



Moddable Four

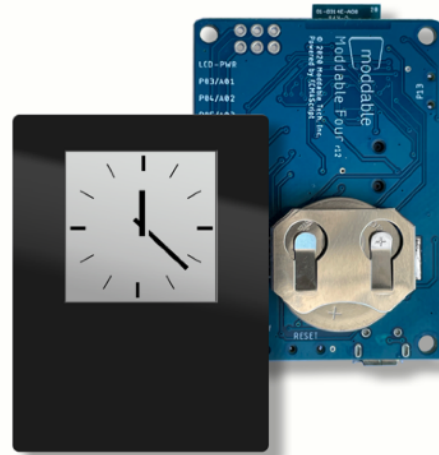
MOD4-0001.0

moddable.com

Dev board with Nordic nRF52 and 1.28" Reflective LCD display

Features

- Nordic nRF52 microcontroller
 - 32-bit ARM® Cortex™-M4 CPU at 64MHz
 - BLE – both peripheral & central roles
 - Ultra low-energy
 - 256 KB RAM
 - 1 MB Flash
- Sharp Memory 1.28" display
 - Reflective display
 - 128 x 128 pixels (square)
 - 1-bit with dithering for grayscale
 - 60 FPS animation
 - 0.1 uA to maintain display image
- 12 pins for external components
 - Digital, I²C, SMBus, SPI, PWM, analog input
- Accelerometer
 - LIS3DH by STMicroelectronics
 - Wake automatically on motion
 - Detect device orientation
 - Low power operation
- Fits into your project design
 - Thin form factor
 - Optional frame with mounting holes contact us
- Power
 - 3.3V and 5V outputs
 - 5V input
 - Power switch (battery cut-off)
- USB port
 - Install project firmware
 - Connect to xdebug JavaScript debugger
 - External power
- Moddable SDK
 - Modern, industry standard JavaScript for rapid development of robust, secure firmware
 - Native C code for performance and integrating existing libraries
 - BLE APIs for both central and peripheral roles
 - Piu UI framework for building interactive user interfaces
 - Poco graphics renderer for high performance text and animation
 - ECMA-419 APIs for I/O
 - Compatible with ECMA-419 sensor drivers
 - Rendering extensions for SVG outlines, QRcodes, and animated GIF
 - Automatic dithering delivers gray-scale images on monochrome display
 - Automatic optimization of any TrueType/OpenType font for monochrome display
 - Energy management APIs to maximize battery life
 - Industry standard Web Workers API for non-blocking asynchronous execution
 - Open source – available on GitHub
 - Thoroughly documented
 - Hundreds of example apps
 - Supports mods for fast development and quick updates



Designed and built for developers

Moddable Four is powered by the energy-efficient nRF52 microcontroller operating at 64 MHz with integrated BLE, 1 MB of flash memory, and 256 KB of RAM. Its high-contrast reflective 1.28" Sharp Memory display consumes negligible power. Create interactive projects using the built-in jog-wheel, back button, and accelerometer.

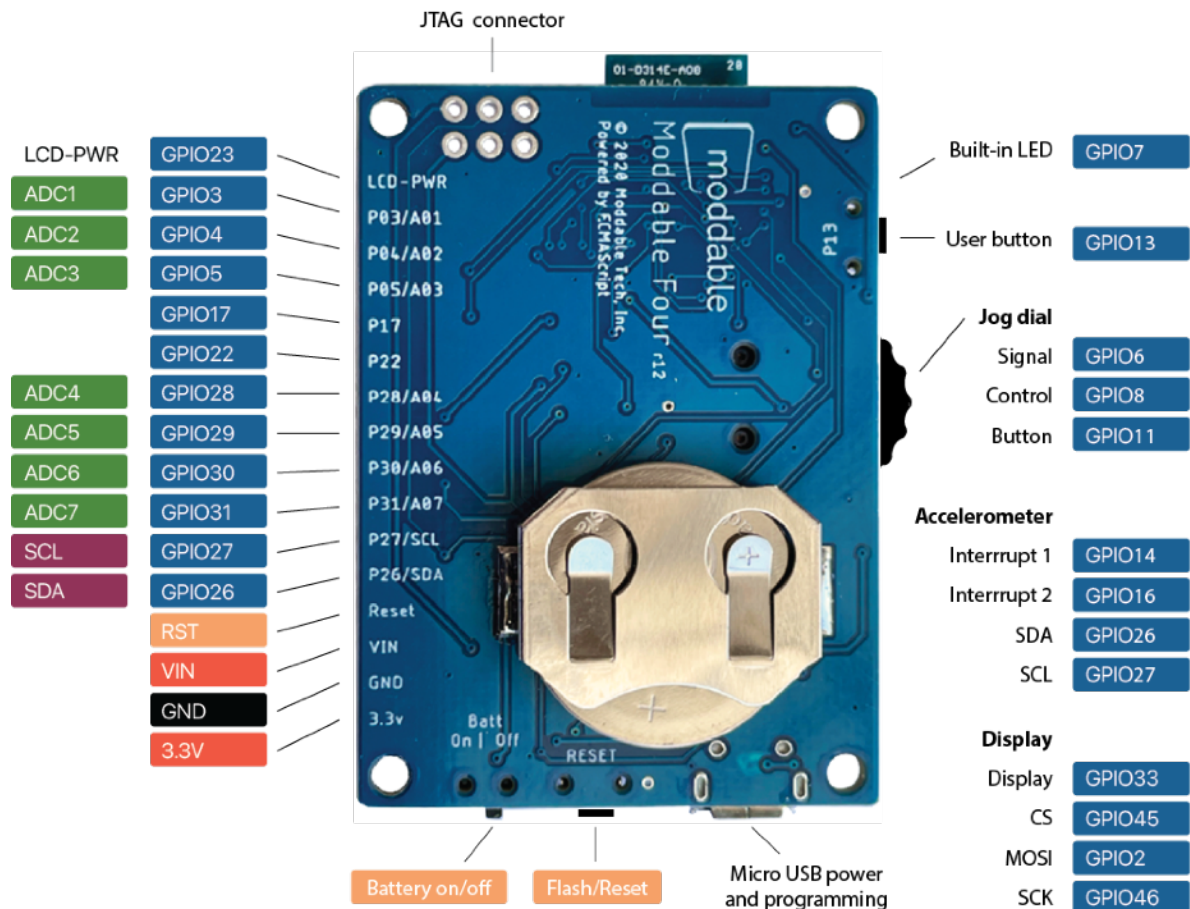
Moddable Four is so energy efficient that it runs for a year on a single coin cell battery. But it is also fast. Interactions with the built-in jog wheel are immediately visible on the smoothly animating display.

The JavaScript Moddable open source SDK is available at: <https://github.com/Moddable-OpenSource/moddable>

Moddable Four Pinout

The expansion header on Moddable Four has twenty programmable pins that allow you to communicate with variety of peripherals using digital, analog input, PWM, I²C, SMBus, and SPI. There's also 3.3V and ground pins to power your peripherals.

For convenience, there's also a built-in LED and programmable push button.



Moddable Four Dimensions

