



## Analog Devices - ADZS-BF518F-EZBRD - Blackfin® BF518F EZ-Board

### Product Overview:

The Blackfin® BF518F EZ-Board™ evaluation board provides developers with a low-cost platform for initial evaluation of the ADSP-BF512/F, BF514/F, BF516/F, BF518/F Blackfin processors via an external JTAG emulator or standalone debug agent board. The EZ-Board also supports uClinux®. Note: To debug you must have a Debug Agent Board or Emulator. The EZ-Board has an expansion interface that allows for modularity with different EZ-Extender boards.



### Kit Contents:

ADSP-BF518F EZ-KIT Lite evaluation system package contains the following items.

- ADSP-BF518F EZ-Board
- VisualDSP++ Installation Quick Reference Card
- CD containing:
  - VisualDSP++ software
  - ADSP-BF518F EZ-Board debug software
  - USB driver files
  - Example programs
  - ADSP-BF518F EZ-Board Evaluation System Manual
- Universal 5.0V DC power supply
- 256 MB SD card
- 7-foot Ethernet patch cable
- Two 6-foot 3.5 mm male-to-male audio cables

## Key Features:

- Analog Devices ADSP-BF518F Blackfin processor
  - Core performance up to 400 MHz
  - 176-pin LQFP package
- Programmable VDDINT core power
  - Analog Devices AD5258 TWI digital potentiometer
  - Analog Devices ADP1715 low dropout linear regulator
- SDRAM: 64 MB, 32M x 16, Micron MT48LC32M16A2TG ,3.3V
- Parallel flash memory Numonyx M29W320EB – 4 MB (2M x 16-bits)
- eMMC flash memory Micron MTFC2GDKDM – 2 GB
- SPI flash memory Numonyx M25P16 – 16 Mb
- Audio CODEC: Analog Devices SSM2603 low-power audio codec
- Ethernet interface National Semiconductor DP83848 PHY device
- RTC Battery: 3.0 Volt Li-ION, CR2430 (270mAh)
- A/D Converter: AD7266, Differential/Single-Ended Input, Dual 2 MSPS, 12 bit 3 Channel
- Thumbwheel Panasonic EVQ-WKA001 rotary encoder
- Universal asynchronous receiver/transmitter (UART) ADM3202 RS-232 line driver/receiver
- LEDs: 13 LEDs: 1 power (green), 1 board reset (red), 3 general purpose (amber), 8 Ethernet (amber)
- Land grid array
- Connectors: Ethernet, SD, EBIU Expansion, Group 1A and 1B Expansion, Group 2A Expansion

## Ordering Information:

### Products:

Part Number	Supplier	Farnell P/N	Newark P/N
ADZS-BF518F-EZBRD	Analog Devices	1758264	32R8729

### Associated Products:

Part Number	Supplier	Description	Farnell P/N	Newark P/N
ADSP-BF518BSWZ-4F4	Analog Device	Blackfin processor	NA	NA

ADP171	Analog Device	LDO	1461508	28M3816
MT48LC32M16A2TG	Micron	SDRAM	NA	NA
M29W320EB	Numonyx	Parallel flash memory	1734993	93K7367
M25P16	Numonyx	SPI flash memory	1099664	24M5080
SSM2603	Analog Device	Audio CODEC	NA	11N9791
DP83848	National	Ethernet interface	1654352	69K2089
EVQ-WKA001	Panasonic	Thumbwheel Panasonic	NA	NA
ADZS-DBAGENT-BRD	Analog Device	DEBUG AGENT FOR EZ-BOARDS	1776226	19P8256
ADZS-HPUSB-ICE	Analog Device	USB-Based Emulator	1424589	14M7074

## Similar Product:

Part Number	Description	Supplier	Support Device	Farnell P/N	Newark P/N
ADZS-BF518F-EZ LITE	KIT, BF512F/14F/16F/18 F EZLITE	Analog Devices	ADSP-BF512/F, ADSP-BF514/F, ADSP-BF516/F	1758265	32R8730

## Document List:

## Datasheets:

Part Number	Description	Size
ADSP-BF518F	<a href="#">Blackfin processor</a>	1.94KB
ADP171	<a href="#">LDO</a>	601KB
MT48LC32M16A2TG	<a href="#">SDRAM</a>	2.4MB
M29W320EB	<a href="#">Parallel flash memory</a>	1.30MB
M25P16	<a href="#">SPI flash memory</a>	1.17MB
SSM2603	<a href="#">Audio CODEC</a>	330KB
DP83848	<a href="#">Ethernet interface</a>	596KB
EVQ-WKA001	<a href="#">Thumbwheel Panasonic</a>	629KB

## Application Notes:

File Name	Size
<a href="#">Using the NAND Flash Controller on Blackfin Processors</a>	2531kB
<a href="#">Blackfin Processor and SDRAM Technology</a>	958kB
<a href="#">Changing the PHY in the Ethernet Driver for Blackfin Processors</a>	132KB
<a href="#">Hardware Design Checklist for the Blackfin Processors</a>	78KB
<a href="#">Interfacing Micron MT9V022 Image Sensors to Blackfin Processors</a>	896KB
<a href="#">Video Framework Considerations for Image Processing on Blackfin Processors</a>	77KB

## Hardware & Software:

File Name	Size
<a href="#">Software Module</a>	NA
<a href="#">Board Design Database</a>	9.48MB