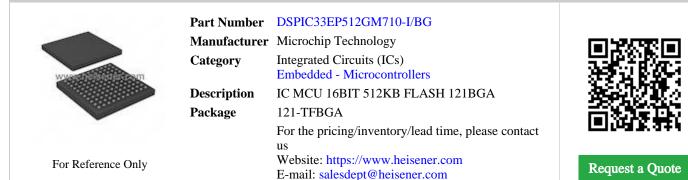


# DSPIC33EP512GM710-I/BG

### DSPIC33EP512GM710-I/BG 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.



# DSPIC33EP512GM710-I/BG Specifications

ManufacturerMicrochip TechnologyCategoryIntegrated Circuits (ICs)Embedded - MicrocontrollersPackage121-TFBGASeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTPreipheralsBrown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDTProgram Memory Size512KB (170K x 24)Program Memory TypeFLASHEPROM Size-AM Size45K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersAD 49x10b/12bDerating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA		
CategoryIntegrated Circuits (ICs)Embedded - MicrocontrollersPackage121-TFBGASeriesdsPICCore ProcessordsPICCore Size16-BitSpeed70 MIPsConcertivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTProgram Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VOata ConvertersA/D 49x10b/12bOctaverters-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Manufacturer Part Number	DSPIC33EP512GM710-I/BG
Embedded - MicrocontrollersPackage121-TFBGASeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VOtata ConvertersA/D 49x10b/12bSocillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGA	Manufacturer	Microchip Technology
Package121-TFBGASeriesdsPIC? 33EPCore ProcessordsPICCore ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTParipheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTParipheralsS5Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3V ~ 3.6 VData ConvertersAID 49x10b/12bDerating Temperature-40°C ~ 85°C (TA)Augunting Type21-TFBGA	Category	Integrated Circuits (ICs)
NotedsPIC? 33EPCore ProcessordsPIC? 33EPCore Size16-BitCore Size70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTConnectivityBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTPeripherals85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDocallot TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGA		Embedded - Microcontrollers
Core ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHBEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VDerating Temperature40°C ~ 85°C (TA)Operating Temperature-Package / Case121-FFBGA	Package	121-TFBGA
Core Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VDerating Temperature-40°C ~ 85°C (TA)Operating Temperature-Package / Case121-TFBGA	Series	dsPIC? 33EP
Speed70 MIPsConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 85°C (TA)Operating Temperature-2ackage / CasePackage / Case121-TFBGA	Core Processor	dsPIC
ConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTConnectivityBrown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDTPeripheralsBrown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGA	Core Size	16-Bit
PeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDyerating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGA	Speed	70 MIPs
Number of I/O     85       Program Memory Size     512KB (170K x 24)       Program Memory Type     FLASH       Program Memory Type     FLASH       SEPROM Size     -       RAM Size     48K x 8       Voltage - Supply (Vcc/Vdd)     3 V ~ 3.6 V       Data Converters     A/D 49x10b/12b       Dscillator Type     Internal       Operating Temperature     -40°C ~ 85°C (TA)       Package / Case     121-TFBGA	Connectivity	CAN, I2C, IrDA, LIN, QEI, SPI, UART/USART
Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Peripherals	Brown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDT
Program Memory TypeFLASHEEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDocillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Number of I/O	85
BeepRoM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDocillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Program Memory Size	512KB (170K x 24)
RAM Size48K x 8Voltage - Supply (Vcc/Vd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDocillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Program Memory Type	FLASH
Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	EEPROM Size	-
Data ConvertersA/D 49x10b/12bDocillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	RAM Size	48K x 8
Dscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Voltage - Supply (Vcc/Vdd)	3 V ~ 3.6 V
Operating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA	Data Converters	A/D 49x10b/12b
Mounting Type -   Package / Case 121-TFBGA	Oscillator Type	Internal
Package / Case 121-TFBGA	Operating Temperature	-40°C ~ 85°C (TA)
-	Mounting Type	_
Supplier Device Package 121-TFBGA (10x10)	Package / Case	121-TFBGA
	Supplier Device Package	121-TFBGA (10x10)
Report errors?		Report errors?

## DSPIC33EP512GM710-I/BG 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.

### DSPIC33EP512GM710-I/BG Payment Methods



If you have any question about DSPIC33EP512GM710-I/BG, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com