

# SEQUOYAH CORE

camera core component  
for system integration

**Flexible full colour camera core**  
**High resolution, full HD**  
**Linux platform for camera controls**  
**high dynamic range**  
**HD-SDI and PAL output**

Sequoiah Core is a board camera unit especially designed for integration. Whether in need of a camera for Local Situational Awareness, a remote weapon station, surveillance system or fusion sensor suite, Sequoiah Core is your solution. Designed to integrate overlays, suitable to be bore sighted, full access to all camera functions through combined FPGA and Linux driven system. High dynamic range, integrated ShadowBoost™ technology and high resolution. Combined with ITS' flexible in-design support this camera core can be implemented into any vehicle camera system, C4ISR system or RWS. This camera is the most flexible solution for your system integration. With good low light level performance, it also offers colour video feeds down to quarter-moon situations, paired with powerful video processing.

## Key features

- **ShadowBoost™** technology for enhanced dynamic range
- High resolution
- Full Camera control
- Flexible platform

## Applications

- Vehicle camera systems
- Surveillance systems
- Remote Weapon Stations
- ISTAR sensor platforms



# ITS

**Innovative Technical Solutions BV**

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NIGHT VISION THERMAL IMAGING CAMERA DEVELOPMENT

EXTRAORDINARY CAMERA SYSTEMS

camera core component  
for system integration

# SEQUOYAH CORE

## System basics

Type	Full colour CMOS camera core
Sensor	Sony IMX252LQR-C Pregius, global shutter
Optical format	1/1.8 inch
Resolution	1920 x 1080 (3.15 Mpxls active pixels)
Dynamic range	10 bit and <b>ShadowBoost™</b>
Spectral range	400 – 1000 nm
Frame rate	Digital: max 151 Hz; Analog: PAL 25 Hz
Detection limit	0.5 mLux @ 2850 K, face plate illumination

## Input and output

Output	HD-SDI (BT1120), PAL (BT656), LVDS, user specifiable
Interface	RS232

## Features

Image processing	Powerful, FPGA based, digital image enhancement: Overlays, white balance, gamma correction, digital zoom, brightness, defect pixel correction, etc. <b>ShadowBoost™</b> for improved visibility of dark areas, <b>EASE™</b> for live edge enhancement
Camera control	Gain, integration time, exposure, sync, iris, set boresight, etc.
Operating System	Linux OS, full access to all camera functions, adjustable and expandable features via software

## Physical dimensions

Size	Sensorboard: 44 x 44 mm; mainboard 83x52mm
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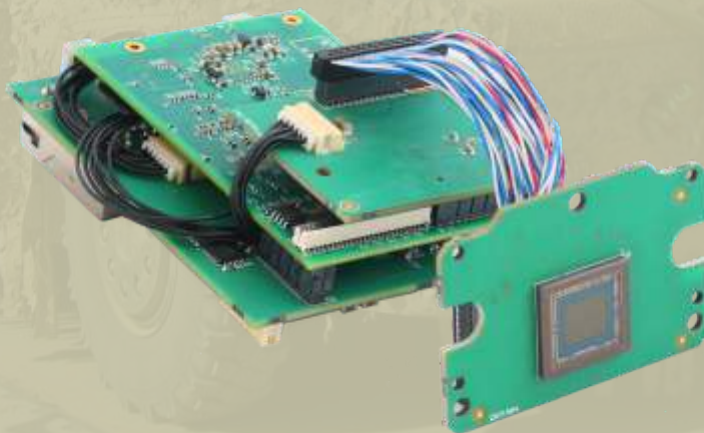
## Power

Input voltage	12 Volt DC, ~5 Watt
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## Environmental parameters

Operating and storage temperature	-30°C to +75°C, -40°C to +85°C
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ITS offers full technical and mechanical support  
Output formats and connectors on request  
Preliminary specifications



Designs and specifications are subject to change without notice.



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