

# The Oclea Universal Evaluation Kit

Discover how the Oclea vision components can give you a head start in developing your products. The Oclea Evaluation Kit (EVK) makes evaluating and developing smart camera products using Oclea System on Modules (SoMs) simple. Includes hardware, SDK, source code examples, and development support.

The EVK supports all of our Oclea SoMs, regardless of form factor, and provides a wealth of easy-to-access connectors to all of the SoM's functionality.

## The Oclea™ Software Development Kit (SDK)

Teknique's royalty-free, flexible Software Development Kit (SDK) provides a Yocto Project Linux-based framework and an environment based on GStreamer and includes pre-defined demonstration applications that allow your software team to start immediate development.

The Oclea™ software platform also includes integrations with leading CNN/DNN frameworks, 3rd party analytics, and cloud service providers.

The SDK also provides a rich set of APIs that enable a range of product customization options.

## What else is needed?

For download and use of the Oclea™ SDK, a signed & executed Software Licence Agreement (SLA) is required. A request for signing will be sent to the email used to purchase the EVK, and an account on the Oclea™ support portal will be generated for further communication.

## Highlights

- Simplifies development of camera products using the Oclea™ SoMs and SDK
- Simple and effective hardware debugging environment
- Provides access to all ports and peripherals for all Oclea™ SoM form factors
- Easy to use large A5 form factor



**MAIN CONNECTOR**

SoM Board-To-Board Connector

**HIGH SPEED PROTOCOL INTERFACES**

- 10/100/1000MB Ethernet Connector
- USB 2.0 Host with 4 Port Hub
- Micro and Regular SD Card Connectors

**POWER & TEST**

- Battery Connector CR2032 for RTC Backup
- Onboard 5V and 3V3 Power Rails for Hardware Development and Debugging
- 5A Range High Side Current Probe on SoM
- 5V Power Supply for System Power Measurement

**VIDEO INPUT INTERFACE**

- Oclea™ Hydra Image Sensor Connector

**VIDEO OUTPUT INTERFACE**

- Full Size HDMI Output
- RCA Composite CVBS Output
- VOUT Header
- MIPI/DSI Out Header

**AUDIO INTERFACE**

- Stereo 48KHz Audio Codec with Line IN/OUT, Headphone, MIC, Mono Speaker Connection

**DEBUG & LOWER SPEED INTERFACES**

- USB Slave Serial Debug Port
- JTAG Header
- IO Expander 12C 16 port TCA9539PWR and IO Debug Headers
- Two (2) RS232 UART ports
- One (1) RS485 port
- PIR Sensor Input Connector
- Infrared IR Receiver TSOP34838
- LED Driver AL8860 1A with Dimming

**What's in the box**

The Oclea Universal Evaluation Kit includes:

- Oclea A5 Breakout Board
- Oclea CV22  $\mu$ SoM
- Oclea CV25  $\mu$ SoM
- Oclea S5L  $\mu$ SoM
- Oclea IMX327 Image Sensor
- Oclea IMX415 Image Sensor
- Oclea-FRAMOS Pixelmate Adapter
- Framos IMX412 Image Sensor
- Selection of Wide and Narrow Angle Lenses
- Oclea ZEUS Camera
- All cables required to power and program
- Quickstart Guide
- Oclea SDK (Download)
- Oclea Support Portal Assistance
- Schematics and Reference Designs



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