



## GreatFET One

DEV-16267

The GreatFET One from Great Scott Gadgets is a hacker's best friend! With two USB ports, one host and one peripheral, it can act as a "man in the middle" for USB interfacing. The GreatFET One connects to a host computer and extends the reach of said computer to the outside world. Whether you need an interface to an external chip, a logic analyzer, a debugger, or just a whole lot of pins to bit-bang, the versatile GreatFET One is the tool for you. Hi-Speed USB and a Python API allow GreatFET One to become your custom USB interface to the physical world. With an extensible, open source design, two USB ports and 100 expansion pins, GreatFET One is your essential gadget for hacking, making and reverse engineering.

At the center is a powerful NXP LPC4330 (Cortex M4 @ 204MHz). The ARM Cortex-M4 is a 32-bit core that offers system enhancements such as low power consumption, enhanced debug features, and a high level of support block integration. The ARM Cortex-M4 CPU incorporates a 3-stage pipeline, uses a Harvard architecture with separate local instruction and data buses as well as a third bus for peripherals, and includes an internal prefetch unit that supports speculative branching. The ARM Cortex-M4 supports single-cycle digital signal processing and SIMD instructions. A hardware floating-point processor is integrated in the core.

The I/O pins are rated for 3.3V and with an 80-pin expansion interface (two female headers with two rows of 20 pins) and a bonus row of 20 male pins, attaching add-on boards is a breeze.

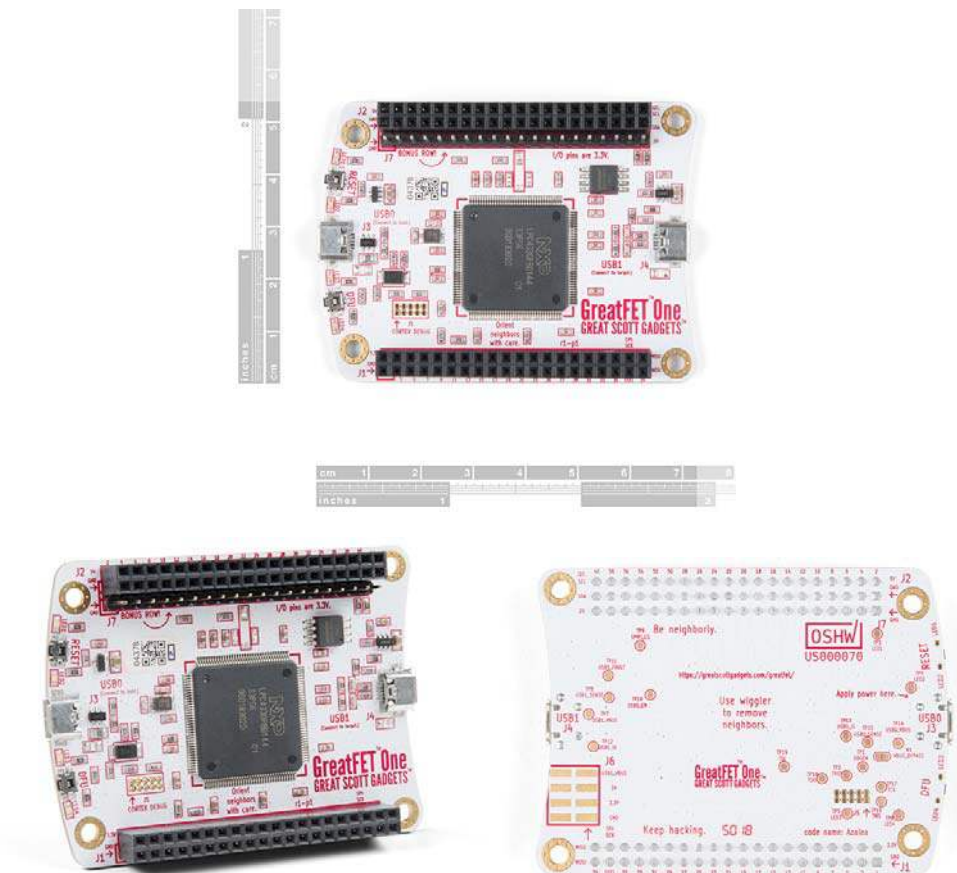
GreatFET One ships in an ESD bag with a high-speed USB cable and a wiggler for easy separation of add-on boards. Enclosures and add-on boards are sold separately.

## INCLUDES

- 1x GreatFET One Board
- 1x USB to microB cable
- 1x Wiggler

## FEATURES

- LPC4330 microcontroller
- 2MB flash memory
- Expansion interface of 80 pins (2 female headers with 2 rows of 20 pins)
- Bonus row of 20 male pins
- Programmable digital I/O
- Unpopulated Cortex Debug Header for JTAG or SWD
- Serial protocols including SPI, I<sup>2</sup>C, UART, and JTAG
- Logic analysis
- Analog I/O (ADC/DAC)
- Data acquisition
- Debugging
- Versatile USB functions including FaceDancer
- High-throughput hardware-assisted streaming serial engine
- Four fabulous LEDs!



<https://www.sparkfun.com/products/16267/1-29-20>