


Energy Measurement 16bit Automotive 24-Pin SSOP Tube

Manufacturer:	Microchip Technology, Inc
Package/Case:	SSOP24
Product Type:	Discrete Semiconductor Modules
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

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General Description

The MCP3905A is an energy measurement IC supporting the IEC 62053 international energy metering specification. The output of the device includes a frequency proportional to the average active (real) power at the inputs as well as a higher frequency output proportional to the instantaneous power for meter calibration. The MCP3905A incorporates two 16-bit delta-sigma ADCs with a programmable gain up to 16, which enable small shunt meter designs for measuring a wide range of I_b and I_{max} currents. The integrated on-chip voltage reference has ultra-low temperature drift of 15 ppm/°C.

Key Features

Supplies active (real) power measurement for single-phase, residential energy metering

Supports legacy IEC 1036/61036/687

Two multi-bit, DAC, second-order, 16-bit, delta-sigma analogue-to-digital converters (ADCs)

0.1% Typical measurement error over 500:1 dynamic range

Programmable gain amplifier (PGA) for small signal inputs supports low value shunt current sensor

Direct drive for electromagnetic mechanical counter and two-phase stepper motors

Low I_{DD} of 4mA (typical)

Tamper output pin for negative power indication

Supplies instantaneous real power on HFOUT for meter calibration

Recommended For You

MCP3911A0-E/SS

Microchip Technology, Inc
SSOP20

MCP3008-I/P

Microchip Technology, Inc
DIP-16

MCP3201T-CI/SN

Microchip Technology, Inc
SOP8

MCP3208-CI/P

Microchip Technology, Inc
DIP

MCP3001-I/SN

Microchip Technology, Inc
SOP8

MCP3208-BI/P

Microchip Technology, Inc
DIP-16

MCP4822-E/P

Microchip Technology, Inc
DIP-8

MCP3421A0T-E/CH

Microchip Technology, Inc
SOT23-6

MCP3425A0T-E/CH

Microchip Technology, Inc
SOT23-6

MCP3427-E/UN

Microchip Technology, Inc
MSOP10

MCP3550-50E/SN

Microchip Technology, Inc
SOP8

MCP3422A0-E/SN

Microchip Technology, Inc
SOP-8

MCP3553-E/SN

Microchip Technology, Inc
SOP8

MCP3422A1-E/SN

Microchip Technology, Inc
SOP-8

MCP3208T-CI/SL

Microchip Technology, Inc
SOP