Serial Port Profile (SPP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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Contents

| 1 | General principles | | | |
|---|--------------------------------------|--|--|--|
| | 1.1 | Implementation Under Test (IUT) identification | | |
| | 1.2 | Enforcement of inter-layer dependencies | | |
| 2 | | declarations | | |
| | 2.1 | Versions | | |
| | 2.2 | Core Configuration | | |
| | 2.3 | Roles | | |
| | 2.4 | Support of SPP Service | | |
| | 2.5 | Application Procedures | | |
| | 2.6 | Profile and Protocol Dependencies | | |
| | 2.6.1 | Service Discovery Protocol | | |
| 3 | References | | | |
| | | | | |
| 4 | Revision history and acknowledgments | | | |

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



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2 ICS declarations

2.1 Versions

Table 0: X.Y Versions

| Item | Version | Reference | Status |
|------|------------|-----------|------------------------|
| 1 | SPP v1.1** | [1] | Deprecated 2013-07-24. |
| 2 | SPP v1.2 | [3] | M |

2.2 Core Configuration

Table 0a: Core Configuration Requirements

| Item | Core Configuration | Reference | Status |
|------|-------------------------------|-----------|----------|
| 1 | Profile supported over BR/EDR | [1] 2.1 | C.1, C.3 |
| 2 | Profile supported over LE | [1] 2.1 | C.2 |

C.1: Excluded for this Profile IF CORE 41/2 "LE Core Configuration".

C.2: Excluded for this Profile.

C.3: Mandatory for this Profile.

2.3 Roles

Table 1: Role Requirements

| Item | Role | Reference | Status |
|------|----------|-----------|--------|
| 1 | Device A | [1] 2.2 | C.1 |
| 2 | Device B | [1] 2.2 | C.1 |

C.1: Mandatory to support at least one.

2.4 Support of SPP Service

Table 2: Serial Port Service Support

| Item | Capability | Reference | Status |
|------|--|-----------|----------|
| 1 | Support of SPP as a standalone profile | [1] 1.2 | 0 |
| 1a | SPP as a standalone profile – Device A | [1] 1.2 | C.2, C.3 |
| 1b | SPP as a standalone profile – Device B | [1] 1.2 | C.2, C.4 |

C.1: No longer used.

C.2: Mandatory to support at least one IF SPP 2/1 "Support of SPP as a standalone profile", otherwise Excluded.

C.3: Optional IF SPP 1/1 "Device A", otherwise Excluded.

C.4: Optional IF SPP 1/2 "Device B", otherwise Excluded.

^{**} Deprecated versions may not appear in the Bluetooth SIG qualification tool after the deprecation date. TCRLs published after this date will not allow the use of deprecated versions.



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2.5 Application Procedures

Table 3: Application Procedures

| Item | Capability | Reference | Status |
|------|--|-----------|--------|
| 1 | Establish link and set up virtual serial connection | [1] 3.1 | C.1 |
| 2 | Accept link and virtual serial connection establishment | [1] 3.1 | C.2 |
| 3 | Register Service record for application in local SDP database | [1] 3.1 | C.3 |
| 4 | No release in Sniff mode. Sniff mode enabled in the Link Manager | [1] 3.2 | 0 |
| 5 | No release in Hold mode. Hold mode enabled in the Link Manager | [1] 3.2 | 0 |
| 6 | No longer used | N/A | N/A |
| 7 | No release after Master/Slave switch. M/S switch enabled in the Link manager | [1] 2.4 | 0 |

- C.1: Mandatory IF SPP 1/1 "Device A", otherwise Optional.
- C.2: Mandatory IF SPP 1/2 "Device B", otherwise Optional.
- C.3: Mandatory IF SPP 2/1b "SPP as a standalone profile Device B", otherwise Optional.

2.6 Profile and Protocol Dependencies

2.6.1 Service Discovery Protocol

Table 4: SDP Dependencies

Prerequisite: SPP 2/1b "SPP as a standalone profile – Device B"

| Item | Capability | Reference | Status | Inter-Layer Dependency |
|------|--------------------------------|-----------|--------|---------------------------|
| 1 | ServiceClassIDList | [1] 6.1 | М | [2] SDP 9/19 |
| 2 | ProtocolDescriptorList | [1] 6.1 | М | [2] SDP 9/2 |
| 3–4 | No longer used | N/A | N/A | N/A |
| 5 | ServiceName | [1] 6.1 | 0 | [2] SDP 9/9 |
| 6 | BluetoothProfileDescriptorList | [1] 6.1 | М | [2] SDP 9/14 |

Note: If more than one Serial Port Profile Service is available, more than one SerialPort SDP record can be registered.

Table 5: No longer used



3 References

- [1] Serial Port Profile Specification (SPP), Version 1.1 or later
- [2] ICS Proforma for Service Discovery Protocol (SDP), SDP.ICS
- [3] Serial Port Profile Specification (SPP), Version 1.2



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4 Revision history and acknowledgments

Revision History

| Publication Number | Revision Number | Date | Comments |
|-----------------------|--------------------|----------------------------|---|
| 0 | 0.92 | 2002-05-06 | First publication. |
| 1 | 0.93 | 2004-03-01 | First version with recorded revision history |
| | 0.94.0r1 | 2004-12-27 | Format and editorial changes. |
| | 0.94.0 | 2005-01-07 | Incorporated review changes. |
| 2 | 1.1.1 | 2005-03-21 | Corrected document revision number. |
| 3 | 1.2.0 | 2012-07-24 | Add versioning table to accommodate SPP_SPEC_v1.2. |
| | 1.2.1r01 | 2013-09-30 | TSE 5292: Added references to SDP ICS, added item 4/6, updated status for item 4/5, and added C.1 and C.2 for Table 4. |
| | 1.2.1r03 | 2013-11-13 | Updated Copyright information |
| 4 | 1.2.1 | 2013-12-03 | Prepare for Publication |
| | 1.2.2r00 | 2016-11-02 | TSE 8028: No material changes. Follow-up to template conversion only. |
| | 1.2.2r01 | 2016-11-14 | TSE 8096 – Item 3/6 "No release in Park mode. Park mode enabled in the Link Manager" removed as a consequence of the deprecation of the Park feature |
| 5 | 1.2.2 | 2016-12-13 | Approved by BTI. Prepared for TCRL 2016-2 publication. |
| | 1.2.3r00 | 2018-04-05 | TSE 10577 (rating 1): Template Conversion. |
| 6 | 1.2.3 | 2018-07-01 | Approved by BTI. Prepared for TCRL 2018-1 publication. |
| | 1.2.4r00 | 2018-09-20 | Drafted Deprecation/Withdrawal changes |
| 7 | 1.2.4 | 2018-11-21 | Approved by BTI. Prepared for TCRL 2018-2 publication. |
| | 1.2.5r00–r01 | 2019-04-15– 2019-06-19 | TSE 11676 (rating 2): Added ICS 2/1a and 2/1b to declare role support when SPP is supported as a stand-alone profile. |
| 8 | 1.2.5 | 2019-07-28 | Approved by BTI. Prepared for TCRL 2019-1 publication. |
| | p9r00-r01 | 2021-08-10 — 2021-12-03 | TSE 17174 (rating 2): Corrected the deprecation date for SPP v1.1 in Table 0. Corrected Table 3 C.2 conditional. Removed the unneccessary text in Section 1.5 and removed subsections that are not used. Fixed Table 4 conditionals, updated to use Inter-Layer Dependency format, and aligned with the referenced SDP ICS. Removed Table 5 since those ICS items are all M now in LMP and are not referenced in the TCMT. Incorporated template-related editorials and minor consistency checker editorials. Updated copyright page to align with v2 of the DNMD. |



Bluetooth SIG Proprietary Page 8 of 9

| Publication Number | Revision Number | Date | Comments |
|-----------------------|--------------------|----------------------------|---|
| 9 | p9 | 2022-01-25 | Approved by BTI on 2021-12-19. Prepared for TCRL 2021-2 publication. |
| | p10r00-r01 | 2025-03-19 – 2025-05-13 | TSE 27016 (rating 2): Updated the reference column and deleted condition C.1 for Table 0. Updated the status for SPP 0/2. Added Table 0a, Core Configuration Requirements. Separated section headings for Versions and Roles. Updated roles for SPP 1/1, SPP 1/2, SPP 2/1a, and SPP 2/1b. Updated conditions C.1 for Table 1, C.2–C.4 for Table 2, and C.1–C.3 for Table 3. Updated the prerequisite for Table 4. Updated the references list. 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. |
| 10 | p10 | 2025-07-08 | Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication. |

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