

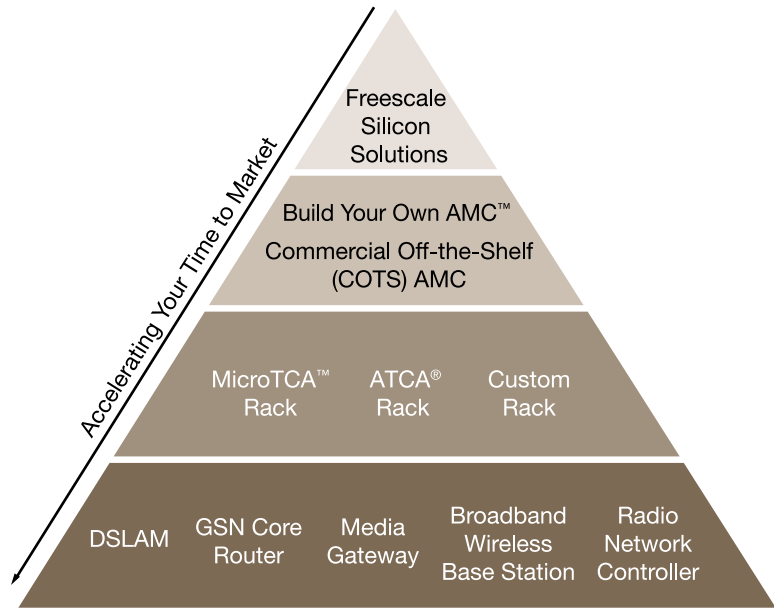
# AdvancedTCA<sup>®</sup>/AdvancedMC<sup>™</sup> Rapid System Development

## AdvancedTCA<sup>®</sup> (ATCA)/AdvancedMC<sup>™</sup> (AMC) Industry Standards Accelerate Your Time to Market

ATCA and AMC are a series of industry-standard specifications heralded as the next-generation, standards-based telecommunications computing platform.

Applications are driven from a wide range of commercial off-the-shelf (COTS) chassis, cards and components to yield rapidly deployable, cost-effective system solutions which are both modular and flexible. The high-speed serial backplane interconnect provides the scalability and bandwidth to help meet the needs of systems today and tomorrow.

Freescale facilitates “Build” and “Buy” routes for customers to implement rapid system evaluation/development while accelerating time to market with fewer resources.



### ATCA/AMC Reference

#### Designs—Build a Board:

A Freescale one-stop-shop for Host, DSP, networking and communications AMC-based designs examples. ATCA/AMC reference designs offer comprehensive board level design collateral such as schematics, Gerbers, firmware and software to accelerate customers’ own design and systems development.

A variety of applications software can also be provided to help reduce time to market, including:

- Media gateway software
- Multi-standard baseband physical layer (PHY) software
- Baseband media access (MAC) software
- DSP application software libraries
- Comprehensive QUICC Engine<sup>™</sup>  $\mu$ code
- Consistent QUICC Engine driver application programming interface (API)
- Open QUICC Engine program

### ATCA/AMC COTS Vendor

#### Solutions—Buy a Board:

COTS vendor solutions accelerate design and systems development by offering a range of Freescale-based AMCs and software for Host, DSP, networking and communications applications. ATCA/AMC COTS vendors include:

- Embedded Planet
- Mercury Computer Systems
- RadiSys<sup>®</sup> Embedded Systems and Solutions
- Kontron
- GDA Technologies, Inc.
- Interphase<sup>®</sup>
- Emerson Network Power Embedded Computing
- Tundra<sup>®</sup> Semiconductor
- Silicon Turnkey Express
- Motorola Embedded Communications Computing

### Freescale Development/Debug Tools and Software

Supporting the “Build” and “Buy” options, Freescale offers leading-edge development and debug tools such as CodeWarrior<sup>®</sup> IDE which incorporates high-performance compilers and simulators to optimize code development.

Whether building or buying, Freescale can help reduce time to market via ATCA/AMC-based solutions that provide:

- Integrated processor functionality benefits
- Leadership performance per slot and per watt
- Integrated “fast serial pipes” directly on chip
- Balanced processing and offload acceleration for target markets

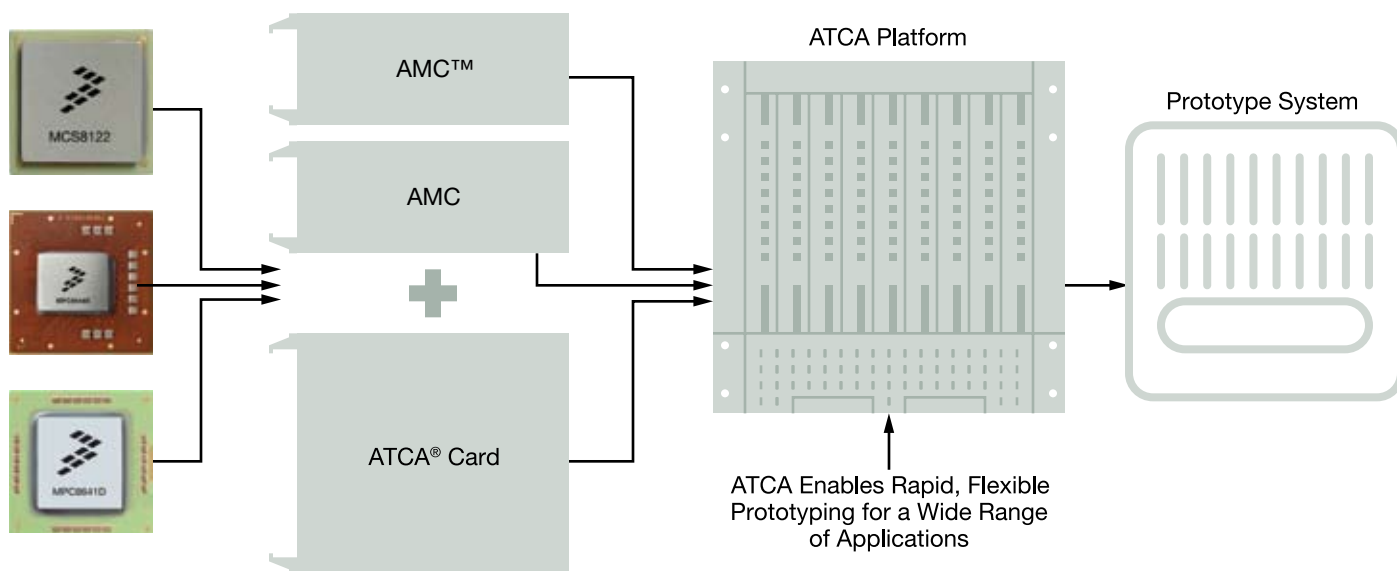
## Freescale—Higher Value Access Solutions

Software Technology	Tools and Support	Freescale ATCA®/AMC™ Reference Designs	ATCA/AMC Board Vendors—Commercial Off-the-Shelf
Media gateway software Multi-standard baseband PHY software Baseband media access (MAC) software DSP application software libraries Comprehensive QUICC Engine™ μcode Consistent QUICC Engine driver API Open QUICC Engine program Power Architecture™ technology StarCore® technology Freescale Semiconductor	Development boards CodeWarrior® IDE tools Compiler/debug/simulator PowerQUICC® Linux® OS BSP StarCore SmartDSP OS Documentation Application notes White papers Performance benchmarks CodeWarrior Linux	MPC8568 AMC MPC8641D AMC MPC8360 AMC MPC8548 AMC MSC8144 AMC MSC8144S AMC Channel Card AMC	Embedded Planet Emerson Network Power Embedded Computing Mercury Computer Systems Kontron RadiSys® Embedded Systems and Solutions GDA Technologies, Inc. Interphase® Tundra® Semiconductor Silicon Turnkey Express Motorola Embedded Communications Computing
Optimized software offers higher value customer engagements—much more than “just silicon”	Software development and debug systems intimately aligned with processors	Rapid system development with Freescale ATCA/AMC reference designs	Faster time to market with industry-standard platforms from ATCA/AMC board vendors

### User Benefits:

- Scalable, soft programmable solutions, pave way to low risk consolidated solutions
- Highly integrated processing platforms deliver highest MIPS/Watt (CPU and DSP)
- Fast serial backplane connect for Gigabit Ethernet, Serial RapidIO® and PCI Express®

### From Silicon to System



### Learn More:

For more information about Freescale's ATCA/AMC Rapid System Development Program, please visit [www.freescale.com/atca](http://www.freescale.com/atca).



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