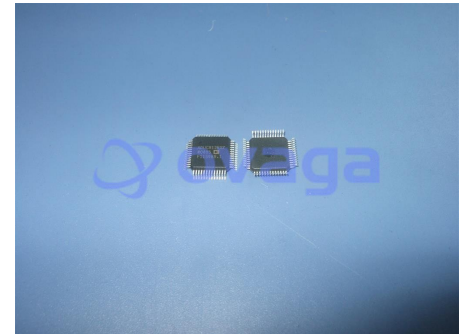


8 Bit MCU, MicroConverter with ADC, ADUC Family ADUC8 Series Microcontrollers, 12 MHz, 8 KB

Manufacturers	Analog Devices, Inc
Package/Case	QFP-52
Product Type	Embedded Processors & Controllers
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADUC812BSZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADuC812 is a fully integrated 12-bit data acquisition system incorporating a high performance self-calibrating multichannel ADC, dual DAC, and programmable 8-bit MCU (8051 instruction set compatible) on a single chip.

The programmable 8051 compatible core is supported by 8Kbytes Flash/EE program memory, 640 bytes Flash/EE data memory, and 256 bytes data SRAM on-chip.

Additional MCU support functions include Watchdog Timer, Power Supply Monitor, and ADC DMA functions. Thirty-two programmable I/O lines, I2C compatible SPI and Standard UART Serial Port I/O are provided for multiprocessor interfaces and I/O expansion.

Normal, idle, and power-down operating modes for both the MCU core and analog converters allow flexible power management schemes suited to low power applications. The part is specified for 3 V and 5 V operation over the industrial temperature range and is available in a 52-lead, plastic quad flatpack package.

Features

Analog I/O

8-Channel, High Accuracy 12-Bit ADC

On-Chip, 100 ppm/°C Voltage Reference

High Speed 200 kSPS

DMA Controller for High Speed ADC-to-RAM Capture

2 12-Bit Voltage Output DACs

On-Chip Temperature Sensor Function

Memory

8K Bytes On-Chip Flash/EE Program Memory

640 Bytes On-Chip Flash/EE Data Memory

256 Bytes On-Chip Data RAM

16M Bytes External Data Address Space

64K Bytes External Program Address Space

8051 Compatible Core

12 MHz Nominal Operation (16 MHz Max)

3 16-Bit Timer/Counters

High Current Drive Capability—Port 3

9 Interrupt Sources, 2 Priority Levels

Power

Specified for 3 V and 5 V Operation

Normal, Idle, and Power-Down Modes

On-Chip Peripherals

UART and SPI® Serial I/O

2-Wire (400 kHz I2C® Compatible) Serial I/O

Watchdog Timer

Power Supply Monitor

Application

Intelligent Sensors Calibration and Conditioning

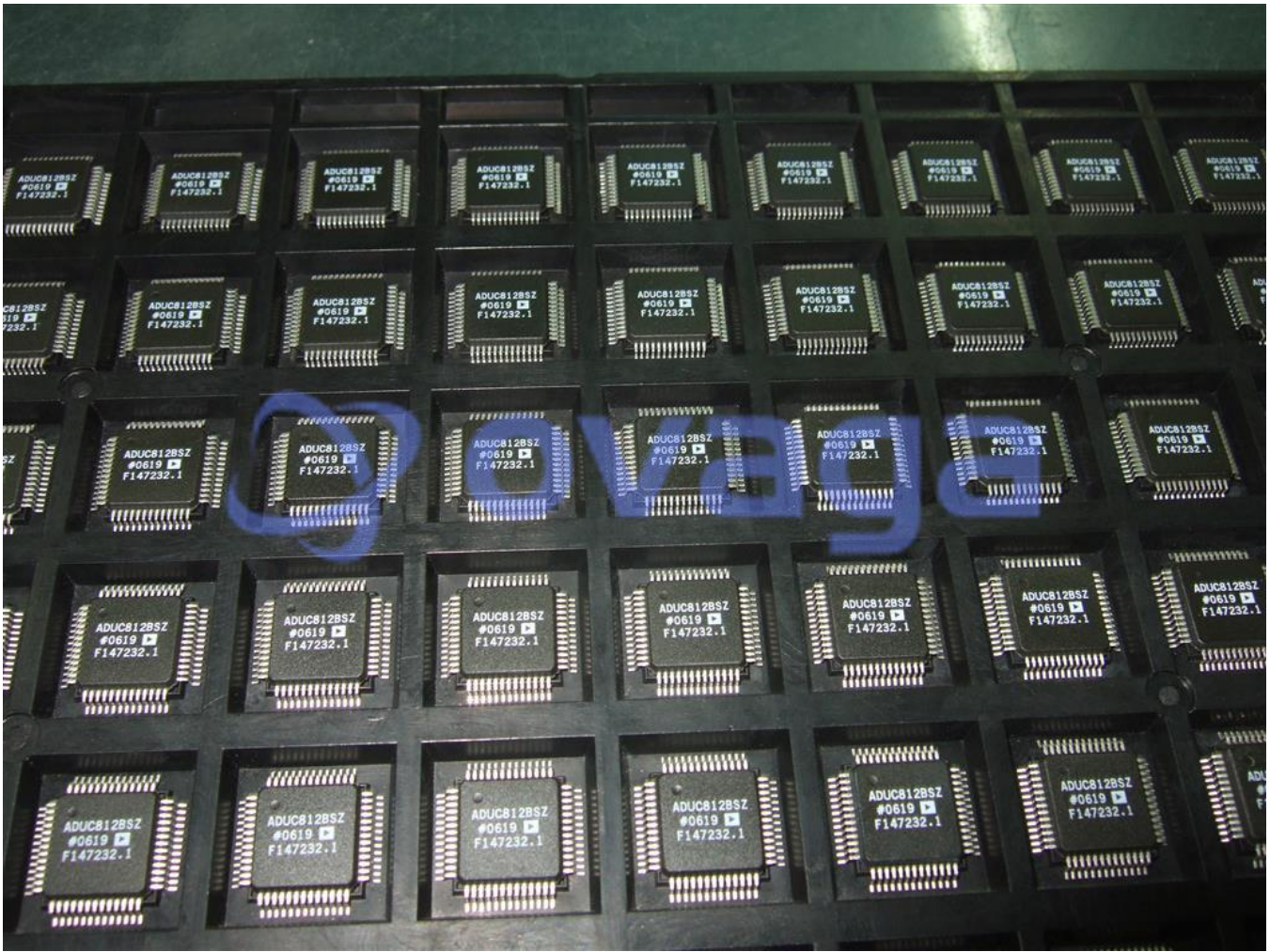
Battery-Powered Systems (Portable PCs, Instruments, Monitors)

Transient Capture Systems

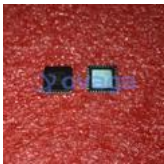
DAS and Communications Systems

Control Loop Monitors (Optical Networks/Base Stations)





Related Products



[ADUC7022BCPZ62](#)

Analog Devices, Inc
LFCSP-40



[ADUC7020BCPZ62](#)

Analog Devices, Inc
LFCSP-40



[ADUC841BSZ62-5](#)

Analog Devices, Inc
QFP-52



[ADUC841BSZ62-3](#)

Analog Devices, Inc
QFP-52



[ADUC831BSZ](#)

Analog Devices, Inc
QFP-52



[ADSP-BF527BBCZ-5A](#)

Analog Devices, Inc
BGA-208



[ADSP-21369BBPZ-2A](#)

Analog Devices, Inc
SBGA-256



[ADSP-BF561SBBCZ-5A](#)

Analog Devices, Inc
CSPBGA-256