

SST Compliant Hardware Monitor with Three Temperature Channels and Three Voltage Channels

PRODUCT FEATURES

Data Brief

General Description

The EMC1133 is a one-wire sensor that is capable of monitoring up to three voltages and three temperature zones for an Intel PC platform containing an SST host. The three temperature zones consist of an internal temperature diode and two externally connected temperature diodes. 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

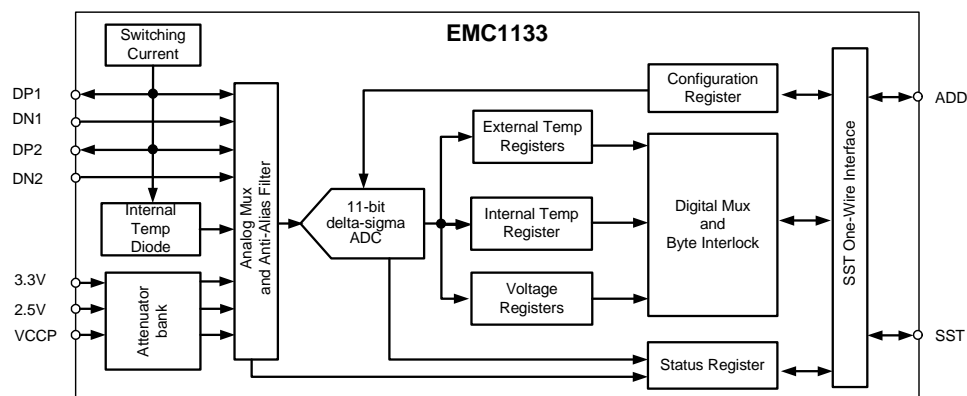
- Desktop PCs, Servers and Workstations

Features

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

- Resistance Error Correction
- Ideality Configuration
- Beta Compensation
- Two External Temperature Monitors
 - 0.125°C resolution
 - $\pm 1^\circ\text{C}$ Accuracy (50°C to 70°C)
 - Diode Fault Reporting
 - Second External Diode configured to read a discrete diode.
- Internal Temperature Monitor
 - Range -40°C to +125°C
 - 0.125°C resolution
 - $\pm 2^\circ\text{C}$ Accuracy (40°C to 70°C)
- Voltage Monitor:
 - 3.3V, 2.5V, VCCP inputs
 - 2% Total Unadjusted Error
 - 11-bit resolution
- Supply
 - 3.0V to 3.6V

Simplified Block Diagram



ORDER NUMBER:

PART NUMBER	FEATURES	PACKAGE
EMC1133-AIZL-TR	External Diode 1 configured to monitor 65nm CPU External diode 2 configured to monitor 2N3904	10 pin MSOP Lead-Free, ROHS Compliant



80 ARKAY DRIVE, HAUPPAUGE, NY 11788 (631) 435-6000, FAX (631) 273-3123

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Package Outline

Revision 2.58 (08-01-07)

PRODUCT PREVIEW

SMSC EMC1133

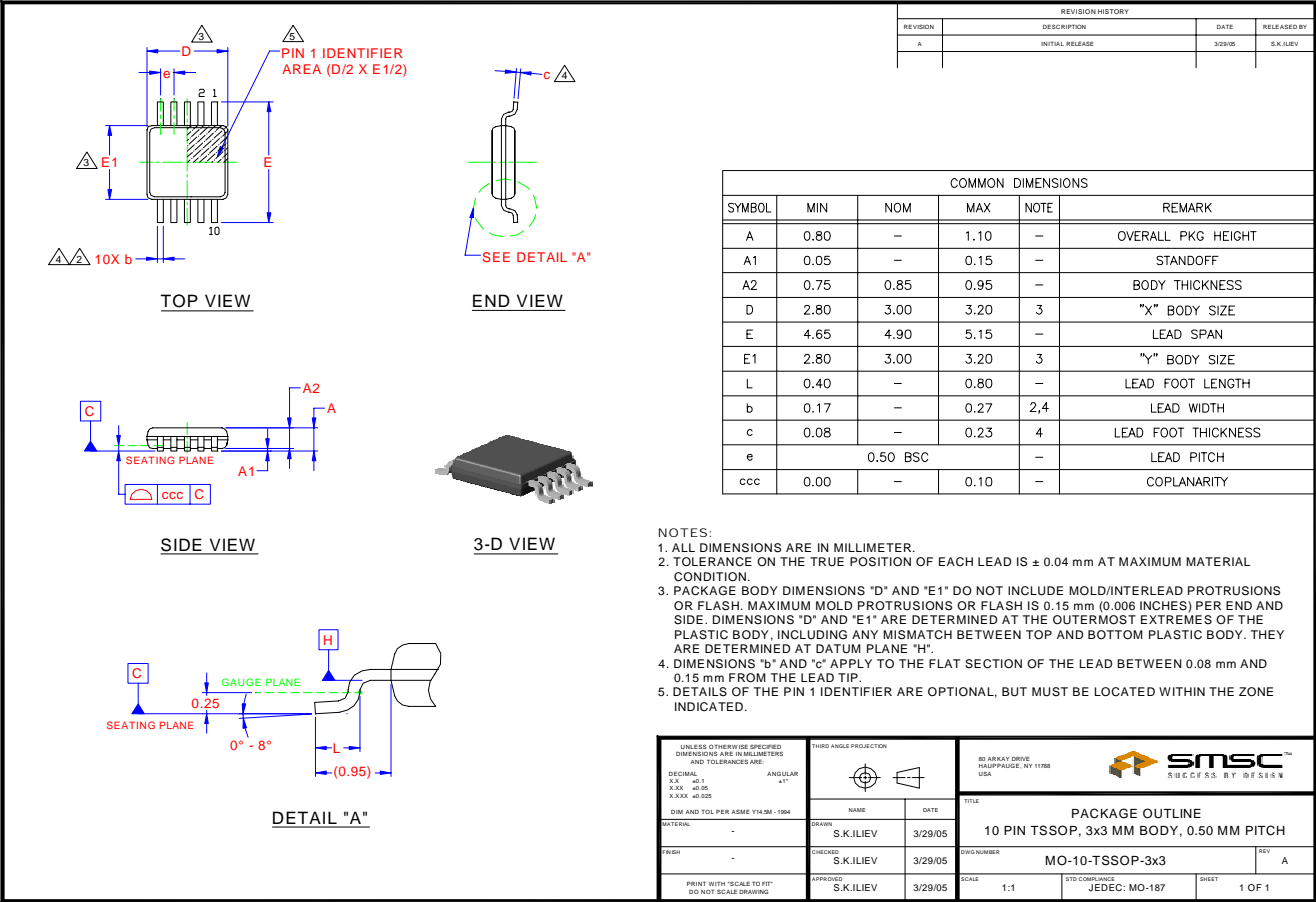


Figure 1 EMC1133 10-Pin MSOP Package Drawing