

Image may be representation.  
See specifications for product details.



## ATMEGA48PA-15MZ

Manufacturer Part Number	<b>ATMEGA48PA-15MZ</b>
Manufacturer	<b>Microchip Technology</b>
Allelco Part Number	32D-ATMEGA48PA-15MZ
ECAD Model	Request Free CAD Models
Parts Description	IC MCU 8BIT 4KB FLASH 32QFN
Package	32-VFQFN Exposed Pad
Data sheet	<b>Cylindrical Battery Holders.pdf</b>
RoHs Status	<b>ROHS3 Compliant</b>

**Get a Quote**

ATMEGA48PA-15MZ - Microchip Technology. New Original in Stock. Download Linear Technology ATMEGA48PA-15MZ datasheet/specifications on AllelcoElec.com. Request a quote for ATMEGA48PA-15MZ, please send us email: [info@allelco.com](mailto:info@allelco.com)

### Specifications

ATMEGA48PA-15MZ Tech Specifications  
ATMEGA48PA-15MZ - Microchip Technology technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	Microchip Technology	Oscillator Type	Internal
Voltage - Supply (Vcc/Vdd)	1.8V ~ 5.5V	Operating Temperature	-40°C ~ 125°C (TA)
Supplier Device Package	32-QFN (5x5)	Number of I/O	23
Speed	16MHz	Mounting Type	Surface Mount
Series	Automotive, AEC-Q100, AVR® ATmega	EEPROM Size	256 x 8
RAM Size	512 x 8	Data Converters	A/D 8x10b
Program Memory Type	FLASH	Core Size	8-Bit
Program Memory Size	4KB (2K x 16)	Core Processor	AVR
Peripherals	Brown-out Detect/Reset, POR, PWM, WDT	Connectivity	I <sup>2</sup> C, SPI, UART/USART
Package / Case	32-VFQFN Exposed Pad	Base Product Number	ATMEGA48
Package	Tape & Reel (TR)		

### Parts with Similar Specifications

The three parts on the right have similar specifications to Microchip Technology ATMEGA48PA-15MZ

Product Attribute				
Part Number	ATMEGA48PA-15MZ	<b>ATMEGA48A-PU</b>	<b>ATMEGA48A-AU</b>	<b>ATMEGA48A-AUR</b>
Manufacturer	Microchip Technology	Microchip Technology	Atmel	Microchip Technology
Base Product Number	ATMEGA48	ATMEGA48	ATMEGA48	ATMEGA48
Package	Tape & Reel (TR)	Tube	Bulk	Tape & Reel (TR)
Speed	16MHz	20MHz	20MHz	20MHz
Core Size	8-Bit	8-Bit	8-Bit	8-Bit
Program Memory Type	FLASH	FLASH	FLASH	FLASH
Mounting Type	Surface Mount	Through Hole	Surface Mount	Surface Mount
Program Memory Size	4KB (2K x 16)	4KB (2K x 16)	4KB (2K x 16)	4KB (2K x 16)
Operating Temperature	-40°C ~ 125°C (TA)	-40°C ~ 85°C (TA)	-40°C ~ 85°C (TA)	-40°C ~ 85°C (TA)
Core Processor	AVR	AVR	AVR	AVR
Package / Case	32-VFQFN Exposed Pad	28-DIP (0.300", 7.62mm)	32-TQFP	32-TQFP
Voltage - Supply (Vcc/Vdd)	1.8V ~ 5.5V	1.8V ~ 5.5V	1.8V ~ 5.5V	1.8V ~ 5.5V
Data Converters	A/D 8x10b	A/D 6x10b	A/D 8x10b	A/D 8x10b
RAM Size	512 x 8	512 x 8	512 x 8	512 x 8
Number of I/O	23	23	23	23
Peripherals	Brown-out Detect/Reset, POR, PWM, WDT	Brown-out Detect/Reset, POR, PWM, WDT	Brown-out Detect/Reset, POR, PWM, WDT	Brown-out Detect/Reset, POR, PWM, WDT
Oscillator Type	Internal	Internal	Internal	Internal
EEPROM Size	256 x 8	256 x 8	256 x 8	256 x 8
Connectivity	I <sup>2</sup> C, SPI, UART/USART	I <sup>2</sup> C, SPI, UART/USART	I <sup>2</sup> C, SPI, UART/USART	I <sup>2</sup> C, SPI, UART/USART
Supplier Device Package	32-QFN (5x5)	28-PDIP	32-TQFP (7x7)	32-TQFP (7x7)
Series	Automotive, AEC-Q100, AVR® ATmega	AVR® ATmega	AVR® ATmega	AVR® ATmega

### ATMEGA48PA-15MZ Datasheet PDF

Download ATMEGA48PA-15MZ pdf datasheets and Microchip Technology documentation for ATMEGA48PA-15MZ - Microchip Technology.

#### Datasheets

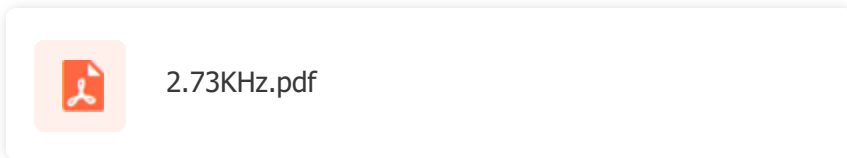
[Cylindrical Battery Holders.pdf](#)

#### PCN Packaging

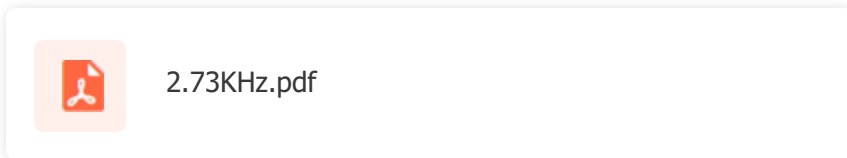
[MBB/Label Chgs 16/Nov/2018.pdf](#)

[Transfer to Microchip/Label/Pkg 5/Sep/2016.pdf](#)

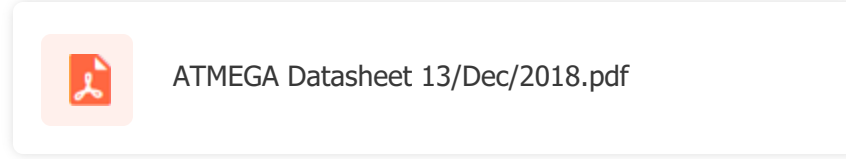
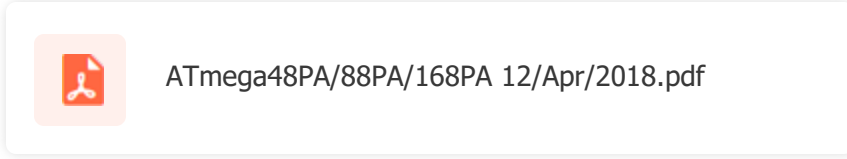
## PCN Assembly/Origin



## Errata



## PCN Design/Specification



## Customers Also Interested in

### Recommended Products

<b>ATMEGA48A-PU</b> Microchip Technology IC MCU 8BIT 4KB FLASH 28DIP	<b>ATMEGA48A-AU</b> Atmel IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48A-AUR</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA4809-AU</b> Microchip Technology IC MCU 8BIT 48KB FLASH 48TQFP	<b>ATMEGA48A-MUR</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32VQFN	<b>ATMEGA48PA-AUR</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP
<b>ATMEGA48PA-MN</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32VQFN	<b>ATMEGA48P-20AU</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48A-MMH</b> Microchip Technology IC MCU 8BIT 4KB FLASH 28VQFN	<b>ATMEGA48PA-MMHR</b> Atmel IC MCU 8BIT 4KB FLASH 28VQFN	<b>ATMEGA48PA-AUR</b> Atmel IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48PA-MMHR</b> Microchip Technology IC MCU 8BIT 4KB FLASH 28VQFN
<b>ATMEGA48PA-MMH</b> Microchip Technology IC MCU 8BIT 4KB FLASH 28VQFN	<b>ATMEGA4809-AFR</b> Microchip Technology IC MCU 8BIT 48KB FLASH 48TQFP	<b>ATMEGA48A-AU</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48PA-AU</b> Atmel IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48PA-15AZ</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP	<b>ATMEGA48PA-AU</b> Microchip Technology IC MCU 8BIT 4KB FLASH 32TQFP

## 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 -

Efficient Supply Management	Cost-Saving Procurement	Fast Sourcing & Delivery
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Contact us if you have any questions.

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### Certifications & Memberships



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