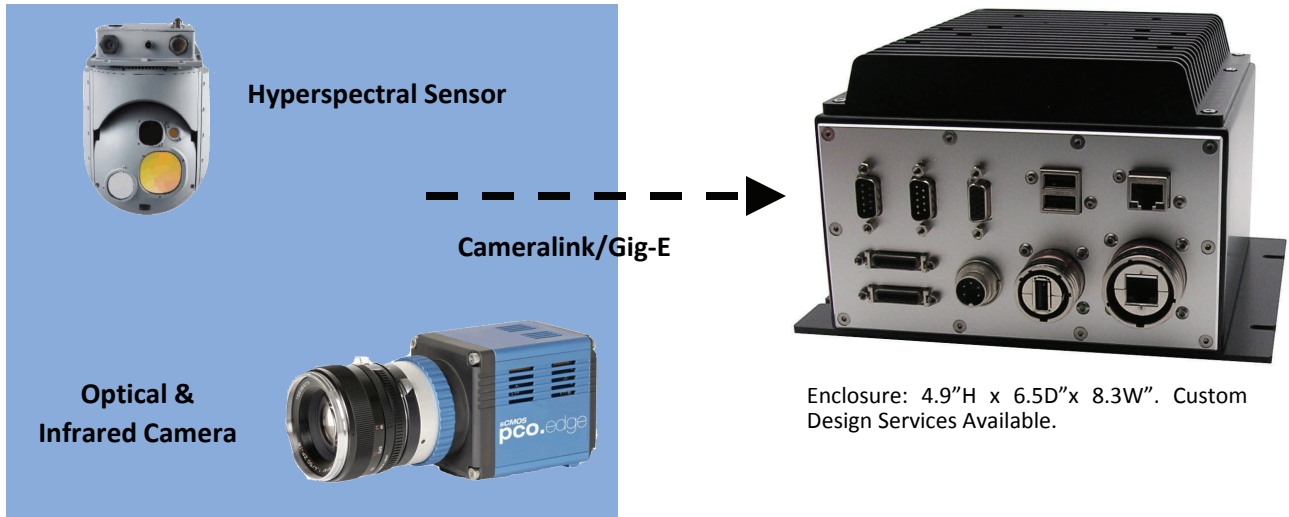




Hyperspectral Imaging and Vision Applications



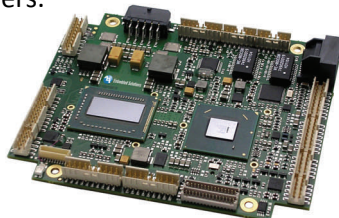
Hyperspectral Imaging

Data cube acquisition and analysis is integral to effective hyperspectral imaging. Hyperspectral sensors collect information as a set of 'images'. Each image represents a range of the electromagnetic spectrum and is also known as a spectral band. These 'images' are then combined and form a three-dimensional hyperspectral data cube for processing and analysis.

Because hyperspectral imaging involves high-speed scanning across a wide or continuous field of view, large data files (often several gigabytes in size) need to be collected and managed.

Computer Vision and Framegrabbers

For applications other than hyperspectral such as Infrared or regular computer vision, a tremendous amount of data-gathering and analysis is still the norm via a number of pathways including multi-port Gig-E, Cameralink and high-definition framegrabbers.



**ADLQM67PC Intel Core i7
PCIe/104 Performance**

The Solution

ADL Embedded Solutions' Intel® Core™ i7-based platform handles these tasks effortlessly with dual and quad Intel Core i7 processing options coupled with an ADLPS104 150W ATX power supply, SATA SSD capable of write speeds in excess of 500MB/s, and ecosystem of compatible PCIe/104 cameralink, Gig-E, and framegrabbing options.

As well, ADL Embedded Solutions' team of system integration engineers stand ready to work closely with customers to develop a custom solutions using state-of-the-art Solidworks 3D CAD workstations, quickturn system prototyping, and follow-on production services.

Platform Hardware Options and Features

- Intel Core i7 Dual and Quad Processors
- 2-4 Cameralink Ports
- 1-4 Gig-E Ports
- AMP, Active Silicon, and EPIC Framegrabbers
- -40°C to +50°C Temperature Range
- -40°C to +85°C Chassis Solutions Available with Conduction Cooling