Smart Thermostat Temperature Compensation

Main Power Supply

LMT84
(Gradient Temp. Sensing)

Shunt Resistor

INA230
(Power Monitoring)

CC3220 Launchpad

System Load

TMP235
(Temp. Monitoring)

ADS7142
(SAR ADC)
Temperature Sensor 1 Power Enable

Simulated Load

Isolated Temperature Sensor

Heat Load Temperature Sensor

Trace to Resistor = 560k x 766mils

At 250mA --> 0.039°C temperature rise

on external layer

Note: Resistor should be placed near

Temperature sensor 1.

Power: 1.25W

Current: 0-250mA

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PCB Number: TIDA-01596
PCB Rev: E1

PCB Label

LOGO
PCB
LOGO

SH-J1  SH-J2  SH-J3  SH-J4

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