

## INFRARED IMAGING TECHNOLOGIES EXPERTS

### SCD DETECTORS

**BLACKBIRD** 10 $\mu$ m  
1280x1024 - SXGA, MWIR  
Up to 120Hz Full Frame  
**1920x1536** - QXGA, MWIR  
Up to 60Hz Full Frame

**PELICAN-D / KINGLET** 15 $\mu$ m,  
640x512 - VGA, MWIR  
Up to **480Hz** Full Frame

**HERCULES** 15 $\mu$ m  
1280x1024 - SXGA, MWIR  
Up to 120Hz Full Frame

### LYNRED DETECTORS

**DAPHNIS HD** 10 $\mu$ m  
1280x720 - SXGA MWIR  
Up to 120Hz Full Frame

**SCORPIO** 15 $\mu$ m  
640x512 - VGA MWIR / LWIR  
Up to 240Hz Full Frame

## IR CAMERA CORES FOR EASY INTEGRATION

**POWERFUL CORE**  
3x more powerful Than Previous model

**SHARPER IMAGES**  
Up to 1920x1536 resolution

- + Fully customizable
- + Advanced Image Processing
- + Remote control GUI (Windows)

## Thermal imaging Technologies & custom solutions for integrators

**IDA ENGINEERING** proved his expertise in design of complex electronic architectures based on **INTEL FPGA** and embedded software on **TEXAS INSTRUMENTS DSP** (Digital Signal Processors).



## Technical Specifications

**640x512 Detectors** Up to 16 NUC Tables configured in software

**1920x1536 / 1280x1024 Detectors** Up to 4 NUC Tables configured in software

### External Trigger Capabilities

**Trigger Input / Output** 1 Trigger IN / OUT, TTL or LVTTL

### Shutter Interface

**Control Open/Close** 1 Compatible CVI MELLES GRIOT, TTL

### Digital Outputs

**CAMERALINK** 16bits Monochrome, Compatible with DALSA standard Frame Grabbers

**GigE** Compatible with PLEORA Ntx-Mini board for GigE Vision

**USB3.0** 16bits Monochrome, optional board with Cypress FX3 drivers .

### Video Outputs

**SDI** 1 HD-SDI & 3G-SDI Output

**HDMI v1.4** 1 HDMI v1.4 output

**CCIR/RS170** 1 CCIR /RS170 Composite Video 75 Ohms output, factory setting

### Camera Control and Communication

**RS232 / RS422 and USB 2.0** available up to 230Kbauds

### Electrical specifications

**Input voltage** 9V to 36V Wide input voltage

**Power consumption** < 7W (without detector proximity board)

**Operating temperature** -40°C to +85°C

### Embedded Software functions

**Integration Time** Programmable by 1us step (1us to 100ms)

**Frame Rate** Programmable by 1Hz step from 1Hz to 1000Hz.

**Windowing** Programmable detector Full, Half, Quarter and Random window  
Image Flip Horizontally and Flip Vertically

**NUC processing** Fast switching tables, Up to 16 tables in 640x512 full format.

**Bad Pixels Detection** Improved bad pixel detection algorithm (Gain, Offset and RMS noise method)

**Cos4 Correction (Optical Vignetting)** Cos4 Correction Applied or Disable on NUC Table

**External Triggering** Selectable Internal or External synchronization

**AGC** Auto & Manual control  
Advanced AGC algorithm  
Histogram equalization  
Enhancement and Sharpening Details (ESD) function

**Symbologies** Reticle Overlay with movement capabilities  
Text Overlay

**Shutter Control** Command Open/Close

**Stirling Cooler** Power management ON/OFF, with current protection

**IreneAgent** Camera Control Software (Windows) GUI (Graphical User Interface)

**IreneCom** Camera Control Software (Windows) Communication Protocol description

**IreneView USB3.0 & GigE** Image Capture and Viewer Software (Windows)