

Atmel AT91SAM9 Evaluation Kits

Ordering Code	Supported Device	
AT91SAM9M10-G45-EK	SAM9M10, SAM9G45	
AT91SAM9X35-EK	SAM9X35	
AT91SAM9X25-EK	SAM9X25	
AT91SAM9G35-EK	SAM9G35	
AT91SAM9G25-EK	SAM9G25	
AT91SAM9G15-EK	SAM9G15	
AT91SAM9CN11-EK	SAM9CN11, SAM9CN12	
AT91SAM9N12-EK	SAM9N12	
AT91SAM9G20-EK	SAM9G20	
AT91SAM9260-EK	SAM9260	
AT91SAM9G10-EK	SAM9G10	
AT91SAM9261-EK	SAM9261	
AT91SAM9263-EK	SAM9263	
AT91SAM9RL-EK	SAM9RL64, SAM9R64	
AT91SAM9XE-EK	SAM9XE128, SAM9XE256, SAM9XE512	
AT91SAM-ICE	All products	

Atmel SAM9 evaluation kits are delivered with free Board Support Packages (BSP) for Linux®, Android™ and Microsoft® Windows®.

For more details



Linux4SAM



Android4SAM



Windows4SAM



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Atmel AT91SAM

ARM926EJ-S™ Processor-based
Embedded Microcontrollers

High Performance, Power Efficient, Ease of Use





Atmel AT91SAM ARM926EJ-S Processor-based Embedded Microcontrollers

Device Name	Performance		Memory							Connectivity												User Interface					Security		Control				Packages	
	Clock Speed (MHz)*	Operating Voltage (Vcc)	SRAM (Kbytes)	Cache Memory (Instruction/Data)	External Bus Interface	LPDDR/SDRAM	LPDDR/DDR2	NAND		UART	SPI	TWI (I²C)	SSC	CAN	LIN	USB Device (Full/High Speed)	USB Host (Full/High Speed)	Ethernet MAC	SD / eMMC	Soft Modem	Max I/O Pins	Graphic LCD	LCD Overlay	Resistive Touchscreen	Video Decoder	Camera Interface	Crypto Engine	Secure Boot	16-bit Timers	32-bit Timers	PWM Channels	10-bit ADC Channels		
								SLC ECC	MLC ECC																									
SAM9M11	400	1.0V	64	2x32K	2	1/1	1/1	1	--	5	2	2	2	--	4	HS	2 HS	1	2	--	160	Yes	Yes	Yes	30fps, D1	Yes	TDES/SHA /AES/TRNG	--	6	--	4	8	BGA 324, 0.8mm pitch	
SAM9M10	400	1.0V	64	2x32K	2	1/1	1/1	1	--	5	2	2	2	--	4	HS	2 HS	1	2	--	160	Yes	Yes	Yes	30fps, D1	Yes	--	--	6	--	4	8	BGA 324, 0.8mm pitch	
SAM9G46	400	1.0V	64	2x32K	2	1/1	1/1	1	--	5	2	2	2	--	4	HS	2 HS	1	2	--	160	Yes	--	Yes	--	Yes	TDES/SHA/ AES/TRNG	--	6	--	4	8	BGA 324, 0.8mm pitch	
SAM9G45	400	1.0V	64	2x32K	2	1/1	1/1	1	--	5	2	2	2	--	4	HS	2 HS	1	2	--	160	Yes	--	Yes	--	Yes	--	--	6	--	4	8	BGA 324, 0.8mm pitch	
SAM9X35	400	1.0V	32	2x16K	1	1/1	1/1	1	1	7	2	3	1	2	4	HS	1 HS, 1 FS	1	2	Yes	105	Yes	Yes	Yes	--	--	--	--	--	--	6	4	12	BGA 217, 0.8mm pitch
SAM9X25	400	1.0V	32	2x16K	1	1/1	1/1	1	1	7	2	3	1	2	4	HS	1 HS, 1 FS	2	2	Yes	105	--	--	--	--	--	--	--	--	--	6	4	12	BGA 217, 0.8mm pitch
SAM9G35	400	1.0V	32	2x16K	1	1/1	1/1	1	1	6	2	3	1	--	4	HS	1 HS, 1 FS	1	2	Yes	105	Yes	Yes	Yes	--	--	--	--	--	--	6	4	12	BGA 217, 0.8mm pitch
SAM9G25	400	1.0V	32	2x16K	1	1/1	1/1	1	1	7	2	3	1	--	4	HS	1 HS, 1 FS	1	2	Yes	105	--	--	--	--	Yes	--	--	--	--	6	4	12	BGA 217, 0.8mm pitch
SAM9G15	400	1.0V	32	2x16K	1	1/1	1/1	1	1	5	2	3	1	--	4	HS	1 HS, 1 FS	--	2	Yes	105	Yes	Yes	Yes	--	--	--	--	--	--	6	4	12	BGA 217, 0.8mm pitch
SAM9CN12	400	1.0V	32	2x16K	1	1/1	1/1	1	--	7	2	2	1	--	--	FS	2 FS	--	--	--	105	Yes	--	Yes	--	--	SHA/AES/ TRNG	Yes	6	--	4	12	BGA 217, 0.8mm pitch	
SAM9CN11	400	1.0V	32	2x16K	1	1/1	1/1	1	--	7	2	2	1	--	--	FS	2 FS	--	--	--	105	Yes	--	Yes	--	--	SHA/AES/ TRNG	--	6	--	4	12	BGA 217, 0.8mm pitch	
SAM9N12	400	1.0V	32	2x16K	1	1/1	1/1	1	--	7	2	2	1	--	--	FS	2 FS	--	1	--	105	Yes	--	Yes	--	--	--	--	--	6	--	4	12	BGA 217, 0.8mm pitch
SAM9G20	400	1.0V	32	2x16K	1	-/1	--	1	--	7	2	1	1	--	--	FS	2 FS	1	1	--	96	--	--	--	--	Yes	--	--	6	--	--	4	BGA 217, 0.8mm pitch	
SAM9G10	266	1.2V	16	2x16K	1	-/1	--	1	--	4	2	1	3	--	--	FS	2 FS	--	1	--	96	Yes	Yes	--	--	--	--	--	3	--	--	--	BGA 217, 0.8mm pitch	
SAM9RL64	240	1.2V	64	2x4K	1	-/1	--	1	--	5	1	2	2	--	--	HS	--	--	1	--	118	Yes	--	Yes	--	--	--	--	3	--	4	6	BGA 217, 0.8mm pitch	
SAM9R64	240	1.2V	64	2x4K	1	-/1	--	1	--	5	1	1	1	--	--	HS	--	--	1	--	49	--	--	--	--	--	--	--	3	--	3	3	BGA 144, 0.8mm pitch	
SAM9263	240	1.8V	96	2x16K	2	-/1	--	2	--	4	2	1	2	1	--	FS	2 FS	1	2	--	160	Yes	--	--	--	Yes	--	--	3	--	4	--	BGA 324, 0.8mm pitch	
SAM9261	240	1.8V	160	2x16K	1	-/1	--	1	--	4	2	1	3	--	--	FS	2 FS		1	--	96	Yes	--	--	--	--	--	--	3	--	--	--	BGA 217, 0.8mm pitch	
SAM9260	210	1.8V	8	2x8K	1	-/1	--	1	--	7	2	1	1	--	--	FS	2 FS	1	1	--	96	--	--	--	--	Yes	--	--	6	--	--	4	BGA 217, 0.8mm pitch QFP 208, 0.5mm pitch	
SAM9XE512	180	1.8V	32	16K + 8K	1	-/1	--	1	--	6	2	2	1	--	--	FS	2 FS	1	1	--	96	--	--	--	--	Yes	--	--	6	--	--	4	BGA 217, 0.8mm pitch QFP 208, 0.5mm pitch	
SAM9XE256	180	1.8V	32	16K + 8K	1	-/1	--	1	--	6	2	2	1	--	--	FS	2 FS	1	1	--	96	--	--	--	--	Yes	--	--	6	--	--	4	BGA 217, 0.8mm pitch QFP 208, 0.5mm pitch	
SAM9XE128	180	1.8V	16	16K + 8K	1	-/1	--	1	--	4	2	2	1	--	--	FS	2 FS	1	1	--	96	--	--	--	--	Yes	--	--	6	--	--	4	BGA 217, 0.8mm pitch QFP 208, 0.5mm pitch	

* Clock Speed: Max clock speed @ +85°C.

Temperature Range: -40°C to +85°C (Ambient)
UART: Support for RS485, ISO7816, IrDA, modem control lines and SPI on selected UARTs.
TWI: Two Wire Interface, interconnects components on a two-wire bus.
SSC: Serial Synchronous Controller, supports many serial synchronous communications protocols used in audio and telecom applications such as I2S, short or long frame sync.

16-bit and 32-bit Timers: Capture/Compare, Waveform generation and PWM modes.
ECC: Error Corrected Code controller.
Camera Interface: For CMOS-type image sensor, ITU-R BT. 601/656 external interface, programmable frame capture rate, up to 12-bit data interface, SAV and EAV synchronization, preview path with scaler, YCbCr format.
Soft Modem: Partnership with Conexant. Offers a cost-effective solution for modem implementation

Graphics LCD: Supports STN & TFT displays, up to 16-bits per pixel in STN color mode, up to 16M colors in TFT mode.
Video Decoder: Hardware video decoding & image post processing : H.264, MPEG4, H.263, MPEG2, JPEG.
eMMC™: MLC NandFlash supported through MMC interface.

Peripheral implementation may vary among products, please consult individual product datasheet for detailed description