

IBM SCSI Controllers (Micro Channel)

Controller	Micro Channel SCSI Adapter with Cache	PS/2 SCSI-2 Adapter/A	SCSI-2 Fast/Wide Adapter/A
Implementation	Planar/card - old PS/2's	Adapter in 76s, 77s	Planar in Model 85 433, 466 Adapter in 95 466, 560, 566 Adapter in Serv 500 non-array models
SCSI type	Option (Options by IBM™) SCSI-1	Option SCSI-2 Fast	Option (Options by IBM) SCSI-2 Fast/Wide
SCSI bus path / speed	8 bit / 5 MB/sec	8 bit / 10 MB/sec	16 bit / 20 MB/sec
I/O Architecture	Micro Channel®	Micro Channel	Micro Channel
I/O bus path / speed	32 bit / 16.6 MB/sec	16 bit / 3 MB/sec	32 bit / 40 MB/sec streaming
I/O features			Streaming data transfer Address parity and data parity
RAID levels	None (use software)	None (use software)	None (use software)
Tagged Command Queuing	No	No	Yes
Processor	80188 at 16 MHz	None (PIO)	80C186 at 20 MHz
Size	Type 3 (long)	Half length - Type 3	Type 3 (short)
Channels	One (internal/external)	One (internal/external)	Two (one internal/one external)
Connectors	One internal; one external	One internal; one external	Two internal for SCSI-1 or SCSI-2 cabling (only one active); one external
Devices supported	7 devices per adapter	7 devices per adapter	7 devices per adapter 15 devices on Server 500 on one or two channels
Cache std / max	512 KB / 512 KB	0 KB / 0 KB (8 KB buffer)	0 KB / 0 KB (128 byte buffer)
Cache method	Two SIMMs	N/A	N/A
Cache configurations	N/A	N/A	N/A
Cache write policy	Write-through	N/A	N/A
Available date	March 1992	June 1994	September 1993
Price (retail USD)	\$ 379	\$ 233	\$ 515 ↕
Part number	70G8497 (old 6451133)	82G4868	70G8498 (old 6451280)
Controller	SCSI-2 RAID Controller	SCSI-2 Fast/Wide Streaming RAID Adapter/A	
Implementation	Adapter in Model 95 array models Not available as option	Adapter in Server 500 array models Option	
SCSI type	SCSI-2 Fast/Wide	SCSI-2 Fast/Wide	
SCSI bus path / speed	16 bit / 20 MB/sec	16 bit / 20 MB/sec	
I/O Architecture	Micro Channel	Micro Channel	
I/O bus path / speed	32 bit / 40 MB/sec streaming	32 bit / 40 MB/sec streaming	
I/O features	Streaming data transfer Address parity and data parity	Streaming data transfer Address parity and data parity	
RAID levels	RAID 0, 1, Hybrid 1, 5 4 ind (A,B,C,D) / 8 logical arrays	RAID 0, 1, Hybrid 1, 5 4 ind (A,B,C,D) / 8 logical arrays	
Tagged Command Queuing	Yes	Yes	
Processor	i960 at 25 MHz	i960 at 25 MHz	
Size	Type 5 (only fits in Model 85 or 95)	Type 3 (full length)	
Channels	Two (both internal)	Two (see Note 1)	
Connectors	Two internal only (can not attach external devices)	Three (side card included except Server 500 does not include)	
Devices supported	7 devices per adapter	14 per adapter (7 per SCSI bus)	
Cache std / max	4 MB / 64 MB (with parity)	4 MB / 4 MB (with parity) 60 ns	
Cache method	4 sockets for 30 pin 80ns SIMMs	Soldered on adapter	
Cache configurations	4, 16, or 64 MB only	N/A	
Cache write policy	Write-through or write-back	Write-through or write-back	
Available date	N/A (November 1993 for Servers)	May 1994	
Price (retail USD)	N/A	\$ 2,395	
Part number	N/A (not available as option)	70G9263	
<p>Note1: SCSI-2 Fast/Wide Streaming RAID Adapter/A There are 3 connectors on adapter: one external and two internal. One internal is the opposite end of the external and can only be used if external is not used (this is first SCSI bus which has 2 connectors). The other internal can go to internal devices or go to the standard sidecard (this is second SCSI bus which has 1 connector). The sidecard ships standard and uses a Micro Channel slot. It is only used if want external devices on this bus (sidecard does not ship on Server 500 array models). So only two connectors can be used at one time and can not mix internal and external devices on the same bus. It supports 8 drives as part of the same physical array spread across two SCSI buses The 2 SCSI buses will be either ① both external or ② one internal and one external or ③ both internal.</p>			