

Some Applications for Backplane Ethernet

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Rapid Prototypes Inc.

The Largest Router Systems on The Planet

Avici

- TSR 40 Ports of 10 Gig
Overall Size: 211.46 cm high x 66.04 cm wide
- SSR 20 Ports of 10 Gig
Overall Size: 96.266 cm high x 44.958 cm wide
- QSR 8 Ports of 10 Gig
Overall Size: 48.895 cm high x 44.958 cm wide

Cisco

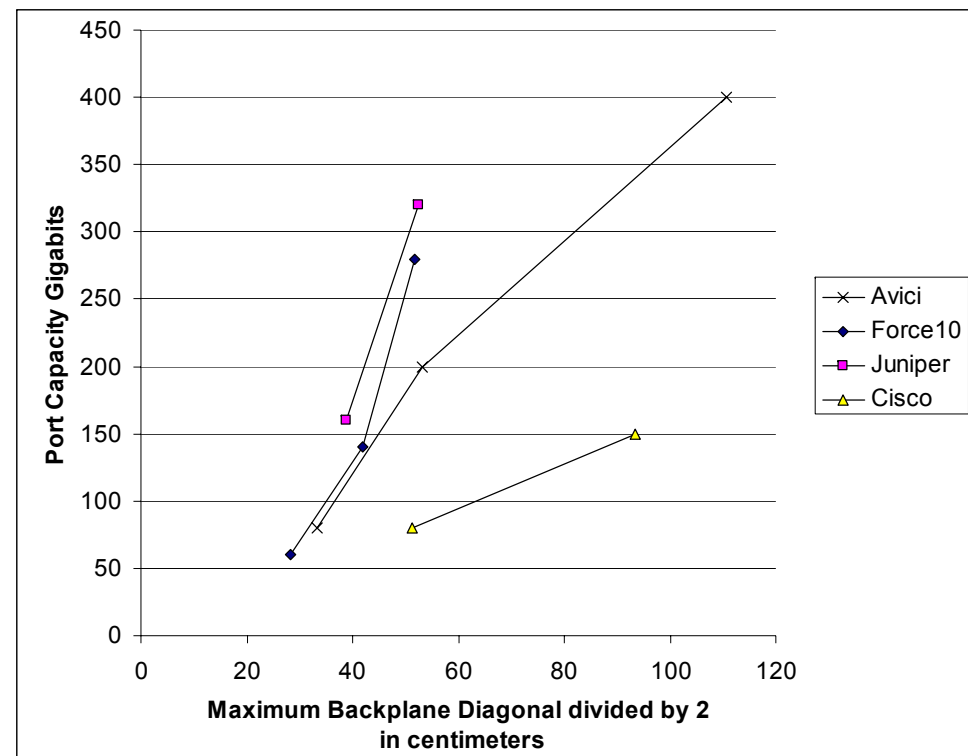
- 12816 15 Ports of 10 Gig
Overall Size: 181.6 cm high x 43.8 cm wide
- 12810 8 Ports of 10 Gig
Overall Size: 95.25 cm high x 48.26 cm wide

Force10

- E1200 28 Ports of 10 Gig
Overall Size: 93.3 cm high x 44.2 cm wide
- E600 14 Ports of 10 Gig
Overall Size: 71.1 cm high x 44.2 cm wide
- E300 6 Ports of 10 Gig
Overall Size: 35.6 cm high x 44.2 cm wide

Juniper

- T320 16 Ports of 10 Gig
Overall Size: 63.83 cm high x 44.27 cm wide
- T640 32 Ports of 10 Gig
Overall Size: 95.12 cm high x 44.27 cm wide



SuperComputer's

- Super Computers are built from an array of CPU's
- Top 500 SuperComputer List June 2004
 - Minimum number of CPU's 60
 - Maximum number of CPU's 9,632
 - An array of 128 1.5 Gigahertz Itanium II's is number 471
- Assuming 2 CPU's per slot at 2.0 Gigahertz and 4 Shelves of 16 ATCA slots each.
 - The system would be about number 300
 - The backplane would be 142.2 cm high by 48.8 cm wide
 - Half of the backplane diagonal would be 75.2 cm

Network Elements

- ATCA Network Element Market Forecast
 - 2004 600 to 2,100 Units
 - 2005 3,100 to 7,600 Units
 - 2006 9,900 to 25,700 Units
 - 2007 26,600 to 70,200 Units
- Total Network Element Market Forecast (includes ATCA)
 - 2007 1,000,000 to 3,000,000 Units

Source: RHK ATCA Market Research
http://www.picmg.org/pdf/RHK_ATCA_Whitepaper_FINAL.pdf
- Shelf Size
 - 16 Slot ATCA Backplane Size 35.6 cm high by 48.8 cm wide
 - Half the diagonal is 30.2 cm