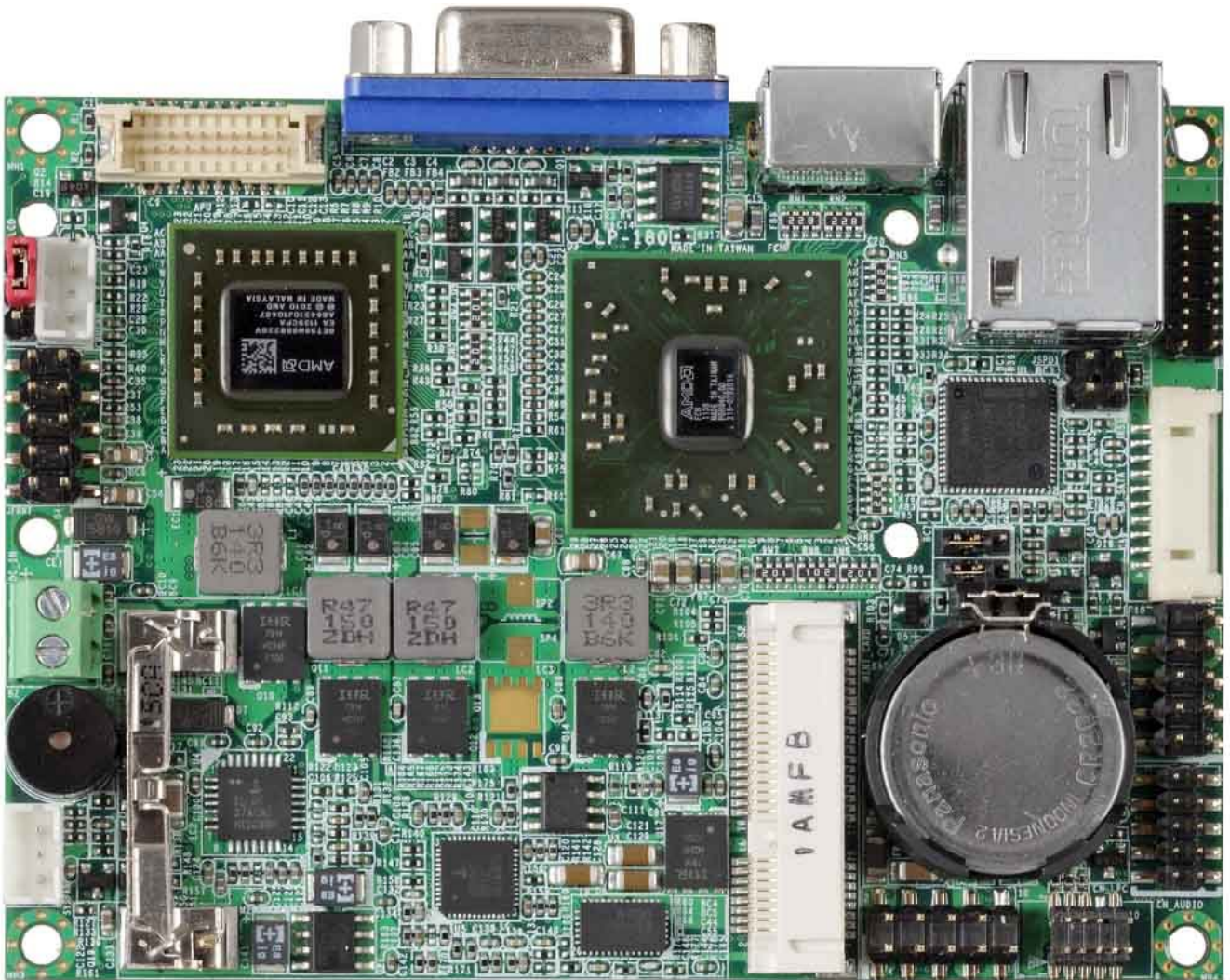


Product Test Report



Product Name	LP-180
Product Version	A
Issued Date	2012/04/10
Report Edition	1.0
BIOS Version	1.0
Testing Engineer	PERRY

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1. Function test

1.1 Hardware function

Base Function Test

Item	Description	Result
1	Power Button	Pass
2	Reset	Pass
3	Power LED	Pass
4	HDD LED	Pass
5	CPUFAN	Pass
6	SYSFAN	Pass
7	CN_AUDIO	Pass
8	LAN1	Pass
9	DDRIII	Pass
10	SATA	Pass
11	USB1/2/3/4	Pass
12	CN_LPC	Pass
13	DC_OUT	Pass
14	DC_IN	Pass
15	COM1/2	Pass
16	MINI_CRAD	Pass
17	CN_DDP	Pass
18	CN_INV	Pass

Jumper

Item	Description	Result
1	JRTC	Pass
2	JAT	Pass
3	JVLCD	Pass

1.2 BIOS function

Item	Description	Result	Remark
1	Press 'Del' to run Setup Utility	Pass	
2	Ctrl-Alt-Del – Soft-Reboot	Pass	
3	Save & Exit Setup	Pass	
4	Date & Time Setting	Pass	
5	Halt On	Pass	
6	Boot priority order	Pass	
7	Keyboard Features Num Lock	Pass	
8	LVDS Setting	Pass	(LP-180X) BIOS : 1.1
9	Onboard Serial Port	Pass	
10	Console Redirection	Pass	
11	Wake-up on LAN(Onboard)	Pass	
12	Shutdown Temperature	Pass	
13	CPU Warning Temperature	Pass	
14	Watch Dog Timer	Pass	
15	Set Supervisor Password	Pass	
16	Set User Password	Pass	
17	Load Setup Defaults	Pass	
18	Azalia OPTION	Pass	
19	ONCHIP_SATA_CHANNEL	Pass	

1.3 Driver

CD dition : OCDIPCO

1. Windows XP SP3 Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	5.10.0.6526
3	LAN Driver	Pass	11.14.48.0

2. Windows XP 64 bit Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	5.10.0.6526
3	LAN Driver	Pass	11.14.48.0

3. Windows Vista 32 bit Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482
3	LAN Driver	Pass	11.14.48.0

4. Windows Vista 64 bit Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482
3	LAN Driver	Pass	11.14.48.0

5. Windows 7 32 bit Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482
3	LAN Driver	Pass	11.14.48.0

6. Windows 7 64 bit Driver Test

Item	Description	Result	version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482
3	LAN Driver	Pass	11.14.48.0

7. Windows 2008 32 bit Driver Test

Item	Description	Result	Version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482

8. Windows 2008 64 bit Driver Test

Item	Description	Result	Version
1	VGA Driver	Pass	8.920.0.0
2	Audio Driver	Pass	6.0.1.6482

9. Windows Server 2003 Driver Test

Item	Description	Result	version
1	Audio Driver	Pass	5.10.0.6526
2	LAN Driver	Pass	11.14.48.0

10. Windows Server 2003 64 bit Driver Test

Item	Description	Result	version
1	Audio Driver	Pass	5.10.0.6526
2	LAN Driver	Pass	11.14.48.0

2. Compatibility test

2.1 CPU Test

Test environment:

OS :Windows XP professional SP3

Test program : PC MARK 2002

Clock Speed	Family	Processor	Result
1.65GHz	G-Series	T56N	Pass

2.2 Memory Test

Test environment:

OS :Windows XP professional SP3

Test program : PC MARK 2002

Manufacturer	Chip	DDRII frequency	Capacity Mbytes	Memory test Source
Kingston	KVR1333 D3S9	DDRIII 1333	1GB	Pass
Kingston	KVR1333 D3S9	DDRIII 1333	4GB	Pass
Kingston	KVR1333 D3S9	DDRIII 1333	8GB	Pass
ADATA	SC7YG1A 087AZ	DDRIII 1066	1GB	Pass

2.3 VGA Graphic Quality Test

Test environment:

OS Windows XP professional SP3

Driver version :

Resolution	Color	Result	Remark
800 x 600	16 /32bit	Pass	
1024 x 600	16 /32bit	Pass	
1024 x 768	16 /32bit	Pass	
1152 x 864	16 /32bit	Pass	
1280 x 720	16 /32bit	Pass	
1280 x 768	16 /32bit	Pass	
1280 x 800	16 /32bit	Pass	
1280 x 1024	16 /32bit	Pass	
1400 x 1050	16 /32bit	Pass	
1440 x 900	16 /32bit	Pass	
1600 x1200	16 /32bit	Pass	

2.4 Audio

Test envirement:

OS Windows XP professional SP3

Driver version : 5.10.0.6526

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows XP professional x64 Edition

Driver version : 5.10.0.6526

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows Vista 32 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows Vista 64 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows 7 32 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows 7 64 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows 2008 32 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows 2008 64 bit

Driver version : 6.0.1.6482

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows SERVER 2003

Driver version : 5.10.0.6316

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

OS Windows SERVER 2003 64bit

Driver version : 5.10.0.6316

Item	Description	Result	Remark
1	2.1CH	Pass	
2	Microphone	Pass	

2.5 HDD Test

Test envirement:

OS Windows XP professional SP3

HDD MODEL	INTERFACE	capacity	HDD Size Detect	HDD Data Transfer	HDD LED Check
MRSAJ6C064GC125C00	2.5 SATA	64GB	Pass	Pass	Pass
Western Digital WD3200BEKT	2.5 SATA	320GB	Pass	Pass	Pass

2.6 CD-ROM Test

Test envirement:

OS Windows XP professional SP2

CD-ROM MODEL	INTERFACE	CD-ROM Detect	CD-ROM Data Transfer	PLAY DVD
LITEON DVD ETAU108	USB	Pass	Pass	Pass

2.7 USB Test

1. Windows XP SP3

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

2. Windows XP 64 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

3. Windows Vista 32 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

4. Windows Vista 64 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

5. Windows 7 32 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

6. Windows 7 64 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

7. Windows 2008 32 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

8. Windows 2008 64 bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

9. Windows Server 2003

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

10. Windows Server 2003 64bit

Item	Result	Remark
External USB Keyboard Test	Pass	
External USB Mouse Test	Pass	
Hot plugging test	Pass	
CD ROM	Pass	
USB Mass storage	Pass	

2.8 Serial Port Test

1. Windows XP SP3

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	b&b com port test	Pass	

2. Windows XP 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

3. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

4. Windows Vista 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

5. Windows 7 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

6. Windows 7 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

7. Windows 2008 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

8. Windows 2008 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

4. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	
3	b&b com port test	Pass	

5. Windows Server 2003 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	RS-232 Mouse Test	Pass	

2.9 PS2 Keyboard 、 Mouse Test

1. MS-DOS

Item	Description	Result	Remark
1	Keyboard LED Status Test	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

2. Windows XP SP3

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

3. Windows XP 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

4. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

5. Windows Vista 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

6. Windows 7 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

7. Windows 7 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

8. Windows 2008 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

9. Windows 2008 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

10. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

11. Windows Server 2003 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	
2	Keyboard Typing Test	Pass	
3	Mouse Detect Test	Pass	

2.10 LAN Test

Data Transfer Test envirement:

-CAT 6 UTP 100M

-8 HR. continuous

1. Windows XP SP3

Item	Description	Result	Remark
1	Device Manager Check	Pass	IPERF
2	Data Transfer Test	Pass	IPERF

2. Windows XP 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	IPERF
2	Data Transfer Test	Pass	IPERF

3. Windows Vista 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	IPERF
2	Data Transfer Test	Pass	IPERF

4. Windows Vista 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	IPERF
2	Data Transfer Test	Pass	IPERF

5. Windows 7 32 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	Iperf
2	Data Transfer Test	Pass	Iperf

6. Windows 7 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	Iperf
2	Data Transfer Test	Pass	Iperf

7. Windows Server 2003

Item	Description	Result	Remark
1	Device Manager Check	Pass	Iperf
2	Data Transfer Test	Pass	Iperf

8. Windows Server 2003 64 bit

Item	Description	Result	Remark
1	Device Manager Check	Pass	Iperf
2	Data Transfer Test	Pass	Iperf

2.11 Power Supply Test

Item	TYPE	Description	Result	Remark
1	AcBel	350W	Pass	
2	High Power	250W	Pass	
3	Seven team	ST-300WAP	Pass	

2.12 Os Install

Item	Description	Result	Remark
1	Windows Server 2003	Pass	
2	Windows Server 2003 64 bit	Pass	
3	Windows XP SP3	Pass	
4	Windows XP 64 bit	Pass	
5	Windows Vista 32 bit	Pass	
6	Windows Vista 64 bit	Pass	
7	Windows 7 32 bit	Pass	
8	Windows 7 64 bit	Pass	
9	Windows 2008 32 bit	Pass	
10	Windows 2008 64 bit	Pass	

2.13 PCI Express Mini Card

Motherboard	PCI Express mini card	Remark
LP-180	MPX-574D	Pass
LP-180	MPX-574D2	Pass

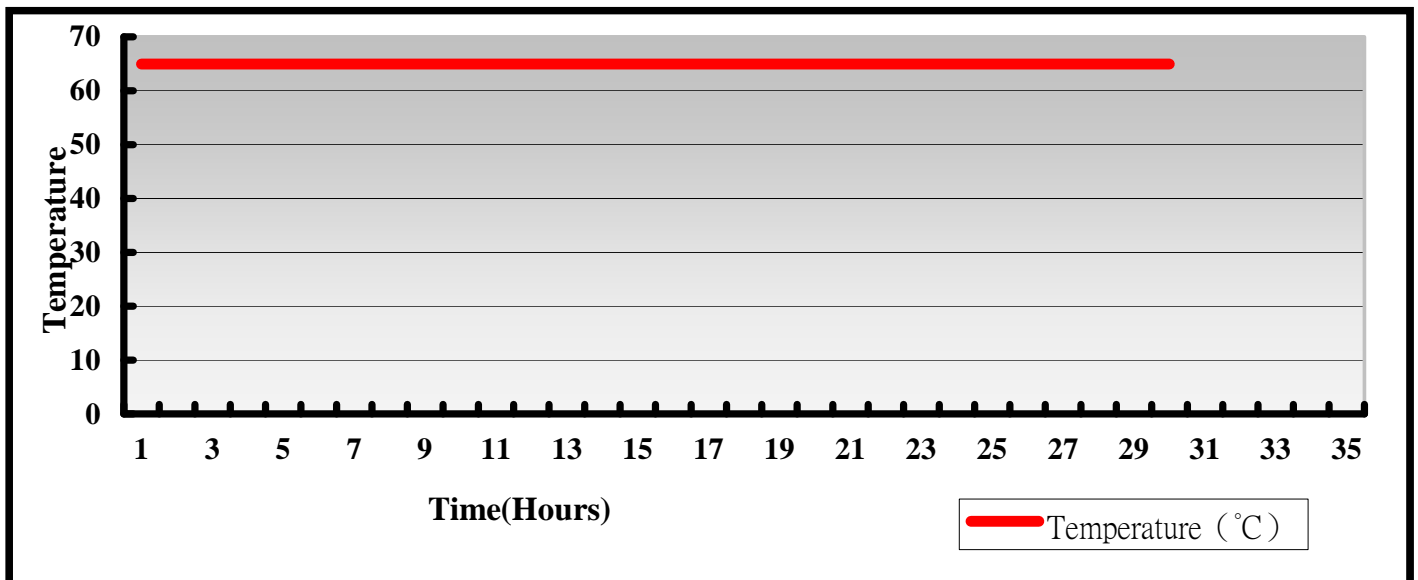
3. Environmental test

3.1 Temperature Test

Hardware Device list:

System Board	LP-180
CPU	AMD CPU G-Series T56N Processor 1.65GHz
Memory	DDRIII 1333 (KVR1333D3S9)1G
HDD	Memoright STM-25 Series(MRSAJ6C064GC125C00)
Operating OS	Windows XP SP3
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3DMark 2003 + Prime95

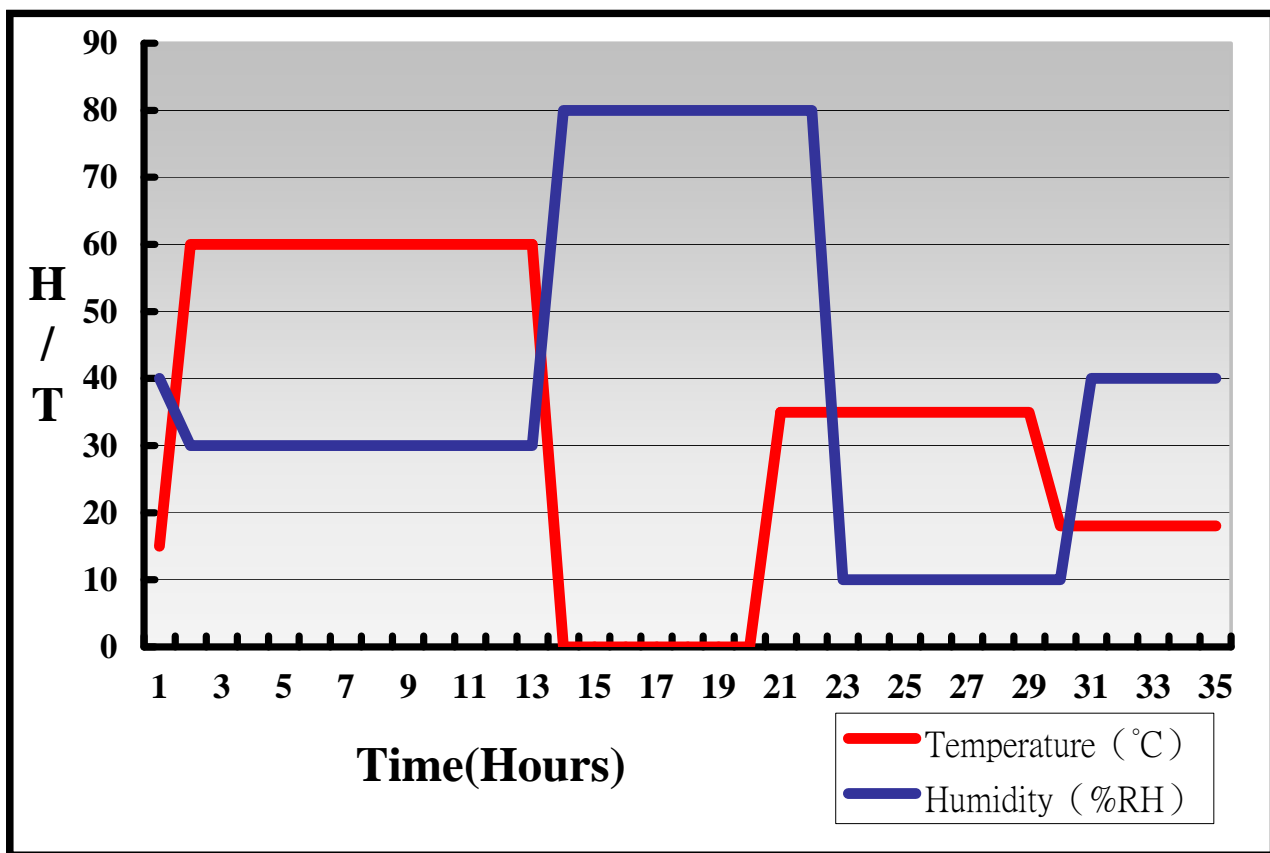
Test Result:



Hardware Device list:

System Board	LP-180
CPU	AMD CPU G-Series T56N Processor 1.65GHz
Memory	DDRIII 1333 (KVR1333D3S9)1G
HDD	Memoright STM-25 Series(MRSAJ6C064GC125C00)
Operating OS	Windows XP SP3
Test Equipment	THERMOTRON 2800 Programmer/Controller
Test Program	3DMark 2003 + Prime95

Test Result:



Boot Up Test:

Hardware Device list:

System Board	LP-180
CPU	AMD CPU G-Series T56N Processor 1.65GHz
Memory	DDRIII 1333 (KVR1333D3S9)4G
HDD	Memoright STM-25 Series(MRSAJ6C064GC125C00)

Temperature	Result	Remark
0°C	Pass	50 Times.
65°C	Pass	50 Times

3.2 Thermal measurements at various points on the board

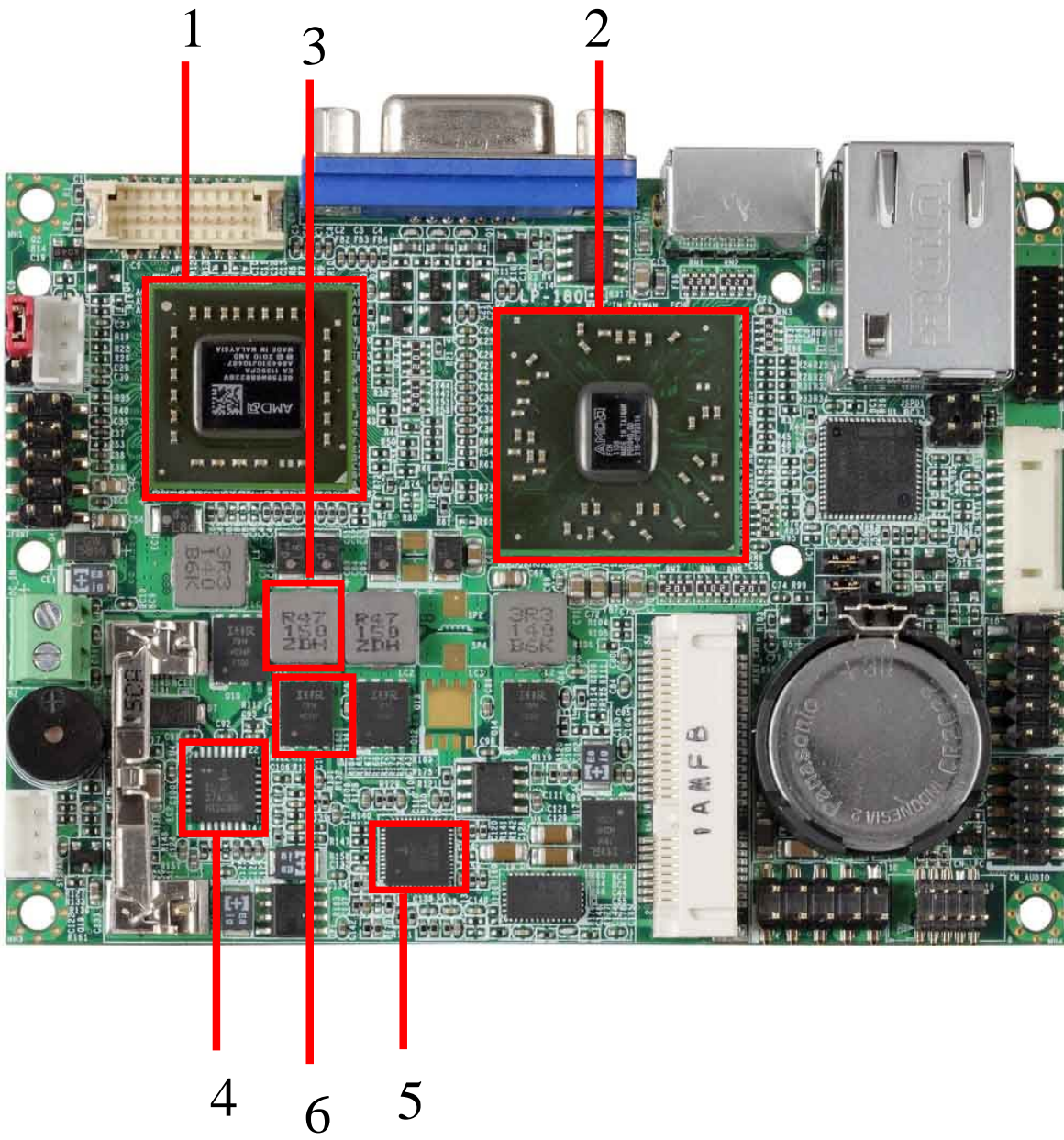
Test Environment :

CPU	AMD CPU G-Series T56N Processor 1.65GHz
Memory	DDRIII 1333 (KVR1333D3S9)4G
HDD	Western Digital 320GB (WD3200BEKT)
Power	ACBel 350W
Operating System	Windows XP SP3
Test Program	3DMARK2003,Prime95

Test Result:

Environmental temperature	47°C
----------------------------------	-------------

Item	name	temperature
1	CPU	65°C
2	FCH	45°C
3	LC1	48.3°C
4	U4	55.2°C
5	U5	53.6°C
6	Q11	53.9°C



4. Reliability Test

4.1 Power Consumption Test

1.Test Environment:

Motherboard	LE-380
CPU	AMD CPU G-Series T56N Processor 1.65GHz
Memory	DDRIII 1333 (KVR1333D3S9)1G
HDD	Memoright STM-25 Series(MRSAJ6C064GC125C00)

(A) Power Supply: ACBel 350W

Voltage	MS-DOS Boot up		Windows XP SP3 3DMARK 2003 + PRIME 95	
	Current (A)	Power (W)	Current (A)	Power (W)
5V	3.18	15.9	4.75	23.75

1.a.Test Environment:

The same as above but with LCD panel

Display Panel	AUO PD035VL1(LF) 8" LCD
----------------------	-------------------------

(A) Power Supply: ACBel 350W

Voltage	MS-DOS Boot up		Windows XP SP3 3DMARK 2003 + PRIME 95	
	Current (A)	Power (W)	Current (A)	Power (W)
5V	3.26	16.3	4.77	23.85

5. Performance Test

5.1 3D MARK(2001 、 2003)

Windows XP SP3

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	AMD CPU G-Series T56N Processor 1.65GHz Kingston DDRIII1333 (KVR1333D3S9)4G Western Digital 320GB (WD3200BEKT)	Pass	
3DMARK2003 Scores		Pass	

WEIGHTED SUITE	Test Environment	Result	Remark
3DMARK2001 Scores	AMD CPU G-Series T56N Processor 1.65GHz ADATA DDRIII1066 (SC7YG1A087AZ)1G Western Digital 320GB (WD3200BEKT)	Pass	
3DMARK2003 Scores		Pass	

5.2 PC MARK2002

Test Environment
AMD CPU G-Series T56N Processor 1.65GHz Kingston DDRIII1333(KVR1333D3S9)4G Western Digital 320GB (WD3200BEKT)

Windows XP SP3

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	
2	Memory test Source	Pass	
3	HDD test Source	Pass	

Test Environment
AMD CPU G-Series T56N Processor 1.65GHz ADATA DDRIII1066(SC7YG1A087AZ)1G Western Digital 320GB (WD3200BEKT)

Windows XP SP3

Item	WEIGHTED SUITE	Result	Remark
1	CPU test Source	Pass	
2	Memory test Source	Pass	
3	HDD test Source	Pass	

5.3 AQUAMARK3

Test Environment
AMD CPU G-Series T56N Processor 1.65GHz Kingston DDRIII1333(KVR1333D3S9)4G Western Digital 320GB (WD3200BEKT)

Windows XP SP3

Item	WEIGHTED SUITE	Result	Remark
1	GFX	Pass	
2	CPU	Pass	
3	AquaMark3 TRISCORE	Pass	

5.4 CINEBENCH

Test Environment
AMD CPU G-Series T56N Processor 1.65GHz Kingston DDRIII1333(KVR1333D3S9)4G Western Digital 320GB (WD3200BEKT)

Windows XP SP3

Item	WEIGHTED SUITE	Result	Remark
1	GFX	Pass	
2	CPU	Pass	

5.5 ZD CPUMARK

Test Environment
AMD CPU G-Series T56N Processor 1.65GHz Kingston DDRIII1333 (KVR1333D3S9)4G Western Digital 320GB (WD3200BEKT)

Windows XP SP3

Item	WEIGHTED SUITE	Result	Remark
1	SCORE	Pass	

5.6 Storage Performance

5.6.1 HDD

Test environment:

OS Windows XP professional SP3

Program (HD Tune)

HDD MODEL	INTERFACE	capacity	Average	Burst Rate	Access Time
WD3200BEKT	2.5" SATA	320GB	65.8MB/sec	116.7MB/sec	15ms

5.6.2 CD-ROM

Test environment:

OS Windows XP professional SP3

Program (NERO)

CD-ROM MODEL	INTERFACE	Average speed	Full READ	Burst Rate	CD
LITEON DVD ETAU108	USB	12.37x	109ms	12 MB/s	52X CD-R