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12bit 200Ksps Analog to Digital Converter IC MM3802A12WBE



MM3802 is a 12-bit successive approximation type of A/D converter IC, which supports differential input system. The data sampling rate, corresponding to 200Ksps at the maximum is controlled by an external clock. The communication is compatible with 3.3V serial interface. Auto-shutdown function automatically makes this IC enter into ultra-low power consumption mode after the data conversion, leading to reduced power consumption of battery powered devices and others.

Applications

Features

Industrinal Instrumentation Robot Control Battery powered device

① Differential analog input

④ Simple Serial Interface

(at shutdown)

6 8pin SOP package

Sampling rate: 200Ksps max.

(5) Abeilable 3.3V Interface system

⑦ AC-common mode rejection

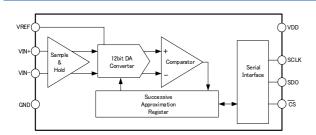
3 ultra-low power consumption mode 0µW

Motor Control Medical equipment Measuring equipment

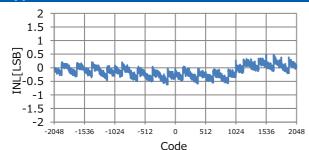
Specification

Item	Specification	Unit
Operation temperature	-40~+85	°C
Power supply	5 (Max. rating 6V)	V
Sampling rate	200 (Max.)	Ksps
Vref voltage	0.1~2.5	V
Analg input voltage	-Vref~+Vref	V
INL	±2 (Max.)	LSB
DNL	±2 (Max.)	LSB
Offset	±6 (Max.)	LSB
Power dissipation	2.3 (at 200Ksps)	mW
	0 (at shutdown)	
Input capacitance	15	pF
Communication IF	Compatible SPI	-

Block Diagram



Typical Performance Characteristics



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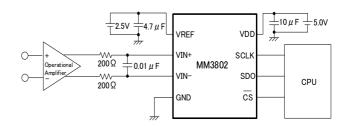
ssion to Create Value through Difference

Package





Application circuit



https://mtm-sec.mitsumi.co.jp/web/ic/

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