

Image may be representation.  
See specifications for product details.



## ATSAME51N20A-AUT

Manufacturer Part Number	<b>ATSAME51N20A-AUT</b>
Manufacturer	<b>Microchip Technology</b>
Allelco Part Number	32D-ATSAME51N20A-AUT
ECAD Model	PCB Symbol, Footprint & 3D Mode
Parts Description	IC MCU 32BIT 1MB FLASH 100TQFP
Package	100-TQFP
Data sheet	<b>SAM D5x,E5x Family Datasheet.pdf</b>
RoHs Status	<b>ROHS3 Compliant</b>

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ATSAME51N20A-AUT - Microchip Technology. New Original in Stock. Download Linear Technology ATSAME51N20A-AUT datasheet/specifications on AllelcoElec.com. Request a quote for ATSAME51N20A-AUT, please send us email: [info@allelco.com](mailto:info@allelco.com)

### Specifications

ATSAME51N20A-AUT Tech Specifications  
ATSAME51N20A-AUT - Microchip Technology technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	Microchip Technology	Oscillator Type	Internal
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.63V	Operating Temperature	-40°C ~ 85°C (TA)
Supplier Device Package	100-TQFP (14x14)	Number of I/O	81
Speed	120MHz	Mounting Type	Surface Mount
Series	SAM E51	EEPROM Size	-
RAM Size	256K x 8	Data Converters	A/D 28x12b; D/A 2x12b
Program Memory Type	FLASH	Core Size	32-Bit Single-Core
Program Memory Size	1MB (1M x 8)	Core Processor	ARM® Cortex®-M4F
Peripherals	Brown-out Detect/Reset, DMA, I <sup>2</sup> S, POR, PWM	Connectivity	CANbus, EBI/EMI, I <sup>2</sup> C, IrDA, LINbus, MMC/SD, QSPI, SPI, UART/USART, USB
Package / Case	100-TQFP	Base Product Number	ATSAME51
Package	Tape & Reel (TR)		

### Parts with Similar Specifications

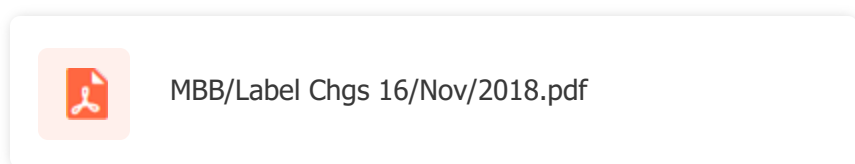
The three parts on the right have similar specifications to Microchip Technology ATSAME51N20A-AUT

Product Attribute				
Part Number	ATSAME51N20A-AUT	ATSAME53J19A-AUT	ATSAME53N20A-AU	ATSAME53J20A-MUT
Manufacturer	Microchip Technology	Microchip Technology	Microchip Technology	Microchip Technology
Program Memory Size	1MB (1M x 8)	512KB (512K x 8)	1MB (1M x 8)	1MB (1M x 8)
Peripherals	Brown-out Detect/Reset, DMA, I <sup>2</sup> S, POR, PWM	Brown-out Detect/Reset, DMA, I <sup>2</sup> S, POR, PWM, WDT	Brown-out Detect/Reset, DMA, I <sup>2</sup> S, POR, PWM, WDT	Brown-out Detect/Reset, DMA, I <sup>2</sup> S, POR, PWM, WDT
Core Size	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core
Number of I/O	81	51	81	51
Program Memory Type	FLASH	FLASH	FLASH	FLASH
Core Processor	ARM® Cortex®-M4F	ARM® Cortex®-M4F	ARM® Cortex®-M4F	ARM® Cortex®-M4F
Data Converters	A/D 28x12b; D/A 2x12b	A/D 24x12b; D/A 2x12b	A/D 28x12b; D/A 2x12b	A/D 24x12b; D/A 2x12b
Package	Tape & Reel (TR)	Tape & Reel (TR)	Tray	Tape & Reel (TR)
Oscillator Type	Internal	Internal	Internal	Internal
Supplier Device Package	100-TQFP (14x14)	64-TQFP (10x10)	100-TQFP (14x14)	64-VQFN (9x9)
Speed	120MHz	120MHz	120MHz	120MHz
Connectivity	CANbus, EBI/EMI, I <sup>2</sup> C, IrDA, LINbus, MMC/SD, QSPI, SPI, UART/USART, USB	EBI/EMI, Ethernet, I <sup>2</sup> C, IrDA, LINbus, MMC/SD, QSPI, SPI, UART/USART, USB	EBI/EMI, Ethernet, I <sup>2</sup> C, IrDA, LINbus, MMC/SD, QSPI, SPI, UART/USART, USB	EBI/EMI, Ethernet, I <sup>2</sup> C, IrDA, LINbus, MMC/SD, QSPI, SPI, UART/USART, USB
Series	SAM E51	SAM E53	SAM E53	SAM E53
Operating Temperature	-40°C ~ 85°C (TA)	-40°C ~ 85°C (TA)	-40°C ~ 85°C (TA)	-40°C ~ 85°C (TA)
RAM Size	256K x 8	192K x 8	256K x 8	256K x 8
EEPROM Size	-	-	-	-
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.63V	1.71V ~ 3.63V	1.71V ~ 3.63V	1.71V ~ 3.63V
Package / Case	100-TQFP	64-TQFP	100-TQFP	64-VQFN Exposed Pad
Base Product Number	ATSAME51	ATSAME53	ATSAME53	ATSAME53

### ATSAME51N20A-AUT Datasheet PDF

Download ATSAME51N20A-AUT pdf datasheets and Microchip Technology documentation for ATSAME51N20A-AUT - Microchip Technology.

#### PCN Packaging




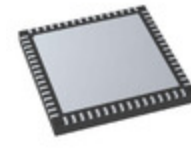
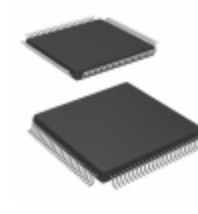

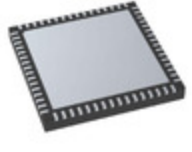

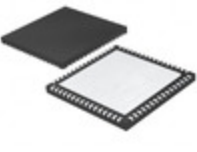






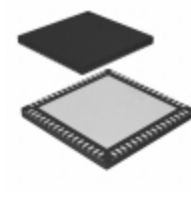
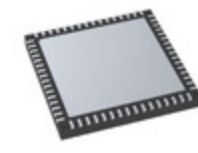
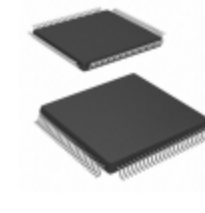


#### HTML Datasheet

PCN Design/Specification

Customers Also Interested in

Recommended Products

					
<b>ATSAME53J18A-AZT</b> Atmel (Microchip Technology)	<b>ATSAME53J19A-AUT</b> Microchip Technology IC MCU 32BIT 512KB FLASH 64TQFP	<b>ATSAME53N20A-AU</b> Microchip Technology IC MCU 32BIT 1MB FLASH 100TQFP	<b>ATSAME53J20A-MUT</b> Microchip Technology IC MCU 32BIT 1MB FLASH 64VQFN	<b>ATSAME51N20A-AU</b> Microchip Technology IC MCU 32BIT 1MB FLASH 100TQFP	<b>ATSAME51J20A-AZ</b> Atmel (Microchip Technology)
					
<b>ATSAME53J20A-MU</b> Microchip Technology IC MCU 32BIT 1MB FLASH 64VQFN	<b>ATSAME51J19A-AU-EFP</b> Microchip Technology IC MCU 32BIT 512KB FLASH 64TQFP	<b>ATSAME51J20A-MUT</b> Microchip Technology IC MCU 32BIT 1MB FLASH 64VQFN	<b>ATSAME51J20A-AUT</b> Microchip Technology IC MCU 32BIT 1MB FLASH 64TQFP	<b>ATSAME53J20A-AU</b> Microchip Technology IC MCU 32BIT 1MB FLASH 64TQFP	<b>ATSAME53J18A-AU</b> Microchip Technology IC MCU 32BIT 256KB FLASH 64TQFP
					
<b>ATSAME51N20A-AZ</b> Micrel / Microchip Technology	<b>ATSAME51J19A-AU</b> Microchip Technology IC MCU 32BIT 512KB FLASH 64TQFP	<b>ATSAME53N19A-AU</b> Microchip Technology IC MCU 32BIT 512KB FLASH 100TQFP	<b>ATSAME53J19A-MFT</b> Microchip Technology IC MCU 32BIT 512KB FLASH 64QFN	<b>ATSAME51J19A-MU</b> Microchip Technology IC MCU 32BIT 512KB FLASH 64VQFN	<b>ATSAME51N19A-AF</b> Microchip Technology IC MCU 32BIT 512KB FLASH 100TQFP

Shipment

Delivery Time

In-stock items can be shipped within 24 hours. Some parts will be arranged for delivery within 1-2 days from the date all items arrive at our warehouse. And Allelco ships order once a day at about 17:00, except Sunday. Once the goods are shipped, the estimated delivery time depends on the shipping methods and Delivery destination. The table below shows are the logistic time for some common countries.

Delivery Cost

- > Use your express account for shipment if you have one.
  - > Use our account for the shipment. Refer to the table below for the approximate charges.
- (Different time frame / countries / package size has different price.)

Delivery Method

- > Global Common Shipment by DHL / UPS / FedEx / TNT / EMS / SF we support.
- > Others more shipping ways, please get in touch with your customer manager.

Common Countries Logistic Time Reference		
Region	Country	Logistic Time(Day)
America	United States	5
	Brazil	7
Europe	Germany	5
	United Kingdom	4
	Italy	5
Oceania	Australia	6
	New Zealand	7
Asia	India	6
	Japan	7
Middle East	Israel	6

DHL & FedEx Shipment Charges Reference	
Shipment charges(KG)	Reference DHL(USD\$)
0.00kg-1.00kg	USD\$60.00
1.00kg-2.00kg	USD\$70.00
2.00kg-3.00kg	USD\$80.00




Note: The above table is for reference only. There may have some data bias for the uncontrollable factors. Contact us if you have any questions.

Payment Support



The payment method can be chosen from the methods shown below:  
Wire Transfer (T/T, Bank Transfer), Western Union, Credit card, PayPal.



Your Faithful Supply Chain Partner -

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Contact us if you have any questions.

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Certifications & Memberships



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