

Image may be representation.  
See specifications for product details.



## MCIMX6QP6AVT1AA

Manufacturer Part Number	<b>MCIMX6QP6AVT1AA</b>
Manufacturer	<b>NXP Semiconductors</b>
Allelco Part Number	32D-MCIMX6QP6AVT1AA
ECAD Model	Request Free CAD Models
Parts Description	IC MPU I.MX6QP 1GHZ 624FCBGA
Package	624-FBGA, FCBGA
Data sheet	<b><a href="#">i.MX 6 Series Fact Sheet.pdf</a></b> <b><a href="#">MCIMX6(D,Q)PxAzzzzA.pdf</a></b>
RoHs Status	<b>ROHS3 Compliant</b>

**Get a Quote**

MCIMX6QP6AVT1AA - NXP USA Inc..New Original in Stock. Download Linear Technology MCIMX6QP6AVT1AA datasheet/specifications on AllelcoElec.com.  
Request a quote for MCIMX6QP6AVT1AA, please send us email: [info@allelco.com](mailto:info@allelco.com)

### Specifications

MCIMX6QP6AVT1AA Tech Specifications  
MCIMX6QP6AVT1AA - NXP USA Inc. technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	NXP Semiconductors	Operating Temperature	-40°C ~ 125°C (TJ)
Voltage - I/O	1.8V, 2.5V, 2.8V, 3.3V	Number of Cores/Bus Width	4 Core, 32-Bit
USB	USB 2.0 + PHY (3), USB 2.0 OTG + PHY (1)	Mounting Type	Surface Mount
Supplier Device Package	624-FCBGA (21x21)	Graphics Acceleration	Yes
Speed	1.0GHz	Ethernet	10/100/1000Mbps (1)
Series	i.MX6QP	Display & Interface Controllers	HDMI, Keypad, LCD, LVDS, MIPI/DSI, Parallel
Security Features	ARM TZ, A-HAB, CAAM, CSU, SJC, SNVS	Core Processor	ARM® Cortex®-A9
SATA	SATA 3Gbps (1)	Co-Processors/DSP	Multimedia; NEON™ SIMD
RAM Controllers	LPDDR2, DDR3L, DDR3	Base Product Number	MCIMX6
Package / Case	624-FBGA, FCBGA	Additional Interfaces	CAN, EBI/EMI, I²C, I²S, MMC/SD/SDIO, SAI, SPI, SSI, S/PDIF, UART
Package	Tray		

### Parts with Similar Specifications

The three parts on the right have similar specifications to NXP USA Inc. MCIMX6QP6AVT1AA

Product Attribute				
Part Number	MCIMX6QP6AVT1AA	<b>MCIMX6Q7CVT08AC</b>	<b>MCIMX6S4AVM08AC</b>	<b>MCIMX6QP5EYM1AA</b>
Manufacturer	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.	NXP USA Inc.
Package	Tray	Tray	Tray	Tray
Co-Processors/DSP	Multimedia; NEON™ SIMD	Multimedia; NEON™ SIMD	Multimedia; NEON™ SIMD	Multimedia; NEON™ SIMD
Additional Interfaces	CAN, EBI/EMI, I²C, I²S, MMC/SD/SDIO, SAI, SPI, SSI, S/PDIF, UART	CAN, I²C, I²S, MMC/SD/SDIO, SAI, SPI, SSI, UART	CAN, I²C, I²S, MMC/SD/SDIO, SAI, SPI, SSI, UART	CAN, EBI/EMI, I²C, I²S, MMC/SD/SDIO, SAI, SPI, SSI, S/PDIF, UART
RAM Controllers	LPDDR2, DDR3L, DDR3	LPDDR2, LVDDR3, DDR3	LPDDR2, LVDDR3, DDR3	LPDDR2, DDR3L, DDR3
Number of Cores/Bus Width	4 Core, 32-Bit	4 Core, 32-Bit	1 Core, 32-Bit	4 Core, 32-Bit
USB	USB 2.0 + PHY (3), USB 2.0 OTG + PHY (1)	USB 2.0 + PHY (4)	USB 2.0 + PHY (4)	USB 2.0 + PHY (3), USB 2.0 OTG + PHY (1)
Core Processor	ARM® Cortex®-A9	ARM® Cortex®-A9	ARM® Cortex®-A9	ARM® Cortex®-A9
Package / Case	624-FBGA, FCBGA	624-FBGA, FCBGA	624-LFBGA	624-LFBGA, FCBGA
Series	i.MX6QP	i.MX6Q	i.MX6S	i.MX6QP
Supplier Device Package	624-FCBGA (21x21)	624-FCBGA (21x21)	624-MAPBGA (21x21)	624-FCPBGA (21x21)
Security Features	ARM TZ, A-HAB, CAAM, CSU, SJC, SNVS	ARM TZ, Boot Security, Cryptography, RTIC, Secure Fusebox, Secure JTAG, Secure Memory, Secure RTC, Tamper Detection	ARM TZ, Boot Security, Cryptography, RTIC, Secure Fusebox, Secure JTAG, Secure Memory, Secure RTC, Tamper Detection	ARM TZ, A-HAB, CAAM, CSU, SJC, SNVS
Operating Temperature	-40°C ~ 125°C (TJ)	-40°C ~ 105°C (TA)	-40°C ~ 125°C (TJ)	-20°C ~ 105°C (TJ)
Speed	1.0GHz	800MHz	800MHz	1.0GHz
Base Product Number	MCIMX6	MCIMX6	MCIMX6	MCIMX6
Display & Interface Controllers	HDMI, Keypad, LCD, LVDS, MIPI/DSI, Parallel	Keypad, LCD	Keypad, LCD	HDMI, Keypad, LCD, LVDS, MIPI/DSI, Parallel
Voltage - I/O	1.8V, 2.5V, 2.8V, 3.3V	1.8V, 2.5V, 2.8V, 3.3V	1.8V, 2.5V, 2.8V, 3.3V	1.8V, 2.5V, 2.8V, 3.3V
SATA	SATA 3Gbps (1)	SATA 3Gbps (1)	-	SATA 3Gbps (1)
Ethernet	10/100/1000Mbps (1)	10/100/1000Mbps (1)	10/100/1000Mbps (1)	10/100/1000Mbps (1)
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount
Graphics Acceleration	Yes	Yes	Yes	Yes

### MCIMX6QP6AVT1AA Datasheet PDF

Download MCIMX6QP6AVT1AA pdf datasheets and NXP USA Inc. documentation for MCIMX6QP6AVT1AA - NXP USA Inc..


### 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


## HTML Datasheet

 i.MX 6 Series Fact Sheet.pdf


 MCIMX6(D,Q)PxAzzzzA.pdf

## PCN Design/Specification

 Manual Updates 14/Jul/2019.pdf

 iMX6 Datasheet Rev 13/Feb/2019.pdf

## PCN Other

 2.73KHz.pdf

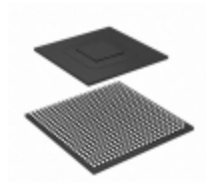
## Customers Also Interested in

### Recommended Products



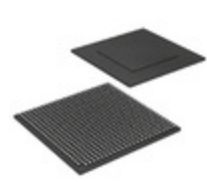
**MCIMX6Q7CVT08AC**

NXP USA Inc.  
IC MPU I.MX6Q 800MHZ 624FCBGA



**MCIMX6S4AVM08AC**

NXP USA Inc.  
IC MPU I.MX6S 800MHZ 624MAPBGA



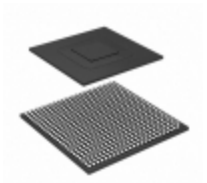
**MCIMX6QP5EYM1AA**

NXP USA Inc.  
IC MPU I.MX6QP 1GHZ 624FCBGA



**MCIMX6Q7CZK08AD**

NXP USA Inc.  
I.MX 6 SERIES 32-BIT MPU QUAD A



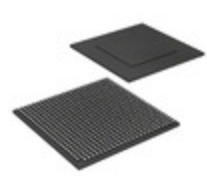
**MCIMX6S1AVM08AB**

NXP USA Inc.  
IC MPU I.MX6S 800MHZ 624MAPBGA



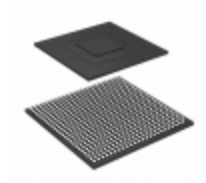
**MCIMX6Q7CVT08AE**

Freescale Semiconductor  
I.MX 6 SERIES 32-BIT MPU, QUAD A



**MCIMX6Q6AVT10ADR**

NXP USA Inc.  
IC MPU I.MX6Q 1.0GHZ 624FCBGA



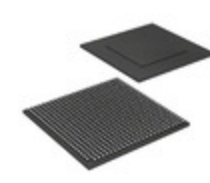
**MCIMX6S4AVM08AB**

NXP USA Inc.  
IC MPU I.MX6S 800MHZ 624MAPBGA



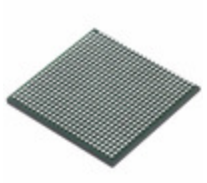
**MCIMX6QP6AVT8AB**

NXP USA Inc.  
I.MX 6QP ROM PERF ENHAN



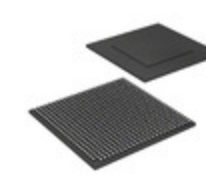
**MCIMX6QP6AVT1AB**

NXP USA Inc.  
I.MX 6QP ROM PERF ENHAN



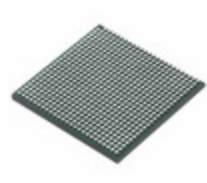
**MCIMX6Q6AVT10AER**

NXP USA Inc.  
IC MPU I.MX6D ENHANCED 624FCBGA



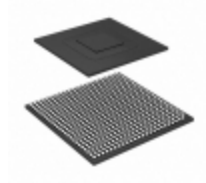
**MCIMX6Q7CVT08AD**

NXP USA Inc.  
IC MPU I.MX6Q 800MHZ 624FCBGA



**MCIMX6Q6AVT10AE**

NXP USA Inc.  
IC MPU I.MX6D ENHANCED 624FCBGA



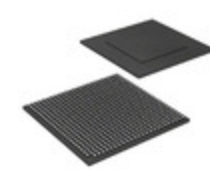
**MCIMX6S1AVM08AC**

NXP USA Inc.  
IC MPU I.MX6S 800MHZ 624MAPBGA



**MCIMX6S4AVM08AB**

Freescale Semiconductor  
I.MX 6 SERIES 32 BIT MPU, ARM CO



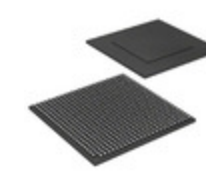
**MCIMX6Q7CVT08AE**

NXP USA Inc.  
I.MX6Q ROM PERF ENHAN



**MCIMX6S1AVM08AB**

Freescale Semiconductor  
I.MX 6 SERIES 32 BIT MPU, ARM CO



**MCIMX6Q6AVT10AD**

NXP USA Inc.  
IC MPU I.MX6Q 1.0GHZ 624FCBGA

## 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

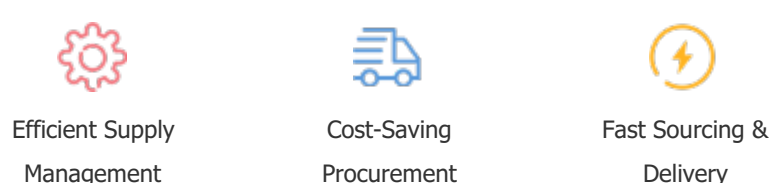
Note: The above table is for reference only. There may have some data bias for the uncontrollable factors.  
Contact us if you have any questions.

## 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





Phone

+00852 9146 4856



Email

info@allelco.com

[View More](#)



WWW.ALLELCOELEC.COM

Copyright © 2012-2023 AllelcoElec.com. All rights reserved.

### Contact us

Address: Flat/Rm C 13/F Harvard Commercial Building 105-111 Thomson Road, Wan Chai, Hong Kong

Phone: +00852 9146 4856

Fax: +00852 3010 8510

Email: info@Allelco.com