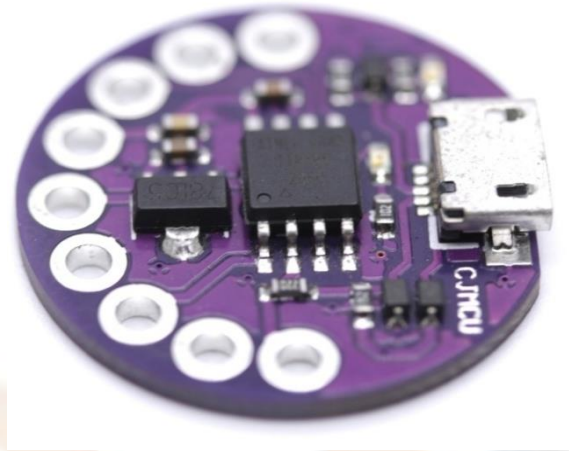# Arduino Lilypad Attiny85 Compatible

The LilyTiny is a tiny little LilyPad board designed to add flashy functionality to your project without taking up a lot of room. Even though it's as small as some of the LilyPad sensors, this board actually has an ATtiny microcontroller on it. Simply sew on 4 LEDs and connect a battery and the LEDs will each blink or fade differently. One will blink on and off, another will flash a heartbeat pattern, another will do a "breathing" fade and the other will do a random fade. LilyTiny is a quick and easy way to add twinkling lights to a project without any programming or a bulky Main Board. It's also a great educational tool for showing a range of functionality without having to get out the computers.

SPECIFICATIONS:

- Program Memory Type: Flash
- Program Memory (KB): 8

- CPU Speed (MIPS): 20

- Data EEPROM (bytes): 512

- Digital Communication Peripherals: 1-SPI, 1-I2C

- Capture/Compare/PWM Peripherals: 5

- Comparators: 1

- Temperature Range (C): -40 to 85

- Operating Voltage Range (V): 1.8 to 5.5

- Pin Count: 8

- Cap Touch Channels: 3

SCHEMATIC DIAGRAM:

TITLE: Lilypad Minifade-v12

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LillyPad

- The high-performance, low-power Microchip 8-bit AVR RISC-based microcontroller combines 8KB ISP flash memory, 512B EEPROM, 512-Byte SRAM, 6 general purpose I/O lines, 32 general purpose working registers, one 8-bit timer/counter with compare modes, one 8-bit high speed timer/counter, USI, internal and external Interrupts, 4-channel 10-bit A/D converter, programmable watchdog timer with internal oscillator, three software selectable power saving modes, and debugWIRE for on-chip debugging. The device achieves a throughput of 20 MIPS at 20 MHz and operates between 2.7-5.5 volts.

- By executing powerful instructions in a single clock cycle, the device achieves throughputs approaching 1 MIPS per MHz, balancing power consumption and processing speed.