

# DSPIC33CK128MP202-E/2N

#### DSPIC33CK128MP202-E/2N 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.

## DSPIC33CK128MP202-E/2N Specifications

ManufacturerMicrochip TechnologyCategoryIntegrated Circuits (ICs)Embedded - MicrocontrollersPackage28-UQFN Exposed PadScriesAutomotive, AEC-Q100, dsPICTM 33CKCore ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPorpheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersADD 12x12b, D/A 3x12bOscillator Type-Operating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)		
CategoryIntegrated Circuits (Cs)Embedded - MicrocontrollersPackage28-UQFN Exposed PadSeriesAutomotive, AEC-Q100, dsPICTM 33CKCore ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type28-UQFN Exposed PadSupplier Device Package28-UQFN (sc6)	Manufacturer Part Number	DSPIC33CK128MP202-E/2N
Embedded - MicrocontrollersPackage28-UQFN Exposed PadSeriesAutomotive, AEC-Q100, dsPICTM 33CKCore ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature $-40^{\circ}C ~ 125^{\circ}C$ (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Manufacturer	Microchip Technology
Package28-UQFN Exposed PadSeriesAutomotive, AEC-Q100, dsPIC™ 33CKCore ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-Notage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type28-UQFN Exposed PadSupplier Device Package28-UQFN (Kc6)	Category	Integrated Circuits (ICs)
SeriesAutonotive, AEC-Q100, dsPIC™ 33CKCore ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersAD 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case28-UQFN (6x6)		Embedded - Microcontrollers
Core ProcessordsPICCore Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Advage / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Package	28-UQFN Exposed Pad
Core Size16-BitSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Package / Case28-UQFN (Exc6)	Series	Automotive, AEC-Q100, dsPIC <sup>™</sup> 33CK
SpeedIOOMSpeed100MHzConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Core Processor	dsPIC
ConnectivityPC, IrDA, LINbus, SPI, UART/USARTPeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Core Size	16-Bit
PeripheralsBrown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDTNumber of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Speed	100MHz
Number of I/O21Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Connectivity	I <sup>2</sup> C, IrDA, LINbus, SPI, UART/USART
Program Memory Size128KB (128K x 8)Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Peripherals	Brown-out Detect/Reset, DMA, Motor Control PWM, POR, PWM, QEI, WDT
Program Memory TypeFLASHEEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Number of I/O	21
EEPROM Size-RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Program Memory Size	128KB (128K x 8)
RAM Size16K x 8Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Program Memory Type	FLASH
Voltage - Supply (Vcc/Vdd)3 V ~ 3.6 VData ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	EEPROM Size	-
Data ConvertersA/D 12x12b, D/A 3x12bOscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	RAM Size	16K x 8
Oscillator TypeInternalOperating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Voltage - Supply (Vcc/Vdd)	3 V ~ 3.6 V
Operating Temperature-40°C ~ 125°C (TA)Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Data Converters	A/D 12x12b, D/A 3x12b
Mounting Type-Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Oscillator Type	Internal
Package / Case28-UQFN Exposed PadSupplier Device Package28-UQFN (6x6)	Operating Temperature	-40°C ~ 125°C (TA)
Supplier Device Package28-UQFN (6x6)	Mounting Type	-
	Package / Case	28-UQFN Exposed Pad
Report errors?	Supplier Device Package	28-UQFN (6x6)
		Report errors?

#### DSPIC33CK128MP202-E/2N 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.

#### DSPIC33CK128MP202-E/2N Payment Methods



If you have any question about DSPIC33CK128MP202-E/2N, please do not hesitate to contact us! Website: https://www.heisener.com E-mail: salesdept@heisener.com