



## **MSP430F2012TN Information**



For Reference Only

Part Number MSP430F2012TN

Manufacturer Texas Instruments

Category Integrated Circuits (ICs)
Embedded - Microcontrollers

**Description** IC MCU 16BIT 2KB FLASH 14DIP

**Package** 14-DIP (0.300", 7.62mm)

For the pricing/inventory/lead time, please contact

us

Website: https://www.heisener.com E-mail: salesdept@heisener.com



Request a Quote

## **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.









# **MSP430F2012TN Specifications**

Manufacturer Part Number         MSP430F2012TN           Manufacturer         Texas Instruments           Category         Integrated Circuits (ICs)           Embedded - Microcontrollers           Package         14-DIP (0.300", 7.62mm)           Series         MSP430F2xx           Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-DIP (0.300", 7.62mm)	<b>-</b>	
Category         Integrated Circuits (ICs)           Embedded - Microcontrollers           Package         14-DIP (0.300", 7.62mm)           Series         MSP430F2xx           Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-DIP	Manufacturer Part Number	MSP430F2012TN
Package         14-DIP (0.300", 7.62mm)           Series         MSP430F2xx           Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-PDIP	Manufacturer	Texas Instruments
Package         14-DIP (0.300", 7.62mm)           Series         MSP430F2xx           Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-PDIP	Category	Integrated Circuits (ICs)
Series         MSP430F2xx           Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-PDIP		Embedded - Microcontrollers
Core Processor         MSP430           Core Size         16-Bit           Speed         16MHz           Connectivity         I2C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-PDIP	Package	14-DIP (0.300", 7.62mm)
Core Size         16-Bit           Speed         16MHz           Connectivity         12C, SPI           Peripherals         Brown-out Detect/Reset, POR, PWM, WDT           Number of I/O         10           Program Memory Size         2KB (2K x 8 + 256B)           Program Memory Type         FLASH           EEPROM Size         -           RAM Size         128 x 8           Voltage - Supply (Vcc/Vdd)         1.8 V ~ 3.6 V           Data Converters         A/D 8x10b           Oscillator Type         Internal           Operating Temperature         -40°C ~ 105°C (TA)           Mounting Type         -           Package / Case         14-DIP (0.300", 7.62mm)           Supplier Device Package         14-PDIP	Series	MSP430F2xx
Speed16MHzConnectivity12C, SPIPeripheralsBrown-out Detect/Reset, POR, PWM, WDTNumber of I/O10Program Memory Size2KB (2K x 8 + 256B)Program Memory TypeFLASHEEPROM Size-RAM Size128 x 8Voltage - Supply (Vcc/Vdd)1.8 V ~ 3.6 VData ConvertersA/D 8x10bOscillator TypeInternalOperating Temperature-40°C ~ 105°C (TA)Mounting Type-Package / Case14-DIP (0.300", 7.62mm)Supplier Device Package14-PDIP	Core Processor	MSP430
Connectivity Peripherals Brown-out Detect/Reset, POR, PWM, WDT Number of I/O 10 Program Memory Size 2KB (2K x 8 + 256B) Program Memory Type FLASH EEPROM Size - RAM Size 128 x 8 Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.6 V Data Converters A/D 8x10b Oscillator Type Internal Operating Temperature -40°C ~ 105°C (TA) Mounting Type Package / Case 14-DIP (0.300", 7.62mm) Supplier Device Package 14-PDIP	Core Size	16-Bit
Peripherals  Brown-out Detect/Reset, POR, PWM, WDT  Number of I/O  10  Program Memory Size  2KB (2K x 8 + 256B)  Program Memory Type  FLASH  EEPROM Size  -  RAM Size  128 x 8  Voltage - Supply (Vcc/Vdd)  1.8 V ~ 3.6 V  Data Converters  A/D 8x10b  Oscillator Type  Internal  Operating Temperature  -40°C ~ 105°C (TA)  Mounting Type  -  Package / Case  14-DIP (0.300", 7.62mm)  Supplier Device Package	Speed	16MHz
Number of I/O Program Memory Size 2KB (2K x 8 + 256B) Program Memory Type FLASH EEPROM Size - RAM Size 128 x 8 Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.6 V Data Converters A/D 8x10b Oscillator Type Internal Operating Temperature -40°C ~ 105°C (TA) Mounting Type - Package / Case 14-DIP (0.300", 7.62mm) Supplier Device Package	Connectivity	I2C, SPI
Program Memory Size 2KB (2K x 8 + 256B)  Program Memory Type FLASH  EEPROM Size -  RAM Size 128 x 8  Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.6 V  Data Converters A/D 8x10b  Oscillator Type Internal  Operating Temperature -40°C ~ 105°C (TA)  Mounting Type -  Package / Case 14-DIP (0.300", 7.62mm)  Supplier Device Package 14-PDIP	Peripherals	Brown-out Detect/Reset, POR, PWM, WDT
Program Memory Type FLASH  EEPROM Size -  RAM Size 128 x 8  Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.6 V  Data Converters A/D 8x10b  Oscillator Type Internal  Operating Temperature -40°C ~ 105°C (TA)  Mounting Type -  Package / Case 14-DIP (0.300", 7.62mm)  Supplier Device Package 14-PDIP	Number of I/O	10
EEPROM Size - 128 x 8  Voltage - Supply (Vcc/Vdd) 1.8 V ~ 3.6 V  Data Converters A/D 8x10b  Oscillator Type Internal  Operating Temperature -40°C ~ 105°C (TA)  Mounting Type - Package / Case 14-DIP (0.300", 7.62mm)  Supplier Device Package 14-PDIP	Program Memory Size	2KB (2K x 8 + 256B)
RAM Size $128 \times 8$ Voltage - Supply (Vcc/Vdd) $1.8 \text{ V} \sim 3.6 \text{ V}$ Data Converters $A/D 8 \times 10b$ Oscillator Type Internal $-40^{\circ}\text{C} \sim 105^{\circ}\text{C (TA)}$ Mounting Type $-40^{\circ}\text{C} \sim 105^{\circ}\text{C (TA)}$ Package / Case $14\text{-DIP (0.300'', 7.62mm)}$ Supplier Device Package $14\text{-PDIP}$	Program Memory Type	FLASH
Voltage - Supply (Vcc/Vdd)  1.8 V ~ 3.6 V  A/D 8x10b  Oscillator Type  Internal  Operating Temperature  -40°C ~ 105°C (TA)  Mounting Type  - Package / Case  14-DIP (0.300", 7.62mm)  Supplier Device Package	EEPROM Size	-
Data Converters  A/D 8x10b  Oscillator Type  Internal  Operating Temperature  -40°C ~ 105°C (TA)  Mounting Type  - Package / Case  14-DIP (0.300", 7.62mm)  Supplier Device Package  14-PDIP	RAM Size	128 x 8
Oscillator Type Internal $ -40^{\circ}\text{C} \sim 105^{\circ}\text{C (TA)} $ Mounting Type $ - $ Package / Case $ 14\text{-DIP } (0.300^{\circ}, 7.62 \text{mm}) $ Supplier Device Package $ 14\text{-PDIP} $	Voltage - Supply (Vcc/Vdd)	1.8 V ~ 3.6 V
Operating Temperature -40°C ~ 105°C (TA)  Mounting Type - Package / Case 14-DIP (0.300", 7.62mm)  Supplier Device Package 14-PDIP	Data Converters	A/D 8x10b
Mounting Type - Package / Case 14-DIP (0.300", 7.62mm) Supplier Device Package 14-PDIP	Oscillator Type	Internal
Package / Case 14-DIP (0.300", 7.62mm) Supplier Device Package 14-PDIP	Operating Temperature	-40°C ~ 105°C (TA)
Supplier Device Package 14-PDIP	Mounting Type	-
	Package / Case	14-DIP (0.300", 7.62mm)
Report errors?	Supplier Device Package	14-PDIP
		Report errors?

#### **MSP430F2012TN 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.

## MSP430F2012TN Payment Methods



















### MSP430F2012TN Shipping Methods













If you have any question about MSP430F2012TN, please do not hesitate to contact us!

Website: https://www.heisener.com E-mail: salesdept@heisener.com