

198)ADS1115 超小型 16 位 精密 模數轉換器 ADC 4 通道 開發板

模組

CJMCU-ADS1115 超小型 16 位 精密 模數轉換器 ADC 開發板模組

FEATURES DESCRIPTION

23• ULTRA-SMALL QFN PACKAGE: The ADS1113, ADS1114, and ADS1115 are 2mm × 1,5mm × 0,4mm precision analog-to-digital converters (ADCs) with 16

- WIDE SUPPLY RANGE: 2.0V to 5.5V bits of resolution offered in an ultra-small, leadless

- LOW CURRENT CONSUMPTION: QFN-10 package or an MSOP-10 package. The ADS1113/4/5 are designed with precision, power, and

Continuous Mode: Only 150µA ease of implementation in mind. The ADS1113/4/5

Single-Shot Mode: Auto Shut-Down feature an onboard reference and oscillator.

Data are

- PROGRAMMABLE DATA RATE: transferred via an I2C-compatible serial interface; four

8SPS to 860SPS I2C slave addresses can be selected. The

- INTERNAL LOW-DRIFT ADS1113/4/5 operate from a single power supply

VOLTAGE REFERENCE ranging from 2.0V to 5.5V.

- INTERNAL OSCILLATOR The ADS1113/4/5 can perform conversions at rates

- INTERNAL PGA up to 860 samples per second (SPS). An onboard PGA is available on the ADS1114 and ADS1115 that

- I2C™ INTERFACE: Pin-Selectable Addresses offers input ranges from the supply to as low as

- FOUR SINGLE-ENDED OR TWO ±256mV, allowing both large and small signals to be

DIFFERENTIAL INPUTS (ADS1115) measured with high resolution. The ADS1115 also

features an input multiplexer (MUX) that provides two • PROGRAMMABLE

COMPARATOR differential or four single-ended inputs.

(ADS1114 and ADS1115)

The ADS1113/4/5 operate either in continuous

APPLICATIONS conversion mode or a single-shot mode that

- PORTABLE INSTRUMENTATION automatically powers down after a conversion

and greatly reduces current consumption during idle

- CONSUMER GOODS periods. The ADS1113/4/5 are specified from -40°C
- BATTERY MONITORING to $+125^{\circ}\text{C}$.

