

# ADUC7060BSTZ32

Data Sheet

Low-Power, Precision Analog Microcontroller, Dual - ADCs, Flash/EE, ARM7TDMI; No of Pins: 48; Temperature Range: Industrial

Manufacturers <u>Analog Devices, Inc</u>

Package/Case LQFP48

Product Type Embedded Processors & Controllers

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for ADUC7060BSTZ32 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The ADCs consists of a 5-channel primary ADC and up to an 8-channel auxiliary ADC. The ADCs operate in single-ended or differential input modes. A single channel buffered voltage output DAC is available on-chip. The DAC output range is programmable to one of two voltage ranges.

The devices operate from an on-chip oscillator and a PLL gene-rating an internal high frequency clock up to 10.24 MHz. The microcontroller core is an ARM7TDMI, 16-bit/32-bit RISC machine offering up to 10 MIPS peak performance. 4 kB of SRAM and 32 kB of nonvolatile Flash/EE memory are provided on-chip. The ARM7TDMI core views all memory and registers as a single linear array.

The ADuC7060/ADuC7061 contain four timers. Timer 1 is wake-up timer with the ability to bring the part out of power saving mode. Timer 2 may be configured as a watchdog timer. A 16-bit PWM with six output channels is also provided.

The ADuC7060/ADuC7061 contain an advanced interrupt controller. The vectored interrupt controller (VIC) allows every interrupt to be assigned a priority level. It also supports nested interrupts to a maximum level of eight per IRQ and FIQ. When IRQ and FIQ interrupt sources are combined, a total of 16 nested interrupt levels are supported. On-chip factory firmware supports in-circuit serial download via the UART serial interface ports and nonintrusive emulation via the JTAG interface.

The parts operate from 2.375 V to 2.625 V over an industrial temperature range of -40°C to +125°C.

### **Features**

### **Application**

Analog input/output - See data sheet for additional information.

Industrial automation and process control

MicrocontrollerARM7TDMI core, 16-/32-bit RISC architectureJTAG port supports code Intelligent, precision sensing systems, 4 mA to 20 mA download and debugMultiple clocking options

loop-based smart sensors

Memory32 kB (16 kB × 16) Flash/EE memory4 kB (1 kB × 32) SRAM

ToolsIn-circuit download, JTAG based debugLow cost, QuickStart development system

Communications interfaces

SPI interface (5 Mbps)4-byte Rx and Tx FIFOs

UART serial I/O and I2C (master/slave)

See Data Sheet for Additional Information

#### **Related Products**



ADUC7022BCPZ62

Analog Devices, Inc LFCSP-40



**ADUC841BSZ62-5** 

Analog Devices, Inc QFP-52



ADUC831BSZ

Analog Devices, Inc QFP-52



ADSP-21369BBPZ-2A

Analog Devices, Inc SBGA-256



ADUC7020BCPZ62

Analog Devices, Inc LFCSP-40



**ADUC841BSZ62-3** 

Analog Devices, Inc QFP-52



ADSP-BF527BBCZ-5A

Analog Devices, Inc BGA-208



ADSP-BF561SBBCZ-5A

Analog Devices, Inc CSPBGA-256