
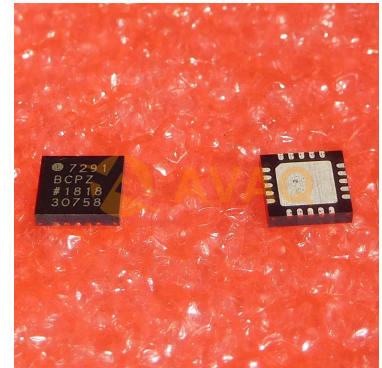


8-Channel Single ADC SAR 22.22ksps 12-bit Serial 20-Pin LFCSP EP Tray

Manufacturer:	Analog Devices, Inc
Package/Case:	LFCSP20
Product Type:	Data Conversion ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The part operates from a single 3.3 V power supply and features an I2C-compatible interface. The part contains a 9-channel multiplexer and a track-and-hold amplifier that can handle frequencies up to 30 MHz. The device has an on-chip 2.5 V reference that can be disabled to allow the use of an external reference. The AD7291 provides a 2-wire serial interface compatible with I2C interfaces. The I2C interface supports standard and fast I2C interface modes. The AD7291 normally remains in a partial power-down state while not converting and powers up for conversions. The conversion process can be controlled by a command mode where conversions occur across I2C write operations or an autcycle mode selected through software control.

The AD7291 includes a high accuracy band gap temperature sensor, which is monitored and digitized by the 12-bit ADC to give a resolution of 0.25°C.

The AD7291 offers a programmable sequencer, which enables the selection of a preprogrammable sequence of channels for conversion.

On-chip limit registers can be programmed with high and low limits for the conversion results; an out-of-range indicator output (ALERT) becomes active when the programmed high or low limits are violated by the conversion result. This output can be used as an interrupt.

Product Highlights

Ideally suited to monitoring system variables in a variety of systems including telecommunications, process control, and industrial control.

I2C-compatible serial interface. Standard and fast modes.

Automatic partial power-down while not converting to maximize power efficiency.

Channel sequencer operation.

Integrated temperature sensor with 0.25°C resolution.

Out of range indicator that can be software disabled or enabled.

Key Features

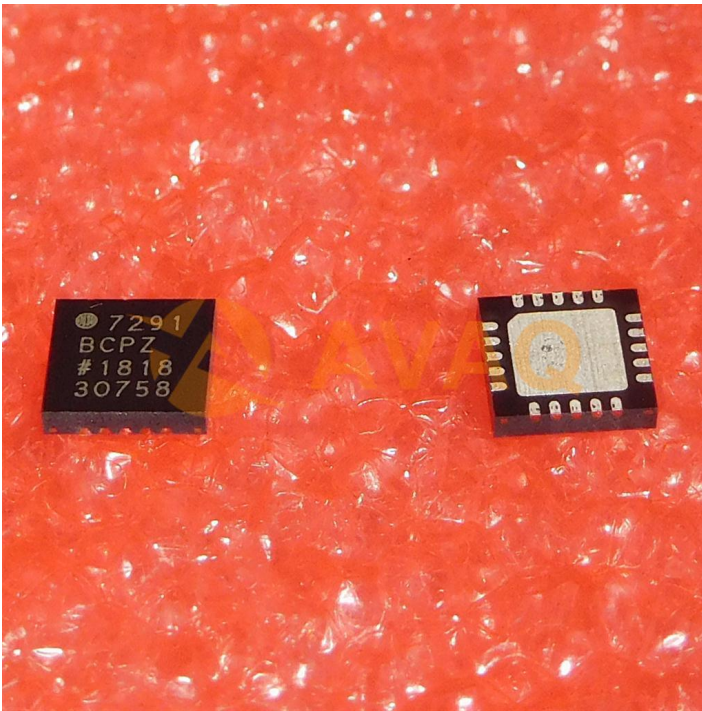
Temperature sensor accuracy of $\pm 1^\circ\text{C}$ typical

Channel sequencer operation

I2C-compatible serial interface supports standard and fast speed modes

Out of range indicator/alert function

Power-down current - 12 μA maximum



Recommended For You

AD7305BRZ

Analog Devices, Inc
SOP20

AD9910BSVZ

Analog Devices, Inc
TQFP100

AD9831ASTZ

Analog Devices, Inc
QFP

AD5447YRUZ

Analog Devices, Inc
TSSOP

AD5302BRMZ

Analog Devices, Inc
MSOP10

AD5531BRUZ

Analog Devices, Inc
TSSOP16

AD537JH

Analog Devices, Inc
CAN10

AD652AQ

Analog Devices, Inc
DIP

AD654JN

Analog Devices, Inc
DIP8

AD7740YRMZ

Analog Devices, Inc
MSOP8

AD9914BCPZ

Analog Devices, Inc
LFCSP

AD73311ARSZ

Analog Devices, Inc
SSOP20

AD9954YSVZ

Analog Devices, Inc
QFP

AD2S1205YSTZ

Analog Devices, Inc
LQFP44

AD9835BRUZ

Analog Devices, Inc
TSSOP16