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**ADVANTECH CO., LTD.**

# QA Test Report

**ACP-2320MB**

**(Acoustic noise Test)**

**Report No : 06O002A0**

**Report Date : February 16, 2006**

Issue Stamp

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*Charles Chang*  
Manager of QA Department

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*Charles Chang*  
Approval

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*Jeff Yang*  
Test Engineer

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*QA Lab Reliability test*

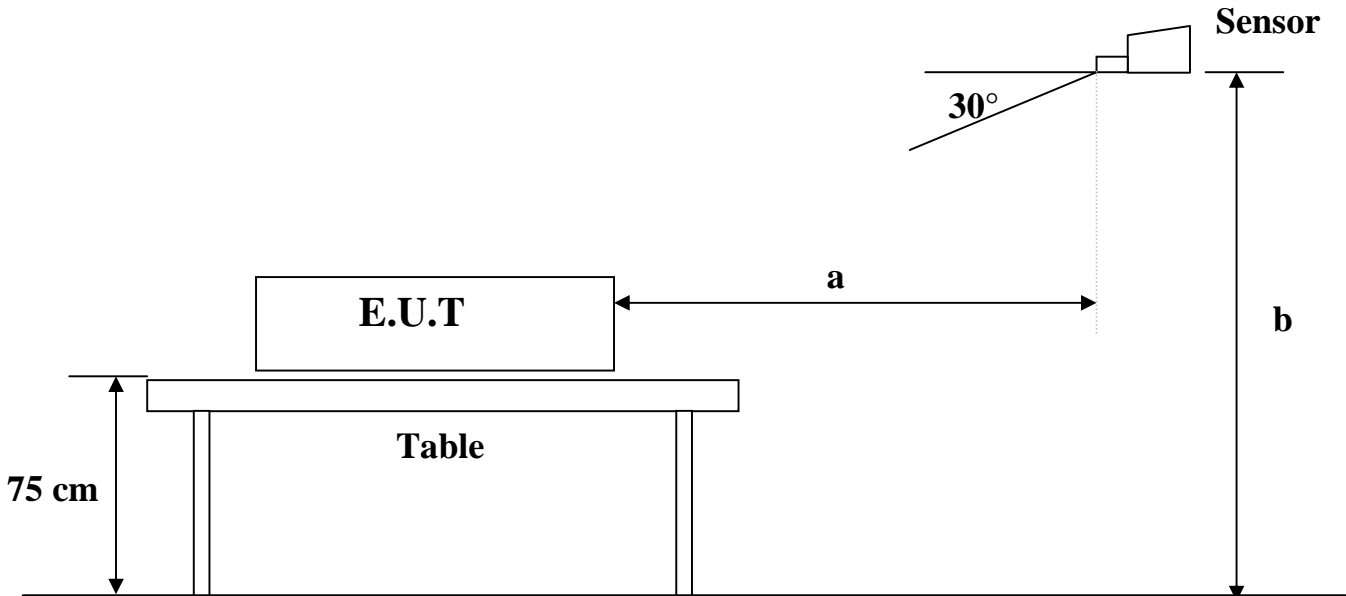
**Test Date :** February 13, 2006  
**Test Site :** PAL Acoustics Technology Ltd.  
**Performed By :** Jeff Yang

**Purpose :** The customer request test.

**Test Standard :** Reference ISO-7779

**Test Condition :**

1. Test temperature: 21
2. Test humidity: 60% R.H.
3. Background noise: 17.0dB
4. System fan:
  - Mode A. Delta AFB0812SH 4000RPM \*2  
Delta AFB0612HH 5000RPM (Located on the back of HDD)
  - Mode B. ADDA AD0812HB-A70GL 3100RPM \*2  
Delta AFB0612HH 5000RPM (Located on the back of HDD)
5. CPU fan: Delta AFB0712HHB-SZ08
6. Test setup:
  - a. Place the ACP-2320MB on the standard test table.
  - b. Prepare the sound level meter.
  - c. Place the sound level meter at the operator position
  - d. Record the background noise level when the ACP-2320MB is not operation.
  - e. Turn on the power of ACP-2320MB.
  - f. For the operation mode, record 4-aspect noise with 30-second data by the sound meter maximum peak reading
7. Operator position: a=100cm, b=150cm , c <30°



**Test Equipment :** Frequency analyzer B&K 2260 (S/N:2217606)  
Microphone : B&K 4189 (S/N:2174852)  
Microphone calibrator : B&K 4231 (S/N:2326946)

#### Sample Configuration & Quantity Under Test :

Using one ACP-2320MB with the following as below :

1. M/B : AIMB-760 A1
2. CPU : Intel Pentium4 3.4GHz
3. Power supply : ZIPPY P2G-6400P
4. System fan & CPU fan :
  - Mode A. Delta AFB0812SH 4000RPM \*2
  - Delta AFB0612HH 5000RPM (Located on the back of HDD)
  - CPU fan: Delta AFB0712HHB-SZ08
  - Mode B. ADDA AD0812HB-A70GL 3100RPM \*2
  - Delta AFB0612HH 5000RPM (Located on the back of HDD)
  - CPU fan: Delta AFB0712HHB-SZ08

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*QA Lab Reliability test*
**Test Data:**

Measure distance : Length=100cm, Height=150cm (  $\alpha < 30^\circ$  )

Mode	Noise Level Value (dB.)			
	Front	Rear	Left	Right
<b>A. System Fan :</b> Delta AFB0812SH 4000RPM *2 Delta AFB0612HH 5000RPM (Located on the back of HDD) <b>CPU Fan :</b> Delta AFB0712HHB-SZ08	54.7	54.7	54.3	52.4
<b>B. System Fan :</b> ADDA AD0812HB-A70GL 3100RPM *2 Delta AFB0612HH 5000RPM (Located on the back of HDD) <b>CPU Fan :</b> Delta AFB0712HHB-SZ08	52.5	53.2	52.7	50.9

**Test Result :**

The test data is only for customer reference.

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*QA Lab Reliability test*

**Photo :**



Test photo