

## **EMC1072**

# 1°C Temperature Sensor with Selectable Address

### PRODUCT FEATURES

**Data Brief** 

#### **General Description**

The EMC1072 is a high accuracy, low cost, System Management Bus (SMBus) temperature sensor with pin selectable SMBus address.

The device provides ±1° accuracy (max) for external diode temperatures and ±2°C accuracy (max) for the internal diode temperature. The EMC1072 monitors two temperature channels (one external and one internal).

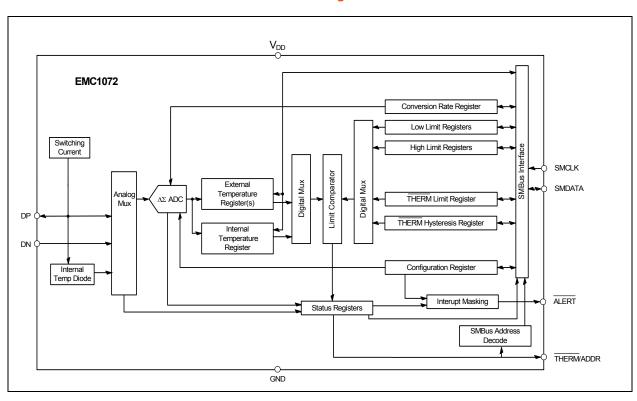
#### **Applications**

- Notebook Computers
- Desktop Computers
- Industrial
- Embedded applications

#### **Features**

- Pin Compatible with ADM1032, MAX6649, and LM99
- External Temperature Monitors
  - ±0.25°C typ accuracy (20°C < T<sub>DIODE</sub> < 110°C)
  - 0.125°C resolution
  - Supports 2N3904 and AMD diodes
- Internal Temperature Monitor
  - ±0.25°C typ accuracy (-5°C < T<sub>A</sub> < 100°C)
- 3.3V Supply Voltage
- SMBus 2.0 Compliant
  - Programmable SMBus address
- Programmable Temperature Limits for ALERT and THERM
- Available in Small 8-pin MSOP Lead-free RoHS Compliant Package

#### **Block Diagram**





### Order Number(s):

EMC1072-1-ACZL-TR for 8-pin, MSOP Lead-Free RoHS Compliant package EMC1072-A-ACZL-TR for 8-pin, MSOP Lead-Free RoHS Compliant package Reel size is 4,000 pieces

This product meets the halogen maximum concentration values per IEC61249-2-21 For RoHS compliance and environmental information, please visit www.smsc.com/rohs



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#### Package Outline Revision 1.39 (10-11-10) PIN 1 IDENTIFIER AREA (D/2 X E1/2) COMMON DIMENSIONS SYMBOL NOM MAX NOTE REMARK MIN 0.80 1.10 OVERALL PKG HEIGHT 2 8X b Α1 0.05 0.15 STANDOFF A2 0.75 0.85 0.95 BODY THICKNESS **TOP VIEW END VIEW** D 2.80 3.00 3 "X" BODY SIZE 4.65 4.90 5.15 LEAD SPAN E1 2.80 3.00 3.20 "Y" BODY SIZE 3 0.80 4 LEAD FOOT LENGTH 0.40 L1 0.95 REF LEAD LENGTH b 0.22 0.38 2 LEAD WIDTH 0.08 0.23 LEAD FOOT THICKNESS 0.65 BSC LEAD PITCH COPLANARITY CCC 0.10 SIDE VIEW 3-D VIEW NOTES: 1. ALL DIMENSIONS ARE IN MILLIMETER. 2. TOLERANCE ON THE TRUE POSITION OF THE LEADS IS $\pm\,0.065$ mm MAXIMUM. 3. PACKAGE BODY DIMENSIONS "D" AND "E1" DO NOT INCLUDE MOLD PROTRUSIONS OR FLASH. MAXIMUM MOLD PROTRUSIONS OR FLASH IS 0.15 mm (0.006 INCHES) PER END AND SIDE. DIMENSIONS "D" AND "E1" ARE DETERMINED AT DATUM PLANE "H". 4. DIMENSION FOR FOOT LENGTH "L" IS MEASURED AT THE GAUGE PLANE 0.25mm ABOVE THE 5. DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. <u></u> $\oplus$ PACKAGE OUTLINE DETAIL "A" 8 PIN TSSOP, 3x3 MM BODY, 0.65 MM PITCH S.K.ILIEV 7/05/04 SCALE: 3/1 MO-8-TSSOP-3x3 PRINT WITH "SCALE TO FIT DO NOT SCALE DRAWING S.K.ILIEV JEDEC: MO-187 / D 1 OF 1

Figure 1 8-Pin MSOP / TSSOP Package