

# ATMEL Microcontrollers

RoHS Compliant This product is RoHS compliant.



## AUTHENTICATION MICROCONTROLLERS



For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Atmel Part No.	Package	Application	SRAM	Sleep Current	ESD Protection	Power Supply	Interface	Price Each			
									1	10	25	100
556-AT88SA100S-TSU-T	AT88SA100S-TSU-T	SOT23-3	Secure Battery Authentication	256 B	<100nA	4KV	2.5-5.5V	High Speed Single Wire	.82	.71	.63	.57
556-AT88SA102S-TSU-T	AT88SA102S-TSU-T	SOT23-3	Secure Auth. & Key Exchange	-	<100nA	4KV	2.5-5.5V	High Speed Single Wire	.82	.71	.63	.57
556-AT88SA10HS-TSU-T	AT88SA10HS-TSU-T	SOT23-3	Host Authentication	-	<100nA	4KV	2.7-5.25V	High Speed Single Wire	.82	.71	.63	.57

## AT32UC3L AVR32 MICROCONTROLLER

The AT32UC3L Series flash microcontrollers features 16, 32 or 64KB Flash, 8 or 16KB SRAM and 12-bit ADC designed for battery powered applications. In addition to be the first 32-bit MCU with true picoPower technology, the AT32UC3L series features a Capacitive Touch Module (CAT) supporting both QTouch and QMatrix, and FlashVault allowing Pre-programmed Secure Library Support for End User Applications.



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MOUSER STOCK NO.	Atmel Part No.	Package	Flash	MIPS	SRAM	Max. I/O Pins	Power Supply	Speed	Price Each			
									1	10	25	100
556-AT32UC3L016-AUT	AT32UC3L016-AUT	TQFP-48	16KB	64	8KB	36	1.8-3.3V	50MHz	4.09	3.61	3.42	3.15
556-AT32UC3L032-AUT	AT32UC3L032-AUT	TQFP-48	32KB	64	16KB	36	1.8-3.3V	50MHz	4.51	3.99	3.78	3.48
556-AT32UC3L064-AUT	AT32UC3L064-AUT	TQFP-48	64KB	64	16KB	36	1.8-3.3V	50MHz	5.16	4.56	4.32	3.98

## AVR 8-BIT RISC MICROCONTROLLERS

The ATmega128RFA1 is a low-power CMOS 8 bit microcontroller based on the AVR enhanced RISC architecture combined with a high data rate transceiver for the 2.4 GHz ISM band. It is derived from the ATmega1281 microcontroller and AT86RF231 radio transceiver.



### Features:

- High Performance, Low Power AVR® 8-Bit Microcontroller
- Advanced RISC Architecture
- Non-volatile Program and Data Memories
- Endurance: 2000 Write/Erase Cycles @ 85°C
- JTAG (IEEE std. 1149.1 compliant) Interface
- Advanced Interrupt Handler
- Watchdog Timer with Separate On-Chip Oscillator
- Power-on Reset and Low Current Brown-Out Detector
- Peripheral Features
  - Multiple Timer/Counter & PWM channels
  - Real Time Counter with Separate Oscillator
  - 10-bit, 330 ks/s A/D Converter; Analog Comparator; On-chip Temperature Sensor
  - Master/Slave SPI Serial Interface
  - Two Programmable Serial USART
  - Byte Oriented 2-wire Serial Interface
- Advanced Power Save Modes
- Fully integrated Low Power Transceiver for 2.4 GHz ISM Band
- Hardware Security (AES, True Random Generator)
- Integrated Crystal Oscillators (32.768 kHz & 16 MHz)
- Temperature Range: -40°C to 85°C Industrial
- Supply voltage range 1.8V to 3.6V with integrated voltage regulators
- Ultra Low Power consumption (1.8 to 3.6V) for Rx/Tx & AVR: <18.6 mA

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Atmel Part No.	Package	Flash	EEPROM	SRAM	Max. I/O Pins	Power Supply	Speed	Price Each			
									1	10	25	100
556-ATMEGA128RFA1-ZU	ATMEGA128RFA1-ZU	DFN-64	128KB	4KB	16KB	38	1.8V-3.6V	16MHz	9.46	8.80	6.31	5.81

## tinyAVR - 1KB-8KB Flash Programmable Memory

Atmel's low power, high performance AVR microcontrollers handle demanding 8- and 16-bit applications. With a single-cycle instruction RISC CPU, innovative picoPower® technology, and a rich feature set, the AVR architecture ensures fast code execution combined with the lowest possible power consumption.

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Atmel Part No.	Package	Flash	EEPROM	SRAM	Max. I/O Pins	Power Supply	Speed	Price Each			
									1	10	25	100
556-ATTINY25-20SSU	ATTINY25-20SSU	SOIC	2KB	128B	128 Bytes	6	2.7V-5.5V	20MHz	1.66	1.42	1.22	1.10
556-ATTINY261-20SU	ATTINY261-20SU	SO150	2KB	128B	128 Bytes	16	2.7V-5.5V	20MHz	2.13	1.99	1.56	1.41
556-ATTINY2313-20MU	ATTINY2313-20MU	MLF	2KB	128B	128 Bytes	18	2.7V-5.5V	20MHz	2.26	1.84	1.42	1.31
556-ATTINY2313-20PU	ATTINY2313-20PU	PDIP	2KB	128B	128 Bytes	18	2.7V-5.5V	20MHz	2.26	1.84	1.42	1.31
556-ATTINY2313-20SU	ATTINY2313-20SU	SO150	2KB	128B	128 Bytes	18	2.7V-5.5V	20MHz	2.15	1.75	1.35	1.25
556-ATTINY2313V10MU	ATTINY2313V10MU	MLF	2KB	128B	128 Bytes	18	1.8V-5.5V	10MHz	2.26	1.84	1.42	1.31
556-ATTINY2313V10PU	ATTINY2313V10PU	PDIP	2KB	128B	128 Bytes	18	1.8V-5.5V	10MHz	2.26	1.84	1.42	1.31
556-ATTINY2313V10SU	ATTINY2313V10SU	SO150	2KB	128B	128 Bytes	18	1.8V-5.5V	10MHz	2.15	1.75	1.35	1.25
556-ATTINY24-20MU	ATTINY24-20MU	MLF	2KB	128B	128 Bytes	12	2.7V-5.5V	20MHz	1.91	1.55	1.15	1.11
556-ATTINY24-20PU	ATTINY24-20PU	PDIP	2KB	128B	128 Bytes	12	2.7V-5.5V	20MHz	1.91	1.55	1.20	1.11
556-ATTINY24-20SSU	ATTINY24-20SSU	SOIC150	2KB	128B	128 Bytes	12	2.7V-5.5V	20MHz	1.91	1.55	1.20	1.11
556-ATTINY24V10PU	ATTINY24V10PU	PDIP	2KB	128B	128 Bytes	12	1.8V-5.5V	10MHz	1.91	1.55	1.20	1.11
556-ATTINY24V10SSU	ATTINY24V10SSU	SOIC150	2KB	128B	128 Bytes	12	1.8V-5.5V	10MHz	1.91	1.55	1.20	1.11
556-ATTINY25-20PU	ATTINY25-20PU	PDIP	2KB	128B	128 Bytes	6	2.7V-5.5V	20MHz	1.66	1.42	1.15	1.02
556-ATTINY25-20SU	ATTINY25-20SU	SO150	2KB	128B	128 Bytes	6	2.7V-5.5V	20MHz	1.66	1.35	1.04	.96
556-ATTINY25V10MU	ATTINY25V10MU	MLF	2KB	125B	128 Bytes	6	1.8V-5.5V	10MHz	1.78	1.54	1.24	1.10
556-ATTINY25V10PU	ATTINY25V10PU	PDIP	2KB	128B	128 Bytes	6	1.8V-5.5V	10MHz	1.66	1.42	1.15	1.02
556-ATTINY261-20PU	ATTINY261-20PU	PDIP	2KB	128B	128 Bytes	16	2.7V-5.5V	20MHz	2.13	1.85	1.57	1.41
556-ATTINY26-16PU	ATTINY26-16PU	PDIP	2KB	125B	128 Bytes	16	4.5V-5.5V	16MHz	2.47	2.01	1.55	1.44
556-ATTINY26-16SU	ATTINY26-16SU	SO150	2KB	125B	128 Bytes	16	4.5V-5.5V	16MHz	2.47	2.13	1.55	1.44
556-ATTINY26L-8PU	ATTINY26L-8PU	PDIP	2KB	125B	128 Bytes	16	2.7V-5.5V	8MHz	2.47	2.01	1.55	1.44
556-ATTINY26L-8SU	ATTINY26L-8SU	SO150	2KB	125B	128 Bytes	16	2.7V-5.5V	8MHz	2.47	2.13	1.55	1.44
556-ATTINY28L-4PU	ATTINY28L-4PU	PDIP	2KB	-	32 Bytes	11	2.7V-5.5V	4MHz	1.61	1.31	1.01	.94
556-ATTINY45-20PU	ATTINY45-20PU	PDIP	4KB	256B	256 Bytes	6	2.7V-5.5V	20MHz	2.13	1.73	1.34	1.24
556-ATTINY45-20SU	ATTINY45-20SU	SO150	4KB	256B	256 Bytes	6	2.7V-5.5V	20MHz	2.02	1.64	1.27	1.18
556-ATTINY45V10PU	ATTINY45V10PU	PDIP	4KB	256B	256 Bytes	6	1.8V-5.5V	10MHz	2.13	1.73	1.34	1.24
556-ATTINY45V10SU	ATTINY45V10SU	SO150	4KB	256B	256 Bytes	6	1.8V-5.5V	10MHz	2.02	1.64	1.27	1.18
556-ATTINY461-20PU	ATTINY461-20PU	PDIP	4KB	256B	256 Bytes	16	2.7V-5.5V	20MHz	2.45	2.13	1.81	1.62
556-ATTINY461V10PU	ATTINY461V10PU	PDIP	4KB	256B	256 Bytes	16	1.8V-5.5V	10MHz	2.45	2.13	1.81	1.62
556-ATTINY461V10SU	ATTINY461V10SU	SO150	4KB	256B	256 Bytes	16	1.8V-5.5V	10MHz	2.45	2.13	1.81	1.62
556-ATTINY461-20MU	ATTINY461-20MU	MLF	4KB	256B	256 Bytes	16	2.7V-5.5V	20MHz	2.45	2.28	1.80	1.62
556-ATTINY84V10MU	ATTINY84V10MU	MLF	8KB	512B	512 Bytes	12	1.8V-5.5V	10MHz	2.90	2.70	2.13	1.92
556-ATTINY84-20PU	ATTINY84-20PU	PDIP	8KB	512B	512 Bytes	12	2.7V-5.5V	20MHz	2.90	2.52	2.15	1.92
556-ATTINY85-20PU	ATTINY85-20PU	PDIP	8KB	512B	512 Bytes	6	2.7V-5.5V	20MHz	2.84	2.31	1.78	1.65
556-ATTINY85V10PU	ATTINY85V10PU	PDIP	8KB	512B	512 Bytes	6	1.8V-5.5V	10MHz	2.73	2.22	1.72	1.59
556-ATTINY85V10SU	ATTINY85V10SU	SO150	8KB	512B	512 Bytes	6	1.8V-5.5V	10MHz	2.62	2.13	1.65	1.53
556-ATTINY861-20PU	ATTINY861-20PU	PDIP	8KB	512B	512 Bytes	16	2.7V-5.5V	20MHz	3.03	2.63	2.24	2.00
556-ATTINY861-20SU	ATTINY861-20SU	SO150	8KB	512B	512 Bytes	16	2.7V-5.5V	20MHz	3.03	2.63	2.24	2.00
556-ATTINY861V10PU	ATTINY861V10PU	PDIP	8KB	512B	512 Bytes	16	1.8V-5.5V	10MHz	3.03	2.63	2.24	2.00