

TECHNICAL BULLETIN FROM GLOBAL BUSINESS SYSTEMS

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Tandberg 1.2Gb, 2.5Gb and 5Gb QIC drives now supported by \$TAPE Adaptec AHA-1510B SCSI Host Adapter card now supported by \$TAPE

The Tandberg Panther 1200S (1.2Gb), Panther 2500S (2.5Gb) and Panther 5000S (5.0Gb with data compression) QIC drives have been certified for use with \$TAPE V7.0D.

The Adaptec AHA-1510B SCSI Host Adapter card has also been certified for use with \$TAPE V7.0D.

The following tape controller cards and tape drives are supported by \$TAPE on Global System Manager (BOS) configurations (this table replaces the information contained in Global Technical Bulletin GT803 (8-July-1996) and Appendix D of the Global Tape V7.0 Manual):-

<i>Name</i>	<i>Controller card</i>	<i>Tape drive</i>	<i>Notes</i>
CD-TAPE	Everex QIC-02 ISA bus	Stream/60	4
	Everex QIC-02 ISA bus	Stream/125	
	4 Everex QIC-02 ISA bus	Stream/150	
CD-TAPE	Everex QIC-02 MCA bus	Stream/60	4
	Everex QIC-02 MCA bus	Stream/125	
	4 Everex QIC-02 MCA bus	Stream/150	
CD-TAPE	Wangtek QIC-02 ISA bus	Wangtek 60Mb	
	Wangtek QIC-02 ISA bus	Wangtek 120Mb	
	Wangtek QIC-02 ISA bus	Wangtek 150Mb	
CD-TAPE	Wangtek QIC-02 MCA bus	Wangtek 60Mb	
	Wangtek QIC-02 MCA bus	Wangtek 120Mb	
	Wangtek QIC-02 MCA bus	Wangtek 150Mb	
VIPER	Viper VP-402 ISA bus	Archive Viper 2150L	1

<i>Name</i>	<i>Controller card</i>	<i>Tape drive</i>	<i>Notes</i>
ADAPTEC	Adaptec AHA-154nx (ISA)	Archive Viper 2060S	5
or	Adaptec AHA-154nx (ISA)	Archive Viper 2125S	
AHA-TAPE	Adaptec AHA-154nx (ISA)	Archive Viper 2150S	
	Adaptec AHA-154nx (ISA)	Wangtek 5099ES	
	Adaptec AHA-154nx (ISA)	Wangtek 5125ES	
	Adaptec AHA-154nx (ISA)	Wangtek 5150ES	
	Adaptec AHA-154nx (ISA)	Wangtek 5250ES	
	Adaptec AHA-154nx (ISA)	Wangtek 5525ES	
	Adaptec AHA-154nx (ISA)	Wangtek 51000ES	
	Adaptec AHA-154nx (ISA)	WangDAT 3100 DDS DAT	2
	Adaptec AHA-154nx (ISA)	WangDAT 3200 DDS-DC DAT	2
	Adaptec AHA-154nx (ISA)	Sony STD-5200 DAT (4Gb)	2
	Adaptec AHA-154nx (ISA)	Sony STD-2000E DAT (2Gb)	2
	Adaptec AHA-154nx (ISA)	Exabyte EXB-8200	2
	Adaptec AHA-154nx (ISA)	Exabyte EXB-8205	2
	Adaptec AHA-154nx (ISA)	Exabyte EXB-8205XLS	2
	Adaptec AHA-154nx (ISA)	Tandberg Panther 250S	
	6		
	Adaptec AHA-154nx (ISA)	Tandberg Panther 525S	
	6		
(new)	Adaptec AHA-154nx (ISA)	Tandberg Panther 1200S	2
(new)	Adaptec AHA-154nx (ISA)	Tandberg Panther 2500S	2
(new)	Adaptec AHA-154nx (ISA)	Tandberg Panther 5000S	2
	Adaptec AHA-1640x (MCA)	Archive Viper 2060S	
	Adaptec AHA-1640x (MCA)	Archive Viper 2125S	
	Adaptec AHA-1640x (MCA)	Archive Viper 2150S	
	Adaptec AHA-1640x (MCA)	Wangtek 5099ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5125ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5150ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5250ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5525ES	
	Adaptec AHA-1640x (MCA)	Wangtek 51000ES	
	Adaptec AHA-1640x (MCA)	WangDAT 3100 DDS DAT	
	2		
	Adaptec AHA-1640x (MCA)	WangDAT 3200 DDS-DC	
	DAT 2		
	Adaptec AHA-1640x (MCA)	Sony STD-5200 DAT (4Gb)	
	2		
	Adaptec AHA-1640x (MCA)	Sony STD-2000E DAT	
	(2Gb) 2		
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8200	
	2		
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8205	
	2		
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8205XLS	
	2		
	Adaptec AHA-1640x (ISA)	Tandberg Panther 250S	
	6		
	Adaptec AHA-1640x (ISA)	Tandberg Panther 525S	

	6		
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 1200S	2
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 2500S	2
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 5000S	2
AIC6360	Adaptec AHA-1510x (ISA)	Wangtek 5099ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5125ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5150ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5250ES	7
	Adaptec AHA-1510x (ISA)	Tandberg Panther 250S	
	6,7		
	Adaptec AHA-1510x (ISA)	Tandberg Panther 525S	
	3,7		

The following tape controller cards and tape drives are supported by \$TAPE on Global System Manager (MS-DOS and Windows) and Global System Manager (Novell NetWare) configurations (this table replaces the information contained in Global Technical Bulletin GT803 (8-July-1996) and Appendix D of the Global Tape V7.0 Manual):–

Name	Controller card	Tape drive	Notes
CD-TAPE	Everex QIC-02 ISA bus Everex QIC-02 ISA bus 4	Stream/60 Stream/125	4
	Everex QIC-02 ISA bus 4	Stream/150	
CD-TAPE	Everex QIC-02 MCA bus Everex QIC-02 MCA bus 4	Stream/60 Stream/125	4
	Everex QIC-02 MCA bus 4	Stream/150	
CD-TAPE	Wangtek QIC-02 ISA bus Wangtek QIC-02 ISA bus Wangtek QIC-02 ISA bus	Wangtek 60Mb Wangtek 120Mb Wangtek 150Mb	
CD-TAPE	Wangtek QIC-02 MCA bus Wangtek QIC-02 MCA bus Wangtek QIC-02 MCA bus	Wangtek 60Mb Wangtek 120Mb Wangtek 150Mb	
VIPER	Viper VP-402 ISA bus	Archive Viper 2150L	1
ADAPTEC or AHA-TAPE	Adaptec AHA-154 <i>nx</i> (ISA) Adaptec AHA-154 <i>nx</i> (ISA) Adaptec AHA-154 <i>nx</i> (ISA)	Archive Viper 2060S Archive Viper 2125S Archive Viper 2150S	5
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 5099ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 5125ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 5150ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 5250ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 5525ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	Wangtek 51000ES	
	Adaptec AHA-154 <i>nx</i> (ISA)	WangDAT 3100 DDS DAT	2
	Adaptec AHA-154 <i>nx</i> (ISA)	WangDAT 3200 DDS-DC DAT	2
	Adaptec AHA-154 <i>nx</i> (ISA)	Sony STD-5200 DAT (4Gb)	2
	Adaptec AHA-154 <i>nx</i> (ISA)	Sony STD-2000E DAT (2Gb)	2
	Adaptec AHA-154 <i>nx</i> (ISA)	Exabyte EXB-8200	2
	Adaptec AHA-154 <i>nx</i> (ISA)	Exabyte EXB-8205	2
	Adaptec AHA-154 <i>nx</i> (ISA)	Exabyte EXB-8205XLS	2
	Adaptec AHA-154 <i>nx</i> (ISA) 6	Tandberg Panther 250S	
	Adaptec AHA-154 <i>nx</i> (ISA) 6	Tandberg Panther 525S	
(new)	Adaptec AHA-154 <i>nx</i> (ISA)	Tandberg Panther 1200S	2
(new)	Adaptec AHA-154 <i>nx</i> (ISA)	Tandberg Panther 2500S	2

(new)	Adaptec AHA-154 <i>nx</i> (ISA)	Tandberg Panther 5000S	2
	Adaptec AHA-1640x (MCA)	Archive Viper 2060S	
	Adaptec AHA-1640x (MCA)	Archive Viper 2125S	
	Adaptec AHA-1640x (MCA)	Archive Viper 2150S	
	Adaptec AHA-1640x (MCA)	Wangtek 5099ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5125ES	

<i>Name</i>	<i>Controller card</i>	<i>Tape drive</i>	<i>Notes</i>
	Adaptec AHA-1640x (MCA)	Wangtek 5150ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5250ES	
	Adaptec AHA-1640x (MCA)	Wangtek 5525ES	
	Adaptec AHA-1640x (MCA)	Wangtek 51000ES	
	Adaptec AHA-1640x (MCA)	WangDAT 3100 DDS DAT	
	2		
	Adaptec AHA-1640x (MCA)	WangDAT 3200 DDS-DC	
	DAT 2		
	Adaptec AHA-1640x (MCA)	Sony STD-5200 DAT (4Gb)	
	2		
	Adaptec AHA-1640x (MCA)	Sony STD-2000E DAT (2Gb)	2
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8200	
	2		
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8205	
	2		
	Adaptec AHA-1640x (ISA)	Tandberg Panther 250S	
	6		
	Adaptec AHA-1640x (ISA)	Tandberg Panther 525S	
	6		
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 1200S	2
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 2500S	2
(new)	Adaptec AHA-1640x (ISA)	Tandberg Panther 5000S	2
	Adaptec AHA-1640x (MCA)	Exabyte EXB-8205XLS	
	2		
AIC6360	Adaptec AHA-1510x (ISA)	Wangtek 5099ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5125ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5150ES	7
	Adaptec AHA-1510x (ISA)	Wangtek 5250ES	7
	Adaptec AHA-1510x (ISA)	Tandberg Panther 250S	
	6,7		
	Adaptec AHA-1510x (ISA)	Tandberg Panther 525S	
	3,7		
ASPI	Any Adaptec controller card and SCSI tape drive supported by the ASPI.SYS device manager family. There are MS-DOS ASPI device managers for all the SCSI host adapters produced by Adaptec. All these device drivers provide a common interface to the SCSI tape devices attached to the host adapter card. This implies that the ASPI \$TAPE controller SHOULD work with any member of the Adaptec host adapter family. The ASPI \$TAPE controller has only been tested with, and is only supported on, the following Adaptec host adapter cards:-		
	<i>Host adapter card</i>	<i>MS-DOS device manager</i>	
	AHA-1542CF	ASPI4DOS.SYS	
	AHA-1540CF	ASPI4DOS.SYS	
	AHA-1542CP	ASPI4DOS.SYS	
	AHA-1510A	ASPI2DOS.SYS	

In particular, the ASPI controller has NOT been tested with the AHA-1740, AHA-2940 or later Adaptec host adapter cards.

The ASPI controller MUST be selected if \$TAPE is to be used when Global System Manager is running under any version of Microsoft Windows.

Note that the ASPI tape controller requires an MS-DOS device driver to be loaded. This device driver MUST be loaded via an entry in the CONFIG.SYS file. The Windows 95 Adaptec drivers supplied with Windows 95 DO NOT provide the ASPI service required by the ASPI \$TAPE controller.

- Note 1 The MCA-bus version of the Archive QIC-02 host adapter card (Archive VP-409) is NOT supported.
- Note 2 These controller card/tape drive combinations are only supported by the TF \$TAPE product. They are NOT supported by the TE \$TAPE product.
- Note 3 The high performance Tandberg Panther 525S drive (which is equivalent to the 525Mb TDC-3820 drive mentioned in GT803) may not stream on all computers when attached to the non-DMA'ed AHA-1510A or AHA-1510B host adapter cards.
- Note 4 This controller-card/tape-drive combination is no longer available.
- Note 5 Only the following members of the Adaptec intelligent host adapter card family are supported by the ADAPTEC and AHA-TAPE controllers:-

AHA-1540A, AHA-1542A
AHA-1540B, AHA-1542B
AHA-1540CF, AHA-1542CF
AHA-1540CP, AHA-1542CP (the Plug-N-Play option MUST be disabled)
AHA-1640x

All the other members of the Adaptec intelligent host adapter card family (e.g. the AHA-1740 and AHA-2940) are NOT supported by the ADAPTEC or AHA-TAPE controllers.

Please refer to the Global Operating Manual (BOS), Global Operating Manual (MS-DOS and Windows) or Global Operating Manual (Novell NetWare) for full details of the Adaptec AHA-154nx and AHA-1640x SCSI host adapter cards supported by \$TAPE. **IMPORTANT NOTE:** The ADAPTEC/AHA-TAPE tape controller does not function correctly when Global System Manager is running under any version of Microsoft Windows. The ASPI controller must be selected if \$TAPE is to be used when

Global System Manager is running under any version of Microsoft Windows.

Note 6 The Tandberg Panther 250S drive is equivalent to the Tandberg TDC-3660 mentioned in GT803. The Tandberg 525S drive is equivalent to the Tandberg TDC-3820 drive mentioned in GT803.

Note 7 Both the AHA-1510A and the AHA-1510B are supported by the AIC6360 \$TAPE controller (see Global Technical Bulletin GT765, 4-July-1995, for details of the AHA-1510A card). In order to use \$TAPE with the AHA-1510B card the following tailoring zap must be applied to P.\$TAPE:-

ZZZZZZ
HJHTQR
HFZCJD
GXPDLB
QJWNFV
WQTZSW
WNTKBQ
WJJVQN
WHJSCZ
WJKBGT
WGJMHY
VYYGBL
WBHZWX
WVLTHK
WNBLCL
WTDWYB
WPLNHN
VYZCPH
VYYVFT
QPNHNV
WGRQRP
QPNRBT
WJKCLR
QPRPYD
VYXMMF
FRKCDH

Important Note: If this zap is applied it will not be possible to use \$TAPE with an AHA-1510A card.

The Plug-N-Play (Plug-and-Play) option on the AHA-1510B card MUST be disabled in order to use this card with the AIC6360 \$TAPE controller. Only the following two switch settings are allowed:-

SW1	SW2	SW3	SW4	Host adapter I/O Port Address (hex)
Off	Off	Off	Off	340 – 35F
Off	Off	Off	On	140 – 15F

The Interrupt Level and Host Adapter SCSI id are selected using the *SCSISelect* configuration utility. Please refer to the Adaptec Installation Guide supplied with the AHA-1510B card for further details.

The drives supported by \$TAPE on Global System Manager (Unix) configurations are described in the relevant Global Configuration Notes.

The full range of Global System Manager (BOS) and Global System Manager (MS-DOS and Windows) \$TAPE controllers included in the P.\$TAPE library is as follows:-

<i>Name</i>	<i>Description</i>
J5CT03, JWCT03	Adaptec AHA-154 <i>nx</i> or AHA-1640 <i>x</i>
J5CT04, JWCT04	Everex/Wangtek QIC-02
J5CT08, JWCT08	Archive Viper QIC-02
JWCT09	Generic ASPI
J5CT0B, JWCT0B	Adaptec AHA-1510 <i>x</i>

The following table shows the full range of Tandberg tape drives supported by \$TAPE together with the maximum tape capacities as recommended by Tandberg for a number of common tape media types:-

<i>Media Type</i>	<i>FPI</i>	<i>Length</i>	<i>250S</i>	<i>525S</i>	<i>1000S</i>	<i>2500S</i>	<i>5000S</i>
3M DC 300XLP	10,000	450	No	No	No	No	No
3M DC 600A	12,500	620	No	No	No	No	No
3M DC 6150	12,500	620	155Mb	No	No	No	No
3M DC 6250	12,500	1020	250Mb	No	No	No	No
3M DC 6320	20,000	620	155Mb	320Mb	No	No	No
3M DC 6525	20,000	1020	250Mb	525Mb	No	No	No
3M MAGNUS 1.0	45,000	760			1.0Gb	No	No
3M MAGNUS 1.2	45,000	950			1.2Gb	No	No
3M MAGNUS 2.0	50,800	950				2.0Gb	4.0Gb*
3m MAGNUS 2.5	50,800	1200				2.5Gb	5.0Gb*

* = Using data compression.

Note that tape capacity specified when a tape is initialised using \$TAPE should be slightly smaller than the absolute maximum (to allow for tape header and error-recovery block). The recommended \$TAPE tape capacities are as follows:-

<i>Media Type</i>	<i>250S</i>	<i>525S</i>	<i>1000S</i>	<i>2500S</i>	<i>5000S</i>
3M DC 300XLP	No	No	No	No	No
3M DC 600A	No	No	No	No	No
3M DC 6150	150M	No	No	No	No
3M DC 6250	250M	No	No	No	No
3M DC 6320	150M	310M	No	No	No
3M DC 6525	250M	510M	No	No	No
3M MAGNUS 1.0			990M	No	No
3M MAGNUS 1.2		1.2G	No	No	
3M MAGNUS 2.0			1.85G	3.7G*	
3m MAGNUS 2.5				2.35G	4.7G*

* = Using data compression, assuming a 1:2 compression ratio.