# Argos®<sup>2D</sup> - D120

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 new hardware is based on Bluetechnix' latest ADSP-BF609 SoM called eCM-BF609. This powerful Blackfin® based dual core (2 x 500MHz) module with a large number of peripheral interfaces and a huge memory capacity of 256MByte DDR 2 SDRAM and 8MByte SPI flash, is the perfect basis for your high end image processing applications. The Argos<sup>2D</sup> - D120 can be bought with a complete board support package that can be tailored to your requirements.



Argos<sup>2D</sup> - D120 without cover

#### Highlights

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

based on



### Applications

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

# Ordering Information

Order No.	Info
150-0020-1	Argos® <sup>2D</sup> - D120 CDK based on BF609 and MT9M131 CS mount
106-2203	BLACKSheep® OS - Full BSP



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## Software Overview

The Argos<sup>2D</sup> - D120 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

» uClinux

#### BLACKSheep® OS BSP Features

- » RTOS extension
- » Multithreaded environment
- » Peripheral drivers (SD-Card, flash, SPI, etc.)
- » Filesystems
- » Embedded webserver
- » JPEG encoder
- » Ethernet drivers
- » Streaming support
- » Frame grabber

#### In the box

- » Argos<sup>2D</sup> D120
- » USB Cable
- » Ethernet Cable
- » Tripod
- » Power Adapter
- » Documentation



Argos<sup>2D</sup> - D120 connector view

## Feature Overview

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.

PROC	ESSOR	Analog Devices ADSPBF609
CLOC	ĸ	2 x 500MHz
RAM		256 MByte DDR2 SDRAM
FLAS	н	8 MByte SPI
IMAG	iER	Aptina MT9M131 - up to 15 fps @ 1280H x 1024V - 30 fps @ 640H x 480V
	COMPOSITE	1
NTERFACES	ETHERNET	1x10/100MBit Ethernet PHY
ERF/	USB 2.0	1 x OTG
I	LENS Mount	M12 or CS mount lenses
POW	ER SUPPLY	12V <sub>DC</sub>
TEMPERATURE RANGE		Commercial 0 to +70 °C
TRIP	OD MOUNT	1 x 1/4"
DIMENSIONS		143 x 55 mm (without lense)

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