

Test Report

Report No.: CQASZ170401373E-03

Test Description: Bluetooth Profile Interoperability Test Report for A2DP

Product/Design Name: BLUETOOTH® HEADSET

Product/Design ID: S570, Sxy0(x=5~6,y=0~9), Kx,(x=1~30), S530PLUS, S8xy,(x=0~3,y=0~9), Xy,(y=6~30), S520-TWS, S530PLUS-TWS, S560-TWS, S570-TWS, S590-TWS, Xz-TWS,(z=5~20), EW-BE002, EW-BE010, EW-BE011, EW-BE013, EW-ZR030

Trademark:

Applicant: Shenzhen KeYueDuo Intelligent Electronics Co., Ltd.

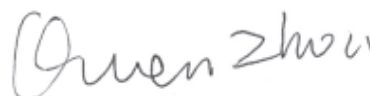
Manufacturer: Shenzhen KeYueDuo Intelligent Electronics Co., Ltd.

Test Specification: Bluetooth Profile Specification Version 1.2 – Advanced Audio Distribution Profile
Bluetooth Advanced Audio Distribution Profile Test Specification: A2DP.TS.1.3.1.0



Test Report Prepared by.....

Name Aaron Wu



Test Report Reviewed by.....

Name Owen Zhou

Bluetooth® Profile Interoperability Test Report

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1 General Information

1.1 General

1.1.1 Administrative data of Test Facility

Test Facility	Shenzhen Centre Quality Accreditation Technology Co., Ltd.
Test Facility Address	1 F., Block B of Complex Building, Baisha Logistics Park, No. 3011 Shahe West Road, Nanshan District, Shenzhen, China
Phone Number	+86-755-26648640
Fax	+86-755-26648637
Email	owen.zhou@cqa-cert.com
Contact Person	Mr. Owen Zhou

1.1.2 Administrative data of Applicant

Applicant: Shenzhen KeYueDuo Intelligent Electronics Co., Ltd.

Applicant Address: F-4, Bldg.A, LiJiaFa Ind. Garden, XinTang Ind. Area, BaiShiXia E., FuYong Sub-dist., Bao'an Dist., Shenzhen, Guangdong, China

Responsible Person: Ruizhi Yang

Phone Number : +86 18033442650

Fax :

Email : john.yang@keyueduo.com

1.1.3 Administrative data of EUT Manufacturer

EUT Manufacturer: Shenzhen KeYueDuo Intelligent Electronics Co., Ltd.

Manufacturer Address: F-4, Bldg.A, LiJiaFa Ind. Garden, XinTang Ind. Area, BaiShiXia E., FuYong Sub-dist., Bao'an Dist., Shenzhen, Guangdong, China

Responsible Person: Ruizhi Yang

Phone Number : +86 18033442650

Fax :

Email : john.yang@keyueduo.com

1.2 Description of EUT

Product name: BLUETOOTH® HEADSET

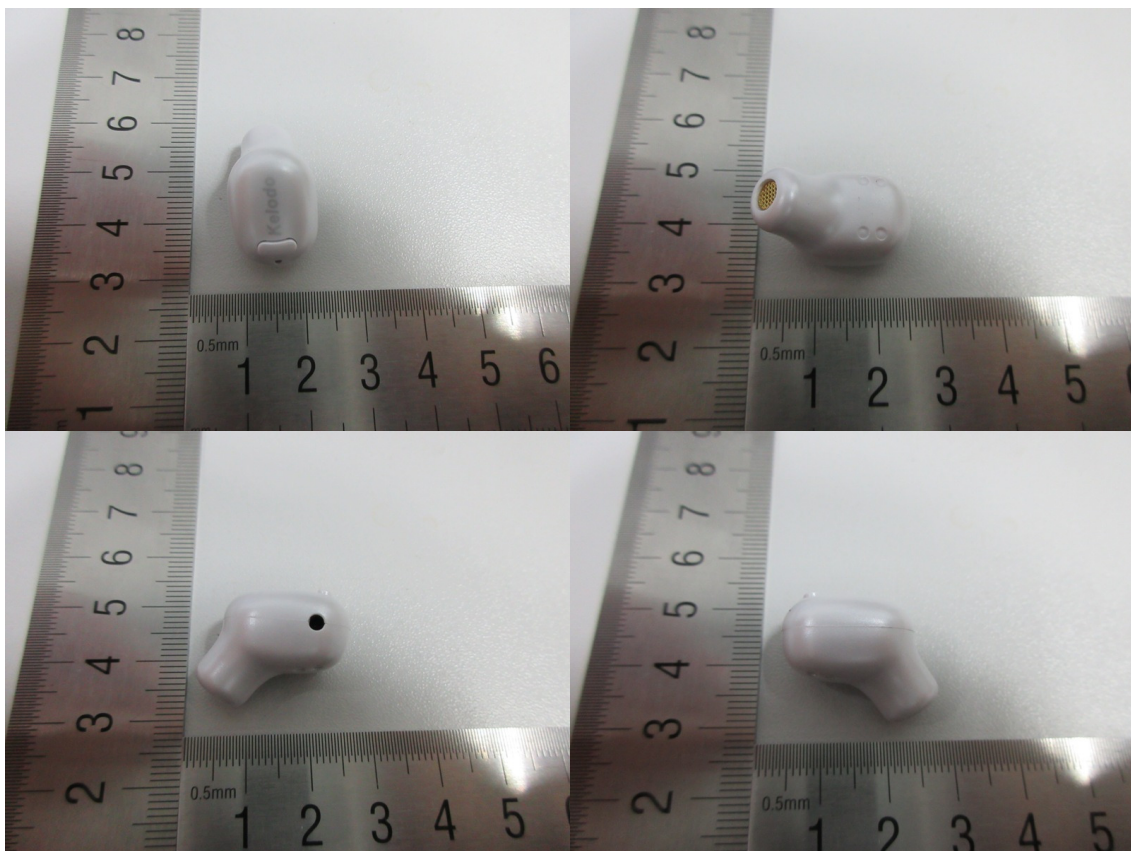
Product description: BLUETOOTH® HEADSET

Product ID/Model: S570, Sxy0($x=5\sim6, y=0\sim9$), Kx, ($x=1\sim30$), S530PLUS, S8xy, ($x=0\sim3, y=0\sim9$), Xy, ($y=6\sim30$), S520-TWS, S530PLUS-TWS, S560-TWS, S570-TWS, S590-TWS, Xz-TWS, ($z=5\sim20$), EW-BE002, EW-BE010, EW-BE011, EW-BE013, EW-ZR030

Hardware Version: V1.1

Software Version: V1.1

Photos of Product:

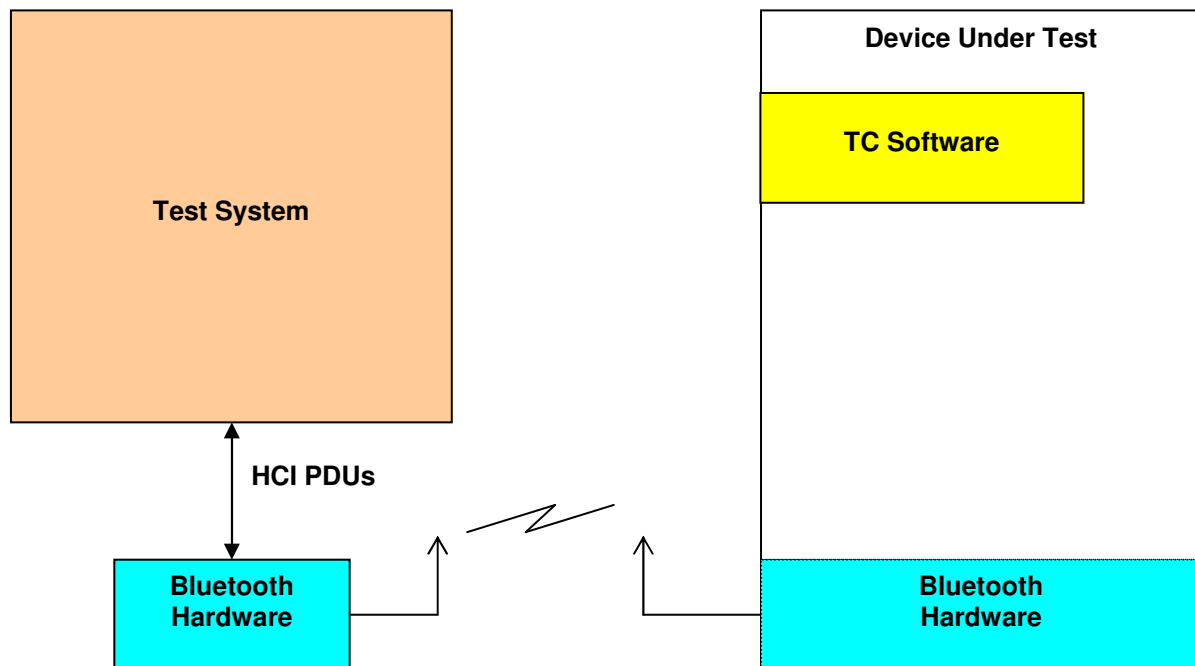


2 Summary List of All Test Cases

Advanced Audio Distribution Profile				
No	TC identifier	Description	Verdict	Comments
1	TP/SET/BV-01-I	Est. Connect. - SRC	Pass	Refer to PTS
2	TP/SET/BV-02-I	Est. Connect. - SNK	N/A	
3	TP/SET/BV-03-I	Start Stream. - SRC	Pass	Refer to PTS
4	TP/SET/BV-04-I	Start Stream. - SNK	N/A	
5	TP/SET/BV-05-I	Restart Stream. - SRC	Pass	Refer to PTS
6	TP/SET/BV-06-I	Restart Stream. - SNK	N/A	
7	TP/REL/BV-01-I	Release Stream. - SRC	Pass	Refer to PTS
8	TP/REL/BV-02-I	Release Stream. - SNK	N/A	
9	TP/SUS/BV-01-I	Suspend Stream - SRC	Pass	Refer to PTS
10	TP/SUS/BV-02-I	Suspend Stream. - SNK	N/A	
11	TP/AS/BV-01-I	Streaming - SBC	Pass	Refer to PTS
12	TP/AS/BV-02-I	Streaming - Options	N/A	
13	TP/AS/BV-03-I	Optional and SBC Streaming - SRC	N/A	
14	TP/SC/BV-01-C	SBC Conformance - Decoder	N/A	
15	TP/SC/BV-02-C	SBC Conformance - Encoder	N/A	
16	TP/SDP/BV-01-I	SDP Interoperability SRC	N/A	
17	TP/SDP/BV-02-I	SDP Interoperability SNK	Pass	Refer to PTS
18	TP/CC/BV-01-I	Configurations SNK Decoder	Pass	Refer to PTS
19	TP/CC/BV-02-I	Configurations SNK Decoder	Pass	Refer to PTS
20	TP/CC/BV-03-I	Configurations SNK Decoder	Pass	Refer to PTS
21	TP/CC/BV-04-I	Configurations SNK Decoder	Pass	Refer to PTS
22	TP/CC/BV-05-I	Configurations SNK Decoder	Pass	Refer to PTS
23	TP/CC/BV-06-I	Configurations SNK Decoder	Pass	Refer to PTS
24	TP/CC/BV-07-I	Configurations SNK Decoder	Pass	Refer to PTS
25	TP/CC/BV-08-I	Configurations SNK Decoder	Pass	Refer to PTS
26	TP/CC/BV-09-I	Configurations SRC Decoder	N/A	
27	TP/CC/BV-10-I	Configurations SRC Decoder	N/A	
28	TP/SYN/BV-01-I	Delay Reporting with VDP video playback	N/A	
29	TP/SYN/BV-02-I	Delay Reporting with local video playback	N/A	
30	TP/SYN/BV-01-C	Delay Value	N/A	

3 Profile Testing

3.1 Description of Test Set-up



The Test System PTS for Bluetooth is running on a PC System.

The test system communicates with the Bluetooth Hardware via an HCI connection.

The tests are performed as remote tests and all communication between the Test System and the DUT is done via the radio interface.



3.2 List of Performed Test Cases

Profile: A2DP

Role: ☒ Sink

☐ Source

For Sink Role:

TC-Identifier	Final Verdict	Date of Test
TP/AS/BV-01-I	Pass	2017-05-09
TP/CC/BV-01-I	Pass	2017-05-09
TP/CC/BV-02-I	Pass	2017-05-09
TP/CC/BV-03-I	Pass	2017-05-09
TP/CC/BV-04-I	Pass	2017-05-09
TP/CC/BV-05-I	Pass	2017-05-09
TP/CC/BV-06-I	Pass	2017-05-09
TP/CC/BV-07-I	Pass	2017-05-09
TP/CC/BV-08-I	Pass	2017-05-09
TP/REL/BV-01-I	Pass	2017-05-09
TP/SDP/BV-02-I	Pass	2017-05-09
TP/SET/BV-01-I	Pass	2017-05-09
TP/SET/BV-03-I	Pass	2017-05-09
TP/SET/BV-05-I	Pass	2017-05-09
TP/SUS/BV-01-I	Pass	2017-05-09

3.3 Referenced Documents

Document Name	Version	Issue Date
Advanced Audio Distribution Profile Specification	V1.2	16 Apr 2007
Advanced Audio Distribution Profile (A2DP) 1.0-1.3 Test Suite Structure (TSS) and Test Purposes (TP)	A2DP.TS.1.3.1.2	13 Dec 2016
Profile ICS Proforma for Advanced Audio Distribution Profile (A2DP) 1.0-1.3	A2DP.ICS.1.3.1.1	14 Jul 2016
Test Case Reference List	2016-2	13 Dec 2016

3.4 Additional Information

The test results presented in this test report apply only to the particular implementation under test (IUT) Declared in clause 1.2 of this report, for the functionality described in the relevant Protocol Implementation Statement (PICS), as presented for test on the date(s) declared in the relevant Protocol Implementation Extra Information for testing (PIXIT).

This test report does not constitute or imply, by its own, to be an approval of the product by Qualification Bodies, Certification Bodies or competent Authorities.

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Abbreviations in this report:

OK, Pass, P	=	passed
F	=	failed
N/A	=	not applicable
NT	=	not tested
EUT	=	equipment under test

Explanation of model designation:

The applicant declared that models S570, Sxy0(x=5~6,y=0~9), Kx,(x=1~30), S530PLUS , S8xy,(x=0~3,y=0~9), Xy,(y=6~30), S520-TWS, S530PLUS-TWS, S560-TWS, S570-TWS, S590-TWS, Xz-TWS,(z=5~20), EW-BE002, EW-BE010, EW-BE011, EW-BE013 and EW-ZR030 are identical in both design and implementation and differ only by non-functional characteristics. Tested model is S570.

3.5 Test Sample Information

The following sample was used for testing.

Sample No	Serial No/BT address	Date Of Reception
SZCR170508-01	0011671165DC	2017-05-08

3.6 List of Test Equipments

Profile Tuning Suite: PTS v. 7.0.0
A2DP-ETS v. 10.0.0.70
EZURIO 4.0 PTS Dongle

Annex 1 Profile Implementation Conformance Statement

TABLE OF CONTENTS
Role Declaration
Application Features
Source Implementation
Application Features
Sink Implementation

Role Declaration

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Table 0: Profile Version

Item	Capability	System Spec Reference	Status	Support [Yes] or [No]
1	A2DP 1.0	A2DP 1.0	C.1	<input type="radio"/> <input checked="" type="radio"/>
2	A2DP 1.2	A2DP 1.2	C.1	<input checked="" type="radio"/> <input type="radio"/>
3	A2DP 1.3	A2DP 1.3	C.1	<input type="radio"/> <input checked="" type="radio"/>
4	A2DP 1.3.1	A2DP 1.3.1	C.1	<input type="radio"/> <input checked="" type="radio"/>

C.1: Mandatory to support only one Profile Version.

Table 1: Roles

Item	Capability	System Spec Reference	Status	Support [Yes] or [No]
1	Source (SRC)	2.2, A2DP Spec	C.1	<input type="radio"/> <input checked="" type="radio"/>
2	Sink (SNK)	2.2, A2DP Spec	C.1	<input checked="" type="radio"/> <input type="radio"/>

C.1: Mandatory to support at least one of the defined roles.

Table 4: A2DP Sink Features

Prerequisite: 1/2

Note - Published ICS: Table 7

Item	Capability	System Spec Reference	Status	Support [Yes] or [No]
1	Initiate Connection Establishment	4.1.1, GAVDP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
2	Accept Connection Establishment	4.1.1, GAVDP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
3	Initiate Start Streaming	4.1.2, GAVDP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
4	Accept Start Streaming	4.1.2, GAVDP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
5	Receive Audio Stream	3.2.2, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
6	Initiate Connection Release	4.1.3, GAVDP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
7	Accept Connection Release	4.1.3, GAVDP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
8	Initiate Suspend	4.1.4, GAVDP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
9	Accept Suspend	4.1.4, GAVDP Spec	O	<input checked="" type="radio"/> <input type="radio"/>
10	SBC Decoder	4.3, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
10a	Decode and Forward Audio Stream	3.2.2, A2DP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
11	SBC Configurations in 16 KHz sampling frequency rate	6.6, A2DP Spec	O	<input checked="" type="radio"/> <input type="radio"/>
12	SBC Configurations in 32 KHz sampling frequency rate	4.3.2.1, A2DP Spec	O	<input checked="" type="radio"/> <input type="radio"/>
13	SBC Configurations in 44.1 KHz sampling frequency rate	4.3.2.1, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
14	SBC Configurations in 48 KHz sampling frequency rate	4.3.2.1, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
15	Delay Reporting	5.1.1.2, A2DP Spec 4.1.8, GAVDP Spec	C.1	<input type="radio"/> <input checked="" type="radio"/>

C.1: Mandatory to support IF A2DP 0/3 (A2DP 1.3) OR A2DP 0/4 (A2DP 1.3.1) is supported, otherwise Excluded.

Table 5: Supported codecs in SNK

Prerequisite: 1/2

Note - Published ICS: Table 13

Item	Capability	System Spec Reference	Status	Support [Yes] or [No]
1	SBC decoder - D1 & D2	4.3, A2DP Spec, A2DP Test Spec	M	<input checked="" type="radio"/> <input type="radio"/>
1a	Decode and Forward SBC Audio Stream	4.3 & Appendix B in A2DP Spec and Appendix A in TS	O	<input type="radio"/> <input checked="" type="radio"/>
2	Optional codec decoder	4.2.2, 4.2.3, 4.4, A2DP Spec	O	<input type="radio"/> <input checked="" type="radio"/>
3	MPEG-1, 2 Audio	4.4, A2DP Spec	C.1	<input type="radio"/> <input checked="" type="radio"/>
4	MPEG-2, 4 AAC	4.5, A2DP Spec	C.1	<input type="radio"/> <input checked="" type="radio"/>
5	ATRAC family	4.6, A2DP Spec	C.1	<input type="radio"/> <input checked="" type="radio"/>
6	<i>(Intentionally left blank)</i>			<input type="radio"/> <input checked="" type="radio"/>

C.1: Mandatory to support at least one implementation if 5/2 is supported, otherwise Excluded.

Table 5a: Supported Codec Features in SNK

Prerequisite: 5/1

Note - Published ICS: Table 13a

Item	Capability	System Spec Reference	Status	Support [Yes] or [No]
1	Channel Mode - Mono	4.3.2.2, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
2	Channel Mode - Dual Channel	4.3.2.2, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
3	Channel Mode - Stereo	4.3.2.2, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
4	Channel Mode - Joint Stereo	4.3.2.2, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
5	Block Length 4	4.3.2.3, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
6	Block Length 8	4.3.2.3, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
7	Block Length 12	4.3.2.3, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
8	Block Length 16	4.3.2.3, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
9	Subbands - 4	4.3.2.4, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
10	Subbands - 8	4.3.2.4, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
11	Allocation - SNR	4.3.2.5, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>
12	Allocation - Loudness	4.3.2.5, A2DP Spec	M	<input checked="" type="radio"/> <input type="radio"/>

Annex 2 Test plan generated by TPG

Test Cases for A2DP			
TP/AS/BV-01-I	Verify that the audio streaming based on SBC format.	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:A
TP/CC/BV-01-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-02-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-03-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-04-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-05-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-06-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-07-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/CC/BV-08-I	Configurations SNK Decoder	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:N/A
TP/REL/BV-01-I	Verify that the audio stream connection is released by SRC.	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:A
TP/SDP/BV-02-I	SDP Interoperability SRC	A2DP.TS.1.3.1.2	SNK IUT:B; SRC IUT:N/A
TP/SET/BV-01-I	Verify that SRC can establish stream connection successfully.	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:A
TP/SET/BV-03-I	Verify that SRC can start audio streaming.	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:A
TP/SET/BV-05-I	Restart Stream. - SRC	A2DP.TS.1.3.1.2	SNK IUT:B; SRC IUT:B
TP/SUS/BV-01-I	Verify that the audio streaming is suspended by SRC.	A2DP.TS.1.3.1.2	SNK IUT:A; SRC IUT:A