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See specifications for product details.



## MK21FX512AVMC12

Manufacturer Part Number	<b>MK21FX512AVMC12</b>
Manufacturer	<b>NXP Semiconductors</b>
Allelco Part Number	32D-MK21FX512AVMC12
ECAD Model	Request Free CAD Models
Parts Description	IC MCU 32B 512KB FLASH 121MAPBGA
Package	121-LFBGA
Data sheet	<b>MK21FX512A, MK21FN1M0A.pdf</b>
RoHs Status	<b>ROHS3 Compliant</b>

**Get a Quote**

MK21FX512AVMC12 - NXP USA Inc..New Original in Stock. Download Linear Technology MK21FX512AVMC12 datasheet/specifications on AllelcoElec.com.  
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### Specifications

MK21FX512AVMC12 Tech Specifications  
MK21FX512AVMC12 - NXP USA Inc. technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	NXP Semiconductors	Oscillator Type	Internal
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.6V	Operating Temperature	-40°C ~ 105°C (TA)
Supplier Device Package	121-MAPBGA (8x8)	Number of I/O	81
Speed	120MHz	Mounting Type	Surface Mount
Series	Kinetis K20	EEPROM Size	-
RAM Size	128K x 8	Data Converters	A/D 42x16b; D/A 2x12b
Program Memory Type	FLASH	Core Size	32-Bit Single-Core
Program Memory Size	512KB (512K x 8)	Core Processor	ARM® Cortex®-M4
Peripherals	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT	Connectivity	CANbus, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG
Package / Case	121-LFBGA	Base Product Number	MK21FX512
Package	Tray		

### Parts with Similar Specifications

The three parts on the right have similar specifications to NXP USA Inc. MK21FX512AVMC12

Product Attribute				
Part Number	MK21FX512AVMC12	<a href="#">MK22FN128VLL10</a>	<a href="#">MK21FN1M0VLQ12</a>	<a href="#">MK21FN1M0AVMC12</a>
Manufacturer	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.
Core Processor	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4
Core Size	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core
Operating Temperature	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)
Supplier Device Package	121-MAPBGA (8x8)	100-LQFP (14x14)	144-LQFP (20x20)	121-MAPBGA (8x8)
Program Memory Type	FLASH	FLASH	FLASH	FLASH
Package / Case	121-LFBGA	100-LQFP	144-LQFP	121-LFBGA
Data Converters	A/D 42x16b; D/A 2x12b	A/D 33x16b; D/A 1x12b	A/D 42x16b; D/A 2x12b	A/D 40x16b; D/A 2x12b
Number of I/O	81	66	100	81
Series	Kinetis K20	Kinetis K20	Kinetis K20	Kinetis K20
Package	Tray	Tray	Tray	Tray
EEPROM Size	-	-	-	-
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Connectivity	CANbus, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG	I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG	CANbus, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG	CANbus, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG
Oscillator Type	Internal	Internal	Internal	Internal
Base Product Number	MK21FX512	MK22FN128	MK21FN1M0	MK21FN1M0
RAM Size	128K x 8	24K x 8	128K x 8	128K x 8
Program Memory Size	512KB (512K x 8)	128KB (128K x 8)	1MB (1M x 8)	1MB (1M x 8)
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V
Speed	120MHz	100MHz	120MHz	120MHz
Peripherals	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT

### MK21FX512AVMC12 Datasheet PDF

Download MK21FX512AVMC12 pdf datasheets and NXP USA Inc. documentation for MK21FX512AVMC12 - NXP USA Inc..

#### Datasheets


[MK21FX512A, MK21FN1M0A.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 Assembly/Origin

 Mult Dev Site Chgs 18/Dec/2020.pdf

## Customers Also Interested in

### Recommended Products



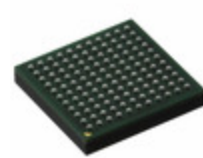
#### MK22FN128VLL10

NXP USA Inc.  
IC MCU 32BIT 128KB FLASH  
100LQFP



#### MK21FN1M0VLQ12

NXP USA Inc.  
IC MCU 32BIT 1MB FLASH 144LQFP



#### MK21FN1M0AVMC12

NXP USA Inc.  
IC MCU 32BIT 1MB FLASH  
121MAPBGA



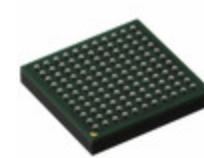
#### MK22DX256VLF5

Freescale Semiconductor  
IC MCU 32BIT 256KB FLASH 48LQFP



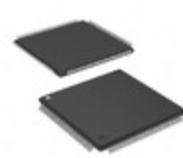
#### MK21FN1MOV12

Freescale / NXP Semiconductors



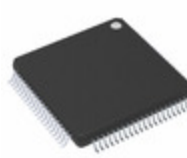
#### MK21FN1M0VMC12

NXP USA Inc.  
IC MCU 32BIT 1MB FLASH  
121MAPBGA



#### MK21FX512AVLQ12

NXP USA Inc.  
IC MCU 32BIT 512KB FLASH  
144LQFP



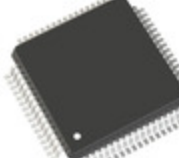
#### MK22DX256VLK5

NXP USA Inc.  
IC MCU 32BIT 256KB FLASH 80FQFP



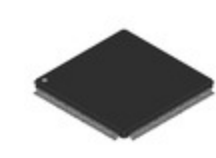
#### MK21FN1MOV12

Freescale / NXP Semiconductors



#### MK22FN128VLH10

NXP USA Inc.  
IC MCU 32BIT 128KB FLASH 64LQFP



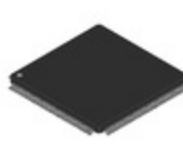
#### MK21FX512VLQ12

Freescale Semiconductor  
IC MCU 32BIT 512KB FLASH  
144LQFP



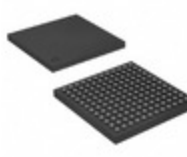
#### MK22DX256VLF5

NXP USA Inc.  
IC MCU 32BIT 256KB FLASH 48LQFP



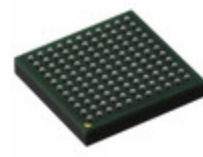
#### MK21FN1M0VLQ12

Freescale Semiconductor  
IC MCU 32BIT 1MB FLASH 144LQFP



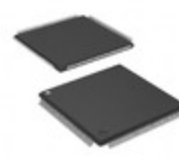
#### MK21FN1M0VMD12

NXP USA Inc.  
IC MCU 32BIT 1MB FLASH  
144MAPBGA



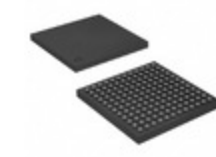
#### MK21FX512VMC12

NXP USA Inc.  
IC MCU 32B 512KB FLASH  
121MAPBGA



#### MK21FX512VLQ12

NXP USA Inc.  
IC MCU 32BIT 512KB FLASH  
144LQFP



#### MK21FN1M0AVMD12

NXP USA Inc.  
IC MCU 32BIT 1MB FLASH  
144MAPBGA



#### MK21P-1A66B-500W

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## 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

Contact us if you have any questions.



Phone

+00852 9146 4856



Email

info@allelco.com

## Certifications & Memberships



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