

12bit 2ch 750Ksps Analog to Digital Converter IC

MM3804A12RRE



Outline

The MM3804 is 12-bit successive approximation type analog-to-digital converter in which differential analog inputs are possible. Two-channel simultaneously sampling are possible. The sampling rate of data corresponds to 750Ksps, and is controlled by an external clock. The communication is SPI serial interface.

Applications

- Industrial Instrumentation Motor Control
- Robot Control Medical equipment
- Battery powered device Measuring equipment

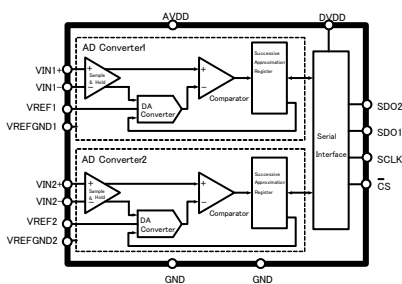
Features

- ① Pseudo-Differential analog inputs
- ② Simultaneous-sampling two channels
- ③ Sampling rate : 750Ksps max.
- ④ Simple Serial interface
- ⑤ Small outline package (SQFN-16A)
- ⑥ Low input capacitance
- ⑦ Low leak current
- ⑧ Wide temperature range

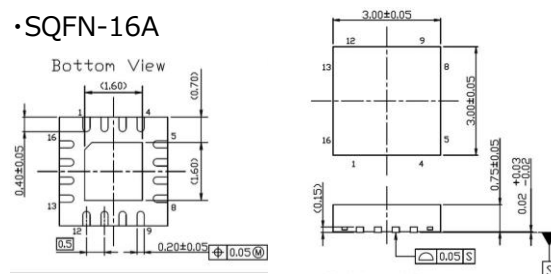
Specification

Item	Specification	Unit
Operation temperature	-40~+125	°C
Power supply	5 (Max. rating 7V)	V
Sampling rate	750 (Max.)	Ksps
Vref voltage	2.25~2.5	V
Analog input voltage	-Vref~+Vref	V
INL	±2 (Max.)	LSB
DNL	-1~2	LSB
Offset	±4 (Max.)	LSB
Power dissipation	40 (at 750Ksps)	mW
	25 (at static)	
Input capacitance	15	pF
Communication IF	Compatible SPI	-

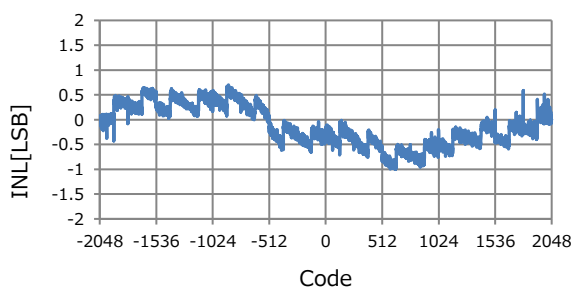
Block Diagram



Package



Typical Performance Characteristics



Application circuit

