

Lightning

MISSION READY SYSTEMS – REINVENTED

Abaco's *Lightning* platform is designed to address the three major pain points our customers have told us about.

- > The time and cost of developing advanced systems with unique requirements
- > The time and cost of configuring modern systems with legacy or other fixed interfaces
- > The time and cost of implementing new technologies to upgrade system performance

In response, we developed the *Lightning* platform. Mission ready systems based on the *Lightning* platform minimize cost of development and time-to-deployment. Highly flexible in terms of the applications they can address, *Lightning* systems are designed to be deliverable in weeks – not months.

Lightning-based systems are inherently modular. A *Lightning*-based system will, for example, typically include a processor module, a graphics module and an I/O module. Because they're modular, they're also highly scalable and easily upgradable.

Where *Lightning* is really different, however, is in the I/O module. Abaco's patented, unique MMS technology allows virtually any combination or complexity of I/O to be simply configured – from

off-the-shelf 'tiles'. Think "mix 'n' match". This can eliminate substantial NRE and development time.

Lightning-based systems also share common dimensions, footprints and connector styles, minimizing design efforts between system developments.

And: *Lightning*-based systems benefit from a rigorous qualification process based on military standards. That means they can be ready for deployment the day they're delivered.

Lightning delivers on the promise of COTS: leading edge commercial technologies, delivered at speed. Think of *Lightning* as mission ready systems – reinvented.

Lightning Advantages

- > Substantially reduced leadtimes
- > "Mix 'n' match" I/O
- > Modular, scalable, upgradable
- > Common dimensions, footprint, connectors
- > Cost-effective
- > Minimal NRE
- > Pre-qualified



MCS1000 Mission- or Display Computer

Ideal for highly demanding I/O-loaded applications where there are multiple target platforms or unique interfaces required on the computing solution. Examples include avionics-rich mission compute and display applications such as sensor fusion/processing.

- > Intel® Xeon® E3 processor
- > CoreAVI (or AMD) E8860 GPU
- > Up to 16 GBytes of DDR4 SDRAM
- > Rich choice of I/O
- > XMC site for further I/O expansion
- > AXIS ImageFlex support
- > Optional 1TB SSD storage



GVC2000 High Performance Display Computer

Ideal for applications where top end data- or display processing is required, with complex or unique I/O needs. Examples include degraded visual environments, complex scene rendering, or driving multiple independent displays all requiring extensive GPU processing capabilities.

- > 12-core Intel® Xeon® D processor
- > 32 GBytes of RAM
- > NVIDIA® Maxwell™ GPU capable of up to 1.2 TeraFLOPS
- > Rich choice of I/O
- > AXIS ImageFlex support
- > AI-enabled (supports NVIDIA Deep Learning SDK)
- > Optional 1TB SSD storage



AXIS ImageFlex

Both the MCS1000 and GVC2000 support AXIS ImageFlex, an innovative software tool designed to significantly reduce the time, effort and expense involved in engineering and deploying real-time image processing and image visualization electro-optical/infrared (EO/IR) applications.



WE INNOVATE. WE DELIVER. YOU SUCCEED.

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