

RaptorEye II Ultra Small Form Factor Aerial Imaging Payload

Rapid realtime image and metadata transmission and storage
Ultra compact, low power, light weight, Intel Atom processor
Enabling technology for digital imaging from small platforms

Dual Gigabit Ethernet interface
Dual analog video inputs
Multiple digital and analog camera support

Expresscard interface supports removable storage for very fast write speeds and large capacity (currently up to 128 GB available)

Optional integrated 1 Watt 2.4 Ghz broadband radio (other bands available)

Available as aerial imaging system or open platform general purpose payload for rapid imaging (i.e. SAR, multispectral, visible, IR), data acquisition, and onboard storage

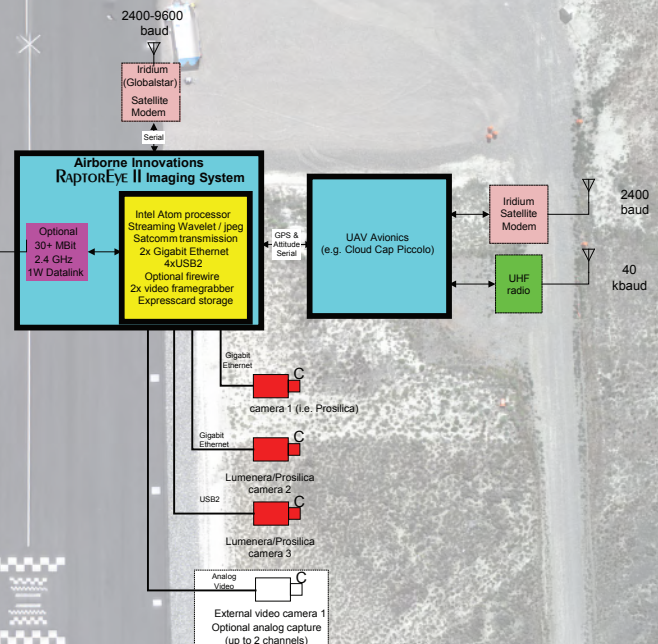
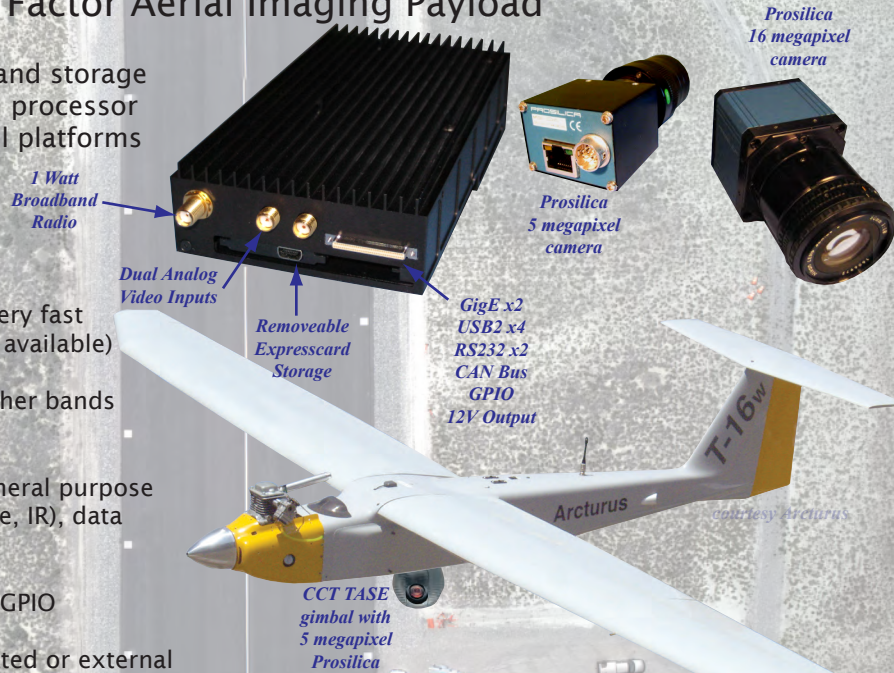
RS232 x 2, CAN bus, USB2 x 4, Camera power outputs, GPIO

High Performance Imaging System with optional integrated or external UHF broadband datalink, transmits high performance streaming multi megapixel large format images and metadata, also supports low bandwidth Iridium and other satcomm image transmission for beyond line of sight missions.

RaptorEye II is a UAV imaging solution capable of transmitting multi megapixel rapid streaming images over an optional integrated 1 Watt broadband 900 MHz / 2.4 GHz link (compatible with Microhard VIP datalinks), and over satcomm systems such as Iridium. It integrates well with the Cloud Cap Piccolo avionics, or can function standalone. It can provide rapid compression, transmission, and onboard archiving of imagery from multiple high performance digital cameras optionally mounted in the Cloud Cap TASE family of gimbals.

Supports 2 to 16 megapixel families of Prosilica, Lumenera, and other user configurable cameras
Compression and resolution selectable so the user can trade off quality and transmission time

- 4 USB2, Firewire inputs possible
- Internal 1 Watt broadband datalink (removable)
- Expresscard for up to 128GB removable onboard storage, internal SATA port for expansion
- Iridium satcomm image transmission option
- Wavelet / JPEG / Raw / TIFF image formats
- Integrated support for the Prosilica and Lumenera families of multi megapixel cameras, other USB2/gigabit ethernet/firewire/analog cameras possible
- Hardware and flight plan based image acquisition triggering
- High computing performance, scalable to available power
- Optional firewire
- High compression performance capable of supporting realtime image downlink of very large format images (i.e. 2 to 16 megapixel)
- User customizable camera support
- Cloud Cap Piccolo Ready
- Integrates with Cloud Cap TASE gimbal family
- Piccolo / NMEA metadata
- Supports satcomm (Iridium, Inmarsat, others) or other transparent serial or ethernet UHF datalinks



Preliminary Specifications:

Power: 9-36V input, processor power scalable to requirements, configurations available as low as 5W, up to 5W avg / 7W peak at highest performance (Atom 1.6GHz)
Optional internal broadband radio adds up to ~12W
Weight: ~280 grams with integrated 30 megabit radio, ~200 grams without radio
Size: 1.2"x3.1"x5.9" (30 x 79 x 150mm) without radio

Some of our customers:



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