



Image may be representation.
See specifications for product details.



MK40DN512VLQ10

Manufacturer Part Number	MK40DN512VLQ10
Manufacturer	NXP Semiconductors
Allelco Part Number	32D-MK40DN512VLQ10
ECAD Model	Request Free CAD Models
Parts Description	IC MCU 32BIT 512KB FLASH 144LQFP
Package	144-LQFP
Data sheet	K40 Family Fact Sheet.pdf K40_LQ/MD10 Datasheet.pdf K40_LQ/MD10 Ref Manual.pdf
RoHs Status	ROHS3 Compliant

Get a Quote

MK40DN512VLQ10 - NXP USA Inc..New Original in Stock. Download Linear Technology MK40DN512VLQ10 datasheet/specifications on AllelcoElec.com.
Request a quote for MK40DN512VLQ10, please send us email: info@allelco.com

Specifications

MK40DN512VLQ10 Tech Specifications
MK40DN512VLQ10 - 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	144-LQFP (20x20)	Number of I/O	98
Speed	100MHz	Mounting Type	Surface Mount
Series	Kinetis K40	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, I²S, LCD, LVD, POR, PWM, WDT	Connectivity	CANbus, EBI/EMI, I²C, IrDA, SD, SPI, UART/USART, USB, USB OTG
Package / Case	144-LQFP	Base Product Number	MK40DN512
Package	Tray		

Parts with Similar Specifications

The three parts on the right have similar specifications to NXP USA Inc. MK40DN512VLQ10

Product Attribute				
Part Number	MK40DN512VLQ10	MK40DX128VMC7	MK40DX128VLK7	MK40DN512VLL10
Manufacturer	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.
Package	Tray	Tray	Tray	Tray
EEPROM Size	-	2K x 8	2K x 8	-
Supplier Device Package	144-LQFP (20x20)	121-MAPBGA (8x8)	80-FQFP (12x12)	100-LQFP (14x14)
Peripherals	DMA, I²S, LCD, LVD, POR, PWM, WDT	DMA, I²S, LCD, LVD, POR, PWM, WDT	DMA, I²S, LCD, LVD, POR, PWM, WDT	DMA, I²S, LCD, LVD, POR, PWM, WDT
Data Converters	A/D 42x16b; D/A 2x12b	A/D 34x16b; D/A 1x12b	A/D 27x16b; D/A 1x12b	A/D 34x16b; D/A 1x12b
Speed	100MHz	72MHz	72MHz	100MHz
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Base Product Number	MK40DN512	MK40DX128	MK40DX128	MK40DN512
Number of I/O	98	74	52	64
Oscillator Type	Internal	Internal	Internal	Internal
Program Memory Size	512KB (512K x 8)	128KB (128K x 8)	128KB (128K x 8)	512KB (512K x 8)
RAM Size	128K x 8	32K x 8	32K x 8	128K x 8
Core Size	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core
Series	Kinetis K40	Kinetis K40	Kinetis K40	Kinetis K40
Package / Case	144-LQFP	121-LFBGA	80-LQFP	100-LQFP
Program Memory Type	FLASH	FLASH	FLASH	FLASH
Core Processor	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4
Connectivity	CANbus, EBI/EMI, I²C, IrDA, SD, SPI, UART/USART, USB, USB OTG	CANbus, I²C, IrDA, SPI, UART/USART, USB, USB OTG	CANbus, I²C, IrDA, SPI, UART/USART, USB, USB OTG	CANbus, I²C, IrDA, SD, SPI, UART/USART, USB, USB OTG
Operating Temperature	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V

MK40DN512VLQ10 Datasheet PDF

Download MK40DN512VLQ10 pdf datasheets and NXP USA Inc. documentation for MK40DN512VLQ10 - NXP USA Inc..

Datasheets

- [K40 Family Fact Sheet.pdf](#)
- [K40_LQ/MD10 Datasheet.pdf](#)
- [K40_LQ/MD10 Ref Manual.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

PCN Design/Specification

Mult Dev 25/May/2020.pdf

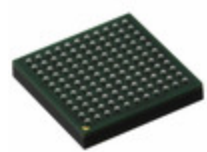
Trace Marking Removal 20/Jun/2019.pdf

Errata

5N22D Mask Set Errata.pdf

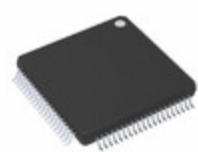
Customers Also Interested in

Recommended Products



MK40DX128VMC7

NXP USA Inc.
IC MCU 32B 128KB FLASH
121MAPBGA



MK40DX128VLK7

NXP USA Inc.
IC MCU 32BIT 128KB FLASH 80FQFP



MK40DN512ZVLL10

NXP USA Inc.
IC MCU 32BIT 512KB FLASH
100LQFP



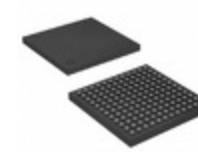
MK4027J-2

Intersil (Renesas Electronics Corporation)



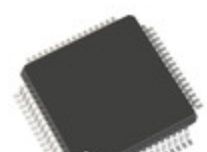
MK40DN256VLQ10

Freescal / NXP Semiconductors



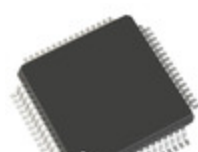
MK40DX128VMD10

NXP USA Inc.
IC MCU 32B 128KB FLASH
144MAPBGA



MK40DX256VLH7

NXP USA Inc.
IC MCU 32BIT 256KB FLASH 64LQFP



MK40DX128VLH7

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



MK40DN512ZVLQ10

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



MK4036GAC

TAEC Product (Toshiba Electronic Devices and Storage)



NO PICTURE

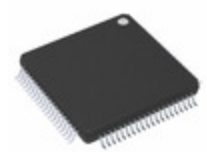
MK4002B

MTEK



MK40DN512VLL10

NXP USA Inc.
IC MCU 32BIT 512KB FLASH
100LQFP



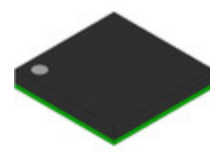
MK40DX256VLK7

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



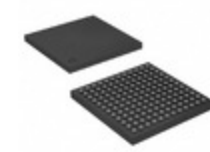
MK4027J-4

Intersil (Renesas Electronics Corporation)



MK40DX128VMC7

Freescal Semiconductor
IC MCU 32B 128KB FLASH
121MAPBGA



MK40DN512VMD10

NXP USA Inc.
IC MCU 32B 512KB FLASH
144MAPBGA



MK40DN512VLK10

NXP USA Inc.
IC MCU 32BIT 512KB FLASH 80FQFP



MK40DX128VLL7

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

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





Contact us

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Email: info@Alleco.com