

eCAM-BF

The embedded camera platform



BLUETECHNIX
Embedding Ideas

The upcoming eCAM camera platform stands for state of the art processor technology combined with outstanding image processing software to build a modular, intelligent embedded camera system integrated into a smart housing with high quality optics. This platform grows with the market demands due to its System-on-Module (SOM) based hardware design. The housing stays the same whereas the processing hardware can be exchanged.

The first hardware release is based on Bluetechnix' latest ADSP-BF561 SOM called CM-BF561. This powerful Blackfin® based dual core (2 x 600MHz) module with a large number of peripheral interfaces and a huge memory capacity of 128MByte SDRAM and 32MByte NOR flash, are the perfect basis for your high end image processing applications. The eCAM can be bought with a complete board support package that can be tailored to your requirements.



based on



Highlights

- » Powerful Blackfin® based hardware
- » High resolution camera
- » Plug & Play camera kit
- » Mountable smart housing
- » Stand alone intelligent camera
- » Rich BSP & free software available

Applications

- » Object Recognition Systems
- » Industrial Vision
- » Security & Surveillance
- » Advanced Driver Assistance Systems
- » Automation and Control

Ordering Information

Order No.	Info
150-0001-1	eCAM-BF based on BF561 and MT9M131 CS mount
106-2203	BLACKSheep® OS

eCAM-BF

The embedded camera platform



BLUETECHNIX
Embedding Ideas

Software Overview

The eCAM can be bought with a complete board support package that can be tailored to your requirements. In addition to this the “Video Analytics Toolbox” a C-callable API for the Blackfin processor, can be used. This video analytics tool can be used in video surveillance for detection of events such as intrusion detection, left/removed object detection, foreground objects/blob detection etc.

- » **BLACKSheep® OS full BSP**
- » **Video Analytics Toolbox from Analog Devices**
- » **uClinux**

BLACKSheep® OS BSP Features

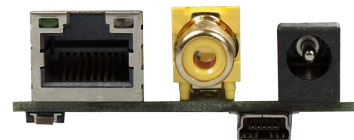
- » RTOS based on VDK from ADI
- » Embedded webserver
- » JPEG encoder
- » Ethernet drivers
- » Streaming support
- » Frame grabber
- » Peripheral drivers (SD-Card, flash, SPI, etc.)
- » Multithreaded environment

Video Analytics Toolbox Features

- » Detection of foreground objects
- » Output Status: Detected Objects
- » ROI : Region of Interest specified to enable detection only in regions of specific interest
- » Configurable: Three versions of the algorithm for scalability. Algorithms are configurable by user
- » Decimation: Input can be scaled by half both horizontally and vertically for reduced resolution support
- » Primitives : VAT Primitives'API library

Feature Overview

PROCESSOR	Analog Devices ADSPBF561	
CLOCK	2 x 600MHz	
RAM	128 MByte SDRAM	
FLASH	32MByte NOR	
IMAGER	Aptina MT9M131 - up to 15 fps @ 1280H x 1024V - 30 fps @ 640H x 480V	
INTERFACES	COMPOSITE	1
	ETHERNET	1x10/100MBit Ethernet PHY
	USB 2.0	1 x Device
	LENS MOUNT	M12 or CS mount lenses
POWER SUPPLY	12V _{DC}	
TEMPERATURE RANGE	Commercial 0 to +70 °C	
TRIPOD MOUNT	1 x 1/4"	
DIMENSIONS	143 x 55 mm (without lense)	



eCAM-BF connector view

BLUETECHNIX Mechatronische Systeme GmbH
Waidhausenstraße 3/19 | 1140 Wien, Austria
+43 (1) 9142091 x 0 | +43 (1) 9142091 x 99
www.bluetechnix.com | office@bluetechnix.com