



Blackfin Processor Family

- Cryptography
- Rights Management
- Open Source
- Car Telematics
- IPTV
- Mobile TV
- Driver Assistance
- Biometrics
- Streaming Media
- High Definition



► Embedded Processing

- Effects Processing
- Triple Play
- Audio Processing
- VoIP
- Embedded Security
- GSM/EDGE
- Baseband Processing
- Digital Radio
- Global Positioning
- Packet Processing
- GCC/Linux



Why Choose a Blackfin® Processor?

- High performance, 16-/32-bit processor core with DSP and RISC functionality and programmability
 - Eliminates need for multiple separate processors
- Large portfolio of products ranging from <200 MHz to 750 MHz
 - 2× performance, 50% of the power dissipation of competitive products
- Software controlled dynamic power management
 - Extends battery life in portable applications
- Application-tuned system peripherals
 - Provides glueless connectivity to a variety of external devices
- Many low cost, pin- and code-compatible models
- Industrial temperature range allows for wide range of applications
- Supported by easy to use, world-class development tools
- On-chip flash memory available on certain models
- Processors available with Lockbox™ Secure Technology
- World-class ecosystem components and RTOS offerings from leading partners
- On-chip low power codec available on certain models

Blackfin Processor Target Applications

ADSP-BF523/ADSP-BF525/ADSP-BF527 and ADSP-BF522/ADSP-BF524/ADSP-BF526: Low power processors that combine high performance, power efficiency, and system integration to enable highly optimized designs.

ADSP-BF531/ADSP-BF532: Low power, general-purpose processors for audio, voice, imaging, biometrics, and industrial applications.

ADSP-BF533: High performance for consumer video, security/surveillance, broadband home gateways, and automotive vision systems.

ADSP-BF534: CAN connectivity for automotive, industrial, and medical applications.

ADSP-BF535: Optimized for networked Internet appliances, central office/network switches, industrial control, and automation applications.

ADSP-BF536/ADSP-BF537: Embedded network connectivity for video, industrial, biometrics, instrumentation, medical, and consumer appliances.

ADSP-BF538/ADSP-BF538F: Ideally suited for a broad range of industrial, instrumentation, and medical appliance applications.

ADSP-BF542/ADSP-BF544/ADSP-BF547/ADSP-BF548/ADSP-BF549: High performance convergent multimedia processors with a flexible platform for industrial, instrumentation, consumer, communications, and automotive applications.

ADSP-BF561: Symmetric multiprocessor optimized for high performance signal and media processing.

2

Blackfin Processors

Part Number	Package ¹	Speed (MHz)	RAM Memory (kB)	Ambient Temp Range (°C)	Key Peripherals	Price Range @ 1k (\$U.S.) ²
ADSP-BF522KBCZ-3	289-CSP_BGA	300	132	0 to 70	PPI	Contact ADI
ADSP-BF522BBCZ-3A	208-CSP_BGA			-40 to +85		
ADSP-BF522KBCZ-3C2	289-CSP_BGA			0 to 70		
ADSP-BF522KBCZ-4	289-CSP_BGA	400	132	0 to 70	SPI	
ADSP-BF522BBCZ-4A ³	208-CSP_BGA			-40 to +85	SPORTs	
ADSP-BF522KBCZ-4C2	289-CSP_BGA			0 to 70	NAND interface	
ADSP-BF523KBCZ-5	289-CSP_BGA	533	132	0 to 70	TWI	
ADSP-BF523BBCZ-5A ³	208-CSP_BGA			-40 to +85	Host DMA	
ADSP-BF523KBCZ-5C2	289-CSP_BGA			0 to 70	UART	
ADSP-BF523KBCZ-6	289-CSP_BGA	600	132	0 to 70	Lockbox	
ADSP-BF523KBCZ-6A	208-CSP_BGA			0 to 70		
ADSP-BF523KBCZ-6C2	289-CSP_BGA			0 to 70		
ADSP-BF524KBCZ-3	289-CSP_BGA	300	132	0 to 70	PPI	
ADSP-BF524BBCZ-3A	208-CSP_BGA			-40 to +85		
ADSP-BF524KBCZ-3C2	289-CSP_BGA			0 to 70		
ADSP-BF524KBCZ-4	289-CSP_BGA	400	132	0 to 70	SPI	
ADSP-BF524BBCZ-4A	208-CSP_BGA			-40 to +85	SPORTs	
ADSP-BF524KBCZ-4C2	289-CSP_BGA			0 to 70	NAND Interface	
ADSP-BF525KBCZ-5	289-CSP_BGA	533	132	0 to 70	TWI	
ADSP-BF525BBCZ-5A ³	208-CSP_BGA			-40 to +85	Host DMA	
ADSP-BF525KBCZ-5C2	289-CSP_BGA			0 to 70	UART	
ADSP-BF525KBCZ-6	289-CSP_BGA	600	132	0 to 70	Lockbox	
ADSP-BF525KBCZ-6A	208-CSP_BGA			0 to 70	HS USB OTG	
ADSP-BF525KBCZ-6C2	289-CSP_BGA			0 to 70		
ADSP-BF526KBCZ-3	289-CSP_BGA	300	132	0 to 70	PPI	
ADSP-BF526BBCZ-3A	208-CSP_BGA			-40 to +85		
ADSP-BF526KBCZ-3C2	289-CSP_BGA			0 to 70		
ADSP-BF526KBCZ-4	289-CSP_BGA	400	132	0 to 70	SPI	
ADSP-BF526BBCZ-4A	208-CSP_BGA			-40 to +85	SPORTs	
ADSP-BF526KBCZ-4C2	289-CSP_BGA			0 to 70	10/100 Ethernet	
ADSP-BF527KBCZ-5	289-CSP_BGA	533	132	0 to 70	TWI	
ADSP-BF527BBCZ-5A	208-CSP_BGA			-40 to +85	Host DMA	
ADSP-BF527KBCZ-5C2	289-CSP_BGA			0 to 70	NAND Interface	
ADSP-BF527KBCZ-6	289-CSP_BGA	600	132	0 to 70	UART	
ADSP-BF527KBCZ-6A	208-CSP_BGA			0 to 70	Lockbox	
ADSP-BF527KBCZ-6C2	289-CSP_BGA			0 to 70	HS USB OTG	

¹Packages: LQFP (low profile quad flat pack); CSP_BGA (chip scale package ball grid array); PBGA (plastic ball grid array).

²All pricing is budgetary and subject to change.

³Available in automotive-grade temperature range.



Blackfin Processors (continued)

Part Number	Package ¹	Speed (MHz)	RAM Memory (kB)	Ambient Temp Range (°C)	Key Peripherals	Price Range @ 1k (\$U.S.) ²
ADSP-BF531SBBC400	160-CSP_BGA	400	52	-40 to +85	PPI UART SPI 2 SPORTs 3 timers 16 GPIOs	8.79–13.93
ADSP-BF531SBBCZ400 ³	160-CSP_BGA					
ADSP-BF531SBST400	176-LQFP					
ADSP-BF531SBSTZ400 ³	176-LQFP					
ADSP-BF531SBB400	169-PBGA					
ADSP-BF531SBBZ400 ³	169-PBGA					
ADSP-BF532SBBC400	160-CSP_BGA	400	84	-40 to +85	PPI UART SPI 2 SPORTs 3 timers 16 GPIOs	9.22–14.33
ADSP-BF532SBBCZ400 ³	160-CSP_BGA					
ADSP-BF532SBST400	176-LQFP					
ADSP-BF532SBSTZ400 ³	176-LQFP					
ADSP-BF532SBB400	169-PBGA					
ADSP-BF532SBBZ400 ³	169-PBGA					
ADSP-BF533SBBZ400	169-PBGA	400	148	-40 to +85	PPI UART SPI 2 SPORTs 3 timers 16 GPIOs	12.05–21.95
ADSP-BF533SBSTZ400	176-LQFP	400				
ADSP-BF533SBBCZ400	160-CSP_BGA	400				
ADSP-BF533SBST400	176-LQFP	400				
ADSP-BF533SBBC500	160-CSP_BGA	500				
ADSP-BF533SBBCZ500 ³	160-CSP_BGA	500				
ADSP-BF533SBB500	160-CSP_BGA	500				
ADSP-BF533SBBZ500 ³	169-PBGA	500				
ADSP-BF533SBBC-5V	160-CSP_BGA	533				
ADSP-BF533SBBCZ-5V	160-CSP_BGA	533				
ADSP-BF533SKBC-6V	160-CSP_BGA	600				
ADSP-BF533SKBCZ-6V	160-CSP_BGA	600				
ADSP-BF533SKBC750	160-CSP_BGA	750				
ADSP-BF533SKBC750	160-CSP_BGA	750				
ADSP-BF534BBC-4A	182-CSP_BGA	400	132	-40 to +85	CAN PPI/SPI TWI 8 timers 48 GPIOs 2 SPORTs/UARTs	12.25–16.73
ADSP-BF534BBCZ-4A ³	182-CSP_BGA	400				
ADSP-BF534BBCZ-4B ³	208-CSP_BGA	400				
ADSP-BF534BBC-5A	182-CSP_BGA	500				
ADSP-BF534BBCZ-5A	182-CSP_BGA	500				
ADSP-BF534BBCZ-5B ³	208-CSP_BGA	500				
ADSP-BF535PBB-200	260-PBGA	200	308	-40 to +85	2 SPIs 2 SPORTs USB device PCI	30.00–45.38
ADSP-BF535PBBZ-200	260-PBGA	200				
ADSP-BF535PKB-300	260-PBGA	300				
ADSP-BF535PKBZ-300	260-PBGA	300				
ADSP-BF535PBB-300	260-PBGA	300				
ADSP-BF535PKB-350	260-PBGA	350				
ADSP-BF535PKBZ-350	260-PBGA	350				
ADSP-BF536BBC-3A	182-CSP_BGA	300	100	-40 to +85	10/100 Ethernet CAN PPI TWI 8 timers 48 GPIOs 2 SPORTs/UARTs	9.95–14.25
ADSP-BF536BBCZ-3A	182-CSP_BGA	300				
ADSP-BF536BBCZ-3B	208-CSP_BGA	300				
ADSP-BF536BBC-4A	182-CSP_BGA	400				
ADSP-BF536BBCZ-4A	182-CSP_BGA	400				
ADSP-BF536BBCZ-4B	208-CSP_BGA	400				
ADSP-BF537BBC-5A	182-CSP_BGA	500	132	-40 to +85	8 timers 48 GPIOs 2 SPORTs/UARTs SPI	16.95–20.95
ADSP-BF537BBCZ-5A	182-CSP_BGA	500				
ADSP-BF537BBCZ-5B	208-CSP_BGA	500				
ADSP-BF537BBCZ-5AV	182-CSP_BGA	533				
ADSP-BF537BBCZ-5BV	208-CSP_BGA	533				
ADSP-BF537KBCZ-6AV	182-CSP_BGA	600				
ADSP-BF537KBCZ-6BV	208-CSP_BGA	600				
ADSP-BF537KBCZ-6BV	208-CSP_BGA	600	0 to 70			

¹Packages: LQFP (low profile quad flat pack); CSP_BGA (chip scale package ball grid array); PBGA (plastic ball grid array).

²All pricing is budgetary and subject to change.

³Available in automotive-grade temperature range.

Blackfin Processors (continued)

Part Number	Package ¹	Speed (MHz)	RAM Memory (kB)	Ambient Temp Range (°C)	Key Peripherals	Price Range @ 1k (\$U.S.) ²	
ADSP-BF538BBCZ-4A	316-CSP_BGA	400	148	-40 to +85	CAN 2.0B, 54 GPIOs 4 SPORTs, 3 UARTs 3 SPIs, 2 TWIs, PPI, flash	15.84–20.42	
ADSP-BF538BBCZ-4F4	316-CSP_BGA	400	148				Flash Memory 512 1MB
ADSP-BF538BBCZ-4F8	316-CSP_BGA	400	148				
ADSP-BF538BBCZ-5A ³	316-CSP_BGA	533	148				
ADSP-BF538BBCZ-5F4 ³	316-CSP_BGA	533	148				Flash Memory 512 1MB
ADSP-BF538BBCZ-5F8 ³	316-CSP_BGA	533	148				
ADSP-BF539BBCZ-5A ³	316-CSP_BGA	533	148		MXVR, CAN, 54 GPIOs, 4 SPORTs, 3 UARTs, 3 SPIs, 2 TWIs, PPI, flash	Contact ADI	
ADSP-BF539BBCZ-5F4 ³	316-CSP_BGA	533	148				
ADSP-BF539BBCZ-5F8 ³	316-CSP_BGA	533	148				
ADSP-BF542KBCZ-4A ³	400-CSP_BGA	400	132	0 to 70	CAN ⁴ HS USB OTG 3 EPPIs, Pixel comp, ATAPI-6, Lockbox	20.20–34.00	
ADSP-BF542KBCZ-5A ³	400-CSP_BGA	533		-40 to +85			
ADSP-BF542KBCZ-6A	400-CSP_BGA	600		0 to 70			
ADSP-BF544KBCZ-4A ³	400-CSP_BGA	400	196	0 to 70	CAN ⁴ Host DMA, 3 EPPIs Pixel comp, Lockbox		
ADSP-BF544KBCZ-5A ³	400-CSP_BGA	533		-40 to +85			
ADSP-BF547BBCZ-5A	400-CSP_BGA	533	260	-40 to +85	HS USB OTC, 3 EPPIs, Pixel comp, ATAPI-6, Lockbox		
ADSP-BF547KBCZ-6A	400-CSP_BGA	600		0 to 70			
ADSP-BF548BBCZ-5A	400-CSP_BGA	533	260	-40 to +85	HS USB OTG, 3 EPPIs, Pixel comp, ATAPI-6, Lockbox, CAN		
ADSP-BF548KBCZ-6A	400-CSP_BGA	600		0 to 70			
ADSP-BF549BBCZ-5A ³	400-CSP_BGA	533	260	-40 to +85	MXVR, CAN HS USB OTG, ATAPI-6, 3 EPPIs, Pixel comp, Lockbox		
ADSP-BF561SKB500	297-PBGA	500	328	0 to 70	2 PPIs UART 12 timers 2 SPORTs	24.90–35.32	
ADSP-BF561SKBZ500	297-PBGA	500		0 to 70			
ADSP-BF561SKBCZ-5A	256-CSP_BGA	500		0 to 70			
ADSP-BF561SKBCZ-5V	256-CSP_BGA	533		0 to 70			
ADSP-BF561SBB500	297-PBGA	500		-40 to +85			
ADSP-BF561SBBZ500 ³	297-PBGA	500		-40 to +85			
ADSP-BF561SBBCZ-5A ³	256-CSP_BGA	500		-40 to +85			
ADSP-BF561SKB600	297-PBGA	600		0 to 70			
ADSP-BF561SKBZ600	297-PBGA	600		0 to 70			
ADSP-BF561SKBCZ-6A	256-CSP_BGA	600		0 to 70			
ADSP-BF561SKBCZ-6V	256-CSP_BGA	600		0 to 70			
ADSP-BF561SBB600	297-PBGA	600		-40 to +85			
ADSP-BF561SBBZ600	297-PBGA	600		-40 to +85			
ADSP-BF561SBBCZ-6A	256-CSP_BGA	600		-40 to +85			

¹Packages: LQFP (low profile quad flat pack); CSP_BGA (chip scale package ball grid array); PBGA (plastic ball grid array).

²All pricing is budgetary and subject to change.

³Available in automotive-grade temperature range.

⁴Available on automotive-grade parts only.

Development Tools

The Blackfin Processor is supported by the Analog Devices CROSSCORE® line of robust and flexible development tools.

VisualDSP++®

VisualDSP++ delivers efficient project management, enabling programmers to move easily between editing, building, and debugging within a single interface. Key features include an optimizing C/C++ compiler, advanced plotting tools, embedded OS support (VDK), award-winning statistical profiling, TCP/IP and USB support, free software upgrades, and technical support.

EZ-KIT Lite® Evaluation Kit

The EZ-KIT Lite evaluation kit is a standalone evaluation board and evaluation suite of VisualDSP++ to facilitate architecture evaluation.

EZ-Extender®

EZ-Extender daughter boards enable developers to access and connect various peripherals from Analog Devices and third parties to the expansion interface of the EZ-KIT Lite evaluation kits.

Emulators

The USB-based and HP USB-based emulators are easy, portable, nonintrusive, target-based debugging solutions. The HP USB-based emulator also supports the background telemetry channel (BTC), a nonintrusive method for exchanging data between the host and the target application without affecting the target system's real-time extended support characteristics.



Software Modules

Analog Devices has a wide range of tested and optimized software modules available, including decoders, encoders, codecs, and other algorithms that provide multimedia functions for the Blackfin and SHARC Processor families. The software modules allow engineers to quickly and easily incorporate these functions, providing a faster development path to the end product. In addition, the highly optimized software modules feature a consistent API and framework to ensure rapid development of multiple functions. Also available is VisualAudio® 2.5, which enables engineers from other backgrounds to leverage a set of basic audio libraries and tools to jump-start their projects, modularize the development process, and shorten the learning curve.

Platforms and Reference Designs

Platforms and reference designs help jump-start your design. They include comprehensive software suites with documented APIs running on application-specific evaluation boards. The easy to use APIs enable customization and control of core system functions, letting you focus on adding value through product differentiation. For more information on Analog Devices platforms, reference designs, and third-party reference designs, visit www.analog.com/software.

Extended Development Tools and Support

Starter Kits

Analog Devices Starter Kits provide everything you need to get started on an application. Kits contain a Blackfin EZ-KIT Lite, EZ-Extender daughter board(s) and the software development kit (SDK), which contains sample code, “how to” documents, and various encoders/decoders that make getting started on an application easy and shorten the learning curve.

Software Development Kits

The SDK contains example software, source code, device drivers, algorithms, utilities information, and application notes that allow you to develop processor applications. The software can be used

as a framework, or as examples of how to use certain aspects and peripherals, in conjunction with an ADI processor. The SDK is included in the starter kits and is also downloadable for free, provided you have the required hardware, at www.analog.com/sdk/downloads.

µClinux

The µClinux kernel and GNU toolchain are available for the Blackfin Processor and can be downloaded from the µClinux for Blackfin Processor website (www.blackfin.uclinux.org), which is the central repository for all Blackfin Processor open-source projects. One of the board support packages available is the ADSP-BF537 STAMP µClinux kernel board support package (BSP). The BSP is composed of the ADSP-BF537 STAMP development board (including the full complement of memory along with serial and network interfaces), a recent copy of the open-source development tools, µClinux kernel, and bootloader. The STAMP board is specifically designed to support the development and porting of open-source µClinux applications.

NI LabVIEW™ Embedded Module for ADI Blackfin Processors

The NI LabVIEW Embedded Module for ADI Blackfin Processors is a comprehensive graphical development environment for embedded design. This module builds on NI LabVIEW embedded technology, which facilitates dataflow graphical programming for embedded systems and includes hundreds of analysis and signal processing functions, integrated I/O, and an interactive debugging interface. With the NI LabVIEW Embedded Module for ADI Blackfin Processors, users can easily access essential VisualDSP++ specific compiler options through LabVIEW, such as the ability to enable cache, optimize linking, and view live front-panel updates via JTAG. To help debug those challenging designs, users can connect the host development PC evaluation hardware or end product using an ADI JTAG emulator. LabVIEW includes a wide array of built-in visualization features including tools for charting and graphing real-time data, and reconfiguring attributes of data presentation, such as colors, font size, and graph types. Furthermore, users can dynamically tune applications at run time through live front panel controls.

Blackfin Processors Development Tools

Blackfin Processor	Evaluation Development Platform	Emulator	VisualDSP++ Development Software	Additional Software Available
ADSP-BF523/C ADSP-BF525/C ADSP-BF527/C	ADZS-BF527-EZLITE Key Features • ADSP-BF527 Blackfin Processor • SDRAM • NAND flash • Audio codec • HS USB OTG • LCD display • Touch screen/keyboard controller	ADZS-USB-ICE ADZS-HPUSB-ICE	VDSP-BLKFN-PC-TEST VDSP-BLKFN-PC-FULL VDSP-BLKFN-PCFLOAT VDSP-BLKFN-PCFLT-5	VDSP-LABVIEW-EMB (All parts except ADSP-BF535/ ADSP-BF561) VDSP-LABVIEW-FULL (All parts except ADSP-BF535/ ADSP-BF561) VisualAudio (ADSP-BF533/ ADSP-BF537 only) Mathworks (ADSP-BF531/ADSP-BF532/ ADSP-BF533/ADSP-BF534/ ADSP-BF536/ADSP-BF537 only)
ADSP-BF522/C ADSP-BF524/C ADSP-BF526/C	In development			

Blackfin Processors Development Tools (continued)

Blackfin Processor	Evaluation Development Platform	Emulator	VisualDSP++ Development Software	Additional Software Available	
ADSP-BF531 ADSP-BF532 ADSP-BF533	ADZS-BF533-EZLITE Key Features ADSP-BF533 Blackfin Processor <ul style="list-style-type: none"> 64 MB (32M × 16-bit) SDRAM 2 MB (512K × 16-bit × 2) Flash memory AD1836 96 kHz audio codec with 4 input and 6 output RCA jacks ADV7183 video decoder with 3 input RCA jacks ADV7171 video encoder with 3 output RCA jacks ADM3202 RS-232 line driver/receiver 	ADZS-BF-EZEXT-1 ADZS-BFAV-EZEXT ADZS-USBLAN-EZEXT ADZS-BFAUDIO-EZEXT ADZS-BFFPGA-EZEXT ADZS-BF533-MMSKIT			
ADSP-BF534 ADSP-BF536 ADSP-BF537	ADZS-BF537-EZLITE Key Features <ul style="list-style-type: none"> ADSP-BF537 Blackfin Processor Max core clock rate of 600 MHz 64 MB (32M × 16) SDRAM, 4 MB (2M × 16) flash memory SMSC LAN83C185 10/100 PHY with RJ45 connector CAN TJA1041 transceiver with 2 RJ10 connectors AD1871 96 KHz stereo ADC with 1/8" jack connector AD1854 96 KHz stereo DAC with 1/8" jack connector RS-232 UART line driver/receiver National Instruments Educational Laboratory Virtual Instrumentation Suite (NI ELVIS) interface 	ADZS-USBLAN-EZEXT ADZS-BFAUDIO-EZEXT ADZS-BFFPGA-EZEXT ADZS-BF537-ASKIT Additional Hardware <ul style="list-style-type: none"> BF537-STAMP PHYTEC Phycore® 		VDSP-LABVIEW-EMB (All parts except ADSP-BF535/ ADSP-BF561) VDSP-LABVIEW-FULL (All parts except ADSP-BF535/ ADSP-BF561)	
ADSP-BF538/ ADSP-BF538F	ADZS-BF538F-EZLITE Key Features <ul style="list-style-type: none"> ADSP-BF538F Blackfin Processor 64 MB (32M × 16) SDRAM 4 MB (2M × 16) flash memory ADM3202 RS-232 line driver/receiver AD1871 96 kHz stereo ADC AD1854 96 kHz stereo DAC TJA1041 transceiver 2 RJ10 connectors 9 LEDs 	ADZS-BFAV-EZEXT ADZS-USBLAN-EZEXT ADZS-BFAUDIO-EZEXT ADZS-BFFPGA-EZEXT	ADZS-USB-ICE ADZS-HPUSB-ICE	VDSP-BKFN-PC-TEST VDSP-BLKFN-PC-FULL VDSP-BLKFN-PCFLOAT VDSP-BLKFN-PCFLT-5	VisualAudio (ADSP-BF533/ ADSP-BF537 only) Mathworks (ADSP-BF531/ADSP-BF532/ ADSP-BF533/ADSP-BF534/ ADSP-BF536/ADSP-BF537 only)
ADSP-BF561	ADZS-BF561-EZLITE Key Features <ul style="list-style-type: none"> ADSP-BF561 Blackfin Processor 64 MB (16M × 16-bit × 2) SDRAM 8 MB (4M × 16-bit) flash memory AD1836 multichannel 96 kHz audio codec RCA jacks for stereo audio input/output ADV7183A advanced 10-bit video decoder 3 RCA jacks for composite (CVBS), differential component (YUV), or S video (Y/C) input ADV7179 chip scale NTSC/PAL video encoder 3 RCA jacks for composite (CVBS), component (RGB), differential component (YUV), or S-Video (Y/C) output 	ADZS-BF-EZEXT-1 ADZS-BFAV-EZEXT ADZS-BFAUDIO-EZEXT ADZS-USBLAN-EZEXT ADZS-BFFPGA-EZEXT ADZS-BF561-MMSKIT			
ADSP-BF542 ADSP-BF544 ADSP-BF547 ADSP-BF548 ADSP-BF549	ADZS-BF548-EZLITE Key Features <ul style="list-style-type: none"> ADSP-BF548 Blackfin Processor DDR SDRAM BURST flash NAND flash Hard drive LCD display AC'97 codec Ethernet PHY Touch screen/keyboard controller 				



Blackfin Processor Product Portfolio



Third-Party Developers

More than 130 third parties provide software, hardware, and consulting services to support Blackfin embedded processors. For more information, visit www.analog.com/processors/collaborative.

Hardware

- Companion chip/chipsets
- Development boards
- Development systems
- Emulators
- Evaluation/starter boards
- Reference designs
- COTS DSP boards
- Daughter cards
- Extender boards

Software and Algorithms

- Speech G.7xx
- Telephony (DTMF, caller ID, etc.)
- Echo cancellation
- Audio (MP3, AAC/+, WMA9, Dolby, DTS, etc.)
- Video/imaging (JPEG, MPEG-2/MPEG-4, H.264, H.263, WMV9, etc.)
- Image processing
- Facial/object recognition software
- VoIP suites
- Embedded Web browser
- Voice recognition
- Proprietary algorithms (3D audio effects, etc.)

OS/RTOS

- Green Hills® Software/INTEGRITY®
- Green Hills Software/*veIOSity*™
- Green Hills Software/*μ-veIOSity*™
- Express Logic/ThreadX®
- Micriμm μC/OS-II
- Mentor Graphics®/Nucleus
- Quadros Systems/RTXC™ Quadros
- Unicoi Systems™/Fusion™
- KADAK Systems/KwikNet™
- Open Source/μ.Clinux
- ADI/VDK

Design Test Optimization

- National Instruments

Software IDDE Tools

- Green Hills Software/MULTI®
- GAIO TECHNOLOGY/Blackfin design kit

HW Development Kits

- PHYTEC/Rapid Development Kits

Complimentary Support Resources

Analog Devices Sales and Distributors:

www.analog.com/salesdir

Processor and Development Tools

Technical Support:

www.analog.com/processors/technicalsupport

North America and Asia:

processor.support@analog.com

Europe:

processor.europe@analog.com



**Analog Devices, Inc.
Worldwide Headquarters**

Analog Devices, Inc.
One Technology Way
P.O. Box 9106
Norwood, MA 02062-9106
U.S.A.
Tel: 781.329.4700
(800.262.5643,
U.S.A. only)
Fax: 781.461.3113

**Analog Devices, Inc.
Europe Headquarters**

Analog Devices, Inc.
Wilhelm-Wagenfeld-Str. 6
80807 Munich
Germany
Tel: 49.89.76903.0
Fax: 49.89.76903.157

**Analog Devices, Inc.
Japan Headquarters**

Analog Devices, KK
New Pier Takeshiba
South Tower Building
1-16-1 Kaigan, Minato-ku,
Tokyo, 105-6891
Japan
Tel: 813.5402.8200
Fax: 813.5402.1064

**Analog Devices, Inc.
Southeast Asia
Headquarters**

Analog Devices
22/F One Corporate Avenue
222 Hu Bin Road
Shanghai, 200021
China
Tel: 86.21.5150.3000
Fax: 86.21.5150.3222

**Embedded Processing and
DSP Support**

U.S.A.:
processor.support@analog.com
Fax: 781.461.3010
Europe:
processor.europe@analog.com
Fax: 49.89.76903.157
www.analog.com/processors