U1 Pins 2, 7, 8, 14 (there are some more) are on PWM Timer 3 (FTM3) so changes Teensy 4.1 to their timer affect both pins 5٧ 3.3V\_3 Pins 3 and 4 use PWM Timer FTM1 so VUSB VUSB changes to that timer affect both pins. Opto-isolated input VBAT Input 1 VBAT NC / +3.3 V output. Current 120 mA (nominal) Firmware FrequencyTimer2 uses pin 5 LED VIN and can output a very low litter LED signal based on the PWM Timer. \_\_5 IN2 T-Unfortunately it's 50% duty cycle Output 1 Opto-isolated output T+ and we need a shorter pulse so PROGRA R R-PROGRAM we're using pin 6 Ground for opto-isolated I/O, ON/OF R+ ON/OFF R+ Blue 5 N/A Opto GND not connected to camera GND PWM\_CRX2\_CS1\_RX1 Brown 6 N/A GND DC camera power ground D+ 1 \$GPRMC TX1\_CTX2\_MISO1\_PWM PWM\_OUT2 5V Cam2\_Trig 2 Cam1\_Trig PWM\_LRCLK2 OUT2 1Hz\_clk PWM\_BCLK2 OUT1D 9 Teensy-PC-USB ( PPS PWM\_IN2 OUT1C 32 Cam3\_Trig PWM\_OUT1D OUT1B Teensy® 4.1 Features PWM\_OUT1A\_RX2 Welcome to Teensy<sup>®</sup> 4.1 Cam4\_Trig 8 PWM\_IN1\_TX2 CS3 Cam1\_Exp Special Features and Additional Pins 32 Bit Arduino-Compatible Microcontroller 36 PWM\_OUT1C CS2 Cam2\_Exp To begin using Teensy, please visit the website & click Getting Started. 10 CS1 DAT3 RX5 On/Off 46 45 **PWM** www.pjrc.com/teensy Cam3\_Exp PWM\_MQSR\_CS CMD SCK2 SCL1 PWM Program 11 PWM\_CTX1\_MOSI IMU\_SyncOut MISO GND - 3.3V 12 PWM\_MQSL\_MISO 11 MOSI PWM PWM Cam4\_Exp -44 CLK CS2 SDA1 3.3V 13 SCK GND **VBAT** 43 DATO MOSI2 42 DAT1 MISO2 PWM SD Card PWM\_SCL2\_TX6\_A10 A17 40 PWM\_SDA2\_RX6\_A11 A16 V (250 mA n 49 CRX1 A8 CTX1 A7 RX5 A6 TX5 A6 TX5 A3 TX4 A3 TX4 A3 TX4 A4 TX3 A1 RX3 A1 RX3 A1 RX3 A1 RX3 RX8 CS0 CK2 D1 CS0 48 D1 49\* D2 50\* \_\_26 39 54 D3 53 CLK 52 D0 MOSI1\_A12 A15 27 SCK1\_A13 38 A14 \_\_28 **GND** PWM\_RX7 A13 29 26 PWM\_TX7 A12 PWM SCL1 CS1 51 30 CRX3 25 A11 54 D3 MISO2 PWM 53 CLK TX1 52 D0 RX1 SCK2 D1 31 CTX3 24 A10 D2 50° \_32 23 OUT1B Α9 GND Cut to separate VIN from VUSB, OSPI Memory GND GNDS USB\_GNDUSB\_GND2 TX1 VUSB LED - GND D-D+ **USB Device** ror solutions to the most common issues and technical support, please visit:

www.pjrc.com/help

Renny 4.1 pins are not 5 wolt tolerant. that n.3 yrb carp (in, cept VIN & VUSB. For solutions to the most common issues Sheet: / File: ig\_handle Teensy 4.1.kicad\_sch Title: Handle Pinout Size: A4 Date: 5-Aug-22 Rev: B KiCad E.D.A. eeschema (6.0.6) ld: 1/1