

Monitor 3V to 5.5V 16-Pin TSSOP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: TSSOP16

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

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General Description

The INA209 is a high-side current shunt and power monitor with an I²C interface. The INA209 monitors both shunt drop and shunt bus voltage. A programmable calibration value, combined with an internal multiplier, enables direct readouts in amperes. An additional multiplying register calculates power in watts. The INA209 features two separate, onboard watchdog capabilities: a warning comparator and an over-limit comparator. The warning comparator is useful for monitoring lower warning limits and incorporates a user-defined delay. The over-limit comparator assists with monitoring upper limits that could require immediate system shutdown.

The INA209 also includes an analog comparator and a programmable digital-to-analog converter (DAC) that combine to provide the fastest possible responses to current overload conditions.

The INA209 can be used together with hot swap controllers that already use a current sense resistor. The INA209 full-scale range can be selected to be either within the hot-swap controller sense limits, or wide enough to include them.

The INA209 senses across shunts on buses that can vary from 0V to 26V. The device uses a single +3V to +5.5V supply, drawing a maximum of 1.5mA of supply current. It is specified for operation from -25°C to +85°C.

Key Features

SENSES BUS VOLTAGES FROM 0V TO +26V

REPORTS CURRENT, VOLTAGE, AND POWER; STORES PEAKS

TRIPLE WATCHDOG LIMITS:

Lower Warning with Delay

Upper Over-limit, No Delay

Fast Analog Critical

HIGH ACCURACY: 1% MAX OVER TEMP

APPLICATIONS

SERVERS

TELECOM EQUIPMENT

AUTOMOTIVE

POWER MANAGEMENT

BATTERY CHARGERS

WELDING EQUIPMENT

POWER SUPPLIES

TEST EQUIPMENT

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Recommended For You

INA3221AIRGVR INA200AQDGKRQ1 INA196AIDBVT

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

VQFN16 MSOP8 SOT23-5

INA220AIDGSR INA198AQDBVRQ1 INA228AQDGSRQ1

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

MSOP10 SOT23-5 VSSOP-10

INA237AQDGSRQ1 INA168QDBVRQ1 INA226AQDGSRQ1

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

VSSOP10 SOT23-5 VSSOP10

INA3221AQRGVRQ1

INA195AIDBVR

INA197AIDBVT

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QFN16

SOT23-5

SOT23-5

INA213AQDCKRQ1
Texas Instruments, Inc

Q1 INA300AQDGSRQ1

Texas Instruments, Inc

INA196AIDBVR

SC70-6

VSSOP-10

SOT23-5