



SOLUTION DESIGN

INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# Telecom Applications

## Blade Server / CGRMS / ATCA

**ATCA Summit**  
**Jeff Hudgins**  
VP of Marketing

*Copyright © 2008 NEI. All Rights Reserved*

November 04, 2009

# Choose a Strategic Partner

*Our comprehensive lifecycle management approach*



The broadest array of products and services to deliver the xTCA promise

# Agenda

---

- **Macro trends from Industry analysts**
- **NEI RFP/RFQ trends**
- **Comparing xTCA, CGRMS, and Blade Servers**
- **Proof point for xTCA in a NEBS environment**
- **Summary**

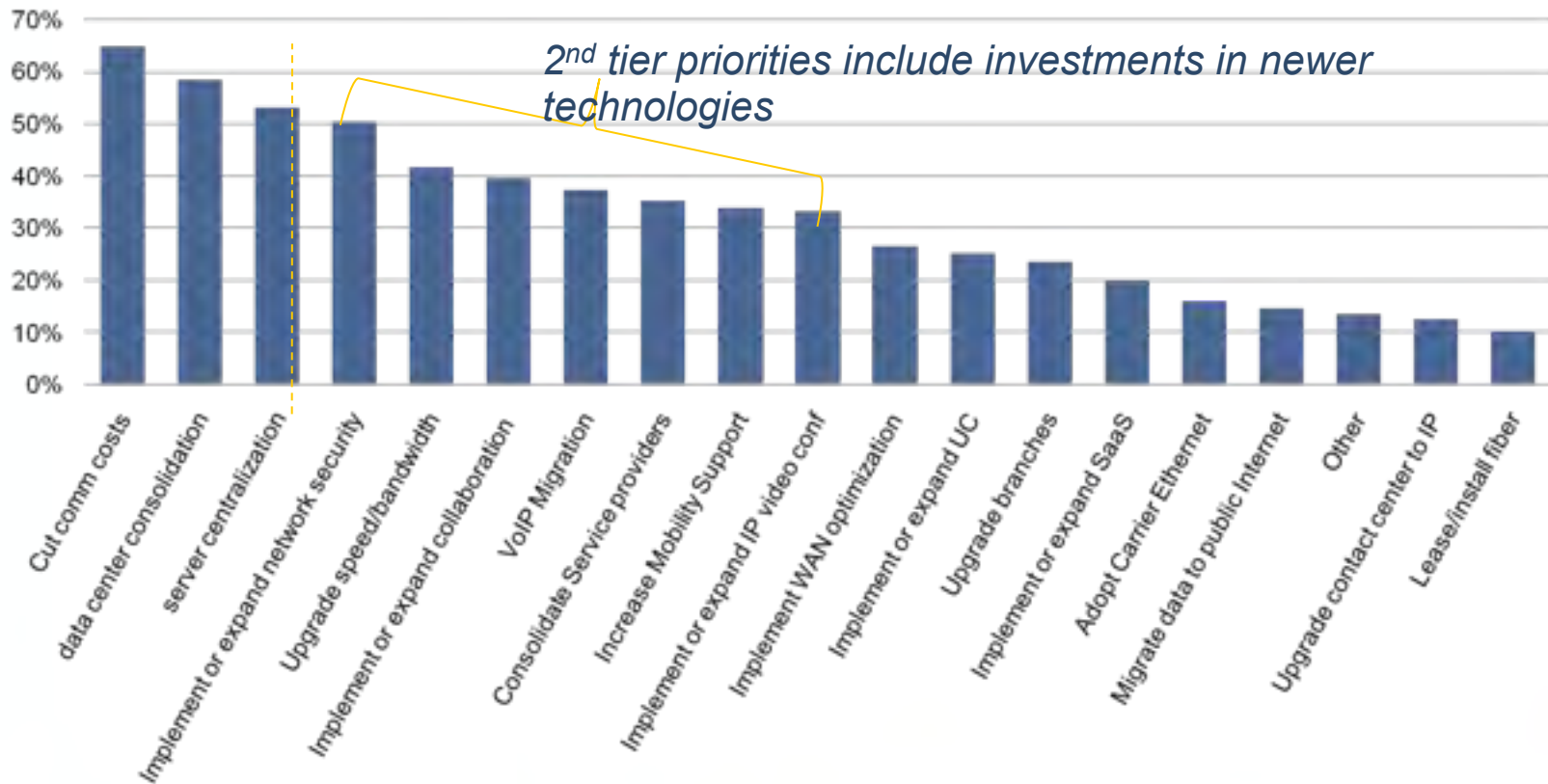
# Agenda

---

- **Macro trends from Industry analysts**
- NEI RFP/RFQ trends
- Comparing xTCA, CGRMS, and Blade Servers
- Proof point for xTCA in a NEBS environment.
- Summary

# What's hot in comms segments?

Which of the following initiatives are likely to be your firm's top telecom/communications priorities over the next 12 months?  
(those answering critical or high priority)



Source: Forrester July 2009 "State Of IT Budgets"



SOLUTION DESIGN

INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# Communications Architecture Trends



© 2008 VDC Research Group, Inc.  
 Embedded Hardware and Systems Practice



SOLUTION DESIGN

INTEGRATION CONTROL

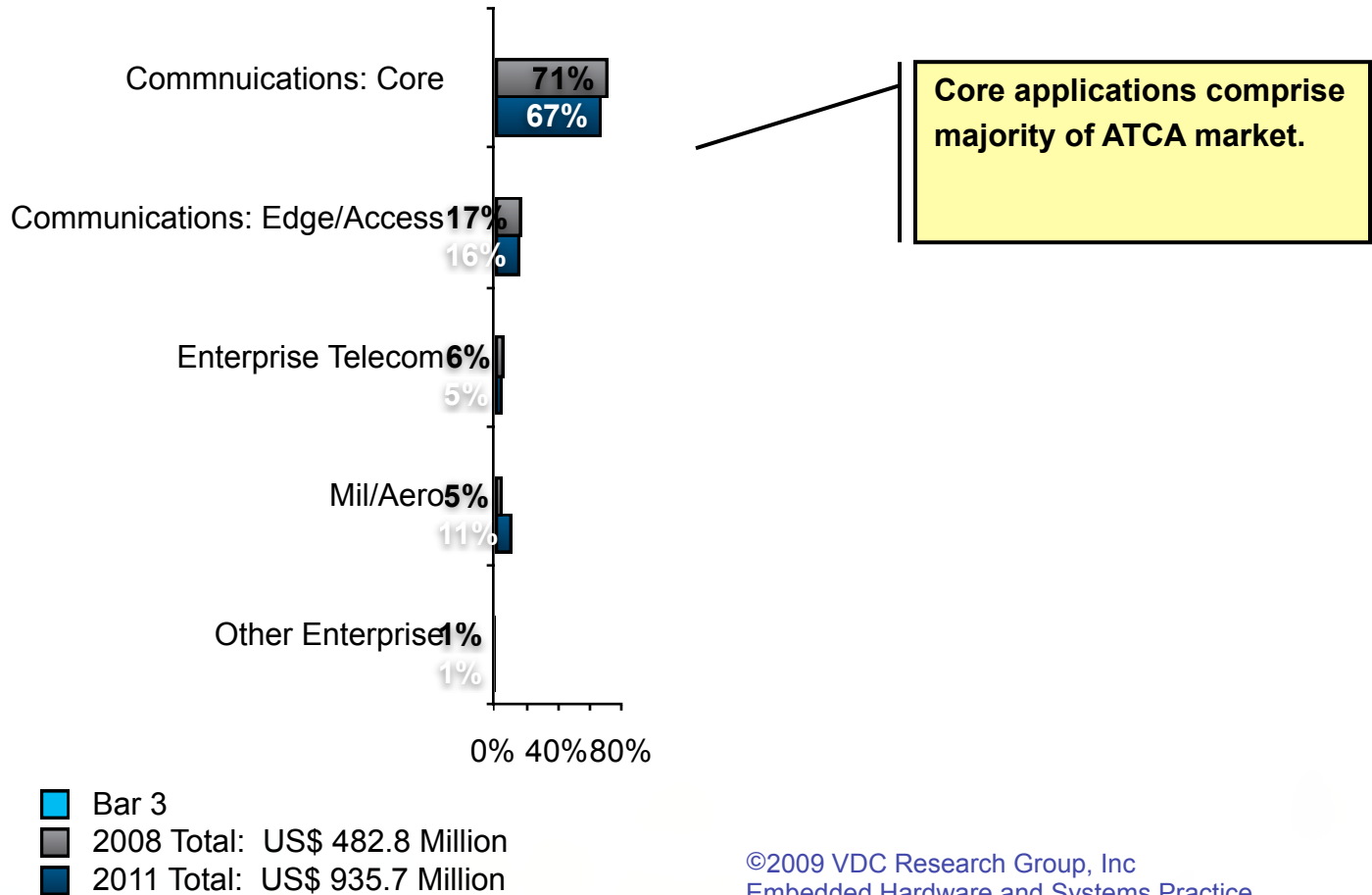
GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# ATCA Market Outlook

Total Merchant ATCA Market, Vertical Segments, 2008 & 2011 (% of Dollar Volume Shipments)



# Agenda

---

- Macro trends from Industry analysts
- **NEI RFP/RFQ trends**
- Comparing xTCA, CGRMS, and Blade Servers
- Proof point for xTCA in a NEBS environment.
- Summary

# Communication ATCA RFP/RFQ trends - NEI

---

- **Today - Anything Wireless**

- Messaging
- Policy Control
- Database consolidation
- Phone number portability and HLR management

- **Future**

- Nehalem (Now) and Romley (2011) Intel architecture.
- 40G Ready ATCA platforms.
- In-memory database applications (increased RAM)
- Growth in LTE and 4G networks worldwide.

- **Now and Future:**

- Tier 2 Equipment Manufactures are leveraging xTCA open standards against legacy Tier 1 TEMS as a competitive advantage.



SOLUTION DESIGN

INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# Agenda

---

- Macro trends from Industry analysts
- NEI RFP/RFQ trends
- **Comparing xTCA, CGRMS, and Blade Servers**
- Proof point for xTCA in a NEBS environment.
- Summary

# Total cost of ownership comparison

---

- **ATCA/Blade Server/Rack Mount Server comparison:**

- Quad Core processors per blade/server
- 2GB RAM per blade/server
- 147 GB SAS drive per blade/server

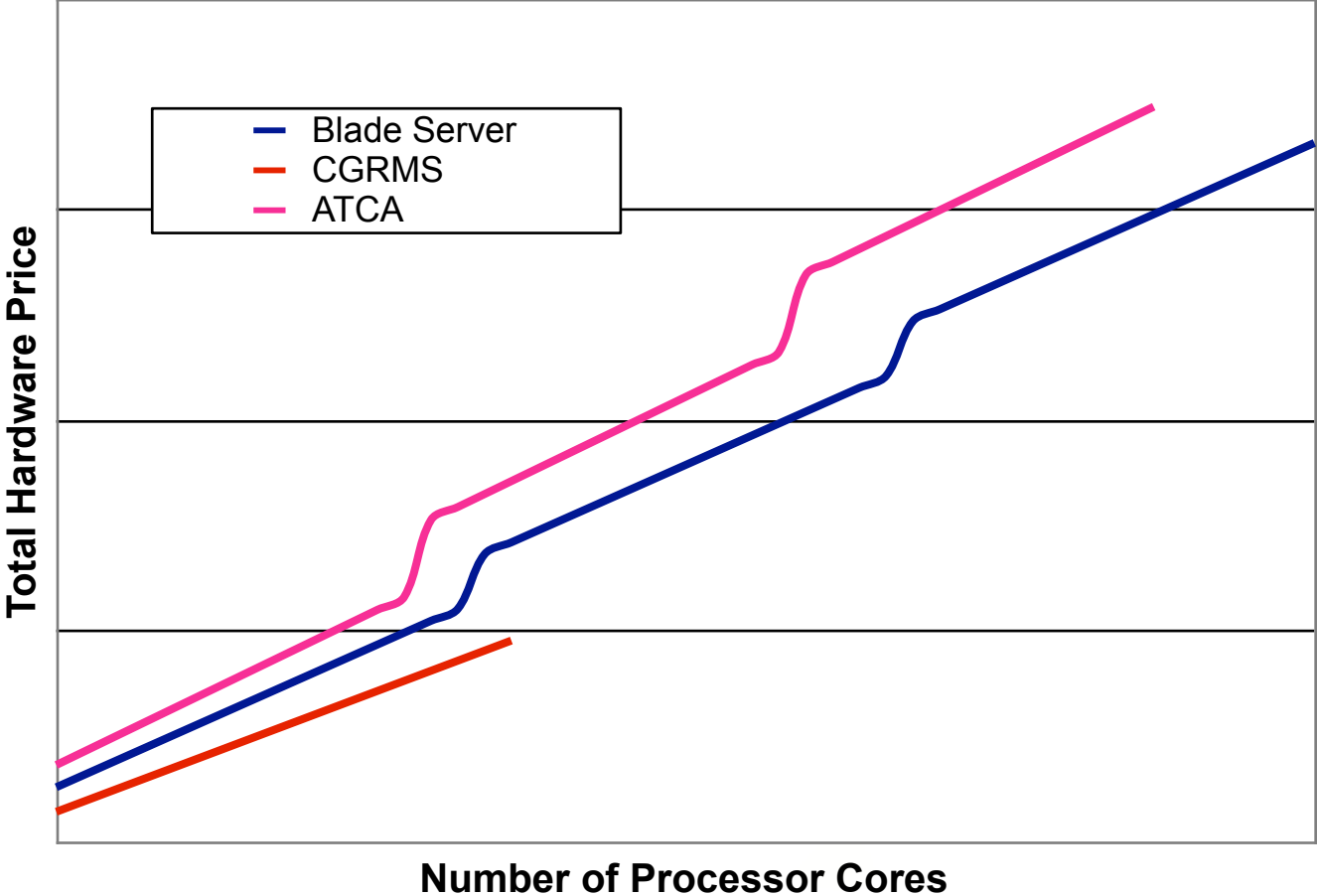
- **Switching**

- ATCA: Two 10G switches
- Blade Server: Integrated redundant switches
- Rack mount: Cisco switch per frame.

- **44U standard frame**

- ATCA : 13U / 14 slot platform
- Blade Server: 7U / 16 slot server
- Rack mount: 1U / dual quad core

# Hardware aquisition cost (single frame)



SOLUTION DESIGN

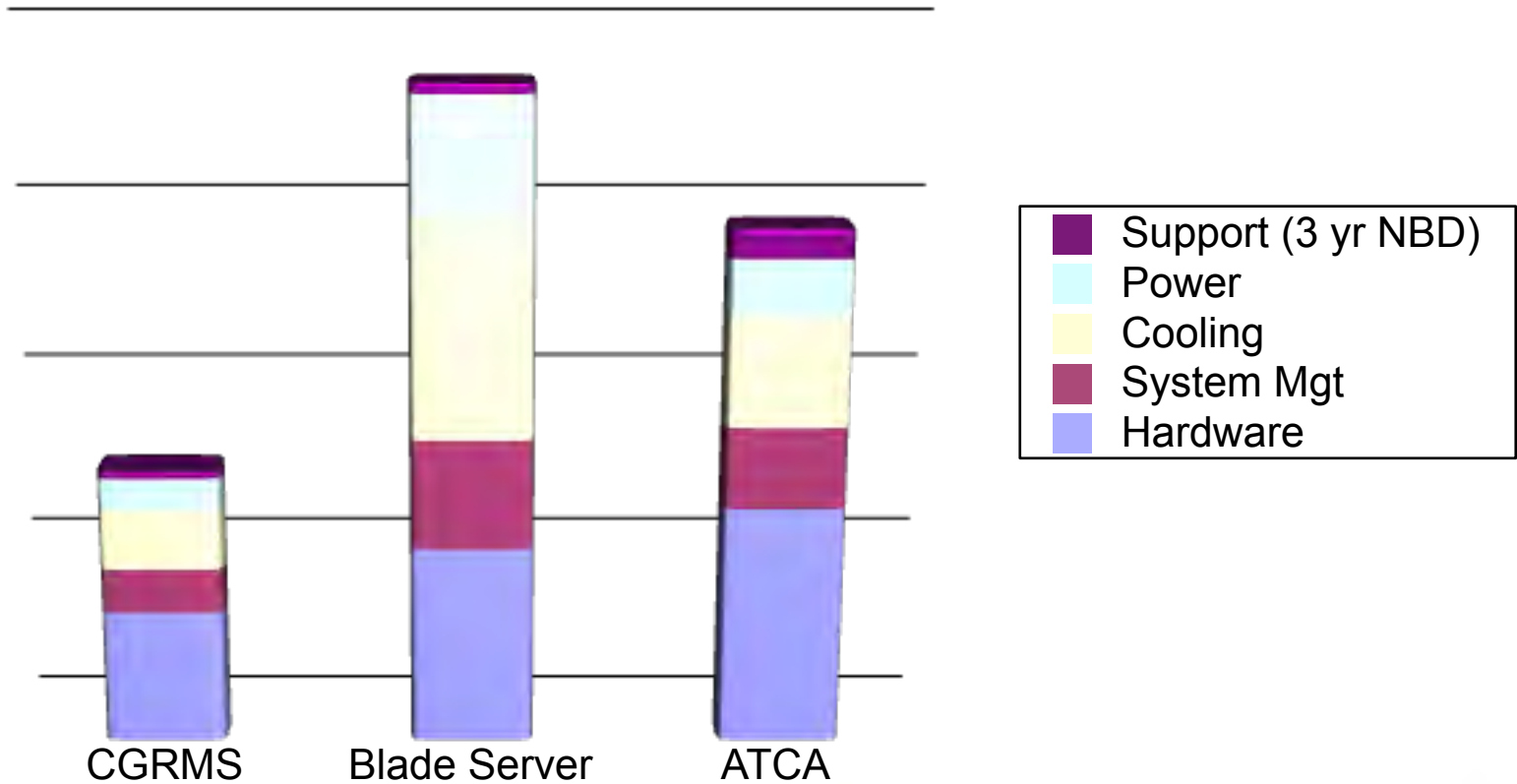
INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# Total Cost of Ownership



# The Transitioning Telecom Infrastructure

Commercial IT data center		Emerging IP-based network		Traditional "core" circuit-switched network
BSS, billing customer care, BI	Operations support, charging gateway, fraud management, provisioning	Application servers media servers, IPTV, SDP	IN, IMS security	Core network applications
AC data center environment	Co-location with -48V DC	Near NEBS (Level 1 and Level II)	Enterprise server with NEBS compliance	Full NEBS compliance
Price important	Price still important		Some customization	Flexibility, customization important
Compute power important	CPU power needed		I/O Important	Telco I/O capability important



# Agenda

---

- Macro trends from Industry analysts
- NEI RFP/RFQ trends
- Comparing xTCA, CGRMS, and Blade Servers
- **Proof point for ATCA in a NEBS environment.**
- Summary



SOLUTION DESIGN

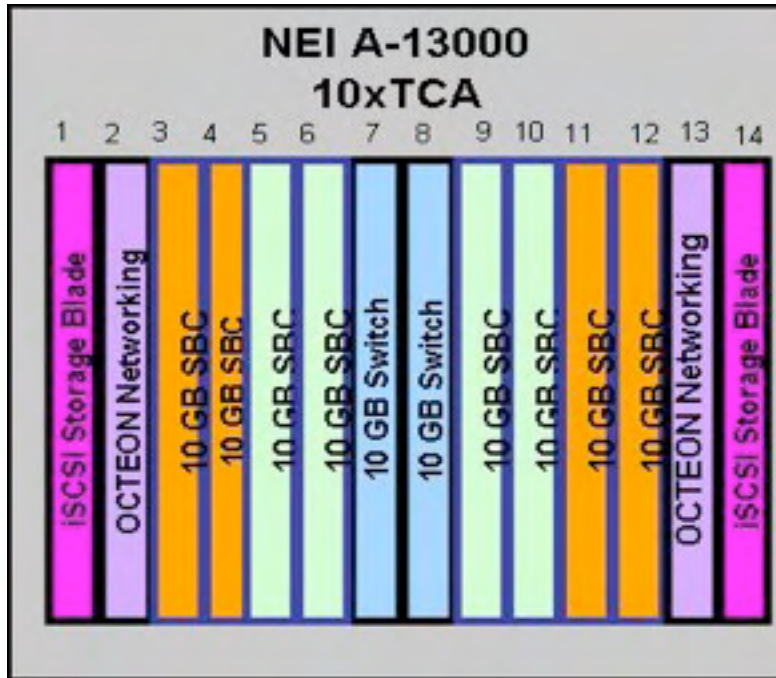
INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# NEI NEBS 10G ATCA Platform



Six different manufacturers  
in one NEBS certified box

## Product Summary

### 13U ATCA Platform

- NEBS-3 Compliant
  - Certification (Q308)
- Telco Alarms
- Long life support
- Short depth, rugged chassis
- Redundant -48VDC power.



SOLUTION DESIGN

INTEGRATION CONTROL

GLOBAL LOGISTICS

SMART SERVICES

SUPPORT & MAINTENANCE

# Frame Level NEBS certification

---

## Frame-level integration

- DC powered
- Power and data cabling to GR-78-CORE requirements
- Application software loaded
- Frame level interop testing



# Summary

---

## *Delivering on the open standard promise.....*

- **ATCA, Blade Server, and Rack mount full frame solutions**
  - Design, data & power cabling, power management, AC or DC
- **Proven leadership in xTCA.**
  - Delivering fully integrated platforms since 2004.
- **Executive member of PICMG**
  - Active in defining requirements through various sub-committees.
- **NEBS Level 3 Certification Testing**
  - Ensures the highest level of compliance testing for the platform.
- **Best in class technology partners**
  - Provides maximum flexibility for the ISV or OEM.