Test Report

Au6331 - MBL Chip

USB2.0

Muliti-Flash Memory Card

Reader Controller

Test Result	**Pass**	**July 26, 2005**

Tester	**Claude:**
Product Part Number	Au6331A31-MBL
Golden Sample Number	Au6331A31-MBL

Test Result Summary：

NO	Test Item		Result	Note
1	Hardware	Microsoft OS.	**Pass**	
		MAC OS.	**Pass**	
		LINUX OS	**Pass**	
2	Host compatibility	EHCI		
		OHCI/UHCI	**Pass**	
		PCI to USB Card		
3	Hub compatibility	USB 2.0 HUB	**Pass**	
		USB 1.1 HUB		
		Two Tier HUB		
4	Performance	High Performance	**Pass**	
		Normal Performance		
5	Card compatibility	SD/MMC	**Pass**	
		MS	**Pass**	
6	Plugging Test	Card plug/unplug	**Pass**	
		Reader plug/unplug	**Pass**	
7	Surprise Remove	Write Files	**Pass**	
		Read Files	**Pass**	
8	Sleep Mode		**Pass**	
9	MS_LOGO Test		**Pass**	
10	Gold Tree Test		**Pass**	
11	Power Consumption		**Pass**	
12	Burn In Test	EHCI	**Pass**	
		USB1.1 Hub		
		USB2.0 Hub		
13	Winthrax	USB1.1 Hub	**Pass**	
		USB2.0 Hub		
14	Signal Quality Test	Full/Low Speed	**Pass**	
		High Speed	**Pass**	

1. Hardware Test

1-1 Microsoft Serial Operation System

Operation System	Win 98	Win ME	Win 2K	Win 2KSP4	Win 2003 sever	Win XP
Motherboard	GA-8VT800-2	GA-8IDX	GA-8VT800-2	GA-8SIMLH-P-C	GA-8TRS 350MT	GA-7N400S-L
Chipset	VT8235	ICH2	VT8235	Sis962L	ATI SB300	Nforce2 Ultra400
USB controller	UHCI	UHCI	EHCI	EHCI	EHCI	EHCI
Hardware test						
Chap 8	Note 1	NA	NA	NA	NA	NA
Chap 9 (USB CV)	NA	NA	Pass	Pass	Pass	Pass
Chap 9 (1000 loop)	Pass	NA	Pass	Pass	Pass	Pass
Suspend/Wakeup (with reader)	Pass	Pass	Pass	Pass	Pass	Pass
Suspend/Wakeup (with card)	Pass	Pass	Pass	Pass	Pass	Pass
Unplug/plug (reader)	Pass	Pass	Pass	Pass	Pass	Pass
Unplug/plug (card)	Pass	Pass	Pass	Pass	Pass	Pass
Cool/Warm boot (with card)	Pass	Pass	Pass	Pass	Pass	Pass
Cool/Warm boot (without card)	Pass	Pass	Pass	Pass	Pass	Pass
Error recovery	Na					
Reading file from card, unplug reader	-	Pass	Pass	Pass	-	Pass
Writing file to card, unplug reader	-	-	Pass	Pass	-	Pass
Reading file from card, unplug card	Pass	Pass	Pass	Pass	Pass	Pass
Writing file to card, unplug card	Pass	Pass	Pass	Pass	Pass	Pass
Reading file form card, suspend/ resume	Pass	Pass	Pass	Pass	Pass	Pass
Writing file form card, suspend/ resume	-	Pass	Pass	Pass	Pass	Pass
Change card during suspend	Pass	-	Pass	Pass	Pass	Pass
Reset system during reading file form card	Pass	Pass	Pass	Pass	Pass	Pass
Reset system during writing file to card	Pass	Pass	Pass	Pass	Pass	Pass

Note:
1.Test CH8 → Total Test：119 Pass：112 Fail：7 in Win 98 and ME.

1-2 MAC Serial Operation System

Operation System	Mac OS 9.2	Mac OS 10.2.8	Mini Mac 10.3.5
Chipset	Apple	Apple	eMac
USB controller	Opti	Opti	Opti
Hardware test			
Suspend/Wakeup (with reader)	Pass	Pass	Pass
Suspend/Wakeup (with card)	Pass	Pass	Pass
Unplug/plug (reader)	Pass	Pass	Pass
Unplug/plug (card)	Pass	Pass	Pass
Cool/Warm boot (with card)	Pass	-	-
Cool/Warm boot (without card)	Pass	-	-
Error recovery			
Reading file from card, unplug reader	**NA**	**Pass**	**Pass**
Writing file to card, unplug reader	**NA**	**Pass**	**Pass**
Reading file from card, unplug card	**NA**	**Pass**	**Pass**
Writing file to card, unplug card	**NA**	**Pass**	**Pass**
Reading file form card, suspend/ resume	**NA**	**Pass**	**Pass**
Writing file form card, suspend/ resume	**NA**	**Pass**	**Pass**
Change card during suspend	**NA**	-	-

1-3 Linux Serial Operation System

Operation System	Red Hat	Red Hat	Red Hat
Version	8.0	9.0	Fedora
Chipset	Sis661	Sis661	Sis661
USB controller	Sis	Sis	Sis
Hardware test			
Mount	**Pass**	**Pass**	**Pass**
Umount	**Pass**	**Pass**	**Pass**
Read	**Pass**	**Pass**	**Pass**
Write	**Pass**	**Pass**	**Pass**
Compare	**Pass**	**Pass**	**Pass**
Note:			

2. Host compatibility

2-1 EHCI

Test Item		Plug/Unplug reader (20 Time)	Suspend Resume	Cool/Warm boot	Read/Write/Compare				
					SD	CF	XD	SMC	MS
Operation System		XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	South Chip Set								
ASUS P4P800S	ICH5	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
MIS 865PE	ICH5	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
MSI 865PE/G	ICH5/ICH5R	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
MSI 875P Neo	ICH5/ICH5R	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8AENXP-D	ICH6R	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-7N400L-S	nForce2 ultra 400	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8TRS300M	ATISB 200	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8TRS 350MT	ATISB 300	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8VT800-2	VT8235 (CE)	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8SIMLH-P-C	Sis 962-L	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8S655TX Ultra	Sis 964	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

2-2 OHCI / UHCI

Note: Please remove “USB Enhanced Host Controller Driver” to test this item.

Test Item		Plug/Unplug reader (20 Time)	Suspend Resume	Cool/Warm boot	Read/Write/Compare				
					SD	CF	XD	SMC	MS
Operation System		XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	South Chip Set								
ASUS P4T533		**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
MSI 875PE Neo	ICH5/ICH5R	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8AENXP-D	ICH6	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-7N400L-S	nForce2 ultra 400	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8TRS 350MT	ATISB 300	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8VT800	VT8235 (CE)	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

GA-8SIMLH-P-C	Sis 962-L	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8S655TX Ultra	Sis 964	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

2-3 PCI to USB Adapter

Test Item		Plug/Unplug reader (20 Time)	Suspend/ Resume	Cool/Warm boot	Read/Write/Compare				
					SD	CF	XD	SMC	MS
Operation System		XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	Adapter								
TUSI-M	PCI NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA8IDX	VIA USB EHCI	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

3. HUB compatibility

3-1 USB 2.0 Hub

Test Item		Plug/Unplug reader (20 Time)	Suspend Resume	Cool/Warm boot	Read/Write/Compare				
					SD	CF	XD	SMC	MS
Operation System		XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	South Chip Set								
ASUS P4P800S	ICH5	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-7N400L-S	nForce2 ultra 400	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8TRS 350MT	ATISB 300	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8VT800-2	VT8235 (CE)	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8S655TX Ultra	Sis 964	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

3-2 USB 1.1 Hub

Test Item		Plug/Unplug reader (20 Time)	Suspend Resume	Cool/Warm boot	Read/Write/Compare				
					SD	CF	XD	SMC	MS
Operation System		XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	South Chip Set								

ASUS P4P800S	ICH5	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-7N400L-S	nForce2 ultra 400	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8TRS 350MT	ATISB 300	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8VT800-2	VT8235 (CE)	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
GA-8S655TX Ultra	Sis 964	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

3-3 Two Tiers Hub

Test Item				Plug/Unplug reader (20 Time)	Suspend Resume	Cool/Warm boot	Read/Write/Compare				
							SD	CF	XD	SMC	MS
Operation System				XP	XP	XP	XP	XP	XP	XP	XP
Mother Board	Chip	Tier one	Tier two								
ASUS P4P800S	ICH5	TI 1.1	NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
		NEC 2.0	TI 1.1								
		NEC 2.0	TI 1.1								
		NEC 2.0	TI 1.1								
GA-7N400L-S	nForce2 ultra 400	TI 1.1	NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
		NEC 2.0	TI 1.1								
		NEC 2.0	TI 1.1								
GA-8TRS 350MT	ATISB 300	TI 1.1	NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
		NEC 2.0	TI 1.1								
GA-8VT800-2	VT8235 (CE)	TI 1.1	NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
		NEC 2.0	TI 1.1								
		NEC 2.0	TI 1.1								
GA-8S655TX Ultra	Sis 964	TI 1.1	NEC 2.0	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
		NEC 2.0	TI 1.1								

4. Performance test

4.1 High Performance

Motherboard		GA-8TRS 350M	
USB Chip controller		ATI SB300(EHCI)	
CPU		2.4Hz	
Memory		256MB	
Test Software		FD Bench V1.01	
Windows operation system		Win XP	Win 2000
SD Card			
SanDisk SD ultra2 2GB	**Read**	3659	4172
	Write	3075	4094
Panasonic Pro High speed SD 512MB	**Read**	4018	4068
	Write	3164	3343
MMC Card			
A-DATATurboMMC Plus256MB	**Read**	4120	4147
	Write	3722	4396
SAMSUNG MMC Plus 128MB	**Read**	4309	4309
	Write	3343	4094
SAMSUNG MMC mobile 128MB	**Read**	4282	4338
	Write	3134	4120
SAMSUNG MMC Micro 128MB	**Read**	4145	4198
	Write	3375	4172
A-DATA MMC mobile 128MB	**Read**	4094	4145
	Write	3430	4226
MMC 4.0 new 128MB	**Read**	4119	4145
	Write	3659	4280
MS Card			
SanDisk Ulta2 512MB	**Read**	5412	5598
	Write	4747	5117
SanDisk Extreme3 2GB	**Read**	5644	5698
	Write	4816	5502

4-2 Normal Performance test

Motherboard		GA-8TRS 350M	
USB Chip controller		ATI SB300(EHCI)	
CPU		2.4Hz	
Memory		256MB	
Test Software		FD Bench V1.01	
Windows operation system		Win XP	Win 2000
SD Card			
Phaot SD 1GB	**Read**	3680	3970
	Write	3560	4172
Sandisk mini SD 128Mb	**Read**	4018	4254
	Write	1598	1747
MMC Card			
KINGMAX RS-MMC 256MB	**Read**	1455	1479

	Write	1133	1489
MS Card			
Sony MS 128MB	**Read**	1415	1479
	Write	421	811
Sony MS Duo 128MB	**Read**	1452	1424
	Write	880	956
SanDisk MS Pro 2.0GB	**Read**	4971	5550
	Write	2408	2684
SanDisk MS Pro Duo 256MB	**Read**	4963	5598
	Write	2332	2707

5.Card compatibility test

5-1 SD / SD_ROM / Mini_SD / MMC / RS_MMC

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
USB 2.0 root hub										
SD Card										
SanDisk ultra2	SD	2G	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Apacer	SD	256	ICH5	Intel	XP					
Apacer 60x	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
A-DATA	SD	256	ICH5	Intel	XP					
Digimaster Twins	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
KINGMAX Platinum	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Kingston ELITE	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
RiDATA 66x	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Panasonic Pro High speed	SD	512	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Panasonic Pro High speed	SD	1G	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Pdc	SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Phast	SD	1G	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PK	SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PRETEC	SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Simple Tech	SD	64	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
S-File	SD	512	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Skymedi	SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Toshiba	SD	16	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
KINGMAX	Mini-SD	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Panasonic	Mini-SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
SanDisk	Mini-SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Transcend	Mini-SD	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
MXIC Palm	Rom	32	ICH5	Intel	XP				**Pass**	
MXIC Kuro	Rom	32	ICH5	Intel	XP				**Pass**	
Palm Demo	Rom	32	ICH5	Intel	XP				**Pass**	
MMC Card										
Data Genia	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
InConn	MMC	64	ICH5	Intel	XP					
Infineon	MMC	16	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Infineon	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
LEXAR	MMC	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
RIDATA	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Ritek	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PK	MMC	1G	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PQI	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PQI	MMC	64	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
PRETEC	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Transcend	MMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
ATP	RSMMC	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
KINGMAX	RSMMC	256	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Nokia	RSMMC	64	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Samsung	RSMMC	32	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Samsung	RSHS-MMC	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Samsung	MMC Plus	128	ICH5	Intel	XP	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
Samsung	MMC Plus	512	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
A-DATA	MMC Plus	256	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
A-DATA	MMC mobile	128	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
RiDATA	MMC mobile	256	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Samsung	MMC mobile	64	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Samsung	MMC mobile	128	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Samsung	MMC mobile	256	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Samsung	MMC Micro	128	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Samsung	MMC Micro	256	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
MMC 4.0 new		128	ICH5	Intel	XP	Pass	Pass	Pass	Pass	Pass
Note:										

5-2 MS

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
USB 2.0 root hub										
004-01-026	MS	4	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
004-02-026	MS	4	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-01-026	MS	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-02-026	MS	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-03-026	MS	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-04-026	MS	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-05-026	MS	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-01-026	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-02-026	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-03-026	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-04-026	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-01-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-02-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-03-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-04-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-05-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-01-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-02-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-03-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-04-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-05-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass

Alcor Micro Corp.

Http://www.alcormicro.com/

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
064-06-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-07-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-01-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-02-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-03-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-04-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
256-01-026	MS	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-21-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-22-026	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-21-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-22-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-23-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-21-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-22-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D008-01-026	MS Duo	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D008-02-026	MS Duo	8	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D016-01-026	MS Duo	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D016-02-026	MS Duo	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D032-01-026	MS Duo	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D032-02-026	MS Duo	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D016-A1-026	MS Duo	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D016-A2-026	MS Duo	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D032-A1-026	MS Duo	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D064-A1-026	MS Duo	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D128-A1-026	MS Duo	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D128-A2-026	MS Duo	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D064-21-026	MS Duo	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
D128-21-026	MS Duo	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
008-41-026	ROM	8	ICH5	Intel	2000				Pass	
016-91-26	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-92-26	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
016-93-026	MS	16	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
032-91-26	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
032-92-26	MS	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-91-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
064-92-026	MS	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-91-26	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-92-26	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
128-93-026	MS	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
256-91-026	MS	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S064-71-026	MS-Pro	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S128-71-026	MS-Pro	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
256-71-026	MS-Pro	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S256-71-026	MS-Pro	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S256-72-026	MS-Pro	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
512-71-026	MS-Pro	512	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S512-71-026	MS-Pro	512	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S512-72-026	MS-Pro	512	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
01G-71-026	MS-Pro	1G	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S01G-71-026	MS-Pro	1G	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S01G-72-026	MS-Pro	1G	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S02G-71-026	MS-Pro	2G	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S032-81-026	MS-Pro Duo	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S064-81-026	MS-Pro Duo	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S128-81-026	MS-Pro Duo	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
S256-81-026	MS-Pro Duo	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
Sony-C	MS-Pro	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
Sony-J	MS-Pro	128	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
Sony	MS-Pro	256	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
Sony MSG	MS-Duo	64	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass
Sony MSH	MS-Du	32	ICH5	Intel	2000	Pass	Pass	Pass	Pass	Pass

Card name	Card type	Memory size	Chipset	Controller	OS	Test Result				
						Normal Format	Quick Format	Write	Read	Compare
	o									
I-O DATA	MS	64	ICH5	Intel	2000	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
SanDisk Extreme3	MS-Pro	2G	ICH5	Intel	2000	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Note:										

6. Plugging Test

6.1 Card plug/unplug:

If first plugging card name as same as sequence plugging card name, please plug/unplug again.

If first plugging card name and sequence plugging card name use the same data port, please change card.

Sequence / First Plugging / Result	**SD/MMC**	**MS**
SD/MMC	**Pass**	**Pass**
MS	**Pass**	**Pass**

6.2 Reader plug/unplug:

Sequence is added other card and then plug/unplug Reader.

Tester must check card states.

Sequence / First Plugging / Result	**SD/MMC**	**MS**
SD/MMC		**Pass**
MS	**Pass**	

7. Surprise Remove Test

If R/W first card name as same as sequence plugging card name, please plug/unplug again.

If first plugging card name and sequence plugging card name use the same data port, please change card

7-1 Write File

Sequence: Plug/Unplug / First Write: Result	SD/MMC	MS
SD/MMC		**Pass**
MS	**Pass**	

7-2 Read File

Sequence: Plug/Unplug / First Write: Result	SD/MMC	MS
SD/MMC		**Pass**
MS	**Pass**	

8. Sleep Mode Test

Sleep Mode / Card Name: Result	S1	S3	S4
SD (R/W)	**Pass**	**Pass**	**Pass**
SMC (R/W)	**Pass**	**Pass**	**Pass**
MS (R/W)	**Pass**	**Pass**	**Pass**

9. MS_LOGO Test:

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 00101	The targeted product shall make only one Logical / Physical transformation table block in Memory Stick		**Pass**
Check 00102	The targeted product shall make a Logical / Physical transformation table block in the last segment .		**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 00103	The targeted product shall set 0 to the transformation table bit of Management . Flag at the first page of the produced Logical / Physical transformation table block .		**Pass**
Check 00104	The targeted product shall not make Logical / Physical transformation table block as a late-developed defect block .		**Pass**
Check 00105	The targeted product shall set E8h to Overwrite Flag and F7h to Management Flag at the first page of the produced Logical / Physical transformation table block.	overwrite flg = 0xE8 management flg = 0xF7	**Pass**
Check 00106	If a Memory Stick under W / P ON was inserted , the targeted product shall not make any Logical / Physical transformation table block.		**Pass**
Check 00201	If the targeted product detects Logical/physical transformation table block in the last segment of the Memory Stick, the targeted product shall erase it and manage it as an alternative block.		**Pass**
Check 00301	The targeted product shall be able to detect Boot Blocks in TestStick003A.		**Pass**
Check 00302	The targeted product shall be able to write data to TestStick003A.		**Pass**
Check 00303	The targeted product shall process the Boot Block information in TestStick003B as right data. The information was read from the page where a correctable error has occurred.		**Pass**
Check 00304	The targeted product shall be able to write data to TestStick003B.		**Pass**
Check 00305	The targeted product shall obtain the Boot Block information from Boot Block 1 of TestStick003C.		**Pass**
Check 00306	The targeted product shall be able to write data to TestStick003C.		**Pass**
Check 00307	The targeted product shall obtain the Boot Block information from Boot Block 1 of TestStick003D.		**Pass**
Check 00308	The targeted product shall be able to write data to TestStick003D.		**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 00309	The targeted product shall fail to read Boot Blocks in TestStick003E.		**Pass**
Check 00401	The targeted product shall not access any block registered as initial defect block in TestStick004A.		**Pass**
Check 00402	The targeted product shall not access any block registered as information block in TestStick004B.		**Pass**
Check 00501	A start-up sequence shall be completed with TestStick005 under W/P ON.		**Pass**
Check 00502	The targeted product will not write to TestStick005 under W/P ON.		**Pass**
Check 00601	The targeted product shall use a logical address in Boot Area to complete a start-up sequence with TestStick006 under W/P ON.		**Pass**
Check 00602	The targeted product shall not copy the block where a logical address has been set in Boot Area, to User Area in TestStick006 under W/P ON. Also, this block shall not be set as a late-developed defect block.		**Pass**
Check 00603	The targeted product shall copy the block where a logical address has been set in Boot Area, to User Area in TestStick006 under W/P OFF.		**Pass**
Check 00604	The targeted product shall set the block where a logical address has been set in Boot Area, as a late-developed defect block in TestStick006 under W/P OFF.		**Pass**
Check 00701	The targeted product shall execute a write process after having erased unused blocks when File System such as FAT is updated by deleting the files in TestStick007.		**Pass**
Check 00702	When the targeted product shall execute a write process to TestStick007, it shall write to unused blocks.		**Pass**
Check 00801	The targeted product shall normally complete a start-up sequence with TestStick008A.		**Pass**
Check 00802	The targeted product can execute a write process to TestStick008A.		**Pass**
Check 00803	The targeted product shall normally complete a start-up sequence with TestStick008B.		**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 00804	The targeted product shall not execute a write process to TestStick008B.		**Pass**
Check 00805	The targeted product shall normally complete a start-up sequence with TestStick008C.		**Pass**
Check 00806	The targeted product can execute a write process to TestStick008C.		**Pass**
Check 00807	When the targeted product writes data to TestStick008C, it shall not write to any late-developed defect block.		**Pass**
Check 00808	The targeted product shall normally complete a start-up sequence with TestStick008D.		**Pass**
Check 00809	The targeted product shall not execute a write process to TestStick008D		**Pass**
Check 00901	The targeted product shall not erase the block, whose update status is 1(: already updated), that was not used in TestStick009A under W/P ON.		**Pass**
Check 00902	The targeted product shall use the block whose update status is 0(: under updating) in TestStick009A.		**Pass**
Check 00903	The targeted product shall erase the block, whose update status is 1(already updated), that was not used in TestStick009A under W/P OFF.		**Pass**
Check 00904	The targeted product shall not erase the block where a logical address out of the segment range has been set in TestStick009B under W/P ON.		**Pass**
Check 00905	The targeted product shall erase the block where a logical address out of the segment range has been set in TestStick009B under W/P OFF.		**Pass**
Check 01001	The targeted product can complete the start-up sequence with TestStick010		**Pass**
Check 01002	The targeted product can write to TestStick010.		**Pass**
Check 01003	When the targeted product writes to TestStick010, 1(: already written) shall be set to the update status. This document verifies whether or not F8h has been correctly set, combining all the values of Overwrite Flag.	overwrite flg = 0xF8	**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 01004	When the targeted product writes to TestStick010, FFh shall be set to Management Flag.	management flg = 0xFF	**Pass**
Check 01101	The targeted product shall not change the block status (page 0) of the block where an uncorrectable error exists in TestStick011A under W/P ON	overwrite flg = 0xF8 management flg = 0xFF	**Pass**
Check 01102	The targeted product shall not change the page status of the page where an uncorrectable error exists in TestStick011A under W/P ON,	overwrite flg = 0xF8 management flg = 0xFF	**Pass**
Check 01103	The targeted product shall not copy or move the data of the block, where an uncorrectable error exists, to other blocks in TestStick011A under W/P ON.		**Pass**
Check 01104	When only a read process is executed, the targeted product shall not change the block status of the block where an uncorrectable error exists in TestStick011A. However, it is not prohibited to copy (move) data of a block where an uncorrectable error exists to an alternative block during a read process. If copying the block data, the block status shall become 0(: NG) while the targeted product shall perform Check011-9, Check011-10, Check011-11 and Check011-12 to the copy target block.	overwrite flg = 0xF8 management flg = 0xFF	**Pass**
Check 01105	When only read process is executed, the targeted product shall set 1(: NG) to the page status of the page where an uncorrectable error exists in TestStick011A.	overwrite flg = 0xB8 management flg = 0xFF	**Pass**
Check 01106	When the update process is executed, the targeted product shall set 0(: NG) to the block status (page 0) of the block (the update source block) where an uncorrectable error exists in TestStick011B.		**Pass**
Check 01107	When the update process is executed, the targeted product shall set 0(: under updating) to the update status (page 0) of the update source block in TestStick011B.	overwrite flg = 0x68 management flg = 0xFF	**Pass**
Check 01108	When the update process is executed, the targeted product shall set 1(: NG) to the page status of the page in the update source block, in which an uncorrectable error exists in TestStick011B.	overwrite flg = 0xB8 management flg = 0xFF	**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 01109	When the update process is executed, the targeted product shall set 1(: OK) to the block status (page 0) of the update target block in TestStick011B.		**Pass**
Check 01110	When the update process is executed, the targeted product shall set 1(: already written) to the update status (page 0) of the update target block in TestStick011B.	overwrite flg = 0xF8 management flg = 0xFF	**Pass**
Check 01111	When the update process is executed, the targeted product shall set 0(: data error) to the page status of the page in the update target block, in which an uncorrectable error exists in TestStick011B.	overwrite flg = 0x98 management flg = 0xFF	**Pass**
Check 01112	The targeted product shall not duplicate or lack any logical address after updating (or copying) the block where an uncorrectable error occurred.		**Pass**
Check 01201	When TestStick012 is inserted, the targeted product shall not change the values of the matching-required parameter of MBR.		**Pass**
Check 01202	When TestStick012 is inserted, the targeted product shall not change the values of the matching-required parameter of PBR		**Pass**
Check 01203	When TestStick012 is inserted, the targeted product shall not erase MEMSTICK.IND File.		**Pass**
Check 01204	When TestStick012 is inserted, the targeted product shall not change the values of MEMSTICK.IND File.		**Pass**
Check 01301	The targeted product shall not change the values of the matching-required parameters of MBR when it writes to TestStick013.		**Pass**
Check 01302	The targeted product shall not change the values of the matching-required parameters of PBR when it writes to TestStick013.		**Pass**
Check 01303	The targeted product shall not change the values of the matching-required parameters of PBR when it writes to TestStick013.		**Pass**
Check 01304	The targeted product shall not change the values of MEMSTICK.IND File when it writes to TestStick013.		**Pass**

Memory Stick Host Checker Test			
No	Check Items	Remark	Check
Check 01401	The targeted product shall not change the values of MEMSTICK.IND File when it writes to TestStick013.		**NA**
Check 01402	The targeted product shall set PBR values based on Format Specifications when it executes the format process to TestStick014A.		**NA**
Check 01403	The targeted product shall make the values of MEMSTICK.IND File based on Format Specifications when it executes the format process to TestStick014A.		**NA**
Check 01404	There shall be no inconsistency on logical addresses when the targeted product executes the format process to TestStick014A.		**NA**
Check 01405	The targeted product shall not erase Information Block registered in the disabled block data when it executes the format process to TestStick014B.		**NA**
Check 01406	The targeted product shall not erase the initial defect blocks registered in the disabled block data when it executes the format process to TestStick014B. However, if the product uses the information block, this check item can be omitted.		**NA**
Check 01407	The targeted product shall not erase the late-developed defect blocks when it executes the format process to TestStick014B.		**NA**

10. Gold Tree Test

No	Test Item	Result
1	Enumeration and Driver installation	Pass
2	Operation with Default Driver	Pass
3	Install Additional Software	N/A
4	DUT Operation Speed	Pass
5	Interoperability – Operate all device	Pass
6	Hot Detach & Reattach	Pass
7	Topology Change	Pass
8	Warn Boot	Pass
9	Cold Boot	Pass
10	Active S1 Suspend and Resume	Pass
11	Inactive S1 Suspend and Resume	Pass
12	Active S3 Suspend and Resume	Pass
13	Interpacket delay test (8~192 bit)	Pass

11. Power Consumption

Flash type	Without card	Full of Card
Operation current	77.2mA	100.3mA
Suspend current	0.26mA	0.31mA

12. Burn in Test

12-1 EHCI

BurnInTest results (Detail: Normal)	
Network Name	QA
Date	07/22/05
Time	09:10:44
Operating system	Windows XP
Number of CPUs	1

CPU manufacturer	GenuineIntel
CPU type	Intel(R) Celeron(R) CPU 2.40GHz
CPU1 speed	2401.2 MHz
Level 2 cache size	128
CPU features	MMX SSE SSE2
CPU Serial #	Not available or disabled
RAM	267894784
Video card	NVIDIA GeForce4 MX 4000
Video resolution	1024x768x32

RESULT SUMMARY					
Test Start time		Test Start time: Thu Jul 21 18:54:36 2005			
Test Stop time		Fri Jul 22 06:54:37 2005			
Test Duration		Test Duration: 012h 00m 01s			
Test	Cycles	Operations	Result	Errors	Last Error
Disk (G:SD Kingston ELITE PRO 256MB)	1519	8.399 Billion	PASS	0	No errors
Disk (H:MS Pro Sony 256MB)	1527	8.382 Billion	PASS	0	No errors
NOTE:					
DETAILED ERROR LOG:					
2005-07-21 18:54:36, Status, Test run started					
2005-07-22 06:54:37, Status, Test run stopped					

Results Produced by PassMark BurnInTest (http://www.passmark.com)

Version: V4.0 Pro

12-2 USB1.1 Hub

BurnInTest results (Detail: Normal)	
Network Name	QA
Date	07/22/05
Time	09:16:19
Operating system	Windows XP
Number of CPUs	1

CPU manufacturer	GenuineIntel
CPU type	Intel(R) Pentium(R) 4 CPU 2.53GHz
CPU1 speed	2560.0 MHz
Level 2 cache size	512
CPU features	MMX SSE SSE2
CPU Serial #	Not available or disabled
RAM	267894784
Video card	NVIDIA GeForce2 MX/MX 400 (Microsoft Corporation)
Video resolution	1024x768x32

RESULT SUMMARY					
Test Start time		Test Start time: Thu Jul 21 19:07:23 2005			
Test Stop time		Fri Jul 22 07:07:24 2005			
Test Duration		Test Duration: 012h 00m 01s			
Test	Cycles	Operations	Result	Errors	Last Error
Disk (G:SD Kingston ELITE PRO 256MB)	737	4.111 Billion	PASS	0	No errors
Disk (H:MS Pro Sony 256MB)	1489	4.354 Billion	PASS	0	No errors
NOTE:					
DETAILED ERROR LOG:					
2005-07-21 19:07:23, Status, Test run started					
2005-07-22 07:07:24, Status, Test run stopped					

Results Produced by PassMark BurnInTest (http://www.passmark.com)

Version: V4.0 Pro

12-3 USB2.0 Hub

BurnInTest results (Detail: Normal)	
Network Name	QA-562F7491C532
Date	04/29/04

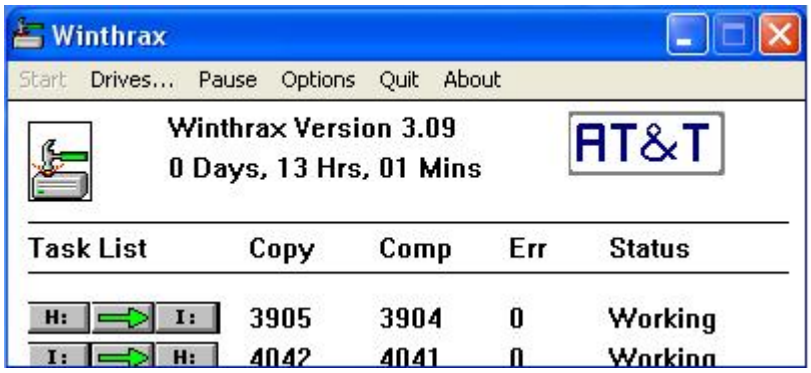
Time	20:59:23
Operating system	Windows XP
Number of CPU	2
CPU manufacturer	GenuineIntel
CPU type	Intel(R) Pentium(R) 4 CPU 2.80GHz
CPU1 speed	2813.5 MHz
CPU2 speed	2813.4 MHz
Level 2 cache size	1024
CPU features	MMX SSE SSE2
CPU Serial #	Not available or disabled
RAM	267894784
Color Depth	32

RESULT SUMMARY					
Test Start time			Thu Apr 29 06:48:14 2004		
Test Stop time			Thu Apr 29 18:48:15 2004		
Test Duration			012h 00m 01s		
Temp (Min / Current / Max)			0.0 / 0.0 / 0.0		
Temp (Min / Current / Max)			0.0 / 0.0 / 0.0		
Test	Cycles	Operations	Result	Errors	Last Error
Disk (G:SD SanDisk Ultra 2 2G)	42	1714614272	0	No errors	42
Disk (H:MS pro Sony 512MB)	172	1689214976	0	No errors	172
NOTE:					
DETAILED ERROR LOG:					
2004-04-29 06:48:14, Status, PassMark BurnInTest V3.0 Pro 1003					
2004-04-29 06:48:14, Status, Test run started					
2004-04-29 18:48:20, Status, Test run stopped					

Results Produced by PassMark BurnInTest (http://www.passmark.com)

Version: V3.0 Pro

13. Winthrax



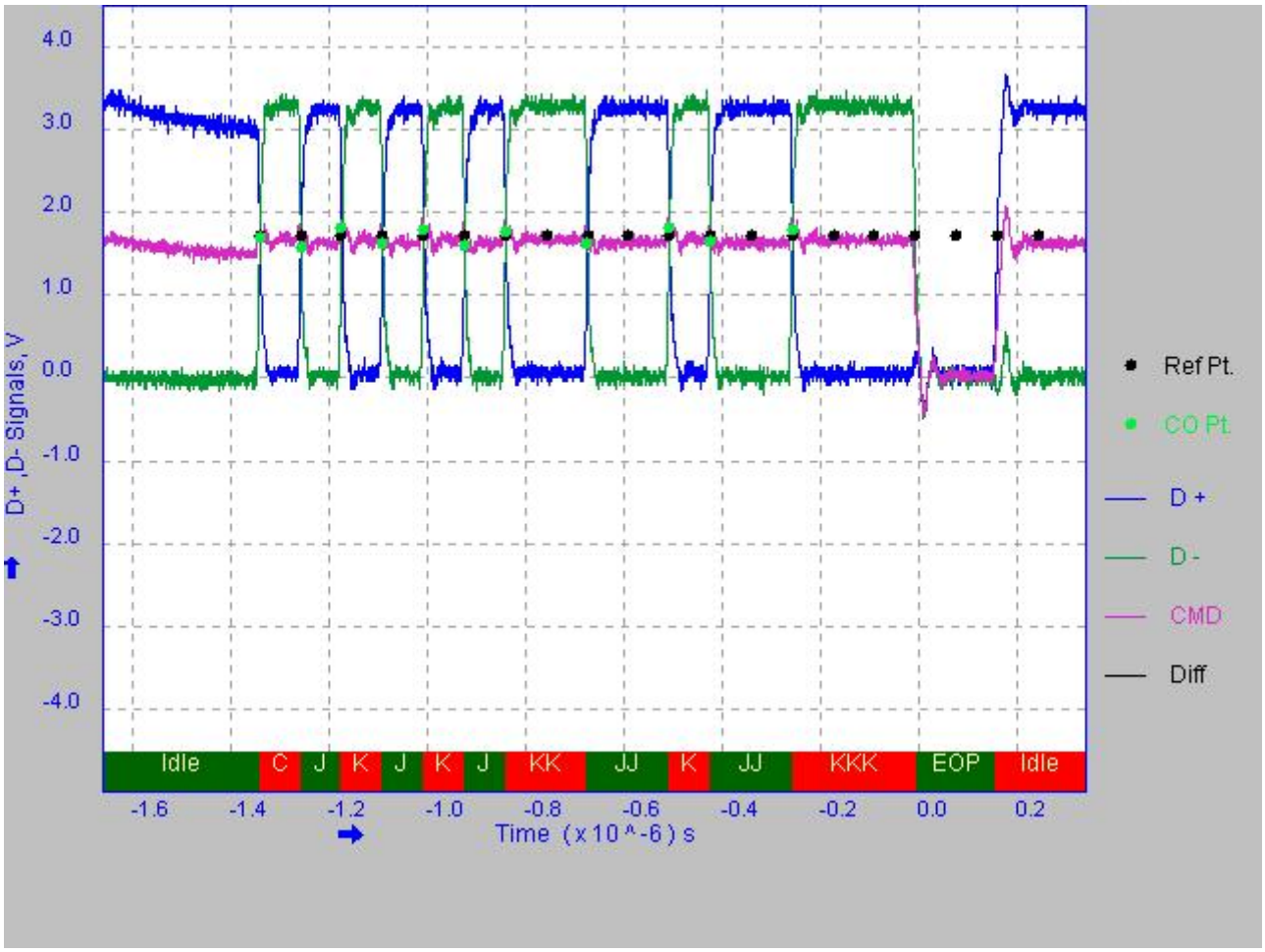
H：SD Panasonic High Speed 512MB

I：Sony MS Pro 512MB

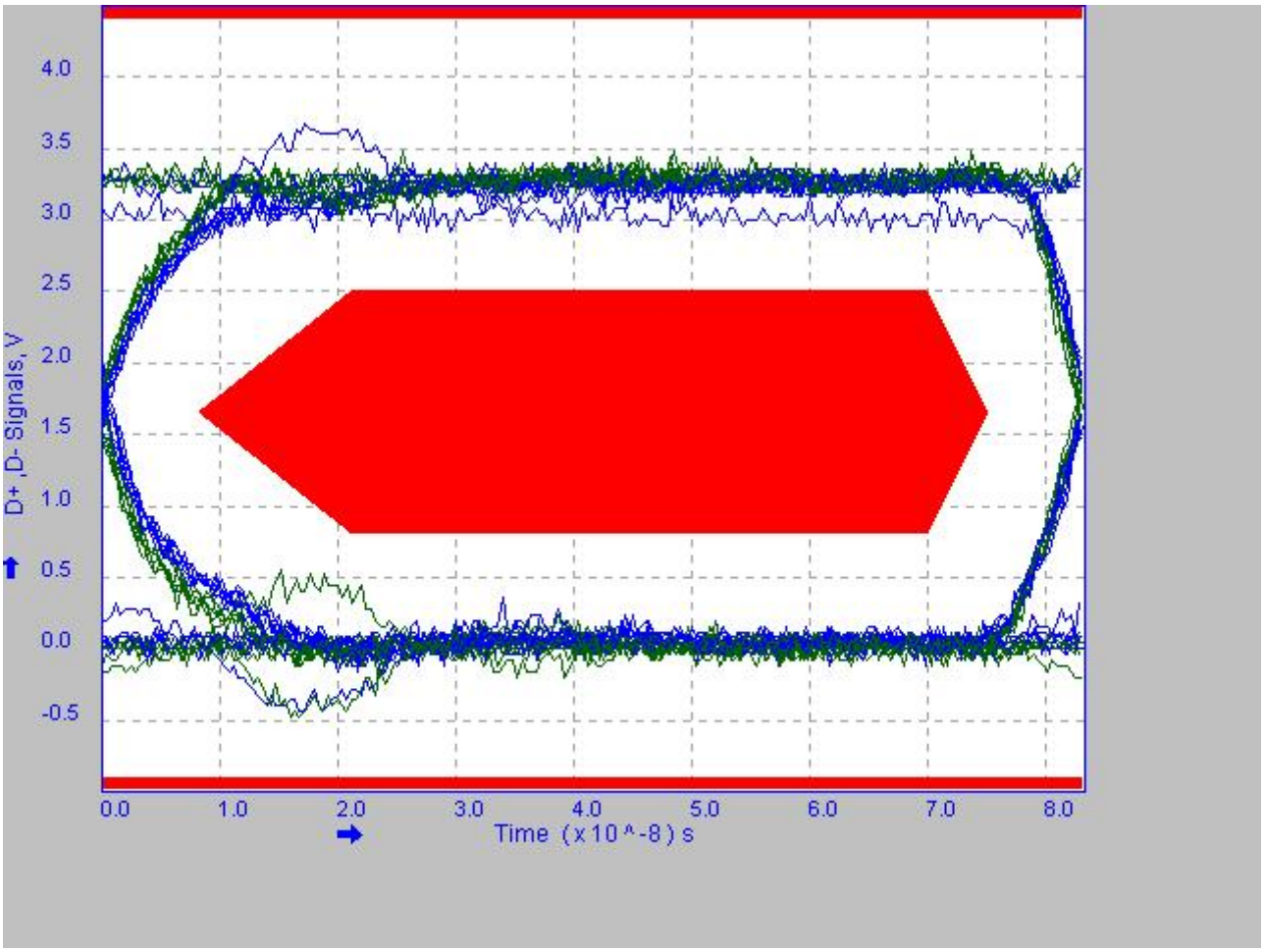
14. Signal Quality Test

14-1 Full Speed:

Signal Quality Test Results in Tek format	
Device ID:	6331fs
Device Description:	Full Speed, Far End Device, Up Stream Testing, Tier 6, Dummy Device.
Date:	Fri Jul 22 11:03:21 CST 2005
Overall Result:	**Pass***



Waveform Plot



Eye Diagram

Results based on USB-IF / Waiver Limits:

Measurement Name	Minimum	Maximum	Mean	pk-pk	Standard Deviation	RMS	Population	Status
Eye Diagram Test	-	-	-	-	-	-	-	Pass
Signal Rate	11.96411Mbps	12.04384Mbps	11.99539Mbps	0.0000bps	28.54610kbps	11.99640Mbps	13	Pass
Crossover Voltage	1.588571 V	1.826667 V	1.710758 V	238.0952mV	93.48740mV	1.713078 V	11	Pass
EOP Width	-	-	167.1984ns	-	-	-	1	Pass
Consecutive Jitter	-388.5348ps	259.6703ps	0.0000s	648.2051ps	223.2813ps	211.8233ps	10	Pass

Paired JK Jitter	-50.51282ps	312.8205ps	122.0330ps	363.3333ps	180.3592ps	198.2148ps	4	Pass
Paired KJ Jitter	-170.5128ps	261.5385ps	26.23626ps	432.0513ps	199.3577ps	174.6309ps	4	Pass

Additional Information :

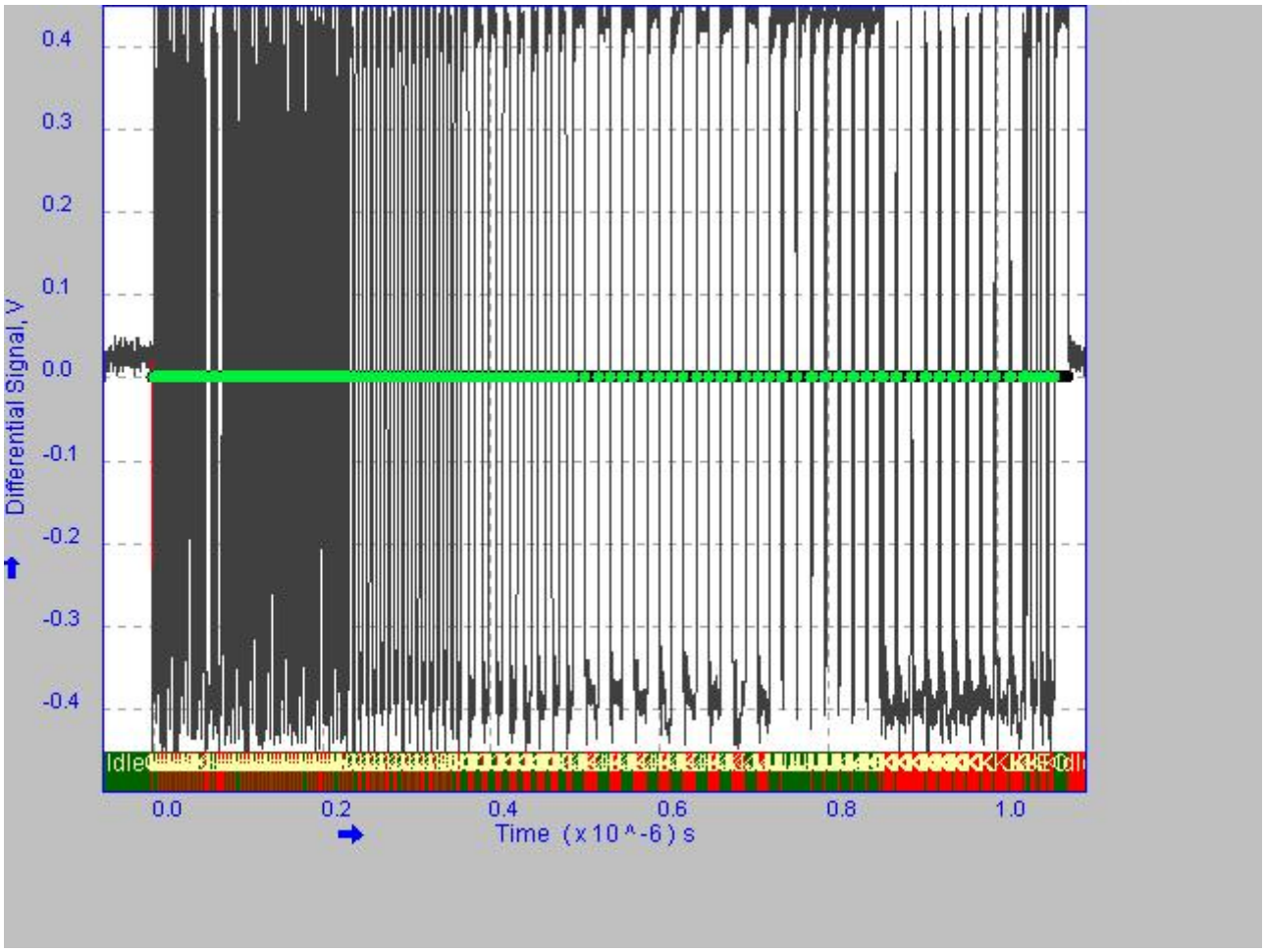
Rise Time: Min: 14.108ns Max: 15.683ns Mean: 14.791ns Std: 629.50ps RMS: 14.802ns Population: 5

Fall Time: Min: 13.623ns Max: 14.772ns Mean: 14.043ns Std: 406.76ps RMS: 14.048ns Population: 6

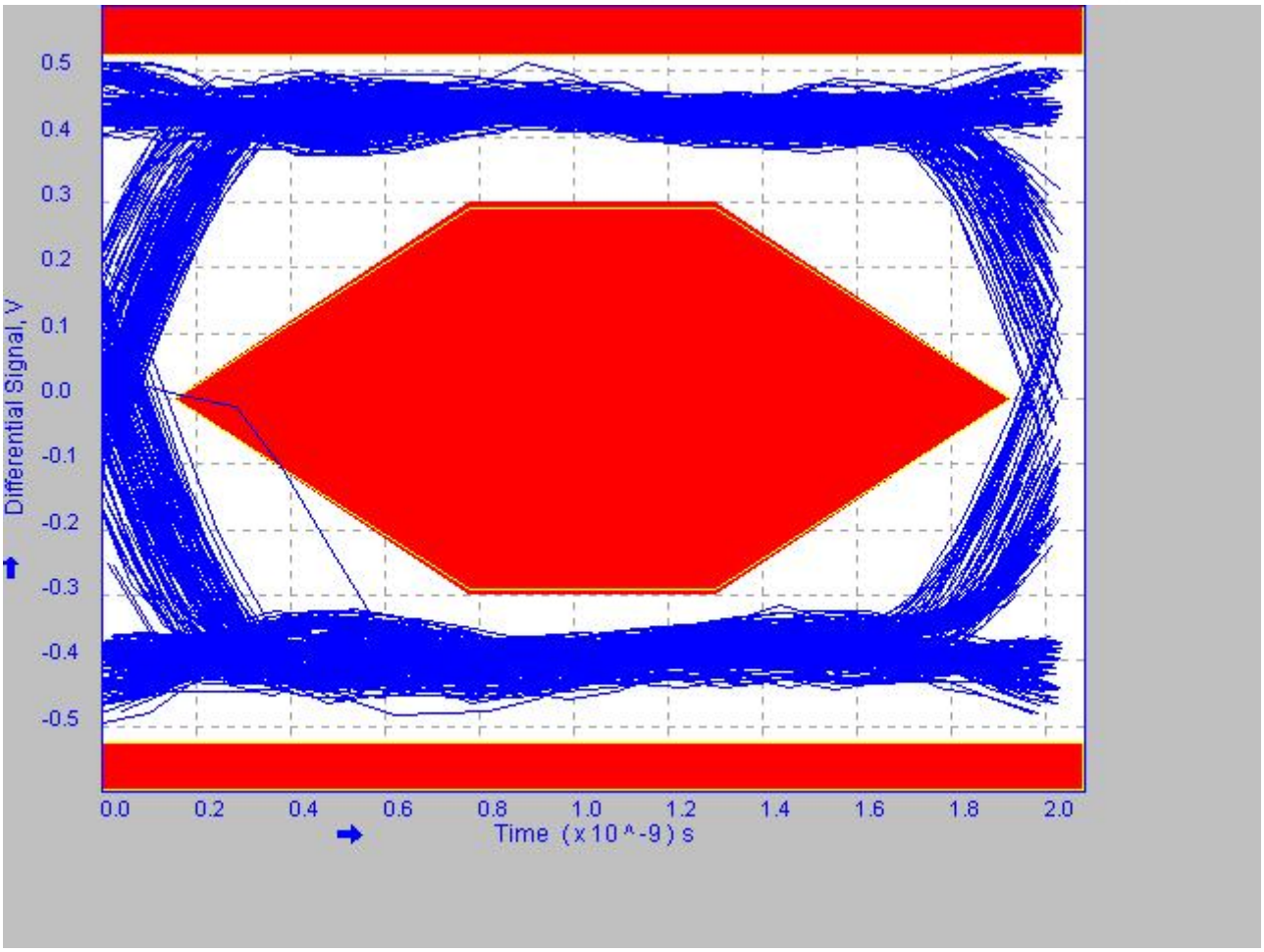
* The Overall Result for this test is **Pass**, because individual status of the measurements is **Pass** and it is performed on Tier 6 (as per USB-IF).

14-2 High Speed:

Signal Quality Test Results in Tek format	
Device ID:	fsfe_001
Device Description:	High Speed, Near End Device, Up Stream Testing, Tier 6, Dummy Device.
Date:	Fri Jul 22 11:18:30 CST 2005
Overall Result:	**Conditional Pass***



Waveform Plot



Eye Diagram

Results based on USB-IF / Waiver Limits:

Measurement Name	Minimum	Maximum	Mean	pk-pk	Standard Deviation	RMS	Population	Status
Eye Diagram Test	-	-	-	-	-	-	-	Conditional Pass
Signal Rate	460.2019Mbps	499.1492Mbps	480.1196Mbps	0.0000bps	8.340379Mbps	479.7267Mbps	513	Pass
EOP Width	-	-	16.57695ns	-	-	-	1	Pass
EOP Width (Bits)	-	-	7.958919	-	-	-	1	Pass
Rise Time	482.6110ps	400.5347ns	107.7401ns	400.0521ns	151.1469ns	185.0401ns	107	Pass
Fall Time	451.1485ps	400.1189ns	108.6642ns	399.6678ns	151.2045ns	185.6261ns	107	Pass

Additional Information :

Consecutive Jitter range : -144.1ps to 137.2ps RMS Jitter 59.23ps

KJ Paired Jitter range : -75.28ps to 60.62ps RMS Jitter 25.87ps

JK Paired Jitter range : -64.71ps to 69.11ps RMS Jitter 25.78ps

*The Overall Result for this test is **Conditional Pass**, because one or more individual status of the measurements is **Conditional Pass**. For this test, the recommended configuration for USB2 testing (as per USB-IF) is on Tier 1.