USB to **UART** JTAG/SWD Interface PCIe Interface +5V +3V3 J1 USB_B_Micro +BATT +BATT +3V3 PRSNT1 PCIe Connector +57 3V30UT PWR2 GND RXD hRTS hCTS hDTR 4 TCLK TCLK 6 TDO TDI hDCD 8 TDI SWD Header TDO 10 hRI TRST a8 TMS ь9 ь10 a9 a10 a11 a12 a13 a14 a15 a16 JTAG Connector SW1 P CBUS0 17 LED_RX J2 b11 b12 b13 b14 GND SW_RST CBUS1 SW_PWR PWR_OK 10 LED_TX CBUS2 CBUS3 19 PWR1 GND FT231XS hRTS b16 b17 b18 PRSNT2 GND **LEDs** Target Power Supply **3**V**3** V_IN **FTDI** Target +BATT +3V3 VBUS +3V3 +3V3 +3V3 U3 $\dot{\Phi}$ NCP703×N33T GND PWR1 R12 R13 GND Screw_VIn PWR2 TARGET POWEROK +3V3 NL17SZ32 PRSNT1 \Rightarrow PRSNT2 GND NL17SZ00 LED_TX LED_RX TARGET_PRESENT CATALOG STATE TARGET_PRESENT AO3400A PWR_OK A03400A YBUS is 3V3 from a 300mA LDO. FTDI 3V3 OUT supports up to 50mA output. Each 3V3 LED is 5mA. 10 pin compact JTAG header follows Black Magic Probe pinning. SWD pin header is for other devices. If target needs VBUS, power with USB and enable via JTAG/SWD/FTDI. GND GND 51K R10 Puccinelli Laboratories, Inc. GND Sheet: / File: P1_FT231X.sch Title: P1 - Module Programmer/Debugger Date: 2020-05-16 Rev: A KiCad E.D.A. kicad (5.1.5-0-10_14) ld: 1/1