## Product Brief







Based on an Altera Development Board to support the VITA Image Sensors of On Semiconductor.

# Complete Reference Design for the VITA Image Sensors

These reference designs are build around the VITA image sensor family of On Semiconductor and are based on Altera FPGAs. It allows you to rapidly start implementation of new imaging designs into an open platform and to optimize their systems once operational.

The On Semiconductor VITA image sensor family comprises four configurable, flexible, easy to use CMOS image sensors targeting growing markets for 2D barcode readers, high-end security and surveillance solutions, motion monitoring, Intelligent Traffic-management Systems (ITS), manufacturing equipment, and others where global shutter is a necessary feature.

#### **Features**

- Support of OnSemi VITA1300, VITA2000 & VITA5000
- Sensor Interface controlled by Altera NIOS II Processor (\*)
- Full HD 1080p/60fps through DVI Interface
- Upgrade to other Altera FPGA's like Cyclone IV, Arria II GX and Stratix III/IV FPGA's
- Schematics and Bill of Materials

#### **Applications**

- Motion Monitoring
- Manufacturing Equipment
- High-end Security and Surveillance Solution
- ITS
- 2D Barcode Readers

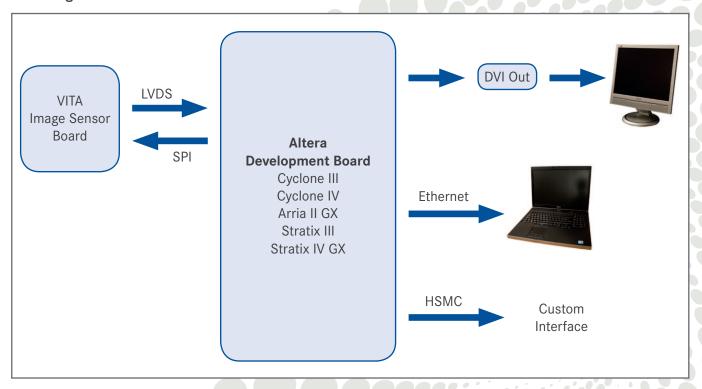


#### **Benefits**

- Make use of Altera's Video and Image Processing framework (\*)
- Provided as a Complete Reference Design
- Full featured Reference Design provided in Source Code
- Develop a flexible Solution with the Ability to connect to different Interfaces like GigE Vision, USB3.0, Cameralink, Coaxpress, ....



### **Blockdiagram of Reference Kit**



## **VITA Reference Kits Ordering Information**

Ordering Information	Information
ARROW-VITA 1300-ALTERA	VITA 1300 Sensor Board (Mono/LVDS)
ARROW-VITA2000-ALTERA	VITA 2000 Sensor Board (Mono/LVDS)
ARROW-VITA5000-ALTERA	VITA 5000 Sensor Board (Mono/LVDS)



#### Remark:

This reference kit will not contain any lens, DVI add-on (Terasic, p/n: P0017 DVI-HSMCC Card) and Cyclone III board. These are available separately from Arrow.

Type of lens which can be used: C-Mount 25 mm F1.4 for 2/3" format cameras.

Please contact your local Arrow FAE for more information and availability of this reference kit. Additional information please find on: www.arroweurope.com/vita

(\*) Customers can use the Quartus II Web Edition design software depending on the supported Altera FPGA. Free and downloadable from www.altera.com

You can use the Altera OpenCore Plus Evaluation flow to test the IP MegaCore functions.

