

DragonEYE

FRAME GRABBER & IMAGE PROCESSING

TECHWAY
SIGNAL VISION SYSTEM

Vision integrated processor / Multi-camera system

APPLICATIONS

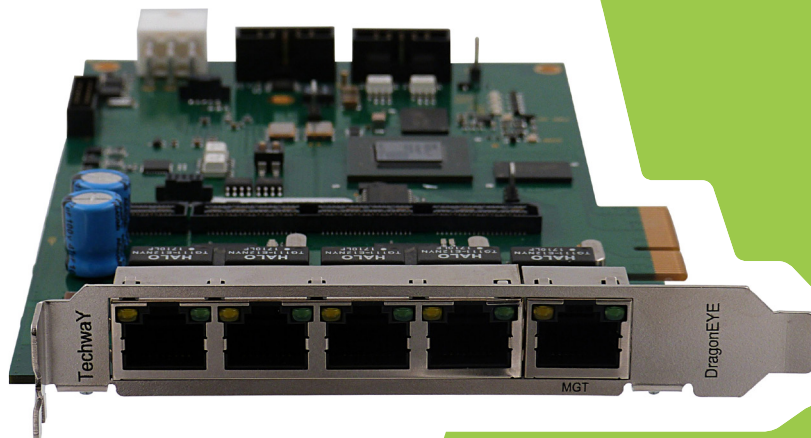
- Multi-camera system
- Laser triangulation
- 3D
- High-speed production line
- High-performance Machine Vision

BENEFITS

- Easy-to-program
- Multi-board
- Versatile
- Cost-effective
- Programmable by user

KEY FEATURES

- Vision processor
- Multi-camera
- Data-acquisition PCIe board
- Image processing modules included
- FPGA based processing
- Real-time processing
- GigE Vision
- SDK & API included
- Xilinx Vivado HLS webpack (free)



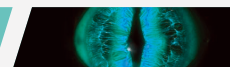
Machine Vision applications process an ever-increasing amount of information that must not be limited by the processing capabilities of computers. To exceed this bandwidth limit, TECHWAY has developed a range of multi-camera acquisition boards equipped with a processor unique of its kind.

Indeed, the DragonEYE series, thanks to its Vision Engine (FPGA technology), allows to unload the computers by offering the possibility to integrate the image pre-processing directly.

This powerful and complex technology is offered in a ready-to-use format accessible to all image developers. It allows them to focus on their applications by pushing the limits of their equipment.

The DragonEYE Lite and the DragonEYE Smart have been specially designed for multi-camera applications.

DragonEYE Lite



The DragonEYE Lite board, thanks to its Vision Engine Xilinx Artix FPGA technology, allows to acquire up to 4 GigE Vision streams and to pre-process each stream in real-time. A series of pre-processing are included in the board and can be easily parameterized by the user.

DragonEYE Smart



The DragonEYE Smart board, with its Vision Engine Xilinx ZYNQ technology, can acquire up to 4 GigE Vision streams. With the ZYNQ (SoC) embedded processor, customization of DragonEYE Smart is made available by developing pre-processing on the board, in C language with the OpenCV library, and take advantage of the FPGA accelerator.

Information and photos subject to change without notice

 INDUSTRY



DragonEYE

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TECHWAY
SIGNAL VISION SYSTEM

SOFTWARE

- Windows & Linux 32/64 bits drivers
- API C++ :
 - PCIe access management
 - Camera management
 - Processing configuration

FIRMWARE

- IP GigE Vision 4 channels
- Xilinx Vivado HLS compliant :
 - Edge detection
 - Convolution
 - Morpho Math
 - Other ...
- Customized solutions (on demand)

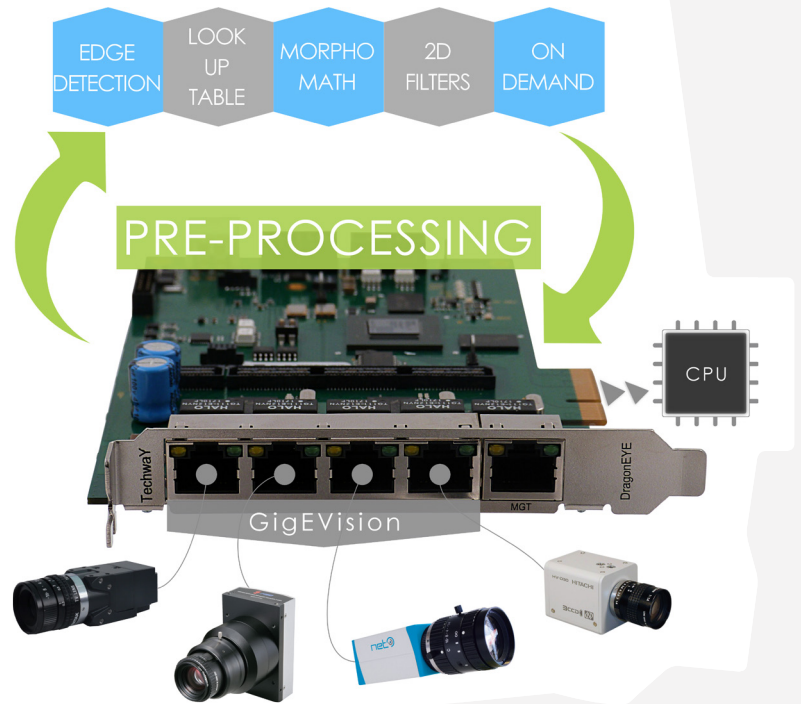
HARDWARE

- Board in PCIe x4 Gen2 format
- 4 GigaEthernet ports
- 4 GPIO
- FPGA Artix 200

ORDERING INFORMATION

- DragonEYE-Lite :
Frame grabber, Artix based
- DragonEYE-Lite-2 :
Frame grabber, Artix based
(extended FPGA)
- DragonEYE-Smart :
Frame grabber, SoC ZYNQ based

DRAGONEYE'S OPERATING PRINCIPLE



DragonEYE boards allow to implement several pre-processing modules, suitable for your application and easy-to-configure.

EASY-TO-USE TOOLS



Xilinx Vivado HLS free webpack

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XILINX

ALLIANCE PROGRAM
CERTIFIED

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