



Company Contact: Justin Moll 702-896-3337 [justin.moll@VadaTech.com](mailto:justin.moll@VadaTech.com)  
VadaTech [www.VadaTech.com](http://www.VadaTech.com)

### **VadaTech's New MCH Transforms Capabilities of MicroTCA-based Systems**

Henderson, NV – April 28, 2014 – VadaTech, a manufacturer of embedded boards and complete application-ready platforms, now offers a MicroTCA Carrier Hub (MCH) with a 40GbE option, synchronous Ethernet, and advanced clocking/GPS capability.

The new MCH is VadaTech's 3<sup>rd</sup> generation module with several unique features that will transform the capability of a MicroTCA-based solution. The UTC004's 40GbE option is a 4x boost in performance from today's 10GbE solutions. The MCH also provides PCIe Gen 3, SRIO Gen 2, and a crossbar switch (CBS) option. The CBS allows any SERDES protocol to be utilized, including custom protocols.

A key feature of the UTC004 is the advanced clocking/synchronization capability. The MCH enables highly flexible master/slave clock and time synchronization to multiple clocking standards including GPS, IEEE1588 (PTP), SyncE, and NTP. The MCH bridges these standards together to provide Grand Master Clock capability to the attached chassis network. For backplane and front panel clocking, the MCH features a low-latency, low-jitter, low-skew M-LVDS clock matrix to ensure the best possible backplane clocking solution. A quad PLL clock network synchronizer enables synchronizing clocks with hitless failover referenced to clocks/pulses coming from the front panel, backplane, on-board GPS/IEEE1588 (PTP)/NTP 1PPS, or SyncE ports. These PLLs can then jitter clean or synthesize arbitrary frequency clocks and pulses to output to the front panel or backplane with up to Stratum-3 holdover criteria. The result of all of these features is precision timing, aligned frequency/phase of the signals, and eliminating the risk of packet loss due to buffer overflow. These features are important for Communications, MIL/Aero, and Physics applications where synchronized timing is critical.

In addition to a management Ethernet RJ45 port, the MCH provides a base channel Ethernet fabric with two front panel 10GBase-T RJ-45 ports for 20Gb combined uplink bandwidth as standard. When a Fat Pipes fabric is ordered, additional uplink ports are provided such as QSFP+, Dual SFP+, or Dual 10GBase-T RJ45 for Fat Pipes fabric uplink; providing up to an additional 40Gb of uplink bandwidth.

Another feature of the UTC004 is a JTAG Virtual Probe. Typically, an option in MicroTCA systems is a JTAG Switch Module for attaching a dongle to the physical chassis for programming or de-bugging. The Virtual Probe allows this work to be done remotely, which is more convenient and a significant advantage in deployed applications.

VadaTech offers MicroTCA chassis, power modules, JSMs, and over 200 AdvancedMCs of various types. The company also offers AdvancedTCA systems and boards and specialty products in other architectures.

### **About VadaTech**

VadaTech provides innovative embedded computing solutions from board-level products, chassis-level platforms, to configurable application-ready systems. With a focus on MicroTCA and AdvancedTCA solutions, the company offers unmatched product selection and expertise in the full xTCA ecosystem. With our unique combination of electrical, mechanical, software, and system-level expertise, VadaTech can provide customized commercial or rugged computing solutions to meet the most complex customer requirements. VadaTech also offers specialized product solutions for VPX/VME, CompactPCI, and other architectures. A member of PICMG and VITA, VadaTech is headquartered in Henderson, NV with offices in Europe and Asia Pacific.

**VadaTech, Inc. [www.VadaTech.com](http://www.VadaTech.com) 198 N. Gibson Rd. Henderson, NV 89014**