

# DSPIC33EP512GM710-E/PT

### DSPIC33EP512GM710-E/PT 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-E/PT Specifications

Manufacturer Microchip Technology   Integrated Circuits (ICs)   Embedded - Microcontrollers   Package 100-TQFP   Series dsPIC? 33EP   Core Processor dsPIC   Core Size 16-Bit   Connectivity CAN, 12C, IrDA, LIN, QEI, SPI, UART/USART   Connectivity GN-not Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDT   Program Memory Size 512KB (170K x 24)   Program Memory Size 512KB (170K x 24)   Converters 4K x 8   Voltage - Supply (Vcc/Vdd) 3V ~ 3.6 V   Converters AD 49x10b/12b   Deciliator Type Internal   Operating Temperature -40°C ~ 125°C (TA)   Program Case 100-TQFP		
CategoryIntegrated Circuits (Cs)Embedded - MicrocontrollersPackage100-TQFPSeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSoped60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTPargram Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Manufacturer Part Number	DSPIC33EP512GM710-E/PT
Embedded - MicrocontrollersPackage100-TQFPSeriesdsPIC ? 33EPCore ProcessordsPICCore Size16-BitSpeed60 MIPsConcectivityCAN, 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 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 125°C (TA)Mounting Type100-TQFPSupplier Device Package100-TQFPSupplier Device Package100-TQFP (12x12)	Manufacturer	Microchip Technology
Package100-TQFPSeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed06 MIPsConnectivityCAN, 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 TypeFLASHPerPROM Size-AdM Size48K x 8Voltage - Suppli (Vcc/Vdd)3 V ~ 3.6 VDetarting Temperature40°C ~ 125°C (TA)Operating Temperature10-TQFPPackage / Case100-TQFP (12x12)	Category	Integrated Circuits (ICs)
SeriesdsPC? 33EPCore ProcessordsPICCore Size16-BitSpeed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTPeripheralsS5Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VDocald TypeInternalOperating Temperature-40°C ~ 125°C (TA)Program Supplier Device Package100-TQFP (12x12)		Embedded - Microcontrollers
Core ProcessordsPICCore Size16-BitSpeed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTPeripherals512KB (170K x 24)Program Memory Size512KB (170K x 24)Perogram Memory TypeFLASHEEPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3V ~ 3.6 VDerating Temperature40°C ~ 125°C (TA)Operating Temperature-Package / Case100-TQFP (12x12)	Package	100-TQFP
Core Size16-BitSpeed60 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 TypeFLASHCBPROM Size-AM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VDetating Temperature40°C ~ 125°C (TA)Operating Temperature-Package / Case100 TQFP (12x12)	Series	dsPIC? 33EP
Speed60 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 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 125°C (TA)Operating Temperature100-TQFPSupplier Device Package100-TQFP (12x12)	Core Processor	dsPIC
ConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTConnectivityBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTPeripheralsBrown-out Detect/Reset, DMA, 12S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDerating Temperature-40°C ~ 125°C (TA)Operating Temperature-0Mounting Type-Package / Case100-TQFP (12x12)	Core Size	16-Bit
PeripheralsBrown-out Detect/Reset, DMA, I2S, Motor Control PWM, POR, PWM, WDTNumber of I/O85Program Memory Size512KB (170K x 24)Program Memory TypeFLASHProgram Memory Type-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDoerding Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFP (12x12)	Speed	60 MIPs
Number 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/12bDscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	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/12bDocillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	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 ~ 125°C (TA)Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Number of I/O	85
EEPROM Size-RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDecillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Program Memory Size	512KB (170K x 24)
RAM Size48K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Program Memory Type	FLASH
Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 49x10b/12bDecillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	EEPROM Size	-
Data ConvertersA/D 49x10b/12bData ConvertersA/D 49x10b/12bDscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	RAM Size	48K x 8
Dscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Voltage - Supply (Vcc/Vdd)	3 V ~ 3.6 V
Derating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Data Converters	A/D 49x10b/12b
Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Oscillator Type	Internal
Package / Case100-TQFPSupplier Device Package100-TQFP (12x12)	Operating Temperature	-40°C ~ 125°C (TA)
Supplier Device Package100-TQFP (12x12)	Mounting Type	-
	Package / Case	100-TQFP
Report errors?	Supplier Device Package	100-TQFP (12x12)
		Report errors?

### DSPIC33EP512GM710-E/PT 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-E/PT Payment Methods



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