

EMC1152

SST Compliant Hardware Monitor with Two Temperature Channels and Five Voltage Channels

PRODUCT FEATURES

General Description

The EMC1152 is a one-wire sensor that is capable of monitoring up to five voltages and 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.

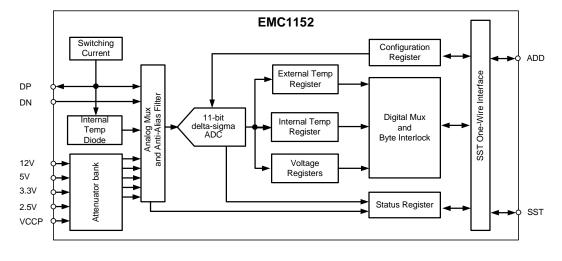
Applications

Desktop PCs, Servers and Workstations

Features

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

- Resistance Error Correction
- Ideality Configuration
- Beta Compensation (EMC1152-1)
- EMC1152 configured to measure 2N3904 diode
- EMC1152-1 configured to measure CPU substrate diode
- External Temperature Monitor
 - 0.125°C resolution
 - ±1°C Accuracy (50°C to 70°C)
 - Diode Fault Reporting
- Internal Temperature Monitor
- Range -40°C to +125°C
- 0.125°C resolution
 ±2°C Accuracy (40°C to 70°C)
- = ±2°C Accuracy (40°C to 70°C
- Voltage Monitor:
 - 12V, 5V, 3.3V, 2.5V, VCCP inputs
 - 2% Total Unadjusted Error
 - 11-bit resolution
- Supply
 - 3.0V to 3.6V



Simplified Block Diagram

SMSC EMC1152

PRODUCT PREVIEW

Data Brief



| ORDER NUMBERS: | | |
|-------------------|---|--|
| PART NUMBER | FEATURES | PACKAGE |
| EMC1152-AIZL-TR | External Diode configured to monitor 2N3904 | 10 pin MSOP Lead-Free, ROHS Compliant |
| EMC1152-1-AIZL-TR | External Diode configured to monitor 65nm CPU | 10 pin MSOP Lead-Free, ROHS Compliant |



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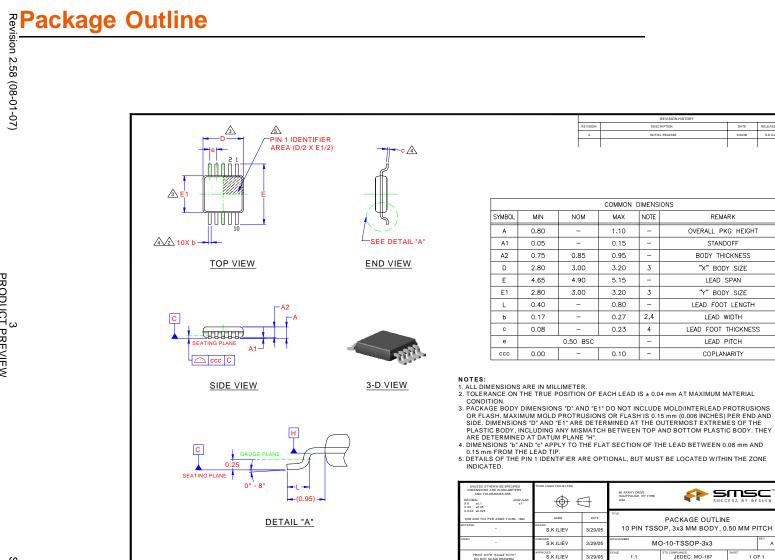
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PRODUCT²**PREVIEW**

3 PRODUCT PREVIEW







3/29/05

REMARK

OVERALL PKG HEIGHT

STANDOFF

BODY THICKNESS

"X" BODY SIZE

LEAD SPAN

"Y" BODY SIZE

LEAD FOOT LENGTH

LEAD WIDTH

LEAD FOOT THICKNESS

LEAD PITCH

COPLANARITY

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