

# HID Service (HIDS)

## **Bluetooth® Implementation Conformance Statement (ICS) Proforma**

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# 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: X.Y Versions

Item	Version	Reference	Status
1	HIDS v1.0	[1]	M

### 2.2 Transports

Table 1: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 1.5	C.1
2	Service supported over LE	[1] 1.5	C.2, C.3

C.1: Excluded for this Service.

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

C.3: Mandatory for this Service.

### 2.3 Service requirements

Table 2: Service Requirements

Item	Capability	Reference	Status
1	HID Service	[1] 2	M
2	Boot Keyboard	[1] 2.7	O
3	Boot Mouse	[1] 2.7	O
4	Boot Protocol Mode	[1] 2.4	C.1
5	Protocol Mode Characteristics	[1] 2.4	C.2
6	Boot Keyboard Input Report Characteristic	[1] 2.6.1	C.3
7	Boot Keyboard Input Report Characteristic - Write	[1] 2.6.1	O
8	Boot Keyboard Output Report Characteristic	[1] 2.7.1	C.3
9	Boot Mouse Input Report Characteristic	[1] 2.9.1	C.4
10	Boot Mouse Input Report Characteristic - Write	[1] 2.8.1	O
11	Report Map Characteristic	[1] 2.6	M
11a	Report Map Characteristic - External Report Reference Characteristic descriptor	[1] 2.6.3.1	O
12	Report Characteristic	[1] 2.5	O
13	Report Characteristic - Report Type: Input Report	[1] 2.5.3.1	C.5
14	Report Type: Input Report - Write	[1] 2.5.3.1	O
15	Report Characteristic - Report Type: Output Report	[1] 2.5.3.1	C.5
16	Report Characteristic - Report Type: Feature Report	[1] 2.5.3.1	C.5
17	HID Control Point Characteristic	[1] 2.11	M
18	HID Information Characteristic	[1] 2.10	M

- C.1: Mandatory IF HIDS 2/2 “Boot Keyboard” OR HIDS 2/3 “Boot Mouse”, otherwise Optional.
- C.2: Mandatory IF HIDS 2/4 “Boot Protocol Mode”, otherwise Optional.
- C.3: Mandatory IF HIDS 2/2 “Boot Keyboard”, otherwise Excluded.
- C.4: Mandatory IF HIDS 2/3 “Boot Mouse”, otherwise Excluded.
- C.5: Mandatory to support at least one IF HIDS 2/12 “Report Characteristic”, otherwise Excluded.

## 2.4 GATT requirements

**Table 3: GATT Requirements**

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	GATT Server over LE	[1] 1.5	M	[2] GATT 1a/3
3	Single Notification	[1] 1.4, 2.4.1	M	[2] GATT 4/17
4	Read Using Characteristic UUID	[1] 1.4, 2.4.1	M	[2] GATT 4/9
5	Read Characteristic Value	[1] 1.4, 2.6.1, 2.7.1	M	[2] GATT 4/8
6	Read Long Characteristic Values	[1] 1.4, 2.3.1	M	[2] GATT 4/10
7	Read Characteristic Descriptors	[1] 1.4, 2.3.3.1, 2.4.3.1	M	[2] GATT 4/19
8	Write without Response	[1] 1.4, 2.5.1	M	[2] GATT 4/12
9	Write Characteristic Value	[1] 1.4, 2.5.1	M	[2] GATT 4/14
10	Write Characteristic Descriptors	[1] 1.4, 2.4.3.1	M	[2] GATT 4/21

## 3 References

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- [1] HID Service Specification, Version 1.0
- [2] ICS Proforma for Generic Attribute Profile (GATT)

## 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
	1.0.1	2012-05-18	TSE 4791: Table 2/10 change status from “C.4” to “O”
1	1.0.1	2012-07-24	Prepare for publication.
	1.0.2r00	2016-08-16	TSE 7494: Added Table 0. Added GAP reference and updated conditional notes for Table 1. Updated conditional notes for Table 2.
2	1.0.2	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	1.0.2 edition 2r00	2018-11-27	Editorial changes only. Template updated. Revision History and Contributors moved to the end of the document.
	1.0.2 edition 2	2019-12-12	Updated copyright page and confidentiality markings to support new Documentation Marking Requirements, performed minor formatting updates, and accepted all tracked changes to prepare for edition 2 publication.
	p3r00–r02	2022-09-22 – 2022-11-07	<p>TSE 18204 (rating 3): In Table 2, added Item 11a and added ICS elements to C.5.</p> <p>TSE 19174 (rating 1): Updated to align with current ICS conventions/template. Removed Support columns and added an Inter-Layer Dependency column where appropriate. Editorial corrections to C.1 in Table 2 because the referenced ICS and descriptions were swapped. Added missing ICS element to C.5 in Table 2. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.2 as p2.</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>
3	p3	2023-02-07	Approved by BTI on 2022-12-28. Prepared for TCRL 2022-2 publication.
	p3ed2r00	2025-07-09	TSE 27297 (rating 1): Updated the title for Table 0. Updated the Status for HIDS 1/2 and added conditions C.2 and C.3. Updated the language in C.5 of Table 2 and the Capability in HIDS 3/3.
	p3 edition 2	2025-08-05	Approved by BTI on 2025-08-05. Prepared for edition 2 publication.



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