

# eCM-BF609

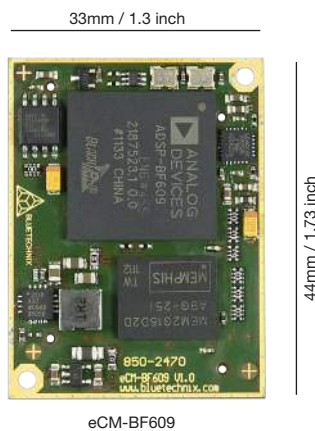
Blackfin® based System-on-Module



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The Core Module eCM-BF609 is optimized for performance and parallel data processing. The module integrates processor, DDR2 SDRAM, flash, Ethernet PHY and power supply at a size of 44x33mm! It is based on the latest high performance dual-core processor ADSP-BF609 from Analog Devices.

The ADSP-BF609 integrates a co-processor unit to accelerate signal and image algorithms (i.e. for pre- and co-processing of video frames in ADAS applications). The eCM-BF609 is designed for industrial and commercial applications. It addresses 256MByte DDR2 SDRAM via its dedicated DDR2 interface and has an onboard SPI flash of 8MByte.



## Highlights

- » ADSP BF609 Dual Core DSP
- » 256 MByte DDR2 SD-RAM up to 266 MHz
- » 8 MByte SPI Flash
- » Optimized for parallel digital signal processing
- » Pipeline Vision Processor (PVP)
- » Industrial SoM available

Most of the ADSP-BF609's pins are available on the Core Module connectors for maximum flexibility during system design.

## Applications

- » Parallel digital signal processing
- » Automotive vision systems
- » Imaging and consumer multimedia
- » Stereo vision systems

## Ordering Information

Order No.	Info
100-3401	Blackfin Evaluation Starter Package with eCM-BF609
100-1217-1	eCM-BF609
100-1218-1	eCM-BF609 Industrial

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## ADSP-BF609 Facts

The ADSP-BF609 Blackfin processor is optimized for embedded vision and video analytics applications using a dual-core fixed-point DSP processor with a unique pipelined vision processor (PVP). The PVP is a set of functional blocks next to the Blackfin cores designed to accelerate image processing algorithms and reduce overall bandwidth requirements.

## Feature Overview

<b>PROCESSOR</b>	ADSP-BF609SKBCZ-6A Blackfin® embedded processor (Dual Core)
<b>CLOCK</b>	2 x 500 MHz
<b>RAM</b>	256 MByte DDR2 SD-RAM up to 266 MHz
<b>FLASH</b>	8 MByte SPI
<b>ETHERNET 10/100 MBIT</b>	1 with IEEE1588 Precision Clock Synchronization
<b>PPI</b>	3 (1 x 24 bit and 2 x 18 bit)
<b>CAN 2.0 / TIMER / COUNTER</b>	1 / 8 / 1
<b>USB 2.0 OTG</b>	1
<b>SPI / I<sup>2</sup>C / UART / SPORT</b>	2 / 2 / 2 / 3
<b>EMMC/RSI</b>	1
<b>LINK PORT</b>	4
<b>GPIO / ACM / PWM</b>	112 / 1 / 2
<b>TEMPERATURE RANGE*</b>	Commercial (0°C to +70°C) Industrial (-40 to +85°C)
<b>DIMENSIONS</b>	44 x 33mm
<b>ADDITIONAL</b>	On-Board core voltage regulator Low voltage reset circuit

\*depends on version - see ordering information

Further information at  
<http://www.bluetechnix.com/goto/ecm-bf609>

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