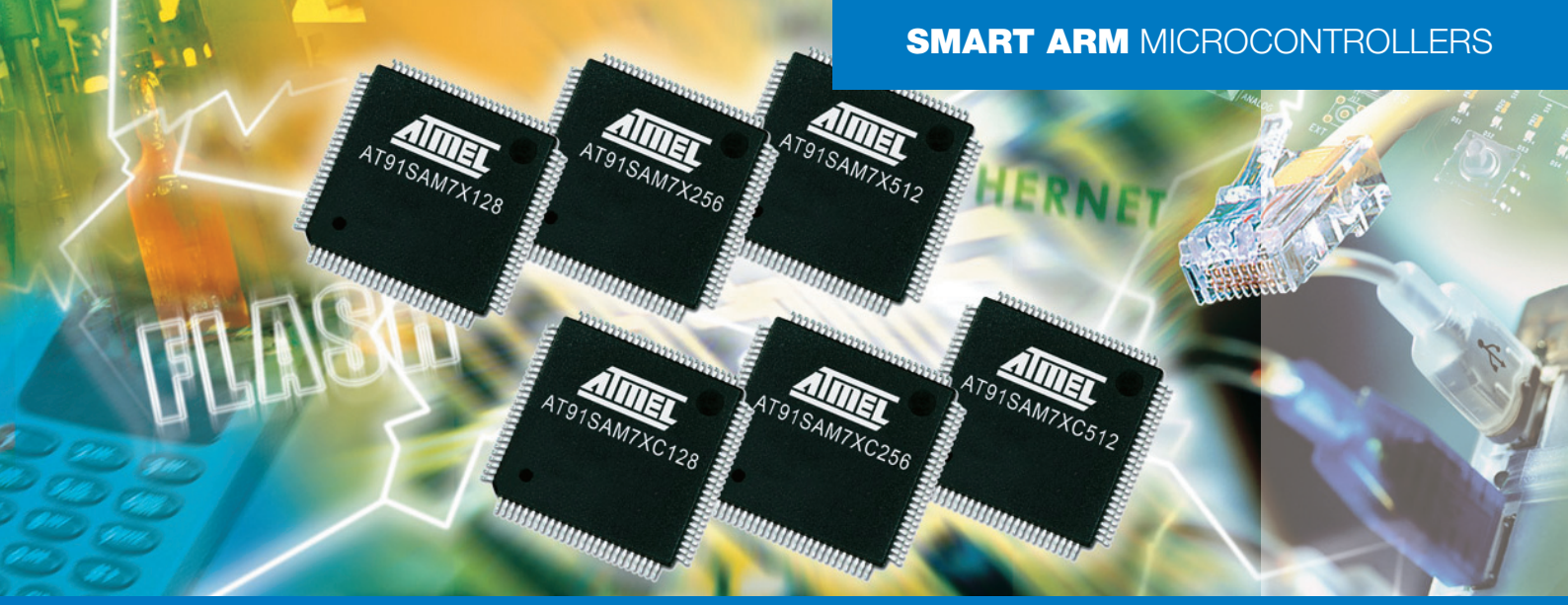
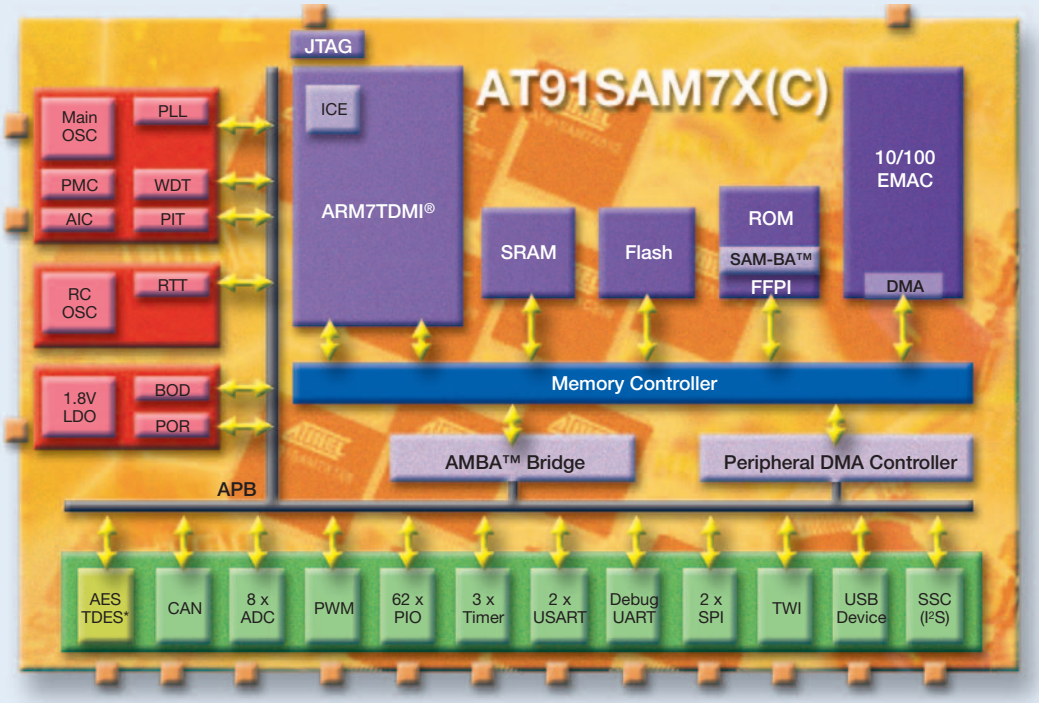


AT91SAM7X and AT91SAM7XC ARM Microcontrollers

For Real-time Ethernet Networking

Atmel's AT91SAM7X and AT91SAM7XC 32-bit microcontrollers are designed for extensively networked, real-time embedded control applications that require USB, Ethernet and CAN. Based on the industry-standard ARM7TDMI® core, the AT91SAM7X(C) boosts performance via deterministic processing, ensuring high-speed communication with low CPU overhead. For applications requiring maximum security for streaming content, the AT91SAM7XC integrates crypto co-processors.

- 55 MHz, 50 MIPS
- 25 ns internal Flash with sector lock capabilities and hardware chip lock
- Single-cycle access SRAM at maximum operating frequency
- USB (Full speed 2.0), configurable Ethernet MAC, CAN Controller
- SPIs, USARTs, SSC (I^2S), TWI, 10-bit A/D converter
- 11-channel DMA engine between peripherals and on-chip memory (PDC)
- System Controller includes Advanced Interrupt Controller, Brownout Detector, Power-On-Reset, Watchdog Timer, Real Time Timer, RC Oscillator
- AT91SAM7XC integrates AES and TDES with encryption rates of up to 80 Mbps
- Green 100-lead LQFP (16x16x1.6 mm) and 100-ball TFBGA (9x9x1.1 mm) packaging options
- Atmel and industry leading third-party development tools and low-priced evaluation boards

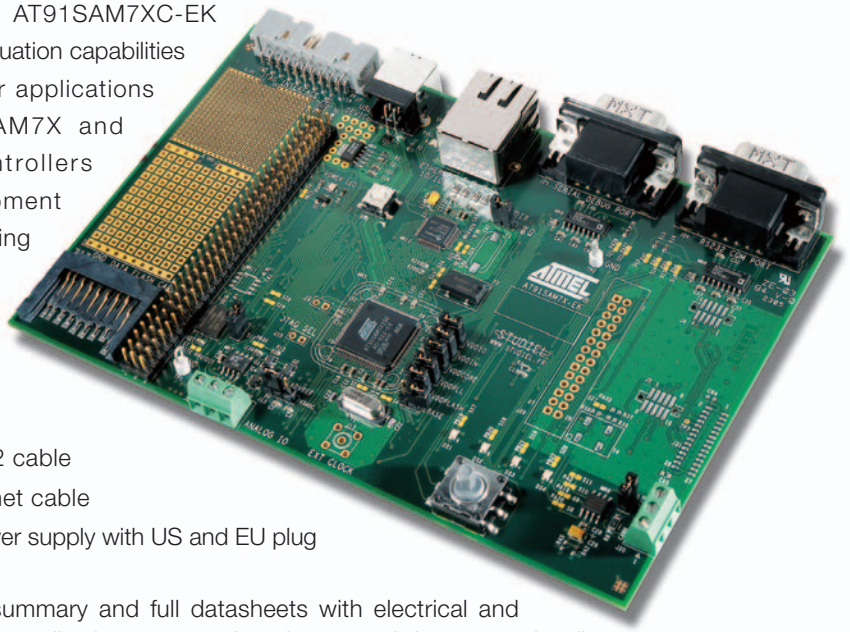


**AES/TDES available on AT91SAM7XC only.*

AT91SAM7X and AT91SAM7XC ARM Microcontrollers

For Real-time Ethernet Networking

The AT91SAM7X-EK and AT91SAM7XC-EK development kits enable evaluation capabilities and code development for applications running on the AT91SAM7X and AT91SAM7XC microcontrollers respectively. The development kit package contains following items:



- an AT91SAM7X or AT91SAM7XC Evaluation Board
- one A/B-type USB cable
- one crossed serial RS232 cable
- one RJ45 crossed Ethernet cable
- universal input AC/DC power supply with US and EU plug adapter
- a DVD-ROM containing summary and full datasheets with electrical and mechanical characteristics, application notes and getting started documents for all AT91 microcontrollers. An AT91 software package with C and Assembly listings is also provided. All this allows a user to begin evaluating an AT91 ARM® Thumb® 32-bit microcontroller quickly and easily.
- more information on tools and software is available on:
  http://www.atmel.com/dyn/products/tools.asp?family_id=605

Open Source Software Offering	Commercial Software Offering		
FreeRTOS™	µC/OS-II	EmbOS	RTL-ARM
NUT/OS	Tiny+	Nucleus	MQX™ RTOS
eCOS	ThreadX®	AMX™ RTOS	RTXC™
	eCosPro™	smx®	Salvo™
	IAR PowerPac™		

Product	Flash	SRAM	Package	Ordering Code	Green Compliance
AT91SAM7X512	512 KB	128 KB	LQFP100	AT91SAM7X512-AU	Yes
			BGA100	AT91SAM7X512-CU	Yes
AT91SAM7XC512	512 KB	128 KB	LQFP100	AT91SAM7XC512-AU(1)	Yes
			BGA100	AT91SAM7XC512-CU(1)	Yes
AT91SAM7X256	256 KB	64 KB	LQFP100	AT91SAM7X256-AU	Yes
			BGA100	AT91SAM7X256-CU	Yes
AT91SAM7XC256	256 KB	64 KB	LQFP100	AT91SAM7XC256-AU(1)	Yes
			BGA100	AT91SAM7XC256-CU(1)	Yes
AT91SAM7X128	128 KB	32 KB	LQFP100	AT91SAM7X128-AU	Yes
			BGA100	AT91SAM7X128-CU	Yes
AT91SAM7XC128	128 KB	32 KB	LQFP100	AT91SAM7XC128-AU(1)	Yes
			BGA100	AT91SAM7XC128-CU(1)	Yes

(1) Contains crypto hardware. Export restrictions may apply.

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Literature Requests
www.atmel.com/literature

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