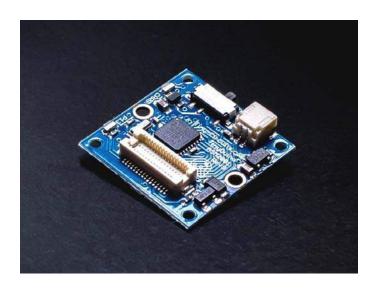


TINYDUINO PROCESSOR BOARD

ASM2001-R-L





DESCRIPTION

The TinyCircuits TinyDuino is an Arduino compatible board in an ultra compact package. The TinyDuino processor board is roughly equivalent to the Arduino Uno board – same processor, same signals brought out to a shield connector. In fact, most Arduino sketches will work as is without any changes.

The TinyDuino Processor Board is available in three variations:

- With Lithium Battery Support has an on-board Lithium battery charger that will charge the battery when attached to USB
- With coin cell battery support for low power applications, use a simple CR1632 coin cell battery that can be easily changed
- Without battery options the lightest and lowest cost option

Main Features:

- Atmega328P processor (same as is used on the Arduino Uno)
- Power Switch
- Status LED
- 8MHz ceramic resonator
- External power supported with a 0.1" power connection holes
- Supports automatic switching between +5V and VBATT (if +5V is present, it will be used instead of the battery)

To learn more about the TinyDuino Platform, click here

https://tinycircuits.com/pages/tinyduino-overview

TECHNICAL DETAILS

- Arduino Compatible
- Expandable with Stackable TinyShield Boards
- o Optional battery connector for CR1612-CR1632 coin cell batteries
- Optional Lithium battery connector and charger
- 0.1" spaced solder holes for external power source
- Robust Gold Finish makes soldering easy and is non-corrosive
- Ultra compact size and weight (smaller than a US Quarter!)
 - o 20mm x 20mm (.787 inches x .787 inches)
 - Max Height (without battery holder): 2.9mm (0.12 inches)
 - o Max Height (with coin cell battery holder): 6.58mm (0.26 inches)

- o Ultra-thin 0.61mm (0.024 inches) PCB
- o Weight: 1.10 grams (0.039 ounces) Lithium version
- Atmel ATmega328P Microcontroller
 - o 32KB Flash, 2KB RAM, 1KB EEPROM
 - 1.2mA (typical) @ 3V, 4MHz
 - o Default Clock speed: 8MHz
- 2.7V 5.5V operating voltage
- 20 I/Os (14 Digital, 6 Analog / Digital I/O) All the signals on the Arduino Shield connectors are supported!
- Arduino Bootloader preprogrammed (uses approx 0.5 KBytes of Flash Memory)

NOTES

- If you are brand new to the TinyDuino, buying a kit is the best way to go since it will have all the parts needed. Check out the TinyDuino Kits.
- All batteries are sold separately
- o To program this board, you need to use the TinyShield USB Board
- This board does not include a voltage regulator do not supply more than +5.5V to VBATT or the +5V signal or you will permanently damage the board and ruin your day.