VOX Imager BB (Broad Band)

Broadband Uncooled IR Video Core

Commercial Applications

General Description

Designed for a wide range of applications, with a unique spectral range (3-14µm), SCD's VOx Imager BB video engine presents flexible & easy to deploy thermal imaging solution.

Applications

- Thermography
- Gas imaging
- Flame imaging
- Metallurgy processes
- Mineral mapping
- Diagnostics of chemical reactions
- Furnace and Boiler inspection
- Laser beam profiling

Main Features

- Detector Technology – VOx Microbolometer
- Detector resolution and pitch – 640x480 pixels, 17 µm
- Waveband 3 to 14 µm
- Dual intra-scene dynamic ranges – 50OC and 250OC
- Exceptional image quality – NETD < 35mK @ F/1,30Hz
- Low Power Consumption – < 1.2 Watt
- Main digital video output – BT.656 / Parallel LVCMOS 8/14 bit
- Second digital video output – Camera Link
- TEC-less and shutter less operation
- Optional shutter
- Time to Image – < 3 seconds
- Light-weight – 43 grams
- Small from factor – 31x31x29.7mm

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Typical Specifications

Parameter	Value
System	Uncooled LWIR Thermal Imager
Detector format	VGA, 640x480 pixel count
Detector pitch	17 µm
Detector material	VOx Microbolometer
Detector package	Ceramic
Spectral range	3-14 µm
Sensitivity (30 Hz, f/1)	< 35 mK
Dual Dynamic range	5°C or 25°C, @ F#1
Frame rate	25/30 Hz (<9Hz version available)
Time to image	< 3 sec
Latency	Sub frame
Supply Voltage	5V
Power consumption	< 1.2 watt
TEC-Less operation	Yes
Shutter-Less operation	Yes
Video output 1 (LVCMOS)	8/14 bit Parallel, Glueless VGA AMOLED, BT.656
Video output 2 (LVDS)	Camera Link, simultaneously with the parallel output
Digital zoom	X2, X4
Polarity invert	Yes
Image flip	Yes (horizontal and vertical)
Discrete button inputs	6
Overlay graphics	Text and Bitmap
Operation temperature	-40°C to +71°C
Storage temperature	-40°C to +85°C
Shock	500G @ 0.5msec, 500 shocks per axis and direction ½ sine
Size	31x31x29.7 mm
Weight	43 grams

Specifications are subject to changes without further notice

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