Internet Protocol Support Profile (IPSP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

Revision: IPSP.ICS.p2Revision Date: 2023-02-07

Prepared By: Internet Working GroupPublished during TCRL: TCRL.2022-2



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 © 2014–2023 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	Ident	tification of the implementation	4
	1.1	Implementation Under Test (IUT) identification	4
	1.2	Roles and Versions	
	1.3	Transports	
	1.4	Node Role	
	1.4.1	Service Requirements – Node Role	
	1.4.2		
	1.4.3	GATT Requirements – Node Role	6
	1.4.4	GAP Requirements – Node Role	6
	1.4.5	L2CAP Requirements – Node Role	6
	1.5	Router	6
	1.5.1	Service Requirements – Router Role	6
	1.5.2		
	1.5.3	GATT Requirements – Router Role	7
	1.5.4	GAP Requirements – Router Role	7
	1.5.5	L2CAP Requirements – Router Role	7
2	Refe	rences	9
3		sion history and acknowledgments	
•	I V C A I	31011 1113t01 y aliu aukii0wiguyiiigiit3	. U

1 Identification of the implementation

1.1 Implementation Under Test (IUT) identification

Identification of the Implementation Under Test (IUT) is to be filled in to provide as much detail as possible regarding version numbers and configuration options.

An ICS contact person to respond to queries regarding information supplied in this ICS proforma is named in the Declaration of Compliance: Summary of Selected Specifications in Implementation.

1.2 Roles and Versions

Table 0: Major Versions (X.Y)

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

Table 0a: No longer used

Table 1: Role Requirements

Item	Role	Reference	Status
1	Node	[1] 3.1	C.1
2	Router	[1] 3.1	C.1

C.1: Mandatory to support at least one of IPSP 1/1 "Node" OR IPSP 1/2 "Router".

1.3 Transports

Table 2: Transport Requirements

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

C.1: Excluded for this Profile.

1.4 Node Role

1.4.1 Service Requirements – Node Role

Table 3: Service Requirements - Node

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	IP Support Service Declaration	[1] 4.1.1	М	N/A
2	Service UUID	[1] 4.1.3	М	[3] GAP 20a/1

1.4.2 Features – Node Role

Table 4: Features - Node

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status
1	Accept L2CAP Connection Request	[1] 6, 4.2	М



1.4.3 GATT Requirements – Node Role

Table 5: GATT Requirements - Node

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Generic Attribute Profile (GATT) Server	[1] 4	М	[2] GATT 1/2

1.4.4 GAP Requirements – Node Role

Table 6: GAP Requirements - Node

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 3.3	M	[3] GAP 5/3 or GAP 38/3
2	Central	[1] 3.3	0	[3] GAP 5/4 or GAP 38/4
3	LE security mode 1	[1] 7.2	М	[3] GAP 25/1

1.4.5 L2CAP Requirements – Node Role

Table 7: L2CAP Requirements - Node

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	LE Credit Based Flow Control Mode	[1] 4	М	[4] L2CAP 2/46

1.5 Router

1.5.1 Service Requirements – Router Role

Table 8: Service Requirement - Router

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status
1	Discover IPSS Service	[1] 5	М



1.5.2 Features – Router Role

Table 9: L2CAP Requirements - Router

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status
1	Initiate L2CAP Connection	[1] 6, 5.1	М
2	Reject L2CAP Connection Request	[1] 6	М

1.5.3 GATT Requirements – Router Role

Table 10: GATT Requirements - Router

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Generic Attribute Profile (GATT) Client	[1] 5	M	[2] GATT 1/1
2	Discover All Primary Services	[1] 5	C.1	[2] GATT 3/2
3	Discover Primary Services by Service UUID	[1] 5	C.1	[2] GATT 3/3

C.1: Mandatory to support at least one of IPSP 10/2 "Discover All Primary Services" OR IPSP 10/3 "Discover Primary Services by Service UUID".

1.5.4 GAP Requirements – Router Role

Table 11: GAP Requirements - Router

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 3.3	0	[3] GAP 5/3 or GAP 38/3
2	Central	[1] 3.3	M	[3] GAP 5/4 or GAP 38/4
3	LE security mode 1	[1] 7.2	М	[3] GAP 35/1

1.5.5 L2CAP Requirements – Router Role

Table 12: L2CAP Requirements – Router

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	LE Credit Based Flow Control Mode	[1] 5	M	[4] L2CAP 2/46



Table 13: No longer used

2 References

- [1] Internet Protocol Support Profile, Version 1.0
- [2] ICS Proforma for Generic Attribute Profile (GATT)
- [3] ICS Proforma for Generic Access Profile (GAP)
- [4] ICS Proforma for Logical Link Control and Adaptation Protocol (L2CAP)

3 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2014-12-22	Prepared for publication
	1.0.1r00	2017-10-08	TSE 9951 (rating 1): Update ICS template. Remove the Global Statement of Conformance section in accordance with the current template.
1	1.0.1	2018-06-27	Approved by BTI. Prepared for TCRL 2018-1 publication.
	p2r00–r02	2022-10-26 – 2022-11-17	TSE 20348 (rating 3): Updated to align with current ICS conventions/template. Removed Support columns. In Table 0, updated the table title, reference, and version title. Deleted Tables 0a and 13 because they are no longer used. In Table 1, updated the table title, references, and C.1. In Table 2, updated references and added Item 2 and C.1. In Table 3, 5, 10, and 11, updated the prerequisite, capabilities, and references; added an ILD column. In Tables 4, 8, and 9, updated the prerequisite and references. In Table 6, updated the prerequisite and references and added an ILD column and Item 3. In Tables 7, 10, and 12 updated the prerequisite and references and added an ILD column. In Table 10, also updated C.1. Updated the references list. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.1 as p1. Performed additional template-related formatting fixes. Replaced the Bluetooth logo in the footer and updated the copyright page to align with v2 of the DNMD.
2	p2	2023-02-07	Approved by BTI on 2022-12-28. Prepared for TCRL 2022-2 publication.

Acknowledgments

Name	Company	
Joe Decuir	CSR	
Frank Berntsen	Nordic Semiconductor	
Krishna Shingala	Nordic Semiconductor	