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# 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

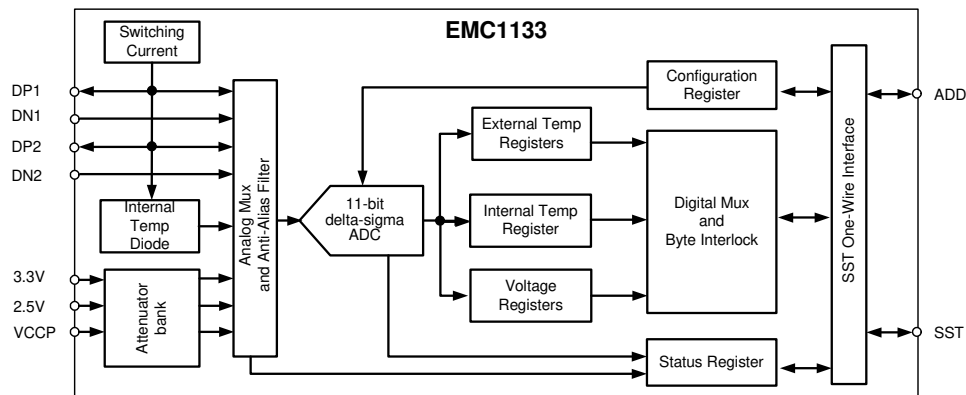
- Desktop PCs, Servers and Workstations

### 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
  - ±1°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
  - ±2°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:**

<b>PART NUMBER</b>	<b>FEATURES</b>	<b>PACKAGE</b>
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



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# Package Outline

Revision 2.58 (08-01-07)

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SMSC EMC1133

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

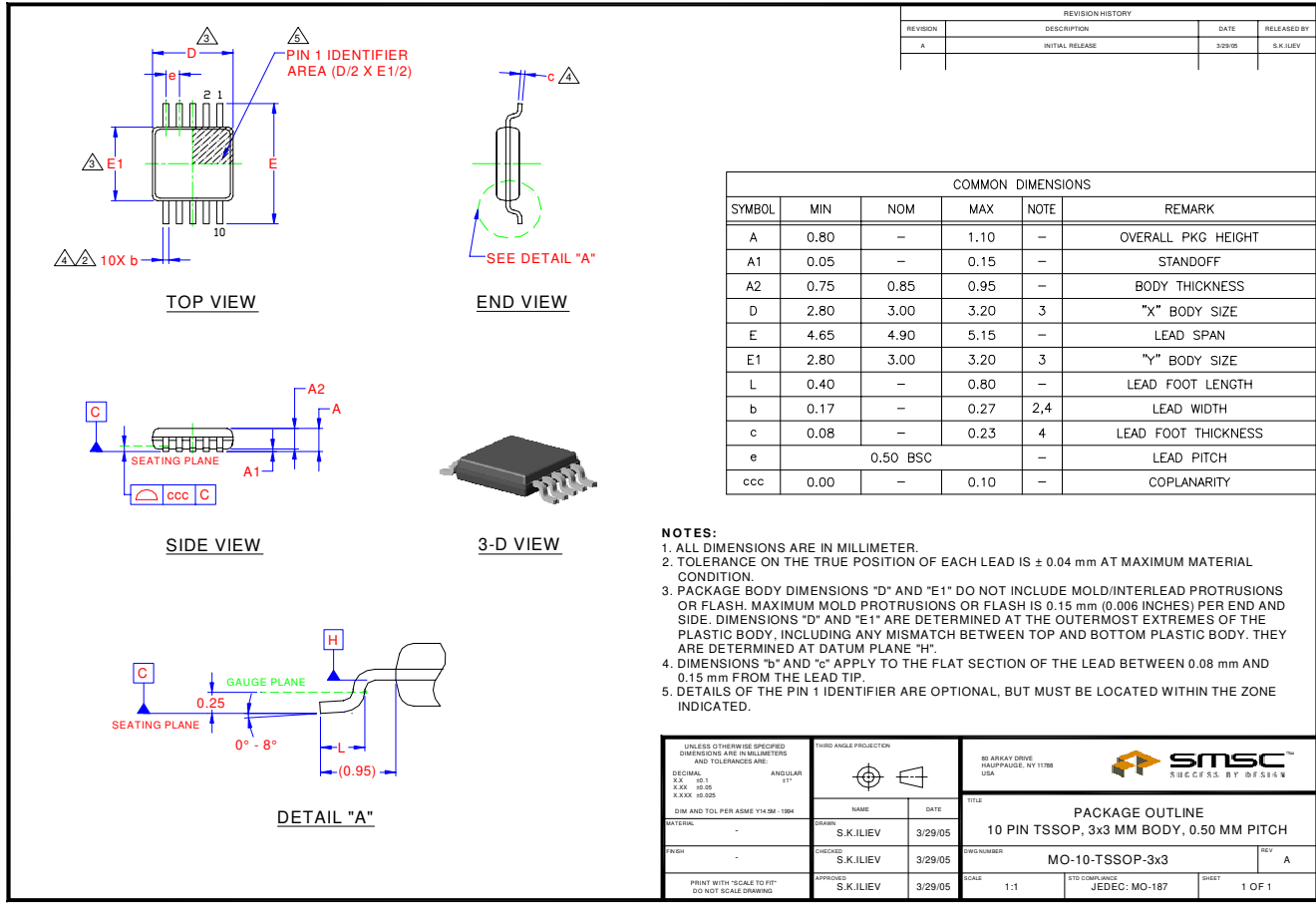


Figure 1 EMC1133 10-Pin MSOP Package Drawing