# Argos®<sup>2D</sup> - D100

The smart CDK - Camera Dev. Kit



The Argos 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 Argos<sup>2D</sup> - D100 can be bought with a complete board support package that can be tailored to your requirements.

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#### Highlights

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

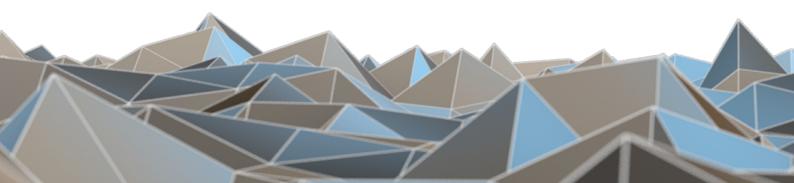
### Applications

based on

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

## Ordering Information

Order No.	Info
150-0001-1	$\operatorname{Argos} \mathbb{R}^{2D}$ - D100 CDK based on
	BF561 and MT9M131 CS mount
106-2203	BLACKSheep® OS



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## BLUETECHNIX Embedding Ideas

### Software Overview

The Argos<sup>2D</sup> - D100 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

PROC	ESSOR	Analog Devices ADSPBF561
CLOC	К	2 x 600MHz
RAM		128 MByte SDRAM
FLAS	H	32MByte NOR
IMAG	ER	Aptina MT9M131 - up to 15 fps @ 1280H x 1024V - 30 fps @ 640H x 480V
	COMPOSITE	1
INTERFACES	ETHERNET	1x10/100MBit Ethernet PHY
ERF	USB 2.0	1 x Device
ILNI	LENS Mount	M12 or CS mount lenses
POWER SUPPLY TEMPERATURE RANGE		12V <sub>DC</sub>
		Commercial 0 to +70 °C
TRIP	OD MOUNT	1 x 1/4"
DIMENSIONS		143 x 55 mm (without lense)



Argos<sup>2D</sup> - D100 connector view

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