

ATOMAS-MINI-DUAL

OEM IP Video

Dual Camera HD IP Video Encoder Module

The ATOMAS-MINI-DUAL encoder module is a feature-rich IP video encoder designed for a wide range of dual camera designs. The compact dual input form factor of the ATOMAS-MINI-DUAL makes it especially well suited for integration to dual camera systems with a primary LVDS zoom block and a secondary video source (digital or analog) such as a thermal camera.



Features

- Glueless connection to SONY FCB zoom blocks
- Support for a secondary video input / camera
- High profile H.264 video compression
- IP video streaming at up to 1080p60
- Local recording to SD card
- Onvif Profile S compliant
- 8VDC to 36VDC wide power input range
- Optional sensors: gyro, compass, accelerometer,...

Simultaneous Dual Camera Support

The ATOMAS-MINI-DUAL is designed for direct connection to SONY's line of FCB zoom camera blocks, such as the FCB-EV7520, as a primary video input with simultaneous support of a secondary input of digital or analog format, such as a thermal camera. Both cameras are processed simultaneously and published via Onvif and other IP API's for streaming / recording.



High Performance Video Engine

The ATOMAS-MINI-DUAL features a powerful video codec engine capable of generating multiple H.264 IP video streams at different quality settings. In single input mode, it can generate HD streams at 1080p 60fps; in dual input mode it can generate streams at up to 1080p 30fps for each input.



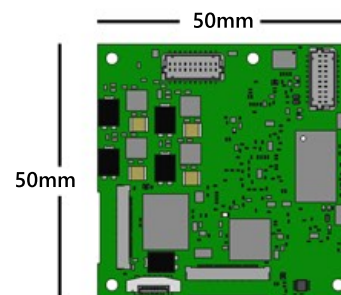
Full Embedded Software Stack

The ATOMAS-MINI-DUAL comes with an extensive list of embedded software functions including: RTSP streaming, administrative web interface, Onvif Profile S, local recording, mobile viewer for smartphones and tablets.

Target Applications

- Video surveillance cameras
- Thermal / visible camera systems
- Advanced PTZ camera systems
- UAV / military applications
- Robotics applications

DIMENSIONS



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Standard / Integrated Interfaces

Network	1 x 10/100 Base-T Ethernet
I/O & Audio	2 x Dry Contact I/O Inputs, 1 x I/O Output 3 x PWM GPIO 1 x Board Reset Signal 1 x Mobile Host Storage Controller (SD/MMC) 1 x 2-ch Audio Line In / 2-ch Audio Line Out
Primary Video Input	30-pin LVDS interface (KEL USL00-30L) * Matches SONY FCB specifications

Video Performance

Video Resolution	Supports sensor inputs at up to 1080p
Video Compression	H.264/MPEG-4 AVC (up to high profile) MJPEG
H.264 Performance	Total D1@390 fps or Full HD 1080p@65 fps Examples: 1 x 1080p60 fps + 1 x D1 @ 30 fps 2 x 1080p30 fps + 1 x D1 @ 30 fps
Video Latency	Can reach less than 120ms latency
Image Processing	2D/3D noise reduction Edge enhancement Frame difference motion detection Privacy masks

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 SD/MMC

Protocols

Networking	IPv4/v6, UDP, TCP, IGMP, ARP, DHCP, DNS, NTP
Streaming	RTSP, RTP, HTTP, Web Sockets
Management	HTTP, HTTPS, Bonjour, ONVIF, PSIA, ION API, SNMP, SMTP
Security	Basic / Digest Authentication, SSL

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 S
System Monitoring	Video signal, storage medium, temperature, memory, CPU, network
Media Recording	Recorded ASF audio/video to SD/MMC
Software Update	Fault-tolerant, remote accessible
Alarm Triggers	I/O input, motion detection, system monitor
PTZ Control	Full Pelco D implementation Can interface to PTZ controller (UART) Programmable preset tours User-defined custom commands
Other Features	Email notifications (on event or schedule) Text overlay OEM rebranding / customization

Mechanical / Environmental

Dimensions	50 mm x 50 mm
Power Input	8VDC to 36VDC
Operating Temp.	Dependent on customer mechanical design * All components are -40C to 85C (Tcase)
Warranty	2 Years Standard

Part Numbers

ATOMAS-MINI-DUAL-DC1

