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## **Bustronic and Z-plane Upgrade AdvancedTCA Backplane to 65 Gbps**

FREMONT, California, Jan 20, 2010 – Elma Bustronic Corporation, an industry leading designer and manufacturer of high performance backplanes, and Z-Plane Inc, a high-speed electronic packaging and interconnection technology company, will be exhibiting an upgraded version of the high-speed ATCA backplane with Z-Plane Links at the DesignCon show in Santa Clara on Feb 2, 3.

Using signal integrity analysis, the Z-Plane and Bustronic teams have optimized the performance of the ATCA backplane with Z-Plane links. Using the orthogonal approach with small PCB links across the rear of the backplane to carry high-speed signals, the backplane can offer significantly faster speeds with cleaner signals. This second iteration of the backplane system offers a strong eye opening in SI studies at speeds up to 40-65 Gbps.

“Claims of 40 Gbps are not unheard of in the embedded system marketplace.” said Justin Moll, Director of Marketing for Bustronic. “However, we need to consider the effects across the backplane. Our ATCA backplane with Z-Plane’s Links allow significantly faster signals with channel compliance that is not feasible in conventional backplanes.”

“Z-Plane is intent on creating packaging designs which are capable of 100 Gbps backplane speeds.” said Chuck Byer, President and CEO of Z-Plane, Inc. “We are very pleased to be working with Elma Bustronic based on their vision, commitment to excellence and dedication to the industry.”

Bustronic and Z-Plane will be exhibiting this technology and other system accessory and backplane innovations at DesignCon in booth #117. For more information, contact Bustronic at [sales@bustronic.com](mailto:sales@bustronic.com) or Z-Plane Inc at [www.z-planeinc.com](http://www.z-planeinc.com)

### **About the ATCA Backplane with Z-Plane Links**

The Bustronic ATCA backplane with Links offers up to triple the performance of traditional versions of the architecture at a reduced cost. This is achieved using the Z-Plane Links which carry the high-speed, long-trace signals via a small PCB board that plugs directly into the rear of the backplane. The basic clock signals and shorter trace lines are left within the backplane. This orthogonal Link approach allows the backplane to have only 6-8 layers, compared to a traditional ATCA backplane may have 18-24 layers or higher. Characterization studies confirm that the signal integrity of the backplane with the Z-Plane Links can produce solid results at higher data rates than conventional backplanes.

The ATCA community is moving to 40 Gigabit/second speeds per channel across the backplane. The version with the Z-Plane Links may help ATCA backplanes achieve these very high performance levels, while keeping costs low. The Z-Plane Links feature an adapter with guide pins used to firmly secure the rear plane PCB in place and provide strain relief. This adapter has a short, impedance-matched connection between the rear “Z dimension” PCB (or Link) and the backplane connector. They also have staggered arrays, so they can be stacked adjacent to one another, and they come in press-fit pin or compliant pin termination depending on the backplane thickness.

### **About Elma Bustronic:**

Founded in 1989, Elma Bustronic specializes in the design and manufacture of high-performance backplanes. Elma Bustronic has a complete line of industry-standard backplanes, including CompactPCI, VME, VME64x, H.110 CT, VXI, VXS, and ATCA. Elma Bustronic’s custom design service combines creative engineering, highly sophisticated computer simulation and modern design techniques to offer customized backplanes that meet the most

specialized system requirements. A member of the ELMA Electronic group, Elma Bustronic is located in Fremont, California. Elma Bustronic is a member of PICMG™, VITA, and the StarFabric Trade Association and can be found on the World Wide Web at [www.Bustronic.com](http://www.Bustronic.com).

**About Z-Plane, Inc.:**

Founded in 2008, Z-Plane™ Inc is a technology-based high-speed electronic packaging and interconnection technology company, which has been established to develop, market, and manufacture high-speed backplane packaging and interconnection solutions. Z-Plane™ Inc is committed to providing new packaging technology for high-speed telecommunications and computing equipment, including routers, servers, and switches with data rates from 40 Giga-bits per second per channel (Gb/sec/ch.) to more than 100 Gb/sec. The Z-Plane™ packaging technology focuses on chip-to-chip interactions and includes high-speed backplane design, backplane connectors, and daughter card design improvements. [www.z-planeinc.com](http://www.z-planeinc.com)