



Tekram Technology Co., Ltd.

Test Report

Product Name : TR-1394C
Test Report Date : Jan-29-2002
Test Report Version : A
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Report Version History

Version	Date	Description
A	Jan-29-2002	First Release.

Test Environment

OS	Driver Version	Remark
Win98se	OS Built-in	
WinME	OS Built-in	
WinNT	N/A	
Win2000	OS Built-in	
WinXP	OS Built-in	

A.PRODUCT SPEC & BASIC FUNCTION TEST

A1. Product Spec

Specification	<ul style="list-style-type: none"> • For PC, Notebook and MAC Powerbook G3 Series. • Update your PC Laptops / Notebook with the AV-F031. Adds IEEE 1394 2 ports 32-bit Cardbus Interface with Power Management, With this addition to your system, you can take advantage of the latest high performance IEEE 1394 peripherals. • Data transfer rate up to 400 Mbps • 1394 standard compliant: IEEE 1394-1995, P1394a, and OHCI standard • Built in driver support from Apple and Microsoft: <ul style="list-style-type: none"> ○ PC: Windows 98, Windows 98 SE, Windows ME, Windows 2000, Windows XP ○ MACs: OS 8.6 or later • Regulatory approval(s): FCC Class B & CE • Operating Temperature: 0 to 70 centigrade. • Chip: VIA
Features & Benefits	<ul style="list-style-type: none"> • 32 bit CardBus interface compatible • 32-bit Data Bus and 33 MHz operation • Data transfer rate up to 400 Mbps • Connect up to 63 device • Flexible topology: Devices can be daisy-chained and no central bus supervision is required. • Supports Plug-and-Play Specification • Hot Plug • Complies with Standard for IEEE 1394-1995, P1394a, and OHCI standard • Up to 16 consecutive cable hops of 4.5 meters, yielding a total cable distance of 72 meters • Cable power: Low-cost peripherals can be powered directly from the 1394 cable, so no dedicated power supply is needed. • Isochronous and Asynchronous data transfer and transfer rate up to 400Mbps • PTC recover fuse for reliable over-current protection
Product Description:	<p>Tekram's TR-1394C is designed to function as both a cable-connected virtual bus and as a backplane bus achieves speeds up to 400 Mbps. Higher speed in the range of one gigabits-per-second are possible in the future. This type of performance has enabled many new PC applications such as real-time digital video.</p>

A2. Basic Function Test

Test Item	Description	Result	Remark
A1a	Check Product Appearance	Pass	
A2b	Check Product Construction	Pass	
A2c	Check AC Adapter in External	Pass	

B. FUNCTIONALITY TEST**B1. Functionality & Operation System Test**

OS \ PORTs	Port1	Port2	Remark
Win98SE	Pass	Pass	
WinME	Pass	Pass	
Win 2000	Pass	Pass	
Win XP	Pass	Pass	

B2.Full Loading

Device	Operation System	Port	Result	Remark
IEEE1394 HDD BOX (DATAFAB)	Win2000	Port1	Pass	
IEEE1394 HDD BOX (BusLink)	Win2000	Port2		

C. COMPATIBILITY TEST

C1.IEEE1394 DEVICE TEST

Device Type	Vendor	Operation System	Port1	Port2	Remark
IEEE1394 HDD BOX	DATAFAB	Win2000	Pass	Pass	
IEEE1394 HDD BOX	BusLink	Win2000	Pass	Pass	
IEEE1394 HDD BOX	Skymaster	Win2000	Pass	Pass	
DV Camcorder +IEEE1394 Port	Sony(DCR-TRV30)	Win2000	Pass	Pass	

C2. NoteBook Computer Test

Manufacturer	Type	Model	PCMCIA Controller	Result	Remark
Medion	MD9326	A450	O2Micro OZ6832/6833 CardBus Controller	Pass	
Toshiba	Satellite	3000	Texas Instruments PCI-1420 Cardbus Controller	Pass	
Twinhead	Slimnote -R200TZ	P79T	Texas Instruments PCI-1131 CardBus controller	Pass	

D.Operation System TEST

OS	Language	Result	Remark
Windows 98Se	English	Pass	
	German	Pass	
	Japanese	Pass	
	Chinese(Traditional)	Pass	
	Chinese(Simples)	Pass	
Windows ME	English	Pass	
	German	Pass	
	Japanese	Pass	
	Chinese(Traditional)	Pass	
	Chinese(Simples)	Pass	
Windows 2000	English	Pass	
	German	Pass	
	Japanese	Pass	
	Chinese(Traditional)	Pass	
	Chinese(Simples)	Pass	
Windows XP	English	Pass	
	German	Pass	
	Japanese	Pass	
	Chinese(Traditional)	Pass	

E.BenchMark TEST

E1.Run WinBench99(Disk)

Item	Bench Mark	Port1	Port2	Remark
1	Business Disk WinMark 99	1880	1820	
2	High-End Disk WinMark 99	6530	6120	
3	Disk Transfer Rate:Beginning	13000	13100	
4	Disk Transfer Rate:End	13100	13200	
5	Disk Access Time	9.39	9.39	
6	Disk CPU Utilization	14.6	14.7	
7	Disk Playback/Bus:Overall	1880	1820	
8	Disk Playback/HE:Overall	6530	6120	
9	Disk Playback/HE:AVS/Express 3.4	5800	5550	
10	Disk Playback/HE:FrontPage 98	19800	18900	
11	Disk Playback/HE:MicroStation SE	5710	4540	
12	Disk Playback/HE:Photoshop 4.0	7340	7190	
13	Disk Playback/HE:Premiere 4.2	4070	3960	
14	Disk Playback/HE:Sound Forge 4.0	6830	6770	
15	Disk Playback/HE:Visual C++ 5.0	6880	6610	
16	Disk Playback/Removable Media	3570	3540	

F. Reliability TEST

F1. Run WinBench99 (Disk) 48 Hours

ITEM	Port	Run Times	Operation System	Result	Remark
Run WinBench99	Port1	24 Hours	Win2000	Pass	
Run WinBench99	Port2	24 Hours	Win2000	Pass	

F2. Run IOmeter 48 Hours

ITEM	Port	Run Times	Operation System	Result	Remark
Run Iometer	Port1	24 Hours	Win2000	Pass	
Run Iometer	Port2	24 Hours	Win2000	Pass	

Appendices

A. Testbed Hardware and Software

Hardware	Manufacturer	Type	Model	PCMCIA Card
NoteBook	Twinhead	Slimnote -R200TZ	P79T	Texas Instruments PCI-1131 CardBus controller
	Medion	MD9326	A450	O2Micro OZ6832/6833 CardBus Controller
	Toshiba	Satellite	3000	Texas Instruments PCI-1420 Cardbus Controller
IEEE1394 HDD Box	BusLink+IBM/ATA100/7200RPM/76G			

B. Attention:

1. Before we plug off 1394 Device from system, we must Unplug or Eject 1394 Hardware.

2. Windows 98SE must install a [Safe Removal utility](#)--- >>

http://www.microsoft.com/windows98/downloads/contents/WURecommended/S_WUFeatured/1394/Default.asp
(242975usa8.exe) that allows you to safely stop a Plug and Play storage device prior to physically unplugging the device.