

NEWS RELEASE

For Immediate Release



DATE: February 25, 2009

CONTACT: Marketing
Jim Renehan, Trenton Systems Inc.
(770) 287-3123
jirenehan@TrentonSystems.com

Sales
Dwight Justice, Trenton Systems Inc.
(770) 287-3123
djustice@TrentonSystems.com

TRENTON Introduces a Four-Board Computer System

Trenton's Four-Board Industrial Computer System Features A Robust Chassis Design with Hot-Swap Drives and Fans with High-Performance SHBs

Atlanta, GA – This four-board cluster computer from Trenton was engineered, manufactured and delivered to a customer seeking to maximize processing performance in a robust computer chassis that is to be deployed in military aircraft. This system uses four Trenton TQ9 PICMG 1.3 system host boards, a four-segment BP4FS6890 backplane and a chassis front panel that provides front-access and hot swappable data storage drives.

The chassis itself is manufactured to provide easy access to the hot-swap fans and the bank of front-access hard drives used in the application. The system's front panel was designed to provide individual backplane segment control.

"Trenton's approach to providing industrial computers is to work closely with the customer to develop a system that best meets all of their current as well as future application requirements," said Dwight Justice, Trenton V-P of Sales. "For example, to lessen the space and weight demands in this application, we designed a four-segment backplane that cut down on the number of system chassis needed in the aircraft. This demonstrates Trenton's ability to design and build both the boards as well as the chassis needed to deliver the exact match between customer requirements and the system performance capability."

What follows is a brief overview of the key system components that make up the four-board cluster computer system

TQ9 System Host Boards

Four TQ9 PICMG 1.3 system host boards, each with a quad-core processor, make up the chassis' array of processor boards. These PICMG 1.3 boards were chosen for this application because of the powerful quad-core processor capability and the ability of the TQ9 to support a x16 PCI Express electrical link to a PICMG 1.3 backplane. The Intel® Core™ 2 Quad Processor Q9400 is used on each TQ9 board and the CPU and chipset both feature a 7-year long lifecycle support capability from the Intel® Embedded Computing Division. Long life support is crucial in this military application. The systems deployed in the aircraft will be in service for a number of years and the ability to support the exact computer hardware configuration without the need of costly re-engineering due to component obsolescence was a key factor in choosing this system architecture.

Four-Segment Backplane (BP4FS6890)

This PICMG 1.3 backplane enables the four TQ9 boards to operate in this application as four independent system host boards. Each backplane segment supports three PCI Express option cards and the option card slots in each segment consist of one x8 and two x16 PCIe mechanical slots. This customer's application uses a specific Ethernet communication card in each of the four-backplane segments. The Trenton BP4FS6890 backplane also has an optional on-board Ethernet hub for those applications that need the SHBs to communicate to each other over the backplane's on-board Ethernet fabric.

Front-Panel Layout

The most noticeable feature on the front panel of this chassis is the bank of hot-swap, front access hard drives. These drives are designed to be easily removed and replaced in flight if necessary. If necessary a drive can be removed not because of failure, but because of the need to protect or move classified data to a secured location. Several LEDs on the front panel provide the system operators with a quick and easy way to view the current system status. The front panel design also allows the operators to individually control each SHB segment if required.

Chassis Design

Trenton worked closely with the customer to design a chassis that would meet and exceed the customer expectations for serviceability and longevity. Access points and various sub-component mounting brackets were designed into the system to ease future system serviceability needs. Weight was a key consideration in the design of this chassis.

Pricing and Availability

Trenton Systems industrial computers are available today and are custom built to exact customer requirements. Contact Trenton Systems for pricing on a system that matches your exact requirements.

About Trenton Systems

Trenton Systems focuses on engineering innovation, customization, dependability, stability/longevity and technical support. Trenton is a specialized designer and manufacturer of industrial computer systems for critical embedded computing applications such as telephony, military/aerospace, government, medical, industrial automation and others that require performance, precision and reliability. Trenton continues the long-standing commitment to in-house, engineering-focused, quality technical support services that has been our standard operating procedure for years.

For more information about on products and design services offered by Trenton Systems, call (866) 514-4941 or (770) 287-3123. You can also visit our website at www.trentonsystems.com or e-mail us at info@TrentonSystems.com.

PCI Express is a registered trademark of the PCI-SIG.
PICMG are trademarks or registered trademarks of the PCI Industrial Computer Manufacturers Group.
All other company and product names are trademarks of their respective owners.

###