



Compaq AlphaServer DS40/ES40 CLIPPER TRAINING

Introduction

Rick Hill

AlphaServer Product Development

Clipper Team

Module Design:

System Module (CSB)	Glenn Herdeg
PCI Backplane (CPB)	Dave Tatosian
CPU module (CPU)	Mike Pline/R. Rudman
Memory module (MMB)	Steve Baka
TIG chip design	Steve Baka
SCSI Backplane	Dave Meier
Junk I/O	Steve Baka
OCP	Rick Rudman

Signal integrity

Jim Long
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Terry Skrypek
Gerry Ganong

Engineering manager System Architect

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Noberto Collado

Qual team

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Mike Thomas
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Power and Packaging

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Tom Thorp

Mechanical engineering

Rich Braun
Cosmo Leo

System Engineer

Bryan Porter
Fran Zdrojkowski

Layout

Walter Supinski
Wally Hamel
Jack Lepkowski

Operations Manager

Firmware

Vendor Management
Lab tech/manager
UNIX
VMS
NT

FCC
Fixturing
Mfg technology mgr
MSPM
Materials
Product manager

EPM

Stage 1 Mat'l support
Stage 1 DFT
Stage 1 DFA
Mfg Quality
Stage 2 DFT
Stage 2 DFA
Stage 2 Mat'l support
Stage 2 startup

MCS

Documentation
Website manager

Bob McClain

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Connie Lau

Mike Allen
John Calabria
Rich Friess
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Mike McGinnis

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Chet Pendleton

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Steve Spaulding
Keith Tenney
Peter Kouklamanis
Russ Raby

Carlene Costain
Thom Roy

Dick Faria
Cynthia Eikelboom
Alice Jacobsen

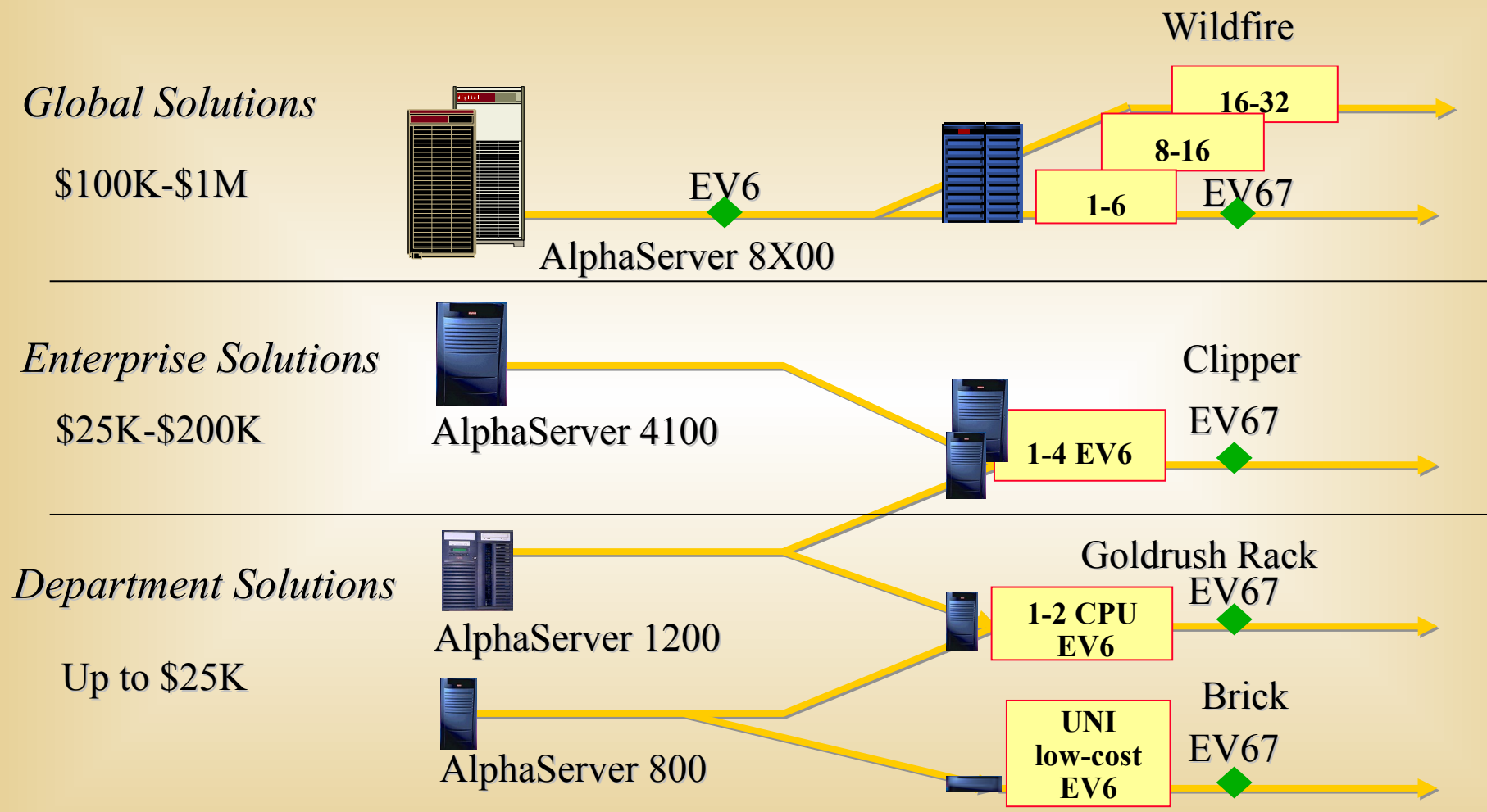
Mike Fein
Kathy Rhoades

Clipper/ES40 Product Overview



Processors:	Quad Processor Alpha EV6 (500Mhz, 4MB Cache), EV67 (667mhz, 4MB Cache)
Upgrades:	EV67 (750+mhz, 8MB DDR cache) Hot swap PCI - post FRS
Platform:	8U Design, Rackmount and Pedestal Packages
Memory:	128MB, 512MB, 1GB & 2GB, Expandable to 32 GB - ECC Standard
I/O Slots:	Up to 10 64-bit, 32mhz PCI slots
Storage:	Floppy, IDE CD-ROM, Up to 8 Ultra-2 SCSI LVD drives
Network:	10/100 MB Ethernet Adapter - Standard
O/S:	Digital UNIX, OpenVMS, Windows NT Server
High Avail:	ECC Memory, Hot Swap Drives, Remote Management, Clusters, RAID, Hot Swap N+1 Power Option, Hot Swap Redundant Fans

Product Positioning



Clipper System Offerings

Common Components

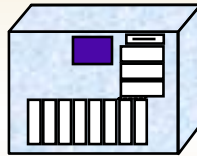
1-4 max CPUs
(EV6/67/68)

8/16 GB max
memory
(32GB post
FRS)

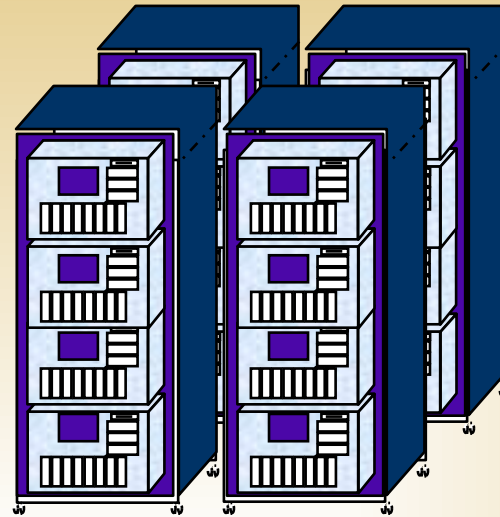
10 PCI slots

4-124 disk
bays

Wide range of
servers

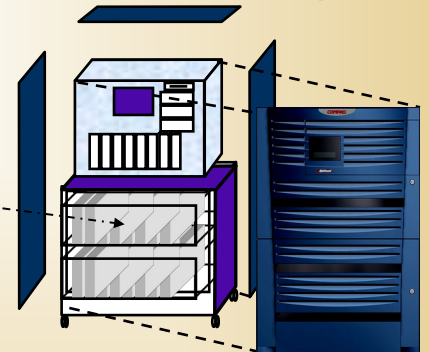


One base
system box

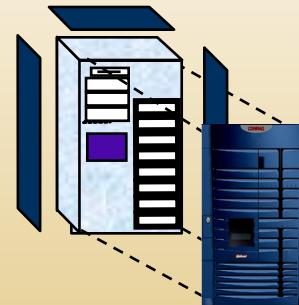


Rack systems for
flexibility, efficiency
and clusters

Expandable
Large Pedestal
for the department



StorageWOR
KS Expansion
Box (10 or 14
drives)



Entry-level
Tower
for the workgroup



Tower configuration for the workgroup

- Leverages top-of-the-line Enterprise technologies in a compact Tower form factor.
- 1-4 multiprocessing system
- 6 or 10 PCI expansion slots
- 256MB - 16 GB of ECC memory (32GB post FRS)
- Up to 8 1.6" internal hot-plug drives
- Maximum Storage - 288GB using 8 1.6" 36GB drives
- Remote System Mgt. Capabilities

Clipper/ES40 Large Pedestal



Large pedestal configuration for the department

- For the business critical users that require greater internal storage expansion capability
- 1-4 multiprocessing system
- 6 or 10 PCI expansion slots
- 256MB - 16 GB of ECC memory (32GB post FRS)
- Up to 28 1.6" internal hot-plug drives
- Maximum Storage - >1.0 TB using 28 1.6" 36GB drives
- Remote System Mgt. Capabilities

Clipper/ES40 Rackmount



Rackmount configuration for the data center

- System box size 8U; EIA Standard 19"
- Fits 4 system boxes per 32U rack
- Easy front service access with slide out rails
- Fits under doors in commercial buildings
- Rolls easily on heavy duty casters
- Easily removed side panels for multi-cab solutions
- Ships fully configured
- Optional UPS
- Maximum Storage per rack
 - With 4 system boxes: 32 1.6" x 36GB = 1.2TB
 - With 1 system box: 88 1.6" x 36GB = 3.2TB

Program Schedule

	CY97	CY98	CY99	CY00
Jan				
Feb				
Mar				
Apr				
May	<ul style="list-style-type: none"> • Team Formed 	<ul style="list-style-type: none"> • Product Requirements Frozen 	<ul style="list-style-type: none"> • Distribute group 2 systems • PVT builds 	<ul style="list-style-type: none"> • "Clipper 2" FRS
Jun		<ul style="list-style-type: none"> • Product Specification Frozen 	<ul style="list-style-type: none"> • PVT starts 	
Jul		<ul style="list-style-type: none"> • UNIX/VMS Boots w/C2 	<ul style="list-style-type: none"> • FRS/External Announce 	
Aug	<ul style="list-style-type: none"> • Prelim HW Specs 	<ul style="list-style-type: none"> • NT Boots w/C2 	<ul style="list-style-type: none"> • EV67 	
Sept	<ul style="list-style-type: none"> • Whole Product Customer Visits 	<ul style="list-style-type: none"> • Critical Path build • Group 1 Lower build 		
Oct		<ul style="list-style-type: none"> • System level debug 		<ul style="list-style-type: none"> • EV68 Speed Upgrades
Nov		<ul style="list-style-type: none"> • Training • Release all final etch 	<ul style="list-style-type: none"> • EV67 Speed Upgrades 	
Dec		<ul style="list-style-type: none"> • Group 2 power-on 	<ul style="list-style-type: none"> • DDR Cache 	