

# AT30TS750A-MA8M-T

Data Sheet

RFO

1-ch TmpSnsr, NV Reg, I2C - 1.7-5.5V, 1MHz, Ind High Tmp, 8-UDFN

Manufacturers	Microchip Technology, Inc	
Package/Case	UDFN-8	- Contraction
Product Type	Integrated Circuits (ICs)	C.C.
RoHS		
Lifecycle		Images are for reference only

**General Description** 

Microchip's AT30TS750A temperature sensor is capable of measuring and converting temperatures from  $-55^{\circ}$ C to  $+125^{\circ}$ C to a digital word and provides a typical accuracy of  $+-0.5^{\circ}$ C over the operating temperature range of 0°C to  $+85^{\circ}$ C.

Please submit RFQ for AT30TS750A-MA8M-T or Email to us: sales@ovaga.com We will contact you in 12 hours.

The AT30TS750A combines precision temperature monitoring and nonvolatile (NVM) registers. The value-added NVM registers allow user configuration settings to be permanently retained across power cycles to simplify the system design, reduce processor startup code, and improve system reliability.

The AT30TS750A is factory calibrated and requires no external components to help provide a cost effective solution. To reduce current consumption and save power, the device features a shutdown mode which turns off all internal circuitry except for the internal power-on reset and serial interface circuits. In addition, the device features a power saving one-shot mode that allows the device to make a temperature measurement and update the temperature register and then return to shutdown mode. The AT30TS750A is based on the industry standard "LM75-type" compatible temperature sensor and is a precision temperature monitoring device designed for use in a variety of applications. The device combines a highly accurate digital temperature sensor with programmable high and low temperature alarms, user-selectable resolution up to 12 bits, and an I2C/SMBus compatible serial interface available in compact packages.

## Features

- $\label{eq:lambda} 2\mbox{-wire } I^2 C^{\mbox{-}m} / SMBus \ Compatible \ Interface$
- Single 1.7V to 5.5V Supply
- Integrated Nonvolatile Registers
- User Selectable 9- to 12-Bit Resolution
- Low Operating Current: 150 µA (typical)
- Shutdown Mode: 0.6µA (typical)

Power Saving One-Shot Temperature Conversion Measurement

Space Saving SOIC, DFN, MSOP Packages available

### **Related Products**



ATA6563-GAQW0 Microchip Technology, Inc SOIC-8



AT30TSE004A-MAA5M-T Microchip Technology, Inc

WDFN-8



### ATMEGA808-MU

Microchip Technology, Inc



# ATTINY3226-SU Microchip Technology, Inc SOIC



### AT42QT1040-MMHR

Microchip Technology, Inc VQFN-20

### AT30TS74-SS8M-T

Microchip Technology, Inc SOIC-8

### ATSAMC21G17A-MZTVAO

Microchip Technology, Inc VQFN

### ATTINY3224-SSU



Microchip Technology, Inc SOIC

**Ovaga Technologies Limited**