

BF561MULTIcore

High-Performance multi-core Blackfin board for uClinux and VisualDSP based on one BF537 and four BF561



The **BF561MULTIcore** board is a very small system based on Analog Devices' Blackfin family. A single BF537 with Ethernet MAC (external PHY) running uClinux controls four dual-core BF561's yielding an accumulated performance of up to 5300 MIPS.

With a size of only 1" x 3.75", the board is designed to fit standard carrier boards, such as PCI, PCIX or eurocards (160x100mm).

The BF537 has 32 Mbytes private SDRAM (125 MHz) to suit the requirements of an operating system (uClinux) while each BF561 has 8 Mbytes of private SDRAM (120 MHz) for image processing or multi-channel buffers.

The Blackfins of the **BF561MULTIcore** communicate with each other, with external peripherals and additional **BF5MULTIcore** boards via high-bandwidth serial ports (SPORT) at a maximum data rate of 160Mbps in either direction.

The BF537 can boot via TFTP over the network and load application software individually to each of the BF561 cores. Alternatively, the board can be booted from an on-board serial flash which makes it independent of any host system.

The only power supply required is a 3.3Volt, 2 Amps rail, where the supply voltage also sets the I/O voltage. The core voltages for the Blackfins are generated on board using a high efficiency buck converter. External core supply is optional.

Example projects for VisualDSP and uClinux are available with the hardware, demonstrating how to start up the Blackfins and launch applications.

Also available is a motherboard for two **BF561-MULTIcore** boards with all I/O signals accessible at 100mil header plus JTAG headers for easy evaluation and a suitable power supply.

Specifications:

Power consumption: 6 Watts @ 3.3V (a single 3.3 Volt supply is required)

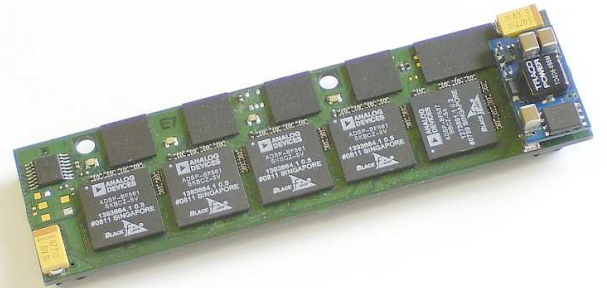
Memory: up to 32MBytes + 4x 8MBytes SDRAM, 4 Mbit serial flash (standard configuration)

I/O: Up to 8 general purpose I/O pins, SPI w/ 5 chip-selects, UART Rx/Tx, 2 complete SPORTS

Processors: ADSP-BF537 (1) and ADSP-BF561 (4)

Physical Dimensions: 96mm x 26 mm x 13mm (including connectors)

Pricing: please call



Ingenieurbüro Bayer DSP Solutions

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Ingenieurbüro Bayer DSP Solutions
Andreas R. Bayer
Vohwinkelallee 8
40229 Düsseldorf / Germany
Phone: +49-211-210 81 20
Fax: +49-211-210 81 76
Email: solutions@dsp-bayer.de
Web: <http://www.dsp-bayer.de>

All prices are excluding VAT, packaging and shipping.