



Welcome to **E-XFL.COM**

Understanding <u>Embedded - Microcontroller, Microprocessor, FPGA Modules</u>

Embedded - Microcontroller, Microprocessor, and FPGA Modules are fundamental components in modern electronic systems, offering a wide range of functionalities and capabilities. Microcontrollers are compact integrated circuits designed to execute specific control tasks within an embedded system. They typically include a processor, memory, and input/output peripherals on a single chip. Microprocessors, on the other hand, are more powerful processing units used in complex computing tasks, often requiring external memory and peripherals. FPGAs (Field Programmable Gate Arrays) are highly flexible devices that can be configured by the user to perform specific logic functions, making them invaluable in applications requiring customization and adaptability.

Applications of **Embedded - Microcontroller**,

Details		
Product Status	Active	
Module/Board Type	MPU Core	
Core Processor	CM-BF561 (Dual Core)	
Co-Processor	-	
Speed	600MHz x 2	
Flash Size	32MB	
RAM Size	128KB	
Connector Type	Expansion 2 x 100	
Size / Dimension	1.73" x 1.3" (44mm x 33mm)	
Operating Temperature	-40°C ~ 85°C	
Purchase URL	https://www.e-xfl.com/product-detail/bluetechnix/100-1215-1	

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Core Module eCM-BF561

The Core Module eCM-BF561 is optimized for performance and parallel data processing. The module integrates processor, RAM, flash and power supply at a size of 44x33mm! It is based on the high performance ADSP-BF561 from Analog Devices.

The eCM-BF561 is designed for commercial applications (commercial temperature range). It addresses 128MByte SDRAM via its 32bit wide SDRAM bus and has an onboard NOR-flash of 32MByte.

Technical Details of eCM-BF561

PROCESSOR	ADSP-BF561SKBCZ-6A Blackfin® embedded processor (Dual Core)
CLOCK	2 x 600MHz
L1 cache (per core)	16kByte instruction and 32kByte data
L2 cache (shared)	128kByte
RAM	128MByte SDRAM up to 133Mhz
FLASH	32MByte NOR
PPI 16Bit	2
SPI	1
I ² C	Emulated by GPIO
UART	1
SPORT	2
TEMPERATURE RANGE*	Commercial (0°C to +70°C) Industrial (-40 to +85°C)
DIMENSIONS	44x33mm
Additional	On-Board core voltage regulator
	Low voltage reset circuit

^{*}depends on version - see ordering information

Operating Systems

- » BLACKSheep® OS (RTOS)
- » uClinux (GPOS)

Ordering Information

Order No.	Info
100-1214-1	eCM-BF561-C-C-Q25S128F32 (eCM-BF561)
100-1215-1	eCM-BF561-C-I-Q25S128F32
100-2342-2	eDEV-BF5xx Enhanced Blackfin Development Board
100-3400	Blackfin Evaluation Starter Package with eCM-BF561
100-3106	CDK - Camera Development Kit with eCM-BF561



eCM-BF561

Applications

- » Parallel digital signal processing
- » Automotive vision systems
- » Imaging and consumer multimedia
- » Set top boxes
- » Video conference applications
- » Portable media players
- » Digital video camera systems



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