



Image may be representation.  
See specifications for product details.



## 5CSEMA5F31C6N

Manufacturer Part Number **5CSEMA5F31C6N**

Manufacturer **Intel**

Allelco Part Number **32D-5CSEMA5F31C6N**

ECAD Model PCB Symbol, Footprint & 3D Model

Parts Description **IC SOC CORTEX-A9 925MHZ 896FBGA**

Package **896-BGA**

Data sheet [Virtual JTAG Megafuntion Guide.pdf](#)

[Cyclone V Device Handbook.pdf](#)

[Cyclone V Device Overview.pdf](#)

RoHs Status **RoHS Compliant**

**Get a Quote**

5CSEMA5F31C6N - Intel.New Original in Stock. Download Linear Technology 5CSEMA5F31C6N datasheet/specifications on AllelcoElec.com.  
Request a quote for 5CSEMA5F31C6N, please send us email: [info@allelco.com](mailto:info@allelco.com)

## Specifications

5CSEMA5F31C6N Tech Specifications

5CSEMA5F31C6N - Intel technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	Intel	Package	Tray
Supplier Device Package	896-FBGA (31x31)	Operating Temperature	0°C ~ 85°C (TJ)
Speed	925MHz	Number of I/O	MCU - 181, FPGA - 288
Series	Cyclone® V SE	Flash Size	-
RAM Size	64KB	Core Processor	Dual ARM® Cortex®-A9 MPCore™ with CoreSight™
Primary Attributes	FPGA - 85K Logic Elements	Connectivity	CANbus, EBI/EMI, Ethernet, I²C, MMC/SD/SDIO, SPI, UART/USART, USB OTG
Peripherals	DMA, POR, WDT	Base Product Number	5CSEMA5
Package / Case	896-BGA	Architecture	MCU, FPGA

## Parts with Similar Specifications

The three parts on the right have similar specifications to Intel 5CSEMA5F31C6N

Product Attribute				
Part Number	5CSEMA5F31C6N	5CSEMA6F31C8N	5CSEMA5F31C7N	5CSEMA4U2317N
Manufacturer	Intel	Intel	Intel	Intel
Flash Size	-	-	-	-
Core Processor	Dual ARM® Cortex®-A9 MPCore™ with CoreSight™	Dual ARM® Cortex®-A9 MPCore™ with CoreSight™	Dual ARM® Cortex®-A9 MPCore™ with CoreSight™	Dual ARM® Cortex®-A9 MPCore™ with CoreSight™
Operating Temperature	0°C ~ 85°C (TJ)	0°C ~ 85°C (TJ)	0°C ~ 85°C (TJ)	-40°C ~ 100°C (TJ)
RAM Size	64KB	64KB	64KB	64KB
Package	Tray	Tray	Tray	Tray
Package / Case	896-BGA	896-BGA	896-BGA	672-FBGA
Number of I/O	MCU - 181, FPGA - 288	MCU - 181, FPGA - 288	MCU - 181, FPGA - 288	MCU - 181, FPGA - 145
Base Product Number	5CSEMA5	5CSEMA6	5CSEMA5	5CSEMA4
Primary Attributes	FPGA - 85K Logic Elements	FPGA - 110K Logic Elements	FPGA - 85K Logic Elements	FPGA - 40K Logic Elements
Connectivity	CANbus, EBI/EMI, Ethernet, I²C, MMC/SD/SDIO, SPI, UART/USART, USB OTG	CANbus, EBI/EMI, Ethernet, I²C, MMC/SD/SDIO, SPI, UART/USART, USB OTG	CANbus, EBI/EMI, Ethernet, I²C, MMC/SD/SDIO, SPI, UART/USART, USB OTG	CANbus, EBI/EMI, Ethernet, I²C, MMC/SD/SDIO, SPI, UART/USART, USB OTG
Peripherals	DMA, POR, WDT	DMA, POR, WDT	DMA, POR, WDT	DMA, POR, WDT
Architecture	MCU, FPGA	MCU, FPGA	MCU, FPGA	MCU, FPGA
Series	Cyclone® V SE	Cyclone® V SE	Cyclone® V SE	Cyclone® V SE
Supplier Device Package	896-FBGA (31x31)	896-FBGA (31x31)	896-FBGA (31x31)	672-UBGA (23x23)
Speed	925MHz	600MHz	800MHz	800MHz

## 5CSEMA5F31C6N Datasheet PDF

Download 5CSEMA5F31C6N pdf datasheets and Intel documentation for 5CSEMA5F31C6N - Intel.

### Datasheets



Virtual JTAG Megafuntion Guide.pdf



Cyclone V Device Handbook.pdf



Cyclone V Device Overview.pdf

### PCN Packaging



Mult Dev Label CHG 24/Jan/2020.pdf



Mult Dev Label Chgs 24/Feb/2020.pdf

### PCN Design/Specification



Quartus SW/Web Chgs 23/Sep/2021.pdf



Mult Dev Software Chgs 3/Jun/2021.pdf



















### Errata



Cyclone V GX,GT,E Errata.pdf

## Customers Also Interested in

### Recommended Products

					
<b>5CSEMA6F31C8N</b> Intel IC SOC CORTEX-A9 600MHZ 896FBGA	<b>5CSEMA5F31C7N</b> Intel IC SOC CORTEX-A9 800MHZ 896FBGA	<b>5CSEMA4U23I7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEBA6U23I7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSXFC2C6U23C7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA6F31C7N</b> Intel IC SOC CORTEX-A9 800MHZ 896FBGA
					
<b>5CSEMA5F31A7N</b> Intel IC SOC CORTEX-A9 700MHZ 896FBGA	<b>5CSEBA6U23C8SN</b> Intel IC SOC CORTEX-A9 600MHZ 672UBGA	<b>5CSEMA6U23I7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA5F31C8N</b> Intel IC SOC CORTEX-A9 600MHZ 896FBGA	<b>5CSEMA2U23I7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA5F31I7N</b> Intel IC SOC CORTEX-A9 800MHZ 896FBGA
					
<b>5CSEMA6U23C8N</b> Intel IC SOC CORTEX-A9 600MHZ 672UBGA	<b>5CSEBA6U23I7SN</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA2U23C7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA5U23I7N</b> Intel IC SOC CORTEX-A9 800MHZ 672UBGA	<b>5CSEMA4U23C8N</b> Intel IC SOC CORTEX-A9 600MHZ 672UBGA	<b>5CSEMA5U23C6N</b> Intel IC SOC CORTEX-A9 925MHZ 672UBGA

## 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

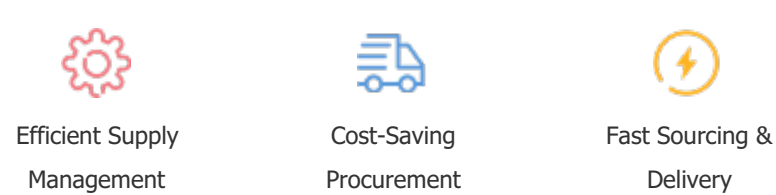
**Note:** The above table is for reference only. There may have some data bias for the uncontrollable factors.  
Contact us if you have any questions.

### 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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