

ADSP-BF525KBCZ-6A

Data Sheet

Digital Signal Processors & Controllers - DSP, DSC ADSP-BF525 Processor 600Mhz Ethernet USB

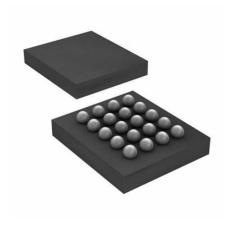
Manufacturers <u>Analog Devices, Inc</u>

Package/Case BGA-208

Product Type Embedded Processors & Controllers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADSP-BF525KBCZ-6A or <u>Email to-us: sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

The ADSP-BF525 offers up to 600 MHz performance and up to 1200 MMACs. This processor core is supported by an advanced DMA controller supporting one- and two-dimensional DMA transfers between on-chip memory, off-chip memory, and system peripherals. The combination of the processor core speed and the DMA controller allows for efficient processing of audio, voice, video, and image data.

The ADSP-BF525 provides peripheral flexibility to complement its high performance processing. The HS USB OTG host direct memory access(HDMA) and NAND flash controller are just a few of the peripheral options on the ADSP-BF525 family—not to mention the availability of up to 48 GPIO ports.

For applications where product differentiation represents a challenge for securing market leadership, the ADSP-BF525 enables developers to provide features and benefits to augment their product offerings without compromising cost or power. The scalability of the ADSP-BF525 makes it an ideal candidate for Premium Audio Players where differentiation of features can be realized without sacrificing system cost. Where the diversity of Multimedia applications and content security are key attributes the ADSP-BF525 provides processing flexibility and LockboxTM Secure Technology to enable users to develop freely and without bounds.

IP protection has become a necessary part of today's embedded computing applications. The ADSP-BF525 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

LockboxTM 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.

Connectivity: HS USB OTG, Host DMA Port, UART's, SPORT's, SPI and TWI.

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



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