

Kit Name	Supported Device		
ATSAM3U-EK	SAM3U		
AT91SAM7L-STK	SAM7L64 SAM7L128		
AT91SAM7S-EK	SAM7S16 SAM7S32 SAM7S64 SAM7S256	SAM7S161 SAM7S321 SAM7S128 SAM7S512	
AT91SAM7SE-EK	SAM7SE32 SAM7SE256 SAM7SE512		
AT91SAM7X-EK	SAM7X128 SAM7X256 SAM7X512		
AT91SAM7XC-EK	SAM7XC128 SAM7XC256 SAM7XC512		
AT91SAM7A3-EK	SAM7A3		
AT91SAM9G20-EK	SAM9G20		
AT91SAM9260-EK	SAM9260		
AT91SAM9XE-EK	SAM9XE128 SAM9XE256 SAM9XE512		
AT91SAM9261-EK	SAM9261 SAM9261S		
AT91SAM9G10-EK	SAM9G10		
AT91SAM9263-EK	SAM9263		
AT91SAM9RL-EK	SAM9RL64		
AT91SAM9M10-G45-EK	SAM9G45 SAM9M10		
AT91SAM-ICE	All ARM7™, ARM9™ & Cortex-M3 Products		

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Product Guide



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32-bit Flash-based ARM Microcontrollers

Product Name	ARM Core		MMU / MPU		Clock Speed (MHz)*	SRAM (Bytes)	Cache Memory (Bytes)	Flash (Bytes)	In System Programming	External Bus Interface	SDRAM Interface	NAND Flash / ECC	Peripheral DMA (Channels)	DBGU / UART	USART	SPI / TWI / SSC	MCI	SDIO	CAN	USB Device (Full-High Speed)	USB Host (Full-High Speed)	Ethernet MAC 10/100	LCD Controller / Drivers	Triple DES Engine	AES Engine (Bits)	Image Sensor Interface	16-bit Timers	PWM Controller	Period Interval Timer	Watchdog Timer	RTC / RTT	10-bit ADC Channel	12-bit ADC Channel	Power-On Reset	Brown Out Detection	On-chip RC Oscillator	Crystal Oscillator	High Current Pads	I/O Pins	I/O Voltage domain (V)	Single Supply	Package	Status
SAM3U1C	Cortex-M3	- / 1	96	20K	-	64K	Y	1	-	1 / 1	13	1	3	4 / 1 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	4	4	1	1	2	2 / 2	4	57	1.62 / 3.6	Y	QFP100/BGA100	S		
SAM3U2C	Cortex-M3	- / 1	96	36K	-	128K	Y	1	-	1 / 1	13	1	3	4 / 1 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	4	4	1	1	2	2 / 2	4	57	1.62 / 3.6	Y	QFP100/BGA100	S		
SAM3U4C	Cortex-M3	- / 1	96	52K	-	256K	Y	1	-	1 / 1	13	1	3	4 / 1 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	4	4	1	1	2	2 / 2	4	57	1.62 / 3.6	Y	QFP100/BGA100	S		
SAM3U1E	Cortex-M3	- / 1	96	20K	-	64K	Y	1	-	1 / 1	17	1	4	5 / 2 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	8	8	1	1	2	2 / 2	4	96	1.62 / 3.6	Y	QFP144/BGA144	S		
SAM3U2E	Cortex-M3	- / 1	96	36K	-	128K	Y	1	-	1 / 1	17	1	4	5 / 2 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	8	8	1	1	2	2 / 2	4	96	1.62 / 3.6	Y	QFP144/BGA144	S		
SAM3U4E	Cortex-M3	- / 1	96	52K	-	256K	Y	1	-	1 / 1	17	1	4	5 / 2 / 1	1	Y	-	HS	-	-	-	-	-	-	3	4	1	1	1 / 1	8	8	1	1	2	2 / 2	4	96	1.62 / 3.6	Y	QFP144/BGA144	S		
SAM7L64	7TDMI	-	36	6K	-	64K	Y	-	-	-	11	1	2	1 / 1 / -	-	N	-	-	-	-	1	-	-	-	3	4	1	1	1 / -	4	-	1	1	2	1 / 1	4	80	1.8 to 3.6	Y	QFP128/BGA144	P		
SAM7L128	7TDMI	-	36	6K	-	128K	Y	-	-	-	11	1	2	1 / 1 / -	-	N	-	-	-	-	1	-	-	-	3	4	1	1	1 / -	4	-	1	1	2	1 / 1	4	80	1.8 to 3.6	Y	QFP128/BGA144	P		
SAM7SL16	7TDMI	-	37	4K	-	16K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	2	-	1	1	2	1 / 1	4	28	1.8 to 3.6	Y	QFN48	D		
SAM7SL161	7TDMI	-	37	4K	-	16K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	4	-	1	1	2	1 / 1	4	36	1.8 to 3.6	Y	QFP64/QFN64	D		
SAM7SL32	7TDMI	-	37	8K	-	32K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	2	-	1	1	2	1 / 1	4	28	1.8 to 3.6	Y	QFN48	D		
SAM7SL321	7TDMI	-	37	8K	-	32K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	4	-	1	1	2	1 / 1	4	36	1.8 to 3.6	Y	QFP64/QFN64	D		
SAM7SL64	7TDMI	-	37	8K	-	64K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	2	-	1	1	2	1 / 1	4	28	1.8 to 3.6	Y	QFN48	D		
SAM7SL641	7TDMI	-	37	8K	-	64K	Y	-	-	-	15	1	2	1 / 2 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	1 / 1	4	-	1	1	2	1 / 1	4	36	1.8 to 3.6	Y	QFP64/QFN64	D		
SAM7S16	7TDMI	-	55	4K	-	16K	Y	-	-	-	9	1	1	1 / 1 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	21	1.8 / 3.3	Y	QFP48/QFN48	S		
SAM7S161	7TDMI	-	55	4K	-	16K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64	S		
SAM7S32	7TDMI	-	55	8K	-	32K	Y	-	-	-	9	1	1	1 / 1 / 1	-	N	-	-	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	21	1.8 / 3.3	Y	QFP48/QFN48	P		
SAM7S321	7TDMI	-	55	8K	-	32K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64/QFN64	P		
SAM7S64	7TDMI	-	55	16K	-	64K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64/QFN64	P		
SAM7S128	7TDMI	-	55	32K	-	128K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64/QFN64	P		
SAM7S256	7TDMI	-	55	64K	-	256K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64/QFN64	P		
SAM7S512	7TDMI	-	55	64K	-	512K	Y	-	-	-	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	32	1.8 / 3.3	Y	QFP64/QFN64	P		
SAM7SE32	7TDMI	- / 1	55	8K	-	32K	Y	1	1	1 / 1	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	88	1.8 / 3.3	Y	QFP128/BGA144	P		
SAM7SE256	7TDMI	- / 1	55	32K	-	256K	Y	1	1	1 / 1	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	88	1.8 / 3.3	Y	QFP128/BGA144	P		
SAM7SE512	7TDMI	- / 1	55	32K	-	512K	Y	1	1	1 / 1	11	1	2	1 / 1 / 1	-	N	-	FS	-	-	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	88	1.8 / 3.3	Y	QFP128/BGA144	P		
SAM7X128	7TDMI	-	55	32K	-	128K	Y	-	-	-	13	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7X256	7TDMI	-	55	64K	-	256K	Y	-	-	-	13	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7X512	7TDMI	-	55	128K	-	512K	Y	-	-	-	13	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	-	-	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7XC128	7TDMI	-	55	32K	-	128K	Y	-	-	-	17	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	1	128	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7XC256	7TDMI	-	55	64K	-	256K	Y	-	-	-	17	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	1	128	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7XC512	7TDMI	-	55	128K	-	512K	Y	-	-	-	17	1	2	2 / 1 / 1	-	N	1	FS	-	1	-	1	256	-	3	4	1	1	- / 1	8	-	1	1	1	1 / 1	4	62	3.3	Y	QFP100/BGA100	P		
SAM7A3	7TDMI	- / 1	60	32K	-	256K	-	-	-	-	19	1	3	2 / 1 / 2	1	N	2	FS	-	-	-	-	-	-	9	8	1	1	- / 1	16	-	3	-	1	1 / 1	-	62	3.3	Y	QFP100	P		
SAM9XE128	926EJ-S	1 / -	180	16K	16K+8K	128K	Y	1	1	1 / 1	24	1	5	2 / 2 / 1	1	Y	-	FS	2FS	1	-	-	-	1	6	-	1	1	- / 1	4	-	2	1	1	2 / 2	3	96	1.8 / 3.3	N	QFP208/BGA217	S		
SAM9XE256	926EJ-S	1 / -	180	32K	16K+8K	256K	Y	1	1	1 / 1	24	1	5	2 / 2 / 1	1	Y	-	FS	2FS	1	-	-	-	1	6	-	1	1	- / 1	4	-	2	1	1	2 / 2	3	96	1.8 / 3.3	N	QFP208/BGA217	S		
SAM9XE512	926EJ-S	1 / -	180	32K	16K+8K	512K	Y	1	1	1 / 1	24	1	5	2 / 2 / 1	1	Y	-	FS	2FS	1	-	-	-	1	6	-	1	1	- / 1	4	-	2	1	1	2 / 2	3	96	1.8 / 3.3	N	QFP208/BGA217	S		

32-bit Embedded ARM Microprocessors

Product Name	ARM Core	Cache Memory (Bytes)	Clock Speed (MHz)*	SRAM (Bytes)	In System Programming										External Bus Interface										SDRAM Interface										DDR2 Interface										S/LC NAND Flash / ECC										Peripheral DMA / Channel										DBGU / UART										USART										SPI / TWI / SSC										MCI										SDIO										eMMC										CAN										USB Device										USB Host (Full/High Speed)										Ethernet MAC 10/100										LCD Controller										R-Touch										Video Decoder										Triple DES Engine & SHA										AES Engine (Bits)										Image Sensor Interface										16-bit Timers										PWM Controller										Period Interval Timer										Watchdog Timer										RTC / RTT										10-bit ADC Channel										Power-On Reset										On-chip RC Oscillator										Crystal Oscillator										High Current / PLL										Slew Rate Control										I/O Pins										I/O Voltage domain (V)										Package										Status																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												