

# DSPIC33EP512MU810T-I/BG

#### DSPIC33EP512MU810T-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.



## DSPIC33EP512MU810T-I/BG Specifications

Manufacturer     Microchip Technology       Manufacturer     Microchip Technology       Category     Integrated Circuits (ICs)       Embedded - Microcontrollers     Embedded - Microcontrollers       Package     121-TFBGA       Series     dsPIC (33EP       Core Processor     dsPIC       Core Size     16-Bit       Conectivity     CAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTG       Connectivity     Gano-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDT       Program Memory Size     512KB (170K x 24)       Program Memory Type     FLASH       EEPROM Size     -       Converters     A/D 32x10b/12b       Outage - Supply (Vcc/Vdd)     3 V ~ 3.6 V       Derating Temperature     40°C ~ 85°C (TA)       Operating Temperature     -       Package / Case     121-TFBGA       Supplier Device Package     121-TFBGA (10x10)			
CategoryIntegrated Circuits (Cs)Embedded - MicrocontrollersPackage121-TFBGASeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Pergoram Memory TypeFLASHEEPROM Size-AM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VDerating Temperature-40°C ~ 85°C (TA)Operating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGA (10x10)	Manufacturer Part Number	DSPIC33EP512MU810T-I/BG	
Embedded - MicrocontrollersPackage121-TFBGASeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AdM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-40°C ~ 85°C (TA)Advanting Type121-TFBGA (10x10)	Manufacturer	Microchip Technology	
Package     121-TFBGA       Series     dsPIC? 33EP       Core Processor     dsPIC       Core Processor     dsPIC       Core Size     16-Bit       Speed     70 MIPs       Concertivity     CAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTG       Peripherals     Brown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDT       Peripherals     S12KB (170K x 24)       Program Memory Size     512KB (170K x 24)       Program Memory Type     FLASH       Peripherals     -       AdM Size     24K x 16       Voltage - Supply (Vcc/Vdd)     3 V ~ 3.6 V       Operating Temperature     40°C ~ 85°C (TA)       Operating Temperature     40°C ~ 85°C (TA)       Package / Case     121-TFBGA       Supplier Device Package     121-TFBGA (10x10)	Category	Integrated Circuits (ICs)	
SeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, 1rDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEPROM Size-AM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-40°C ~ 85°C (TA)Program Grape121-TFBGA		Embedded - Microcontrollers	
Core ProcessordsPICCore Size16-BitSpeed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-Program Memory Type1.1-TFBGASupplier Device Package121-TFBGA (10x10)	Package	121-TFBGA	
Core Size16-BitSpeed70 MIPsConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Series	dsPIC? 33EP	
Speed70 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHProgram Memory Type74 K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VOtata ConvertersA/D 32x10b/12bOperating Temperature-40°C ~ 85°C (TA)Operating Temperature121-TFBGA (10x10)	Core Processor	dsPIC	
Connectivity     CAN, I2C, IrDA, LIN, QEI, SPI, UART/USART, USB OTG       Peripherals     Brown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDT       Number of I/O     83       Program Memory Size     512KB (170K x 24)       Program Memory Type     FLASH       EEPROM Size     -       RAM Size     24K x 16       Voltage - Supply (Vcc/Vdd)     3 V ~ 3.6 V       Detail Type     Internal       Operating Temperature     -40°C ~ 85°C (TA)       Mounting Type     -       Package / Case     121-TFBGA (10x10)	Core Size	16-Bit	
PeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHPEPROM Size-RAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDocillator Type-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA (10x10)	Speed	70 MIPs	
Number of I/O83Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGA (10x10)	Connectivity	CAN, I2C, IrDA, LIN, QEI, SPI, UART/USART, USB OTG	
Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-Avoc ~ 85°C (TA)-Package / Case121-TFBGA (10x10)	Peripherals	Brown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDT	
Program Memory TypeFLASHEEPROM Size-RAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDerating Temperature-40°C ~ 85°C (TA)Operating Type-Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Number of I/O	83	
EEPROM Size-RAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bData ConvertersInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Program Memory Size	512KB (170K x 24)	
RAM Size24K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Program Memory Type	FLASH	
Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 32x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	EEPROM Size	-	
Data ConvertersA/D 32x10b/12bData ConvertersInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	RAM Size	24K x 16	
Dscillator TypeInternalOperating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Voltage - Supply (Vcc/Vdd)	3 V ~ 3.6 V	
Derating Temperature-40°C ~ 85°C (TA)Mounting Type-Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Data Converters	A/D 32x10b/12b	
Mounting Type-Package / Case121-TFBGASupplier Device Package121-TFBGA (10x10)	Oscillator Type	Internal	
Package / Case 121-TFBGA   Supplier Device Package 121-TFBGA (10x10)	Operating Temperature	-40°C ~ 85°C (TA)	
Supplier Device Package 121-TFBGA (10x10)	Mounting Type	-	
	Package / Case	121-TFBGA	
Report errors?	Supplier Device Package	121-TFBGA (10x10)	
			Report errors?

#### DSPIC33EP512MU810T-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.

### DSPIC33EP512MU810T-I/BG Payment Methods



If you have any question about DSPIC33EP512MU810T-I/BG, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com