Health Thermometer Profile (HTP)

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

- **Revision:** HTP.ICS.p3 edition 2
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- **Prepared By:** BTI
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Contents

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	HTP v1.0	[1]	M

2.2 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Thermometer	[1] 2.1	C.1
2	Collector	[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] 2.5	C.1
2	Profile supported over LE	[1] 2.5	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 Thermometer Role

2.4.1 Services – Thermometer Role

Table 3: Service – Thermometer Role

Prerequisite: HTP 1/1 “Thermometer”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Health Thermometer Service	[1] 3.1	M	[2] HTS 2/1
2	Health Thermometer Service UUID in AD	[1] 3.1.1	O	N/A
2a	Service UUID	[1] 3.1.1	C.1	[5] GAP 20a/1
3	Local Name	[1] 3.1.2	O	[5] GAP 20a/2
4	Device Information Service	[1] 3.2	M	[3] DIS 2/1

C.1: Mandatory IF HTP 3/2 “Health Thermometer Service UUID in AD”, otherwise not defined.

2.4.2 Device Information Service Requirements – Thermometer Role

Table 4: Device Information Service Requirements – Thermometer Role

Prerequisite: HTP 1/1 "Thermometer"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Manufacturer Name String Characteristic	[1] 3.2	M	[3] DIS 2/2
2	Model Number String Characteristic	[1] 3.2	M	[3] DIS 2/3
3	System ID Characteristic	[1] 3.2	M	[3] DIS 2/8

2.4.3 GAP Requirements – Thermometer Role

Table 5: GAP Requirements – Thermometer Role

Prerequisite: HTP 1/1 "Thermometer"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 2.4	M	[5] GAP 5/3 OR GAP 38/3
2	LE security mode 1	[1] 6.1	M	[5] GAP 25/1
3	Unauthenticated Pairing (LE security mode 1 level 2)	[1] 6.1	C.1	[5] GAP 25/8
4	Authenticated Pairing (LE security mode 1 level 3)	[1] 6.1	C.1	[5] GAP 25/7

C.1: Mandatory to support at least one.

Table 6: No longer used

2.5 Collector Role

Table 7: No longer used

2.5.1 Discover Services and Characteristics – Collector Role

Table 8: Discover Services and Characteristics – Collector Role

Prerequisite: HTP 1/2 "Collector"

Item	Capability	Reference	Status
1	Discover Health Thermometer Service	[1] 4.2.1	M
2	Discover Temperature Measurement characteristic	[1] 4.3.1.1	M
3	Discover Temperature Measurement - Client Characteristic Configuration Descriptor	[1] 4.3.1.1	M
4	Discover Temperature Type characteristic	[1] 4.3.1.2	O

Item	Capability	Reference	Status
5	Discover Intermediate Temperature characteristic	[1] 4.3.1.3	O
6	Discover Intermediate Temperature - Client Characteristic Configuration Descriptor	[1] 4.3.1.3	O
7	Discover Measurement Interval characteristic	[1] 4.3.1.4	O
8	Discover Measurement Interval – Client Characteristic Configuration Descriptor	[1] 4.3.1.4	O
9	Discover Measurement Interval – Valid Range Descriptor	[1] 4.3.1.4	O

2.5.2 Features – Collector Role

Table 9: Features – Collector Role

Prerequisite: HTP 1/2 "Collector"

Item	Capability	Reference	Status
1	Configure Temperature Measurement characteristic for notifications	[1] 4.4	M
2	Receive Temperature Measurement characteristic indications	[1] 4.4	M
3	Receive multiple Temperature Measurement characteristic indications	[1] 4.4	M
4	Receive Time Stamp Field	[1] 4.4	M
5	Receive Temperature Type Field	[1] 4.4	M
6	Configure Intermediate Temperature characteristic for notifications	[1] 4.5	O
7	Receive Intermediate Temperature characteristic notifications	[1] 4.5	C.1
8	Configure Measurement Interval characteristic for indications	[1] 4.6	O
9	Receive Measurement Interval characteristic Indications	[1] 4.6	C.2
10	Read Measurement Interval characteristic	[1] 4.6	O
11	Write Measurement Interval characteristic	[1] 4.6	O
12	Read Measurement Interval Valid Range Descriptor	[1] 4.6.1	O
13	Read Temperature Type characteristic	[1] 4.7	O
14	Verify Bond Status on Reconnection	[1] 5.2.3	M

C.1: Mandatory IF HTP 9/6 "Configure Intermediate Temperature characteristic for notifications", otherwise Excluded.

C.2: Mandatory IF HTP 9/8 "Configure Measurement Interval characteristic for indications", otherwise Excluded.

2.5.3 Discover DIS and Related Characteristics – Collector Role

Table 10: DIS and Related Characteristics – Collector Role

Prerequisite: HTP 1/2 "Collector"

Item	Capability	Reference	Status
1	Discover Device Information Service	[1] 4.2.2	O
2	Discover Manufacturer Name String Characteristic	[1] 3.2, 4.3.2, 4.8	C.2

Item	Capability	Reference	Status
3	Discover Model Number String Characteristic	[1] 3.2, 4.3.2, 4.8	C.2
4	Discover System ID Characteristic	[1] 3.2, 4.3.2, 4.8	C.2

C.1: No longer used.

C.2: Optional IF HTP 10/1 “Discover Device Information Service”, otherwise Excluded.

2.5.4 GATT Requirements – Collector Role

Table 11: GATT Requirements – Collector Role

Prerequisite: HTP 1/2 “Collector”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	GATT Client over LE	[1] 2.5	M	[4] GATT 1a/1
3	Discover All Primary Services	[1] 4.2	C.1	[4] GATT 3/2
4	Discover Primary Services by Service UUID	[1] 4.2	C.1	[4] GATT 3/3
5	Discover All Characteristics of a Service	[1] 4.3.1, 4.3.2	C.2	[4] GATT 3/5
6	Discover Characteristics by UUID	[1] 4.3.1, 4.3.2	C.2	[4] GATT 3/6
7	Discover All Characteristic Descriptors	[1] 4.3.1	M	[4] GATT 3/7
8	Write Characteristic Value	[1] 4.6	C.3	[4] GATT 3/14
9	Single Notification	[1] 4.5	C.4	[4] GATT 3/17
10	Read Characteristic Descriptors	[1] 4.1	M	[4] GATT 3/19
11	Write Characteristic Descriptors	[1] 4.1	M	[4] GATT 3/21

C.1: Mandatory to support at least one.

C.2: Mandatory to support at least one.

C.3: Mandatory IF HTP 9/11 “Write Measurement Interval characteristic”, otherwise Optional.

C.4: Mandatory IF HTP 9/7 “Receive Intermediate Temperature characteristic notifications”, otherwise Optional.

2.5.5 GAP Requirements – Collector Role

Table 12: GAP Requirements – Collector Role

Prerequisite: HTP 1/2 “Collector”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Central	[1] 2.4	M	[5] GAP 5/4 OR GAP 38/4
2	LE security mode 1	[1] 6.2	M	[5] GAP 35/1
3	Unauthenticated Pairing (LE security mode 1 level 2)	[1] 6.2	M	[5] GAP 35/8

Item	Capability	Reference	Status	Inter-Layer Dependency
4	Authenticated Pairing (LE security mode 1 level 3)	[1] 6.2	M	[5] GAP 35/7

Table 13: No longer used

3 References

[1] Health Thermometer Profile Specification, Version 1.0

[2] ICS Proforma for Heath Thermometer Service (HTS)

[3] ICS Proforma for Device Information Service (DIS)

[4] ICS Proforma for Generic Attribute Profile (GATT)

[5] ICS Proforma for Generic Access Profile (GAP)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2011-05-24	Prepare for publication.
	1.0.1r0	2011-11-03	TSE 4515: Corrections to Tables 2, 5, 11, 12.
1	1.0.1	2012-03-30	Prepare for publication.
	1.0.2r00	2016-10-05	TSE 7519: Table 0 added; copyedits to table notes; “References” updated; new(ish) template.
2	1.0.2	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	1.0.2 edition 2r00	2018-11-26	Editorial changes only. Template updated. Revision History and contributors moved to the end of the document.
	1.0.2 edition 2	2019-12-13	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–r03	2022-10-05 – 2022-11-15	TSE 19219 (rating 3): Updated to align with current ICS conventions/template. Removed Support columns and added an Inter-Layer Dependency column where appropriate. Updated references. Performed additional template-related formatting fixes. 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. Replaced the Bluetooth logo in footer and updated the copyright page to align with v2 of the DNMD.
3	p3	2023-02-07	Approved by BTI on 2022-12-28. Prepared for TCRL 2022-2 publication.
	p3ed2r00–r01	2025-07-10 – 2025-07-15	TSE 27355 (rating 1): Updated the Status for HTP 2/2 and added conditions C.2 and C.3.
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