

SST Compliant Hardware Monitor with Two Temperature Channels

PRODUCT FEATURES

Data Brief

General Description

The EMC1102 is a one-wire sensor that is capable of monitoring up to two temperature zones for an Intel PC platform containing an SST host. The two temperature zones consist of an internal temperature diode and an externally connected temperature diode. In cooperation with a host device, thermal management and fan control can be performed. Communication takes place over a one-wire SST based interface. The internal 11-bit delta-sigma ADC architecture provides superb linearity, high accuracy, and excellent noise immunity.

Applications

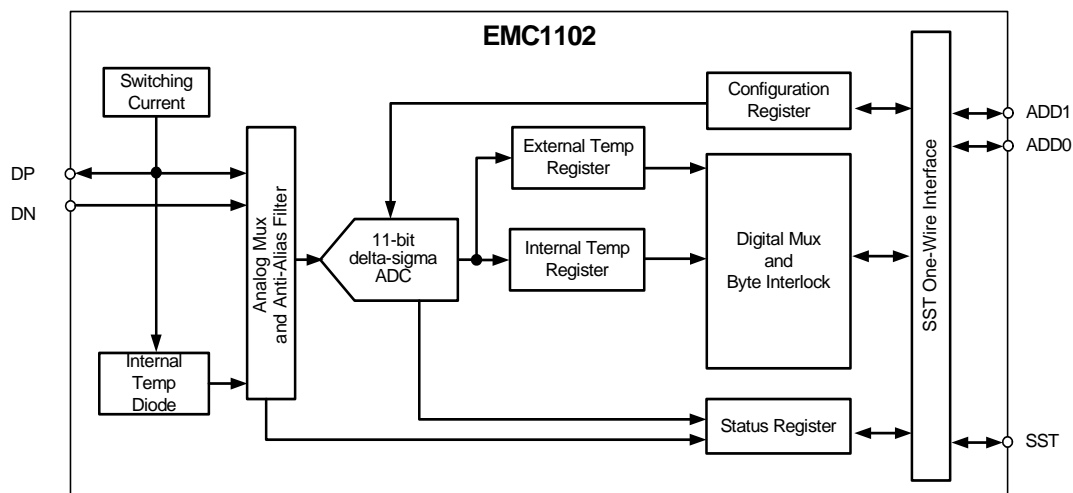
- Desktop PCs, Servers and Workstations

Features

- Single Wire Interface (SST based)
 - SST 1.0 compliant
 - Fixed Address, Discoverable Device
 - Nine programmable addresses
 - Supports FCS Abort functionality not available in SST 0.9 compliant devices

- Resistance Error Correction
- Ideality Configuration
- Beta Compensation
- External Temperature Monitor
 - 0.125°C resolution
 - $\pm 1^\circ\text{C}$ Accuracy (50°C to 70°C)
 - Diode Fault Reporting
- Internal Temperature Monitor
 - Range -40°C to +125°C
 - 0.125°C resolution
 - $\pm 2^\circ\text{C}$ Accuracy (40°C to 70°C)
- Supply
 - 3.0V to 3.6V

Simplified Block Diagram



ORDER NUMBER(S):

PART NUMBER	FEATURES	PACKAGE
EMC1102-ACZL-TR	External Diode configured to monitor 65nm CPU	8 pin MSOP Lead-Free, ROHS Compliant



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Package Outline

PRODUCT³ PREVIEW

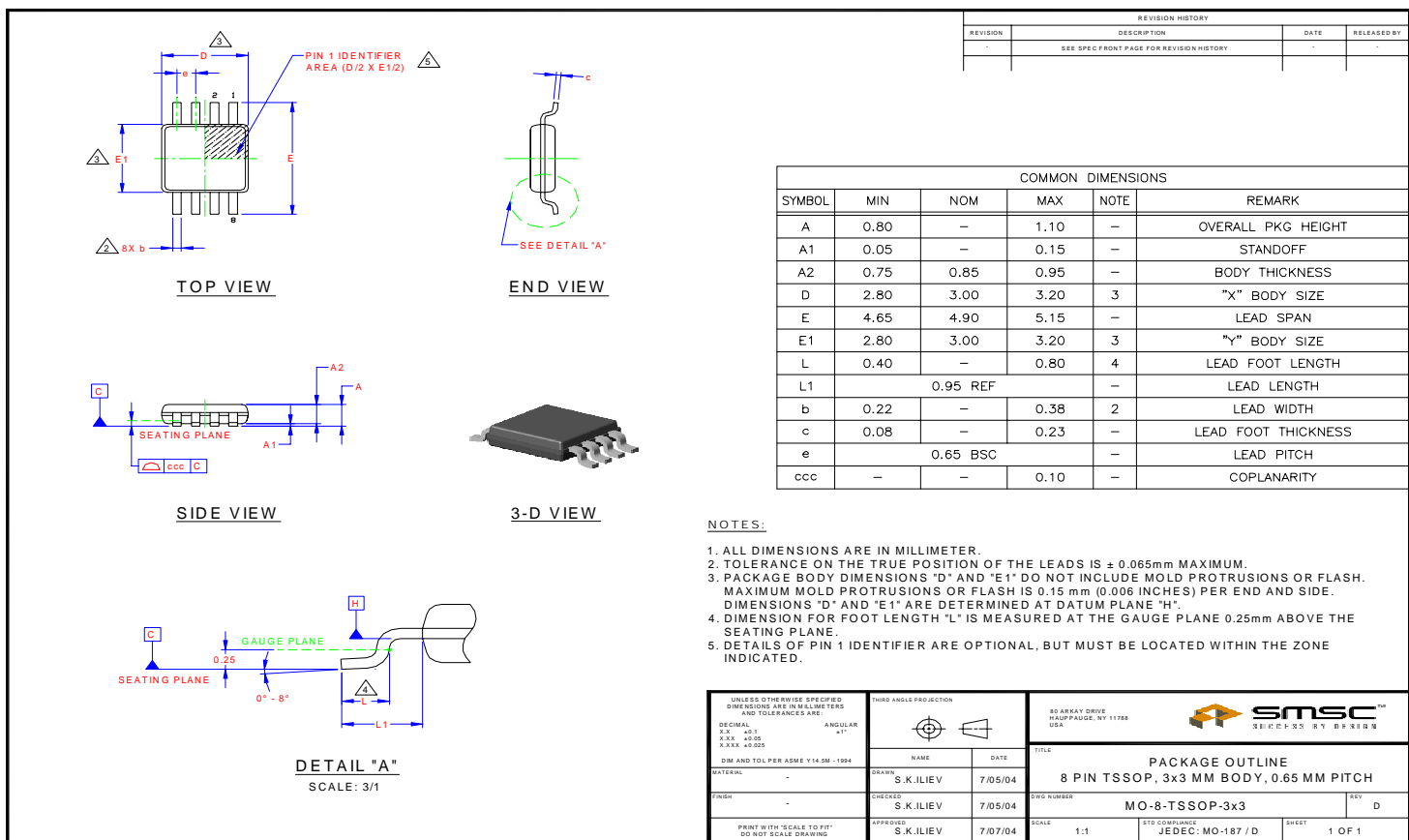


Figure 1 EMC1102 8-Pin MSOP Package Drawing