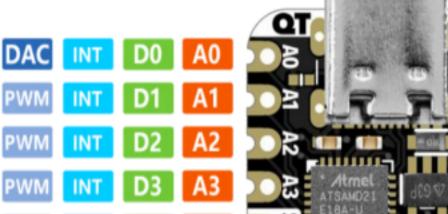




\*unofficial











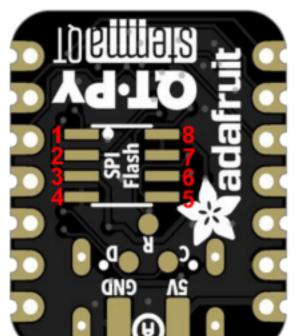


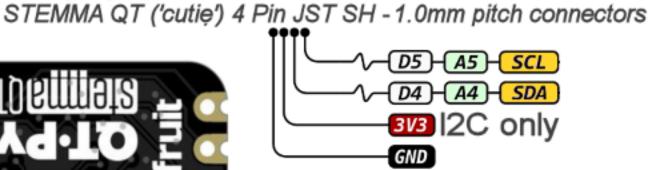


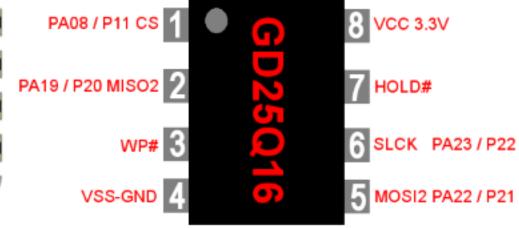












Only A0 and A1 cannot be PWM output

There's no pull up on this pin by default so when using with I2C, you may need a 2.2K-10K pullup on each to 3.3V

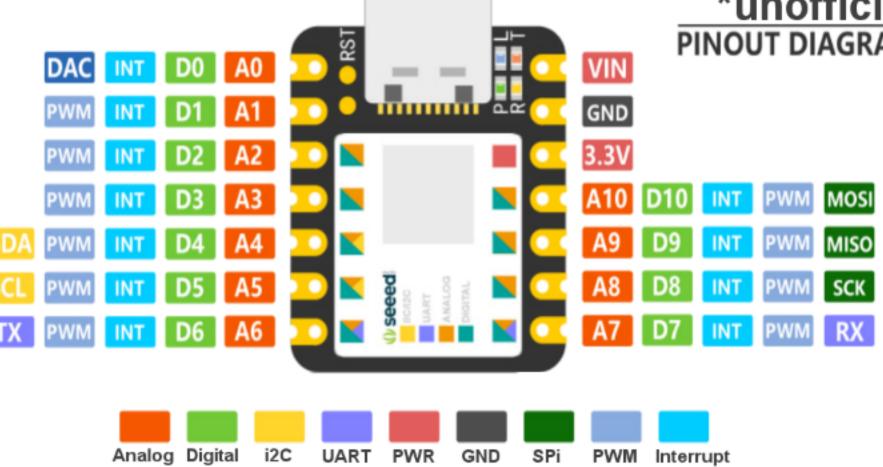
Once soldered in, you can access the SPI flash in Arduino on SPI1 and chip select pin 17.

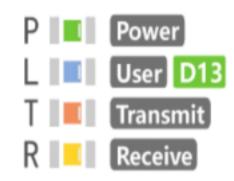
## Onboard Neopixel pins

There is a very tiny NeoPixel that is connected to digital pin 11 for signal. If you would like to turn off the pixel for low power usage, set pin 12 low. By default pin 12 is set high for you by Arduino/CircuitPython



















STEMMA QT ('cutie') 4 Pin JST SH - These are smaller 1.0mm pitch connectors



Maximum source current is 46mA and maximum sink current is 65mA per cluster. A cluster is a group of GPIOs. Evach VDD/GND pair is connected to 2 clusters so current consumption through the pair will be a sum of the clusters source/sink currents



Serial: Port which is USB virtual serial, normally prints to the Arduino Serial Monitor.

Serial1: Hardware serial port, physical RX(D7) & TX(D6) pins.



Processor ARM Cortex-M0+ 48MHz 256K FLASH 32K SRAM Peripherals 12-bit ADC 10-bit DAC USB 2.0 12C SPI DMA System Low Power Modes SWD External interrupts Platforms Arduino CircuitPython Atmel Studio MicroPython