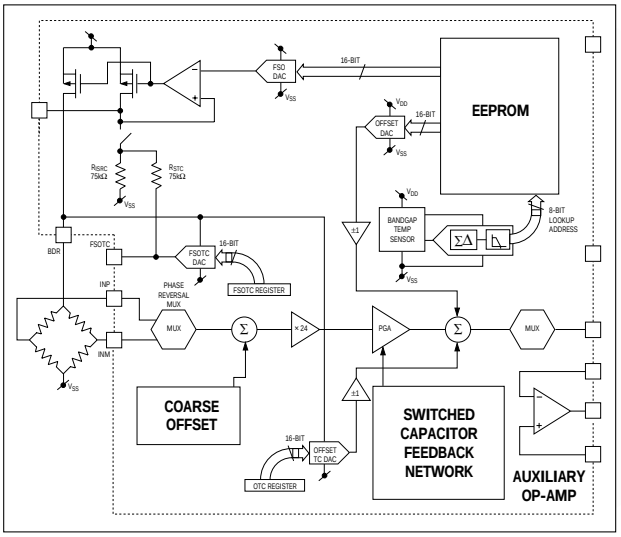
FIRST 16-BIT UNIVERSAL RESISTIVE SENSOR SIGNAL CONDITIONER

Single-Chip Solution Provides Multiple Outputs, Single-Pin Programming and 16-Bit Compensation

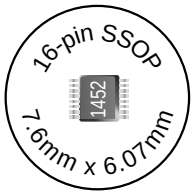
ALL THIS



- ✓ 4-20mA, 0-5V (Rail-to-Rail), 0.5V-4.5V (Ratiometric), 2.5V ±2.5V
- ✓ Fully Analog Signal Path with 16-Bit Digital Correction
- ✓ Single-Pin Digital Programming

IN THIS

CHECK OUT TECH TIPS AT
www.maxim-ic.com/sensortips.htm



- ♦ Sensor Output Sensitivities from 1mV/V to 40mV/V
- ♦ Select from 2-Point, First-Order Temperature Correction to 176-Point Temperature Correction (Every 1.5°C)
- ♦ -40°C to +125°C Operation
- ♦ Supports Current and Voltage Bridge Excitation
- ♦ Secure-Lock™ Prevents Data Corruption

Choose from a Wide Range of Integrated Signal Conditioning ICs

PART	OUTPUT	COMPENSATION METHOD	VOLTAGE SUPPLY (V)	TEMPERATURE SENSOR	EEPROM
MAX1452	4-20mA, 0.5-4.5V, 0-5V Rail-to-Rail, 2.5 ±2.5V	16-bit DACs (select from 2-point to 176-point temperature compensation.	5	Internal	Internal
MAX1450	0-5VDC	1st order resistor programmable	5		
MAX1457	0.5-4.5V, 0-5V, 4-20mA	16-bit DACs (selectable from 1- to 120-point temperature compensation and 1-point linearity correction)	5		External
MAX1458/59/78	4-20mA, 0.5-4.5V, 0-5V. Optional adjustable clipping limits.	12-bit DACs (enhanced 2-point temperature compensation)	5	Internal	Internal
MAX1462	Digital (parallel) and analog, 0-2.4VDC, 4-20mA	RISC Processor, 16-bit ADC +DSP	2.4 (310µA)	Internal	Internal
MAX1460	Digital (parallel) and analog, 0-2.4VDC, 4-20mA	RISC Processor, 16-bit ADC +DSP	5 (400µA)	Internal	Internal

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MAX1452