



Image may be representation.
See specifications for product details.



MC9S12XDP512MAG

Manufacturer Part Number	MC9S12XDP512MAG
Manufacturer	NXP Semiconductors
Allelco Part Number	32D-MC9S12XDP512MAG
ECAD Model	Request Free CAD Models
Parts Description	IC MCU 16BIT 512KB FLASH 144LQFP
Package	144-LQFP
Data sheet	MC9S12XDP512 Datasheet.pdf
RoHs Status	ROHS3 Compliant

Get a Quote

MC9S12XDP512MAG - NXP USA Inc..New Original in Stock. Download Linear Technology MC9S12XDP512MAG datasheet/specifications on AllelcoElec.com.
Request a quote for MC9S12XDP512MAG, please send us email: info@allelco.com

Specifications

MC9S12XDP512MAG Tech Specifications
MC9S12XDP512MAG - NXP USA Inc. technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	NXP Semiconductors	Oscillator Type	External
Voltage - Supply (Vcc/Vdd)	2.35V ~ 5.5V	Operating Temperature	-40°C ~ 125°C (TA)
Supplier Device Package	144-LQFP (20x20)	Number of I/O	119
Speed	80MHz	Mounting Type	Surface Mount
Series	HCS12X	EEPROM Size	4K x 8
RAM Size	32K x 8	Data Converters	A/D 24x10b
Program Memory Type	FLASH	Core Size	16-Bit
Program Memory Size	512KB (512K x 8)	Core Processor	HCS12X
Peripherals	LVD, POR, PWM, WDT	Connectivity	CANbus, EBI/EMI, I ² C, IrDA, LINbus, SCI, SPI
Package / Case	144-LQFP	Base Product Number	MC9S12
Package	Tray		

Parts with Similar Specifications

The three parts on the right have similar specifications to NXP USA Inc. MC9S12XDP512MAG

Product Attribute				
Part Number	MC9S12XDP512MAG	MC9S12XDP512MAL	MC9S12XDT256MAA	MC9S12XDG128MAL
Manufacturer	NXP USA Inc.	Freescal Semiconductor	NXP USA Inc.	NXP USA Inc.
Program Memory Size	512KB (512K x 8)	512KB (512K x 8)	256KB (256K x 8)	128KB (128K x 8)
Package	Tray	Bulk	Tray	Tray
Series	HCS12X	HCS12X	HCS12X	HCS12X
Number of I/O	119	91	59	91
Oscillator Type	External	External	External	External
Data Converters	A/D 24x10b	A/D 16x10b	A/D 8x10b	A/D 16x10b
EEPROM Size	4K x 8	4K x 8	4K x 8	2K x 8
RAM Size	32K x 8	32K x 8	16K x 8	12K x 8
Base Product Number	MC9S12	MC9S12	MC9S12	MC9S12
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Core Processor	HCS12X	HCS12X	HCS12X	HCS12X
Connectivity	CANbus, EBI/EMI, I ² C, IrDA, LINbus, SCI, SPI	CANbus, EBI/EMI, I ² C, IrDA, LINbus, SCI, SPI	CANbus, EBI/EMI, I ² C, IrDA, LINbus, SCI, SPI	CANbus, EBI/EMI, I ² C, IrDA, LINbus, SCI, SPI
Core Size	16-Bit	16-Bit	16-Bit	16-Bit
Package / Case	144-LQFP	112-LQFP	80-QFP	112-LQFP
Supplier Device Package	144-LQFP (20x20)	112-LQFP (20x20)	80-QFP (14x14)	112-LQFP (20x20)
Operating Temperature	-40°C ~ 125°C (TA)	-40°C ~ 125°C (TA)	-40°C ~ 125°C (TA)	-40°C ~ 125°C (TA)
Peripherals	LVD, POR, PWM, WDT	LVD, POR, PWM, WDT	LVD, POR, PWM, WDT	LVD, POR, PWM, WDT
Voltage - Supply (Vcc/Vdd)	2.35V ~ 5.5V	2.35V ~ 5.5V	2.35V ~ 5.5V	2.35V ~ 5.5V
Speed	80MHz	80MHz	80MHz	80MHz
Program Memory Type	FLASH	FLASH	FLASH	FLASH

MC9S12XDP512MAG Datasheet PDF

Download MC9S12XDP512MAG pdf datasheets and NXP USA Inc. documentation for MC9S12XDP512MAG - NXP USA Inc..

Datasheets

[MC9S12XDP512 Datasheet.pdf](#)


PCN Packaging

[All Dev Label Update 15/Dec/2020.pdf](#)

[Mult Dev Pkg Seal 15/Dec/2020.pdf](#)


Environmental Information

 NXP USA Inc REACH.pdf

 NXP USA Inc RoHS Cert.pdf





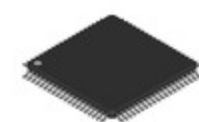













PCN Design/Specification

 Mult Dev 25/May/2020.pdf

 Trace Marking Removal 20/Jun/2019.pdf

Customers Also Interested in

Recommended Products

					
MC9S12XDP512MAL Freescale Semiconductor IC MCU 16BIT 512KB FLASH 112LQFP	MC9S12XDT256MAA NXP USA Inc. IC MCU 16BIT 256KB FLASH 80QFP	MC9S12XDG128MAL NXP USA Inc. IC MCU 16BIT 128KB FLASH 112LQFP	MC9S12XDG512VAL Freescale / NXP Semiconductors	MC9S12XDT256CAA Freescale Semiconductor IC MCU 16BIT 256KB FLASH 80QFP	MC9S12XDQ256MAG Freescale / NXP Semiconductors
					
MC9S12XDG128VAA Freescale / NXP Semiconductors	MC9S12XDP512VAG Freescale Semiconductor IC MCU 16BIT 512KB FLASH 144LQFP	MC9S12XDT256CAL NXP USA Inc. IC MCU 16BIT 256KB FLASH 112LQFP	MC9S12XDG512VALR Freescale / NXP Semiconductors	MC9S12XDT256CAA NXP USA Inc. IC MCU 16BIT 256KB FLASH 80QFP	MC9S12XDP512MA Freescale / NXP Semiconductors
					
MC9S12XDG256CAL Fairchild (onsemi)	MC9S12XDP512CAG 0L15Y NA	MC9S12XDP512MAL NXP USA Inc. IC MCU 16BIT 512KB FLASH 112LQFP	MC9S12XDP512CAA Freescale / NXP Semiconductors	MC9S12XDP512VAG NXP USA Inc. IC MCU 16BIT 512KB FLASH 144LQFP	MC9S12XDP512CAL NXP USA Inc. IC MCU 16BIT 512KB FLASH 112LQFP

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

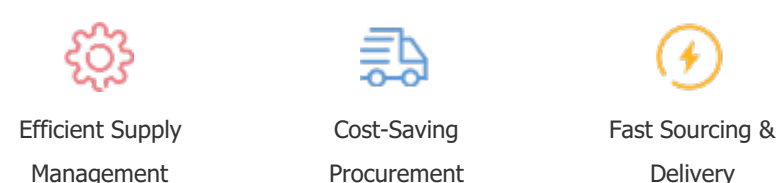
Note: The above table is for reference only. There may have some data bias for the uncontrollable factors.
Contact us if you have any questions.

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 -



Contact us if you have any questions.



Certifications & Memberships



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