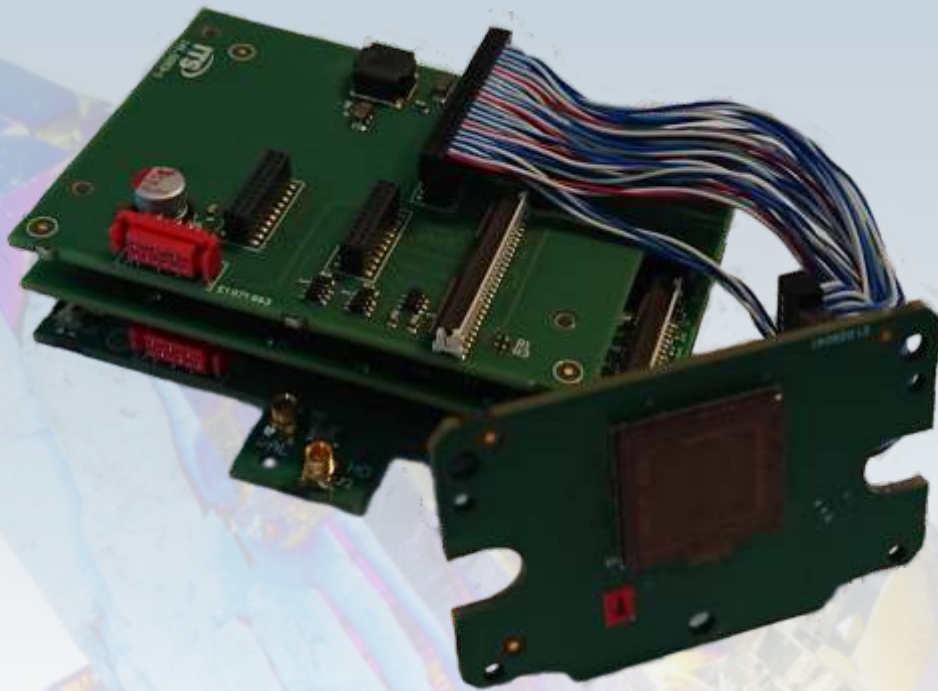


INDIGO



Indigo is a versatile image sensor fusion platform with extreme low latency. Up to triple sensor input, FPGA Video processing and fusion algorithms combined into 1 unit. Ready to be integrated into situational awareness systems, driver vision systems, surveillance systems or a multitude of industrial applications like combined thermal CMOS cameras for thermal inspections. Open to a variety of thermal cores so no vendor lock in to 1 choice.

KEY FEATURES:

- Up to triple sensor fusion
- Extreme low latency
- ShadowBoost for extended dynamic range in darkest scenes
- LLL CMOS and/or digital night vision fused with thermal

APPLICATIONS:

- Driver vision systems
- Local situational awareness systems
- Surveillance platforms
- Degraded visual environment vision systems
- Thermal inspection cameras
- Atonomous systems camera

VERSATILE IMAGE SENSOR FUSION

INDIGO

System basics

Type	Multi sensor OEM board camera platform
Sensors (max 3)	IR, CMOS, ICMOS
Default CMOS (colour or monochrome)	SONY IMX 252, other cores optional
Default IR	Tamarisk 640, other cores optional
Default ICMOS	Pulsatrix HD
Resolutions	CMOS (master) 1920 x 1080 IR 640 x 480 scaled to CMOS ICMOS 1280 x 1024
Dynamic range	10 bit and Shadowboost™
Frame rate	25Hz, 30Hz, 50Hz, 60Hz
Spectral range	400 - 1100nm and LWIR
Detection limit colour CMOS	~0.5 mlux faceplate (3-5 mlux scene F1.8)
Detection limit monochrome CMOS	~100 µlux faceplate (~1mlux scene F1.8)
Detection limit ICMOS	< 1 µlux @2850K faceplate

Input and output

Visible input	8CH LVDS
Thermal input	4CH LVDS
Output	HD-SDI/3G-SDI/4CH LVDS/8CH LVDS/PAL
Interface	UART

Features

Image processing	FPGA based digital enhancement, overlays, white balance, gamma correction
Smart electronic fusion/blending	Visible only, Thermal only, 0-100% Fusion/blending, outlining, black and white white hot fusion with extreme low latency
Thermal modes	Black hot, white hot, false colouring
External sync	Yes
SDK	Available for OEM
Operating system	Linux OS
Virtual Iris™	Advanced protection for image intensifier
ShadowBoost™	Extended dynamic range for CMOS and ICMOS

Dimensions

Board dimensions	Approx. 87x54x35 mm
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Power

Input voltage	12V DC
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Environmental parameters

Operating and storage temperature	-30°C to +75°C, -40°C to +85°C (Without ICMOS) -20°C to +60°C, -35°C to +65°C (Including ICMOS)
Shock	MILSPEC design
Vibrations	MILSPEC design

Specifications are subject to change without notice

VERSATILE IMAGE SENSOR FUSION