

MM4032A14

2023/12/06

Outline

MM4032A14 is a high-performance 14bit sophisticated successive approximation analog-to-digital converter IC with a built-in reference voltage supply, supporting pseudo-differential inputs. Simultaneous sampling of differential signals through two channels is available. The maximum data sampling rate is 1000ksps, controlled by an external clock. This IC supports a serial interface.

Features

- ① Power supply for analog: 5 V, Power supply for digital: 1.8 to 5 V
- ② 14bit successive approximation ADC
- ③ Simultaneous sampling and conversion through two channels
- ④ Two channels of pseudo-differential analog input
- ⑤ Sampling rate: 1000ksps at the maximum
- ⑥ Use of internal / external reference voltage
- ⑦ AVDD current consumption: 8.5mA typ.
(use of internal reference voltage for conversion)
- ⑧ Conversion mode setting (setting of input range, selection of output sequence)

Specifications

Specifications	Number of input channels [ch]	Resolution [bit]	Sampling Rate [ksps]	internal reference voltage [V]	Integral nonlinearity error [LSB]	Differential nonlinearity error [LSB]
MM4032A14RLE	2	14	1000.00	2.5	-1.5~1.5	-1.0~1.0

Specifications	Communication I/F	Package
MM4032A14RLE	SPI	SQFN-16A