

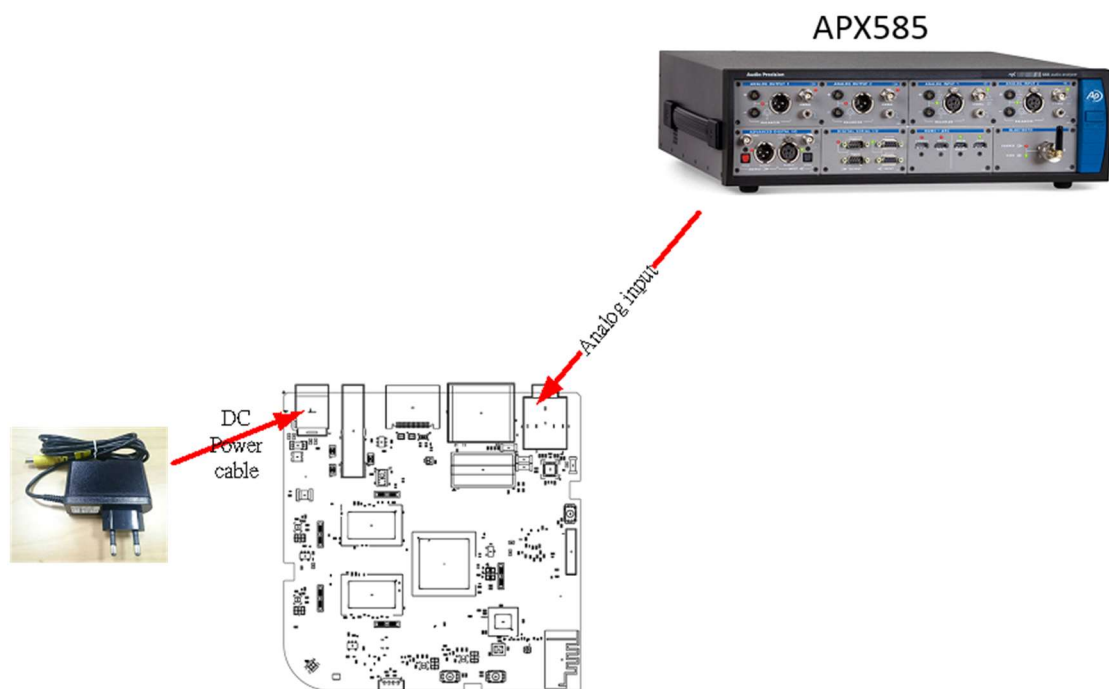
BFX-AT100

Hardware Unit Test Report

MIC Test

Hardware version	FW version	Sample No.	eMMC Flash P/N
V015	4.9.113 #1 Mon Feb 11 22:40:43 CST 2019	S/N:	KLM8G1GETF-B041

1. Audio Test Setup



2. Test Condition

Use Audio precision send 1 KHz voice. The input signal level is 0.3013Vrms and the sample rate is 48 KHz.

3. Result and Picture

The spec is using 1kHz voice. Fig. 3 shows the Total harmonic distortion from 20~20 KHz. The THD at 1KHz is -75dB.

	Specification (dB)		Test Result (dB)	Figure	Pass/Fail
	Min.	Max.			
Signal-to-noise ratio (SNR)	80		80.812	Figure 1	Pass
Dynamic range (DNR)	80		80.751	Figure 2	Pass
Total harmonic distortion (THD)		-53.9	-75.8153	Figure 3	Pass

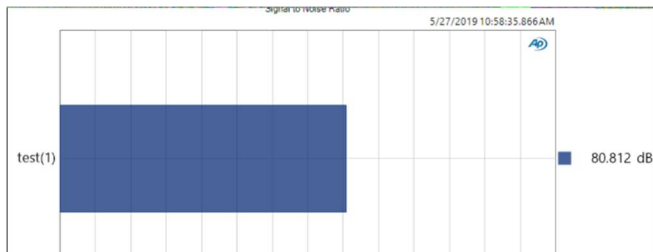


Fig. 1: SNR

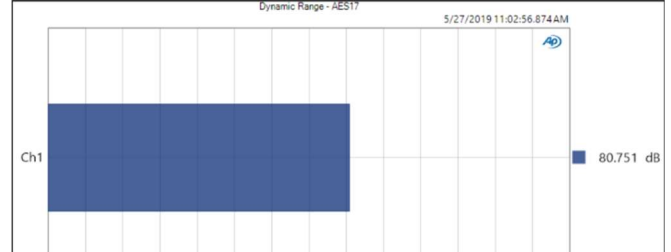


Fig. 2: DNR

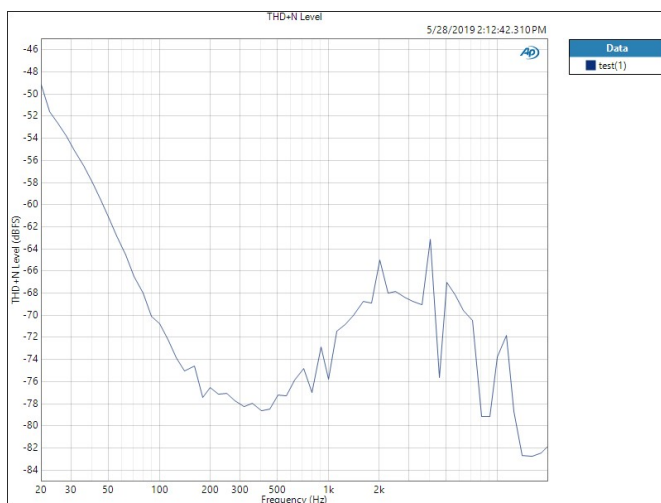


Fig. 3: THD

4. Frequency response

Fig. 4 shows 20~20 KHz frequency response. We can see the RMS Level is below -1db at 30~20 KHz. The normal microphone frequency response is 50~15 KHz.

4.1 Result and Picture

Frequency response Normal microphone 50~15 KHz	Specification (dB)		Test Result (dB)	Figure	Pass/Fail
	Min.	Max.			
RMS Level	-1		-0.5~0	Figure 4	Pass

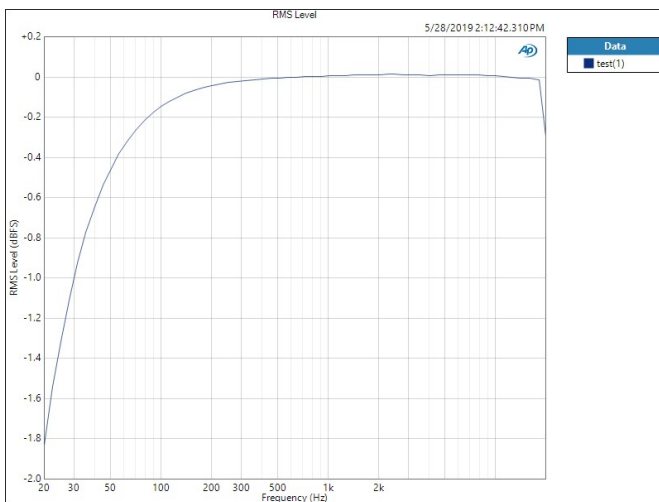


Fig. 4: 20~20 KHz frequency response