



Atmel SAM3N Series

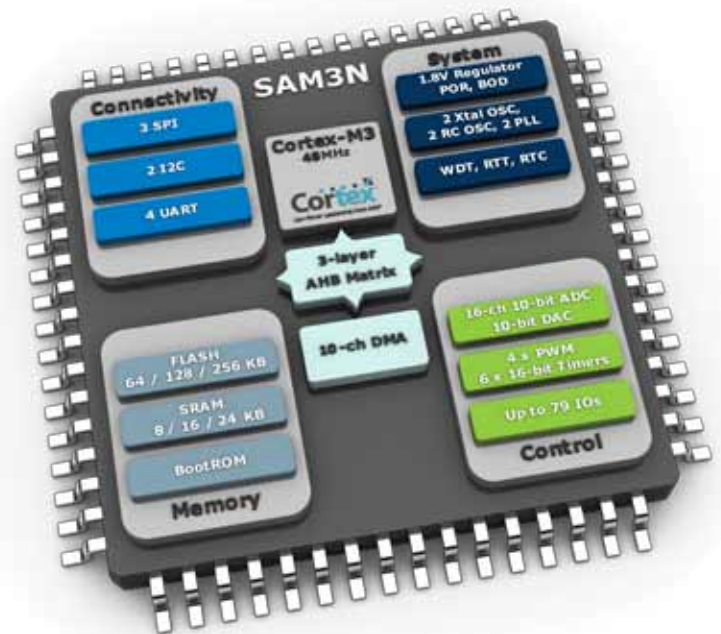
Cortex M3 Flash Microcontroller Converges Performance and Simplicity

Benefits

- Atmel® entry point into Cortex™ M3 technology
- Pin-to-pin compatible with best-selling Atmel SAM7S series and Atmel SAM3S series
- Native Atmel QTouch® capacitive touch support (buttons/sliders/wheels)
- Low power consumption enabled by advanced power management techniques and low operating voltage capability
- Delivers high-speed serial interfaces (SPI, UART)
- Simplified PCB design and low system cost
- Advanced safety and security features

Key Features

- 1.62V to 3.6V supply
- Cortex M3 rev 2.0 processor running at up to 48MHz
- Native 3-layer Advanced High-performance Bus (AHB) Matrix, 10 DMA channels
- Embedded regulator, power-on-reset, brown-out detection and multiple clock sources including 32kHz oscillator and factory-trimmed RC
- High-speed communication peripherals including USART (18Mbps), SPI (38Mbps)
- Up to 16-channel 10-bit 384Ksps ADC, 1-channel 10-bit 500Ksps DAC
- Powerful and flexible 16-bit timers with quadrature decoder and gray counter. Powerful PWM unit, calendar RTC, watchdog
- Power consumption 1.9 µA in backup mode, 22mA @48MHz, 0.9mA @1MHz
- 128-bit unique ID
- Up to 79 I/O lines with integrated serial resistors (on-die termination)
- 48-, 64- and 100-pin packages



Application Areas

- Industrial control
- Metering
- Medical
- Test and measurement
- 802.15.4 wireless networking
- Toys and consumer peripherals
- Remote control



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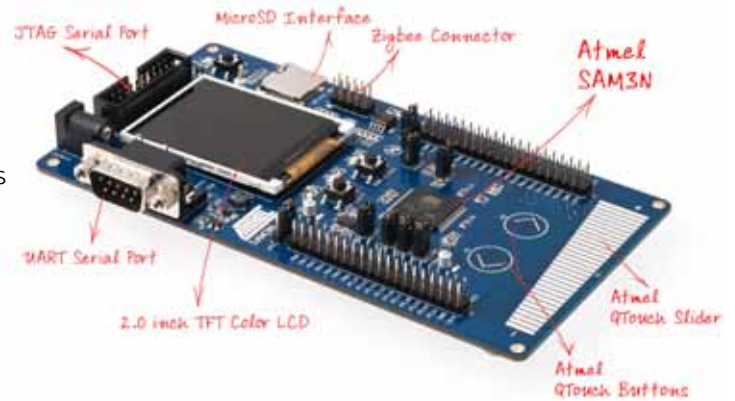
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Evaluation Kit and Ecosystem

- Fully-featured evaluation board and software library
- Atmel® QTouch® library support for buttons, sliders and wheels
- Worldwide support ecosystem of industry-leading suppliers of development tools, real-time operating systems and middleware products

Ordering Information

Kit Ordering Code ATSAM3N-EK



Ordering Code	Flash	Package	Availability
ATSAM3N4CA-AU	256kB	LQFP100	Now
ATSAM3N4CA-CU	256kB	BGA100	March 2011
ATSAM3N4BA-AU	256kB	LQFP64	Now
ATSAM3N4BA-MU	256kB	QFN64	Now
ATSAM3N4AA-AU	256kB	LQFP48	Now
ATSAM3N4AA-MU	256kB	QFN48	March 2011
ATSAM3N2CA-AU	128kB	LQFP100	April 2011
ATSAM3N2CA-CU	128kB	BGA100	March 2011
ATSAM3N2BA-AU	128kB	LQFP64	April 2011
ATSAM3N2BA-MU	128kB	QFN64	March 2011
ATSAM3N2AA-AU	128kB	LQFP48	March 2011
ATSAM3N2AA-MU	128kB	QFN48	March 2011
ATSAM3N1CA-AU	64kB	LQFP100	April 2011
ATSAM3N1CA-CU	64kB	BGA100	March 2011
ATSAM3N1BA-AU	64kB	LQFP64	April 2011
ATSAM3N1BA-MU	64kB	QFN64	March 2011
ATSAM3N1AA-AU	64kB	LQFP64	March 2011
ATSAM3N1AA-MU	64kB	QFN48	March 2011



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