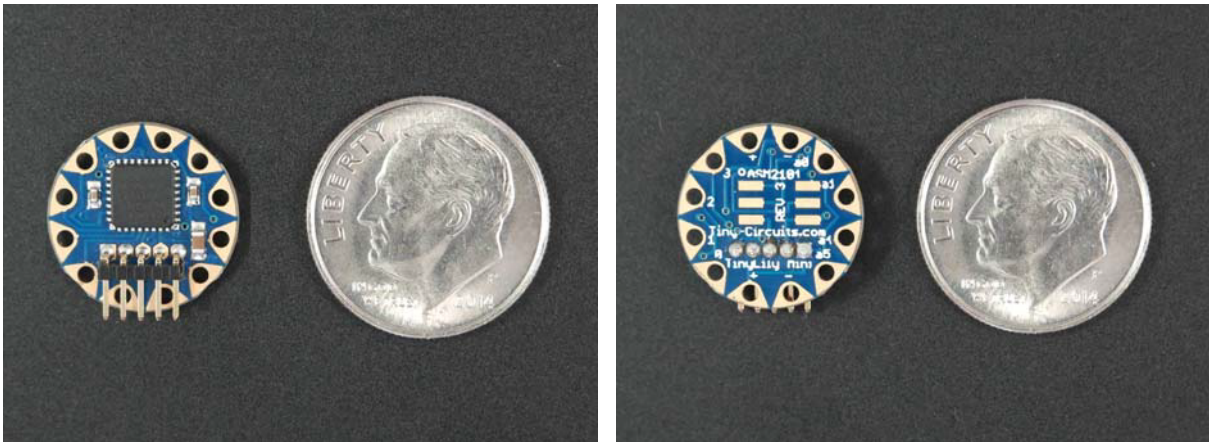# TINYLILY MINI PROCESSOR

ASM2101

DESCRIPTION

The TinyCircuits TinyLily Mini is an Arduino compatible module in an ultra compact package. Designed to be used in e-textile and wearable applications, the TinyLily Mini is very similar to the Arduino LilyPad with the same processing power and Arduino software compatibility – but at 1/12th the size!

- o **Arduino and LilyPad Compatible**
- o **Atmel Atmega328P processor (same as is used on the Arduino Uno and LilyPad)**
- o **Washable**
- o **Sewtabs for 8 I/O (4 Digital, 4 Analog / Digital) and 4 Power Sewtabs (2 for power, 2 for ground)**

Note: To program this board, you need to use the **TinyLily Mini USB Board,** which is sold separately.

TECHNICAL DETAILS

o   Arduino and LilyPad Compatible

o   Washable

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

o   Sewtabs for 8 I/O (4 Digital, 4 Analog / Digital) and 4 Power Sewtabs (2 for power, 2 for ground)

o   Sewtabs are 1.2mm in diameter, easy to use with standard conductive thread and needles

o   Arduino Bootloader preprogrammed (uses approx 0.5 KBytes of Flash Memory)

o   USB expansion header (for use with the **TinyLily Mini USB Board**)

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

> o   14.0mm (0.55 inch) diameter
>
> o   Max Height: 2.8mm (0.11 inches)
>
> o   Ultra-thin 0.61mm (0.024 inches) PCB
>
> o   Weight: .39 grams (.01 ounces)

o   Atmel ATmega328P Microcontroller

> o   32KB Flash, 2KB RAM, 1KB EEPROM
>
> o   1.2mA (typical) @ 3V, 4MHz
>
> o   Clock speed: 8MHz

o   2.7V – 5.5V operating voltage

NOTES

o   If you are brand new to the TinyLily, buying a kit is the best way to go since it will have all the parts needed. Check out the kits**.**

o   This board does not include a voltage regulator – do not supply more than +5.5V or you will permanently damage the board and ruin your day.