

# DSPIC33EP128MC504T-E/PT

### DSPIC33EP128MC504T-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.



# DSPIC33EP128MC504T-E/PT Specifications

ManufacturerMicrochip TechnologyCategoryIntegrated Circuits (ICs)Embedded-MicrocontrollersPackage44-TQFPSeriesGsPC? 33EPCore ProcessorGsPCCore Size16-BitSpeed60 MIPsConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory SizeI28KB (43K x 24)Pergram Memory TypeFLASHEEPROM Size-RAM SizeSix 16Voltage - Supply (Vcc/Vdd)3V ~ 3.6 VData ConvertersAD 9x10b/12bOperating Temperature44°C ~ 125°C (TA)Mounting Type-Package / Case44TQFP		-	
CategoryIntegrated Circuits (Cs)Embedded - MicrocontrollersPackage44-TQFPSeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Manufacturer Part Number	DSPIC33EP128MC504T-E/PT	
Embedded - MicrocontrollersPackage44-TQFPSeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed60 MIPsConcetivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Manufacturer	Microchip Technology	
Package44-TQFPSeriesdxPIC? 33EPCore ProcessordxPICCore Size16-BitSpeed60 MIPsConcetivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature-40°C ~ 125°C (TA)Phackage / Case44-TQFPSupplier Device Package44-TQFP	Category	Integrated Circuits (ICs)	
SeriesdsPIC? 33EPCore ProcessordsPICCore Size16-BitSpeed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)		Embedded - Microcontrollers	
Core ProcessordsPICCore Size16-BitSpeed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)	Package	44-TQFP	
Core Size16-BitSpeed60 MIPsConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case44-TQFP (10x10)	Series	dsPIC? 33EP	
Speed60 MIPsConnectivityCAN, 12C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature-40°C ~ 125°C (TA)Program Group-41°CFPackage / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Core Processor	dsPIC	
ConnectivityCAN, I2C, IrDA, LIN, QEI, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOperating Temperature-40°C ~ 125°C (TA)Package / Case44-TQFP (10x10)	Core Size	16-Bit	
PeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDTNumber of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)	Speed	60 MIPs	
Number of I/O35Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)	Connectivity	CAN, I2C, IrDA, LIN, QEI, SPI, UART/USART	
Program Memory Size128KB (43K x 24)Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Peripherals	Brown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, WDT	
Program Memory TypeFLASHEEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bData ConvertersInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)	Number of I/O	35	
EEPROM Size-RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFP (10x10)	Program Memory Size	128KB (43K x 24)	
RAM Size8K x 16Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Program Memory Type	FLASH	
Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	EEPROM Size	-	
Data ConvertersA/D 9x10b/12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	RAM Size	8K x 16	
Oscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Voltage - Supply (Vcc/Vdd)	3 V ~ 3.6 V	
Operating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Data Converters	A/D 9x10b/12b	
Mounting Type-Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Oscillator Type	Internal	
Package / Case44-TQFPSupplier Device Package44-TQFP (10x10)	Operating Temperature	-40°C ~ 125°C (TA)	
Supplier Device Package44-TQFP (10x10)	Mounting Type	-	
	Package / Case	44-TQFP	
Report errors?	Supplier Device Package	44-TQFP (10x10)	
			Report errors?

## DSPIC33EP128MC504T-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.

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If you have any question about DSPIC33EP128MC504T-E/PT, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com