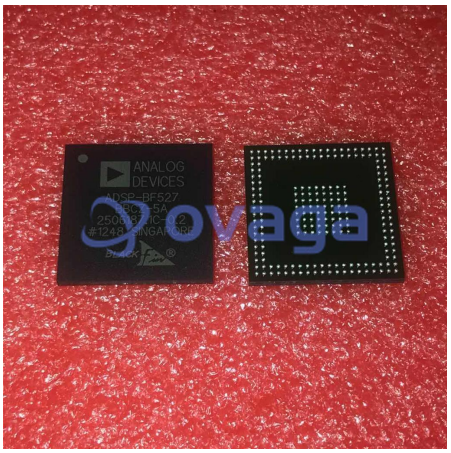
# ADSP-BF527BBCZ-5A

Data Sheet

Digital Signal Processors & Controllers - DSP, DSC ADSP-BF527 Processor 533Mhz Ethernet USB

| | |
|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | BGA-208 |
| Product Type | Embedded Processors & Controllers |
| RoHS | Rohs |
| Lifecycle | |



Images are for reference only

Please submit RFQ for ADSP-BF527BBCZ-5A or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

## General Description

The high performance 16/32-bit Blackfin embedded processor core, the flexible cache architecture, the enhanced DMA subsystem, and the dynamic power management (DPM) functionality allow system designers a flexible platform to address a wide range of portable applications, including consumer, communications and industrial/instrumentation.

With the combination of peripherals which enable glue-less connectivity to networked devices such as Ethernet or WiFi 802.11 a/b/g modules and power efficient signal processing, the ADSP-BF527 is well suited to IP connected applications such as VoIP Phone or IP Camera.

The VoIP challenge to the embedded-system designer is to choose a processing solution that is cost-effective, easy to deploy and scaleable in performance across market spaces. A "sweet spot" embedded-solution approach is to design with a platform that can implement a low channel count basic VoIP solution, yet retain sufficient capacity for value added capabilities and services – such as video, music, imaging and system control. Unlike traditional VoIP embedded solutions that utilize two processor cores to provide VoIP functionality, the ADSP-BF527 provides a convergent solution in a unified core architecture that allows voice and video signal processing concurrent with RISC MCU processing to handle network and user-interface demands. This unique ability to offer full VoIP functionality on a single convergent processor provides for a unified software development environment, faster system debugging and deployment, and lower overall system cost.

IP protection has become a necessary part of today's embedded computing applications. The ADSP-BF527 provides a security scheme which balances flexibility and upgradeability with performance through the inclusion of a firmware-based solution including OTP (One Time Programmable) memory to enable users to implement private keys for secure access to program code.

## Features

Lockbox™ Secure Technology: Hardware-enabled security for code and content protection.

Blackfin Processor Core with up to 600 MHz (1200 MMACS) performance

2 dual-channel, full-duplex synchronous serial ports supporting 8 stereo I2S channels

12 peripheral DMA channels supporting one- and two-dimensional data transfers

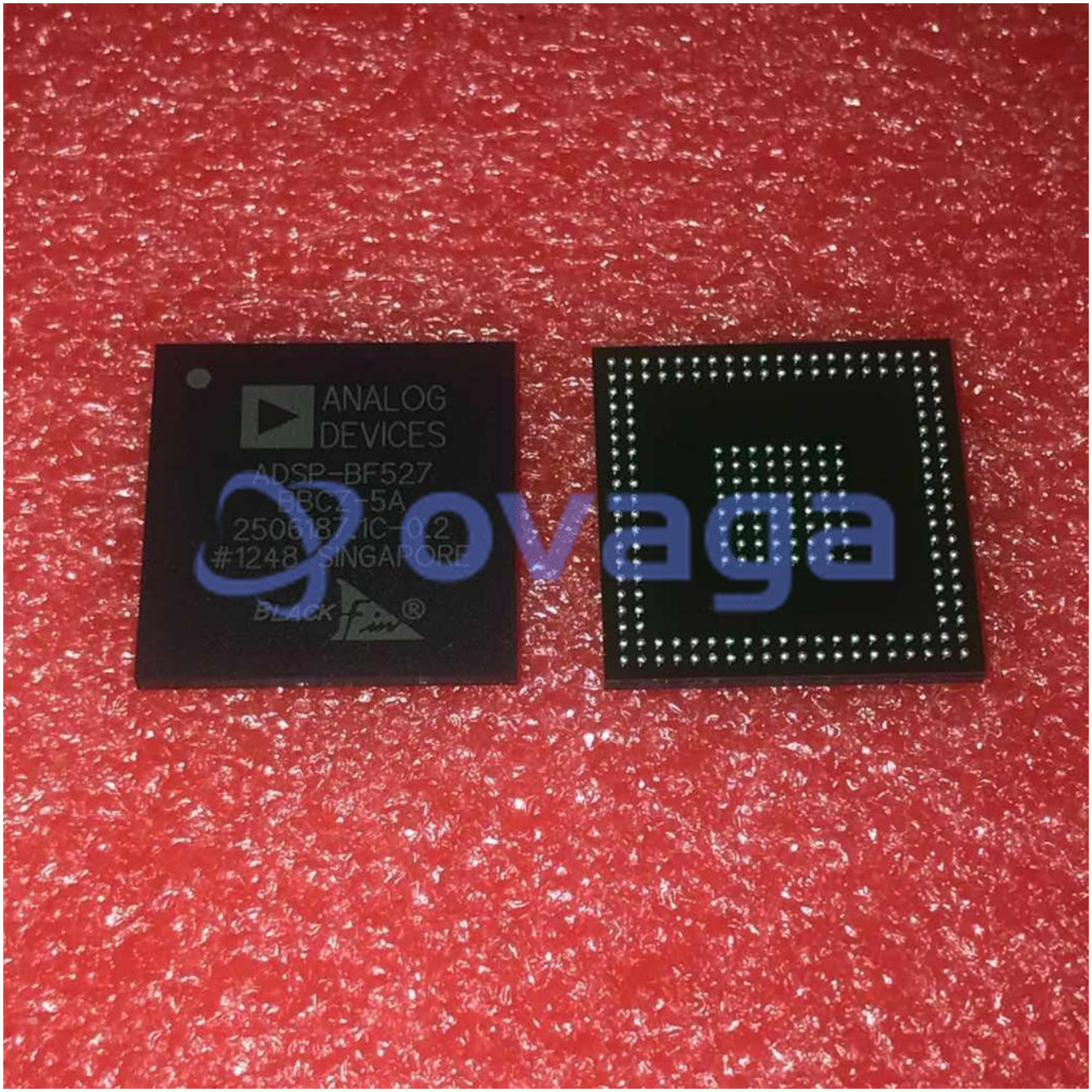
NAND Flash Controller with 8-Bit interface for commands, addresses and data.

Ethernet 10/100 MII interface

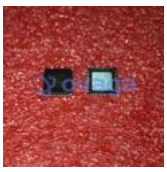
Memory controller providing glue-less connection to multiple banks of external SDRAM, SRAM, Flash, or ROM

289-ball, 12x12 mm, 0.5 mm pitch mini-BGA (Commercial temperature range 0°C to +70°C)

208-ball, 17x17 mm, 0.8 mm pitch mini-BGA (Commercial temperature range 0°C to +70°C; Industrial temperature range -40°C to +85°C*) * 533 MHz max operating speed




**Related Products**



[ADUC7022BCPZ62](#)

Analog Devices, Inc

LFCSP-40

[ADUC7020BCPZ62](#)

Analog Devices, Inc

LFCSP-40

[ADUC841BSZ62-5](#)

Analog Devices, Inc

QFP-52

[ADUC841BSZ62-3](#)

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QFP-52

[ADUC831BSZ]

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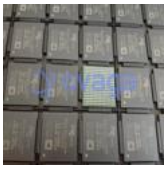
QFP-52

[ADSP-21369BBPZ-2A]

Analog Devices, Inc

SBGA-256



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CSPBGA-256

[ADSP-BF531SBSTZ400]

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LQFP176