

**Power/Energy 24-Pin SSOP**

<b>Manufacturer:</b>	<u>Cirrus Logic, Inc</u>
<b>Package/Case:</b>	SSOP24
<b>Product Type:</b>	Discrete Semiconductor Modules
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	NRND



Images are for reference only

[Inquiry](#)**General Description**

The CS5460A is a highly integrated Delta-Sigma analog/digital converter (ADC) that combines two Delta-Sigma ADCs, high-speed power calculation functions and a serial interface on a single chip. It is designed to accurately measure and calculate energy, instantaneous power, IRMS and VRMS for single-phase, 2- or 3-wire power metering applications. The CS5460A interfaces to a low-cost shunt resistor or transformer to measure current and resistive divider or potential transformer to measure voltage. It features a bi-directional serial interface for communication with a microcontroller and a programmable frequency output that is proportional to energy. The CS5460A has on-chip functionality to facilitate AC or DC system-level calibration. The “Auto-Boot” feature allows the CS5460A to function standalone and to initialize itself on system power-up. In Auto-Boot mode, the CS5460A reads the calibration data and start-up instructions from an external EEPROM. In this mode, the CS5460A can work without the need for a microprocessor for low-cost metering applications.

## Key Features

Energy data linearity:  $\pm 0.1\%$  of reading over 1000:1 dynamic range

EOn-chip functions: energy,  $I * V$ ,  $I$

RMS

RMS,

Smart 'Auto-Boot' mode from serial EEPROM

AC or DC system calibration

Mechanical counter/stepper motor driver

Meets accuracy spec for IEC, ANSI, JIS

Power consumption < 12 mW

On-chip 2.5 V reference (25 ppm/ $^{\circ}$ C typ.)

Interface optimized for shunt sensor

Phase compensation

Ground-referenced signals with single supply

Simple 3-wire digital serial interface

Watchdog timer

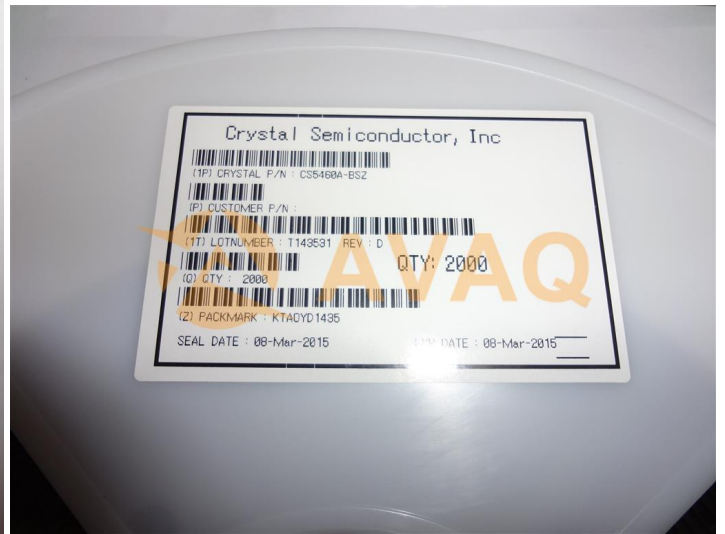
Power-supply monitor

Power supply configurations

$V_{A+} = 5\text{ V}$ ;  $V_{A-} = 0\text{ V}$ ;  $V_{D+} = 3\text{ V to } 5\text{ V}$

$V_{A+} = 2.5\text{ V}$ ;  $V_{A-} = -2.5\text{ V}$ ;  $V_{D+} = 3\text{ V}$

Package: 24-pin SSOP; lead-free assembly



## Recommended For You

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### CS5467-ISZ

Cirrus Logic, Inc  
SSOP28

### CS5463-ISZ

Cirrus Logic, Inc  
SSOP24

### CS5467-IS

Cirrus Logic, Inc  
SSOP28

### CS5463-IS

Cirrus Logic, Inc  
SSOP24

### CS1500-FSZ

Cirrus Logic, Inc  
SOP8

### CS5466-ISZ

Cirrus Logic, Inc  
SSOP24

### CS5462-ISZ

Cirrus Logic, Inc  
SSOP

### CS5466-ISZR

Cirrus Logic, Inc  
BGA

### CS1600-FSZ

Cirrus Logic, Inc  
SOP-8

### CS1601-FSZ

Cirrus Logic, Inc  
SOP-8

### CS5463-ISZR

Cirrus Logic, Inc  
SSOP24

### CS5480-INZR

Cirrus Logic, Inc  
QFN