AMD Opteron™ 200 Series Processor
AdvancedTCA® Reference Design Kit
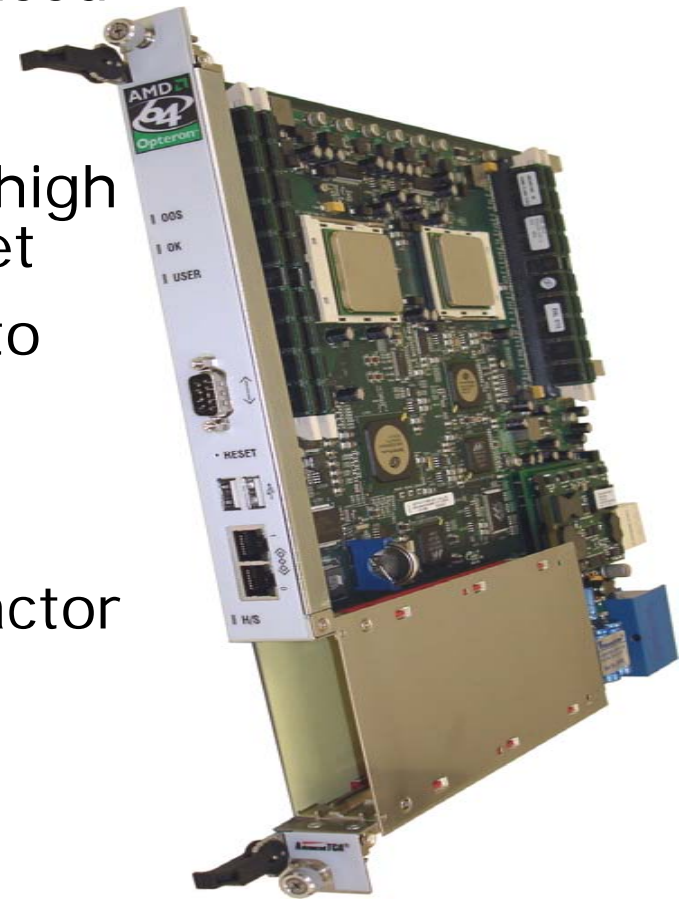
Technical Overview

April 2007

# AMD Opteron™ ATCA RDK Objectives

Provide a demonstration platform to address the emerging ATCA (Advanced Telecom Computing Architecture) standard
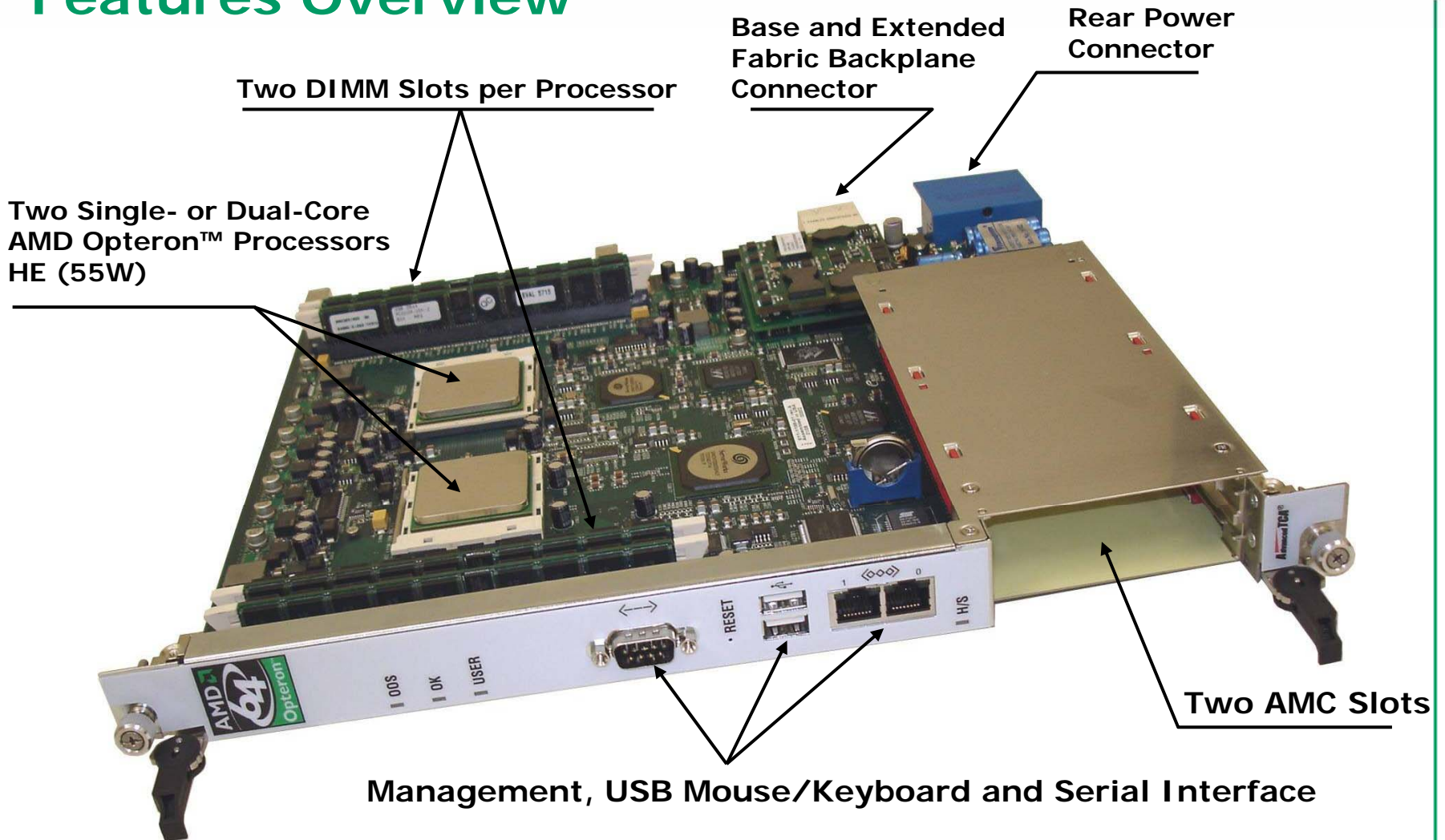
- Establishes AMD as a provider of high performance CPUs into this market
- Confirms that AMD is committed to the Telecom market
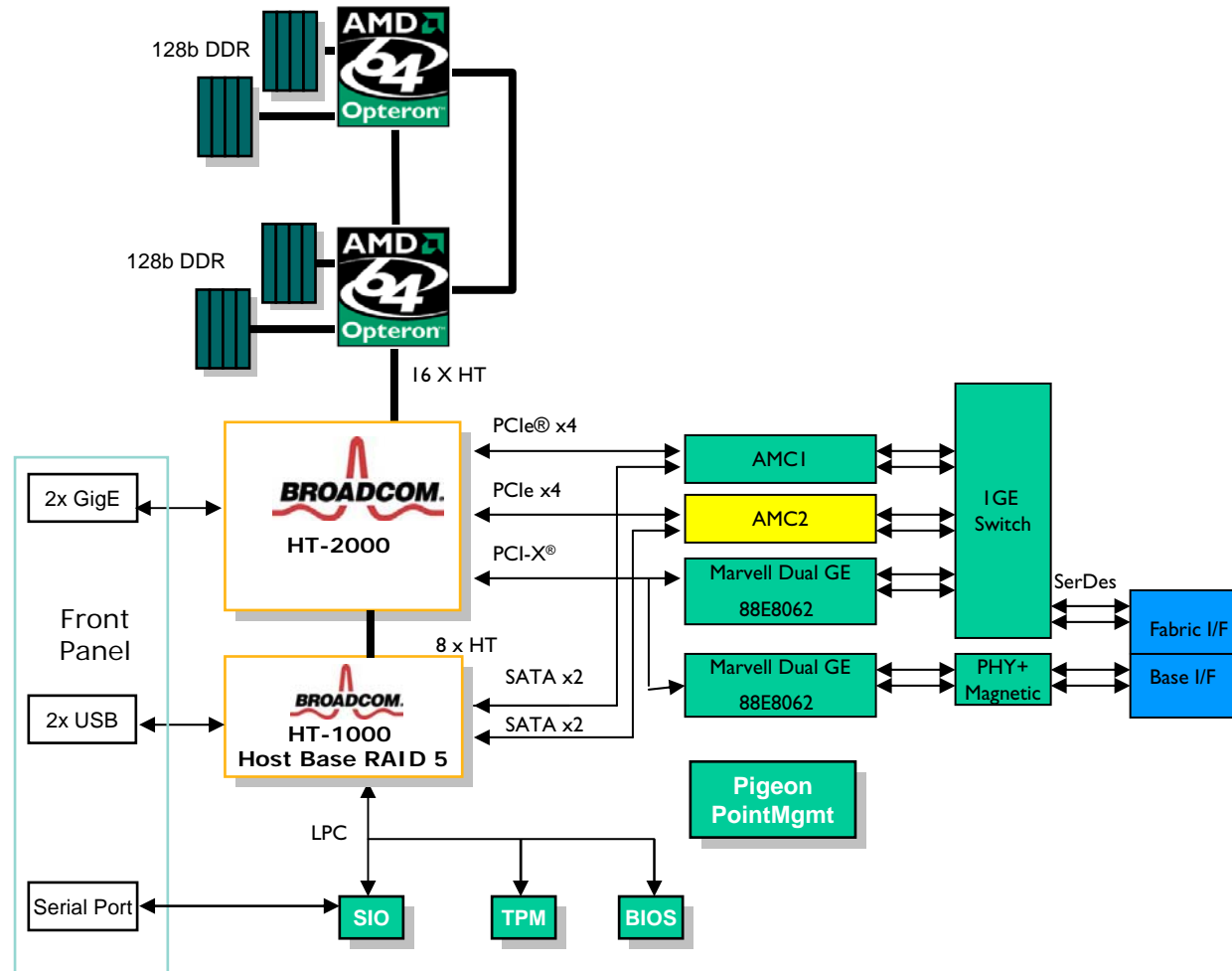
Accelerate customer designs

- Utilize a telecom standard form factor
- Reduce schedules and risk
- Provide complete set of design collateral

# AMD Opteron™ ATCA RDK Features Overview

Two DIMM Slots per Processor

Base and Extended Fabric Backplane Connector

Rear Power Connector

Two Single- or Dual-Core AMD Opteron™ Processors HE (55W)

Two AMC Slots

Management, USB Mouse/Keyboard and Serial Interface

# AMD Opteron™ ATCA RDK Block Diagram

April 11, 2007          42608B - NDA Required          C O N F I D E N T I A L

# AMD Opteron™ ATCA RDK Features

**Two AMD Opteron™ 200 Series Processors**

**PICMG 3.0 compliant**

**Two AMC slots**

- Two x4 PCI Express® from the Broadcom HT-2000 interface directly to AMC modules
- Four SATA ports from Broadcom HT-1000 connect to AMC modules
- Marvell Dual GigE controller connects via PCIe® from Broadcom HT-2000 through port switch to AMC modules
  – GigE controller shared between fabric and AMC

**Backplane**

- Marvell Dual GigE controllers connect via PCIe from Broadcom HT-2000 through port switch to Fabric interface and AMC modules
  – GigE controller shared between fabric and AMC
- Marvell Dual GigE controller connects via PCIe from Broadcom HT-2000 to Base interface and AMC modules

**Front Panel**

- Two USB ports from Broadcom HT-1000
- Two GigE ports from Broadcom HT-2000
- One serial port from SIO
- Standard LEDs

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