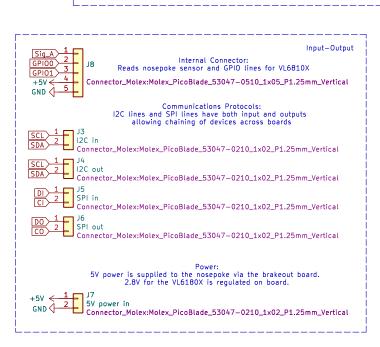
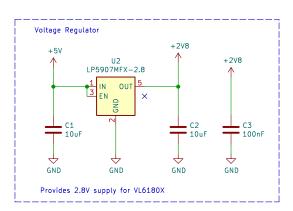
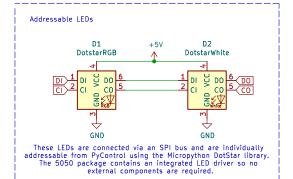
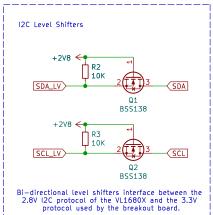


VL6180X is an ambient light sensor and infrared based time of flight sensor to detect distances from 0 to 10+ cm. It is read via the I2C bus with default address 0x29. To initialise multiple VL6180X on a single I2C bus the devices must be booted sequentially with the I2C address reassigned for each device in turn to prevent address conflicts. This is achieved by holding GPI00 low to prevent booting until the previous chip has been initialised with an updated I2C address at which point GPI00 can be pulled high to initialise the next device. GPI01 is a configurable interupt that can be configured to trigger when an object is detected within a specified distance, or to detect specific levels of ambient light.









A PyControl compatible Nosepoke board with addressable LEDs, TOF sensing and ambient light sensing

Design by: Daniel Titheradge University of Bristol

Sheet:1/1
File: NosePokeV1.0.kicad_sch

Title: Nosepoke board		
Size: A4	Date: 2024-06-29	Rev:
KiCad E.D.A. 8.0.4		ld: 1/1