

Tire Pressure Monitoring System Service (TPMSS)

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	TPMSS 1.0	[1]	M

Table 1: X.Y.Z Versions

Table number reserved but not yet in use.

2.2 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 2.2	C.1
2	Service supported over LE	[1] 2.2	C.2, C.3

C.1: Excluded for this Service.

C.2: Excluded for this Service IF CORE 41/1 “BR/EDR Core Configuration” OR CORE 40/1 “Core-Controller”.

C.3: Mandatory for this Service.

2.3 Features

Table 3: Feature Requirements

Item	Capability	Reference	Status
1	Motion Detection	[1] 3	O

Table 4: Characteristic Support Requirements

Item	Capability	Reference	Status
1	Tire Pressure characteristic	[1] 3.2	M
2	Tire Temperature characteristic	[1] 3.3	M
3	Tire Acceleration characteristic	[1] 3.4	C.1
4	TPMS Properties characteristic	[1] 3.5	M
5	TPMS Duty Cycle characteristic	[1] 3.6	O
6	Write TPMS Duty Cycle characteristic	[1] 3.6	C.2
7	TPMS Position characteristic	[1] 3.7	O
8	Write TPMS Position characteristic	[1] 3.7	C.3
9	TPMS Signing Key characteristic	[1] 3.8	M

C.1: Mandatory IF TPMSS 3/1 “Motion Detection”, otherwise Excluded.

C.2: Optional IF TPMSS 4/5 “TPMS Duty Cycle characteristic”, otherwise Excluded.



C.3: Optional IF TPMSS 4/7 “TPMS Position characteristic”, otherwise Excluded.

2.4 GATT requirements

Table 5: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Read Characteristic Value	[1] 2.5	M	[2] GATT 4/8
2	Read Multiple Characteristic Values	[1] 2.5	M	[2] GATT 4/11
3	Write Characteristic Value	[1] 2.5	C.1	[2] GATT 4/14
4	Single Notification	[1] 2.5	M	[2] GATT 4/17
5	Indication	[1] 2.5	M	[2] GATT 4/18
6	Read Characteristic Descriptor	[1] 2.5	M	[2] GATT 4/19
7	Write Characteristic Descriptor	[1] 2.5	M	[2] GATT 4/21
8	GATT Server over LE	[1] 2.5	M	[2] GATT 1a/3

C.1: Mandatory IF TPMSS 4/5 “TPMS Duty Cycle characteristic” OR TPMSS 4/7 “TPMS Position characteristic”, otherwise Optional.

3 References

- [1] Tire Pressure Monitoring System Service Specification
- [2] ICS Proforma for Generic Attribute Profile (GATT)

4 Revision history and acknowledgments

Revision History

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0	p0	2026-08-11	Approved by BTI on 2026-06-28. TPMSS v1.0 adopted by the BoD on 2026-08-10. Prepared for initial publication.

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Name	Company
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Jawid Mirani	Bluetooth SIG, Inc.
Victor Zhodzishsky	Infineon Technologies AG
Alicia Courtney	Broadcom