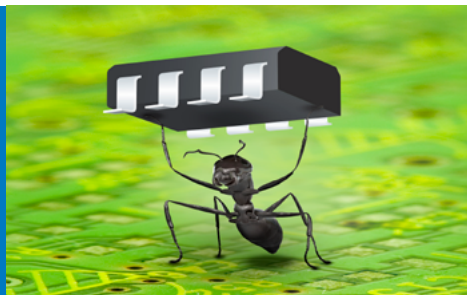
Atmel ATtiny102 and ATtiny104 MCUs

High Performance in a Small Device



The new high-performance Atmel® tinyAVR® 8-bit RISC-based ATtiny102 and ATtiny104 microcontroller (MCU) offers a small, very versatile, low-cost and easy-to-use solution for almost any application. It also incorporates Atmel picoPower® technology to deliver industry-leading low power.

The ATtiny102 and ATtiny104 MCUs are ideal for system monitoring, battery measurement, battery charging, voltage measurement, current measurement, interface to buttons, switches, drive of small motors, drive of one or more LEDs, and many other applications. The integrated USART provides a means for a wired or wireless interface, making it possible to create a powerful, yet small and low-cost solution for any Internet of Things (IoT) end-node.

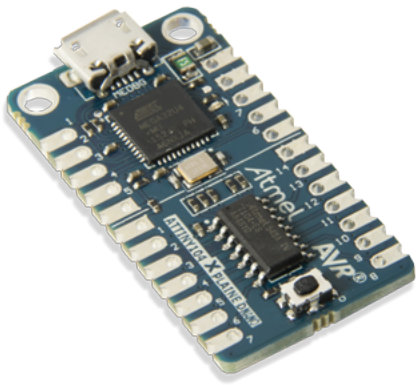
Key Features

- 1KB in-system programmable Flash memory
- Up to 12 general-purpose I/O lines
- 32 bytes SRAM
- 16 general-purpose working registers
- 16-bit timer/counter with two PWM channels
- Internal and external interrupts
- One 10-bit A/D converter with up to 8 channels
- On-chip analog comparator
- Full duplex USART
- Programmable watchdog timer with internal oscillator
- Internal calibrated 8MHz oscillator
- 10-bytes unique ID (serial number)
- Three calibrated internal voltage references (1.1V, 2.2V and 4.3V)
- Four software-selectable power saving modes

By executing powerful instructions in a single clock cycle, the ATtiny104 device achieves throughputs approaching 1 MIPS per MHz, while balancing power consumption and processing speed.

ATTINY104-XNANO Xplained Nano evaluation kit

– A hardware platform for evaluating ATtiny102/ATtiny104 microcontrollers



Evaluation Kit Key Features

- Atmel ATtiny104 host 14-pin 1kB Flash MCU
- Embedded programmer for programming the host MCU
- One mechanical button
- One LED
- Access to all I/O lines



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