

HID Over GATT Profile (HOGP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

- **Revision:** HOGP.ICS.p11
- **Revision Date:** 2025-11-04
- **Prepared By:** BTI
- **Published during TCRL:** TCRL.pkg101



This document, regardless of its title or content, is not a Bluetooth Specification as defined in the Bluetooth Patent/Copyright License Agreement (“PCLA”) and Bluetooth Trademark License Agreement. Use of this document by members of Bluetooth SIG is governed by the membership and other related agreements between Bluetooth SIG Inc. (“Bluetooth SIG”) and its members, including the PCLA and other agreements posted on Bluetooth SIG’s website located at www.bluetooth.com.

THIS DOCUMENT IS PROVIDED “AS IS” AND BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES MAKE NO REPRESENTATIONS OR WARRANTIES AND DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, THAT THE CONTENT OF THIS DOCUMENT IS FREE OF ERRORS.

TO THE EXTENT NOT PROHIBITED BY LAW, BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES DISCLAIM ALL LIABILITY ARISING OUT OF OR RELATING TO USE OF THIS DOCUMENT AND ANY INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING LOST REVENUE, PROFITS, DATA OR PROGRAMS, OR BUSINESS INTERRUPTION, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, AND EVEN IF BLUETOOTH SIG, ITS MEMBERS, OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document is proprietary to Bluetooth SIG. This document may contain or cover subject matter that is intellectual property of Bluetooth SIG and its members. The furnishing of this document does not grant any license to any intellectual property of Bluetooth SIG or its members.

This document is subject to change without notice.

Copyright © 2011–2025 by Bluetooth SIG, Inc. The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. Other third-party brands and names are the property of their respective owners.



Contents

1	General principles	4
1.1	Implementation Under Test (IUT) identification	4
1.2	Enforcement of inter-layer dependencies	4
2	ICS declarations.....	5
2.1	Versions	5
2.2	Roles	6
2.3	Transports	6
2.4	HID Device	6
2.4.1	Services (HID Device).....	6
2.4.2	Features (HID Device)	6
2.4.3	GAP requirements (HID Device)	7
2.4.4	HID ISO Characteristics (HID Device)	8
2.4.5	HID ISO Protocol (HID Device)	8
2.4.6	Device Mode Change (HID Device)	8
2.4.7	Available Report Intervals (HID Device).....	8
2.5	HID Host	9
2.5.1	Client Services Support (Report Host)	9
2.5.2	Discover Services and Characteristics (Report Host)	9
2.5.3	Discover Services and Characteristics (Boot Host).....	10
2.5.4	Features (Report Host)	11
2.5.5	Features (Boot Host).....	12
2.5.6	GATT requirements (Report Host)	13
2.5.7	GATT requirements (Boot Host)	14
2.5.8	GAP requirements (HID Host)	14
2.5.9	HID ISO Protocol (HID Host)	15
2.5.10	Available Report Intervals (HID Host)	15
3	References	16
4	Revision history and acknowledgments	17

1 General principles

1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

Referred ILD resides in	Individual ILD	Full-layer ILD
Controller layer	Core-Complete configuration, or Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or Core-Complete configuration

Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool

2 ICS declarations

2.1 Versions

Table 0: No longer used

Table 0a: X.Y Versions (HID Device)

Prerequisite: HOGP 1/1 "HID Device"

Item	Version	Reference	Status
1	HOGP v1.0	[1]	C.1
2	HOGP v1.1	[9]	C.1

C.1: Mandatory to support one and only one.

Table 0b: X.Y.Z Versions (HID Device)

Table number reserved but not yet in use.

Table 0c: X.Y Versions (Report Host)

Prerequisite: HOGP 1/2 "Report Host"

Item	Version	Reference	Status
1	HOGP v1.0	[1]	C.1
2	HOGP v1.1	[9]	C.1

C.1: Mandatory to support one and only one.

Table 0d: X.Y.Z Versions (Report Host)

Table number reserved but not yet in use.

Table 0e: X.Y Versions (Boot Host)

Prerequisite: HOGP 1/3 "Boot Host"

Item	Version	Reference	Status
1	HOGP v1.0	[1]	C.1
2	HOGP v1.1	[9]	C.1

C.1: Mandatory to support one and only one.

Table 0f: X.Y.Z Versions (Boot Host)

Table number reserved but not yet in use.

2.2 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	HID Device	[1] 2.1	C.1
2	Report Host	[1] 2.1	C.1
3	Boot Host	[1] 2.1	C.1

C.1: Mandatory to support at least one.

2.3 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Profile supported over BR/EDR	[1] 1	C.1
2	Profile supported over LE	[1] 1	C.2, C.3

C.1: Excluded for this Profile.

C.2: Excluded for this Profile IF CORE 41/1 “BR/EDR Core Configuration”.

C.3: Mandatory for this Profile.

2.4 HID Device

2.4.1 Services (HID Device)

Table 3: Services (HID Device)

Prerequisite: HOGP 1/1 “HID Device”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	HID Service	[1] 3.1	M	[2] HIDS
2	Multiple Service instances – HID Service	[1] 3.1	O	N/A
3	Battery Service	[1] 3.2	M	[5] BAS
4	Device Information Service	[1] 3.3	M	[6] DIS
5	Scan Parameters Service	[1] 3.4	O	[7] SCPS
6	HID ISO Service	[9] 3.5	C.1	N/A

C.1: Mandatory IF HOGP 4/8 “HID ISO feature”, otherwise Excluded.

2.4.2 Features (HID Device)

Table 4: Features (HID Device)

Prerequisite: HOGP 1/1 “HID Device”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Include HID Service UUID in AD in GAP Discoverable Mode	[1] 3.1.3	O	N/A

Item	Capability	Reference	Status	Inter-Layer Dependency
2	Include Local Name in AD or Scan Response Data	[1] 3.1.4	O	N/A
3	Include Appearance in AD or Scan Response Data	[1] 3.1.5	O	N/A
4	PnP ID	[1] 3.3.2	M	[6] DIS 2/11
5	Report Characteristic	[1] 4.8	C.1	[2] HIDS 2/12
6	Non-HID Service characteristic described within Report Map characteristic	[1] 4.8.1	C.1	N/A
7	Report Map Characteristic - External Report Reference Characteristic descriptor	[1] 4.8.1	C.2	[2] HIDS 2/11a
8	HID ISO feature	[9] 3.5	C.4	N/A
9	HID ISO Input Report type	[9] 6.5.1.1.3	C.3	N/A
10	HID ISO Output Report type	[9] 6.5.1.1.3	C.3	N/A

C.1: Mandatory to support at least one.

C.2: Mandatory IF HOGP 4/6 “Non-HID Service characteristic described within Report Map characteristic”, otherwise not defined.

C.3: Mandatory to support at least one IF HOGP 4/8 “HID ISO feature”, otherwise Excluded.

C.4: Optional IF NOT HOGP 0a/1 “HOGP v1.0”, otherwise Excluded

2.4.3 GAP requirements (HID Device)

Table 5: GAP Requirements (HID Device)

Prerequisite: HOGP 1/1 “HID Device”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 2.4	M	[4] GAP 5/3
2–3	No longer used	N/A	N/A	N/A
4	Bondable mode (Peripheral)	[1] 6.1 [9] 7.1	M	[4] GAP 24/2
5	Bonding procedure (Peripheral)	[1] 6.1 [9] 7.1	M	[4] GAP 24/3
6	LE security mode 1 (Peripheral)	[1] 6.1 [9] 7.1	M	[4] GAP 25/1
7	Unauthenticated Pairing (LE security mode 1 level 2) (Peripheral)	[1] 6.1 [9] 7.1	M	[4] GAP 25/8
8	Authenticated Pairing (LE security mode 1 level 3) (Peripheral)	[1] 6.1 [9] 7.1	O	[4] GAP 25/7
9	Connected Isochronous Stream Peripheral Establishment procedure	[9] 5	C.1	[4] GAP 23/6

C.1: Mandatory IF HOGP 4/8 “HID ISO feature”, otherwise not defined.



Table 6: No longer used

2.4.4 HID ISO Characteristics (HID Device)

Table 17: Characteristics (HID ISO Device)

Prerequisite: HOGP 4/8 “HID ISO feature”

Item	Capability	Reference	Status
1	HID ISO Properties Characteristic	[9] 6.5.1	M
2	LE HID Operation Mode Characteristic	[9] 6.5.2	M
3	Indicate LE HID Operation Mode Characteristic	[9] 6.5.2	C.1

C.1: Mandatory IF HOGP 19/1 “Device Mode Change”, otherwise Optional.

2.4.5 HID ISO Protocol (HID Device)

Table 18: HID ISO Protocol (HID Device)

Prerequisite: HOGP 4/8 “HID ISO feature”

Item	Capability	Reference	Status
1	Redundancy	[9] 5.5	O
2	Multiple reports per SDU	[9] 5.5	O

2.4.6 Device Mode Change (HID Device)

Table 19: Device Mode Change (HID Device)

Prerequisite: HOGP 17/1 “HID ISO Properties Characteristic”

Item	Capability	Reference	Status
1	Device Mode Change	[9] 5.2.2	O

2.4.7 Available Report Intervals (HID Device)

Table 20: HID ISO Available Report Interval (HID Device)

Prerequisite: HOGP 4/8 “HID ISO feature”

Item	Capability	Reference	Status
1	1 ms	[9] 5.3	O
2	1.25 ms	[9] 5.3	O
3	2 ms	[9] 5.3	O
4	2.5 ms	[9] 5.3	O
5	3 ms	[9] 5.3	O
6	3.75 ms	[9] 5.3	O
7	4 ms	[9] 5.3	O
8	5 ms	[9] 5.3	M
9	7.5 ms	[9] 5.3	M

2.5 HID Host

2.5.1 Client Services Support (Report Host)

Table 7: No longer used

Table 7a: GATT based Profile Support (Report Host)

Prerequisite: HOGP 1/2 “Report Host”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Scan Client	[1] 4.2	M	[8] SCPP 1/2

Table 8: No longer used

2.5.2 Discover Services and Characteristics (Report Host)

Table 9: Discover Service and Characteristics (Report Host)

Prerequisite: HOGP 1/2 “Report Host”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Discover HID Service	[1] 4.5.1	M	N/A
2	Discover Battery Service	[1] 4.5.3	M	N/A
3	Discover Device Information Service	[1] 4.5.2	M	N/A
4	Discover Scan Parameters Service	[1] 4.2	M	[8] SCPP 7/1
5	Discover HID Service characteristic: Report Map	[1] 4.6.1.1	M	N/A
6	Discover HID Service characteristic: Report Map – External Report Reference characteristic descriptor	[1] 4.6.1.1	M	N/A
7	Discover HID Service characteristic: Report	[1] 4.6.1.2	M	N/A
8	Discover HID Service characteristic: Report – Client Characteristic Configuration characteristic descriptor	[1] 4.6.1.2	M	N/A
9	Discover HID Service characteristic: Report – Report Reference characteristic descriptor	[1] 4.6.1.2	M	N/A
10	Discover HID Service characteristic: HID Information	[1] 4.6.1.4	M	N/A
11	Discover HID Service characteristic: HID Control Point	[1] 4.6.1.3	M	N/A
12	Discover HID Service characteristic: Protocol Mode	[1] 4.6.1.5	O	N/A

Item	Capability	Reference	Status	Inter-Layer Dependency
13	Discover Battery Service characteristic: Battery Level	[1] 4.6.3.1	M	N/A
14	Discover Battery Service characteristic: Battery Level – Client Characteristic Configuration characteristic descriptor	[1] 4.6.3.1	M	N/A
15	Discover Device Information Service characteristic: PnP ID	[1] 4.6.2.1	M	N/A
16	Discover non-HID Service characteristic: Report Reference characteristic descriptor	[1] 4.8.1	M	N/A
17	Discover HID ISO Service	[9] 4.5.4	C.1	N/A
18	Discover HID ISO Service characteristic: HID ISO Properties characteristic	[9] 4.6.4.1	C.1	N/A
19	Discover HID ISO Service characteristic: LE HID Operation characteristic	[9] 4.6.4.2	C.1	N/A

C.1: Mandatory IF HOGP 11/29 “HID ISO feature”, otherwise Excluded.

2.5.3 Discover Services and Characteristics (Boot Host)

Table 10: Discover Service & Characteristics (Boot Host)

Prerequisite: HOGP 1/3 “Boot Host”

Item	Capability	Reference	Status
1	Discover HID Service	[1] 4.3.1	M
2	Discover Battery Service	[1] 4.3.3	O
3	Discover Device Information Service	[1] 4.3.2	O
4	Discover HID Service characteristic: Protocol Mode	[1] 4.4.1.1	M
5	Discover HID Service characteristic: Boot Keyboard Input Report	[1] 4.4.1.2	C.1, C.2
6	Discover HID Service characteristic: Boot Keyboard Input Report – Client Characteristic Configuration characteristic descriptor	[1] 4.4.1.2	C.3
7	Discover HID Service characteristic: Boot Keyboard Output Report	[1] 4.4.1.3	C.1, C.2
8	Discover HID Service characteristic: Boot Mouse Input Report	[1] 4.4.1.4	C.1
9	Discover HID Service characteristic: Boot Mouse Input Report – Client Characteristic Configuration characteristic descriptor	[1] 4.4.1.4	C.4
10	Discover Battery Service characteristic: Battery Level	[1] 4.4.3	O
11	Discover Battery Service characteristic: Battery Level – Client Characteristic Configuration characteristic descriptor	[1] 4.4.3.1	O
12	Discover Device Information Service characteristic: PnP ID	[1] 4.4.2.1	O

C.1: Mandatory to support at least one.

C.2: Mandatory to support none or all.



- C.3: Mandatory IF HOGP 10/5 “Discover HID Service characteristic: Boot Keyboard Input Report”, otherwise Excluded.
- C.4: Mandatory IF HOGP 10/8 “Discover HID Service characteristic: Boot Mouse Input Report”, otherwise Excluded.

2.5.4 Features (Report Host)

Table 11: Features (Report Host)

Prerequisite: HOGP 1/2 “Report Host”

Item	Capability	Reference	Status
1	Read Report Map characteristic	[1] 4.7	M
2	Read Report Map characteristic: External Report Reference characteristic descriptor	[1] 4.7	M
3	Read Report characteristic: Report Type: Input Report	[1] 4.8	C.2
4	Write Report characteristic: Report Type: Input Report	[1] 4.8	C.2
5	Read Report characteristic: Report Type: Output Report	[1] 4.8	C.3
6	Write - Report characteristic: Report Type: Output Report	[1] 4.8	C.3
7	Read - Report characteristic: Report Type: Feature Report	[1] 4.8	C.4
8	Write - Report characteristic: Report Type: Feature Report	[1] 4.8	C.4
9	Read Report characteristic: Report Reference characteristic descriptor	[1] 4.8	M
10	Read Report characteristic: Input Report: Client Characteristic Configuration characteristic descriptor	[1] 4.8	M
11	Report characteristic configuration: enable notifications	[1] 4.8	M
11a	Report characteristic configuration: disable notifications	[1] 4.8	C.2
12	Read HID Information characteristic	[1] 4.10	O
13	Suspend State	[1] 4.9	O
14	Exit Suspend State	[1] 4.9	C.1
15	Write HID Control Point characteristic: Suspend command	[1] 4.9	C.1
16	Write HID Control Point characteristic: Exit Suspend command	[1] 4.9	C.1
17	Read Protocol Mode characteristic: Get Protocol command	[1] 4.8	O
18	Write Protocol Mode characteristic: Set Report Protocol Mode command	[1] 4.8	O
19	Read Battery Level characteristic	[1] 4.15	C.5
20	Read Battery Level characteristic: Client Characteristic Configuration characteristic descriptor	[1] 4.15	C.6
21	Battery Level characteristic configuration: enable notifications	[1] 4.15	C.6
21a	Battery Level characteristic configuration: disable notifications	[1] 4.15	O
22	Read non-HID Service characteristic: Report Reference characteristic descriptor	[1] 4.8	M
23	Read PnP ID characteristic	[1] 4.16	M
24	Notify Report characteristic	[1] 4.8	M
25	Notify Battery Level characteristic	[1] 4.15	C.5
26	Report Characteristic: Input Report type supported	[1] 4.8	M
27	Report Characteristic: Output Report type supported	[1] 4.8	O

Item	Capability	Reference	Status
28	Report Characteristic: Feature Report type supported	[1] 4.8	O
29	HID ISO feature	[9] 4.19	C.7
30	Read HID ISO Properties characteristic	[9] 6.5.1.2	C.8
31	Write LE HID Operation Mode characteristic: Hybrid Operation Mode	[9] 5.1	C.8
32	Write LE HID Operation Mode characteristic: Default Operation mode	[9] 5.1	C.8
33	HID ISO Input Report type	[9] 6.5.1.1.3.1	C.9
34	HID ISO Output Report type	[9] 6.5.1.1.3.1	C.9

- C.1: Mandatory IF HOGP 11/13 “Suspend State”, otherwise Excluded.
- C.2: Optional IF HOGP 11/26 “Report Characteristic: Input Report type supported”, otherwise Excluded.
- C.3: Optional IF HOGP 11/27 “Report Characteristic: Output Report type supported”, otherwise Excluded.
- C.4: Optional IF HOGP 11/28 “Report Characteristic: Feature Report type supported”, otherwise Excluded.
- C.5: Mandatory to support at least one.
- C.6: Mandatory IF HOGP 11/25 “Notify Battery Level characteristic”, otherwise Excluded.
- C.7: Optional IF NOT HOGP 0c/1 “HOGP v1.0”, otherwise Excluded.
- C.8: Mandatory IF HOGP 11/29 “HID ISO feature”, otherwise Excluded.
- C.9: Optional IF HOGP 11/29 “HID ISO feature”, otherwise Excluded.

2.5.5 Features (Boot Host)

Table 12: Features (Boot Host)

Prerequisite: HOGP 1/3 “Boot Host”

Item	Capability	Reference	Status
1	Read Protocol Mode characteristic: Get Protocol Mode command	[1] 4.11	M
2	Write Protocol Mode characteristic: Set Boot Protocol Mode command	[1] 4.11	M
3	Read HID Service characteristic: Boot Keyboard Input Report	[1] 4.12	C.1
4	Write HID Service characteristic: Boot Keyboard Input Report	[1] 4.12	C.1
5	Read Client Characteristic Configuration characteristic descriptor for Boot Keyboard Input Report	[1] 4.12	C.1
6	Boot Keyboard Input Report characteristic configuration: enable notifications	[1] 4.12	C.1
6a	Boot Keyboard Input Report characteristic configuration: disable notifications	[1] 4.12	O
7	Read HID Service characteristic: Boot Keyboard Output Report	[1] 4.13	C.1
8	Write HID Service characteristic: Boot Keyboard Output Report	[1] 4.13	C.1
9	Read HID Service characteristic: Boot Mouse Input Report	[1] 4.14	C.2
10	Write HID Service characteristic: Boot Mouse Input Report	[1] 4.14	C.2



Item	Capability	Reference	Status
11	Read Client Characteristic Configuration characteristic descriptor for Boot Mouse Input Report	[1] 4.14	C.2
12	Boot Mouse Input Report characteristic configuration: enable notifications	[1] 4.14	C.2
12a	Boot Mouse Input Report characteristic configuration: disable notifications	[1] 4.14	O
13	Notify Boot Keyboard Input Report characteristic	[1] 4.12	C.1
14	Notify Boot Mouse Input Report characteristic	[1] 4.14	C.2
15	Read Battery Level characteristic	[1] 4.15	O
16	Read Battery Level characteristic: Client Characteristic Configuration characteristic descriptor	[1] 4.15	O
17	Battery Level characteristic configuration: enable notifications	[1] 4.15	O
17a	Battery Level characteristic configuration: disable notifications	[1] 4.15	O
18	Notify Battery Level characteristic	[1] 4.15	O
19	Read PnP ID characteristic	[1] 4.16	O

C.1: Mandatory IF HOGP 10/5 “Discover HID Service characteristic: Boot Keyboard Input Report” OR HOGP 10/7 “Discover HID Service characteristic: Boot Keyboard Output Report”, otherwise Excluded.

C.2: Mandatory IF HOGP 10/8 “Discover HID Service characteristic: Boot Mouse Input Report”, otherwise Excluded.

2.5.6 GATT requirements (Report Host)

Table 13: GATT Requirements (Report Host)

Prerequisite: HOGP 1/2 “Report Host”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	GATT Client over LE	[1] 4.1	M	[3] GATT 1a/1
2	No longer used	N/A	N/A	N/A
3	Discover All Primary Services	[1] 4.1	C.1	[3] GATT 3/2
4	Discover Primary Services by Service UUID	[1] 4.1	C.1	[3] GATT 3/3
5	Find Included Services	[1] 4.1	M	[3] GATT 3/4
6	Discover All Characteristics of a Service	[1] 4.1	C.2	[3] GATT 3/5
7	Discover Characteristics by UUID	[1] 4.1	C.2	[3] GATT 3/6
8	Discover All Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/7
9	Read Characteristic Value	[1] 4.1	C.3	[3] GATT 3/8
10	Read Using Characteristic UUID	[1] 4.1	C.3	[3] GATT 3/9
11	Read Long Characteristic Values	[1] 4.1	C.4	[3] GATT 3/10
12	Read Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/19
13	Write without Response	[1] 4.1	M	[3] GATT 3/12
14	Write Characteristic Value	[1] 4.1	M	[3] GATT 3/14



Item	Capability	Reference	Status	Inter-Layer Dependency
15	Write Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/21
16	Single Notification	[1] 4.1	M	[3] GATT 3/17
17	Exchange MTU	[1] 4.1	O	[3] GATT 3/1

C.1: Mandatory to support at least one.

C.2: Mandatory to support at least one.

C.3: Mandatory to support at least one.

C.4: Mandatory IF HOGP 13/9 “Read Characteristic Value” OR HOGP 13/10 “Read Using Characteristic UUID”, otherwise not defined.

2.5.7 GATT requirements (Boot Host)

Table 14: GATT Requirements (Boot Host)

Prerequisite: HOGP 1/3 “Boot Host”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	GATT Client over LE	[1] 4.1	M	[3] GATT 1a/1
2	No longer used	N/A	N/A	N/A
3	Discover All Primary Services	[1] 4.1	C.1	[3] GATT 3/2
4	Discover Primary Services by Service UUID	[1] 4.1	C.1	[3] GATT 3/3
5	Discover All Characteristics of a Service	[1] 4.1	O	[3] GATT 3/5
6	Discover Characteristics by UUID	[1] 4.1	O	[3] GATT 3/6
7	Discover All Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/7
8	Read Characteristic Value	[1] 4.1	M	[3] GATT 3/8
9	Read Using Characteristic UUID	[1] 4.1	M	[3] GATT 3/9
10	Read Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/19
11	Write without Response	[1] 4.1	M	[3] GATT 3/12
12	Write Characteristic Value	[1] 4.1	M	[3] GATT 3/14
13	Write Characteristic Descriptors	[1] 4.1	M	[3] GATT 3/21
14	Single Notification	[1] 4.1	M	[3] GATT 3/17

C.1: Mandatory to support at least one.

2.5.8 GAP requirements (HID Host)

Table 15: GAP Requirements (HID Host)

Prerequisite: HOGP 1/2 “Report Host” OR HOGP 1/3 “Boot Host”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Central	[1] 2.4	M	[4] GAP 5/4
2	LE security mode 1 (Central)	[1] 6.2 [9] 7.2	M	[4] GAP 35/1



Item	Capability	Reference	Status	Inter-Layer Dependency
3	Unauthenticated Pairing (LE security mode 1 level 2) (Central)	[1] 6.2 [9] 7.2	M	[4] GAP 35/8
4	Authenticated Pairing (LE security mode 1 level 3) (Central)	[1] 6.2 [9] 7.2	O	[4] GAP 35/7
5	Connected Isochronous Stream Central Establishment procedure	[9] 5	C.1	[4] GAP 33/7

C.1: Mandatory IF HOGP 11/29 “HID ISO feature”, otherwise not defined.

Table 16: No longer used

2.5.9 HID ISO Protocol (HID Host)

Table 21: HID ISO Protocol (HID Host)

Prerequisite: HOGP 11/29 “HID ISO feature”

Item	Capability	Reference	Status
1	Redundancy	[9] 5.5	M
2	Multiple reports per SDU	[9] 5.5	M

2.5.10 Available Report Intervals (HID Host)

Table 22: HID ISO Available Report Interval (HID Host)

Prerequisite: HOGP 11/29 “HID ISO feature”

Item	Capability	Reference	Status
1	1 ms	[9] 5.3	O
2	1.25 ms	[9] 5.3	O
3	2 ms	[9] 5.3	O
4	2.5 ms	[9] 5.3	O
5	3 ms	[9] 5.3	O
6	3.75 ms	[9] 5.3	O
7	4 ms	[9] 5.3	O
8	5 ms	[9] 5.3	C.1
9	7.5 ms	[9] 5.3	C.1

C.1: Mandatory to support at least one.

3 References

- [1] HID over GATT Profile Specification, Version 1.0 or later
- [2] ICS Proforma for HID Service (HIDS)
- [3] ICS Proforma for Generic Attribute Profile (GATT)
- [4] ICS Proforma for Generic Access Profile (GAP)
- [5] ICS Proforma for Battery Service (BAS)
- [6] ICS Proforma for Device Information Service (DIS)
- [7] ICS Proforma for Scan Parameters Service (SCPS)
- [8] ICS Proforma for Scan Parameters Profile (SCPP)
- [9] HID over GATT Profile Specification, Version 1.1

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2011-12-27	Adopted by the Bluetooth SIG Board of Directors
	1.0.1r0	2012-06-05	TSE 4728: Add item 11a to Table 11.
1	1.0.1	2012-07-24	Prepare for publication.
	1.0.2r1	2012-09-04	TSE 4888: Removed conditionals in Table 1, Profile Roles. TSE 4868: Table 13: GATT Requirements – Report Host, change item 10 from M to O. Added Version table, Table 0 per BQRB decision.
2	1.0.2	2012-10-30	Prepare for Publication
	1.0.3r01	2013-09-30	TSE 5313: Addition of Table 7a
3	1.0.3	2013-12-03	Prepare for Publication
	1.0.4r00	2015-05-10	TSE 6257: Revised status of item 13/17 (Exchange MTU) to Optional
	1.0.4r01	2015-05-12	Updated to the current ICS template and revised per the standard conventions for items like conditionals and pre-requisites.
4	1.0.4	2015-07-14	Prepared for TCRL 2015-1 publication
	1.0.5r00	2015-10-01	TSE 6412: In Table 11 of Section 1.5.5 - updated conditionals; revised capability characteristics for items 11/6, 11/7, and 11/8; changed item 11/12 status to Optional; and added new items 11/26, 11/27, and 11/28. In Table 13 of Section 1.5.7 - updated conditionals. TSE 6653: Revised and added multiple capability characteristics in Section 1.5.5, Table 11 and Section 1.5.6, Table 12.
5	1.0.5	2015-12-22	Prepared for TCRL 2015-2 publication.
	1.0.6r00	2017-05-25	TSE 9148: Template conversion. Correct copy/paste table numbering errors (3 Table 5's).
6	1.0.6	2017-06-26	Approved by BTI. Prepared for TCRL 2017-1 publication.

Publication Number	Revision Number	Date	Comments
	p7r00–r05	2022-09-14 – 2022-11-15	<p>TSE 19166 (rating 2): Updated the ILD column for Table 4, Item 7. Other edits for this TSE made for TSE 19178.</p> <p>TSE 19178 (rating 1): Updated to align with current ICS conventions/template. Removed Support columns and added an Inter-Layer Dependency column where appropriate. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.6 as p6.</p> <p>Performed additional template-related formatting fixes. Replaced Bluetooth logo in footer and updated the copyright page to align with v2 of the DNMD.</p>
7	p7	2023-02-07	Approved by BTI on 2022-12-28. Prepared for TCRL 2022-2 publication.
	p8r00–r01	2023-10-27 – 2023-12-11	<p>TSE 23418 (rating 2): In Table 5 (GAP requirements), marked Items 2 and 3 as no longer used.</p> <p>Made editorial edits to align the document with the latest ICS template, including updates to the section titles. Deleted draft revision history comments prior to p0.</p>
8	p8	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p9r00–r01	2025-05-07 – 2025-05-08	<p>TSE 27353 (rating 1): In Table 2, updated the Status value for HOGP 2/2 and added conditions C.2 and C.3.</p> <p>Incorporated editorials to align the document with the latest ICS template, including updates to Section 1 and the addition of a section heading for the ICS declarations section.</p>
9	p9	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.
	p10r00–r05	2025-05-08 – 2025-06-27	<p>Work for p10 began after p9 content was finalized; publication of p9 occurred later due to internal processes.</p> <p>Incorporated HOGP_ULL.ICS.0.9.0r08_Sang CR. To account for the HID ISO ULL feature enhancement in HID Over GATT Profile Specification v1.1, added Tables 0b, 0d, 0f, 17–20, 21, and 22 and marked Table 0 and as no longer used. Added Items HOGP 3/6, 4/8, 4/9, 5/9, 9/17 – 9/19, 11/29 – 11/34, 15/5 and several corresponding conditions. Updated the references list.</p>
10	p10	2025-08-12	Approved by BTI on 2025-07-14. HOGP v1.1 adopted by the BoD on 2025-08-11. Prepared for TCRL pkg100-addition publication.
	p11r00	2025-08-13	TSE 27555 (rating 1): Updated the ILD column for Items 5/1 and 15/1 to delete references to GAP Table 38.
11	p11	2025-11-04	Approved by BTI on 2025-10-02. Prepared for TCRL pkg101 publication.

Acknowledgments

Name	Company
Dejan Berec	Bluetooth SIG, Inc.
Pete Guerin	Bluetooth SIG, Inc.
Seong-ho Kim	Bluetooth SIG, Inc.
Sangjik Lee	Bluetooth SIG, Inc.
Tiberiu Marinescu	Bluetooth SIG, Inc.
Jason Nydegger	Bluetooth SIG, Inc.
Sowmya Ramjee	Bluetooth SIG, Inc.
Alicia Courtney	Broadcom Ltd.
Chris Church	CSR
Joe Decuir	CSR
Krishnan Nair	CSR
Magnus Sommansson	CSR
Jongmin Kim	LG Electronics
Hyeonjae Lee	LG Electronics
Robert Hulvey	Meta Platforms, Inc.
Frank Berntsen	Nordic Semiconductor
Miles Smith	Nordic Semiconductor
Mike Tsai	Qualcomm