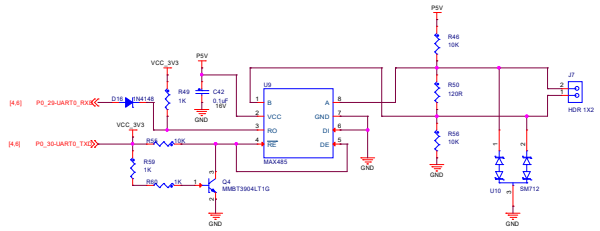
Channel-2

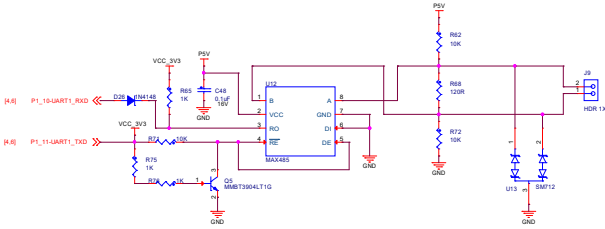


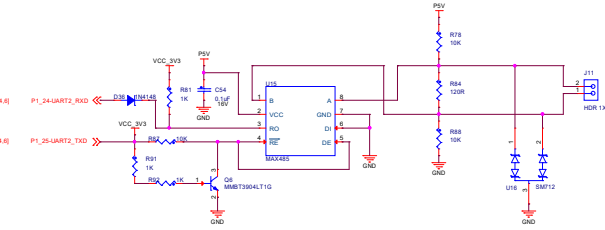
Channel-3

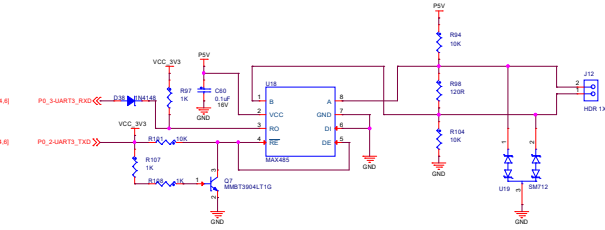


RS-485 Interface

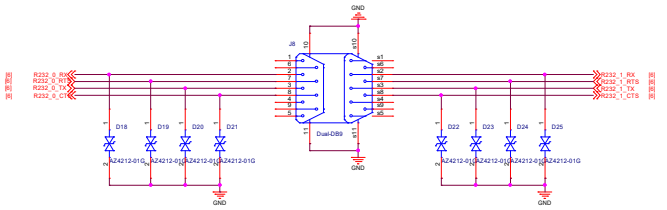


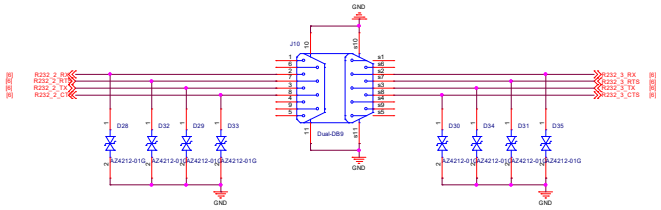






RS-232 Connector





NXP

ICAP Classification: CP: X IUO: PUBI:

Drawing Title:

LPC UART Server Board

Page Title:

RS232-485 INTERFACE-1

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D	SCH-XXXXX, PDF: SPF-XXXXX	A

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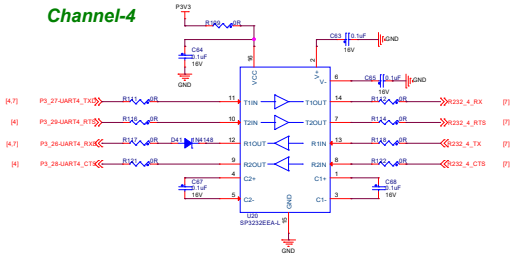
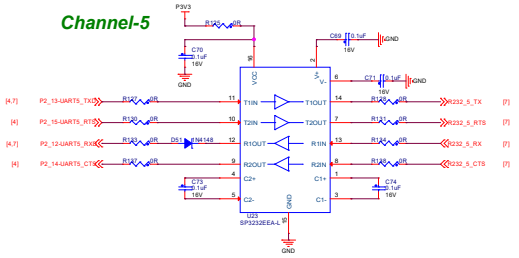
RS-232 Interface

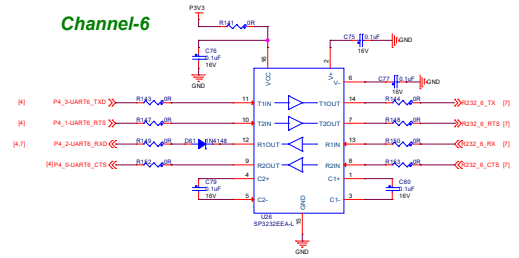
Channel-4



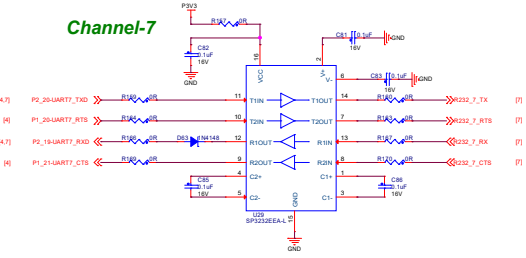
Channel-5



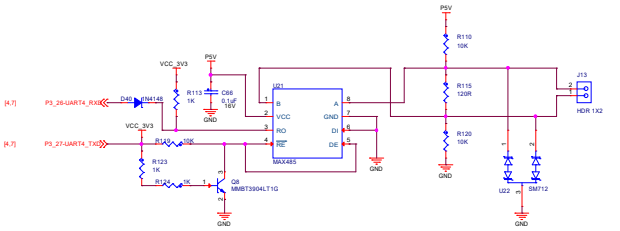
Channel-6

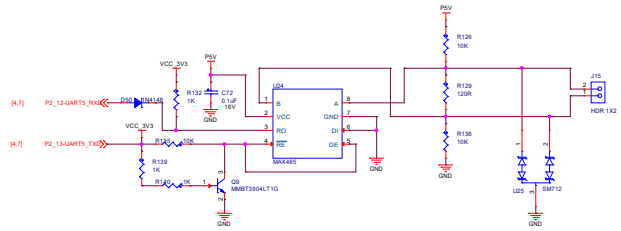


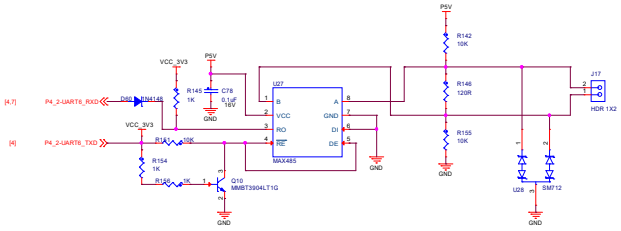
Channel-7

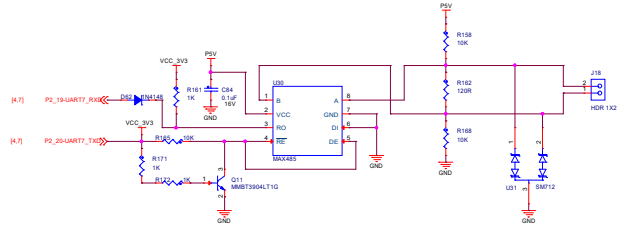


RS-485 Interface

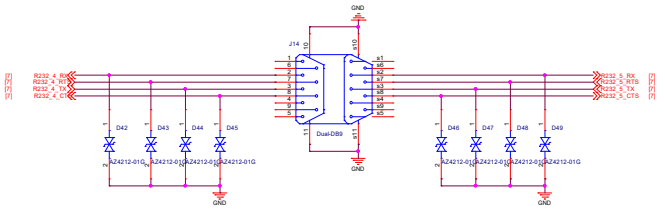


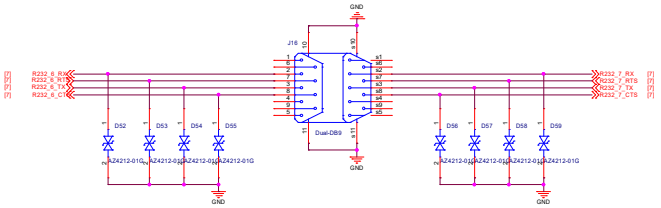






RS-232 Connector





NXP

ICAP Classification: CP: X IUO: PUBI:

Drawing Title:

LPC UART Server Board

Page Title:

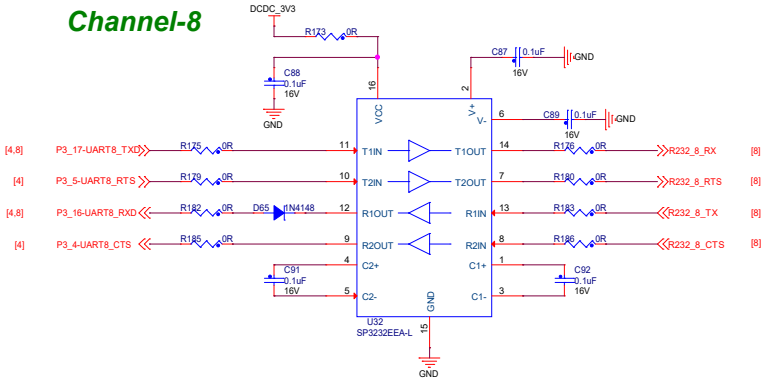
RS232-485 INTERFACE-2

Size	Document Number	Rev
D	SCH-XXXXX, PDF: SPF-XXXXX	A

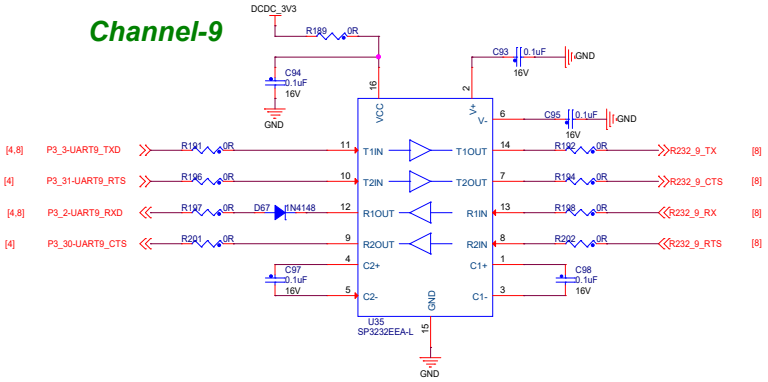
Date: Saturday, August 03, 2019 Sheet 7 of 10

RS-232 Interface

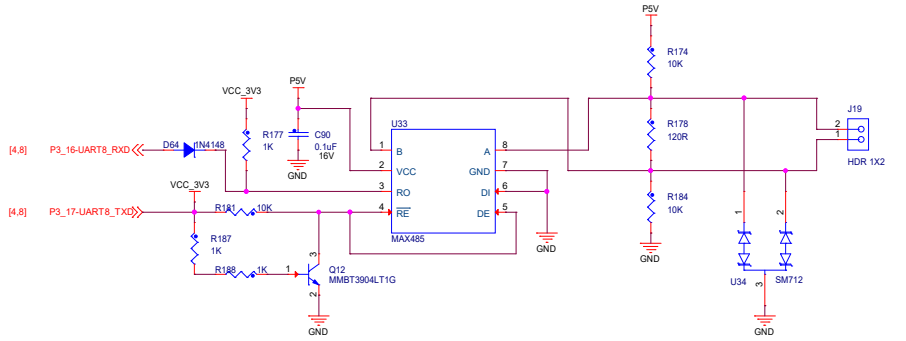
Channel-8

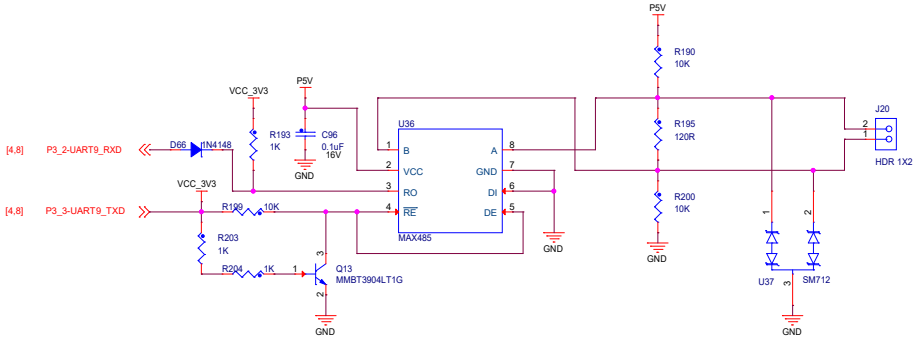


Channel-9

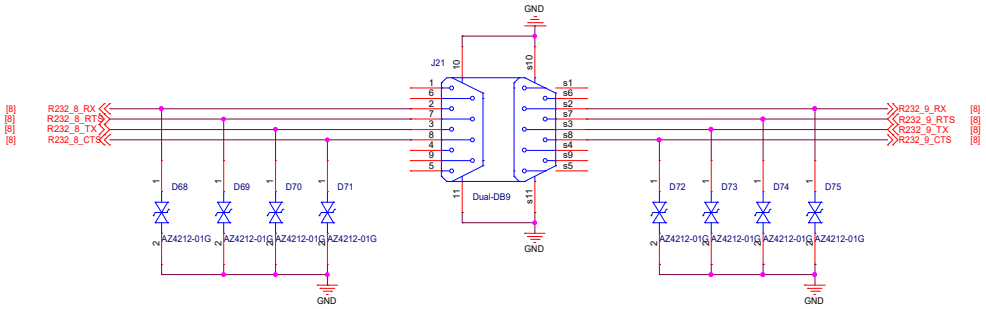


RS-485 Interface





RS-232 Connector



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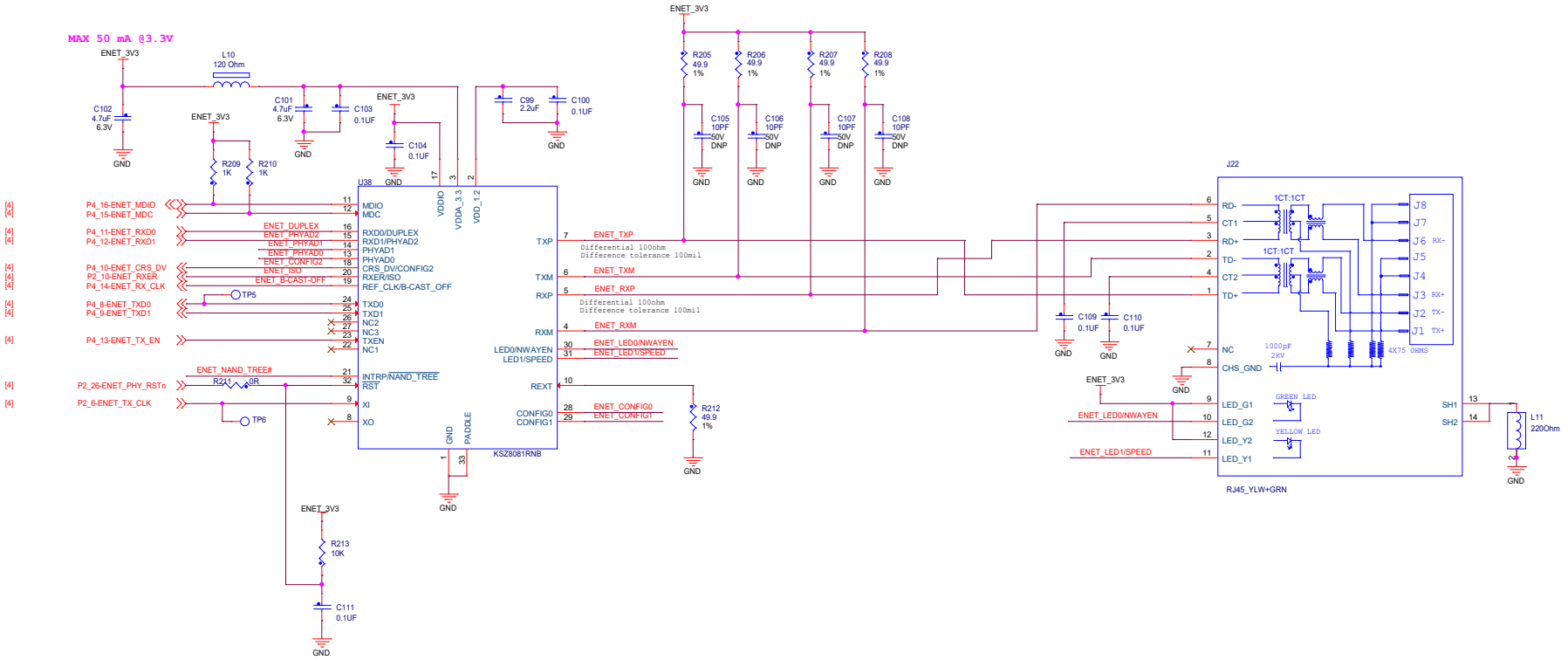
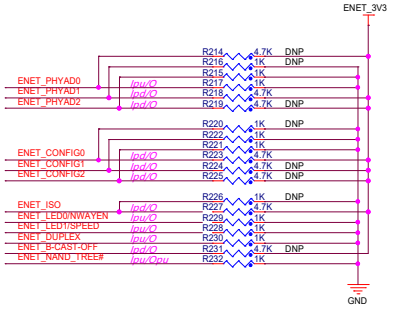
Drawing Title:	LPC UART Server Board		
Page Title:	RS232-485 INTERFACE-3		
Size: C	Document Number: SCH-XXXXX, PDF: SPF-XXXXX		Rev: A
Date: Wednesday, August 07, 2019	Sheet 8 of 10		

Ethernet Circuit



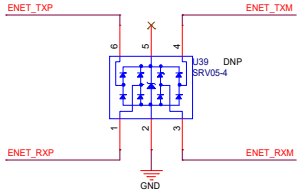
EARTNNET SETTING



# CFG	Description
PHYAD[2:0]	PHY ADDR 00-XXX (00010 DEFAULT)
CONFIG[2:0]	IF MODE 001 RMII 101 RMII Back-to-Back xxx Reserved-not used
ISO	ISOLATE mode Pull-up = Enable Pull-down (default) = Disable
SPEED	SPEED mode Pull-up (default) = 100Mbps Pull-down = 10Mbps

# CFG	Description
DUPLEX	DUPLEX mode Pull-up (default) = Half Duplex Pull-down = Full Duplex
NWAYEN	Nway Auto-Negotiation Pull-up (default) = Enable Pull-down = Disable
B_CAST_OFF	Broadcast Off - for PHY Address 0 Pull-up = PHY Address 0 set as unique PHY addr Pull-down (default) = PHY Address 0 set as broadcast PHY addr
NAND_TREE#	NAND Tree Mode Pull-up (default) = Disable Pull-down = Enable

ESD PROTECTION



ICAP Classification: CP: X IUO: PUBI: ___

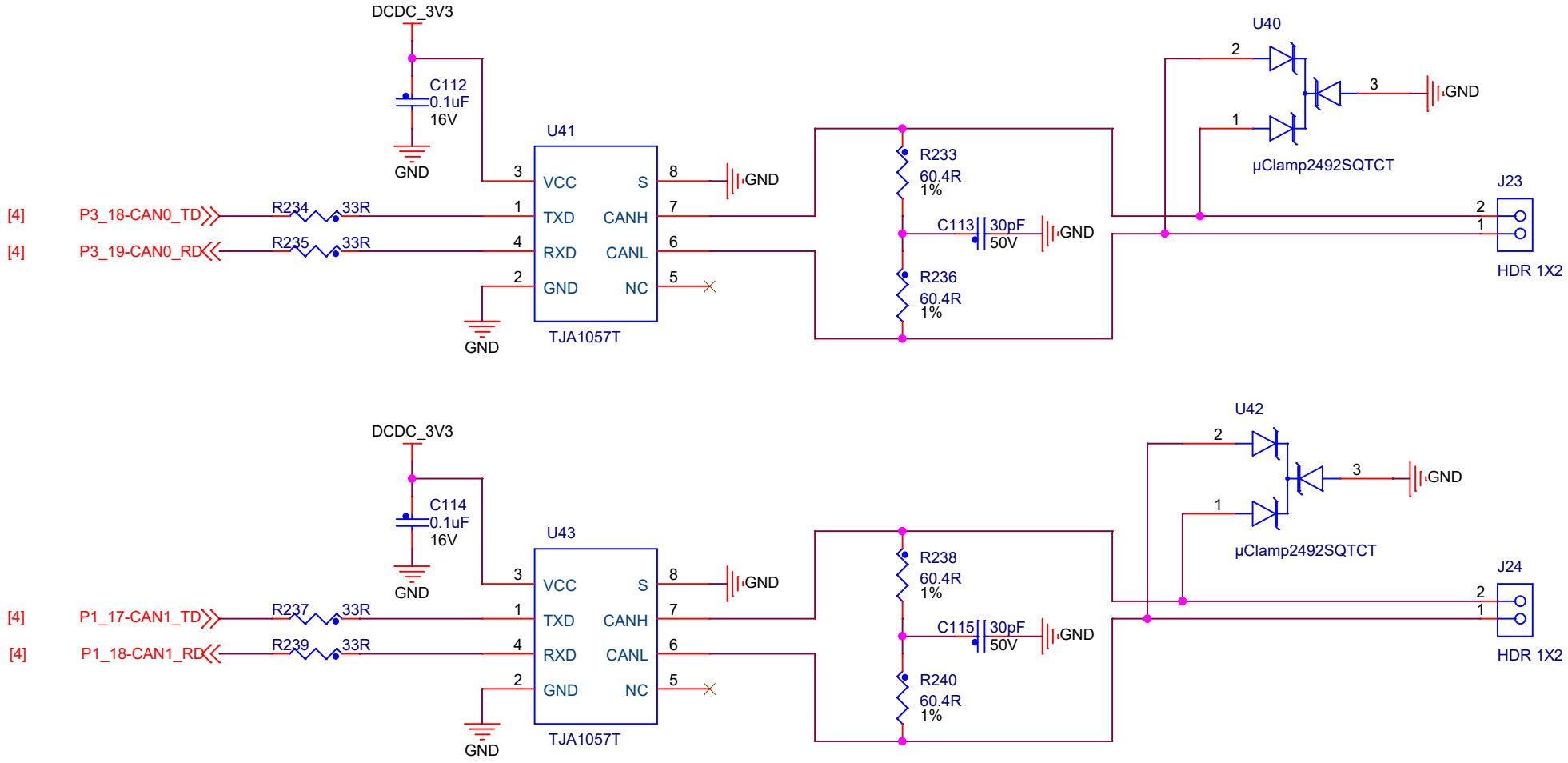
Drawing Title: **LPC UART Server Board**

Page Title: **EARTHNET**

Size	Document Number	Rev
C	SCH-XXXXX, PDF: SPF-XXXXX	A

Date: Sunday, August 04, 2019 Sheet 9 of 10

CAN Interface



ICAP Classification: Classification CP: IUO: PUBI:

Drawing Title:

LPC UART Server Board

Page Title:

CAN BUS

Size	Document Number	Rev
A	SCH-XXXXX PDF: SPF-XXXXX	X

Date: Tuesday, August 06, 2019 Sheet 10 of 10