

ATOMAS Mini LVDS

OEM IP Video

Full HD 1080p60 H.264 IP Encoder Module

The ATOMAS Mini encoder module is a feature-rich IP video encoder designed for a wide range of OEM camera designs. The unique compact form factor of the ATOMAS Mini LVDS makes it especially well suited for integration to standard LVDS zoom camera blocks.



Features

- Glueless connection to SONY FCB Zoom blocks
- High profile H.264 video compression
- IP video streaming at up to 1080p60
- Local recording to SD card
- Onvif Profile S compliant
- Web-based administrative user interface
- 7VDC to 12VDC power input range
- Optional microSD break-out module
- Low latency IP video streaming
- On-board RTC and hardware watchdog

Direct-Connect to Sony FCB Zoom Blocks

The ATOMAS Mini LVDS is designed for direct connection to SONY's line of FCB zoom camera blocks, such as the FCB-EV7500, with a form factor allowing for easy integration on the back or the side of the camera block. The video interface via LVDS provides for the highest level of digital video quality while maintaining ease of integration to your mechanical design.



High Performance Video Engine

The ATOMAS Mini LVDS features a powerful video codec engine capable of generating multiple H.264 IP video streams at different quality settings. For instance, in dual streaming, it can generate a primary stream at full HD (1080p60) as well as a secondary stream at D1 30 FPS - and with a latency of less than 120ms.



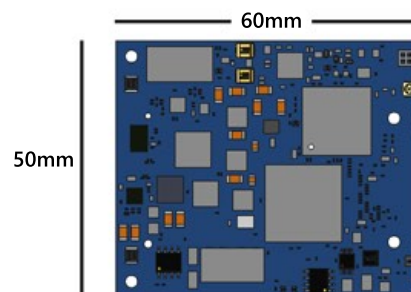
Full Embedded Software Stack

The ATOMAS Mini LVDS 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
- Industrial image processing
- Handheld or mobile devices
- UAV / military applications

DIMENSIONS



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Standard / Integrated Interfaces

Network	1 x 10/100 Base-T Ethernet Optional WIFI support
Video Interface	30-pin LVDS interface (KEL USL00-30L) * Matches SONY FCB specifications
Sensor Support	FCB: EH3150, EH6300, EH6500, EV5300, EV5500, EV7100, EV7500, EV7520
Serial Port	1 x UART, RS-485/422 * Software accessible * Interface possible to PTZ controller
I/O & Audio	2 x Dry Input I/O, 1 x Dry Output I/O 1 x Board Reset Signal 1 x Dual Color Status LED Signal 1 x Mobile Host Storage Controller (SD/MMC) 1 x 2-ch Audio Line In / 2-ch Audio Line Out

Video Performance

Video Resolution	Supports sensor inputs at up to 12 megapixels
Video Compression	H.264/MPEG-4 AVC (up to high profile) MPEG4 Part 2 JPEG
Still Images	Still image capture at up to 12 megapixels
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	Lens distortion correction Motion adaptive deinterlacing Arbitrary image resizing and scaling ratio 2D/3D noise reduction Edge enhancement Frame difference motion detection Privacy masks ROI based video compression

System

Operating System	Linux
HW Watchdog	Auto-boot, OS supervision, temperature monitoring, software monitoring
Other	Realtime Clock (RTC) Temperature Sensor Optional gyroscope/accelerometer/compass

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 60 mm
Power Input	7VDC to 12VDC
Operating Temp.	-40C to 85C (case temperature)
Warranty	2 Years Standard