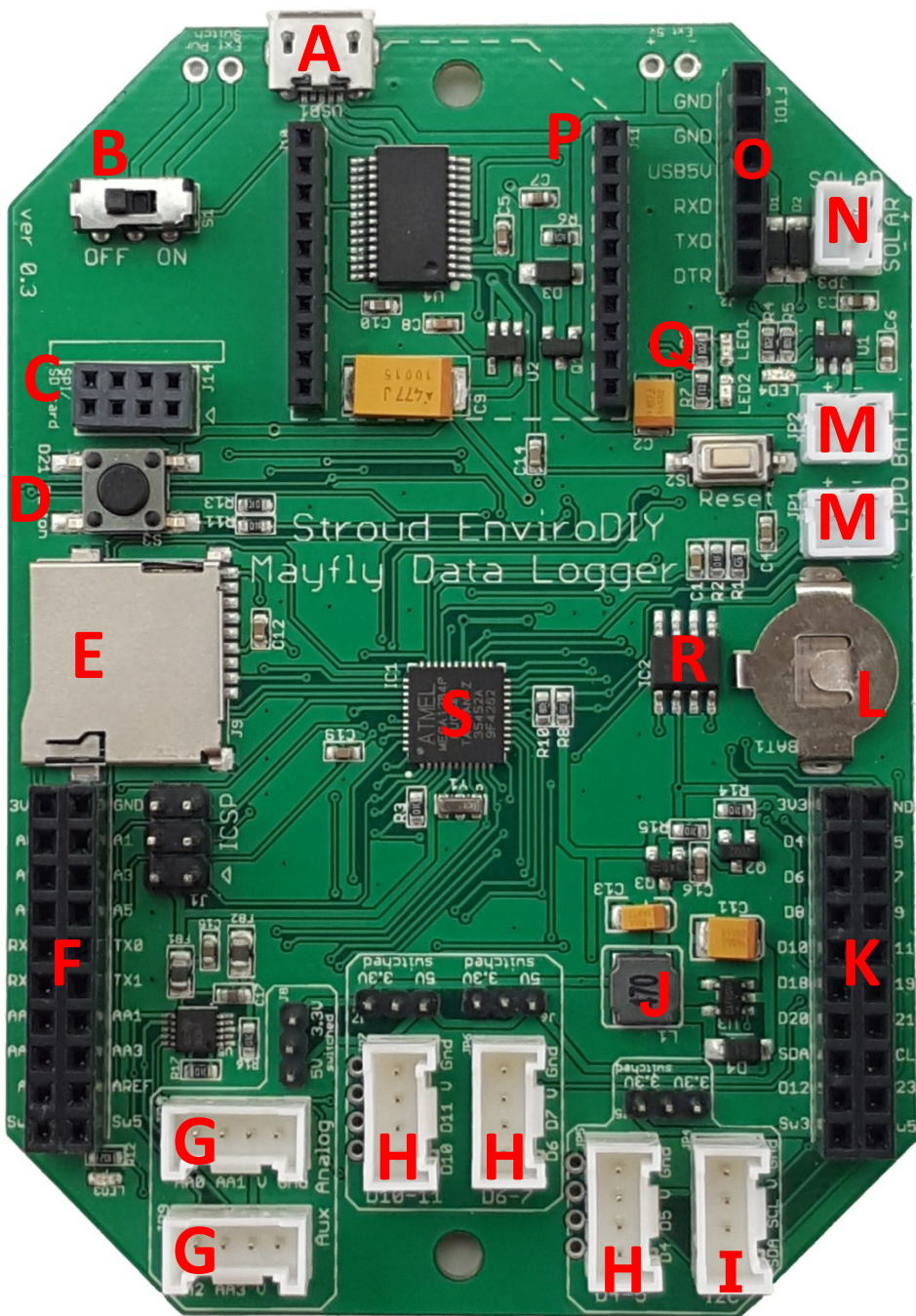


# Features of the Mayfly Data Logger



<b>A</b>	<b>MicroUSB port</b> – connect a standard MicroUSB cable to a computer for programming the Mayfly using the Arduino software
<b>B</b>	<b>Power switch</b> – turns the Mayfly board on and off
<b>C</b>	<b>microSD/SPI connector</b> – socket for vertical microSD memory card adapter board or other SPI devices
<b>D</b>	<b>Pushbutton</b> – connected to pin D21 for user-defined input
<b>E</b>	<b>microSD card socket</b> – socket for storing data on a standard microSD memory card
<b>F</b>	<b>Analog pin header</b> – access to the Mayfly’s power, ground, & analog pins, and also the four Auxiliary 16-bit Analog-to-Digital converter pins
<b>G</b>	<b>Auxiliary ADC Grove connectors</b> – pairs of Auxiliary Analog pins along with ground and power (3.3v or 5V)
<b>H</b>	<b>Digital pin Grove connectors</b> – pairs of digital pins along with ground and power (3.3v or 5v), for connecting sensors and Grove accessories
<b>I</b>	<b>I<sup>2</sup>C port Grove connector</b> – connection for any devices that use the I <sup>2</sup> C protocol
<b>J</b>	<b>5-volt boost converter</b> – generates 5v for powering external sensors
<b>K</b>	<b>Digital pin header</b> – access to the Mayfly’s power, ground, & digital pins
<b>L</b>	<b>Clock battery</b> – socket for CR1220 lithium battery to keep clock chip (R) running when no other power is connected to Mayfly
<b>M</b>	<b>LiPo battery connectors</b> – JST socket for connecting LithiumPolymer (LiPo) rechargeable battery. Additional socket is for providing power to high-current peripheral devices
<b>N</b>	<b>Solar panel connector</b> – JST socket for connecting 6v solar panel for charging the LiPo battery
<b>O</b>	<b>FTDI programing header</b> – alternative port for programming board using an external FTDI adapter instead of using the Mayfly microUSB port
<b>P</b>	<b>Bee module socket</b> – connection port for various telemetry modules that use the Bee footprint (mesh radio, WiFi, cellular)
<b>Q</b>	<b>Red &amp; Green LEDs</b> – LEDs for providing visual feedback, connected to pins D8 (green) and D9 (red)
<b>R</b>	<b>Real-time clock</b> – DS3231 clock module with on-board temperature sensor, retains the date and time after initial programming, requires battery (L)
<b>S</b>	<b>Processor</b> – ATmega1284p microprocessor