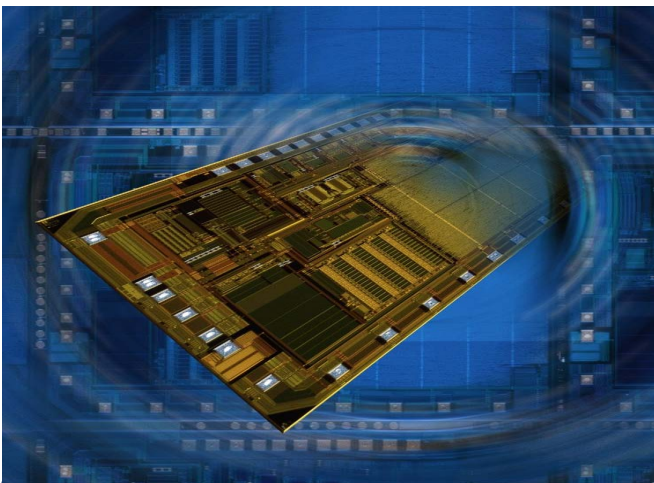


Product Information CC196



CC196

Customer benefits:

- ▶ Excellent system know-how
- ▶ Smart concepts for system safety
- ▶ Secured supply
- ▶ Long- term availability of manufacturing processes and products
- ▶ QS9000 and ISO/TS16949 certified

The ASIC CC196 was developed for the evaluation of analog signals from piezoelectric sound detectors (knock sensors) in gasoline engines. It is a further development of the ASIC CC195.

The CC196 implements a signal-conditioning of the analog knock-signal (MUX, ant aliasing-filter, rectifier and AD-converter) and a digital signal processing (FIR filter).

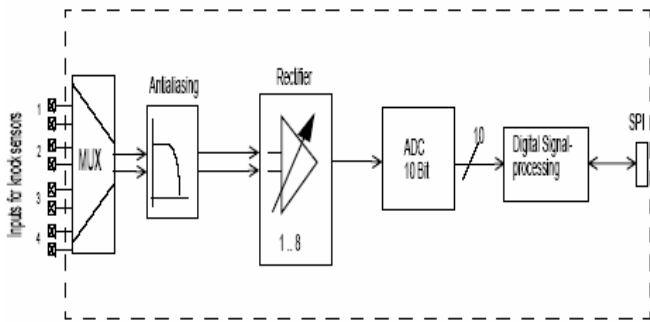
The CC196 features a serial interface (SPI) to connect a CPU without spending many interconnections.

The CC196 is available in a SOIC16W and a SOIC20 package. It is designed for the automotive temperature range (-40 °C to 125 °C)

Features

- ▶ 4 fully differential inputs for knock sensors
- ▶ Programmable gain
- ▶ Programmable FIR-filter
- ▶ Built-in facility for diagnostic
- ▶ Detection of shorted inputs
- ▶ Serial Interface
- ▶ 10 Bit ADC

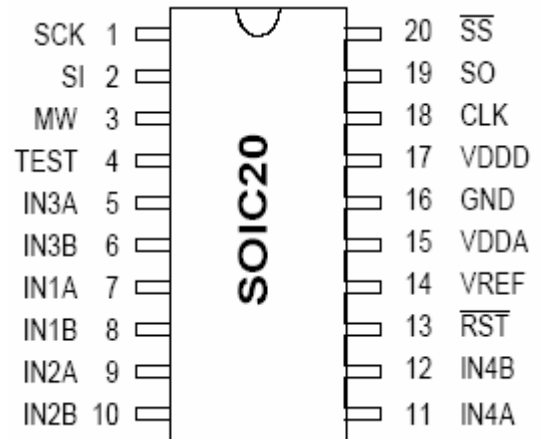
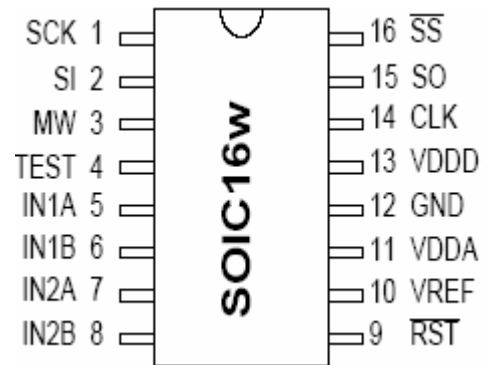
Block diagram



Recommended operating conditions

Symb.	Parameter	Min	Max	Unit
V _{DD}	DC supply voltage	4.5	5.5	V
T _A	Ambient temperature	-40	125	°C

PIN configuration



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