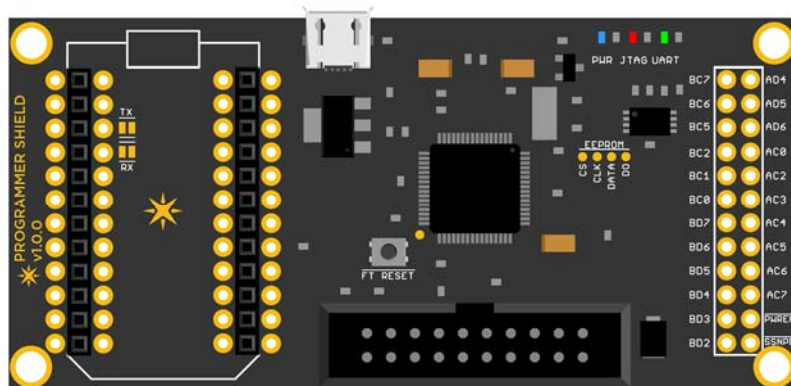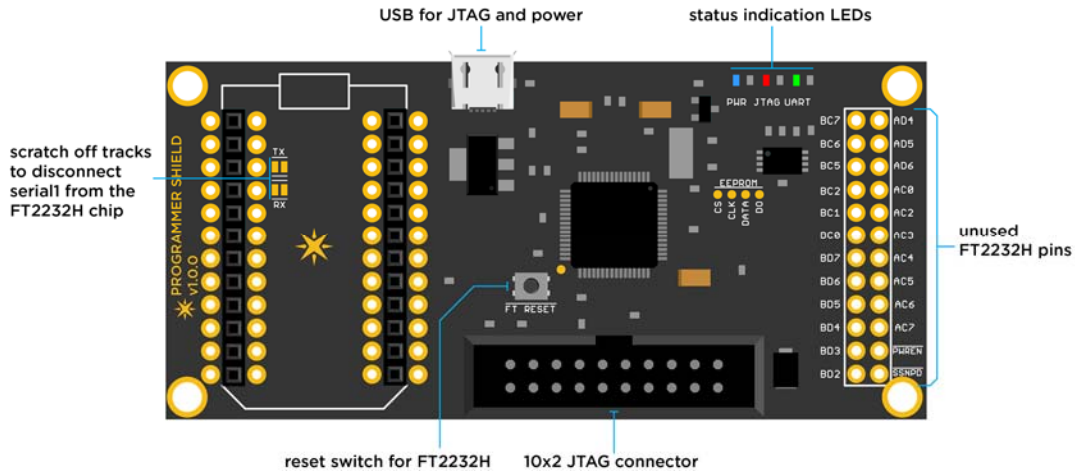# Programmer Shield

Do you want to gain complete control over your Particle device right down to its every bit of memory space? or watch as your code gets executed and debug it? Then this shield should be able to pacify that control freak inside of you.

This is a FT2232H based JTAG programmer shield that is compatible with OpenOCD and Broadcom's WICED IDE. The FT2232 chip is setup to provide an USB-JTAG and USB-UART interface simultaneously. The FT2232 can be also reconfigured by the user by reprogramming the on-board config EEPROM. The unused pins are clearly marked and broken out into easy to access header holes.

The USB-UART interface is connected to the TX and RX of a Particle device and communicates via Serial1
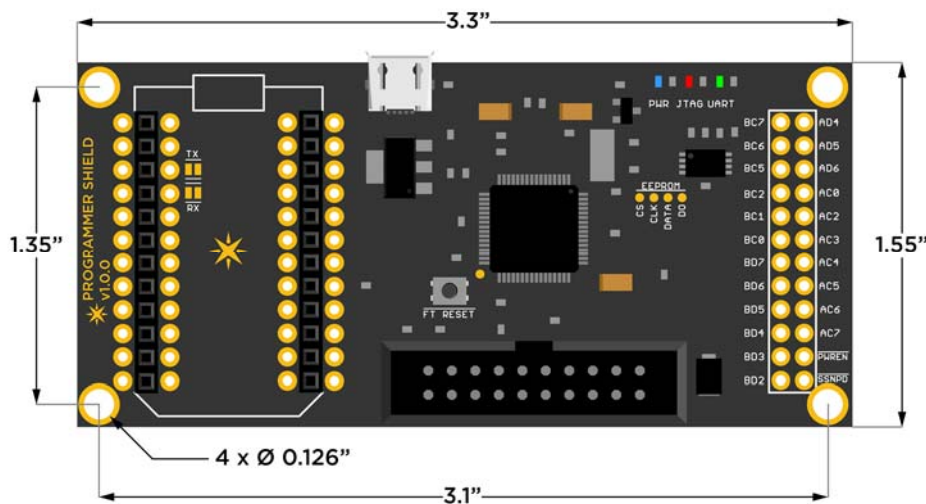
For more instructions on setting up OpenOCD and using the Programmer Shield, please read through the README at the landing page of the Programmer Shield repository on GitHub, linked below:

https://github.com/spark/shields/tree/master/photon-shields/programmer-shield

Programmer Shield - Specifications

- Operating supply: USB
- Current consumption:
- Dimensions: 1.55" x 3.3"
- Weight: 18 gms
- Compatibility: OpenOCD and WICED IDE

Drill Template >

https://docs.particle.io/datasheets/particle-shields/ 11-1-7