



Elite Software R&D Services  
Since 1990

# Open MultiComputing Kit—Full Life-cycle Development, Maintenance, and Re-engineering

## Client

Pigeon Point Systems (“PPS”) is a privately held software and hardware development company founded in 1997. It focuses on products and services supporting the adoption of open modular platforms to replace proprietary architectures, with a primary focus on the telecommunications market and PICMG standards. Pigeon Point’s product portfolio includes world-class management components for modular platforms based on the AdvancedTCA® (ATCA), AdvancedMC™, and MicroTCA™ architectures, plus consulting and design services. Pigeon Point participates actively in defining the open modular architectures. An executive member of PICMG, Pigeon Point is a leader in the ATCA, AdvancedMC and MicroTCA subcommittees and is active in many other technical subcommittees. Pigeon Point is also a contributing member of the Service Availability™ Forum and active in its HPI Working Group. The company serves more than 140 customers, including 6 of the top 10 global communications OEMs. The list of its customers is headed by such industry authorities as Motorola Computer Group, Intel Corporation, Force Computers, Microsoft Corporation, Siemens Mobile, Texas Instruments, along with many others. PPS is headquartered among the redwoods in Scotts Valley, California.

In 2008 Pigeon point Systems was acquired by Actel Corporation and became a wholly owned subsidiary of Actel. Earlier this year, Actel and Pigeon Point announced a partnership to develop and market solutions based on the Actel Fusion® mixed-signal FPGAs to speed the design of AdvancedTCA blade and AdvancedMC carrier blade management controllers. By acquiring the leading provider of TCA management components, Actel now offers

a comprehensive solution for proprietary and standards-based system management implementations in the industrial, military, telecommunications, and medical markets.

## Solution

**Open MultiComputing Kit (OMCK)** is a product which allowed CompactPCI or VME single board computers to communicate over the backplane. OMCK is a full-featured product, which provides flexible and convenient configuration facilities to the end user and delivers superb performance (up to 4x or 6x the speed of the 100 Mbit Ethernet depending on configuration). OMCK emulates an Ethernet LAN, supporting operation of all conventional protocols over the backplane network. Being a multi-platform product, for each supported platform OMCK provides the user with the facilities that are specific to the platform.

## Auriga’s Contribution

- OMCK full life-cycle development, including design, development, testing, integration, release preparation tasks, and documentation writing;
- Porting to 14 different PowerPC and x86 based boards (single board computers) manufactured by several vendors (including Motorola Computer Group and Force Computers);
- Porting to the following operating systems: Windows 2000, Windows NT Embedded, Linux, VxWorks, LynxOS, and OSE;
- CompactPCI hot swap support;
- OMCK support and maintenance.