



Editor's Foreword

By Joe Pavlat

CompactPCI & AdvancedTCA Systems

AdvancedTCA Summit 2007

Welcome to the 2008 *CompactPCI and AdvancedTCA Systems Buyer's Guide*. The products listed here speak to the growth of AdvancedTCA, the interest in MicroTCA, and the persistence of CompactPCI.

An event that also demonstrated continued interest and growth in these areas took place in October. The third annual AdvancedTCA Summit was held in Santa Clara, California at the Convention Center. Once again, Chairman Lance Leventhal and his colleagues at Creative Concepts did a fabulous job putting the event together, and everyone I talked to was very happy with it. Some highlights included:

- 112 program participants and speakers
- 4 keynote speeches
- 5 short paper sessions
- 6 industry expert panels
- 7 tutorials and 7 one-hour workshops
- Special Venture Capital and Market Analyst sessions
- 1,171 registrants, 850+ attendees

In addition to the keynotes, popular sessions included Introduction to AdvancedTCA, AdvancedTCA/MicroTCA, the Issues Roundtable on Creating Real Applications, the Special Session on Venture Capital, the CP-TA session, the Beer, Pizza, and Chat with the Experts session, the Pioneers session, the Special Market Research session, and the Special Open Tutorial on Developing Next-Generation Solutions.

There were 70 exhibitors, including open-standards-holdout Cisco Systems (recruiting AdvancedTCA engineers!), Emerson Network Power, Ericsson, Enea, Freescale Semiconductor, Fujitsu, RadiSys, GE Fanuc, IBM, Intel, NEC, Interphase, Kontron, Molex, Motorola, Schroff, Tyco, and Wind River. Major sponsors were Enea, Intel, Interphase, Motorola, Intel Communications Alliance, Freescale Semiconductor, Wind River, and White Electronic Designs.

This month marks the fifth anniversary of the release of the first AdvancedTCA specification, and, as predicted by many, this is the year AdvancedTCA came of age with many customers, including

major players like Nortel, delivering production quantities of AdvancedTCA gear to their customers. Most of these customers have now moved beyond the evaluation phase into deployment and further design. There was also significant interest at the Summit in MicroTCA from a variety of industries, including telecom, enterprise networking, medical equipment, instrumentation, and military/defense/aerospace systems.

Another sign that the AdvancedTCA market is growing up came from the analysts who assess market size and future growth. In the first few years after AdvancedTCA was developed, there was little actual market data and perhaps more than a bit over-enthusiasm.

It was refreshing to see the analysts who presented at the Summit generally now agree on market size and growth. Eric Heikkila, Director of Embedded Hardware at Venture Development Corporation, was one analyst who presented his data (Figure 1).

Eric thinks the combined AdvancedTCA and MicroTCA markets total \$557M in 2007, \$979M in 2008, \$1822M in 2009, \$2817M in 2010, and \$3679M in 2011. You can download Eric's presentation and many others at the Summit's web site, www.advancedtcasummit.com.

In this issue

In this month's issue, Frank Fitzgerald of Carlo Gavazzi Computing Solutions

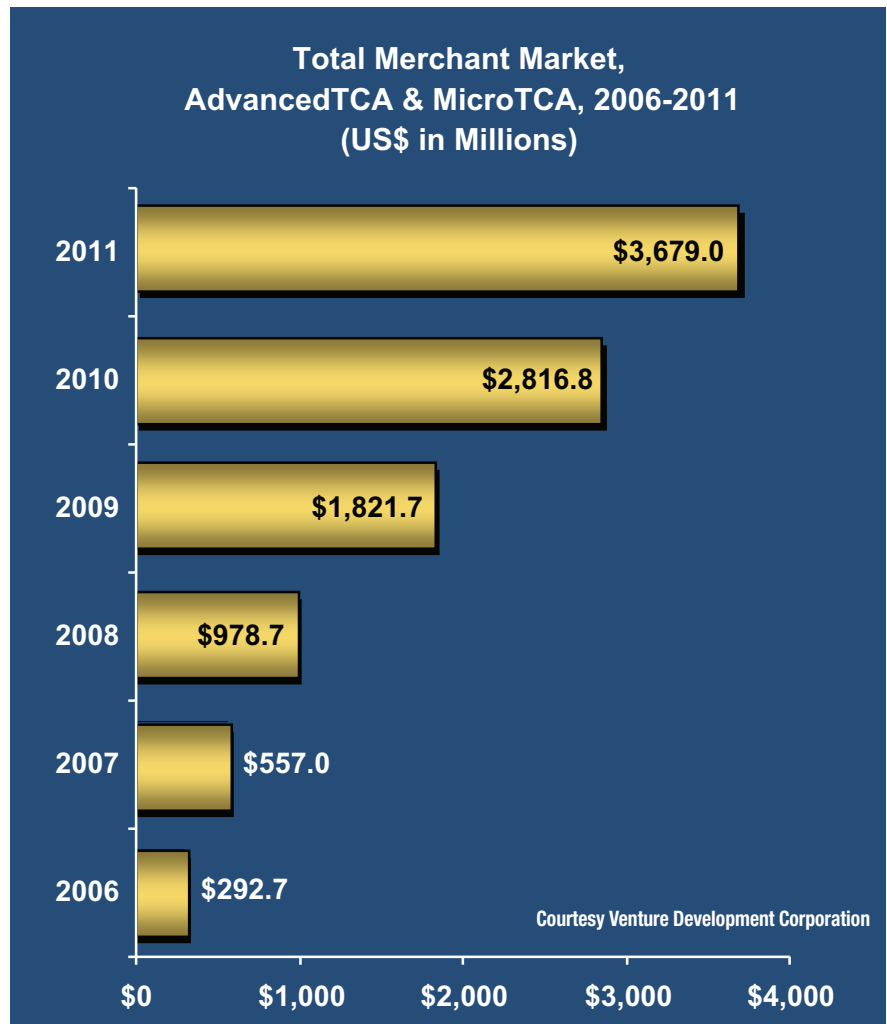


Figure 1

“ While HA
has long been
integral to high
reliability telecom
equipment, the
solutions until
recently have been
proprietary ”

gives us a great tutorial on the subject of shelf management in open platforms such as AdvancedTCA. He outlines the basic architecture of Shelf Managers and how they interact with the rest of the system.

He points out that this is a complex and constantly evolving technology, often beyond the complete grasp of a system vendor intent on delivering an application to a customer. Frank describes how shelf suppliers need to be expert at system management, what sorts of things to look for, and what questions to ask when selecting a shelf vendor.

Taking the discussion to the next level, Dr. Asif Naseem, GoAhead Software, presents an in-depth look at High Availability. HA middleware is the next layer above system management, and Dr. Naseem ably explains the architecture, processes, and services that go into building a highly available system. While HA has long been integral to high reliability telecom equipment, the solutions until recently have been proprietary. Organizations like PICMG, the Service Availability Forum, and the Linux Foundation are working together to bring HA into the world of open public standards.

Another perspective on HA comes this month in an interview with Jim Lawrence and Chris Lanfear of Enea. They address some of the important business issues surrounding HA, customer expectations, the competition, more on the Service Availability Forum, and even how the

military is reacting to HA for their next-generation systems.

For those designing MicroTCA power subsystems, Juergen Hahn-Barth from CONEC Corporation gives us details about the power connectors specified for use in MicroTCA, and the design issues engineers face.

After years of debating which switched serial interconnect will see wide use, the “fabric wars” finally seem to be over. While Fibre Channel will see some use in storage applications, it’s clear now that Ethernet will be used for the bulk of IP transport applications and Serial RapidIO will be used in systems utilizing lots of DSPs and in applications where Quality of Service at the hardware level is required. Tom Roberts from Mercury Computer Systems presents the two technologies and talks about how each is best used.

Learn and enjoy!



Joe Pavlat
Editorial Director