

## JeeLabs Hardware

- **Note:** as of Feb 2017, docs for everything ARM-based uses [GitHub Pages](#). This new documentation can be viewed at <http://embello.jeelabs.org>.
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See the [Pinouts](#) page for diagrams of all the pins and ports used by JeeNodes and Plugs.

### [Microcontroller Boards](#)

- [JeeNode](#) - an ATmega microcontroller board and wireless radio for use with FTDI - [JN](#)
- [JeeNode SMD](#) - same as the JeeNode, but pre-assembled with SMD parts - [NS](#)
- [JeeNode USB](#) - same as the JeeNode, but including a USB interface - [JU](#)
- [JeeNode Zero](#) - based on ARM Cortex M0+, pre-assembled with SMD parts - [JZ](#)
- [JeeLink](#) - a microcontroller board and wireless radio as USB dongle - [JL](#)
- [SMD Kit](#) - small JeeNode-like kit to try out SMD soldering (no wireless) - [SK](#)
- [JeeNode Micro](#) - based on the ATtiny84, smaller than a JeeNode, limited to 2 ports - [JM](#)
- [LED Node](#) - a variant of the JeeNode with 3 high-power PWM drivers for LED strips - [LN](#)

See the side-by-side [Comparison Matrix](#) for details about each JeeNode type.

### [Interfaces - I2C Bus](#)

- [Analog Plug](#) - 4 analog inputs with 12- to 18-bit resolution - [AP](#)
- [Color Plug](#) - color sensor for accurately measuring RGB and light levels - [CP](#)
- [DC Motor Plug](#) - control up to 2 small DC motors or one stepper - [DM](#)
- [Dimmer Plug](#) - up to 16 PWM-controlled LEDs - [DP](#)
- [Expander Plug](#) - 8 extra general-purpose I/O lines - [EP](#)
- [Gravity Plug](#) - 3-axis accelerometer - [GP](#)
- [LCD Plug](#) - piggyback driver board for standard 16-pin LCDs - [LP](#)
- [Lux Plug](#) - light sensor with large dynamic range - [XP](#)
- [Memory Plug](#) - drives up to 4 EEPROM chips, up to 512 Kbyte - [MP](#)
- [Output Plug](#) - 8 output pins with high-voltage drivers - [OP](#)
- [Precision RTC Plug](#) - low-drift 2 ppm RTC with battery backup - [PR](#)
- [Pressure Plug](#) - atmospheric pressure sensor - [PP](#)
- [Proximity Plug](#) - 8 capacitive touch sensors - [YP](#)
- [RTC Plug](#) - real-time clock with battery backup - [RP](#)
- [UART Plug](#) - serial port with 64-byte buffers and RTS/CTS control - [UP](#)

### [Interfaces - Other](#)

- [Blink Plug](#) - 2 LEDs and 2 miniature pushbuttons - [BP](#)
- [Current Source Plug](#) - drive 2 channels of power LEDs @ 350/700 mA - [CS](#)
- [Ether Card](#) - an Ethernet card for use with the [Carrier Board](#) - [EC](#)
- [Flash Board](#) - piggy-back board to turn a JeeNode into an ISP programmer - [EB](#)
- [Heading Board](#) - 2-axis compass, barometer, and temperature sensor - [HB](#)
- [Infrared Plug](#) - send and receive various types of IR commands - [IR](#)
- [Input Plug](#) - 16 inputs, analog or digital - [IP](#)
- [MOSFET Plug](#) - 2 power MOSFETs to switch high-current DC - [ME](#)
- [OOK 433 Plug](#) - transmit and receive on the 433 MHz band using OOK - [OO](#)
- [Opto-coupler Plug](#) - dual opto-coupler to sense two DC inputs, with isolation - [OC](#)
- [Relay Plug](#) - 2 miniature relays to switch AC and DC, with isolation - [RY](#)
- [RFM12B Board](#) - a breakout board with optional 5V level conversion for the RFM12B - [RE](#)
- [Room Board](#) - indoor temperature, humidity, motion, and light sensors - [RB](#)
- [Slave Plug](#) - an ATtiny85 micro-controller connected to port-compatible headers - [SP](#)
- [Thermo Plug](#) - NTC / 1-wire sensor / thermocouple, and sound / relay output - [TP](#)
- [Utility Plug](#) - RJ12 jack with some re-wiring / signal conditioning options - [UT](#)
- [USB FTDI Board](#) - like the [USB BUB](#), but produced for some local projects - [UF](#)

## Prototyping

- [Breadboard Connector](#) - connect a solder-less breadboard - [BC](#)
- [Carrier Card](#) - two larger prototype areas for use with the [Carrier Board](#) - [CC](#)
- [Jee Plug](#) - a small prototype board to hook up simple sensors and connectors - [JP](#)
- [Plug Shield](#) - use I2C plugs (with optional I2C repeater) with an Arduino and similar boards - [PS](#)
- [Proto Board](#) - a daughterboard "filled" with holes for prototyping - [PB](#)
- [Wire Jumpers](#) - a set of flexible jumper cables for quick prototyping - [WJ](#)
- [Wireless Starter Pack](#) - 3 nodes, Room Board sensor w/LDR, an LCD Plug, and lots of extras - [WS](#)

## Mounting Options

- [AA Power board](#) - ultra low drain AA battery boost supply - [AA](#)
- [Bridge Board](#) - use any JeeNode next to a solderless breadboard - [BB](#)
- [Carrier Board](#) - rearrange a JeeNode + Plugs to fit in a plastic enclosure - [CB](#)
- [Extension Cables](#) - 6-pin 150-mm long flexible wires to hook up stuff - [XC](#)
- [Graphics Board](#) - a 64x128 graphics LCD which can carry a JeeNode and 2 plugs - [GB](#)

The two-letter [Product codes](#) at the end of each entry refer to pages which list version details of the product.