

PicoNV OEM Video Module

Rapid Integration Video Encoder and Payload Platform

- Low latency 1080p Video Compression
- Supports multiple cameras (HD, thermal, 20+MP, block)
- User configurations – customizability and programmability
- Onboard configuration and streaming software

FEATURES

PicoNV is a low cost, rapid integration video platform which incorporates video encoding, flexible interfaces, and familiarity of programming environments.

Demanding user configurations such as a 3 camera configuration with high resolution snapshot, thermal, and global shutter HD board or block cameras can be created with easy to program Python and video processing with hardware accelerated OpenCV code (or simply hook into our existing easy to use configuration interface). Combine it with one of our Picoradio or Picoradio NX links for a flexible video downlink solution.

Variety of Camera Options

20MP global shutter, and higher resolution cameras with digital zoom can also be easily supported. It can support single and dual camera configurations such as Boson thermal+HD, 1080p global shutter HD board camera, 1080p / 720p global shutter optical zoom block cameras, and even 3+ camera configurations and more.

Easy to use Software

Preconfigured software will broadcast RTP video to QgroundControl and Mission Planner, with easy browser interface configurability. More ready to go configurations are on the way. User code can plug into our configuration interface, user code protection is also possible, custom support is available.

Developer Friendly

Native development is also supported with a familiar Linux interface (the development cycle can also be self-hosted with monitor output!). Dedicated crypto authentication chip available for optional software protection.

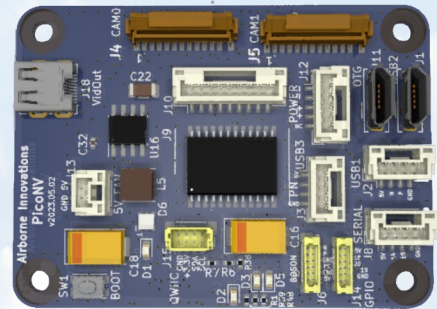
A variety of user interfaces are available for custom applications.

INTERFACES

- 2 MIPI-CSI camera interfaces (1x 4-lane, 1x 2-lane)
- 1x FLIR Boson USB interface
- Wide input power (7.5-28Vin)
- 10/100/1000 Mbit ethernet interface
- 100/1000 Mbit switches available for user configurations
- 5x USB 2.0 interfaces total (3x latching connectors, 1 Dev USB, 1 OTG)
- 1x Dedicated Serial UART port
- 3x GPIO / 1 GPIO + 1x secondary serial UART
- IO Expansion port (QWIIC / I2C), allows for serial, payload control, display output, and much more
- Onboard Flash
- MicroSD or USB storage options
- Display / monitor output

NDAA Compliant

PicoNV actual size



Dimensions: 41x54mm

Example Camera Options:

- 1080p Global Shutter board camera (M12 lens) for FPV type applications
- DVI input (supports 720p/1080p60 input)
- 1080p block camera
- FLIR Boson USB
- 20MP Global Shutter
- 16MP Video+Snapshot with windowed zoom
- Multiple USB remote cameras
- Micro lens HD cameras

APPLICATIONS

- FPV Addon camera
- Custom Payloads
- External 720p/1080p video source
- Camera Gimbals
- POV / Body Worn
- Medical
- Industrial
- Broadcast
- Security
- R&D
- Flight Testing
- Infrastructure
- Sports
- Vehicle
- Scientific
- Surveillance

INFO

- Product page, manual, pricing, and ordering

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