BFLANcore

Blackfin board with built in LAN based on a BF537 and a Lattice MachXO2 FPGA

DSP Systeme GmbH
Embedded DSP & FPGA Technology

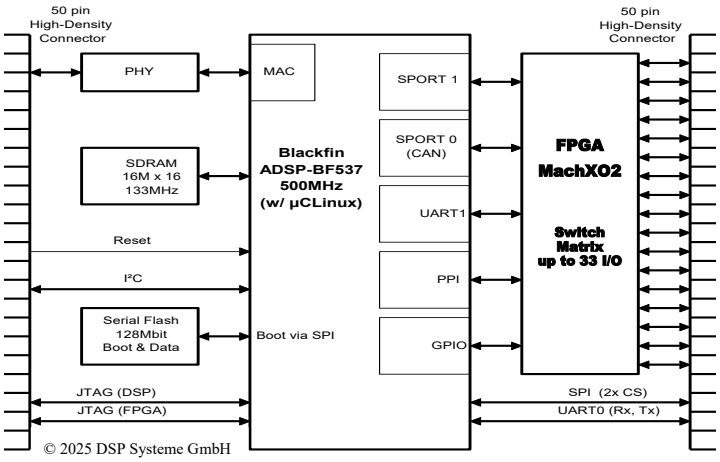
The **BFLANcore** board is a micro system based on Analog Devices' Blackfin family. A single BF537 capable of running a 10/100Mbps Ethernet MAC and on-board PHY in combination with a Lattice MachXO2 FPGA makes up a complete high performance DSP controller board for all sorts of embedded applications.

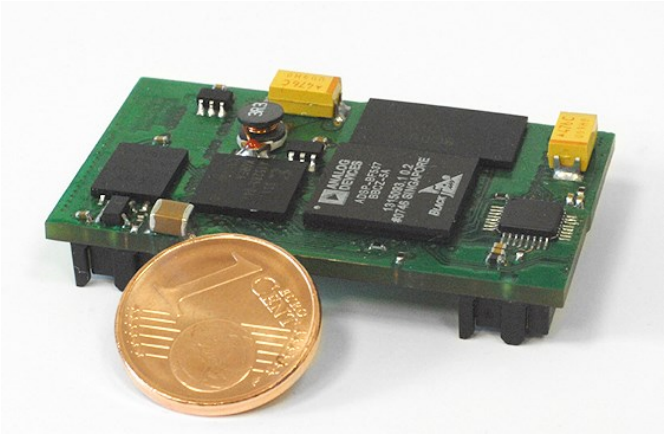
With a size of only 1.0" x 1.8", the board will fit every embedded platform. High density connectors (.8mm pitch) provide access to 33 general purpose plus a number of DSP I/O signals as well as LAN and JTAG signals for both DSP and FPGA.

The BF537 can boot via TFTP over the network and load configuration data to the FPGA. Alternatively, the board can be booted from an on-board serial flash.

The only power supply required is a 3.3Volt 300 mA rail. The core voltages for the Blackfin and the FPGA are generated on board.

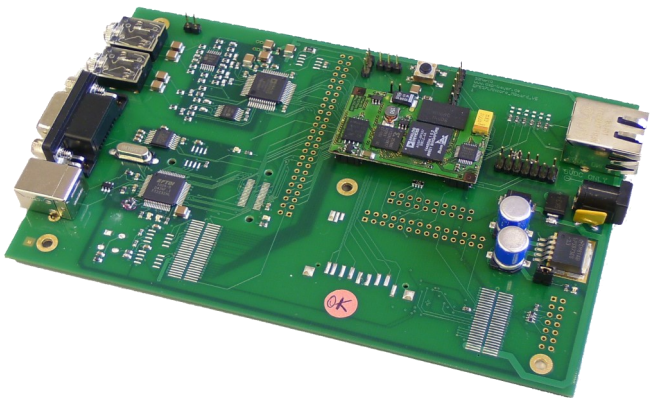
Example projects for VisualDSP are available with the hardware, demonstrating how to start up the Blackfin and launch applications.





Blackfin Module „BFLANcore"

A motherboard for one **BFLANcore** board with many I/O signals accessible at 100mil header plus JTAG headers for easy evaluation, a suitable power supply and JTAG headers is available on request.
The motherboard features a 2-channel audio interface based on Analog Devices' AD1836 audio codec, a high-speed USB2.0 Port using the FT2232H from FTDI and a serial port (UART) with level converters. The motherboard can easily be mounted into an aluminum case for standard 160x100mm Euro cards.



Motherboard for „BFLANcore"

Specifications*:

Power consumption: approx. 1 Watt @ 3.3V

Memory: 32MB SDRAM, 64/128 Mb serial flash

I/O: Up to 33 general purpose I/O pins including I²C, SPI, UARTs, SPORTs and PPI

Processor: ADSP-BF537-BBCZ5A

FPGA: Lattice MachXO2 LCMXO2-640HC

Physical Dimensions: 46mm x 26 mm x 13mm (including connectors)

RoHS-compliant: Yes

**Specifications may change without notice*

DSP Systeme GmbH
Vohwinkelallee 8
40229 Düsseldorf / Germany
Phone: +49-211-271 46 30
Fax: +49-211-210 81 76
Email: gmbh@dsp-sys.de
Web: http://www.dsp-sys.de

Date of last change:
2025-04-09