

# PIC32MZ0512EFK100-E/PF

### PIC32MZ0512EFK100-E/PF 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.



## PIC32MZ0512EFK100-E/PF Specifications

ManufacturerMicrochip TechnologyManufacturerMicrochip TechnologyEmbedded - MicrocontrollersPackage100-TQFPSeriesAutomotive, AEC-Q100, PIC® 32MZCore ProcessorMIPS32@ M-ClassCore Size32-BitSpeed180MHzConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, PS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersAD 40x12bOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)		
CategoryIntegrated Circuits (Tcs)Embedded - MicrocontrollersPackage100-TQFPSeriesAutomotive, AEC-Q100, PIC® 32MZCore ProcessorMIPS32® M-ClassCore Size32-BitSpeed180MHzConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, PS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Manufacturer Part Number	PIC32MZ0512EFK100-E/PF
Embedded - MicrocontrollersPackage100-TQFPSeriesAutomotive, AEC-Q100, PIC® 32MZCore ProcessorMIPS32@ M-ClassCore Size32-BitSpeed180MHzConcetivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, PS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature+40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Manufacturer	Microchip Technology
Package 100-TQFP   Series Autonotive, AEC-Q100, PIC® 32MZ   Core Processor MIPS32® M-Class   Core Size 32-Bit   Speed 180MHz   Connectivity CANbus, EBI/EMI, Ethernet, IPC, PMP, SPI, SQI, UART/USART, USB OTG   Peripherals Brown-out Detect/Reset, DMA, IPS, POR, PWM, WDT   Number of I/O 78   Program Memory Size 512KB (512K x 8)   Program Memory Type FLASH   EEPROM Size -   RAM Size 128K x 8   Voltage - Supply (Vcc/Vdd) 2.1 V ~ 3.6 V   Operating Temperature 40°C ~ 125°C   Mounting Type -   Package / Case 100-TQFP   Supplier Device Package 100-TQFP	Category	Integrated Circuits (ICs)
SeriesAutomotive, AEC-Q100, PIC® 32MZCore ProcessorMIPS32® M-ClassCore Size32-BitSpeed180MHzConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, PS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CPackage / Case100-TQFP (14x14)		Embedded - Microcontrollers
Core ProcessorMIPS32® M-ClassCore Size32-BitSpeed180MHzConnectivityCANbus, EBI/EMI, Ethernet, IPC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, IPS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type100-TQFP (14x14)	Package	100-TQFP
Core Size32-BitSpeed180MHzConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, I*S, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CPackage / Case100-TQFP (14x14)	Series	Automotive, AEC-Q100, PIC® 32MZ
Speed180MHzConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, I²S, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Core Processor	MIPS32® M-Class
ConnectivityCANbus, EBI/EMI, Ethernet, PC, PMP, SPI, SQI, UART/USART, USB OTGPeripheralsBrown-out Detect/Reset, DMA, PS, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Core Size	32-Bit
PeripheralsBrown-out Detect/Reset, DMA, I2S, POR, PWM, WDTNumber of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Speed	180MHz
Number of I/O78Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Connectivity	CANbus, EBI/EMI, Ethernet, I2C, PMP, SPI, SQI, UART/USART, USB OTG
Program Memory Size512KB (512K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Peripherals	Brown-out Detect/Reset, DMA, I2S, POR, PWM, WDT
Program Memory TypeFLASHEEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Number of I/O	78
EEPROM Size-RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFP (14x14)	Program Memory Size	512KB (512K x 8)
RAM Size128K x 8Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Program Memory Type	FLASH
Voltage - Supply (Vcc/Vdd)2.1 V ~ 3.6 VData ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	EEPROM Size	-
Data ConvertersA/D 40x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	RAM Size	128K x 8
Oscillator TypeInternalOperating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Voltage - Supply (Vcc/Vdd)	2.1 V ~ 3.6 V
Operating Temperature-40°C ~ 125°CMounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Data Converters	A/D 40x12b
Mounting Type-Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Oscillator Type	Internal
Package / Case100-TQFPSupplier Device Package100-TQFP (14x14)	Operating Temperature	-40°C ~ 125°C
Supplier Device Package100-TQFP (14x14)	Mounting Type	-
	Package / Case	100-TQFP
Report errors?	Supplier Device Package	100-TQFP (14x14)
		Report errors?

### PIC32MZ0512EFK100-E/PF 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.

#### PIC32MZ0512EFK100-E/PF Payment Methods



If you have any question about PIC32MZ0512EFK100-E/PF, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com