

ATOMAS-DUO-HDMI

OEM IP Video

Multi-Purpose 4K IP Camera Video Module

The ATOMAS-DUO-HDMI encoder platform is a feature-rich IP camera video encoder solution for a wide range of single or multi camera designs. The compact form factor of the ATOMAS-DUO-HDMI platform makes it especially well suited for integration to dual camera systems with a primary HDMI zoom block and a secondary video source (digital or analog) such as a thermal camera.



Features

- Direct connect to SONY 4K zoom blocks (HDMI)
- Support for a secondary video input / camera
- H.265 (HEVC), H.264 and MJPEG video compression
- Max 4K@30FPS (3840x2160) + Max 1080p@30FPS
- Full zoom block control (VISCA, etc)
- Onvif Profile T
- 7VDC to 17VDC power input range
- Optional on-board PoE support
- Optional Wi-Fi support

One platform for single and multi camera systems.

The ATOMAS-DUO-HDMI platform is designed for direct connection to the leading 4K zoom blocks from SONY and supports other types of 4K hdmi sources. It is designed for simultaneous support of a secondary input of digital or analog / composite format, such as a thermal camera. Both cameras are processed simultaneously and published via Onvif and other IP API's for streaming / recording.



The latest video technology for optimal performance.

The ATOMAS-DUO-HDMI platform features a powerful video codec engine capable of generating multiple H.265 (HEVC) IP video streams at different quality settings. It can manage a primary video input at 4K UHD resolution at 30fps; in dual input mode it can manage a secondary input at up to Full HD (1080p) at 30fps.



Benefit from a modular approach to camera design.

The ATOMAS-DUO-HDMI platform offers multiple options, add-on modules and accessories designed to allow you to leverage the same powerful video encoder platform in all of your single input and multi input camera systems.

Choose your options

- Secondary video input
- Wi-Fi connectivity
- 802.3af power-over-ethernet
- Thermal dissipation / heatsink
- Cables & connectivity kit
- Custom chassis

Extend using an add-on module



ATOMAS-MINI-BOSON-ADAPT
Provides direct connect to FLIR Boson™ 320 / 640 (60Hz) thermal camera on secondary digital video input of the ATOMAS-DUO.



ATOMAS-QUADSD
Enables four (4) composite SD video cameras to be used on the secondary digital video input of the ATOMAS-DUO.

Select a 4K zoom block



SONY FCB-ER8530 / ER8550
Similar in size to the FCB-EV series, SONY's full HD line of zoom blocks, it offers an easy interchangeable solution.

1/2.5-type Exmor R CMOS Sensor
Quad Full HD
20x Optical Zoom



SONY FCB-ES8230
Using a 1.0-type sensor with large light receiving area, it produces clear, noiseless, high-definition images and offers mechanical optical stabilization.

1.0-type Exmor R CMOS Sensor
Quad Full HD
12x Optical Zoom

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Standard / Integrated Interfaces

Network	1 x 10/100/1000 Base-T Ethernet (GbE) * optional Wi-Fi + Bluetooth
I/O & Audio	2 x I/O Inputs, 1 x I/O Output 3 x PWM GPIO 2 x Serial Ports (UART + RS422/485) 1 x i2c for external board control On-board microSD socket 2-ch Audio Line In + 2-ch Audio Line Out
Primary Video In	30-pin HDMI interface (KEL USL00-30L) * Matches SONY specifications or, micro HDMI interface (MOLEX 46765-2001)
Secondary Video In	30-pin multi-purpose interface (KEL USL00-30L) * Supports multiple digital video formats * Compatible with FLIR Boson / QuadSD modules or, Composite video input interface
Other	3.3 VDC power output (max. 100mA) 5 VDC power output (max. 500mA)

Video Performance

Video Resolution	Supports sensor inputs at up to 4K UHD
Video Compression	H.265 (HEVC) / H.264 (MPEG-4 AVC) / MJPEG
Video Latency	Can reach less than 120ms latency
Image Processing	2D/3D noise reduction Edge enhancement Frame difference motion detection Privacy masks And more...

System

Operating System	Embedded Linux
HW Watchdog	Auto-boot, OS supervision, temperature monitoring, software monitoring
Other	Realtime Clock (RTC) & Temperature Sensor

Storage

Internal	1GB NAND Flash
External	External Storage via microSD

Software

Web GUI	System configuration and maintenance Live video and PTZ control Cross-browser support Smartphone and tablet support
Programming Interface	ION API, ONVIF Profile T, Genetec API
System Monitoring	Video signal, storage medium, temperature, memory, CPU, network
Media Recording	Recorded audio/video to SD/MMC
Software Update	Fault-tolerant, remote accessible
Alarm Triggers	I/O input, motion detection, system monitor
PTZ Control	Full PTZ implementation Can interface to any PTZ controller (i2c, UART) Programmable preset tours User-defined custom commands
Other Features	Email notifications (on event or schedule) Text overlay OEM rebranding / customization

Electrical / Mechanical / Environmental

Dimensions	52 mm x 60 mm x 8mm (WxDxH)
Power Input	7VDC to 17VDC (with VBAT for RTC) with, optional on-board PoE (802.3af)
Operating Temp.	Dependent on customer mechanical design * Most components are -40C to 85C (Tcase)
COO	Designed and manufactured in Canada
Warranty	2 Years Standard

DIMENSIONS

