


Monitor 2.7V to 5.5V Automotive 16-Pin VQFN EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	QFN16
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

INA3221AQRGVRQ1 Image

Images are for reference only

Inquiry

General Description

The INA3221-Q1 is a three-channel, high-side current and bus voltage monitor with an I²C- and SMBUS-compatible interface. The INA3221-Q1 monitors both shunt voltage drops and bus supply voltages, in addition to having programmable conversion times and averaging modes for these signals. The INA3221-Q1 offers both critical and warning alerts to detect multiple programmable out-of-range conditions for each channel.

The INA3221-Q1 senses current on buses that can vary from 0 V to 26 V. The device is powered from a single 2.7-V to 5.5-V supply, and draws 350 μ A (typ) of supply current. The INA3221-Q1 is specified over the operating temperature range of -40°C to $+125^{\circ}\text{C}$. The I²C- and SMBUS-compatible interface features four programmable addresses.

Key Features

Qualified for automotive applications

AEC-Q100 qualified with the following results:
Device temperature grade 1: -40°C to 125°C

Functional Safety-Capable
Documentation available to aid functional safety system design

Senses bus voltages from 0 V to 26 V

Reports shunt and bus voltage

High accuracy:
Offset voltage: $\pm 80\ \mu\text{V}$ (maximum)

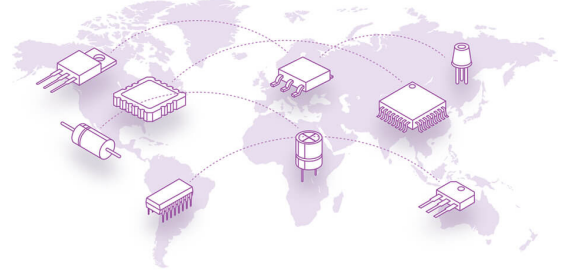
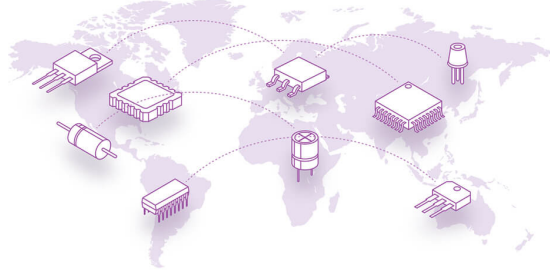
Gain error: 0.25% (maximum)

Configurable averaging options

Four programmable addresses

Programmable alert and warning outputs

Power-supply operation: 2.7 V to 5.5 V



Recommended For You

INA3221AIRGVR

Texas Instruments, Inc
VQFN16

INA200AQDGKRQ1

Texas Instruments, Inc
MSOP8

INA196AIDBVT

Texas Instruments, Inc
SOT23-5

INA220AIDGSR

Texas Instruments, Inc
MSOP10

INA198AQDBVRQ1

Texas Instruments, Inc
SOT23-5

INA228AQDGSRQ1

Texas Instruments, Inc
VSSOP-10

INA237AQDGSRQ1

Texas Instruments, Inc
VSSOP10

INA168QDBVRQ1

Texas Instruments, Inc
SOT23-5

INA226AQDGSRQ1

Texas Instruments, Inc
VSSOP10

INA195AIDBVR

Texas Instruments, Inc
SOT23-5

INA197AIDBVT

Texas Instruments, Inc
SOT23-5

INA213AQDCKRQ1

Texas Instruments, Inc
SC70-6

INA300AQDGSRQ1

Texas Instruments, Inc
VSSOP-10

INA196AIDBVR

Texas Instruments, Inc
SOT23-5

INA193AQDBVRQ1

Texas Instruments, Inc
SOT23-5