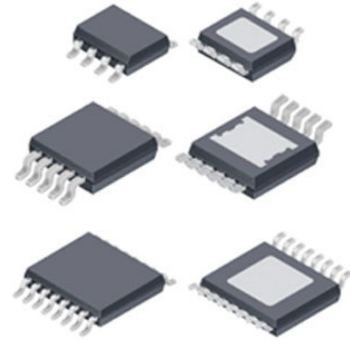


isoSPI Isolated Communications Interface

Manufacturers	Analog Devices, Inc
Package/Case	16-Lead MSOP
Product Type	Interface ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC6820HMS#3ZZPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC6820 provides bidirectional SPI communications between two isolated devices through a single twisted-pair connection. Each LTC6820 encodes logic states into signals that are transmitted across an isolation barrier to another LTC6820. The receiving LTC6820 decodes the transmission and drives the slave bus to the appropriate logic states. The isolation barrier can be bridged by a simple pulse transformer to achieve hundreds of volts of isolation.

The LTC6820 drives differential signals using matched source and sink currents, eliminating the requirement for a transformer center tap and reducing EMI. Precision window comparators in the receiver detect the differential signals. The drive currents and the comparator thresholds are set by a simple external resistor divider, allowing the system to be optimized for required cable lengths and desired signal-to-noise performance.

Features

AEC-Q100 Qualified for Automotive Applications

1Mbps Isolated SPI Data Communications

Simple Galvanic Isolation Using Standard Transformers

Bidirectional Interface Over a Single Twisted Pair

Supports Cable Lengths Up to 100 Meters

Very Low EMI Susceptibility and Emissions

Configurable for High Noise Immunity or Low Power

Engineered for ISO26262 Compliant Systems

Requires No Software Changes in Most SPI Systems

Ultralow, 2 μ A Idle Current

Automatic Wake-Up Detection

Operating Temperature Range: -40°C to 125°C

2.7V to 5.5V Power Supply

Interfaces to All Logic from 1.7V to 5.5V

Available in 16-Lead QFN and MSOP Packages

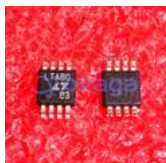
Application

Industrial Networking

Battery Monitoring Systems

Remote Sensors

Related Products



[LTC4300A-1IMS8#PBF](#)

Analog Devices, Inc
MSOP8



[LTC2870IFE#PBF](#)

Analog Devices, Inc
TSSOP28



[LTC6820HMS#PBF](#)

Analog Devices, Inc
MSOP-16



[LTC2870IUFD#PBF](#)

Analog Devices, Inc
28-QFN



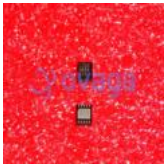
[LTC6820IMS#PBF](#)

Analog Devices, Inc
MSOP16



[LTM2881IV-3#PBF](#)

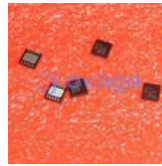
Analog Devices, Inc
LGA32



[LTC2854HDD#PBF](#)

Analog Devices, Inc

QFN-10



[LTC2852IDD#PBF](#)

Analog Devices, Inc

DFN10