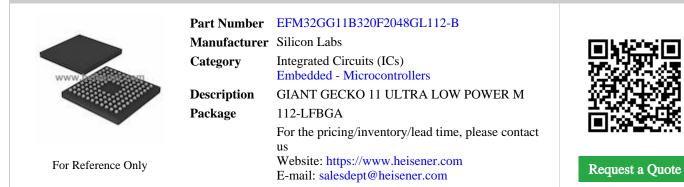


# EFM32GG11B320F2048GL112-B

#### EFM32GG11B320F2048GL112-B Information



# **Certified Quality**

Heisener's commitment to quality has shaped our processes for sourcing, testing, shipping, and every step in between. This foundation underlies each component we sell.



#### EFM32GG11B320F2048GL112-B Specifications

Manufacturer Silicon Labs   Manufacturer Silicon Labs   Category Integrated Circuits (ICs)   Embedded - Microcontrollers   Package 112-LFBGA   Series Giant Gecko S1   Core Processor ARM® Cortex®-M4   Core Size 32-Bit   Speed 72MHz   Connectivity CANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USART   Proprimerals Brown-out Detect/Reset, DMA, LCD, POR, PWM, WDT   Number of I/O 90   Program Memory Size 2MB (2M x 8)   Program Memory Type FLASH   EEPROM Size -   RAM Size 512K x 8   Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.8 V   Data Converters A/D 16x12b SAR, D/A 2x12b   Oscillator Type Internal   Operating Temperature -40°C ~ 85°C (TA)   Mounting Type -   Package / Case 112-LFBGA   Supplier Device Package 112-LFBGA			
CategoryIntegrated Circuits (ICs)Embedded - MicrocontrollersPackage112-LFBGASeriesGiant Gecko S1Core ProcessorARM@ Cortex@-M4Core Size32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, IPC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-Nutage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Manufacturer Part Number	EFM32GG11B320F2048GL112-B	
Embedded - MicrocontrollersPackage112-LFBGASeriesGiant Gecko S1Core ProcessorARM® Cortex®-M4Core Size32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, IPC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case112-EBGASupplier Device Package112-BGA (10x10)	Manufacturer	Silicon Labs	
Package112-LFBGASeriesGiant Gecko S1Core ProcessorARM® Cortex®-M4Core Size32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)PERPOM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersAUD 16x12b SAR, D/A 2x12bOscillator Type-Mounting Type-Package / Case112-LFBGASupplier Device Package12-BGA (10x10)	Category	Integrated Circuits (ICs)	
SeriesGiant Gecko S1SeriesARM® Cortex®-M4Core Processor32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)		Embedded - Microcontrollers	
Core ProcessorARM® Cortex®-M4Core Size32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-Nutber of Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type112-LFBGASupplier Device Package112-BGA (10x10)	Package	112-LFBGA	
Core Size32-BitSpeed72MHzConnectivityCANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case112-EFBGASupplier Device Package112-BGA (10x10)	Series	Giant Gecko S1	
Speed72MHzConnectivityCANbus, EBI/EMI, PC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Core Processor	ARM® Cortex®-M4	
ConnectivityCANbus, EBI/EMI, IPC, IrDA, LINbus, SmartCard, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type112-LFBGASupplier Device Package112-BGA (10x10)	Core Size	32-Bit	
PeripheralsBrown-out Detect/Reset, DMA, LCD, POR, PWM, WDTNumber of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Speed	72MHz	
Number of I/O90Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Connectivity	CANbus, EBI/EMI, I2C, IrDA, LINbus, SmartCard, SPI, UART/USART	
Program Memory Size2MB (2M x 8)Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Peripherals	Brown-out Detect/Reset, DMA, LCD, POR, PWM, WDT	
Program Memory TypeFLASHEEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Number of I/O	90	
EEPROM Size-RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Program Memory Size	2MB (2M x 8)	
RAM Size512K x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Program Memory Type	FLASH	
Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.8 VData ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	EEPROM Size	-	
Data ConvertersA/D 16x12b SAR, D/A 2x12bOscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	RAM Size	512K x 8	
Oscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Voltage - Supply (Vcc/Vdd)	1.8 V ~ 3.8 V	
Operating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Data Converters	A/D 16x12b SAR, D/A 2x12b	
Mounting Type-Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Oscillator Type	Internal	
Package / Case112-LFBGASupplier Device Package112-BGA (10x10)	Operating Temperature	-40°C ~ 85°C (TA)	
Supplier Device Package 112-BGA (10x10)	Mounting Type	-	
	Package / Case	112-LFBGA	
Report errors?	Supplier Device Package	112-BGA (10x10)	
			Report errors?

### EFM32GG11B320F2048GL112-B Guarantees



**Quality Guarantees** 

We provide 90 days warranty. \* If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.



#### **Service Guarantees**

We guarantee 100% customer satisfaction. Our experienced sales team and tech support team back our services to satisfy all our customers.

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If you have any question about EFM32GG11B320F2048GL112-B, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com