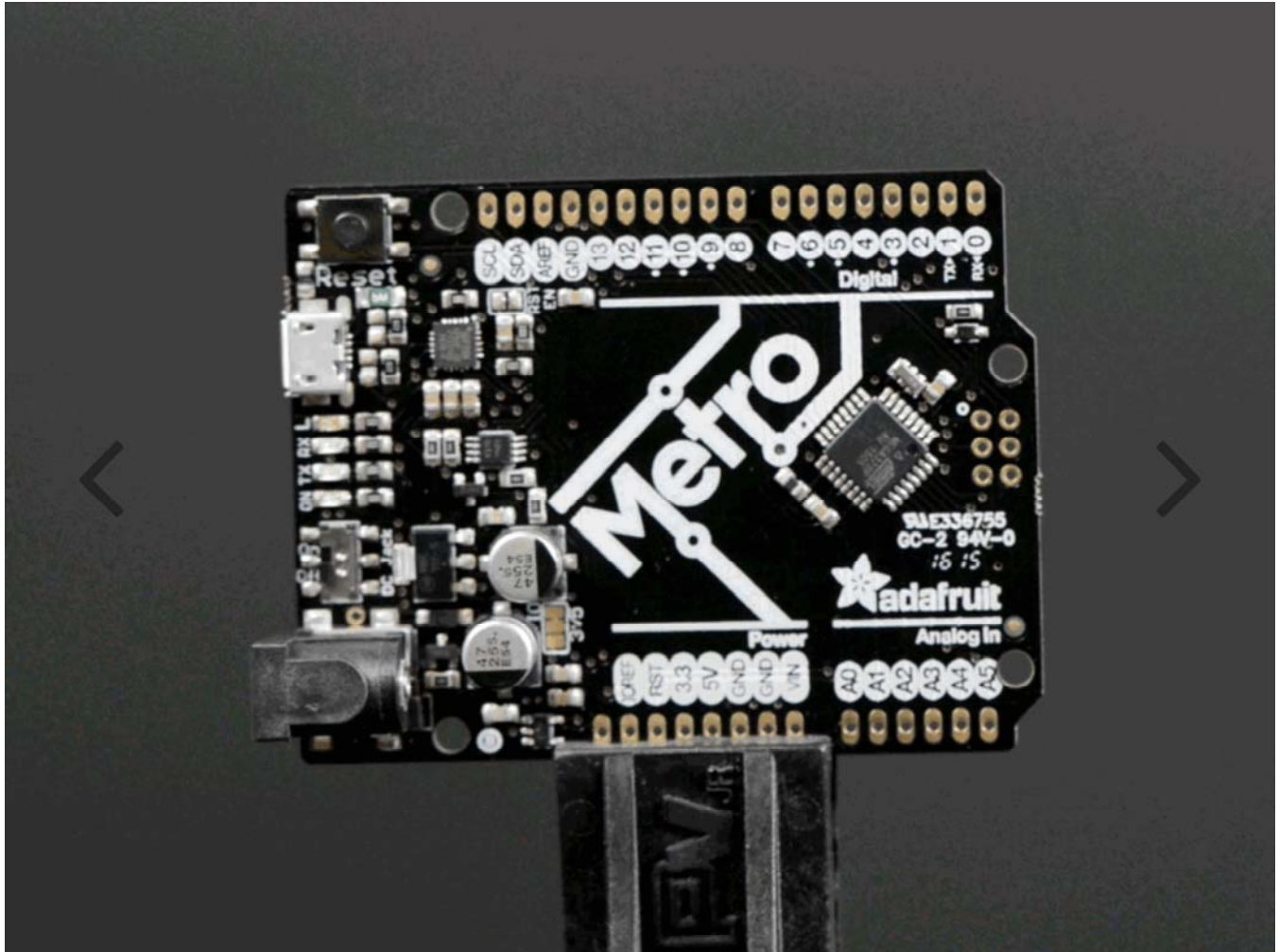


ARDUINO / BOARDS

Adafruit METRO 328 without Headers – ATmega328

PRODUCT ID: 2466



DESCRIPTION

We sure love the ATmega328 here at Adafruit, and we use them *a lot* for our own projects. The processor has plenty of GPIO, Analog inputs, hardware UART SPI and I2C, timers and PWM galore – just enough for most simple projects. When we need to go small, we use a Pro Trinket 3V or 5V, but when size isn't as much of a concern, and a USB–serial converter is required, we reach for an Adafruit METRO.

METRO is the culmination of years of playing with AVRs: we wanted to make a development board that is easy to use and is hacker friendly.

- ATmega328 brains – This popular chip has 32KB of flash (1/2 K is reserved for the bootloader), 2KB of RAM, clocked at 16MHz
- Power the METRO with 7–9V polarity protected DC or the micro USB connector to any 5V USB source. The 2.1mm DC jack has an on/off switch next to it so you can turn off your setup easily. The METRO will automagically switch between USB and DC.
- METRO has 20 GPIO pins, 6 of which are Analog in as well, and 2 of which are reserved for the USB–serial converter. There's also 6 PWMs available on 3 timers (1 x 16–bit, 2 x 8–bit). There's a hardware SPI port, hardware I2C port and hardware UART to USB.
- GPIO Logic level is 5V but by cutting and soldering closed a jumper, you can easily convert it to 3.3V logic
- USB to Serial converter, there's a hardware USB to Serial converter that can be used by any computer to listen/send data to the METRO, and can also be used to launch and update code via the bootloader
- Four indicator LEDs, on the front edge of the PCB, for easy debugging. One green power LED, two RX/TX LEDs for the UART, and a red LED connected to pin PB5
- Easy reprogramming, comes pre–loaded with the Optiboot bootloader, which is supported by avrdude and only uses 512 bytes.
- Beautiful styling by PaintYourDragon and Bruce Yan, in Adafruit Black with gold plated pads.
- Works with all Adafruit designed shields!

This version of the METRO 328 comes as a fully assembled and tested development board but without any headers attached. We do include some through-hole headers that you can solder on if you like, or you can solder wires or header directly to the breakout pads. We also include 4 rubber bumpers to keep it from slipping off your desk. Don't forget to grab & install the FTDI VCP drivers from FTDI to make the COM/Serial port show up right!