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NEWS

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**PIGEON POINT SYSTEMS DELIVERS FIRST COTS
MANAGEMENT SOLUTION FOR VPX MODULES
USING VITA 46.11**

**New Product Leverages Decade of
ATCA Management Experience**

CARLSBAD, CALIFORNIA, March 31, 2014 — Pigeon Point Systems, LLC today announced the delivery of the first COTS management controller solution for Intelligent Platform Management Controllers (IPMCs) based on VITA 46.11, now a Draft Standard for Trial Use with VPX modules and chassis. The VITA Standards Organization (VSO) chose to base VITA 46.11 on the management infrastructure of ATCA to take advantage of the maturity and widespread implementation of that architecture in the embedded computing community. PPS' Board Management Reference (BMR) product line, which now includes the support for VPX IPMCs, has been used for ATCA IPMCs for a decade and in hundreds of thousands of ATCA boards, often under very demanding operating constraints. The new BMR-A2F-VPX solution leverages that robust heritage to make it easy for VPX module developers to comply with VITA 46.11. The new solution, like its leading PPS counterparts for ATCA and related architectures, is based on the Microsemi[®] SmartFusion[®] intelligent mixed signal FPGA.

The BMR-A2F-VPX solution includes a reference PCB schematic and FPGA design for the core of an IPMC, ready for integration into the design of a particular VPX plug-in module. Also included is C language source code for the IPMC firmware and a C language tool chain, already highly configurable through macros and compile time options, ready for further adaptation if necessary. Finally, the solution includes a bench top implementation of the reference design so that a developer can get started immediately ramping up on VITA 46.11 with live hardware. Later, when the developer brings up his own VPX module embedding the reference design, the bench top implementation provides a known good implementation for comparison.

The BMR-A2F-VPX IPMC solution is fully compliant with VITA 46.11, while inheriting substantial extensions from Pigeon Point's ATCA IPMCs. One example VITA 46.11-specific feature is the option to configure an IPMC at either of the functional tiers defined in VITA 46.11. A Tier 1 IPMC has reduced functionality and reduced compute resource requirements, while a Tier 2 BMR IPMC has all the required features defined by the standard, plus many additional options, as well. A customer who wants to integrate more system management into their application layer(s) could choose to implement Tier 1 of VITA 46.11 throughout a system, minimizing the standardized management layer.

The Pigeon Point BMR VPX IPMC solution also includes support for two useful PICMG specifications: HPM.1, standardizing IPMC firmware upgrades and HPM.2, standardizing how IPMCs can be attached to an in-shelf LAN. These specifications were adopted by PICMG in 2007 and 2012 respectively. The BMR VPX solution maps them straightforwardly to the VPX and VITA 46.11 context.

HPM.1, which is essentially universally implemented in ATCA IPMCs, allows IPMC firmware updates for a VPX chassis to be done on a unified basis, even if it includes IPMCs implemented by different vendors, as long as all the implementations are HPM.1-compliant. The architecture includes support for

advanced features such as dual redundant firmware images and automatic fallback if an attempted upgrade does not succeed.

Taking advantage of HPM.2, the new BMR releases can enable BMR-based management controllers to deliver the following benefits, all in an interoperable way with other independently implemented controllers: 1) get much faster firmware upgrades, boosting serviceability, 2) deliver traces of the Intelligent Platform Management Interface (IPMI) messaging in which they participate and remote visibility for serial port traffic on a board, both aiding diagnostic efforts, 3) potentially provide high speed access to large controller data items for both the Chassis Manager and a higher level System Manager, benefiting overall xTCA system performance.

Multiple leading VPX plug-in module vendors are already building SmartFusion-based Pigeon Point Board Management Reference (BMR) management controllers into their products. These vendors get advanced controller features, with lower cost and footprint, while benefiting from Pigeon Point's years of leadership and proven specification compliance and interoperability, applied now in the VITA 46.11 context for VPX.

"Today's critical embedded computers are very complex and require robust system management," stated Jerry Gipper, executive director of VITA. "VITA 46.11 provides that solution for VPX while the Pigeon Point Systems products are going to enable, for VPX plug-in module developers, a fast-track to VITA 46.11-compliant and -interoperable modules."

For more information on this already available SmartFusion-based IPMC solution for VPX, visit www.pigeonpoint.com; further queries are welcome via email at info@pigeonpoint.com.

About Pigeon Point

Pigeon Point Systems LLC delivers world-class management components for modular platforms based on the AdvancedTCA, AdvancedMC and MicroTCA

and VPX architectures to leading companies worldwide. Pigeon Point's focus on providing dependable, proven solutions for the mandatory management controllers in these architectures allows customers to concentrate on the value-added aspects of their products. Deep expertise on these architectures ensures compliance and interoperability in the Pigeon Point components.

Pigeon Point is a member of VITA and participates actively in the working group that issued VITA 46.11 as a Draft Standard for Trial Use, covering System Management on VPX. Pigeon Point is also an executive member of PICMG, a leader in its AdvancedTCA[®], AdvancedMC[®], and MicroTCA[™] subcommittees and active in many other technical subcommittees. For more information on Pigeon Point Systems, visit www.pigeonpoint.com.

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Notice to editors: a supplementary graphic is available in soft copy at www.pigeonpoint.com/press/VPX_IPMC and included below, with a draft caption.

Graphic: Pigeon Point's Board Management Reference (BMR) solution for VITA 46.11-compliant IPMCs on VPX plug-in modules fully complies with the standard, while adding substantial additional functionality and a legacy of robustness and interoperability, from Pigeon Point's corresponding solutions for ATCA IPMCs that are widely used by leading ATCA vendors throughout the world

