Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

TINYDUINO PROCESSOR BOARD

ASM2001-R-L
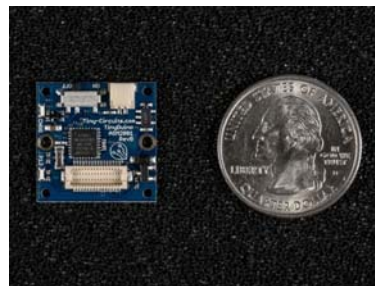
DESCRIPTION

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:

o **With Lithium Battery Support** - has an on-board Lithium battery charger that will charge the battery when attached to USB

o **With coin cell battery support** - for low power applications, use a simple CR1632 coin cell battery that can be easily changed

o **Without battery options** - the lightest and lowest cost option

Main Features:

o **Atmega328P processor (same as is used on the Arduino Uno)**

o **Power Switch**

o **Status LED**

o **8MHz ceramic resonator**

o **External power supported with a 0.1″ power connection holes**

o **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

o Arduino Compatible

o Expandable with Stackable TinyShield Boards

o Optional battery connector for CR1612-CR1632 coin cell batteries

o Optional Lithium battery connector and charger

o 0.1″ spaced solder holes for external power source

o Robust Gold Finish – makes soldering easy and is non-corrosive

o Ultra compact size and weight (smaller than a US Quarter!)

  o 20mm x 20mm (.787 inches x .787 inches)

  o 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
  - o 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
- 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.