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).

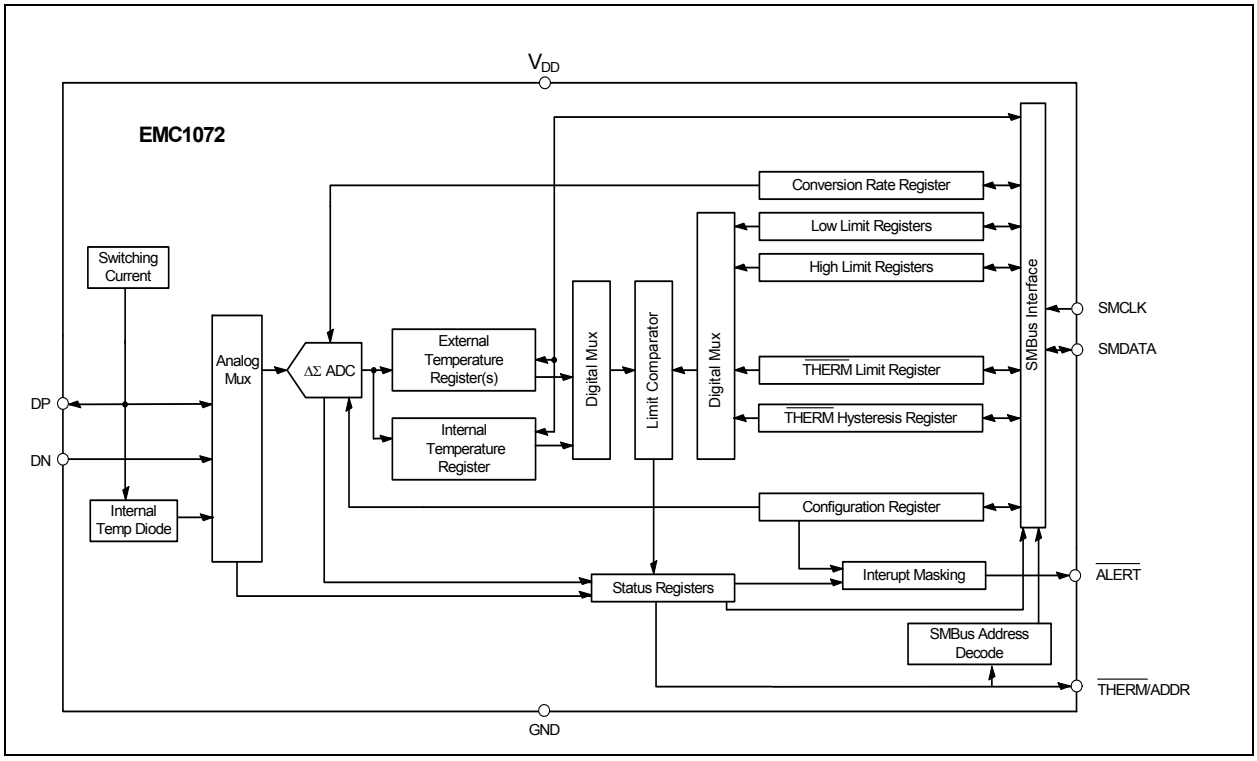
Applications

- 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_{DIODE} < 110°C)
  - — 0.125°C resolution
  - — Supports 2N3904 and AMD diodes
- Internal Temperature Monitor
  - — ±0.25°C typ accuracy (-5°C < T_A < 100°C)
- 3.3V Supply Voltage
- SMBus 2.0 Compliant
  - — Programmable SMBus address
- Programmable Temperature Limits for $\overline{\text{ALERT}}$ and $\overline{\text{THERM}}$
- 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

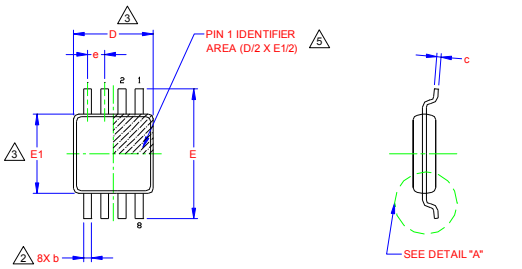
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Package Outline



REVISION HISTORY			
REVISION	DESCRIPTION	DATE	RELEASED BY
-	SEE SPEC FRONT PAGE FOR REVISION HISTORY	-	-

COMMON DIMENSIONS					
SYMBOL	MIN	NOM	MAX	NOTE	REMARK
A	0.80	–	1.10	–	OVERALL PKG HEIGHT
A1	0.05	–	0.15	–	STANDOFF
A2	0.75	0.85	0.95	–	BODY THICKNESS
D	2.80	3.00	3.20	3	"X" BODY SIZE
E	4.65	4.90	5.15	–	LEAD SPAN
E1	2.80	3.00	3.20	3	"Y" BODY SIZE
L	0.40	–	0.80	4	LEAD FOOT LENGTH
L1		0.95 REF		–	LEAD LENGTH
b	0.22	–	0.38	2	LEAD WIDTH
c	0.08	–	0.23	–	LEAD FOOT THICKNESS
e		0.65 BSC		–	LEAD PITCH
ccc	–	–	0.10	–	COPLANARITY

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER.
2. TOLERANCE ON THE TRUE POSITION OF THE LEADS IS ± 0.065mm 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 SEATING PLANE.
5. DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS AND TOLERANCES ARE:
DECIMAL X.X ±0.1, X.XX ±0.05, X.XXX ±0.025 ANGULAR ±1°
DIM AND TOL PER ASME Y14.5M - 1994
MATERIAL -
FINISH -
PRINT WITH "SCALE TO FIT" DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

	NAME	DATE
DRAWN	S.K.ILIEV	7/05/04
CHECKED	S.K.ILIEV	7/05/04
APPROVED	S.K.ILIEV	7/07/04

80 ARKAY DRIVE
HAUPPAUGE, NY 11788
USA

SMSC SUCCESS BY DESIGN

TITLE: PACKAGE OUTLINE
8 PIN TSSOP, 3x3 MM BODY, 0.65 MM PITCH

DWG NUMBER: MO-8-TSSOP-3x3 REV: D
SCALE: 1:1 STD COMPLIANCE: JEDEC: MO-187 / D SHEET: 1 OF 1

Figure 1 8-Pin MSOP / TSSOP Package