

# Test Report

Report No.: CQASZ20180400028EW-06

**Test Description:** Bluetooth Profile Interoperability Test Report for HFP  
**Product/Design Name:** 1MORE Triple Driver BT In-Ear Headphones  
**Product/Design ID:** E1001BT  
**Trademark:** 1MORE  
**Applicant:** 1MORE Shen Zhen Acoustic Technology Co., Ltd.  
**Manufacturer:** 1MORE Shen Zhen Acoustic Technology Co., Ltd.  
**Test Specification:** Bluetooth Profile Specification Version 1.7 - Hands-Free Profile  
Bluetooth Hands-Free Profile (HFP) Test Specification: HFP.TS.1.7.1



Test Report Prepared by.....  
**Test Engineer** Aaron Wu



Test Report Reviewed by.....  
**Test Reviewer** 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 Huaxia Testing Technology Co., Ltd

**Test Facility Address:** 1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

**Phone Number:** 86-755-26648642

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### 1.1.2 Administrative data of Applicant

**Applicant:** 1MORE Shen Zhen Acoustic Technology Co., Ltd.

**Applicant Address:** Tianliao Building 1403-1411, Zone A Tianliao Industrial Park, Taoyuan Street, Nanshan District, Shenzhen, P.R. China

**Responsible Person:** Mrs. He

**Phone Number :** 13242075433

**Fax :**

**Email :** xiao.he<xiao.he@tiinlab.com.cn>

### 1.1.3 Administrative data of EUT Manufacturer

**EUT Manufacturer:** 1MORE Shen Zhen Acoustic Technology Co., Ltd.

**Manufacturer Address:** Tianliao Building 1403-1411, Zone A Tianliao Industrial Park, Taoyuan Street, Nanshan District, Shenzhen, P.R. China

**Responsible Person:** Mrs. He

**Phone Number :** 13242075433

**Fax :**

**Email :** xiao.he<xiao.he@tiinlab.com.cn>

## 1.2 Description of EUT

**Product name:** 1MORE Triple Driver BT In-Ear Headphones

**Product description:** 1MORE Triple Driver BT In-Ear Headphones

**Product ID/Model:** E1001BT

**Hardware Version:** v1.0

**Software Version:** v1.0

### Photos of Product:



## 2 Summary List of All Test Cases

Hands-Free Profile				
No	TC identifier	Description	Verdict	Comments
1	TP/OOR/BV-01-I	AG reconnects to HF	Pass	Refer to PTS
2	TP/OOR/BV-02-I	HF reconnects to AG	Pass	Refer to PTS
3	TP/TRS/BV-01-C	Transfer registration status	Pass	Refer to PTS
4	TP/PSI/BV-01-C	Transfer signal strength indication	N/A	
5	TP/PSI/BV-02-C	Transfer roaming status indication	N/A	
6	TP/PSI/BV-03-C	Transfer roaming status indication	N/A	
7	TP/PSI/BV-04-I	Query Operator Selection	N/A	
8	TP/PSI/BV-05-I	Transfer roaming status indication - Roaming function not supported	N/A	
9	TP/ACS/BV-01-I	HF is IUT, HF Initiated, AG is SCO only	N/A	
10	TP/ACS/BV-02-I	AG is IUT, AG Initiated, HF is SCO only	N/A	
11	TP/ACS/BV-03-I	HF is IUT, AG Initiated, AG is SCO only	Pass	Refer to PTS
12	TP/ACS/BV-04-I	AG is IUT, HF Initiated, HF is SCO only	N/A	
13	TP/ACS/BV-05-I	HF is IUT, HF Initiated, AG has eSCO	N/A	
14	TP/ACS/BV-06-I	AG is IUT, AG Initiated, HF has eSCO	N/A	
15	TP/ACS/BV-07-I	HF is IUT, AG Initiated, AG has eSCO	Pass	Refer to PTS
16	TP/ACS/BV-08-I	AG is IUT, HF Initiated, HF has eSCO	N/A	
17	TP/ACS/BV-09-I	HF is IUT, HF Initiated, AG has eSCO allows only SCO	N/A	
18	TP/ACS/BV-10-I	AG is IUT, AG Initiated, HF has eSCO allows only SCO	N/A	
19	TP/ACS/BV-11-I	AG is IUT, HF Initiated eSCO with 18ms latency	N/A	
20	TP/ACS/BV-12-I	HF is IUT, AG Initiates eSCO with 18ms latency	Pass	Refer to PTS
21	TP/ACS/BI-13-I	HF is IUT, AG Initiates eSCO with invalid bandwidth	Pass	Refer to PTS
22	TP/ACS/BI-14-I	AG is IUT, HF Initiates eSCO with invalid bandwidth	N/A	
23	TP/ACS/BV-15-I	HF is IUT, AG Initiates eSCO with S4 Settings	Pass	Refer to PTS
24	TP/ACS/BV-16-I	AG is IUT, HF requests eSCO with S4 Settings	N/A	
25	TP/ACS/BV-17-I	HF is IUT, HF requests eSCO over Secure Connections	N/A	
26	TP/ACS/BV-18-I	AG is IUT, AG Initiates eSCO over Secure Connections	N/A	
27	TP/ACR/BV-01-I	Audio release - HF initiated	Pass	Refer to PTS
28	TP/ACR/BV-02-I	Audio release - AG initiated	Pass	Refer to PTS
29	TP/CLI/BV-01-I	Caller ID	N/A	
30	TP/ICA/BV-01-I	Answer incoming call HF - inband ring	Pass	Refer to PTS
31	TP/ICA/BV-02-I	Answer incoming call HF - inband setting	Pass	Refer to PTS
32	TP/ICA/BV-03-I	Answer incoming call HF - ring muting	N/A	
33	TP/ICA/BV-04-I	Answer incoming call HF - no inband ring	Pass	Refer to PTS
34	TP/ICA/BV-05-I	Answer incoming call HF - no inband ring + audio connection	Pass	Refer to PTS



Hands-Free Profile				
No	TC identifier	Description	Verdict	Comments
35	TP/ICA/BV-06-I	Answer incoming call AG	Pass	Refer to PTS
36	TP/ICR/BV-01-I	Reject incoming Call from HF	Pass	Refer to PTS
37	TP/ICR/BV-02-I	Reject incoming Call from AG	Pass	Refer to PTS
38	TP/TCA/BV-01-I	Terminate a Call - HF terminated	Pass	Refer to PTS
39	TP/TCA/BV-02-I	Terminate a Call - AG terminated	Pass	Refer to PTS
40	TP/TCA/BV-03-I	Terminate a Call - Remote party terminated	Pass	Refer to PTS
41	TP/TCA/BV-04-I	Outgoing Call Abandon from HF	Pass	Refer to PTS
42	TP/TCA/BV-05-I	Terminate Ongoing Call - While Call Waiting	N/A	
43	TP/TCA/BV-06-I	Terminate a Call - AG terminated NO CARRIER	N/A	
44	TP/ATH/BV-03-I	HF Initiated Audio Transfer to the HF - No SLC	N/A	
45	TP/ATH/BV-04-I	HF Initiated Audio Transfer to the HF - SLC	N/A	
46	TP/ATH/BV-05-I	AG Initiated Audio Transfer to the HF - No SLC	Pass	Refer to PTS
47	TP/ATH/BV-06-I	AG Initiated Audio Transfer to the HF - SLC]	Pass	Refer to PTS
48	TP/ATA/BV-01-I	AG initiated Audio transfer to the AG	Pass	Refer to PTS
49	TP/ATA/BV-02-I	HF initiated Audio transfer to the AG	N/A	
50	TP/OCN/BV-01-I	Place call - phone number	N/A	
51	TP/OCM/BV-01-I	Place call - memory	N/A	
52	TP/OCM/BV-02-I	Place call - no number at memory location	N/A	
53	TP/OCL/BV-01-I	Place call - last number	N/A	
54	TP/OCL/BV-02-I	Place call - No last number stored in the AG	N/A	
55	TP/TWC/BV-01-I	3 Way - Call waiting- User Busy	N/A	
56	TP/TWC/BV-02-I	3 Way - Drop Active/Retrieve Waiting Call	N/A	
57	TP/TWC/BV-03-I	3 Way - Hold Active/Retrieve Waiting Call or Held	N/A	
58	TP/TWC/BV-04-I	3 Way - Join Calls	N/A	
59	TP/TWC/BV-05-I	3 Way - HF Initiated	N/A	
60	TP/TWC/BV-06-I	3 Way - Explicit Call Transfer	N/A	
61	TP/CIT/BV-01-I	Incoming call interrupted - call terminated	Pass	Refer to PTS
62	TP/ENO/BV-01-I	EC/NR OFF - AG supports EC/NR	Pass	Refer to PTS
63	TP/ENO/BV-02-I	EC/NR OFF - AG doesn't support EC/NR	N/A	
64	TP/VRA/BV-01-I	Voice recognition activation HF	N/A	
65	TP/VRA/BV-02-I	Voice recognition activation AG	N/A	
66	TP/VRA/BI-01-I	Voice Recognition Activation from AG to HF Not Supported	N/A	
67	TP/VRD/BV-01-I	Voice recognition deactivation	N/A	
68	TP/VTG/BV-01-I	Phone number/voice tag - AG accepts	N/A	
69	TP/TDC/BV-01-I	Transmit DTMF	N/A	
70	TP/RSV/BV-01-I	Speaker vol ctrl - remote/local	Pass	Refer to PTS
71	TP/RSV/BV-02-I	Speaker vol ctrl - remote	Pass	Refer to PTS
72	TP/RSV/BV-03-I	Speaker vol ctrl - store settings	Pass	Refer to PTS
73	TP/RMV/BV-01-I	Micro gain ctrl - remote/local	N/A	
74	TP/RMV/BV-02-I	Micro gain ctrl - remote	N/A	



Hands-Free Profile				
No	TC identifier	Description	Verdict	Comments
75	TP/RMV/BV-03-I	Micro gain ctrl - store settings	N/A	
76	TP/ECS/BV-01-I	Query List of Current Calls	N/A	
77	TP/ECS/BV-02-I	Sending of Correct Call Status on SLC Initialization	N/A	
78	TP/ECS/BV-03-I	Transfer of Current Call Status to Held	Pass	Refer to PTS
79	TP/ECC/BV-01-I	Release Specified Call Index	N/A	
80	TP/ECC/BV-02-I	Private consultation Mode	N/A	
81	TP/ECC/BI-03-I	Enhanced Call Control Not Supported-Release Call	N/A	
82	TP/ECC/BI-04-I	Enhanced Call Control Not Supported-Private Consult Mode	N/A	
83	TP/RHH/BV-01-I	Query Response and Hold Status	N/A	
84	TP/RHH/BV-02-I	Put an Incoming Call on Hold from HF	N/A	
85	TP/RHH/BV-03-I	Put an Incoming call on Hold from AG	N/A	
86	TP/RHH/BV-04-I	Accept a held incoming call from HF	N/A	
87	TP/RHH/BV-05-I	Accept a held incoming call from AG	N/A	
88	TP/RHH/BV-06-I	Reject a held incoming call from HF	N/A	
89	TP/RHH/BV-07-I	Reject a held incoming call from AG	N/A	
90	TP/RHH/BV-08-I	Held incoming call terminated by caller	N/A	
91	TP/NUM/BV-01-I	Query AG with Subscriber Number Information	N/A	
92	TP/NUM/BI-01-I	HF supports SNI - AG does not support SNI	N/A	
93	TP/SLC/BV-01-C	HF Initiates SLC with 3-way	N/A	
94	TP/SLC/BV-02-C	AG Initiates SLC with 3-way	N/A	
95	TP/SLC/BV-03-C	HF Initiates SLC. No 3-way	Pass	Refer to PTS
96	TP/SLC/BV-04-C	AG Initiates SLC. No 3-way	Pass	Refer to PTS
97	TP/SLC/BV-05-I	HF Initiates SLC with codec negotiation	N/A	
98	TP/SLC/BV-06-I	AG Initiates SLC with codec negotiation	N/A	
99	TP/SLC/BV-07-I	HF Initiates SLC without codec negotiation	N/A	
100	TP/SLC/BV-08-I	AG Initiates SLC without codec negotiation	N/A	
101	TP/SLC/BV-09-I	SLC, Lower Tester and IUT both support HF Indicator, with some in common	N/A	
102	TP/SLC/BV-10-I	SLC, IUT support HF Indicator, Lower Tester does not	N/A	
103	TP/DIS/BV-01-I	Verify inquiry and discoverability	Pass	Refer to PTS
104	TP/SDP/BV-01-I	Service Search Request	Pass	Refer to PTS
105	TP/ATAH/BV-01-I	Multiple audio transfers during call - AG and HF initiated	N/A	
106	TP/ATA/BV-03-I	Audio transfer by SLC release during an active call	N/A	
107	TP/ATH/BV-09-I	Audio transfer by powering ON HF	N/A	
108	TP/SDP/BV-02-C	SLC during SDP response	N/A	
109	TP/SDP/BV-03-C	Handle dynamic server channel number for HFP service	N/A	
110	TP/DIS/BV-02-I	HF disallows connections in non-discoverable mode	N/A	





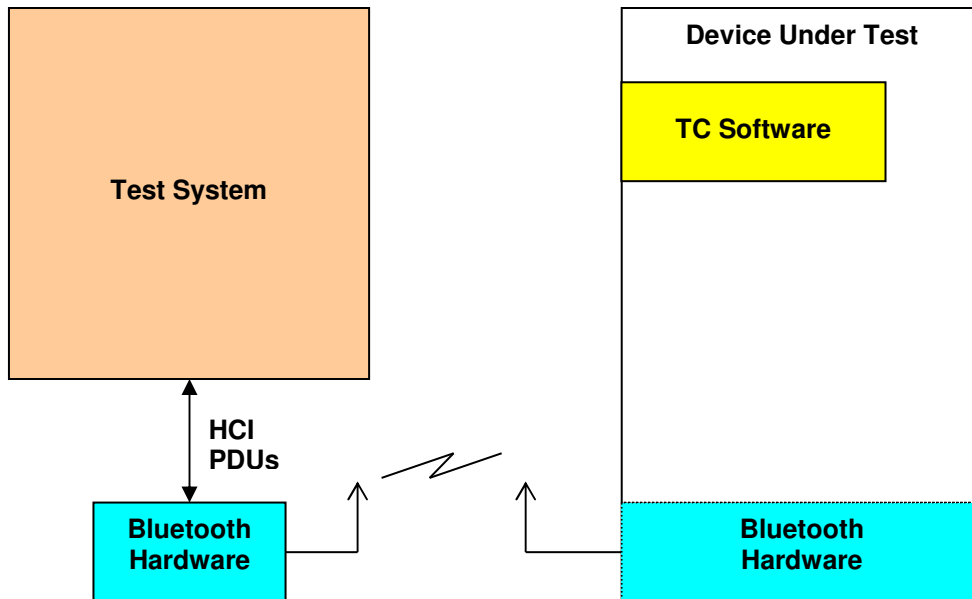
Hands-Free Profile				
No	TC identifier	Description	Verdict	Comments
111	TP/ICA/BV-07-I	HF connects to AG during in-coming call	N/A	
112	TP/ICA/BV-08-I	Link loss during in-coming call]	N/A	
113	TP/ICA/BV-09-I	SLC release during in-coming call	N/A	
114	TP/VRA/BV-03-I	Voice Recognition Activation	N/A	
115	TP/OCA/BV-01-I	Place outgoing call by dialing number on the AG	N/A	
116	TP/ACC/BV-01-I	Codec Connection Setup - HF Initiated	N/A	
117	TP/ACC/BV-02-I	Codec Connection Setup following an initial successful Codec Connection Setup - HF Initiated	N/A	
118	TP/ACC/BV-03-I	Codec Connection Setup Failure - HF Initiated	N/A	
119	TP/ACC/BV-04-I	Codec Connection Setup - AG Initiated	N/A	
120	TP/ACC/BV-05-I	Codec Connection Setup Failure - AG Initiated	N/A	
121	TP/ACC/BV-06-I	Codec Connection - AG Initiated - Verify Support for T1 Settings	N/A	
122	TP/ACC/BV-07-I	Codec Connection - AG Initiated - Verify Support for T2 Settings	N/A	
123	TP/ACC/BV-08-I	Codec Connection - AG Initiated - Verify Support for T1 Settings	N/A	
124	TP/ACC/BV-09-I	Codec Connection Setup Failure - HF Initiated	N/A	
125	TP/ACC/BV-10-I	Codec Connection Setup- AG Initiated	N/A	
126	TP/ACC/BV-11-I	Codec Connection Setup following an initial successful Codec Connection Setup - AG Initiated	N/A	
127	TP/ACC/BI-12-I	Codec Connection Setup failure due to invalid eSCO parameters	N/A	
128	TP/ACC/BI-13-I	Codec Connection Setup failure, codec currently unavailable on the HF device	N/A	
129	TP/ACC/BI-14-I	Codec Connection Setup failure, WBS codecs currently unavailable on the HF device	N/A	
130	TP/ACC/BV-15-I	Codec Connection Setup failure due to invalid eSCO parameters	N/A	
131	TP/WBS/BV-01-I	AG SDP record supports WBS service speech service	N/A	
132	TP/WBS/BV-02-I	HF SDP record supports WBS service speech service	N/A	
133	TP/WBS/BV-03-I	Verify HF device correctly supports codec re-negotiation during SLC	N/A	
134	TP/HFI/BV-01-I	HF sends an updated HF indicator value	N/A	
135	TP/HFI/BV-02-I	AG receives an updated HF indicator value	N/A	
136	TP/HFI/BI-03-I	AG receives invalid updated HF indicator values	N/A	
137	TP/IIA/BV-01-I	Activate all indicators using a fixed string	N/A	
138	TP/IIA/BV-02-I	Activate only service indicator	N/A	
139	TP/IIA/BV-03-I	Deactivate only battery level status & signal strength indicator	N/A	
140	TP/IIA/BV-04-I	Activate or deactivate specific indicators	N/A	
141	TP/IIA/BV-05-I	Active only battery level indicator	N/A	
142	TP/IID/BV-01-I	Deactivate all non-mandatory indicators using a fixed string	N/A	



<b>Hands-Free Profile</b>				
<b>No</b>	<b>TC identifier</b>	<b>Description</b>	<b>Verdict</b>	<b>Comments</b>
143	TP/IID/BV-02-I	Deactivate only sig. strength indicator	N/A	
144	TP/IID/BV-03-I	Deactivate all non-mandatory indicators using a fixed string	N/A	
145	TP/IID/BV-04-I	Deactivate only signal strength indicator - Battery status reported	N/A	
146	TP/IIC/BV-01-I	Standard event reporting off and all indicators activated	N/A	
147	TP/IIC/BV-02-I	Register individual indicators configuration when standard event reporting is OFF	N/A	
148	TP/IIC/BV-03-I	Standard indicator read command still works when indicators are deactivated	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: HFP

Role:  Hands-Free Unit

Audio Gateway

TC-Identifier	Final Verdict	Date of Test
TP/OOR/BV-01-I	Pass	2018-06-27
TP/OOR/BV-02-I	Pass	2018-06-27
TP/RSV/BV-01-I	Pass	2018-06-27
TP/RSV/BV-02-I	Pass	2018-06-27
TP/RSV/BV-03-I	Pass	2018-06-27
TP/SDP/BV-01-I	Pass	2018-06-27
TP/SLC/BV-03-C	Pass	2018-06-27
TP/SLC/BV-04-C	Pass	2018-06-27
TP/DIS/BV-01-I	Pass	2018-06-27
TP/TCA/BV-01-I	Pass	2018-06-27
TP/TCA/BV-02-I	Pass	2018-06-27
TP/TCA/BV-03-I	Pass	2018-06-27
TP/TCA/BV-04-I	Pass	2018-06-27
TP/TRS/BV-01-C	Pass	2018-06-27
TP/ACR/BV-01-I	Pass	2018-06-27
TP/ACR/BV-02-I	Pass	2018-06-27
TP/ACS/BI-13-I	Pass	2018-06-27
TP/ACS/BV-07-I	Pass	2018-06-27
TP/ACS/BV-12-I	Pass	2018-06-27
TP/ACS/BV-03-I	Pass	2018-06-27
TP/ACS/BV-15-I	Pass	2018-06-27
TP/ATA/BV-01-I	Pass	2018-06-27
TP/ATH/BV-05-I	Pass	2018-06-27
TP/ATH/BV-06-I	Pass	2018-06-27
TP/CIT/BV-01-I	Pass	2018-06-27
TP/ECS/BV-03-I	Pass	2018-06-27
TP/ENO/BV-01-I	Pass	2018-06-27
TP/ICA/BV-01-I	Pass	2018-06-27
TP/ICA/BV-02-I	Pass	2018-06-27
TP/ICA/BV-04-I	Pass	2018-06-27
TP/ICA/BV-05-I	Pass	2018-06-27
TP/ICA/BV-06-I	Pass	2018-06-27
TP/ICR/BV-01-I	Pass	2018-06-27
TP/ICR/BV-02-I	Pass	2018-06-27



### 3.3 Referenced Documents

Document Name	Version	Issue Date
Hands-Free Profile 1.7	V1.7	18 Sep 2014
Hands-Free Profile (HFP) 1.5-1.7 <i>Bluetooth</i> ® Test Specification	HFP.TS.1.7.1.4	19 Dec 2017
Hands-Free Profile (HFP) 1.5-1.7 <i>Bluetooth</i> ® Implementation Conformance Statement (ICS) Proforma	HFP.ICS.1.7.1.2	18 Jul 2017
Test Case Reference List	2017-2	12 Dec 2017

### 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

### 3.5 Test Sample Information

The following sample was used for testing.

Sample No	Serial No/BT address	Date Of Reception
SZCR180617-01	67564534571E	2018-06-17

### 3.6 List of Test Equipments

Profile Tuning Suite: PTS v. 7.1.1  
HFP-ETS v. 10.1.1.8  
EZURIO 4.0 PTS Dongle



## Annex 1 Profile Implementation Conformance Statement

### Roles

Table 0b: HF Major Profile Version

Support	Item	Capability	System Spec Reference	Status	Comment
<input type="checkbox"/>	0b/1	Hands-Free Profile 1.5	HFP 1.5	C.1	C.1: Mandatory to support one and only one profile version.
<input type="checkbox"/>	0b/2	Hands-Free Profile 1.6	HFP 1.6	C.1	C.1: Mandatory to support one and only one profile version.
<input checked="" type="checkbox"/>	0b/3	Hands-Free Profile 1.7	HFP 1.7	C.1	C.1: Mandatory to support one and only one profile version.

### Roles

Table 0d: HF Minor Profile Version (X.Y.Z)

Prerequisite: HFP 0b/3

Support	Item	Capability	System Spec Reference	Status	Comment
<input type="checkbox"/>	0d/1	Hands-Free Profile 1.7.1	HFP 1.7.1	C.1	C.1: Optional IF 0b/3 (Hands-Free Profile 1.7) is supported, otherwise Excluded.

### Roles

Table 1: Roles

Support	Item	Capability	System Spec Reference	Status	Comment
<input type="checkbox"/>	1/1	Audio Gateway (AG)	2.2	C.1	C.1: It is mandatory to support at least one of the defined roles.
<input checked="" type="checkbox"/>	1/2	Hands-Free (HF)	2.2	C.1	C.1: It is mandatory to support at least one of the defined roles.



## Hands-Free Capabilities

**Table 3: Capabilities of the HF**

Support	Item	Capability	System Spec Reference	Status	Comment
<input checked="" type="checkbox"/>	3/1	Connection Management	4.2; 4.3	M	
<input checked="" type="checkbox"/>	3/2a	Phone Status Information ("service" and "call" indicators)	4.4; 4.10	M	
<input type="checkbox"/>	3/2b	Phone Status Information ("callsetup" indicator)	4.10	O	
<input type="checkbox"/>	3/2c	Accept indicator of signal strength	4.5	O	
<input type="checkbox"/>	3/2d	Accept indicator of roaming state ("roam:")	4.6	O	
<input type="checkbox"/>	3/2e	Accept indicator of battery level ("battchg")	4.7	O	
<input type="checkbox"/>	3/2f	Accept indicator of operator selection	4.8	O	
<input checked="" type="checkbox"/>	3/3	Audio connection handling	4.11; 4.12	M	
<input type="checkbox"/>	3/3a	Audio connection establishment independent of call processing	4.11; 4.12	O	
<input checked="" type="checkbox"/>	3/4a	Accept an incoming voice call (in-band ring)	4.13	M	
<input checked="" type="checkbox"/>	3/4b	Accept an incoming voice call (no in-band ring)	4.13	M	
<input type="checkbox"/>	3/4c	Accept an incoming voice call (in-band ring muting)	4.13	O	
<input checked="" type="checkbox"/>	3/5	Reject an incoming voice call	4.14	M	
<input checked="" type="checkbox"/>	3/6	Terminate a call	4.15	M	
<input checked="" type="checkbox"/>	3/7	Audio connection transfer during an ongoing call	4.16; 4.17	M	
<input type="checkbox"/>	3/8	Place a call with a phone number supplied by the HF	4.18	O	
<input type="checkbox"/>	3/9	Place a call using memory dialing	4.19	O	
<input type="checkbox"/>	3/10	Place a call to the last number dialed	4.20	O	
<input type="checkbox"/>	3/11	Call waiting notification	4.21	O	
<input type="checkbox"/>	3/12	Three Way Calling	4.22	O	
<input type="checkbox"/>	3/12a	Three way calling (AT+CHLD values 0)	4.22	C.2	C.2 Optional if (3/12); otherwise Excluded.



<input type="checkbox"/>	3/12b	Three way calling (AT+CHLD values 1 and 2)	4.22	C.1	C.1 Mandatory if (3/12); otherwise Excluded.
<input type="checkbox"/>	3/12c	Three way calling (AT+CHLD value 3)	4.22	C.2	C.2 Optional if (3/12); otherwise Excluded.
<input type="checkbox"/>	3/12d	Three way calling (AT+CHLD value 4)	4.22	C.2	C.2 Optional if (3/12); otherwise Excluded.
<input type="checkbox"/>	3/13	Calling Line Identification (CLI)	4.23	O	
<input checked="" type="checkbox"/>	3/14	Echo cancelling (EC) and Noise reduction (NR)	4.24	O	
<input type="checkbox"/>	3/15	Voice recognition activation/deactivation	4.25	O	
<input type="checkbox"/>	3/16	Attach a phone number to a voice tag	4.26	O	
<input type="checkbox"/>	3/17	Ability to transmit DTMF codes	4.27	O	
<input checked="" type="checkbox"/>	3/18a	Remote audio volume control – speaker	4.28.1	O	
<input type="checkbox"/>	3/18b	Remote audio volume control – microphone	4.28.1	O	
<input type="checkbox"/>	3/19	Response and hold	4.29	O	
<input type="checkbox"/>	3/20	Subscriber Number Information	4.30	O	
<input type="checkbox"/>	3/21a	Enhanced Call Status	4.31	O	
<input type="checkbox"/>	3/21b	Enhanced Call Control	4.32	C.2	C.2 Optional if (3/12); otherwise Excluded.
<input checked="" type="checkbox"/>	3/18c	Volume Level Synchronization – speaker	4.28.2	C.3	C.3 Mandatory if 3/18a or 3/18b, otherwise Optional.
<input type="checkbox"/>	3/18d	Volume Level Synchronization – microphone	4.28.2	C.4	C.4 Mandatory if 3/18b, otherwise Optional
<input checked="" type="checkbox"/>	3/3b	eSCO support in Audio Connection	5.7.1	C.7	C.7: Mandatory IF 3/26 (S4 Setting) OR 3/24 (Wide Band Speech service) is supported, otherwise Optional.
<input type="checkbox"/>	3/7a	HF-initiated Audio transfer to AG during ongoing call	4.17	O	
<input checked="" type="checkbox"/>	3/18e	HF informs AG about local changes of audio volume	4.28.2	O	
<input type="checkbox"/>	3/18f	HF informs AG about local changes of microphone gain	4.28.2	O	
<input type="checkbox"/>	3/12e	Originate new call with established call in progress	4.22	C.2	C.2 Optional if (3/12); otherwise Excluded.





<input type="checkbox"/>	3/22	Support for automatic link loss recovery	4.3	O	
<input type="checkbox"/>	3/3c	Codec negotiation	4.11	C.5	C.5: Mandatory if (3/24) otherwise excluded.
<input type="checkbox"/>	3/23	Individual Indicator Activation	4.34	C.6	C.6: Excluded if (0/1) otherwise optional.
<input type="checkbox"/>	3/24	Wide Band Speech service	5.7	C.6	C.6: Excluded if (0/1) otherwise optional.
<input type="checkbox"/>	3/25	HF Indicators	HFP 1.7 - 4.35	C.8	C.8: Optional IF 0b/1 (HFP v1.5) OR 0b/2 (HFP v1.6) is NOT supported, otherwise Excluded.
<input checked="" type="checkbox"/>	3/26	Support CVSD eSCO S4 setting	HFP 1.7 - 5.7.3	C.9	C.9: Excluded IF HFP 0b/1 (HFP v1.5) OR HFP 0b/2 (HFP v1.6) is supported, otherwise Mandatory.

## Audio Coding Requirements

**Table 4: Requirements towards the Link Control Procedures of the Serial Port Profile (AG and HF)**

Support	Item	Capability	System Spec Reference	Status	Comment
<input checked="" type="checkbox"/>	4/1	CVSD audio coding over SCO	2.3	M	
<input type="checkbox"/>	4/2	mSBC audio coding over eSCO	5.7.4	C.1	C.1: Mandatory if Wide band speech service is supported (HFP 2/24 or HFP 3/24), otherwise excluded.
<input checked="" type="checkbox"/>	4/3	CVSD audio coding over eSCO (Initiating)	HFP 1.7 - 5.7.3	C.2	C.2: Mandatory IF HFP 2/3b (eSCO support in Audio Connection - AG) OR HFP 3/3b (eSCO support in Audio Connection - HF); otherwise Excluded.
<input checked="" type="checkbox"/>	4/4	CVSD audio coding over eSCO (Accepting)	HFP 1.7 - 5/7/3	C.2	C.2: Mandatory IF HFP 2/3b (eSCO support in Audio Connection - AG) OR HFP 3/3b (eSCO support in Audio Connection - HF); otherwise Excluded.



## Annex 2 Test plan generated by launch studio

HFP.TS.1.7.1.2			
Test Case ID	Legacy Test Case ID	Test Case Description	Test Case Category
TP/OOR/BV-01-I	TP/OOR/BV-01-I	AG reconnects to HF	HF IUT:A;AG IUT:A
TP/OOR/BV-02-I	TP/OOR/BV-02-I	HF reconnects to AG	HF IUT:A;AG IUT:A
TP/RSV/BV-01-I	TP/RSV/BV-01-I	Speaker vol ctrl - remote/local	HF IUT:A;AG IUT:A
TP/RSV/BV-02-I	TP/RSV/BV-02-I	Speaker vol ctrl - remote	HF IUT:A;AG IUT:A
TP/RSV/BV-03-I	TP/RSV/BV-03-I	Speaker vol ctrl - store settings	HF IUT:A;AG IUT:A
TP/SDP/BV-01-I	TP/SDP/BV-01-I	Service Search Request	HF IUT:A;AG IUT:A
TP/SLC/BV-03-C	TP/SLC/BV-03-C	HF Initiates SLC. No 3-way	HF IUT:A;AG IUT:N/A
TP/SLC/BV-04-C	TP/SLC/BV-04-C	AG Initiates SLC. No 3-way	HF IUT:N/A;AG IUT:A
TP/DIS/BV-01-I	TP/DIS/BV-01-I	Verify inquiry and discoverability	HF IUT:A;AG IUT:A
TP/TCA/BV-01-I	TP/TCA/BV-01-I	Terminate a Call - HF terminated	HF IUT:A;AG IUT:A
TP/TCA/BV-02-I	TP/TCA/BV-02-I	Terminate a Call - AG terminated	HF IUT:A;AG IUT:A
TP/TCA/BV-03-I	TP/TCA/BV-03-I	Terminate a Call - Remote party terminated	HF IUT:A;AG IUT:A
TP/TCA/BV-04-I	TP/TCA/BV-04-I	Outgoing Call Abandon from HF	HF IUT:A;AG IUT:A
TP/TRS/BV-01-C	TP/TRS/BV-01-C	Transfer registration status	HF IUT:A;AG IUT:A
TP/ACR/BV-01-I	TP/ACR/BV-01-I	Audio release - HF initiated	HF IUT:A;AG IUT:A
TP/ACR/BV-02-I	TP/ACR/BV-02-I	Audio release - AG initiated	HF IUT:A;AG IUT:A
TP/ACS/BI-13-I	TP/ACS/BI-13-I	HF is IUT, AG Initiates eSCO with invalid bandwidth	HF IUT:A;AG IUT:N/A
TP/ACS/BV-07-I	TP/ACS/BV-07-I	HF is IUT, AG Initiated, AG has eSCO	HF IUT:A;AG IUT:N/A
TP/ACS/BV-12-I	TP/ACS/BV-12-I	HF is IUT, AG Initiates eSCO with 18ms latency	HF IUT:A;AG IUT:N/A
TP/ACS/BV-03-I	TP/ACS/BV-03-I	HF is IUT, AG Initiated, AG is SCO only	HF IUT:A;AG IUT:N/A
TP/ACS/BV-15-I	TP/ACS/BV-15-I	HF is IUT, AG Initiates eSCO with S4 Settings	HF IUT:B;AG IUT:N/A
TP/ATA/BV-01-I	TP/ATA/BV-01-I	AG initiated Audio transfer to the AG	HF IUT:A;AG IUT:A
TP/ATH/BV-05-I	TP/ATH/BV-05-I	AG Initiated Audio Transfer to the HF - No SLC	HF IUT:A;AG IUT:A
TP/ATH/BV-06-I	TP/ATH/BV-06-I	AG Initiated Audio Transfer to the HF - SLC]	HF IUT:A;AG IUT:A
TP/CIT/BV-01-I	TP/CIT/BV-01-I	Incoming call interrupted - call terminated	HF IUT:A;AG IUT:A
TP/ECS/BV-03-I	TP/ECS/BV-03-I	Transfer of Current Call Status to Held	HF IUT:N/A;AG IUT:A
TP/ENO/BV-01-I	TP/ENO/BV-01-I	EC/NR OFF - AG supports EC/NR	HF IUT:A;AG IUT:A
TP/ICA/BV-01-I	TP/ICA/BV-01-I	Answer incoming call HF - inband ring	HF IUT:A;AG IUT:B
TP/ICA/BV-02-I	TP/ICA/BV-02-I	Answer incoming call HF - inband setting	HF IUT:A;AG IUT:A
TP/ICA/BV-04-I	TP/ICA/BV-04-I	Answer incoming call HF - no inband ring	HF IUT:A;AG IUT:A
TP/ICA/BV-05-I	TP/ICA/BV-05-I	Answer incoming call HF - no inband ring + audio connection	HF IUT:A;AG IUT:B
TP/ICA/BV-06-I	TP/ICA/BV-06-I	Answer incoming call AG	HF IUT:A;AG IUT:A
TP/ICR/BV-01-I	TP/ICR/BV-01-I	Reject incoming Call from HF	HF IUT:A;AG IUT:A
TP/ICR/BV-02-I	TP/ICR/BV-02-I	Reject incoming Call from AG	HF IUT:A;AG IUT:A