# Argos®<sup>2D</sup> - A120

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 i.MX53 SOM called CM-i.MX6x. This powerful ARM® Cortex<sup>™</sup>-A9 (up to 4 x 1GHz) based module with a large number of peripheral interfaces and a huge memory capacity of 2GByte DDR3-SDRAM and 2GByte eMMC flash, are the perfect basis for your high end image processing applications.

The Argos<sup>2D</sup> - A120 comes with a complete software application framework that can be tailored to your requirements. In addition to this the Advanced Development and Analysis Framework (ADAF) developed by NISYS can be used to build stand alone object recognition systems e.g. traffic sign recognition, license plate detection etc.



#### Highlights

- » Powerful i.MX6x based hardware
- » High resolution camera
- » Plug & Play camera kit
- » Mountable smart housing
- » Stand alone intelligent camera
- » Free software and lots of demos available
- » Optional ADAF pre-installed on SD-card

#### Applications

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



Argos<sup>2D</sup> - A120 connector view



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## BLUETECHNIX Embedding Ideas

### Feature Overview

SoC		Freescale i.MX6x (Single/ Dual / Quad ARM® Cortex™-A9)
CLOCK		up to 4 x 1GHz
RAM		2GByte DDR3-SDRAM
FLASH		2GByte eMMC / 4MByte NOR
IMAGER		Aptina MT9M131 - up to 15 fps @ 1280H x 1024V - 30 fps @ 640H x 480V
NTERFACES	HDMI	1
	ETHERNET	1x10/100MBit Ethernet PHY
	USB 2.0	1 x OTG
ILNI	LENS Mount	M12 or CS mount lenses
POWER SUPPLY		12V <sub>DC</sub>
TEMPERATURE Range		Commercial 0 to +70 °C
TRIPOD MOUNT		1 x 1/4"
DIMENSIONS		143 x 55 mm (without lense)

#### NISYS ADAF

#### Advanced Development and Analysis Framework

ADAF by NISYS consists of an operating system independent middleware and a GUI. The middleware provides the following functionalities:

- Integration of arbitrary sensor devices (Camera, CAN, GPS...)
- » Data recording and replay featuring a microsecond timestamp resolution
- » Synchronization of different sensors during recording and replaying
- » Framework for development and integration of processing plugins
  - C / C++
  - Scripting language Lua
- » User defined input / output structures
- » Coupling of plugins via processing graph

Due to the strict separation of core and GUI functionalities, you are able to design the user interface matching your requirements.

#### Further information on www.nisys.de



ADAF lane detection, traffic sign recognition

Software

- » Linux Board Support Package (v2.6.35)
- » NISYS ADAF for Linux
- Further information on

www.bluetechnix.com/goto/argos

### Ordering Information

Order No.	Info
150-1020-1	Argos® <sup>2D</sup> A120 - CDK based on i.MX6 and MT9M131 with CS mount

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

