JOSHUATREE EVB

Mates with JoshuaTree Daughter Cards

Revision History

Rev 1.0:
Initial Release

MICROCHIP

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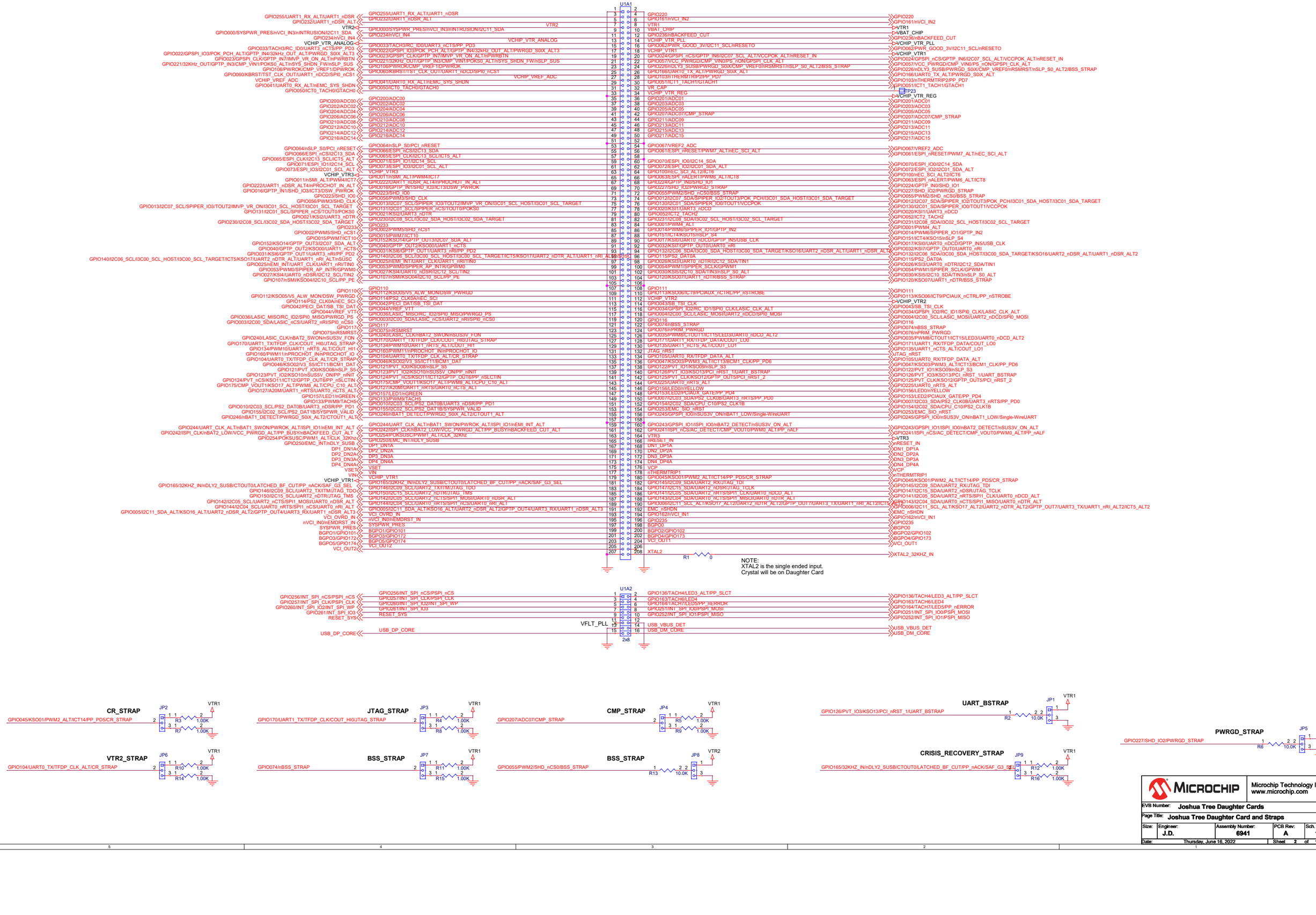
EVB Number: **Joshua Tree Daughter Cards**

Page Title: **JOSHUA TREE EVALUATION BOARD**

Size:	Engineer:	Assembly Number:	PCB Rev:	Sch. Rev:
	J.D.	6941	A	1.0

Date: Thursday, June 16, 2022 Sheet 1 of 17


U1A1
GPIO255/UART1_RX_ALT/UART1_nDSR
GPIO232/UART1_nDSR_ALT
VTR2
GPIO000/SYSPWR_PRES/nVCI_IN3/nINTRUSION/I2C11_SDA
GPIO234/nVCI_IN4
VCHIP_VTR_ANALOG
GPIO033/TACH3/RC_ID0/UART3_nCTS/PP_PD3
GPIO022/GPSPI_IO3/POK_PCH_ALT/GPTP_IN4/32kHz_OUT_ALT/PWRGD_S0IX_ALT3
GPIO023/GPSPI_CLK/GPTP_IN7/IMVP_VR_ON_ALT/nPWRBTN
GPIO221/32KHz_OUT/GPTP_IN3/CMP_VIN1/POKS0_ALT/nSYS_SHDN_FW/nSLP_SUS
GPIO106/PWROK/CMP_VREF1/DPWROK
GPIO060/KBRST/TST_CLK_OUT/UART1_nDCD/SPI0_nCS1
VCHIP_VREF_ADC
GPIO041/UART0_RX_ALT/nEMC_SYS_SHDN
GPIO050/IC10_TACH0/GTACH0
GPIO200/ADC00
GPIO202/ADC02
GPIO204/ADC04
GPIO206/ADC06
GPIO210/ADC08
GPIO212/ADC10
GPIO214/ADC12
GPIO216/ADC14
GPIO064/nSLP_S0/PCI_nRESET
GPIO066/ESPI_nCS/I2C13_SDA
GPIO065/ESPI_CLK/I2C13_SCL/IC15_ALT
GPIO071/ESPI_IO1/I2C14_SCL
GPIO073/ESPI_IO3/I2C01_SCL_ALT
VCHIP_VTR3
GPIO011/nSMI_ALT/PWM4/IC17
GPIO222/UART1_nDSR_ALT4/nPROCHOT_IN_ALT
GPIO016/GPTP_IN1/SHD_IO3/IC13/DSW_PWROK
GPIO223/SHD_IO0
GPIO056/PWM3/SHD_CLK
GPIO013/I2C07_SCL/SPIPER_IO3/TOUT2/IMVP_VR_ON/I3C01_SCL_HOST/I3C01_SCL_TARGET
GPIO131/I2C01_SCL/SPIPER_nCS/TOUT0/POKS0
GPIO021/KSI2/UART3_nDTR
GPIO230/I2C08_SCL/I3C02_SDA_HOST/I3C02_SDA_TARGET
GPIO233
GPIO002/PWM5/SHD_nCS1
GPIO015/PWM7/IC110
GPIO152/KSO14/GPTP_OUT3/I2C07_SDA_ALT
GPIO040/GPTP_OUT2/KSO00/UART1_nCTS
GPIO031/KSI6/GPTP_OUT1/UART3_nRI/PP_PD2
GPIO140/I2C06_SCL/I3C00_SCL_HOST/I3C00_SCL_TARGET/IC75
GPIO025/nEMI_INT/UART_CLK/UART1_nRI/TIN0
GPIO053/PWM0/SPIPER_AP_INTR/GPWM0
GPIO027/KSI4/UART0_nDSR/I2C12_SCL/TIN2
GPIO107/nSMI/KSO04/I2C10_SCL/PP_PE
GPIO110
GPIO112/KSO05/V5_ALW_MON/DSW_PWRGD
GPIO114/PS2_CLK0A/nEC_SCI
GPIO042/PECI_DAT/SB_TSI_DAT
GPIO044/VREF_VTT
GPIO036/LASIC_MISO/RC_ID2/SPI0_MISO/PWRGD_PS
GPIO003/I2C00_SDA/LASIC_nCS/UART2_nRI/SPI0_nCS0
GPIO117
GPIO075/nRSMRST
GPIO240/LASIC_CLK/nBAT2_SWON/nSUS3V_FON
GPIO170/UART1_TX/TFDP_CLK/COUT_HI0/JTAG_STRAP
GPIO134/PWM10/UART1_nRTS_ALT/COUT_HI1
GPIO160/PWM11/nPROCHOT_IN/nPROCHOT_IO
GPIO104/UART0_TX/TFDP_CLK_ALT/CR_STRAP
GPIO046/KSO02/V3_SS/IC11/BCM1_DAT
GPIO121/PVT_IO0/KSO08/nSLP_S5
GPIO123/PVT_IO2/KSO10/nSUS3V_ON/PP_nINIT
GPIO124/PVT_nCS/KSO11/IC712/GPTP_OUT6/PP_nSLCTIN
GPIO175/CMP_VOUT1/KSO17_ALT/PWM8_ALT/CPU_C10_ALT
GPIO127/A20M/UART1_nRTS/UART0_nCTS_ALT
GPIO157/LED1/nGREEN
GPIO133/PWM9/TACH5
GPIO010/I2C03_SCL/PS2_DAT0B/UART3_nDSR/PP_PD1
GPIO155/I2C02_SCL/PS2_DAT1B/SYSPWR_VALID
GPIO246/nBAT1_DETECT/PWRGD_S0IX_ALT2/CTOUT1_ALT
GPIO244/UART_CLK_ALT/nBAT1_SWON/PWROK_ALT/ISPI_IO1/nEMI_INT_ALT
GPIO242/ISPI_CLK/nBAT2_LOW/VCC_PWRGD_ALT/PP_BUSY/nBACKFEED_CUT_ALT
GPIO254/POKSUSC/PWM1_ALT/CLK_32Khz
GPIO250/EMC_INT/nDLY_SUSB
DP1_DN1A
DP2_DN2A
DP3_DN3A
DP4_DN4A
VSET
VIN
VCHIP_VTR1
GPIO165/32KHZ_IN/nDLY2_SUSB/CTOUT0/LATCHED_BF_CUT/PP_nACK/SAF_G3_SEL
GPIO146/I2C09_SCL/UART2_TX/ITM/JTAG_TDO
GPIO150/I2C15_SCL/UART2_nDTR/JTAG_TMS
GPIO142/I2C05_SCL/UART2_nCTS/SPI1_MOSI/UART0_nDSR_ALT
GPIO144/I2C04_SCL/UART0_nRTS/SPI1_nCS/UART0_nRI_ALT
GPIO005/I2C11_SDA_ALT/KSO16_ALT/UART2_nDSR_ALT2/GPTP_OUT4/UART3_RX/UART1_nDSR_ALT3
VCI_OVRD_IN
nVCI_IN0/nEMDRST_IN
SYSPWR_PRES
BGPO1/GPIO101
BGPO3/GPIO172
BGPO5/GPIO174
VCI_OUT2
GPIO0220
GPIO161/nVCI_IN2
VTR1
VBAT_CHIP
GPIO236/nBACKFEED_CUT
VCHIP_VTR_PLL
GPIO062/PWR_GOOD_3V/I2C11_SCL/nRESETO
VCHIP_VTR1
GPIO024/GPSPI_nCS/GPTP_IN6/I2C07_SCL_ALT/VCCPOK_ALT/nRESET_IN
GPIO057/VCC_PWRGD/CMP_VIN0/PS_nON/GPSPI_CLK_ALT
GPIO226/nDLY3_SUSB/PWRGD_S0IX/CMP_VREF0/nRSMRST/nSLP_S0_ALT2/BSS_STRAP
GPIO166/UART0_TX_ALT/PWRGD_S0IX_ALT
GPIO103/nTHERMTRIP2/PP_PD7
GPIO051/IC11_TACH1/GTACH1
VR_CAP
TP23
VCHIP_VTR_REG
GPIO201/ADC01
GPIO203/ADC03
GPIO205/ADC05
GPIO207/ADC07/CMP_STRAP
GPIO211/ADC09
GPIO213/ADC11
GPIO215/ADC13
GPIO217/ADC15
GPIO067/VREF2_ADC
GPIO061/ESPI_nRESET/PWM7_ALT/nEC_SCI_ALT
GPIO070/ESPI_IO0/I2C14_SDA
GPIO072/ESPI_IO2/I2C01_SDA_ALT
GPIO100/nEC_SCI_ALT2/IC76
GPIO063/ESPI_nALERT/PWM6_ALT/IC18
GPIO224/GPTP_IN0/SHD_IO1
GPIO227/SHD_IO2/PWRGD_STRAP
GPIO055/PWM2/SHD_nCS0/BSS_STRAP
GPIO012/I2C07_SDA/SPIPER_IO2/TOUT3/POK_PCH/I3C01_SDA_HOST/I3C01_SDA_TARGET
GPIO130/I2C01_SDA/SPIPER_IO0/TOUT1/VCCPOK
GPIO020/KSI1/UART3_nDCD
GPIO052/IC12_TACH2
GPIO231/I2C08_SDA/I3C02_SCL_HOST/I3C02_SCL_TARGET
GPIO001/PWM4_ALT
GPIO014/PWM6/SPIPER_IO1/GPTP_IN2
GPIO151/IC14/KSO15/nSLP_S4
GPIO017/KSI0/UART0_nDCD/GPTP_IN5/USB_CLK
GPIO032/KSI7/GPTP_OUT0/UART0_nRI
GPIO132/I2C06_SDA/I3C00_SDA_HOST/I3C00_SDA_TARGET/KSO16/UART2_nDSR_ALT/UART1_nDSR_ALT2
GPIO115/PS2_DAT0A
GPIO026/KSI3/UART0_nDTR/I2C12_SDA/TIN1
GPIO054/PWM1/SPIPER_SCLK/GPWM1
GPIO030/KSI5/I2C10_SDA/TIN3/nSLP_S0_ALT
GPIO120/KSO07/UART1_nDTR/BSS_STRAP
GPIO111
GPIO113/KSO06/IC19/PCIAUX_nCTRL/PP_nSTROBE
VCHIP_VTR2
GPIO043/SB_TSI_CLK
GPIO034/GPSPI_IO2/RC_ID1/SPI0_CLK/LASIC_CLK_ALT
GPIO004/I2C00_SCL/LASIC_MOSI/UART2_nDCD/SPI0_MOSI
GPIO116
GPIO074/nBSS_STRAP
GPIO076/nPRIM_PWRGD
GPIO035/PWM8/CTOUT1/IC115/LED3/UART0_nDCD_ALT2
GPIO171/UART1_RX/TFDP_DATA/COUT_LO0
GPIO135/UART1_nCTS_ALT/COUT_LO1
JTAG_nRST
GPIO105/UART0_RX/TFDP_DATA_ALT
GPIO047/KSO03/PWM3_ALT/IC113/BCM1_CLK/PP_PD6
GPIO122/PVT_IO1/KSO09/nSLP_S3
GPIO126/PVT_IO3/KSO13/PCI_nRST_1/UART_BSTRAP
GPIO125/PVT_CLK/KSO12/GPTP_OUT5/PCI_nRST_2
GPIO225/UART0_nRTS_ALT
GPIO156/LED0/nYELLOW
GPIO153/LED2/PCIAUX_GATE/PP_PD4
GPIO007/I2C03_SDA/PS2_CLK0B/UART3_nRTS/PP_PD0
GPIO154/I2C02_SDA/CPU_C10/PS2_CLK1B
GPIO253/EMC_SIO_nRST
GPIO245/GPSPI_IO0/nSUS3V_ON/nBAT1_LOW/Single-WireUART
GPIO243/GPSPI_IO1/ISPI_IO0/nBAT2_DETECT/nSUS3V_ON_ALT
GPIO241/ISPI_nCS/AC_DETECT/CMP_VOUT0/PWM0_ALT/PP_nALF
VTR3
nRESET_IN
DN1_DP1A
DN2_DP2A
DN3_DP3A
DN4_DP4A
VCP
nTHERMTRIP1
GPIO045/KSO01/PWM2_ALT/IC714/PP_PD5/CR_STRAP
GPIO145/I2C09_SDA/UART2_RX/JTAG_TDI
GPIO147/I2C15_SDA/UART2_nDSR/JTAG_TCLK
GPIO141/I2C05_SDA/UART2_nRTS/SPI1_CLK/UART0_nDCD_ALT
GPIO143/I2C04_SDA/UART0_nCTS/SPI1_MISO/UART0_nDTR_ALT
GPIO006/I2C11_SCL_ALT/KSO17_ALT2/UART2_nDTR_ALT2/GPTP_OUT7/UART3_TX/UART1_nRI_ALT2/IC75
EMC_nSHDN
GPIO162/nVCI_IN1
GPIO235
BGPO0
BGPO2/GPIO102
BGPO4/GPIO173
VCI_OUT1
XTAL2
XTAL2_32KHZ_IN
R1
0
NOTE:
XTAL2 is the single ended input.
Crystal will be on Daughter Card
U1A2
GPIO256/INT_SPI_nCS/PSPI_nCS
GPIO257/INT_SPI_CLK/PSPI_CLK
GPIO260/INT_SPI_IO2/INT_SPI_WP
GPIO261/INT_SPI_IO3
RESET_SYS
VFLT_PLL
USB_DP_CORE
GPIO136/TACH4/LED3_ALT/PP_SLCT
GPIO163/TACH6/LED4
GPIO164/TACH7/LED5/PP_nERROR
GPIO251/INT_SPI_IO0/PSPI_MOSI
GPIO252/INT_SPI_IO1/PSPI_MISO
USB_VBUS_DET
USB_DM_CORE
2x8
CR_STRAP
JP2
GPIO045/KSO01/PWM2_ALT/IC714/PP_PD5/CR_STRAP
R3
1.00K
R7
1.00K
JTAG_STRAP
JP3
GPIO170/UART1_TX/TFDP_CLK/COUT_HI0/JTAG_STRAP
R4
1.00K
R8
1.00K
CMP_STRAP
JP4
GPIO207/ADC07/CMP_STRAP
R5
1.00K
R9
1.00K
UART_BSTRAP
JP1
GPIO126/PVT_IO3/KSO13/PCI_nRST_1/UART_BSTRAP
R2
10.0K
PWRGD_STRAP
JP5
GPIO227/SHD_IO2/PWRGD_STRAP
R6
10.0K
VTR2_STRAP
JP6
GPIO104/UART0_TX/TFDP_CLK_ALT/CR_STRAP
R10
1.00K
R14
1.00K
BSS_STRAP
JP7
GPIO074/nBSS_STRAP
R11
1.00K
R15
1.00K
BSS_STRAP
JP8
GPIO055/PWM2/SHD_nCS0/BSS_STRAP
R13
10.0K
CRISIS_RECOVERY_STRAP
JP9
GPIO165/32KHZ_IN/nDLY2_SUSB/CTOUT0/LATCHED_BF_CUT/PP_nACK/SAF_G3_SEL
R12
1.00K
R16
1.00K
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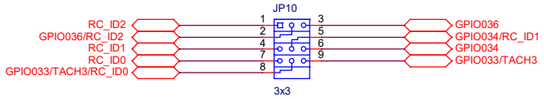
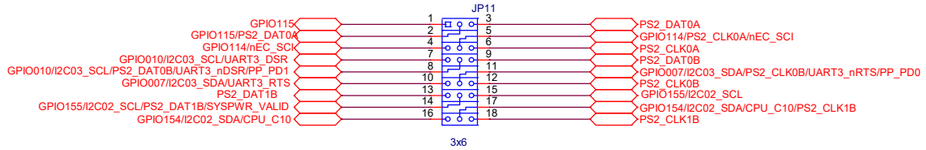
EVB Number: Joshua Tree Daughter Cards
Page Title: Joshua Tree Daughter Card and Straps
Size: | Engineer: J.D. | Assembly Number: 6941 | PCB Rev: A | Sch. Rev: 1.0
Date: Thursday, June 16, 2022 | Sheet 2 of 17

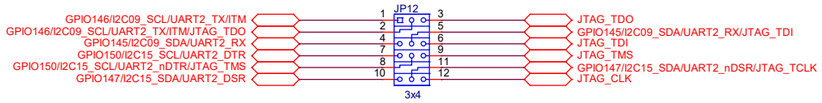
RC IDENTIFICATION DETECTION DEMUX



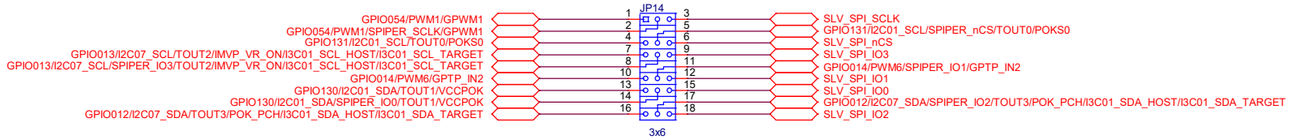
PS2 SIGNAL DEMUX



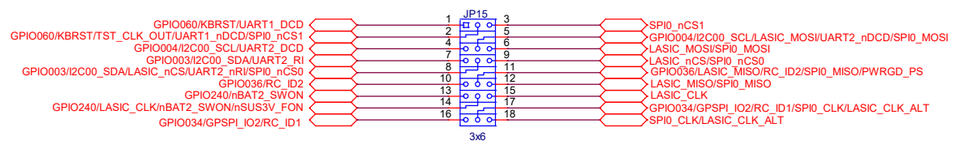
JTAG SIGNAL DEMUX



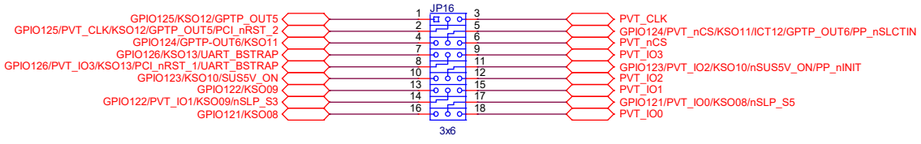
SLAVE SPI SIGNALS DEMUX



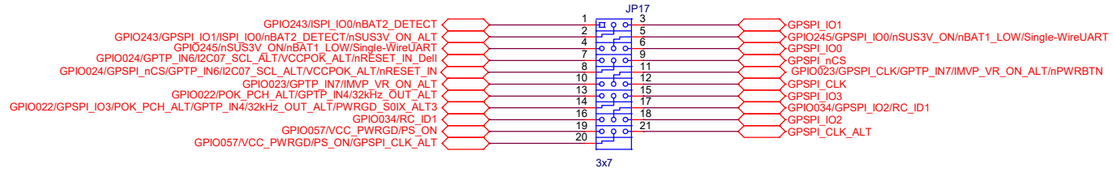
LASIC SPI & SPI0 SIGNAL DEMUX



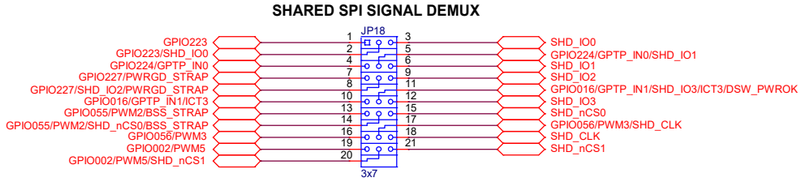
PRIVATE SPI SIGNALS DEMUX



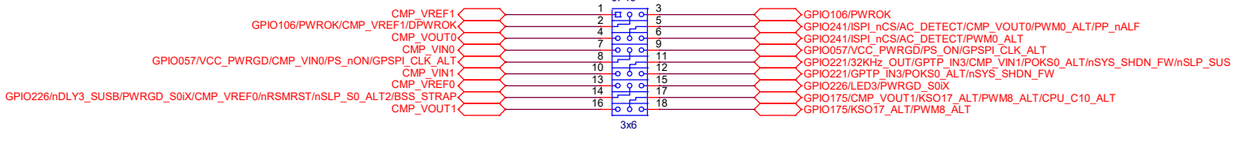
GENERAL PURPOSE SPI SIGNAL DEMUX



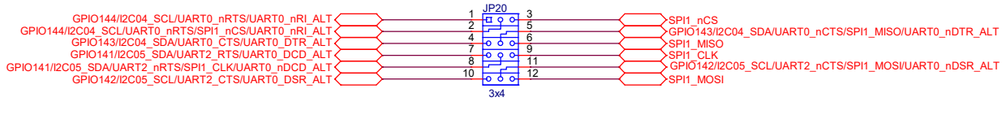
SHARED SPI SIGNAL DEMUX



COMPARATOR SIGNAL DEMUX



SPI1 SIGNAL DEMUX



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EVB Number: TBD				
Page Title: Carlsbad Signal Demux				
Size:	Engineer: J.D.	Assembly Number: 6906	PCB Rev: A	Sch. Rev: 0.1
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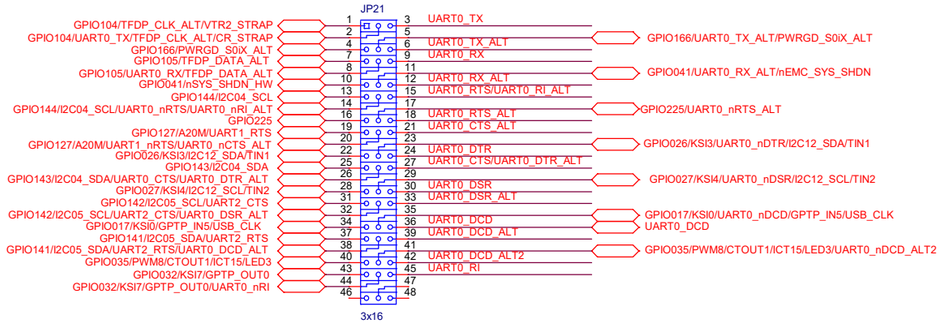
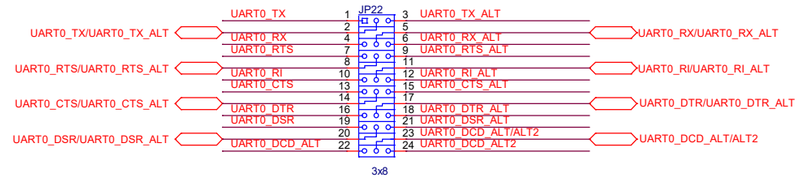
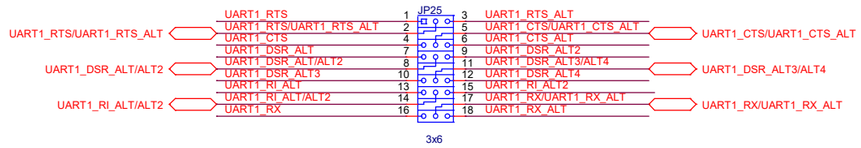
UART-0 SIGNAL DEMUX



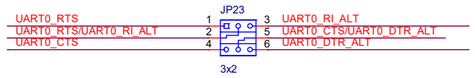
UART-0 ALTERNATE SIGNAL DEMUX



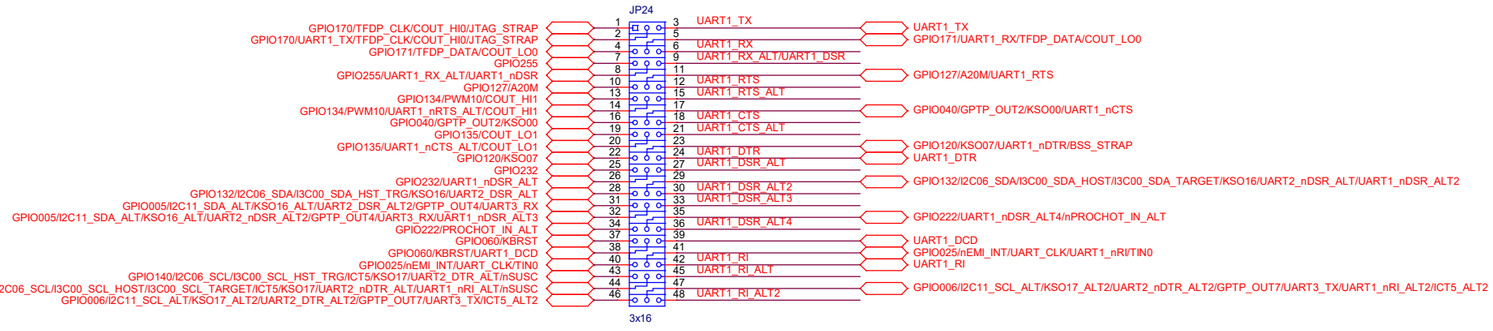
UART-1 ALTERNATE SIGNAL DEMUX



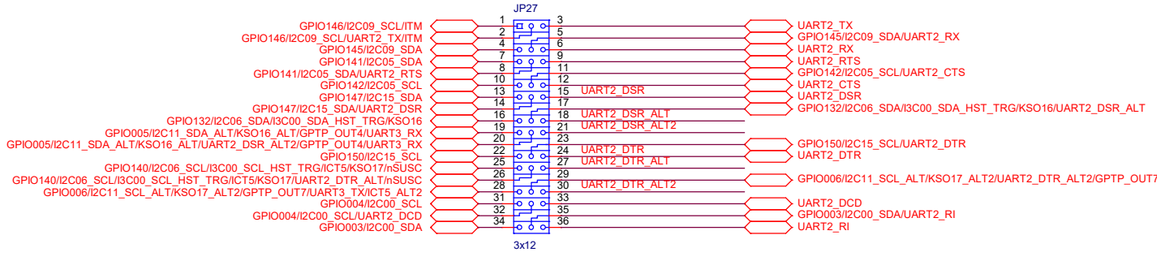
UART-0 MULTI SIGNAL DEMUX



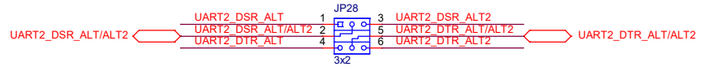
UART-1 SIGNAL DEMUX



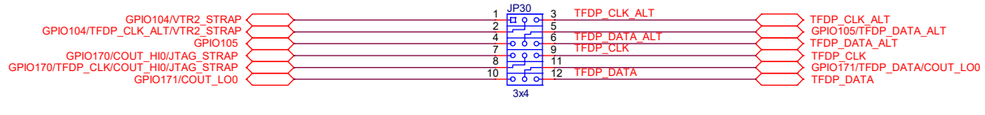
UART-2 SIGNAL DEMUX



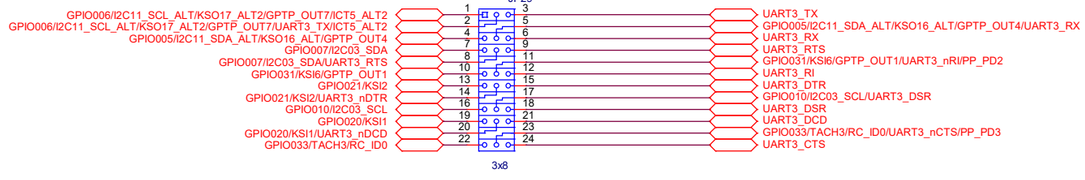
UART-2 ALTERNATE SIGNAL DEMUX



TRACE FIFO DEBUG SIGNAL DEMUX



UART-3 SIGNAL DEMUX



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EVB Number: **Joshua Tree Daughter Cards**			
Page Title: **Joshua Tree Signal Demux-2**			
Size:	Engineer: **J.D.**	Assembly Number: **6941**	PCB Rev: **A** / Sch. Rev: **1.0**
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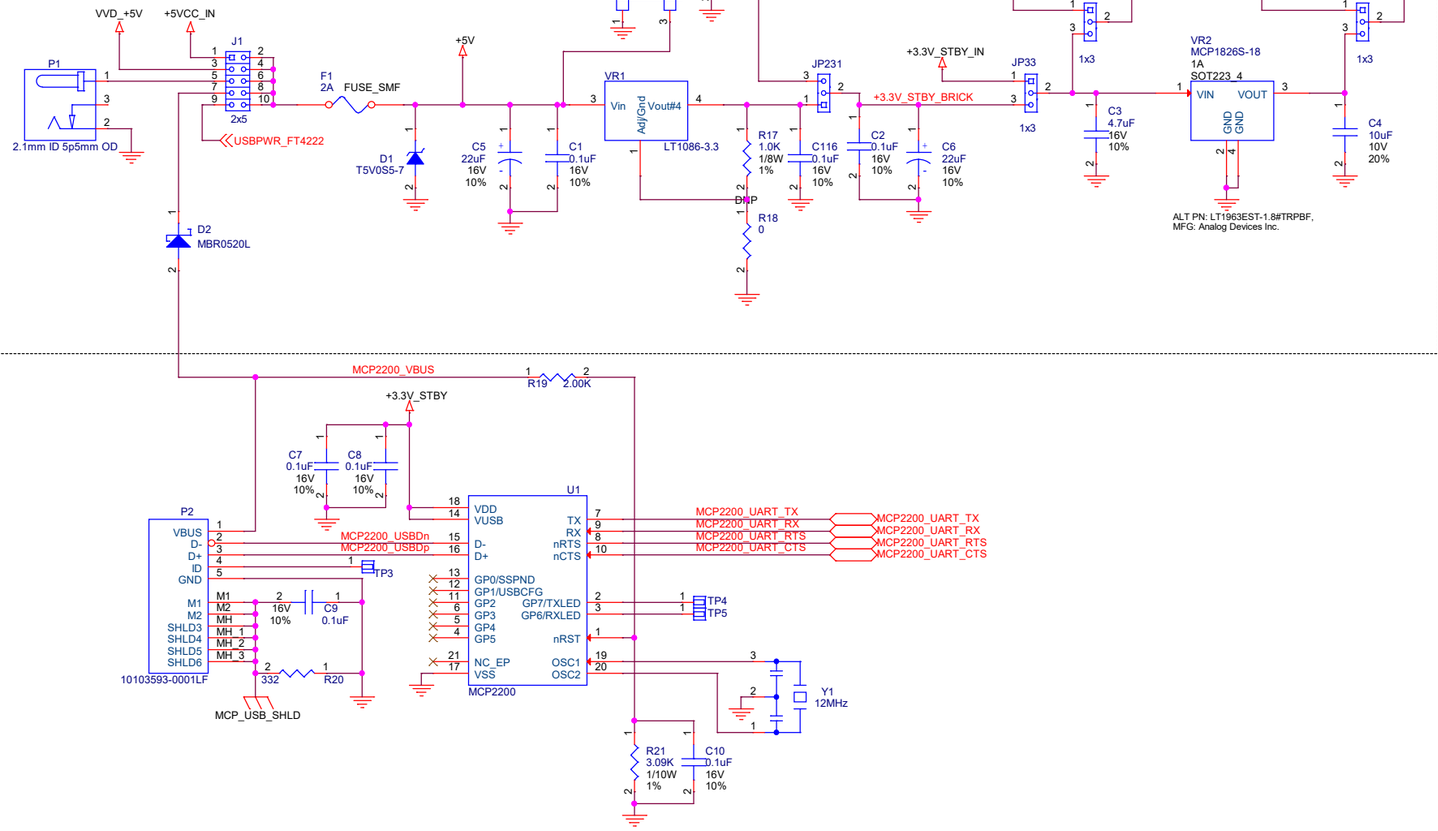
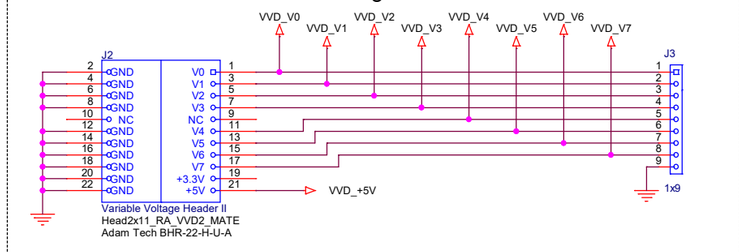
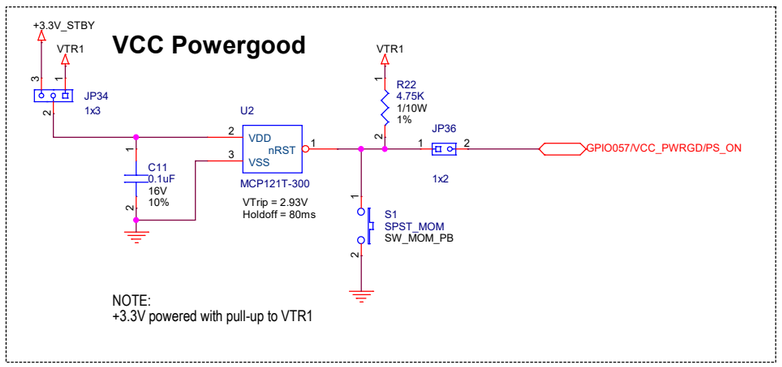
Voltage Regulator



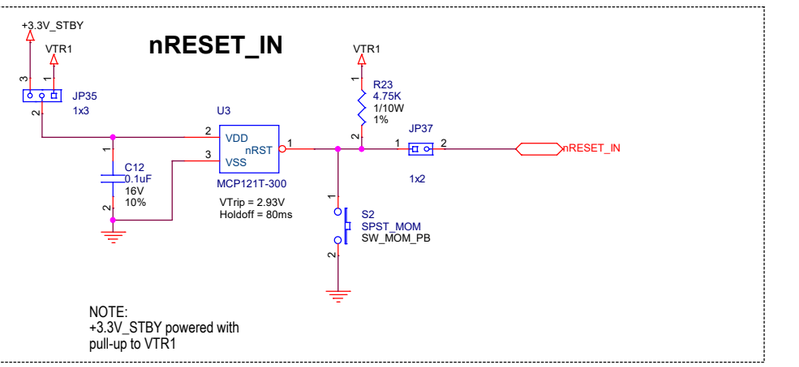
Variable Voltage Header II



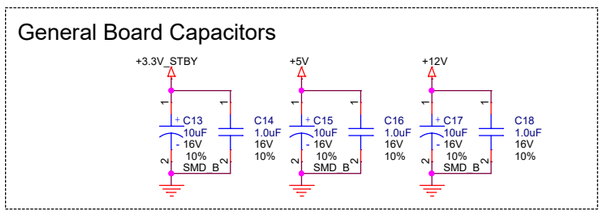
VCC Powergood



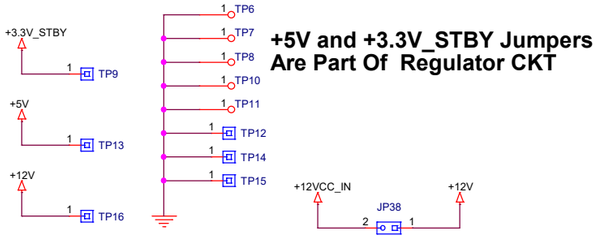
nRESET_IN



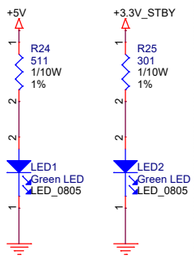
General Board Capacitors



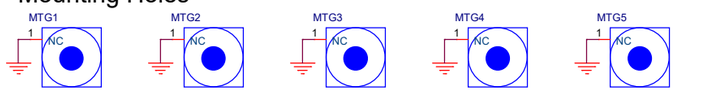
Test Points



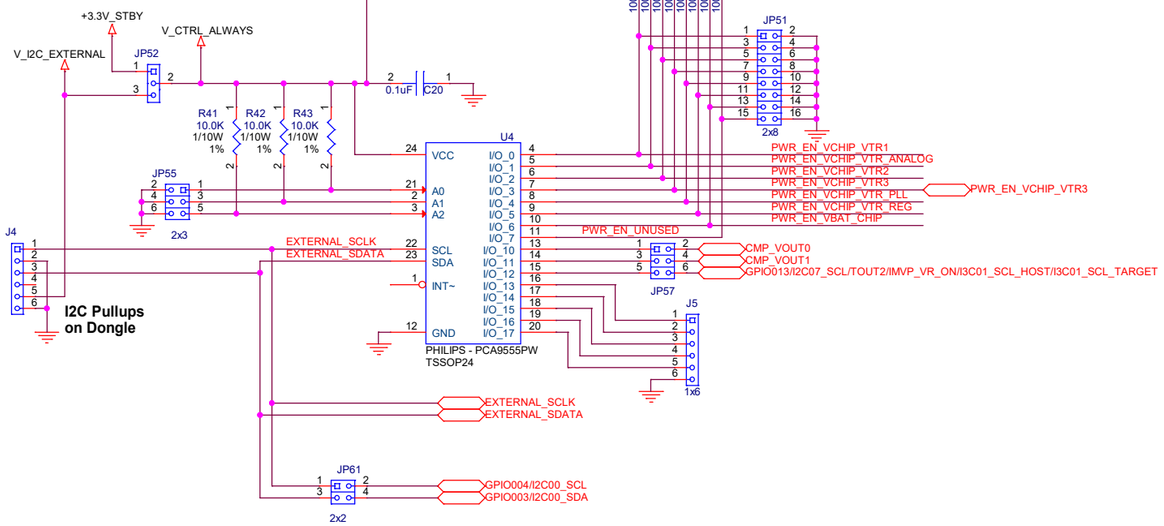
Power LEDs

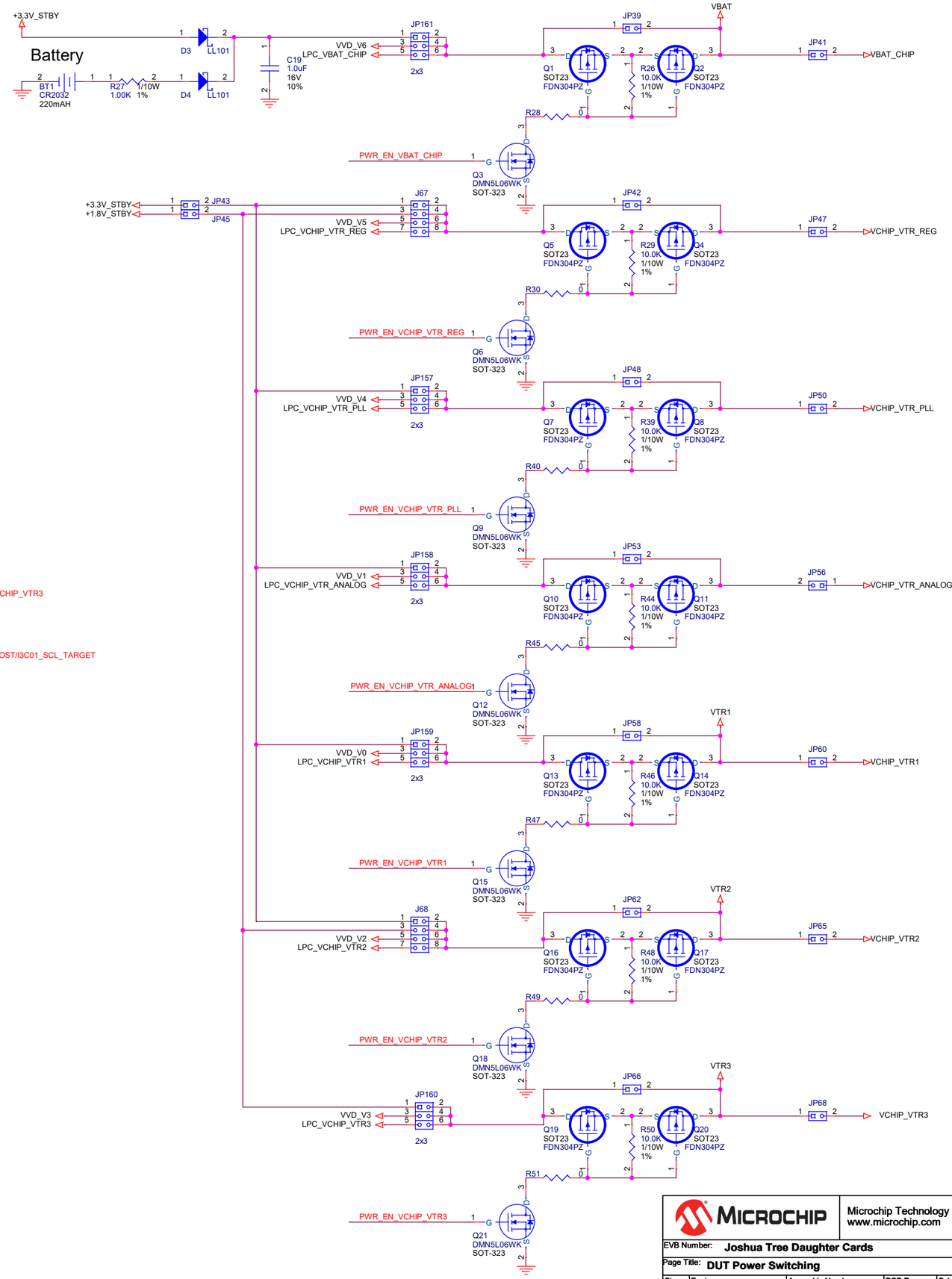


Mounting Holes



MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	Joshua Tree EVB Power and Resets			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Friday, June 17, 2022	Sheet 5 of 17		





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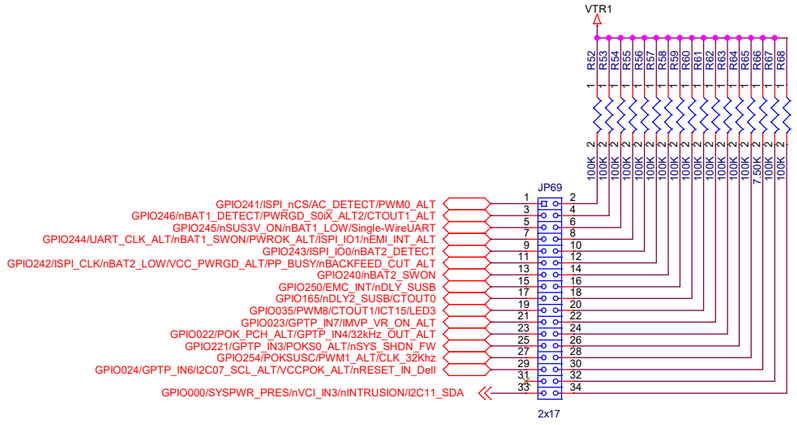
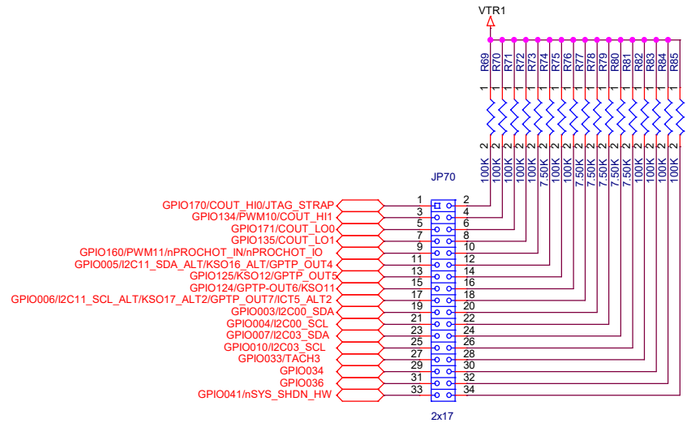
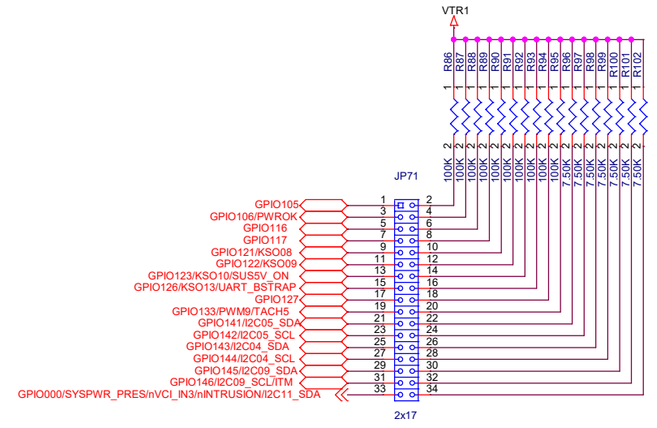
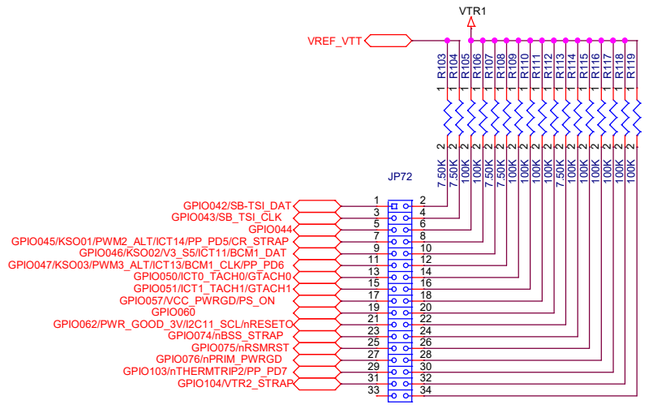
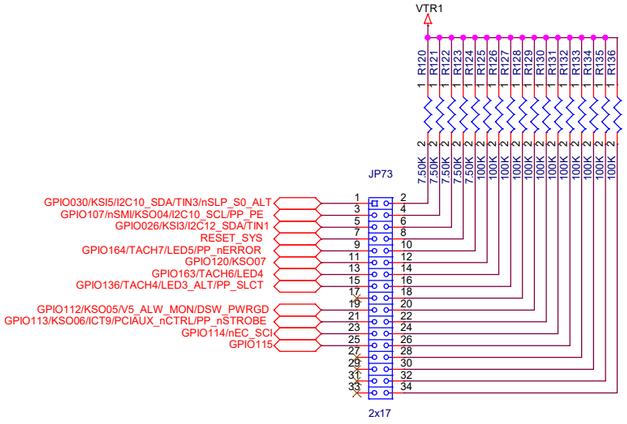
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	DUT Power Switching			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Thursday, June 16, 2022	Sheet 6 of 17		

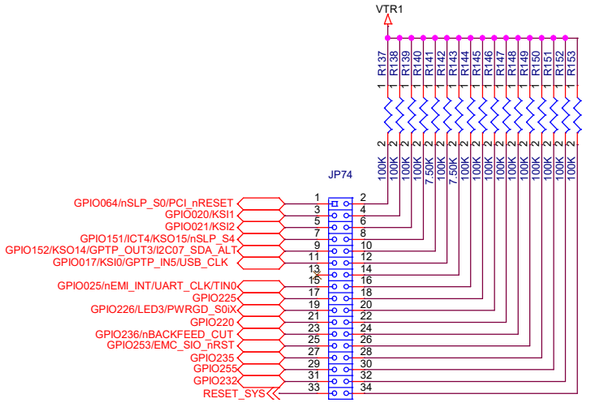


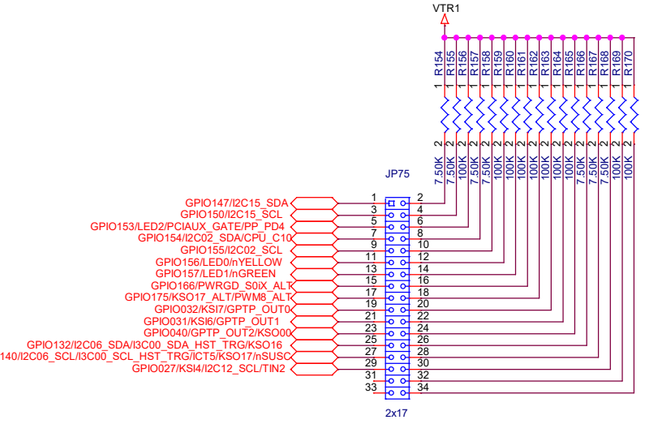


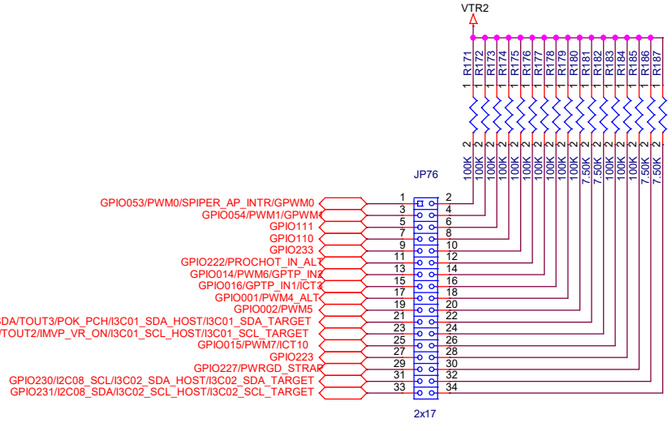


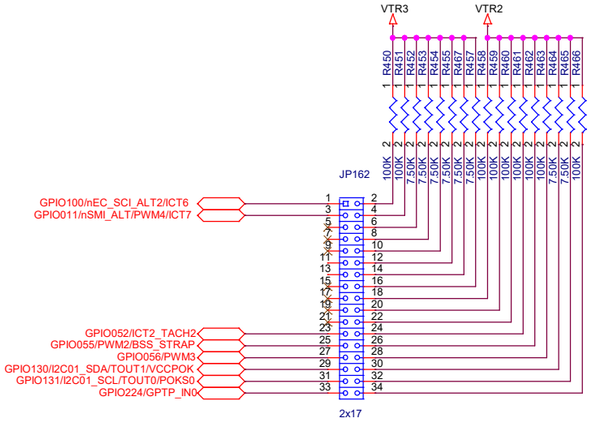












MICROCHIP

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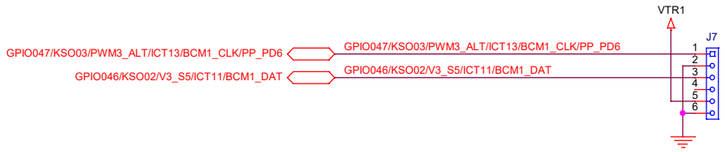
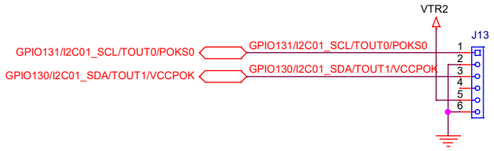
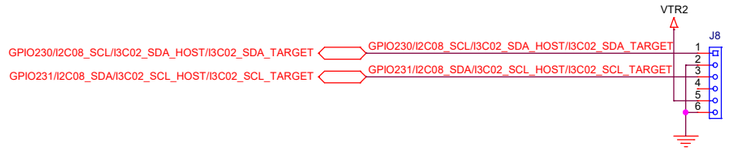
EVB Number: **Joshua Tree Daughter Cards**				
Page Title: **GPIO**				
Size:	Engineer: **J.D.**	Assembly Number: **6941**	PCB Rev: **A**	Sch. Rev: **1.0**
Date: **Thursday, June 16, 2022**			Sheet **7** of **17**	

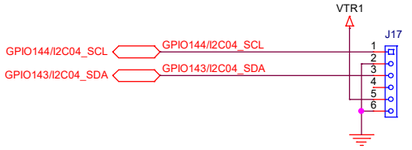
Access Bus Interface

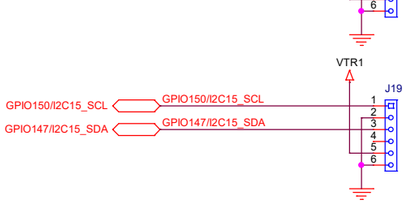
NOTE:
All pull-ups can be jumpered in at
the GPIO Headers - 7.5K Ohm.

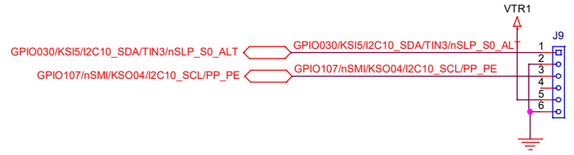


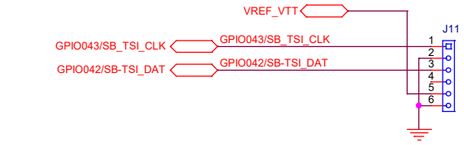


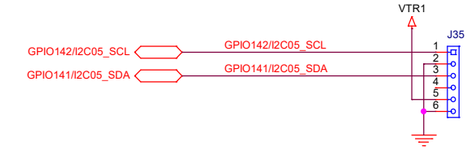


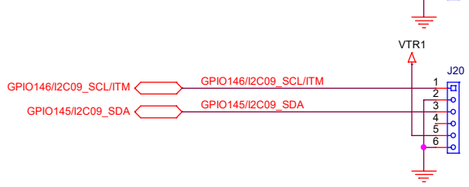




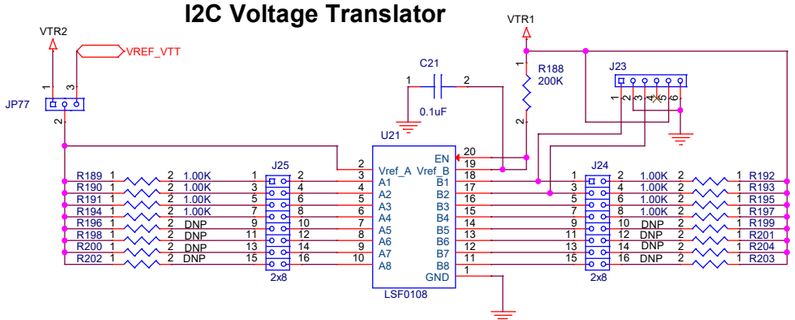






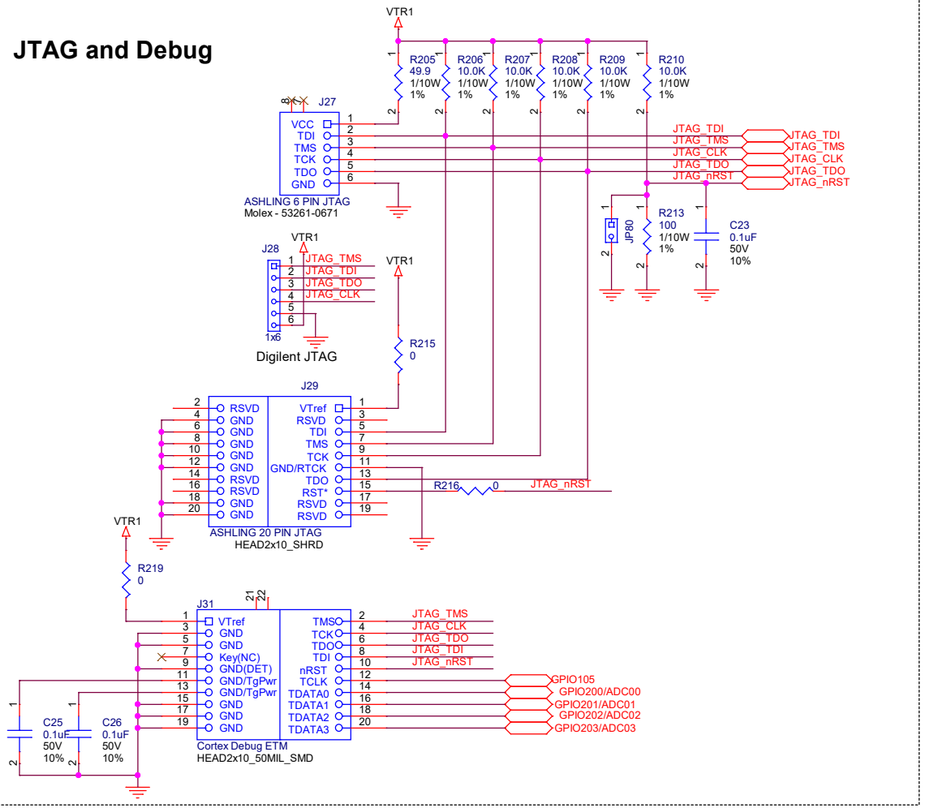


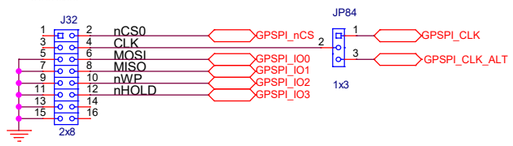
I2C Voltage Translator

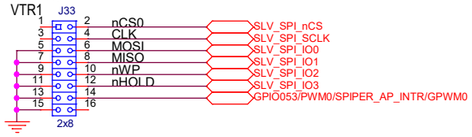


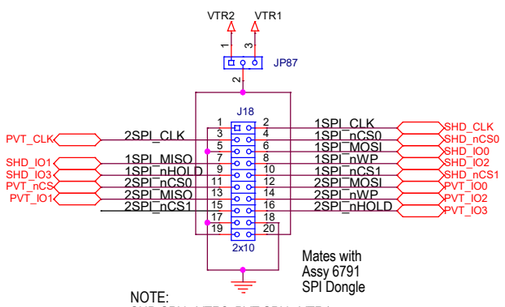
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	**Joshua Tree Daughter Cards**			
Page Title:	**SMBus Headers**			
Size:	Engineer: **J.D.**	Assembly Number: **6941**	PCB Rev: **A**	Sch. Rev: **0.1**
Date:	Friday, June 17, 2022	Sheet **8** of **17**		

JTAG and Debug



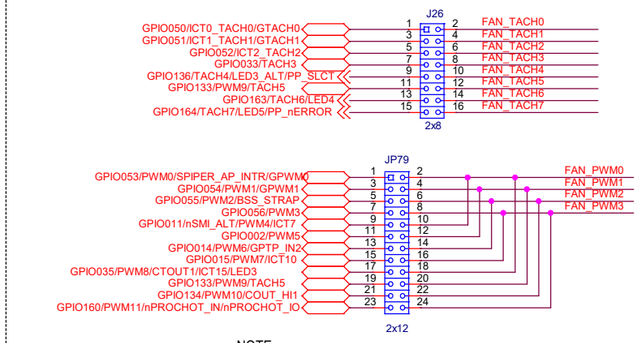






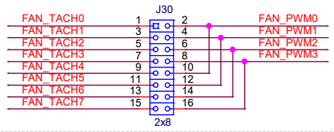
NOTE:
SHD SPI is VTR2; PVT SPI is VTR1
For proper operation, set VTR1 & VTR2 to the same voltage.

FAN and TACH Headers

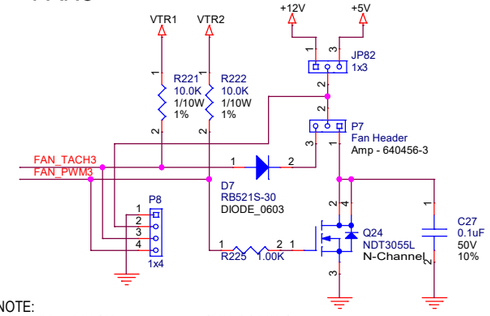


NOTE:
The PWM and TACH pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

FAN and TACH Loopback

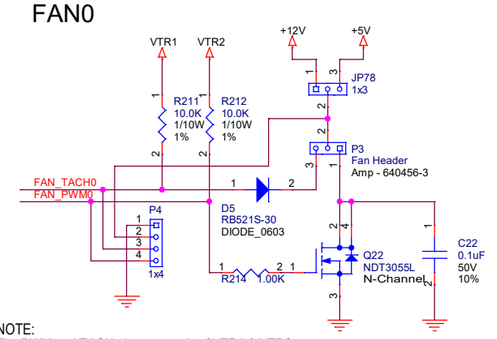


FAN3



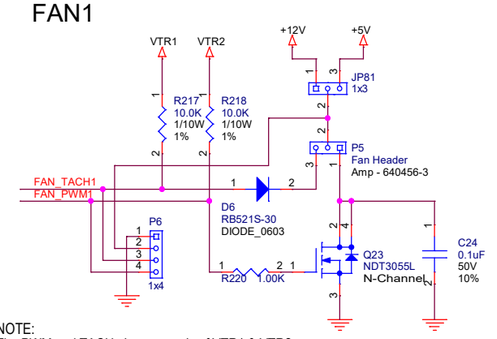
NOTE:
The PWM and TACH pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

FAN0



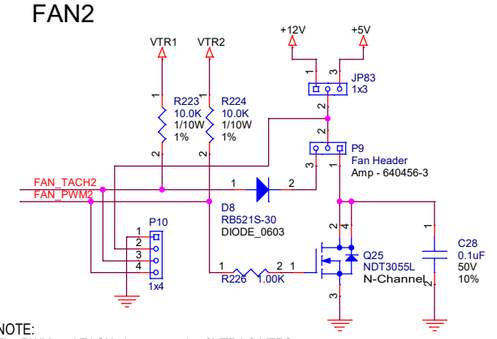
NOTE:
The PWM and TACH pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

FAN1

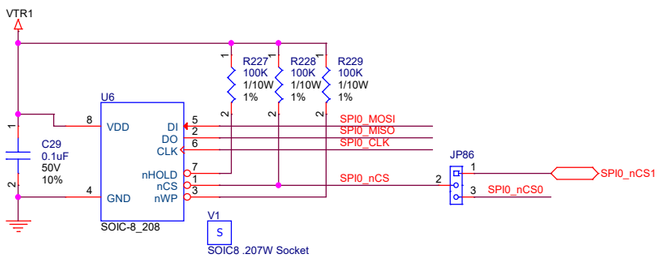


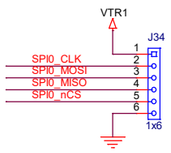
NOTE:
The PWM and TACH pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

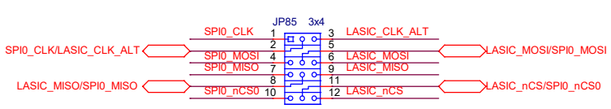
FAN2

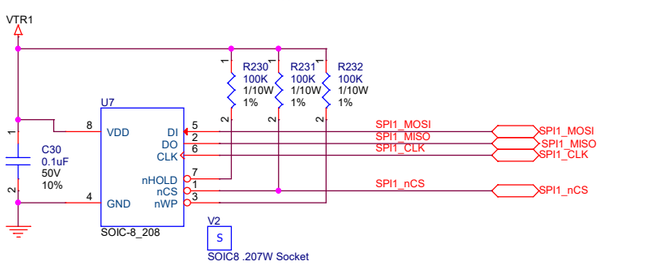


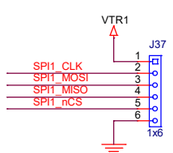
NOTE:
The PWM and TACH pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

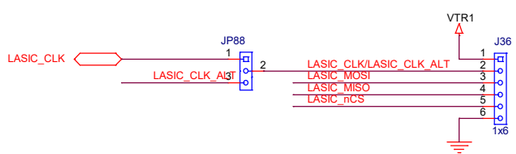












NOTE:
These SPI interfaces go to a SOIC8 socket so that +3.3V or +1.8V parts can be used.

MICROCHIP

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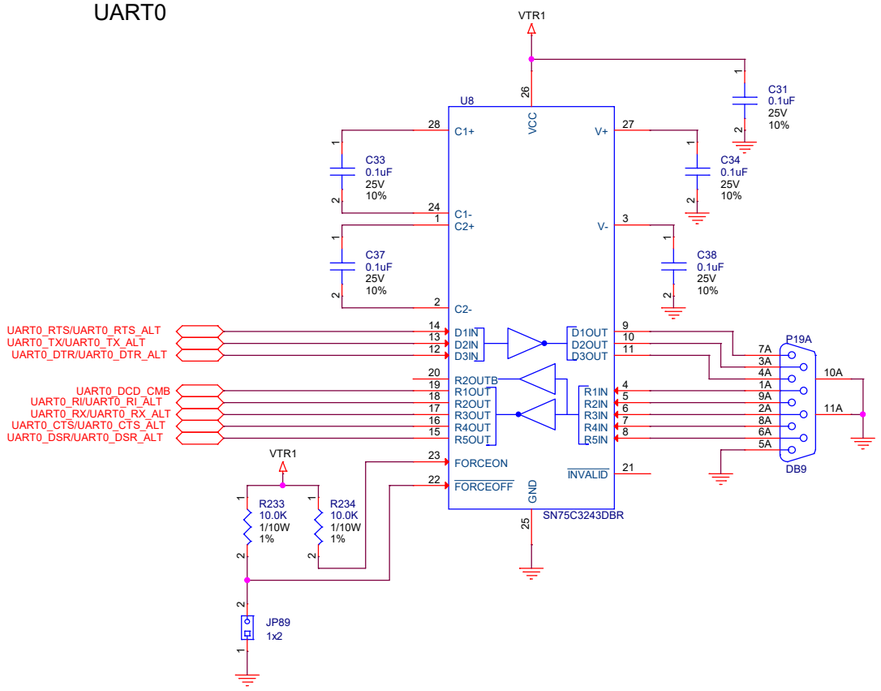
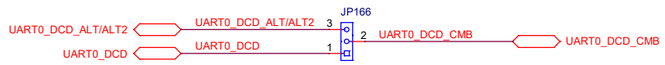
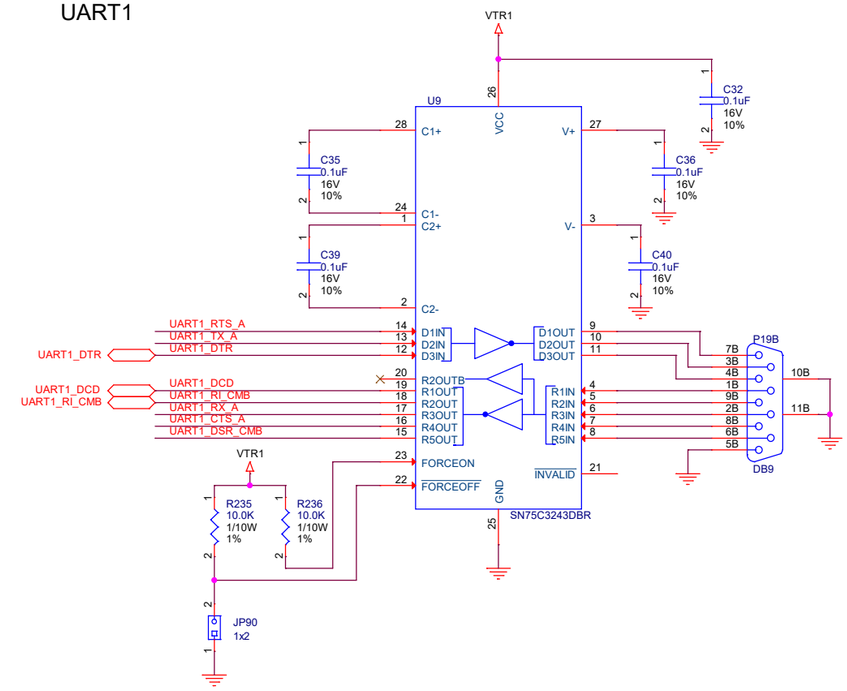
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	JTAG, FANs and SPI			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Friday, June 17, 2022	Sheet 9 of 17		

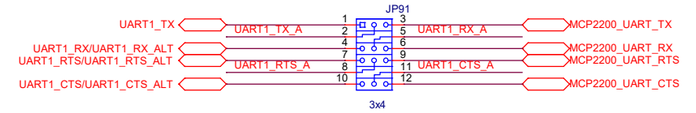
UART0

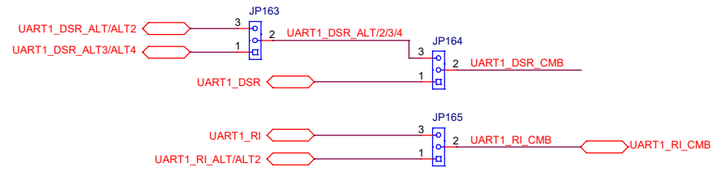




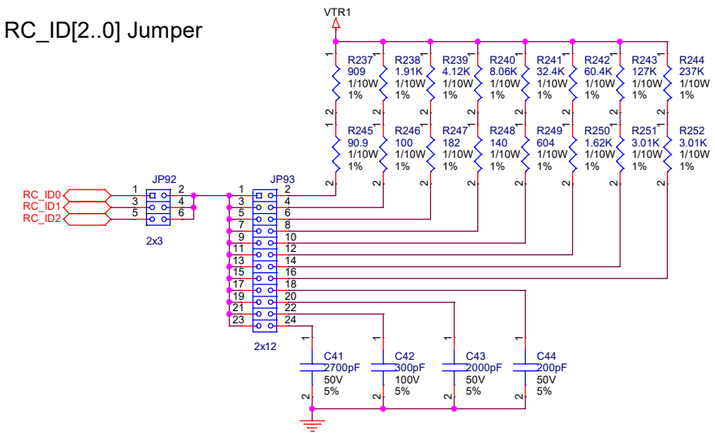
UART1







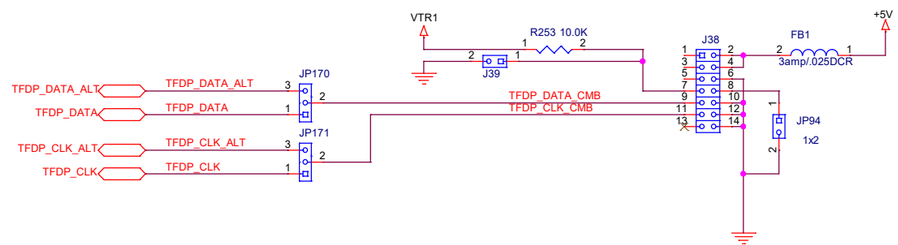
RC_ID[2..0] Jumper



NOTE:
If VTR1 is supplied with 1.8V, the RC_ID logic will not function correctly.
VTR1 must be connected to a +3.3V supply for the RC_ID block to operate.

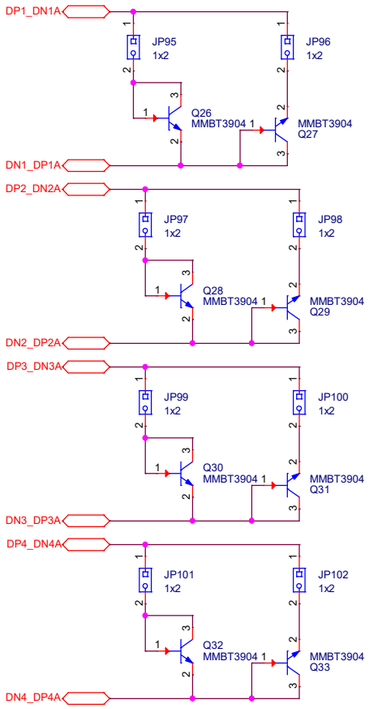
Software Developers Debug Interface

Mates with: Trace FIFO Board (Assy 6227)
Pegasus Debugger (Assy 6345)

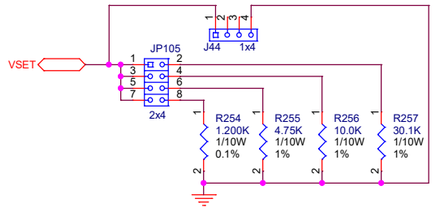


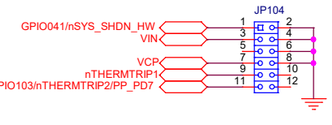
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	UARTs, RC_ID, and Trace FIFO Header			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Thursday, June 16, 2022	Sheet 10 of 17		

Remote Temperature Monitoring

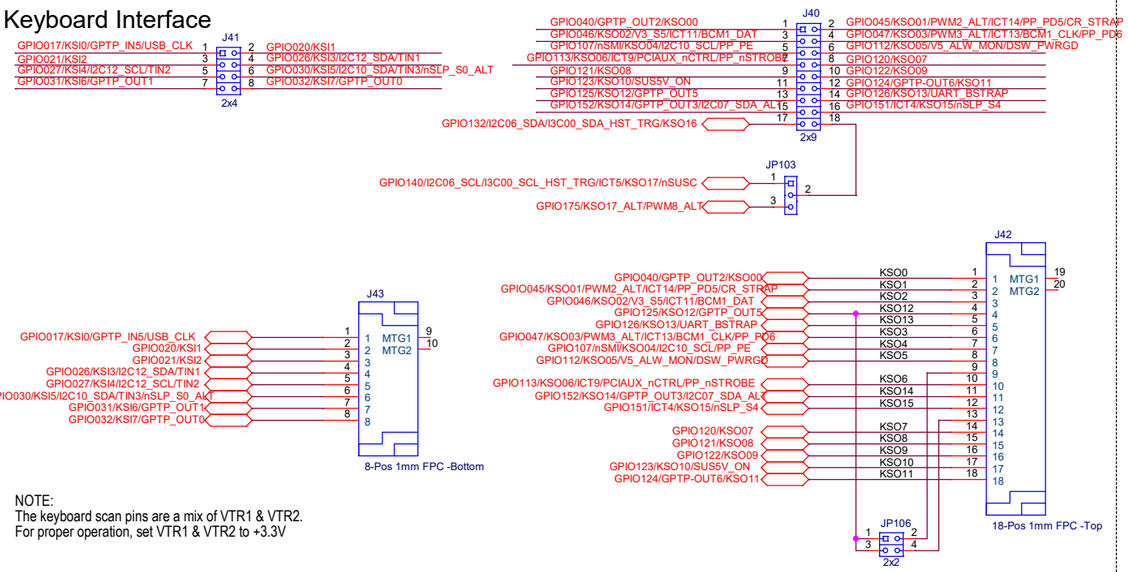


JP102 is a receptacle.





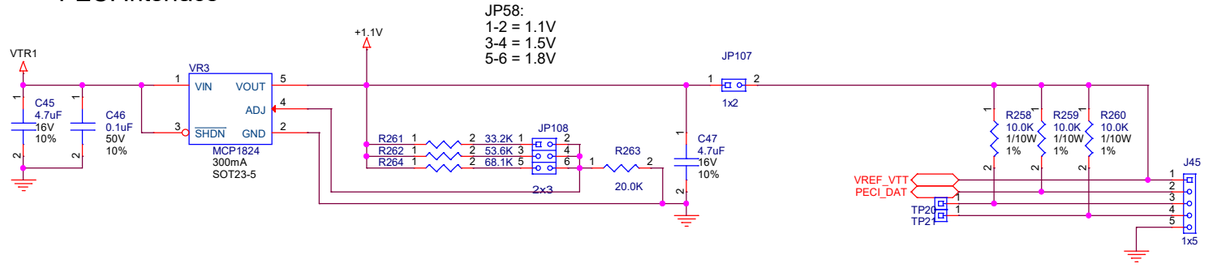
Keyboard Interface



NOTE:
The keyboard scan pins are a mix of VTR1 & VTR2.
For proper operation, set VTR1 & VTR2 to +3.3V

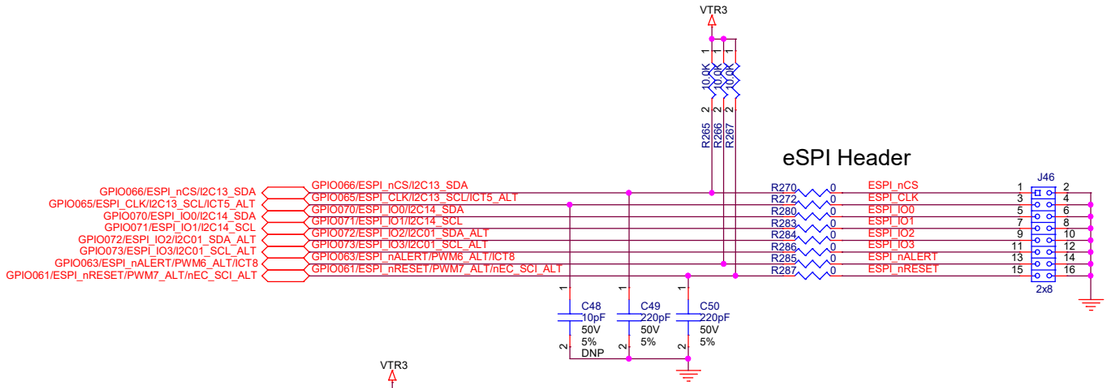
PECI Interface

JP58:
1-2 = 1.1V
3-4 = 1.5V
5-6 = 1.8V

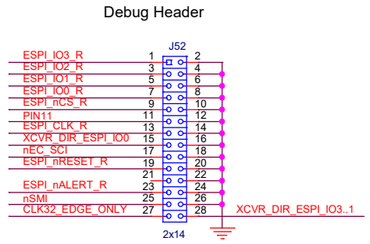


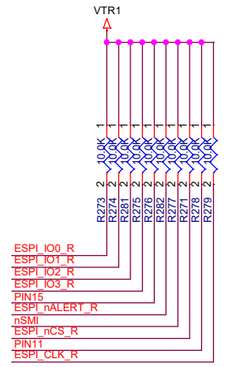
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	Therm Diodes, KB Scan, ADC, Peci			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Thursday, June 16, 2022	Sheet 11 of 17		

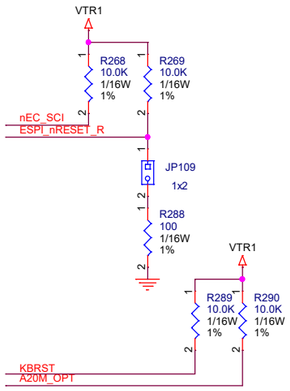
eSPI Header

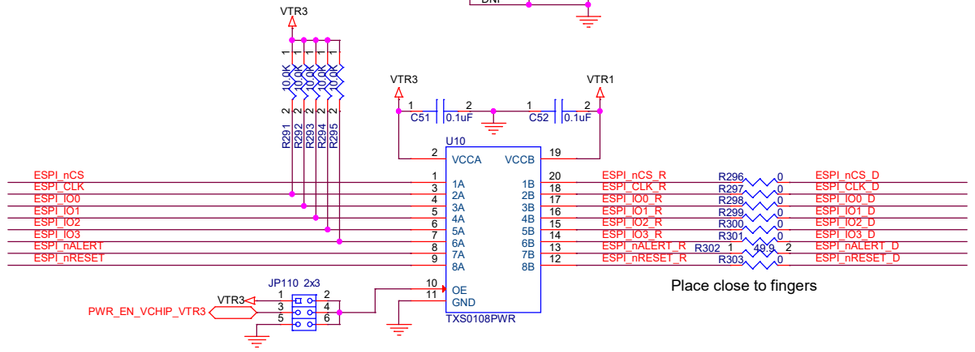


Debug Header





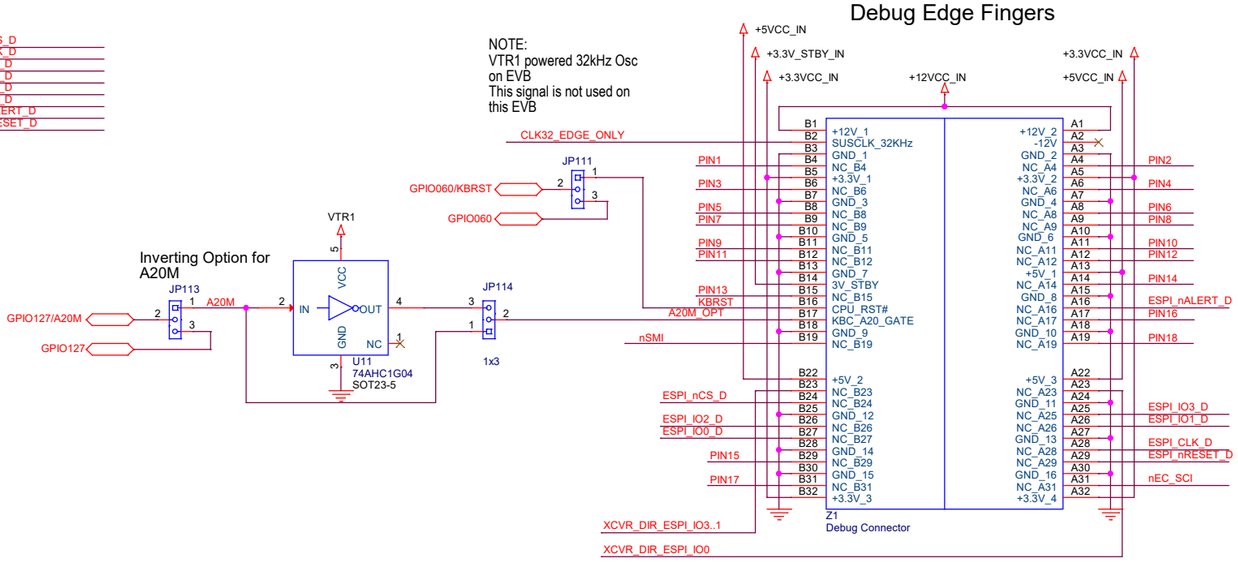


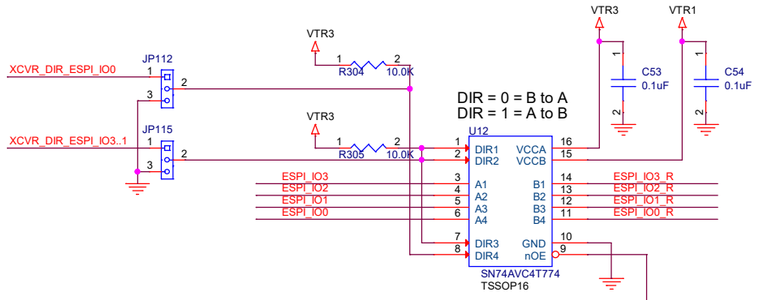


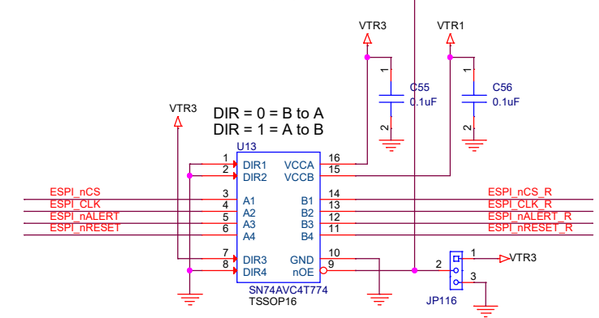
Place close to fingers

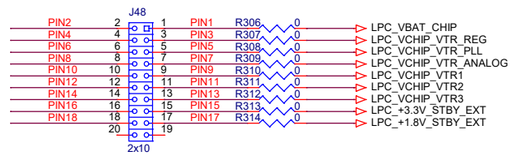
Debug Edge Fingers

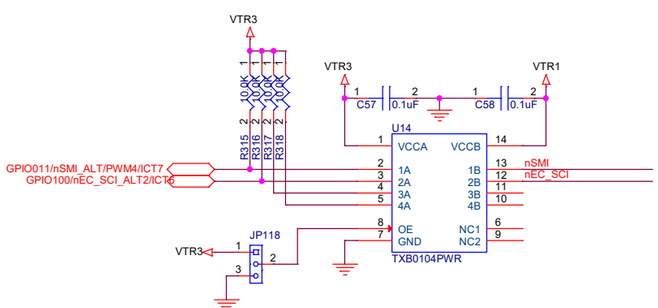
NOTE:
VTR1 powered 32kHz Osc on EVB
This signal is not used on this EVB

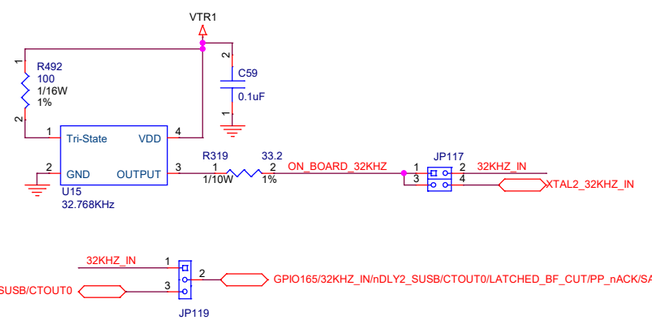






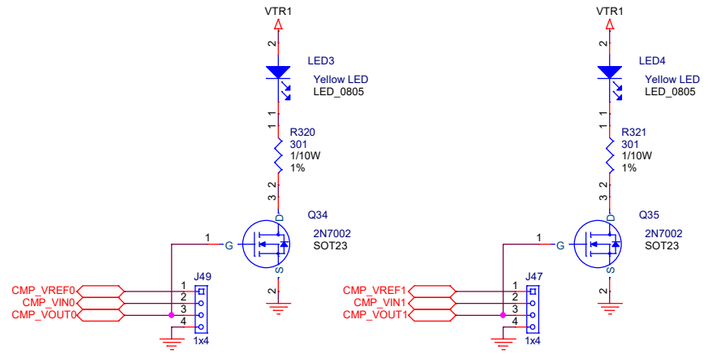




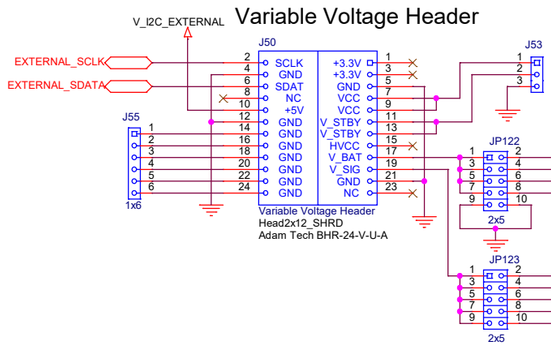


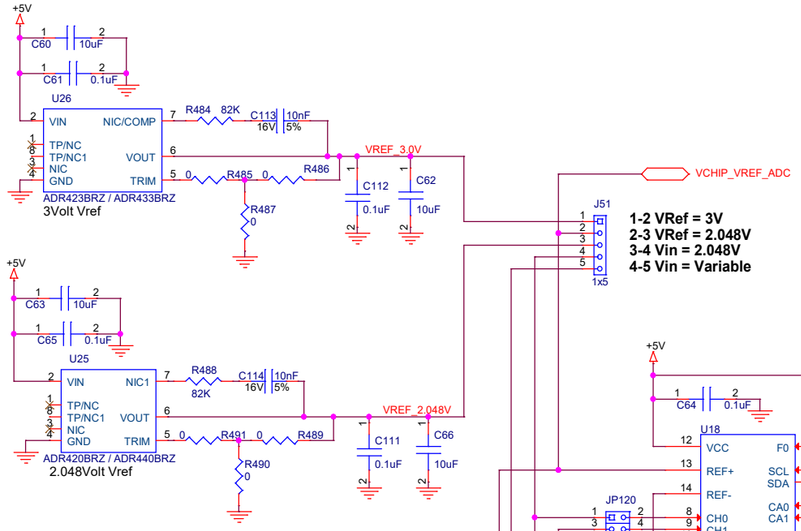
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	Debug Edge Fingers and eSPI Header			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Friday, July 01, 2022	Sheet 12 of 17		

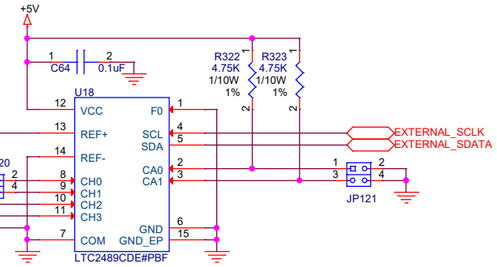
Comparator Access Headers

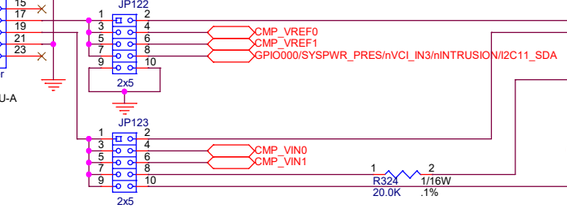


Variable Voltage Header

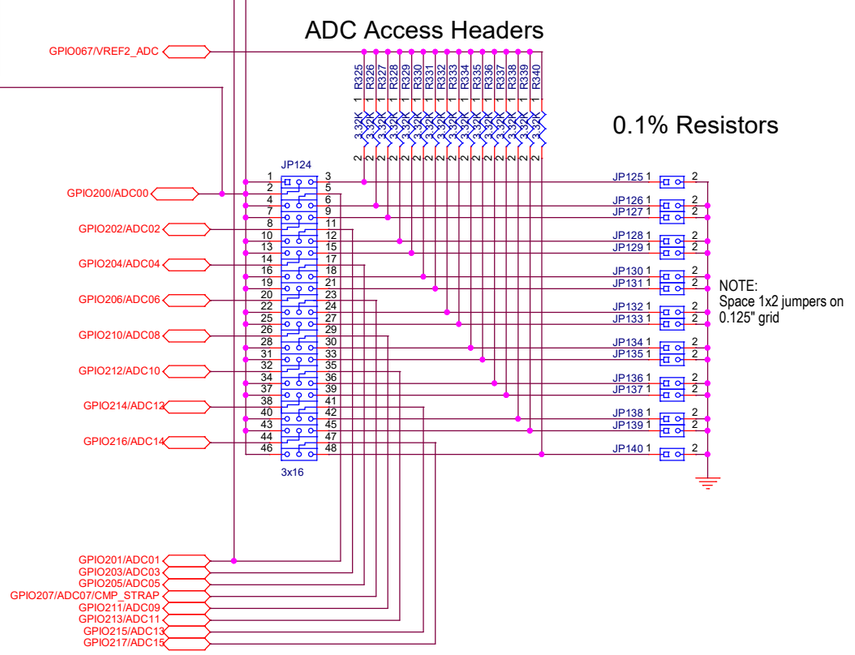








ADC Access Headers

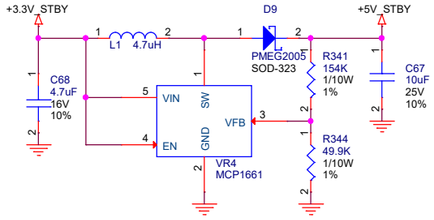


0.1% Resistors

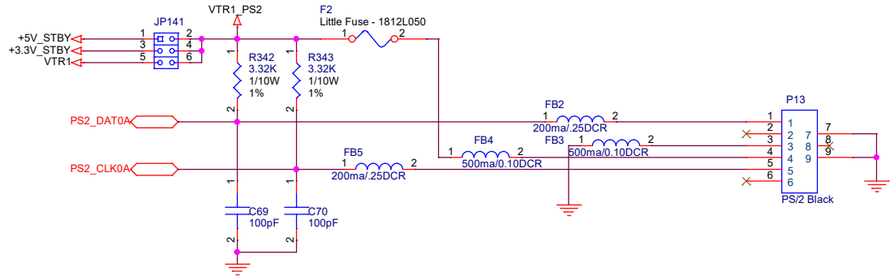
NOTE:
Space 1x2 jumpers on
0.125" grid

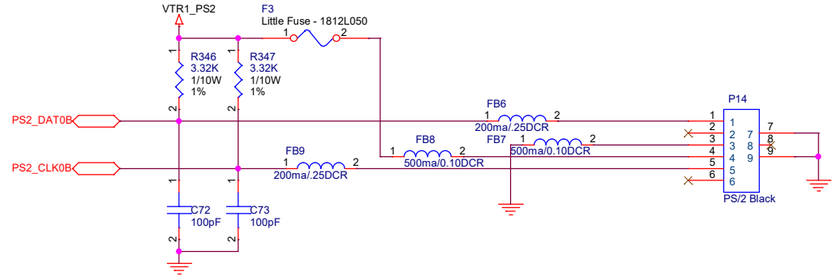
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	ADC, Comparator			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Friday, July 01, 2022	Sheet 13 of 17		

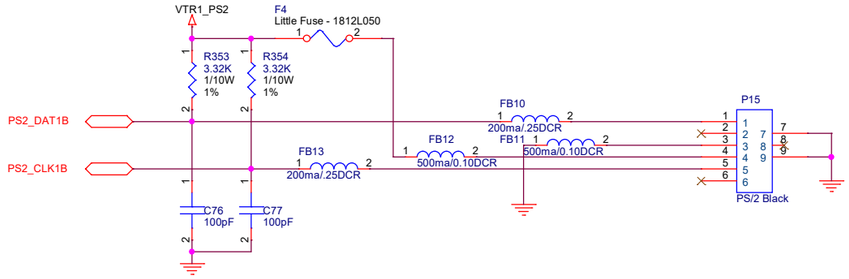
3.3V to 5.0V Boost Regulator



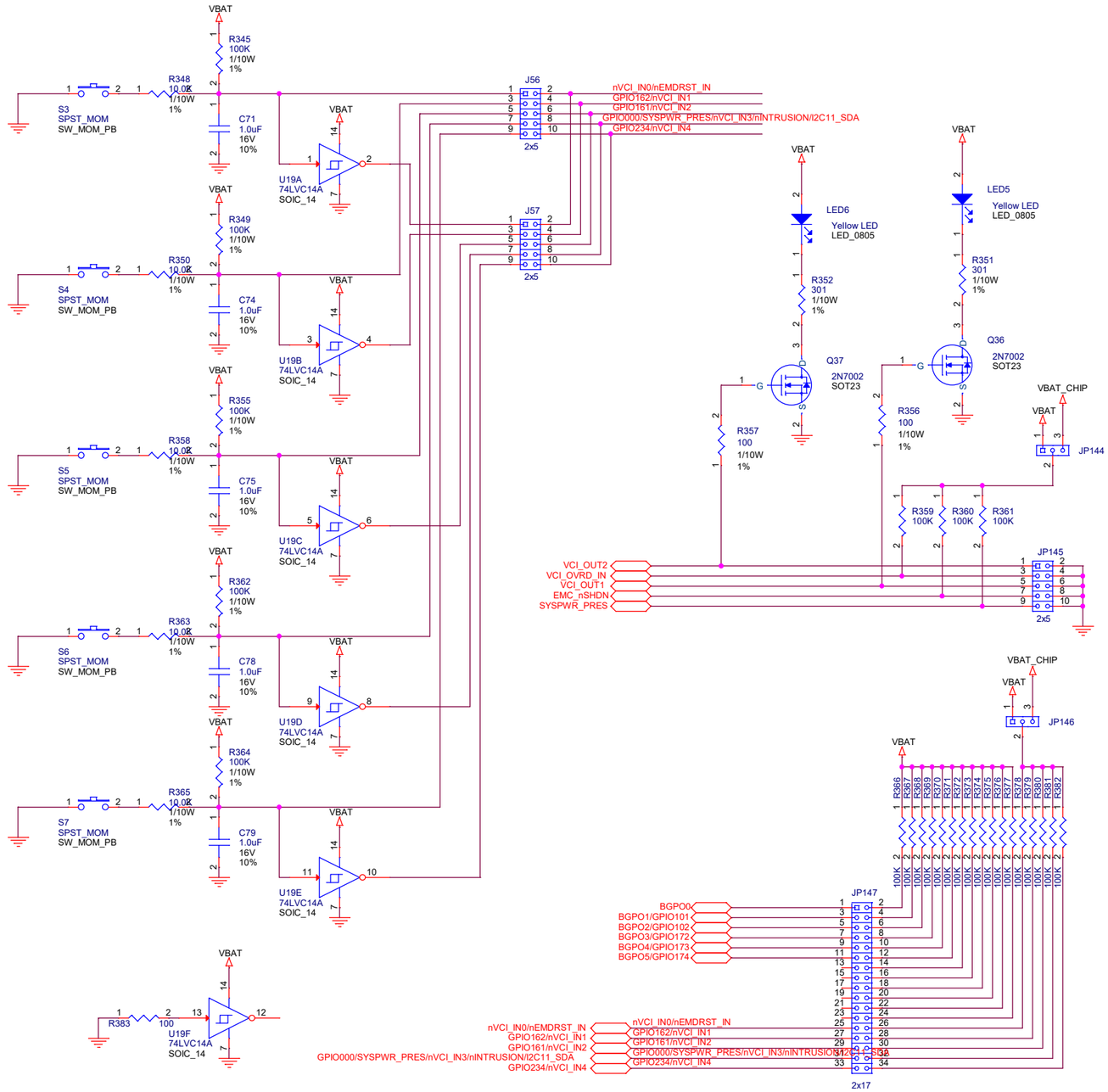
PS2 Interface







VCI Interface / Battery Well Glue logic



MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	PS2 and Battery Logic			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Monday, July 04, 2022	Sheet 14 of 17		

FT4222 (On IO Board)

USBPWR_FT4222
VCHIP_VTR2
VOUT3V3
VCCIN
VCCIO
GND
R384 0R
R385 0R
D10 MBR0520
J59
J58
TP22
C80 4.7uF
C81 0.1uF
C82 4.7uF
C83 0.1uF
C84 4.7uF
C85 0.1uF
J60
R386 10k
QSPI_SS
VPP
B1 FT4222HQ-D-T
R387 47k
R388 10k
R389 10k
J61
nRESET_IN
TEST_M
DCNF0
DCNF1
SW1
C86 0.1uF
R390 DNP 301R
R391 0R
Y2 12MHz
C89 27pF
C90 27pF
R392 12k
C87 100pF DNP
J62
Host USB port
10103593-0001LF
R393 330R
C88 0.1uF
EARTH_2
J63
J64
JP31A/B, DEFAULT OPEN
R411 10k
R412 10k
J65
FT4222_UP
JP148
R394 7.5k
R395 7.5k
R396 7.5k
R397 7.5k
R398 7.5k
R399 7.5k
R400 7.5k
R401 7.5k
R402 7.5k
R403 7.5k
33OhmR404
33OhmR405
33OhmR406
33OhmR407
33OhmR408
33OhmR409
33OhmR410
2x12
FT4222_SS3_OUT
FT4222_SS2_I2CSDA
FT4222_SS1_I2CSCL
FT4222_SPI_MSTR_INT
FT4222_SPI_nCS
FT4222_SPI_IO3
FT4222_SPI_IO2
FT4222_SPI_IO0
FT4222_SPI_IO1
FT4222_SPI_SCLK
GPIO053/PWM0/SPIPER_AP_INTR/GPWM0
SLV_SPI_nCS
SLV_SPI_IO3
SLV_SPI_IO2
SLV_SPI_IO0
SLV_SPI_IO1
SLV_SPI_SCLK

LED3

LED11 Yellow LED LED_0805
R477 301 1/10W 1%
Q41 2N7002 SOT23
LED3 or LED3_ALT
GPIO035/PWM8/CTOUT1/ICT15/LED3
GPIO136/TACH4/LED3_ALT/PP_SLCT
JP222

LED4

LED12 Yellow LED LED_0805
R478 301 1/10W 1%
Q42 2N7002 SOT23
GPIO163/TACH6/LED4
JP223 1x2

LED5

LED13 Yellow LED LED_0805
R479 301 1/10W 1%
Q43 2N7002 SOT23
GPIO164/TACH7/LED5/PP_nERROR
JP224 1x2

LED0

LED7 Yellow LED LED_0805
R413 301 1/10W 1%
Q38 2N7002 SOT23
GPIO156/LED0/nYELLOW
JP149 1x2

LED1

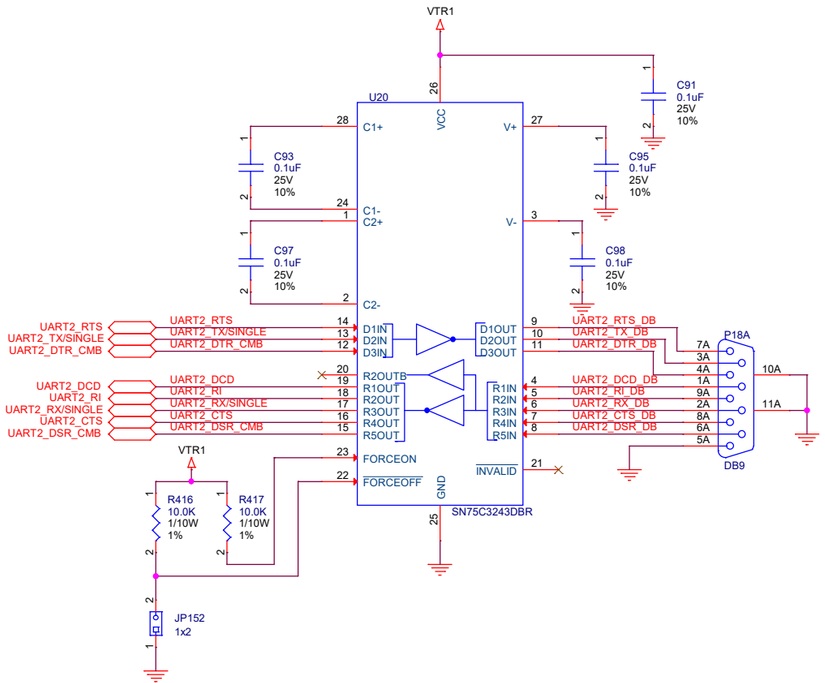
LED8 Yellow LED LED_0805
R414 301 1/10W 1%
Q39 2N7002 SOT23
GPIO157/LED1/nGREEN
JP150 1x2

LED2

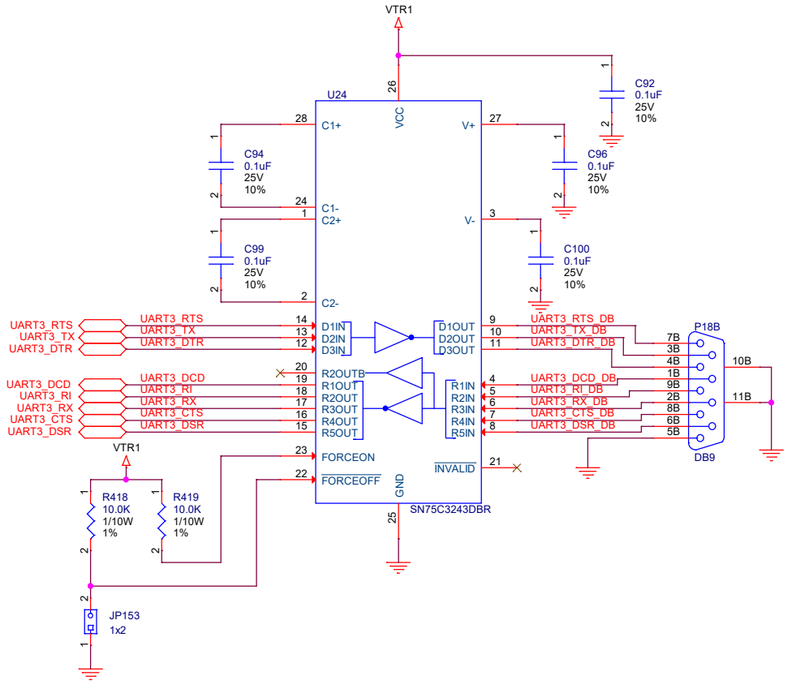
LED9 Yellow LED LED_0805
R415 301 1/10W 1%
Q40 2N7002 SOT23
GPIO153/LED2/PCIAUX_GATE/PP_PD4
JP151 1x2

MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	FT4222			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Friday, June 17, 2022	Sheet 15 of 17		

UART2

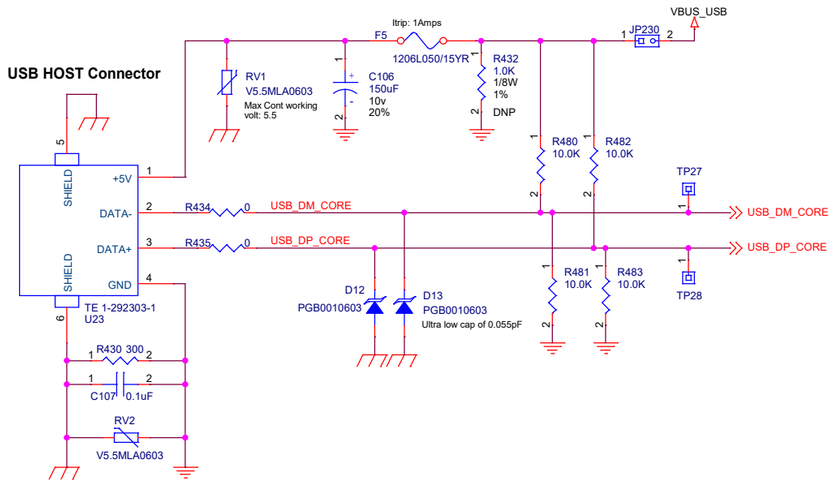


UART3

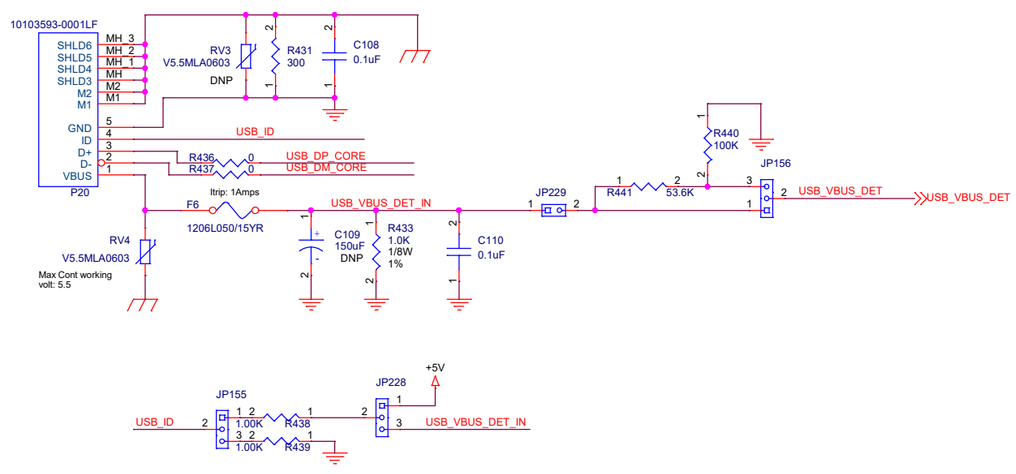


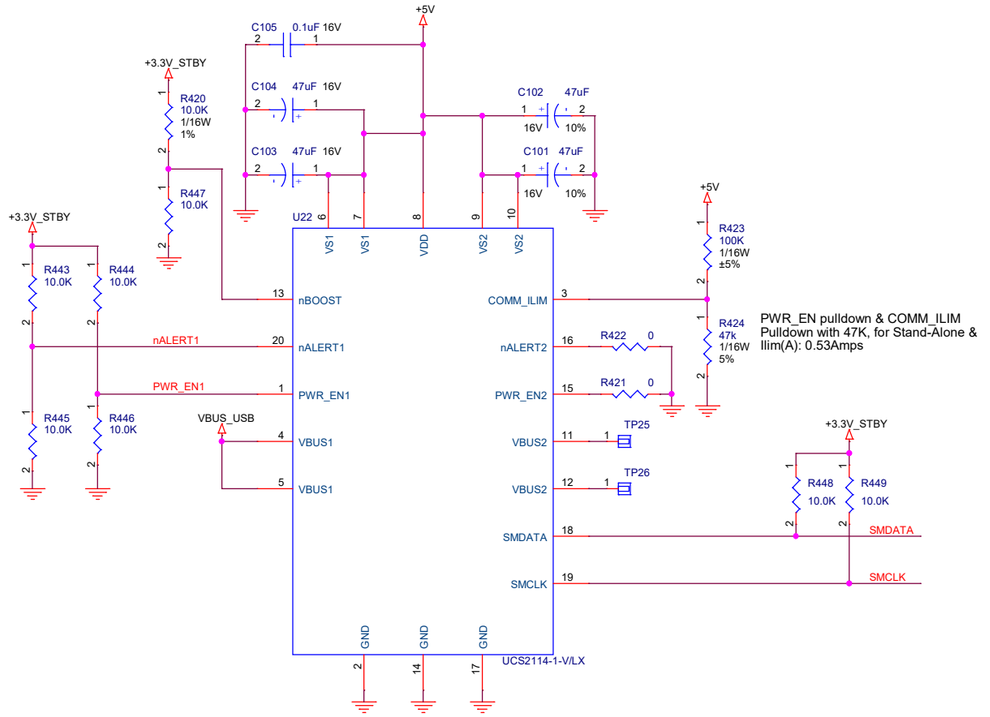
MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	UART2 & 3			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Thursday, June 16, 2022	Sheet 16 of 17		

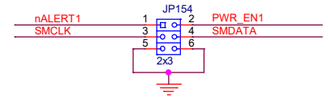
USB HOST Connector



USB Device Connector







MICROCHIP	Microchip Technology Inc. www.microchip.com			
EVB Number:	Joshua Tree Daughter Cards			
Page Title:	USB			
Size:	Engineer: J.D.	Assembly Number: 6941	PCB Rev: A	Sch. Rev: 1.0
Date:	Thursday, June 16, 2022	Sheet 17 of 17		