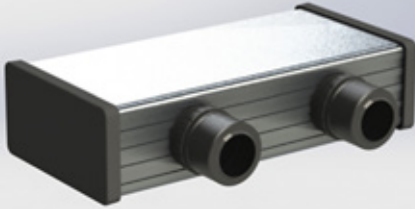




# Microteam

ELECTRONICS • AUTOMATION • ROBOTICS • AUTOMOTIVE



## MACHINE VISION MADE EASY

### THE ONE-BOX APPROACH

Machine vision has been regarded as complicated and prohibitively expensive for many applications. The Squint camera is for those who want their machine vision the other way round – clean, simple and robust.

### THE BENEFITS

The Squint is a camera and an industrial-grade computer in a single enclosure. It is:

- A true one-box solution easily integrated into machinery
- Standalone system – a host computer is not required
- An open platform programmable using standard Linux development tools
- Either mono or stereo vision camera
- An industrial grade component for professional use
- Tailorable hardware to meet your specific needs
- Affordable – a fraction of the cost of a conventional machine vision setup

As a single unit, the Squint does without external PCs, frame grabbers and expensive, cumbersome cabling. It is perfect for robotic applications, welding and machining stations etc., or simply as a remote camera with I/O synchronized to the video stream.

The Squint can be programmed using standard tools and libraries without any vendor-specific tools. Pick your language and framework of choice: C, C++, Python, etc. Alternatively ask us to develop the application. Industry-standard libraries like OpenCV make it easy to implement even relatively complex machine vision algorithms.



## APPLICATION AREAS

The Squint is particularly well suited for various industrial use cases:


- Object recognition and distance measurement for autonomous robots
- Quality inspection for welding, cutting etc. with single pass/fail output
- Positioning of the workpiece for machining, driving the actuators directly

## FEATURES

- 1 or 2 CMOS image sensors
- Resolution selectable from 720 x 480 or 1920 x 1080 pixels
  - Some sensors with global shutter for undistorted imaging of moving objects
- Color or monochrome versions available
- 30 to 60 fps depending on sensor
- Wide variety of optics because of the universal C and CS mounts
- Quad-core Cortex-A9 processor with H.264 encoder hardware
- Gigabit Ethernet
- 4 isolated general purpose inputs
- The states of the inputs can be embedded in the image stream
- 4 outputs
- Controllable from the user SW, e.g. as a pass/fail output
- Optional features:
  - Stereo audio in, synchronized to the image stream
  - CAN bus
  - RS485 bus
  - FPGA hardware accelerator
- Available as an off-the-shelf product or as a tailored OEM component

## WHAT'S YOUR NEED?

Microteam has wide experience in real-time signal processing and development of embedded systems since 1981. For more information about references and prices please contact [sales@microteam.fi](mailto:sales@microteam.fi)



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