



Q4'97 Remote Access Market Share Results

Based on Dell'Oro Group Report 2/18/98



Summary of Q4'97 Market Share Results

Ascend is the Recognized Remote Access Concentrator Market Leader Again in Q4'97

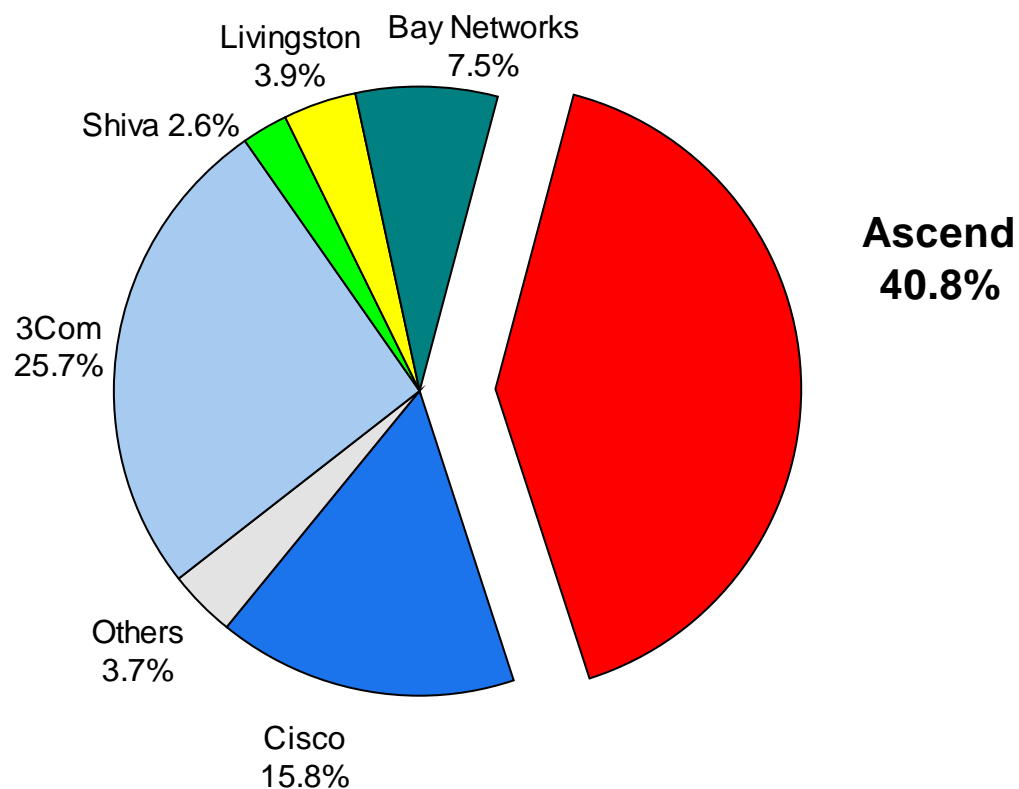
- ☐ **40.8% share of analog port shipments**
- ☐ **76.8% share of ISDN PRI B-channel shipments**
- ☐ **48.8% share of T1 DS0 shipments**
- ☐ **Ascend's market share has been increasing steadily since 1995**
- ☐ **Ascend has shipped 5.5 million RAC ports since 1995 - over 3.3 million shipped in 1997**



Ascend Maintains Leadership in Analog Port Shipments

Worldwide Market Share of Total Remote Access Concentrator Analog Port Shipments

based on Q4'97 shipments

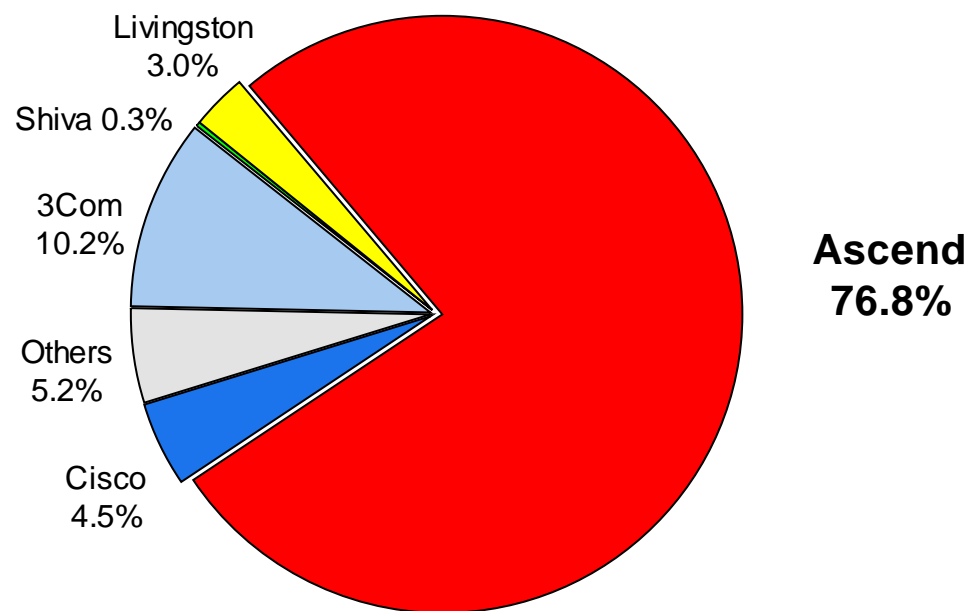




Ascend Dominates ISDN PRI B-channel Shipments

**Worldwide Market Share of Total Remote Access Concentrator
ISDN PRI B-channel Shipments**

based on Q4'97 shipments

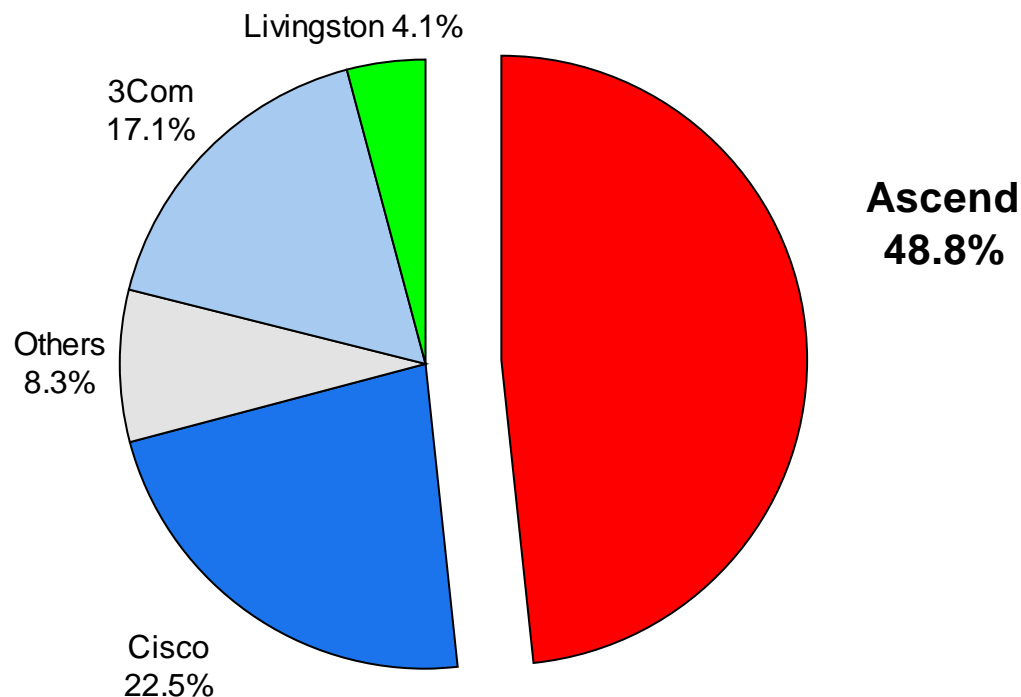




Ascend is the Leader in Estimated T1 Shipments

**Worldwide Market Share of Total Remote Access Concentrator
T1 DS0 Shipments**

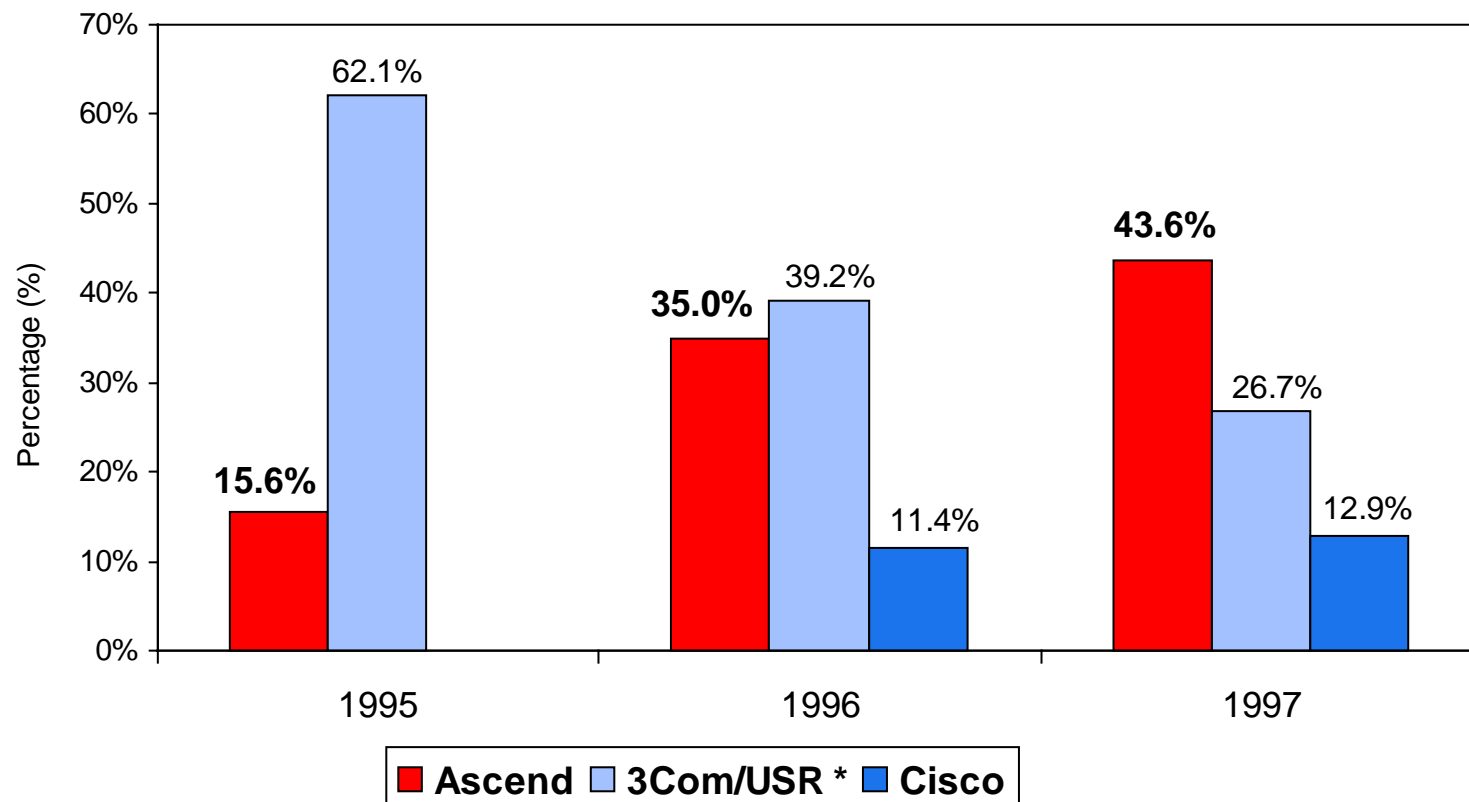
based on Q4'97 shipments





Ascend Steadily Gains Market Share

Access Concentrator Analog Port Shipment Market Share 1995-1997



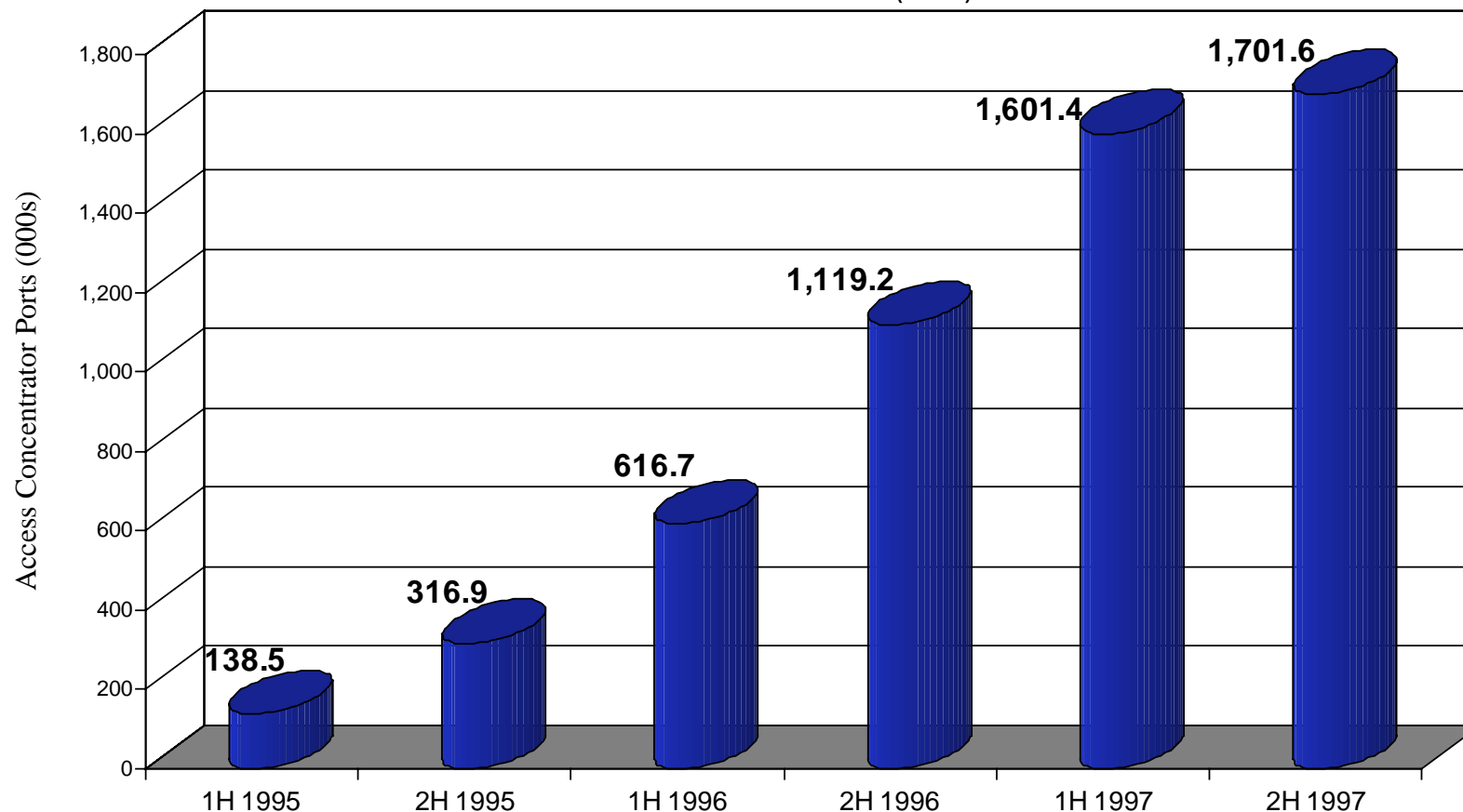
* Reflects 3Com/USR 1997 merger

Source: Dell'Oro Group, 2/18/98

Ascend's Access Concentrator Installed Base Approaches 5.5 Million Ports



Ascend Communications: Worldwide Access Concentrator Port Shipments
1995-1997 (000s)



Ascend shipped over 3.3 million RAC ports in 1997

Source: Ascend Company data