

Image may be representation.  
See specifications for product details.



## MK20DX256VMC7R

Manufacturer Part Number	<b>MK20DX256VMC7R</b>
Manufacturer	<b>NXP Semiconductors</b>
Allelco Part Number	32D-MK20DX256VMC7R
ECAD Model	Request Free CAD Models
Parts Description	IC MCU 32B 256KB FLASH 121MAPBGA
Package	121-LFBGA
Data sheet	<a href="#">K2x USB MCU Family Fact Sheet.pdf</a> <a href="#">K20_LL/MC7 Datasheet.pdf</a> <a href="#">K20_LL/MC7 Ref Manual.pdf</a>
RoHs Status	ROHS3 Compliant

**Get a Quote**

MK20DX256VMC7R - NXP USA Inc..New Original in Stock. Download Linear Technology MK20DX256VMC7R datasheet/specifications on AllelcoElec.com.  
Request a quote for MK20DX256VMC7R, please send us email: [info@allelco.com](mailto:info@allelco.com)

## Specifications

MK20DX256VMC7R Tech Specifications

MK20DX256VMC7R - 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	70
Speed	72MHz	Mounting Type	Surface Mount
Series	Kinetis K20	EEPROM Size	2K x 8
RAM Size	64K x 8	Data Converters	A/D 35x16b; D/A 1x12b
Program Memory Type	FLASH	Core Size	32-Bit Single-Core
Program Memory Size	256KB (256K x 8)	Core Processor	ARM® Cortex®-M4
Peripherals	DMA, I <sup>2</sup> S, LVD, POR, PWM, WDT	Connectivity	CANbus, EBI/EMI, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG
Package / Case	121-LFBGA	Base Product Number	MK20DX256
Package	Tape & Reel (TR)		

## Parts with Similar Specifications

The three parts on the right have similar specifications to NXP USA Inc. MK20DX256VMC7R

Product Attribute				
Part Number	MK20DX256VMC7R	MK20DX256VMC7	MK20DX32VFM5	MK20DX256ZVLQ10
Manufacturer	NXP USA Inc.	Freescale Semiconductor	NXP USA Inc.	NXP USA Inc.
Package	Tape & Reel (TR)	Bulk	Tray	Tray
Number of I/O	70	70	20	100
Operating Temperature	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)	-40°C ~ 105°C (TA)
Core Processor	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4	ARM® Cortex®-M4
Oscillator Type	Internal	Internal	Internal	Internal
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Program Memory Size	256KB (256K x 8)	256KB (256K x 8)	32KB (32K x 8)	256KB (256K x 8)
Package / Case	121-LFBGA	121-LFBGA	32-VFQFN Exposed Pad	144-LQFP
Series	Kinetis K20	Kinetis K20	Kinetis K20	Kinetis K20
Base Product Number	MK20DX256	MK20DX256	MK20DX32	MK20DX256
Program Memory Type	FLASH	FLASH	FLASH	FLASH
Voltage - Supply (Vcc/Vdd)	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V	1.71V ~ 3.6V
Core Size	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core	32-Bit Single-Core
Speed	72MHz	72MHz	50MHz	100MHz
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
EEPROM Size	2K x 8	2K x 8	2K x 8	4K x 8
RAM Size	64K x 8	64K x 8	8K x 8	64K x 8
Supplier Device Package	121-MAPBGA (8x8)	121-MAPBGA (8x8)	32-QFN-EP (5x5)	144-LQFP (20x20)
Connectivity	CANbus, EBI/EMI, I <sup>2</sup> C, IrDA, SPI, UART/USART, USB, USB OTG	CANbus, EBI/EMI, 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, EBI/EMI, I <sup>2</sup> C, IrDA, SD, SPI, UART/USART, USB, USB OTG
Data Converters	A/D 35x16b; D/A 1x12b	A/D 35x16b; D/A 1x12b	A/D 6x16b	A/D 42x16b; D/A 2x12b

## MK20DX256VMC7R Datasheet PDF

Download MK20DX256VMC7R pdf datasheets and NXP USA Inc. documentation for MK20DX256VMC7R - NXP USA Inc..

### Datasheets

- [K2x USB MCU Family Fact Sheet.pdf](#)
- [K20\\_LL/MC7 Datasheet.pdf](#)
- [K20\\_LL/MC7 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

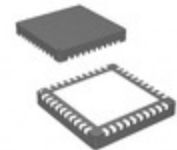
2.73KHz.pdf

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### Recommended Products



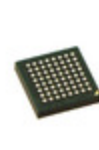
**MK20DX256VMC7**  
Freescale Semiconductor  
IC MCU 32B 256KB FLASH  
121MAPBGA



**MK20DX32VFM5**  
NXP USA Inc.  
IC MCU 32BIT 32KB FLASH 32QFN



**MK20DX256ZVLQ10**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
144LQFP



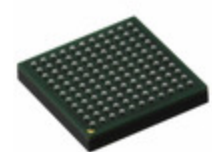
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NXP USA Inc.  
IC MCU 32BIT 32KB FLASH  
64MAPBGA



**MK20DX256VLQ10**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
144LQFP



**MK20DX256VLK7**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH 80FQFP



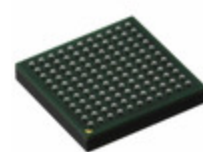
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NXP USA Inc.  
IC MCU 32B 256KB FLASH  
121MAPBGA



**MK20DX256ZVLL10**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
100LQFP



**MK20DX256ZVLL7**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
100LQFP



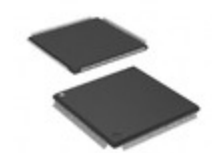
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NXP USA Inc.  
IC MCU 32B 256KB FLASH  
121MAPBGA



**MK20DX256VLK7R**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH 80FQFP



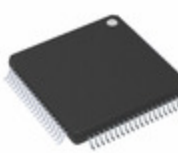
**MK20DX32VLF5**  
NXP USA Inc.  
IC MCU 32BIT 32KB FLASH 48LQFP



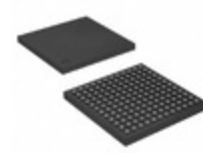
**MK20DX256VLQ10R**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
144LQFP



**MK20DX256ZVLL10**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH  
100LQFP



**MK20DX256ZVLK10**  
NXP USA Inc.  
IC MCU 32BIT 256KB FLASH 80FQFP



**MK20DX256VMD10**  
NXP USA Inc.  
IC MCU 32B 256KB FLASH  
144MAPBGA



**MK20DX32VLH5**  
NXP USA Inc.  
IC MCU 32BIT 32KB FLASH 64LQFP



**MK20DX32VLF5**  
Freescale Semiconductor  
IC MCU 32BIT 32KB FLASH 48LQFP

## 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

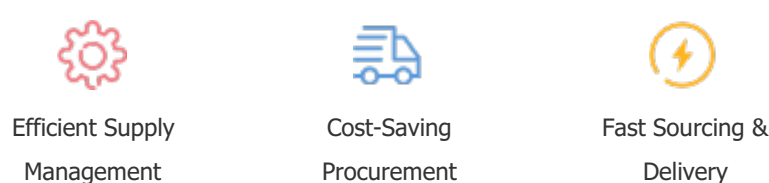
Note: The above table is for reference only. There may have some data bias for the uncontrollable factors. Contact us if you have any questions.

### 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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