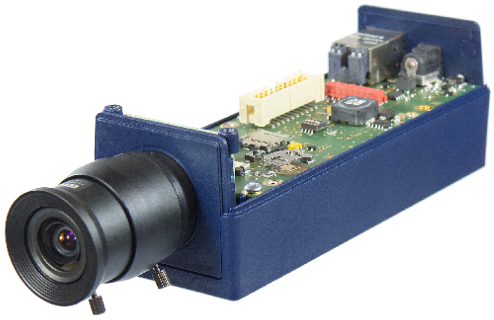
Argos®^{2D} - A100

The smart CDK - Camera Dev. Kit

BLUETECHNIX
Embedding Ideas

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.MX53. This powerful ARM® Cortex™-A8 (1GHz) based module with a large number of peripheral interfaces and a huge memory capacity of 1GByte DDR2-SDRAM and 2GByte NAND flash, are the perfect basis for your high end image processing applications.
The Argos^{2D} - A100 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.



Argos^{2D} - A100 without cover

Highlights

- **Powerful i.MX53 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^{2D} - A100 connector view

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Feature Overview

SoC		Freescale i.MX535 (ARM® Cortex™-A8)
CLOCK		1GHz
RAM		1GByte DDR2-SDRAM
FLASH		4MByte NOR / 2GByte NAND
IMAGER		Aptina MT9M131 - up to 15 fps @ 1280H x 1024V - 30 fps @ 640H x 480V
INTERFACES	**HDMI**	1
	ETHERNET	1x10/100MBit Ethernet PHY
	USB 2.0	1 x OTG
	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)

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
150-1001-1	Argos®^{2D} A100 - CDK based on i.MX53 and MT9M131 with CS mount

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

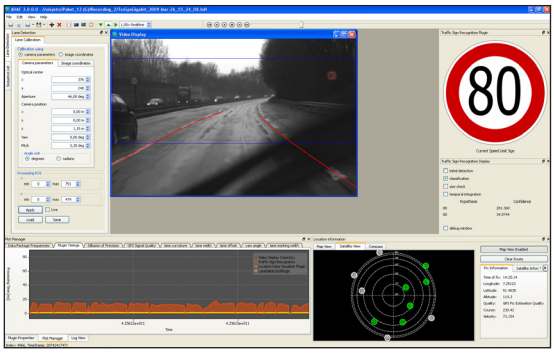
» Framework for development and integration of processing plugins
- C / C++
- Scripting language Lua

» 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

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