NETwin '97

Session C004

Marketing IBM HUBS Against Competition

Market and Competitive Analysis

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AGENDA

HUB Market Overview

Hub Competition
  *   3COM
  *   BAY
  *   CABLETRON

CHANNELS / DISTRIBUTION Strategy

IBM WINNING Strategy

HUB POSITIONING

Market and Competitive Analysis

the PLUMBING....a 'logical PHYSICAL view' !
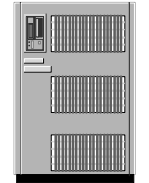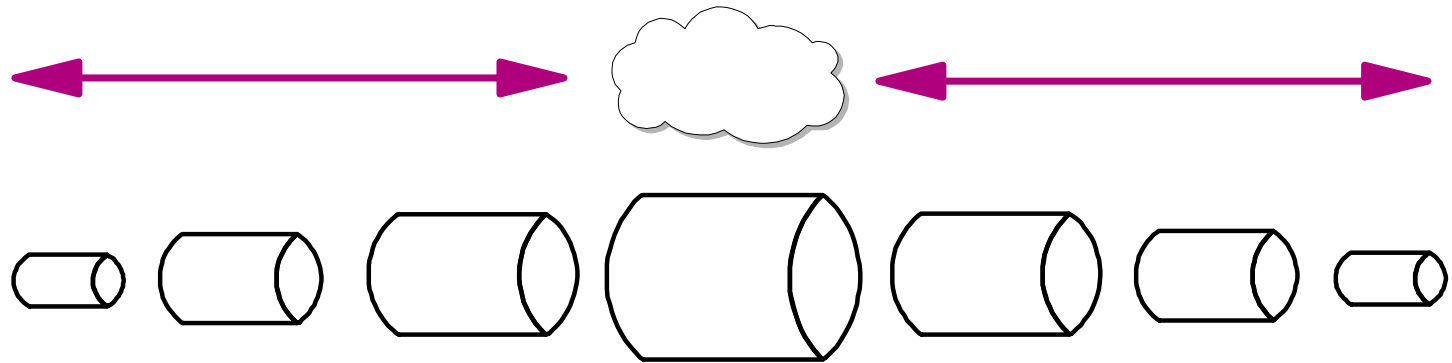
EVOLUTION

LAN   CAMPUS B/BONE   CORP. WAN   the INTERNET   CORP. WAN   CAMPUS B/BONE   LAN

SHARED MEDIA LANS

ATM SWITCHED N/W's

wiring HUBS HUBS	intell't HUBS LAN SWITCHES	ROUTERS ROUTERS	intell't HUBS LAN SWITCHES	wiring HUBS HUBS
LAN SWITCHES	ATM Bbone	ATM WAN	ATM Bbone	LAN SWITCHES
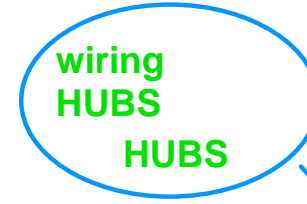
connect once , switch forever
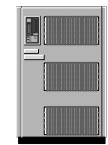
REQUIREMENTS & DECISION PARAMETERS

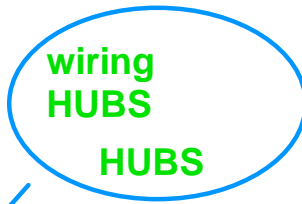"HUB Decisions not getting the 'Porsche vs. Ferrarri' decision focus"

1. WORKSTATION DEDICATED / HIGH BANDWIDTH   } SWITCH

2. SERVER BOTTLENECK RELIEF   } SWITCH

3. INTRA WORKSTATION "THICKPIPE"   } SWITCH

4. LAN CONGESTION   } SWITCH

5. EXCESSIVE LAN ADMINISTRATION   } SWITCH

6. SIMPLE WIRING TOPOLOGY   } HUB

7. WORKGROUP PHYSICAL CONCENTRATION   } HUB

8. CABLING PLANT RESTRICTIONS   } HUB

LAN MARKET FOCUS

Primary Vendor Focus and Strategy

.......and , therefore , MARKET Perception!....

IBM

3COM
BAY
CABLETRON

CISCO
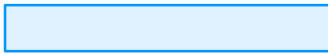
ATM , TR , ENET

25M Desktop

155M Uplink,BBONE

}}} 622M

ATM today....

ENET , TR , ATM

10M Desktop

100M BBONE

}}} Gigabit

ATM when application need....

⟵ **"SVN , NIA"** ⟶

3Com

3Com

Overview and Strategies
HUB   Products
Pricing

3Com
Overview

Market and Competitive Analysis

3Com Revenue

1996 estimated

$ Millions
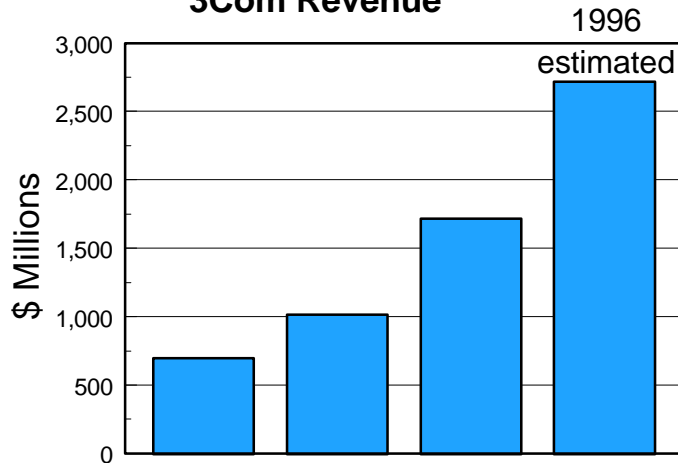
	1993	**1994**	**1995**	**1996**
Revenue ▇	696	1,014	1,718	2,720

3Com's continued growth is a result of:

- Strengthened leadership position at the edge of the network
- Increased acceptance of standards based approach in solving networks bottlenecks in the network core
- Increased status and reputation in the industry

Systems Products
- Switches, hubs, inter-networking, remote access

NICs
- Ethernet, Fast Ethernet, Token Ring, ATM

Other
- Services

% Revenue by Product Type

NICs   43%

Other   1%

System Prod.   56%

U.S. vs. Overseas

U.S.   47%

Non-U.S.   53%
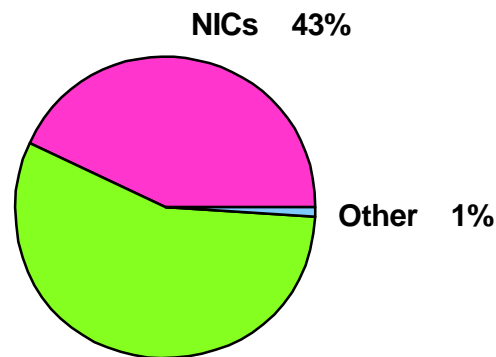
Source: 3Com press releases
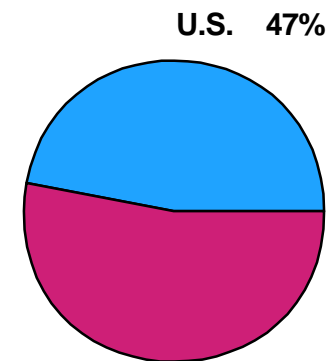
3Com Overview

Acquisitions

3Com	Date	Technology Acquired
OnStream Networks	10/96	High-speed WAN (TDM, ATM)
Axon	3/96	Remote monitoring RMON
Chipcom	7/95	High-end chassis-based hubs
Primary Access	4/95	Integrated remote access
Sonix Communic.	4/95	ISDN internetworking
AccessWorks	1/95	ISDN solutions
NiceCom	10/94	ATM technology
Centrum	3/94	Routing, remote access
Synernetics	1/94	Ethernet switching and FDDI
Pacific Monolithics *	1/94	Wireless technology
Star-Tek	1/93	Token Ring technology
BICC Group	1/92	Intelligent hubs

3Com has acquired companies to:
- Broaden their product line
- Add technical expertise that they did not have internally
- Access markets they were not competing in
- Gain access to customers / channels that they had little presence in

The challenge is integrating acquired companies to fit the overall product development, marketing, and sales strategies

3Com
Overview

Workgroup HUBS

- Designed for workgroup applications
- High-performance
- Cost-effective
- Easy to administer
- Flexible for future growth

Management

- 3Com's Transcend SNMP management

Ethernet

- OfficeConnect Hubs
- SuperStack II HUB 10 Stackable Hubs
- SuperStack II PORT SWITCH Stackable Hubs
- LinkBuilder TP Series

Fast Ethernet

- SuperStack II HUB 100 Stackable Hubs

Token Ring

- SuperStack II HUB TR Stackable Hubs

FDDI

- LinkBuilder FDDI Hubs

Multifunction HUBS

- ONcore Integrated System
- ONline System Concentrator
- LinkBuilder MSH Multi-Services HUB

3Com
HUB Overview

LAN HUB Product Portfolio vs. IBM

HUB Offering	3Com	IBM
Ethernet **Desktop / Workgroup**	OfficeConnect 8TP SERIES SuperStack II HUB 10 SuperStack II PORT SWITCH Stackable Hubs LinkBuilder TP/12	8222 8224
Fast Ethernet	SuperStack II HUB 100 Stackable Hubs	8223 8225
Token Ring	SuperStack II HUB TR Stackable Hubs	8226 , 8228 8230 , 8238
FDDI	LinkBuilder FDDI Hub	8244 8260 Modules
Multifunction HUBS	ONcore ONline LinkBuilder MSH Multi-Services HUB	8250 8260

3Com
HUB Product Details

Market and Competitive Analysis

OFFICE CONNECT

- *small Ethernet offices*
- *8 port RJ/45 units (stackable X 4)*
- *4 MODELS - 10BaseT RJ/45*
  - *above + BNC 10Base2 port*
  - *above + MGT*
  - *100BaseTX Fast Ethernet (max stack = 2)*

LINKBUILDER

- UNmanaged
- 12 port twisted pair RJ/45
- backbone interface = AUI,TP,BNC,FIBER
- slide-in BRIDGE module

FDDI

- 4 SLOT Chassis
  - 8 PORT UTP
  - 4 PORT Fiber
  - 2 PORT Fiber , 5 PORT UTP
  - MGT module , (SNMP only)

3Com
HUB Product Details

STACKABLE HUBS

SUPERSTACK II HUB 10   Ethernet

- 12 or 24 port   (max stack = 8)
- additional AUI port
- 4 MODELS (intermixable in stack)
    1. 12 port RJ/45 TP
    2. 24 port RJ/45 TP
    3. 6 port FIBER
    4. 24 port (2 x 50 pin TELCO)
- "5 pack" offered for 12/24 models
- MGT module (1 per stack) SNMP or RMON

SUPERSTACK II HUB 100   Fast Ethernet

- 12 port RJ/45 unit (max stack = 8)
- 2 MODELS   - model TX (100BaseTX) for Cat. 5 UTP
                       - model T4 (100BaseT4) for Cat. 3/4/5 UTP
- 2 optional BackBone links - 1) Cat. 5 100BaseTX RJ/45
                                           - 2) FIBER 100BaseFX
- 1 Yr. Limited WARRANTY

3Com
HUB Product Details

STACKABLE HUBS

SUPERSTACK II HUB TR   TOKEN RING

- 12 or 24 port RJ/45 (UTP/STP)   (max stack = 20)
- COPPER/FIBER RI/RO modules link to other HUBS (100m)
- MGT = SNMP , RMON
- "4 pack" offered

SUPERSTACK II PORT SWITCHING

- 12 or 24 port RJ/45 (max stack = 10)
- multiple transceiver interfaces
- hot swappable units (optionable)

REDUNDANT Power Units

- 2 types   -   REDUNDANT   (on separate power feed)
              -   UNINTERRUPTABLE   (battery)
- support for 4 units in STACK
- MGT card for Ethernet or Token Ring

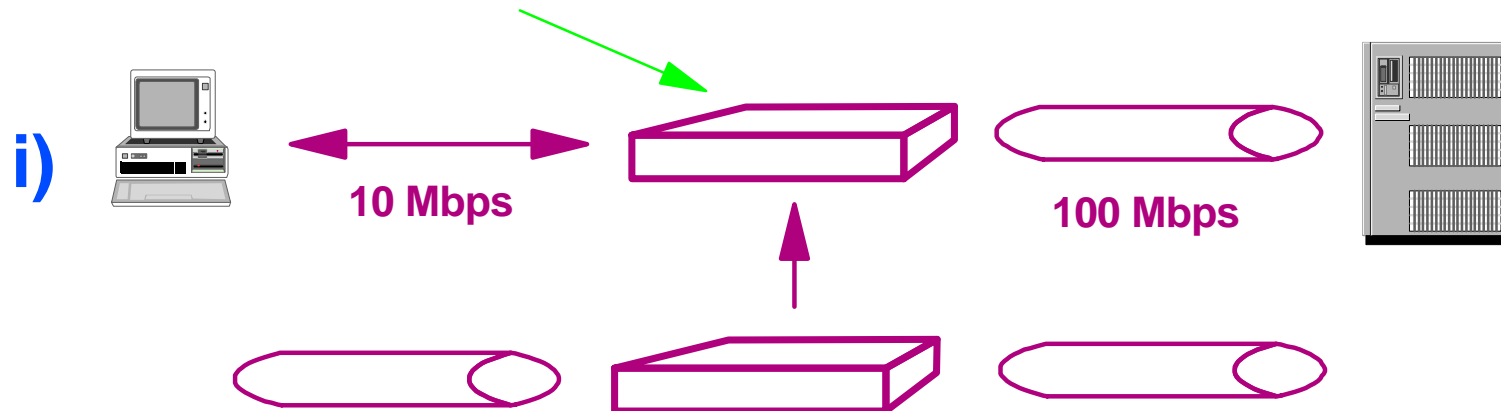# 3Com
HUB Product Details

STACKABLE HUBS

FAST ETHERNET Migration

" **FAST ETHERNET = 10 X the bandwidth @ < 2 X the $$$$** "

1) **ADD Fast Ethernet "ETHERLINK" 10/100 NIC cards**
to PC's , SERVERS (with PCI , ISA , EISA buses)

2) **ADD SUPERSTACK II SWITCH 1000 10/100 to STACK**

i)   10 Mbps   100 Mbps

ii) ...then add SuperStack II HUB 100's to stack...

3Com
MARKETING

Target Customers

- Small Office / Home Office (SOHO) market
  - OfficeConnect product line
  - 2/97 roll out comprehensive channel program
- Small / Medium Sized Businesses
- Enterprise
  - Scaling products (622M ATM, Gigabit Ethernet)
  - Increasing direct sales force
- Channels
  - Traditional strength; constant reinforcement
- Telcos
- PC Manufacturers
  - Dell
  - Acer

Target Decision Maker

- Technical network administrators
  - "Own the desktop", then move up the chain of complexity
- Channels
  - Strong, long-term relationships

Advertising and Demand Generation

- Heavy end-user advertising targets technical decision maker; right place / right time
- Direct mail is solution-oriented and product-focused
- Extensive library of ad-copy
- Heavy use of "leave pieces" (company store)
- Internal sales force markets directly to channels
  - Long-term relationship focus
  - Interaction between push / pull

Marketing Deliverables

- www.3com.com
- Product Guides, Brochures, Data Sheets, etc.
- 3Tech Technical Newsletter
- 3Seller Reseller Newsletter
- NetAge Customer Newsletter
- 3Source CD-ROM
- 3Manuals CD-ROM
- 3Com BBS Bulletin Board Service
- 3ComFacts Fax Service
- 3Com Live! Satellite Broadcasts
- Co-op ads available for channel partners

3Com
CHANNEL Marketing

Channels Overview

- Direct to established accounts (pushing F500 through Chipcom acquisition)
  - Primary fulfillment through resellers
- Channels EMPHASIS (approx. 93% of revenue)
  - Established, entrenched channel partners
  - 3Com channel program considered Best of Breed
- Telcos
- OEM
- PC Manufacturers
  - Strategic alliance with Dell, Acer

Certification

- By technical competence, number of sales reps / number of SE's, business partner revenue
  - 3STAR Network Level
  - 3STAR Solutions Level
  - 3STAR Advanced Level
- Individual rep certification
  - 3WIZARD Technologist
  - 3WIZARD Master
- Channel quallification to sell / provide services

Education and Training

- Established technical training
- Sales training available
- Sales kits available for targeted selling

Incentives

- By volume (discounts, MDF, Co-op funds) encourage sales of entire 3Com product line
- Spiffs / promos for individual reps
  - Numerous programs; strategic targets
  - Typically short runs; attractive
  - Frequent bundling promos

Support

- Technical (1-800, 7x24 or 5x8); various levels
- Marketing
  - 3Com-funded person at key partners
  - 3Com rep quota based on channel sales
  - Lead referral program
  - Extensive use of demos
  - Frequent face time; "Buddy Calls" with reseller
  - "Working Together" Program
  - Will provide complete sales assistance

Pricing and Special bids

- Discounts per product family
- Large distributors have some authority to bid special prices (adapter orders < 1000 NICs)
- Meets-Comp desk for large / strategic bids
  - Lead with best price first
  - Will exceed 45 - 50% discount for key wins
  - Simply, easy process for resellers to follow

Bay

Bay Networks

Overview and Strategies
HUB Products
Pricing

Bay
Overview

Bay Revenue

1996 estimated

$ Millions (y-axis: 0, 500, 1,000, 1,500, 2,000, 2,500)
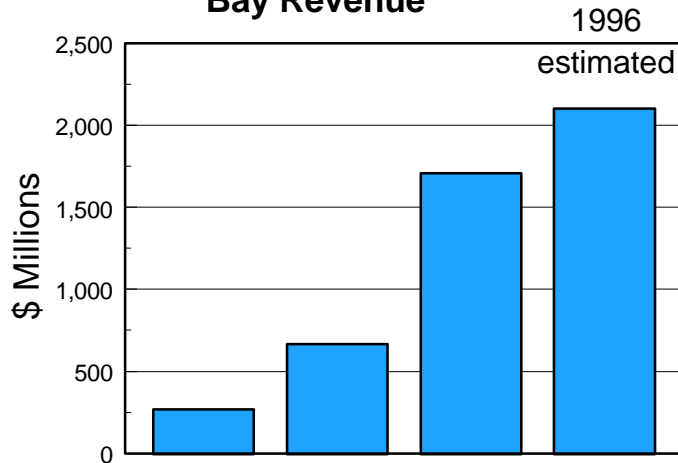
	1993	1994	1995	1996
Revenue	267	665	1,707	2,100

Bay has acquired companies to:
- Broaden their product line
- Add technical expertise that they did not have internally

With recent changes at the head of Bay, some say they are still struggling with the merger of Synoptics and Wellfleet

Acquisitions	Date	Technology Acquired
NetICs Inc.	12/96	10/100 Autosensing ASICs
LANcity Corp.	9/96	Cable modem technology
Penril Datacomm *	6/96	Digital modem business
Performance Technology	3/96	LAN to Internet access technology
ARMON Networking	2/96	RMON software
Xylogics	12/95	Remote LAN access
Centillion Networks	5/95	Token Ring / ATM switching

* Bay bought only the DSP modem business from Penril.

Source: Bay Networks press releases

BAY NETWORKS
HUB Overview

LAN HUB Product Portfolio vs. IBM

HUB type	BAY	IBM
Ethernet **Desktop / Workgroup**	SYSTEM 800 Workgroup Conc'rs SYSTEM 2000 LATTISHub Model 28XX BayStack Ethernet Stackable Hubs	8222 8224
Fast Ethernet	BayStack Fast Ethernet Stackable Hubs	8223 8225
Token Ring	SYSTEM 2000 Model 27XX BayStack Token Ring Stackable Hubs	8226 8228 8230 8238
FDDI	SYSTEM 2000 Model 2914	8244 8260 Modules
Multifunction HUBS	SYSTEM 3000	8250 8260

BAY NETWORKS
HUB Product Details

Market and Competitive Analysis

SYSTEM 800   Ethernet

- ◆ 8 PORT 10BaseT
- ◆ additional AUI port
- ◆ 12 models .... Country , Mgt options
- ◆ Unmanaged = $300   Managed = $800

SYSTEM 2000   Ethernet and Token Ring

- ◆ 16 port CHASSIS models
- ◆ Ethernet = 28XX (LATTISHUB) , Token Ring = 27XX
- ◆ 9 models .... Mgt options , RI/RO media types

FDDI

- ◆ 14 port CHASSIS
- ◆ $16,000 list

BAY NETWORKS
HUB Product Details

Market and Competitive Analysis

BAYSTACK STACKABLES

Ethernet   -   6 Models   (max stack = 10)
- 12 port RJ/45
- 24 port RJ/45
- 24 port TELCO connection
- 6 port FIBER

Fast Ethernet   -   12 port (max stack = 6)

Token Ring   -   3 models   (max stack = 10)
- all 24 port RJ/45 STP/UTP

Redundant Power   -   unit manages stack of 4

Management options   -   SNMP
-    SNMP w/ pRMON
-    Full RMON

Bay
MARKETING

Target Customers

- Enterprise
  - Direct sales force
- Medium sized businesses
  - Combination direct sales and channels
- Small / medium sized businesses
  - Primarily channels with direct sales assist
- Small Office / Home Office (SOHO) market
  - Bay is going after this market with a new product line called NETGEAR
  - Competing with 3Com's OfficeConnect and Cisco's NeBeyond product line

Advertising and Demand Generation

- Extensive trade rag advertisement
- Lead generation primarily for direct sales reps
  - Use channel partners only if advantageous
- Frequent contact with channel partners

Marketing Deliverables

- Bay Networks WWW Page
- Product Guides, Brochures, Data Sheets, etc.
- Channel Bulletin Updates
- CD Library (includes proposal generator and all literature)
- InfoFACTS Fax Service
- Coast Line Internet Access
- Satellite Broadcasts
- Co-op ads available for channel partners

Bay
CHANNEL Marketing

Channels Overview

- Direct
  - Preferred sales channel for high-end products and key accounts
- Channels
  - High-end partners for complex products
  - Resellers for simple solutions
  - Restructured channels program in mid '95

Certification

- By technical competence and revenue (by site or entire company)
  - Enterprise Solution Partners able to resell all Bay products and solutions
  - Authorized Partners resell all except high-end
- Seven technical certification levels

Education and Training

- Established technical training

Incentives

- By volume
- Frequent promos to push selected products

Support

- Technical 1-800
  - 7x24 available from 3rd party
- Marketing
  - Qualified lead program
  - Co-op funds for partners reporting monthly sales
  - Collateral material and ad-copy available
  - Demo equipment available

Pricing and Special bids

- Discounts per product
- Special bids handled by direct sales reps as a consulting service to channel partners
- Discounts heavily to win strategic sales

CABLETRON

Market and Competitive Analysis

CABLETRON   SYSTEMS

Overview and Strategies
HUB Products
Pricing

CABLETRON
Overview

CABLETRON REVENUE

1996 estimated

$ Millions
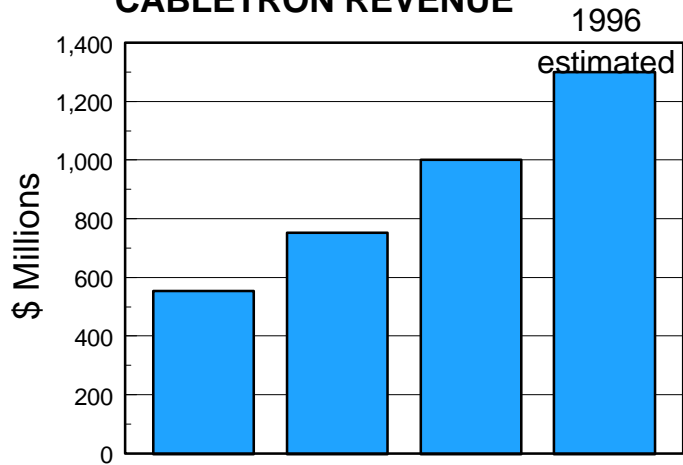
	1993	1994	1995	1996
Revenue	553	753	1,000	1,300

CABLETRON FOCUS....
- large corporate opportunities
- large networks , minimal small configurations , networks

HAVE NOT REALLY EXPLOITED SMC ACQUISITION, OR ADOPTED THEIR SWITCHING TECHNOLOGY.

Acquisitions	Date	Technology Acquired
SMC (Switching Div.)		Ethernet switching

Source: Cabletron press releases

CABLETRON SYSTEMS
HUB Overview

(C) 1997 IBM Networking Hardware Division

HUB type	CABLETRON	IBM
Ethernet **Desktop / Workgroup**	MicroMMAC 22E , 24E , 32E ,34E Remotes HubSTACK SEH , SEHI 22 , 24 , 32 , 34 Stackables	8222 8224
Fast Ethernet	HubSTACK SEH , SEHI 100TX -22 Stackable	8223 8225
Token Ring	MicroMMAC 22T , 24T , 42T , 44T Remotes HubSTACK STH , STHI 22T , 24T , 42T , 44T Stackables	8226 8228 8230 8238
FDDI	no chassis , just modules	8244 8260 Modules
Multifunction HUBS	MMAC -FNB MMAC-Plus MIcroSNAC Concentrator	8250 8260 2217

CABLETRON
HUB Product Details

2 MODEL / FAMILIES
* **MicroMMAC**
* **HubSTACK**

Model naming convention:

22	24	32	34	Enet
		42	44	TRing

12 ports

24 ports

RJ/45	RJ/71 (50pin)	**Enet**
UTP 3,4,5	IBM 1,2,6,9,STP	**TRing**
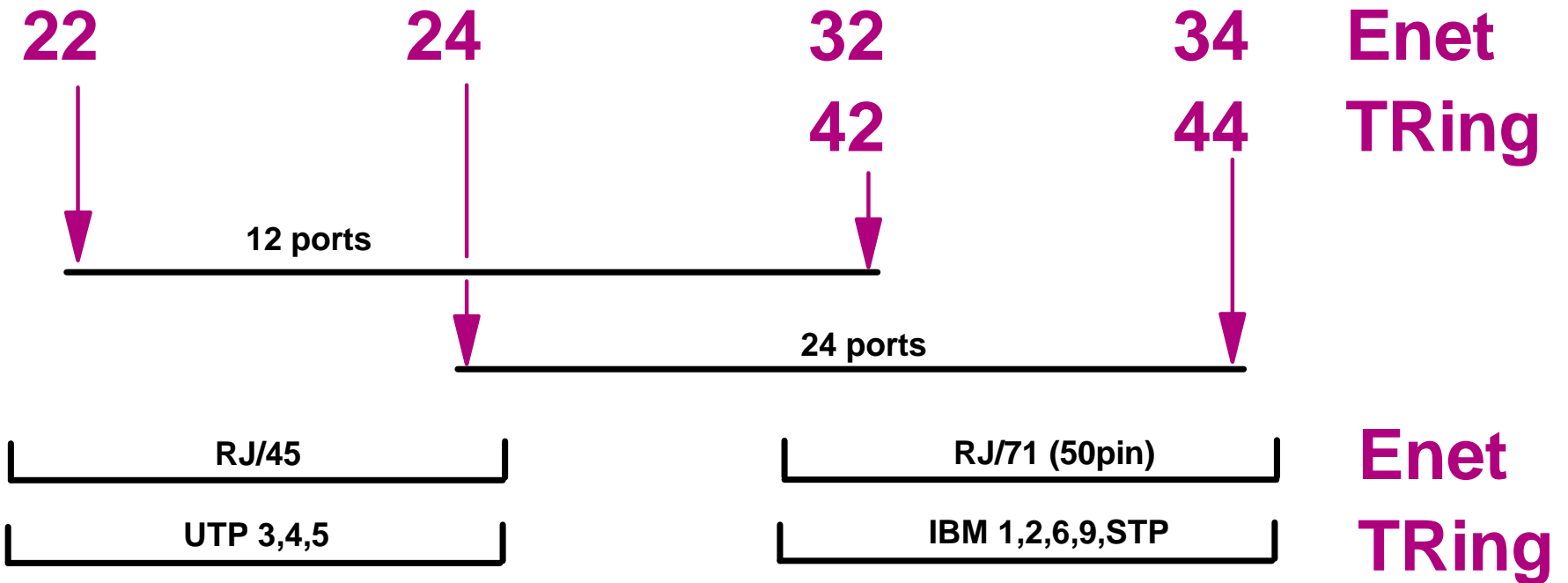
CABLETRON
HUB Product Details

MicroMMAC   Remote Office Hubs

- **Token Ring and Ethernet**
- **12 or 24 port**
- **RMON support**
- **plus 1 COMM port**
- **BRIM** - **1 port on each unit**
  - **SNMP mgble BRIDGE/ROUTING interface card to any TR,ENET,FDDI,ATM,WAN network**
- **EPIM** - **1 port per 12 port unit , 2 per 24 unit**
  - **for additional coax,fiber,STP,UTP**

HubSTACK   Stackables

- **Token Ring , Ethernet ... (12 or 24 port)**
  - **max stack .... Ethernet = 5**
    - **Token Ring = 4**
- **Fast Ethernet ... (22 port)**
  - **max stack = 5**
  - **100BaseTX**
- **SEH model = unmanaged**
- **SEHI model = managed (MIB II , SNMP , no RMON)**

CABLETRON
CHANNEL Marketing

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SUMMARY of HUB Products

Market and Competitive Analysis

TECHN'GY	CHASSIS TYPE	Managed / UnManaged	Manufacturer	PRODUCT	PRICE	PORTS
ETHERNET	FIXED	UNManaged	3COM	OFFICECONNECT HUB 8 TPO	229	8
				LinkBuilder TP12	499	12
			BAY	SYSTEM 800 (800A-F)	299	8
				SYSTEM 2000 (2800A)	799	16
			IBM	8222-008	299	8
		Managed	3COM	OFFICECONNECT HUB 8 TPM	749	8
			BAY	SYSTEM 800 (810M)	799	8
				2800 (2813-05) SNMP	1395	16
				2800 (2813-04) Adv.Mgt. SNMP/pRMON	2195	16
				2800 (2813SA) Adv.Anal.Mgt. SNMP/RMON	3195	16
			IBM	8224-002	1395	16
	STK'BLE	UNManaged	3COM	SuperStack II HUB 10	799	12
				SuperStack II HUB 10	1399	24
			BAY	BayStack HUB 101	849	12
				BayStack HUB 102	1399	24
			CABLETRON	HubSTACK SEH 22	1395	12
				HubSTACK SEH 24	1995	24
			IBM	8224-001	895	16
		Managed	3COM	SuperStack II HUB 10 Mgt Mod SNMP/pRMON	1498	12
				SuperStack II HUB 10 Adv.Mgt. SNMP/RMON	2798	12
				SuperStack II HUB 10 Mgt Mod SNMP/pRMON	2098	24
				SuperStack II HUB 10 Adv.Mgt. SNMP/RMON	3398	24

SUMMARY of HUB Products

TECHN'GY	CHASSIS TYPE	Managed / UnManaged	Manufacturer	PRODUCT	PRICE	PORTS
ETHERNET	STK'BLE	Managed	BAY	BayStack HUB 101 SNMP	1348	12
				BayStack HUB 101 Adv.Mgt. Mod. SNMP/pRMON	1548	12
				BayStack HUB 101 Adv.ANAL.Mod. SNMP/RMON	2848	12
				BayStack HUB 102 SNMP	1898	24
				BayStack HUB 102 Adv.Mgt. Mod. SNMP/pRMON	2098	24
				BayStack HUB 102 Adv.ANAL.Mod. SNMP/RMON	3398	24
			CABLETRON	HubSTACK SEHI-22 SNMP	2395	12
				HubSTACK SEHI-24 SNMP	2995	24
				MicroMMAC-22E SNMP/pRMON	4895	12
				MicroMMAC-24E SNMP/pRMON	5495	24
			IBM	8224-002	1395	16
Fast Ethernet	FIXED	UNManaged	3COM	OFFICECONNECT HUB 8 TP100	749	8
			IBM	8223	1595	8
			IBM	8225-001	2895	12

SUMMARY of HUB Products

Market and Competitive Analysis

TECHN'GY	CHASSIS TYPE	Managed / UnManaged	Manufacturer	PRODUCT	PRICE	PO RTS
Fast Ethernet	FIXED	Managed	IBM	8225-002 w/SNMP	3995	12
				8225-003 w/RMON	4495	12
	STK'BLE	Managed	3COM	SuperStack II HUB 100 TX (w/MGT)	4590	12
				SuperStack II HUB 100 T4 (w/MGT)	4590	12
			BAY	BayStack FEN HUB w/Mgt. Module	4370	12
			CABLETRON	HubSTACK SEHI 100TX -22	7995	22
			IBM	8225-002 w/SNMP	3995	12
				8225-003 w/RMON	4495	12
TOKEN RING	FIXED	UNManaged	BAY	2700 2702B-C (Pass)	1595	16
				2700 2705B (Act)	2195	16
			IBM	8226 4/16 RJ-45	545	8
				8228 4/16 UTP/STP	545	8
		Managed	BAY	2700 2715B-05 Model SNMP	3250	16
				2700 2715B-04 Model Adv. Mgt.	3550	16
				2700 2715SA-08 Model Adv.Anal.Mgt.	4495	16
			CABLETRON	MicroMMAC -22T SNMP/RMON	6795	12
				MicroMMAC -24T SNMP/RMON	7795	24

SUMMARY of HUB Products

TECHN'GY	CHASSIS TYPE	Managed / UnManaged	Manufacturer	PRODUCT	PRICE	PO RTS
TOKEN RING	FIXED	Managed	IBM	8230-4A	2995	16
				8230-4P	2695	16
	STK'BLE	UNManaged	3COM	SuperStack II HUB TR	1895	12
				SuperStack II HUB TR	2495	24
			BAY	BayStack 501 TR HUB	2795	24
			CABLETRON	HubSTACK STH - 22T	1895	12
				HubSTACK STH - 24T	2895	24
		Managed	3COM	SuperStack II HUB TR w/Mgt. Module RMON	3345	12
				SuperStack II HUB TR w/Adv. Mgt. Module RMON+	4390	12
				SuperStack II HUB TR w/Mgt. Module RMON	3945	24
				SuperStack II HUB TR w/Adv. Mgt. Module RMON+	4990	24
			BAY	BayStack TR HUB 502 Std. Mgt. Module	4395	24
				BayStack TR HUB 504 Adv. Anal. Mgt. Module	6495	24
			CABLETRON	HubSTACK STHI - 22T	3795	12
				HubSTACK STHI - 24T	4795	24
			IBM	8238-PB1 (Pass)	3565	16
				8238-AB1 (Act)	4405	16

Workgroup HUB POSITIONING

8230 legacy.....

* CMOL Management base (pre SNMP)

* remote LAMS

* IBM cabling system

8225 Fast Ethernet strength

* hot swappable UNITS

* full RMON

* segmentation by unit

IBM Total Solution vs.
SuperStack , Bay Stack , and HubSTACK

* use integration strength of 8225,24,38 with
  2210

* integrate with 8235 REMOTE ACCESS

* NIC cards , AS , RS , PC whole solution bundles

Market and Competitive Analysis

COMPETITIVE "Go to Market" STRATEGY
..... or HOW MARKET GETS TO THEM!

1. CABLING & N/W ADDED VALUE Corporations
(ie. ANIXTER)

- ONE-STOP Network Provider
- Vendor differentiation must be encouraged

2. DISTRIBUTOR } INTEGRATOR } CLIENT

- 1-800-BUY-HUBS
- Packaged with RS/AS/DEC/SUN/HP/DG
- Software Application , Workstation Solution drag
- HUB's are a COMMODITY here

CHANNELS and DISTRIBUTION

COMPETITIVE "Go to Market" STRATEGY
..... or HOW MARKET GETS TO THEM!

3. PC DEALERS

- Drag from Multiple PC deals
- LAN Installation SERVICES Package
- 3rd Party IMPLEMENTATION / MGT Outsourcing

4. LARGE ACCOUNTS

- 3COM , BAY , Cabletron , Corporate focus
- fullfillment by DISTRIBUTOR , DEALER , INTEGRATOR
   ....(most of the time!)

HUB MARKET FOCUS

1. AWARENESS to IBM RS/AS TEAMS

- participate with their Business Partners , Integrators
- Use OPPORTUNITY MGT SYSTEM to Build FOCUS list
- Package "higher IBM content" solutions
- take the COMMODITY and MYSTIQUE away FOR THEM

2. FOCUS on CABLING SUPPLIERS

- LAN expansions = HUBS
- new SITES = WIRING = HUBS
- educate , lunch/learns , become their partner
- help with 8260 opportunities
- ENGAGE , PARTNER with IBM Customer SERVICE

IBM WINNING SOLUTIONS

HUB MARKET FOCUS

3. PC DEALER AWARENESS

- NIC card volume = HUBS
- create simple "FEATURE CARD" cheatsheets for quick reference

4. SIGN UP NETeam MEMBERS

- and work with them .....

5. WIN the SWITCH battle , ship the HUBS

- see Larry Heathcote's presentation....C005

Au Revoir , a bientot !!!!

Les gens achetent des les gens qu'ils respectent...
et les gens respectent les gens qu'ils aiment !

APPENDIX

IBM ®

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Market and Competitive Analysis

GC - NWC004.pre - 01/13/97

PRICES

3Com Prices
HUB Products

Market and Competitive Analysis

Part Number	Price ($US)	Description
		ETHERNET OfficeConnect Series
OfficeConnect 8/TPO	229	ENET unmanaged 8 ports (4 max)
OfficeConnect 8/TPC	279	ENET unmanaged 8 ports + BNC 10Base2 COAX port for 30 add'l units
OfficeConnect 8/TPM	749	ENET managed 8 ports + BNC
OfficeConnect 8/TP100	1,395	FAST ENET 8 ports
		ETHERNET Stackables
	799	SuperStack II HUB 10 12 port
	3,655	SuperStack II HUB 10 12 port (5 - pack)
	1,399	SuperStack II HUB 10 24 port
	6,445	SuperStack II HUB 10 24 port (5 - pack)
	699	SuperStack II HUB 10 Mgt Module
	1,999	SuperStack II HUB 10 Adv RMON Module
		ETHERNET PORT SWITCH HUBS
	1,499	SuperStack II Port Switch 12 port
	2,199	SuperStack II Port Switch 24 port
	49-79	cascade cables
	499	**LINKBUILDER TP/12 unmanaged ENET 12 port HUB**
		FAST ETHERNET STACKABLE
	2,595	SuperStack II HUB 100 100Base-TX 12 port
	9,575	SuperStack II HUB 100 100Base-TX (4 pack,48 port)
	2,595	SuperStack II HUB 100 100BASE-T4 12 port
	9,575	SuperStack II HUB 100 100BASE-T4 (4-pack,48 port)
	1,995	SuperStack II HUB 100 Mgt Unit
	349	SuperStack II HUB 100 TX Transceiver Module
	499	SuperStack II HUB 100 FX Transceiver Module
	89	expansion cable

3Com Prices
HUB Products

Part Number	Price ($US)	Description
		TOKEN RING Stackables
3C510510B	1,895	SuperStack II HUB TR 12 port
3C510511B	2,495	SuperStack II HUB TR 24 port
3C510503	670	Fiber RI/RO Module
3C510504	300	Copper RI/RO Module
3C510502	1,450	RMON Mgt Module
3C510505	2,495	Adv. RMON Mgt Module
3C565047A	1,495	Redundant Power Supply

BAY Prices
HUB Products

Part Number	Price ($US)	Description
		System 800 WKGRP Concentrator
800,800A-F	299	Model 800 - 8 port unmanaged ENET HUB
810M,810MA-MF	799	Model 800 - 8 port managed ENET HUB
		System 2000 WKGRP Concentrator
2800A	799	LattisLink ENET 16 port
2803	895	LattisHub ENET 16 portI
2804	1,195	LattisHub ENET 16 port (FL interconnect)
2813-04	2,195	LattisHub ENET 16 port ADV. management
2813-05	1,395	LattisHub ENET 16 port BAS. management
2813SA	3,195	LattisHub ENET 16 port ADV. ANAL. mgt
2814-04	2,495	LattisHub ENET 16 port managed (FL interconnect)
2814-05	1,695	LattisHub ENET 16 port (FL interconnect) Bas. management
2814SA	3,495	LattisHub ENET 16 port (FL interconnect) ADV. ANAL mgt.
2702B-C	1,595	Token Ring 16 port passive
2705B	2,195	Token Ring 16 port active w/ speed detect
2712B-04	3,995	Token Ring 16 port ADV managed IP passive
2712B-05	3,195	Token Ring 16 port BAS managed IPpassive
2712B-F-04	5,195	Token Ring 16 port ADV managed IP passive (Fiber RI/RO)
2715B-04	3,550	Token Ring 16 port ADV managed IPactive
2715B-05	3,250	Token Ring 16 port BAS managed IP active
2715B-F-04	5,695	Token Ring 16 port ADV managed IP active (Fiber RI/RO)
2715SA-08	4,495	Token Ring 16 port ADV. ANAL. mgt
2715SA-F-08	6,495	Token Ring 16 port ADV. ANAL. mgt (Fiber RI/RO)
		FDDI WKGRP Concentrator
2914-04	15,995	Fiber Optic FDDI concentrator (14 port?)

BAY Prices
HUB Products

Market and Competitive Analysis

Part Number	Price ($US)	Description
		BayStack Fast Ethernet Hub
AT2202001	2,375	BayStack 100BaseT , 12 BASE-TX port , 1 exp slot ,1 100BaseT media slot
AT2219001	495	100BASE-FX Fiber Media Adapter
AT2204001	1,995	100BASE-TX FENET HOST MODULE w/ 12 100BASE-TX ports
AT2207001	1,995	Network Mgt. Module
AT0018001	89	Cascade cable
RPSU	2,995	Redundant PWR supply (for up to 4 stkble units)
		BayStack Stackable Hubs (ETHERNET)
	849	ENET , 12 X RJ-45 ports
	1,399	ENET , 24 X RJ-45 ports
	1,399	ENET , 24 port TELCO connectors
	2,295	ENET 10 Base-FL w / 6 ST ports
	1,499	ENET , 12 X RJ-45 ports and -48 VDC Power Supply
	2,099	ENET , 24 X RJ-45 ports and -48 VDC Power Supply
	99	ENET AUI Media Adapter
	199	ENET 10 Base-2 Media Adapter
	349	ENET 10 Base-FL Media Adapter
	399	ENET 10 Base-FL RDN Media Adapter
	129	ENET 10 Base-T MDI Media Adapter
	749	ENET Single Mode Fiber Media Adapter
	499	ENET Std SNMP Mgt Module
	699	ENET ADV. N/W MGT Module
	1,999	ENET ADV. ANALYZER N/W MGT Module
	59	Cascade cable
	2,995	Redundant PWR Supply (for 4 units)

BAY Prices
HUB Products

Part Number	Price ($US)	Description
		BayStack Stackable Hubs (TOKEN RING)
	2,795	BayStack 501 TR HUB 24 active UTP/STP RJ-45 ports , 1 MDA slot , 1 exp slot
	4,395	BayStock 502 , above plus STD N/W Mgt Module
	6,495	BayStock 504 , above plus ADV ANAL Module plus Data Collection Module
	750	BayStack TR Dual Port Fiber 802.5 RI/RO Media Dependant Adapter
	350	BayStack TR Dual Port Copper RI/RO Media Dependant Adapter
	1,595	BayStack TR Multi-ring Expansion Module
	2,995	Redundant Pwr Supply (up to 4 units)

CABLETRON Prices
HUB Products

CABLETRON Prices
HUB Products

Part Number	Price ($US)	Description
		TOKEN RING (Remotes)
MicroMMAC - 22T	6,795	12 port UTP Token Ring HubSTACK
MicroMMAC - 24T	7,795	24 port UTP
MicroMMAC - 42T	6,795	12 port STP
MicroMMAC - 44T	7,795	24 port STP
		TOKEN RING (Stackables) (non-intelligent)
HubStack STH-22	1,895	12 port UTP Token Ring HubSTACK
HubStack STH-24	2,895	24 port UTP
HubStack STH-42	1,895	12 port STP
HubStack STH-44	2,895	24 port STP
		TOKEN RING (Stackables) (intelligent)
HubSTACK STHi-22	3,795	same as STH line
HubSTACK STHi-24	4,795	
HubSTACK STHi-42	3,795	
HubSTACK STHi44	4,795	