Curtiss-Wright Controls Joins OpenFabrics Alliance

Curtiss-Wright Controls Embedded Computing [1] (CWCEC), a business group of Curtiss-Wright Controls and a leading designer and manufacturer of commercial off-the-shelf (COTS) VPX, OpenVPX, VME, VXS and CompactPCI products for the rugged, deployed defense and aerospace market, has joined the OpenFabrics Alliance (OFA). OFA develops, tests, licenses and distributes the OpenFabrics Enterprise Distribution [2] (OFED) cross-platform, open-source software for high-performance, low-latency and energy-efficient computing. Support for OFED will provide Curtiss-Wright's Continuum HPEC [2] (High Performance Embedded Computing) customers with software that can be easily leveraged from platform generation to platform generation, and enables rapid code migration from commercial HPC [2]-based systems, such as high-end workstations and blade servers, to rugged HPEC computer [2] systems designed for defense and aerospace applications.

"Curtiss-Wright's HPEC systems deliver supercomputing processing performance in rugged, compact deployable system architectures optimized for harsh military environments," said Lynn Bamford, vice president and general manager of Curtiss-Wright Controls Embedded Computing. "Joining the OpenFabrics Alliance enables our HPEC-Center of Excellence [2] (HPEC-COE) to provide our customers with the most advanced open architecture software designed especially for high performance computing, maximizing interoperability and speeding time to market."

"We are excited to welcome Curtiss-Wright as OFA's newest member," said Jim Ryan, chair of the OFA. "Curtiss-Wright is leveraging wireless industry silicon to provide RapidIO OFED capability to the HPEC market place. Their HPEC-COE provides non-proprietary low-latency, high bandwidth processor system solutions to embedded defense and aerospace customers. The OpenFabrics Alliance looks to its members to help drive the future and ongoing development of OFED. Curtiss-Wright Controls will be a valuable member as we continue momentum."

About OpenFabrics Enterprise Distribution

OFED is an open source software middleware that abstracts fabrics and operating systems from middleware, operating system command calls, and customer applications. OFED is an open standard body created by the OpenFabrics Alliance, with many contributors across the industry. OFED supports multiple fabrics such as Serial RapidIO and Ethernet, and supports multiple operating systems including LINUX and Windows.

OFED Features:

· Operating system abstraction (LINUX, Windows, OpenSolaris)

- Fabric abstraction (Infiniband, Ethernet, and Serial RapidIO)
- Middleware abstraction (OpenMPI, OpenSM, and Intel MPI)
- Processor abstraction (Intel, PPC, FPGA and GP-GPU)
- DMA control and fabric handshake
- Zero-Copy data transfers
- Supports DMA controlled diagnostics utilities and tools.
- Low latency high speed application-to-application data transfers.

In 2010, Curtiss-Wright launched its Continuum HPEC-COE (Center of Excellence) to reduce customer risk while making it easier and faster for customers to develop and deploy high node and core count compute clusters for RADAR, SIG/INT, EW and Communications applications based on the most advanced open standards such as OpenVPX [3]™ and OpenFabrics Enterprise Distribution (OFED™). Continuum HPEC systems leverage CWCEC's proven and qualified COTS-based systems and board level products such as the recently announced VPX6-490 GPGPU [2] engine, and the CHAMP-AV6, HPE720, ADC510, and VPX6-185 high performance boards interconnected by a RapidIO switch fabric and high-performance open standard middleware. The next generation of HPEC platforms will migrate to leverage the advanced capabilities of CWCEC's latest generation of high performance modules including the new CHAMP-AV8, CHAMP-FX3, ADC516, VPX6-6902 and VPX6-1956.

About the OpenFabrics Alliance

The OpenFabrics Alliance (OFA) is a 501(c)(6) non-profit association that develops, tests, licenses and distributes the OpenFabrics Enterprise Distribution (OFED) -- cross-platform, open-source software for high-performance, low-latency and energy-efficient computing. OFED is used in business, research and scientific environments that require fast and efficient networks, storage connectivity and parallel computing. OFED is free and is included in major Linux distributions as well as Microsoft Windows. In addition to distributing OFED, the OFA conducts interoperability testing to ensure all releases meet multi-vendor enterprise requirements for security, usability and reliability. For more information about OFA, visit www.OpenFabrics.org [4].

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