

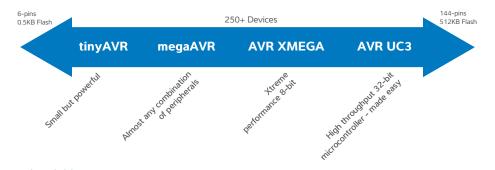
Atmel AVR Microcontrollers

Enabling unlimited possibilities



Atmel AVR Microcontrollers

Atmel® AVR® 8- and 32-bit microcontrollers deliver a unique combination of performance, power efficiency, and design flexibility. Optimized to speed time to market, they are based on the industry's most code-efficient architecture for C and assembly programming. No other microcontrollers deliver more computing performance with better power efficiency. Industry-leading development tools and design support let you go to market faster, and once you are there, the large AVR family lets you reuse your knowledge when improving your products and expanding to new markets – easily and cost-effectively.



Develop easily and quickly

Atmel AVR Studio[®] 5 is the integrated development environment for developing and debugging AVR applications. AVR Studio 5 provides a seamless and easy-to-use environment to write, build, and debug your C/C++ and assembly code. A wide range of starter kits, reference designs, and evaluation kits are offered across the range of AVR microcontrollers. Debuggers, programmers and compiler are offered directly from Atmel and support all AVR microcontrollers. AVR Software Framework is provided free of charge and provides drivers for all peripherals, example code, driver documentation and reference applications that will kick-start your AVR project with industry proven code.

Atmel AVR UC3 32-bit Microcontrollers

The Atmel AVR UC3 32-bit takes efficiency to a new level, going beyond high performance and low power consumption. Native fixed point DSP support, dual port SRAM, multi layer data bus, peripheral DMA controller, peripheral event system and intelligent peripherals takes performance and power consumption to the next step.

The peripheral DMA controller and multi-layer high-speed bus architecture make the AVR UC3 microcontrollers ideal for high throughput applications.





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Intelligent peripherals and dynamic power control make Atmel® AVR® UC3 devices the obvious choice for portable and battery-powered applications. Selected AVR UC3 devices include an integrated Floating Point Unit which improves arithmetic performance on decimal numbers, with better precision and wider dynamic range.

Atmel AVR XMEGA 8/16-bit Microcontrollers

The Atmel AVR XMEGA® delivers a leading combination of real time performance, integration and power efficiency. The highly integrated design minimizes your bill of materials in a broad range of applications. This includes features like 12-bit analog, AES and DES crypto, high-speed analog modules, flexible timer/counters, multiple communication modules, DMA, and efficient power management. The multi-channel DMA controller provides fast, CPU-independent, data transfer between data memories and peripherals. The innovative Event System enables inter-peripheral signaling without using CPU or DMA resources and ensures a short and guaranteed response time.

Atmel megaAVR 8-bit Microcontrollers

When your designs need some extra muscle, you need the Atmel megaAVR®. Ideal for applications requiring large amounts of code, the megaAVR offers substantial program and data memories with performance up to 20MIPS. All megaAVRs offer self-programmability for fast, secure, cost-effective in-circuit upgrades. You can even upgrade the flash while running your application.

Based on industry-leading, proven technology, the megaAVR family offers our widest selection of devices in terms of memories, pin counts and peripherals. Choose from general-purpose devices to models with specialized peripherals like USB, or LCD controllers, or CAN, LIN and Power Stage Controllers. It's easy to find the perfect fit for your project in the megaAVR product family.

Atmel tinyAVR 8-bit Microcontrollers

Atmel tinyAVR® devices are optimized for applications that require performance, power efficiency, and ease of use in a small package. All tinyAVR devices are based on the same architecture and compatible with other AVR devices. Integrated ADC, EEPROM memory, power on reset, and brown out detector let you build applications without adding external components. tinyAVR offers flash memory and on-chip debug for fast, secure, cost-effective in-circuit upgrades that significantly cuts your time to market.

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