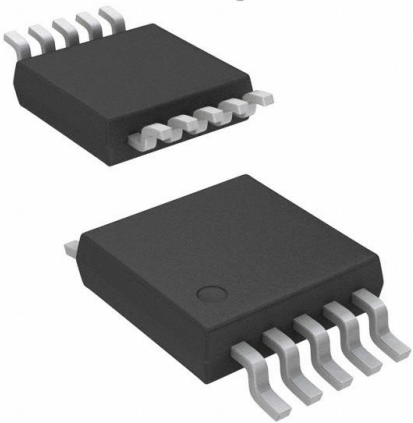


EMC1152-AIZL-TR Datasheet

www.digi-electronics.com



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DiGi Electronics Part Number	EMC1152-AIZL-TR-DG
Manufacturer	Microchip Technology
Manufacturer Product Number	EMC1152-AIZL-TR
Description	SENSOR DIGITAL -40C-125C 10MSOP
Detailed Description	Temperature Sensor Digital, Local/Remote -40°C ~ 125°C 11 b 10-MSOP



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Purchase and inquiry

Manufacturer Product Number:

EMC1152-AIZL-TR

Series:

-

Sensor Type:

Digital, Local/Remote

Sensing Temperature - Remote:

-

Voltage - Supply:

3V ~ 3.6V

Features:

-

Test Condition:

40°C ~ 70°C (40°C ~ 70°C)

Mounting Type:

Surface Mount

Supplier Device Package:

10-MSOP

Manufacturer:

Microchip Technology

Product Status:

Obsolete

Sensing Temperature - Local:

-40°C ~ 125°C

Output Type:

Simple Serial Transport™ (SST)

Resolution:

11 b

Accuracy - Highest (Lowest):

±2°C

Operating Temperature:

-40°C ~ 125°C

Package / Case:

10-TFSOP, 10-MSOP (0.118", 3.00mm Width)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



EMC1152

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

PRODUCT FEATURES

Data Brief

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

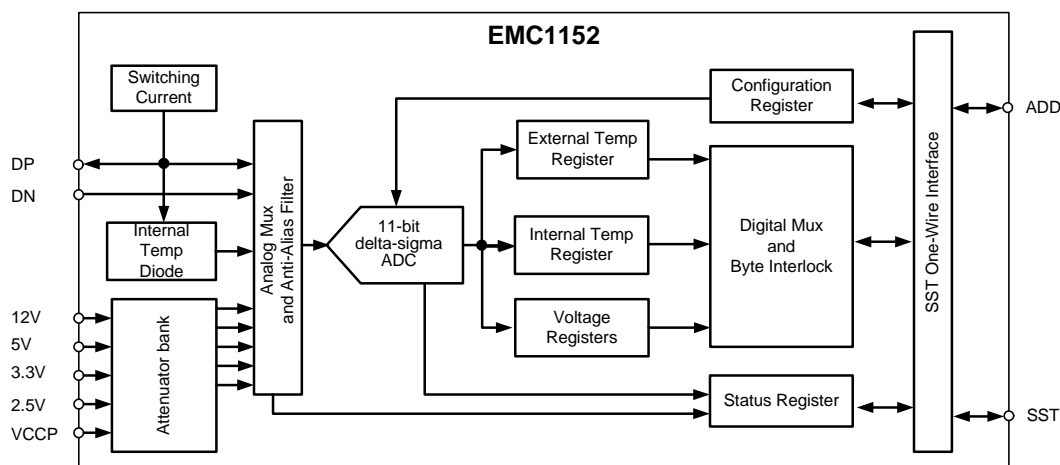
- Desktop PCs, Servers and Workstations

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
 - $\pm 1^\circ\text{C}$ 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)
- 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



**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



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 3

SMSC EMC1152

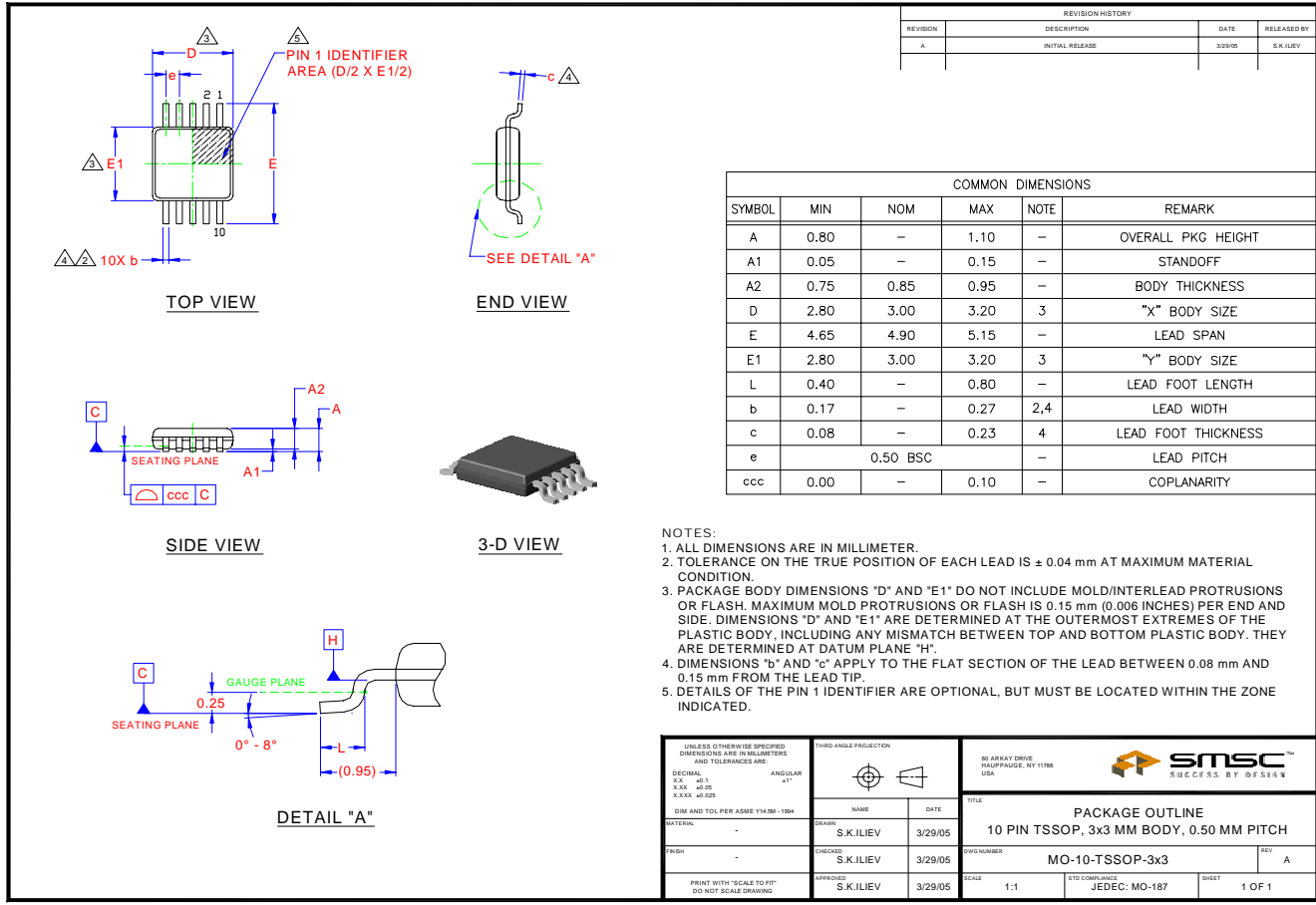


Figure 1 EMC1152 10-Pin MSOP Package Drawing

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

EMC1152-AIZL-TR Microchip Technology SENSOR DIGITAL -40C-125C 10MSOP

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