Link Manager Protocol (LMP)

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

- **Revision:** LMP.ICS.p43
- **Revision Date:** 2026-11-03
- **Prepared By:** BTI
- **Published during TCRL:** TCRL.pkg105

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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 Capability Statement

2.1.1 General Response Messages

Table 1: Response Messages

Item	Capability	Reference	Status
1	Accept message	[1] 2.7	M
2	Reject message	[1] 2.7	M

2.1.2 Supported Features (General Statement)

Table 2: Supported Features

Item	Capability	Reference	Status	Inter-Layer Dependency
1	3-slot packets	[1] 3.3, 4.1.10	O	N/A
2	5-slot packets	[1] 3.3, 4.1.10	O	N/A
3	Encryption	[1] 3.3, 4.2.5	M	N/A
4	Slot offset	[1] 3.3, 4.4.1	O	N/A
5	Timing accuracy	[1] 3.3, 4.3.1	O	N/A
6	Role switch	[1] 3.3, 4.4.2 [3] 8.6.5	C.5	N/A
7	Hold mode	[1] 3.3, 4.5.1	O	N/A
8	Sniff mode	[1] 3.3, 4.5.3	O	[6] BB 17/2
9	No longer used	N/A	N/A	N/A
10	Power Control	[1] 3.3, 4.1.3 [2] 5.1	O	N/A
11	Channel quality driven data rate	[1] 3.3, 4.1.7	O	N/A
12	SCO link	[1] 3.3, 4.6.1 [3] 4.3, 6.5.2.1, 6.5.2.4	O	N/A
13	RSSI with inquiry results	[1] 3.3 [3] 8.4.2	O	N/A
13a	Power Control Requests	[1] 3.3, 4.1.3	O	N/A
14	Broadcast encryption	[1] 3.3, 4.2.4, 4.2.6	C.18	N/A
15	eSCO link	[1] 3.3, 4.6.2 [3] 5.5, 6.5.3.1	O	N/A
16	No longer used	N/A	N/A	N/A
17	Enhanced Data Rate ACL (2 Mb/s mode)	[1] 3.3 [3] 6.5.4	O	N/A
17a	Enhanced Data Rate ACL (3 Mb/s mode)	[1] 3.3 [3] 6.5.4	C.19	N/A
18	Enhanced Data Rate eSCO (2 Mb/s mode)	[1] 3.3 [3] 6.5.3	O	N/A

Item	Capability	Reference	Status	Inter-Layer Dependency
18a	Enhanced Data Rate eSCO (3 Mb/s mode)	[1] 3.3 [3] 6.5.3	C.20	N/A
19	No longer used	N/A	N/A	N/A
19a	Simple Pairing Updates	[4] [5] 3.3, 4.2.7.4	M	N/A
19b	Secure Simple Pairing (Controller Support)	[1] 3.3, 4.2.7	C.22	N/A
20	Enhanced Power Control	[1] 3.3, 4.1.3.1	C.6	N/A
21	No longer used	N/A	N/A	N/A
22	LE Supported (Controller)	[1] 3.3	C.4	N/A
23	LE and BR/EDR to same device capable (Controller)	[1] 3.3	C.12	N/A
24–25	No longer used	N/A	N/A	N/A
26	Secure Connections	[1] 3.3, 4.2.7	C.23	[8] SEC 1/3
26a	No longer used	N/A	N/A	N/A
27	Ping	[1] 3.3, 4.1.13	C.10	N/A
28	Coarse Clock Adjustment	[1] 3.3, 4.1.14	C.15	N/A
29	Slot Availability Mask	[1] 3.3, 4.1.15	O	N/A
30	Paging Parameter Negotiation	[1] 3.3, 4.1.9	O	N/A

C.1–C.3: No longer used.

C.4: Mandatory IF CORE 10/12 “Link Layer (LL)”, otherwise Excluded.

C.5: Optional IF LMP 2/4 “Slot offset”, otherwise Excluded.

C.6: Optional IF LMP 2/10 “Power Control” AND LMP 2/13a “Power Control Requests”, otherwise Excluded.

C.7–C.9: No longer used.

C.10: Mandatory IF LMP 2/26 “Secure Connections”, otherwise Optional.

C.11: No longer used.

C.12: Optional IF LMP 2/22 “LE Supported (Controller)”, otherwise Excluded.

C.13–C.14: No longer used.

C.15: Optional IF LMP 26/1 “AFH capable Central” AND LMP 26/2 “AFH capable Peripheral” AND LMP 2a/130 “Synchronization Train” AND LMP 2a/131 “Synchronization Scan” AND NOT LMP 2/14 “Broadcast encryption”, otherwise Excluded.

C.16–C.17: No longer used.

C.18: Excluded IF LMP 2/28 “Coarse Clock Adjustment”, otherwise Optional IF LMP 2/3 “Encryption”, otherwise Excluded.

C.19: Optional IF LMP 2/17 “Enhanced Data Rate ACL (2 Mb/s mode)”, otherwise Excluded.

C.20: Optional IF LMP 2/18 “Enhanced Data Rate eSCO (2 Mb/s mode)”, otherwise Excluded.

C.21: No longer used.

C.22: Mandatory IF LMP 2/3 “Encryption”, otherwise Excluded.

C.23: (Reverse ILD) Mandatory IF SEC 1/3 “Secure Connections”, otherwise Excluded.

Table 2a: Additional Features

Item	Capability	Reference	Status
12	HV2 packets	[1] 3.3 [3] 6.5.2.2	C.12
13	HV3 packets	[1] 3.3 [3] 6.5.2.3	C.12
14	μ-law log synchronous data	[1] 3.3 [3] 9.1	C.14
15	A-law log synchronous data	[1] 3.3 [3] 9.1	C.14
16	CVSD synchronous data	[1] 3.3 [3] 9.2	C.14
19	Transparent synchronous data	[1] 3.3 [3] 6.4.3	C.14
28	Interlaced inquiry scan	[1] 3.3 [3] 8.4.1	O
29	Interlaced page scan	[1] 3.3 [3] 8.3.1	O
32	EV4 packets	[1] 3.3 [3] 6.5.3.2	C.32
33	EV5 packets	[1] 3.3 [3] 6.5.3.3	C.32
39	3-slot Enhanced Data Rate ACL packets	[1] 3.3 [3] 4.1.10	C.39
40	5-slot Enhanced Data Rate ACL packets	[1] 3.3 [3] 4.1.10	C.39
47	3-slot Enhanced Data Rate eSCO packets	[1] 3.3 [3] 4.1.10	C.47
48	Extended Inquiry Response	[1] 3.3	C.48
52	Encapsulated PDU	[1] 3.3, 4.1.12.1	M
53	Erroneous Data Reporting	[1] 3.3	C.53
53a	HCI Write Default Erroneous Data Reporting command	[7] 7.3.65	O
54	Non-flushable Packet Boundary Flag	[1] 3.3	O
56	Link Supervision Timeout Changed event	[1] 3.3	C.56
56a	HCI Link Supervision Timeout Changed event	[7] 7.7.46	O
57	Variable Inquiry TX Power Level	[1] 3.3	O
128	Connectionless Peripheral Broadcast - Central Operation	[1] 3.3	C.128
129	Connectionless Peripheral Broadcast - Peripheral Operation	[1] 3.3	C.129
130	Synchronization Train	[1] 3.3	O
131	Synchronization Scan	[1] 3.3	O
132	Inquiry Response Notification event	[1] 3.3	C.132

Item	Capability	Reference	Status
132a	HCI Inquiry Response Notification event	[7] 7.7.74	O
133	Generalized interlaced scan	[1] 3.3 [3] 8.3.1, 8.4.1	C.133
139	Train nudging	[1] 3.3 [3] 8.3.2, 8.4.1	O

C.12: Optional IF LMP 2/12 “SCO link”, otherwise Excluded.

C.14: Optional IF LMP 2/12 “SCO link” OR LMP 2/15 “eSCO link”, otherwise Excluded.

C.32: Optional IF LMP 2/15 “eSCO link”, otherwise Excluded.

C.39: Optional IF LMP 2/17 “Enhanced Data Rate ACL (2 Mb/s mode)”, otherwise Excluded.

C.47: Optional IF LMP 2/18 “Enhanced Data Rate eSCO (2 Mb/s mode)”, otherwise Excluded.

C.48: Optional IF LMP 2/13 “RSSI with inquiry results”, otherwise Excluded.

C.53: Mandatory IF (LMP 2/12 “SCO link” OR LMP 2/15 “eSCO link”) AND LMP 2a/53a “HCI Write Default Erroneous Data Reporting command”, otherwise Excluded.

C.56: Mandatory IF LMP 2a/56a “HCI Link Supervision Timeout Changed event”, otherwise Excluded.

C.128: Optional IF LMP 2a/130 “Synchronization Train”, otherwise Excluded.

C.129: Optional IF LMP 2a/131 “Synchronization Scan”, otherwise Excluded.

C.132: Mandatory IF LMP 2a/132a “HCI Inquiry Response Notification event”, otherwise Excluded.

C.133: Optional IF (LMP 2a/28 “Interlaced inquiry scan” OR LMP 2a/29 “Interlaced page scan”), otherwise Excluded.

Table 2b: EDR Features

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Enhanced Data Rate ACL links	[2] 3.2	C.1, C.4	[6] BB 2/4
2	Enhanced Data Rate ACL links (multi-slot)	[2] 3.2	C.2, C.4	[6] BB 2/4a
3	Enhanced Data Rate eSCO links	[2] 3.2	C.3, C.4	[6] BB 2/5

C.1: Mandatory IF LMP 2/17 “Enhanced Data Rate ACL (2 Mb/s mode)”, otherwise not defined.

C.2: Mandatory IF LMP 2a/39 “3-slot Enhanced Data Rate ACL packets”, otherwise not defined.

C.3: Mandatory IF LMP 2/18 “Enhanced Data Rate eSCO (2 Mb/s mode)”, otherwise not defined.

C.4: Mandatory to support at least one IF CORE 30/4 “HS Core-Controller Configuration” OR CORE 30/5 “HS/LE Core-Controller Configuration” OR CORE 32/4 “HS Core-Complete Configuration” OR CORE 32/5 “HS/LE Core-Complete Configuration”, otherwise Optional.

2.1.3 Authentication

Table 3: Authentication

Item	Capability	Reference	Status
1	Initiate authentication before connection completed	[1] 4.2.1	M
2	Initiate authentication after connection completed	[1] 4.2.1	M
3	Respond to authentication request	[1] 4.2.1	M

2.1.4 Pairing

Table 4: Pairing

Item	Capability	Reference	Status
1	Initiate pairing before connection completed	[1] 4.2.2	M
2	Initiate pairing after connection completed	[1] 4.2.2	M
3	Respond to pairing request	[1] 4.2.2.1, 4.2.2.3	M
4	Use fixed PIN and request responder to initiator switch	[1] 4.2.2.2	C.1
5	Use variable PIN	[1] 4.2.2.2	C.1
6	Accept initiator to responder switch	[1] 4.2.2.2	C.2
7	Host can change Controller IO Capabilities	[1] 4.2.7.3.4	C.3

C.1: Mandatory to support at least one.

C.2: Mandatory IF LMP 4/5 “Use variable PIN” AND (LMP 4/1 “Initiate pairing before connection completed” OR LMP 4/2 “Initiate pairing after connection completed”), otherwise Optional.

C.3: Optional IF LMP 2/19b “Secure Simple Pairing (Controller Support)”, otherwise Excluded.

2.1.5 Link Keys

Table 5: Link Keys

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Creation of link key - Combination Key	[1] 4.2.2.4	M
3	Initiate change of link key	[1] 4.2.3	O
4	Accept change of link key	[1] 4.2.3	M
5–7	No longer used	N/A	N/A
8	Support for 7 bytes or longer encryption key size	[1] 4.2.5.2	M

2.1.6 Encryption

Table 6: Encryption

Item	Capability	Reference	Status
1	Initiate encryption	[1] 4.2.5.1	M
2	Accept encryption requests	[1] 4.2.5.1	M
3–4	No longer used	N/A	N/A
5	Key size negotiation	[1] 4.2.5.2	M
6	Start encryption, as Central	[1] 4.2.5.3	M
7	Accept start of encryption	[1] 4.2.5.3	M
8	Stop encryption, as Central	[1] 4.2.5.4	M
9	Accept stop of encryption	[1] 4.2.5.4	M

Item	Capability	Reference	Status
10	Encryption Pause/Resume	[1] 4.2.5.5, 4.2.5.6	M
11	AES CCM Encryption	[1] 4.2.5	C.3

C.1–C.2: No longer used.

C.3: Mandatory IF LMP 2/26 “Secure Connections”, otherwise Excluded.

2.1.7 Information Requests

Table 7: Clock Offset Information

Item	Capability	Reference	Status
1	Request clock offset information	[1] 4.3.2	M
2	Respond to clock offset requests	[1] 4.3.2	M

Table 8: Slot Offset Information

Prerequisite: LMP 2/4 “Slot offset”

Item	Capability	Reference	Status
1	Send slot offset information	[1] 4.4.1	C.1

C.1: Mandatory IF LMP 13/1 “Request role switch”, otherwise Optional.

Table 9: Timing Accuracy Information

Prerequisite: LMP 2/5 “Timing accuracy”

Item	Capability	Reference	Status
1	Request timing accuracy information	[1] 4.3.1	O
2	Respond to timing accuracy information requests	[1] 4.3.1	M

Table 10: LM Version Information

Item	Capability	Reference	Status
1	Request LM version information	[1] 4.3.3	O
2	Respond to LM version information requests	[1] 4.3.3	M

Table 11: Feature Support

Item	Capability	Reference	Status
1	Request supported features	[1] 4.3.4	M
2	Respond to supported features requests	[1] 4.3.4	M
3	Request extended features mask	[1] 4.3.4	C.2
4	Respond to extended features request	[1] 4.3.4	C.2

C.1: No longer used.

C.2: Mandatory IF LMP 2a/128 “Connectionless Peripheral Broadcast - Central Operation” OR LMP 2a/129 “Connectionless Peripheral Broadcast - Peripheral Operation” OR LMP 2a/130

"Synchronization Train" OR LMP 2a/131 "Synchronization Scan" OR LMP 2a/132 "Inquiry Response Notification event" OR LMP 2a/133 "Generalized interlaced scan" OR LMP 2/28 "Coarse Clock Adjustment" OR LMP 2/26 "Secure Connections" OR LMP 2/27 "Ping" OR LMP 2/29 "Slot Availability Mask" OR LMP 2a/139 "Train nudging", otherwise Optional. Note: Mandatory IF a feature requiring another features page (a feature with an LMP feature number greater than 63 in Table 3.1: Mapping of LMP Feature Bits to ICS Items), other than Host features, is supported, otherwise Optional.

Table 12: Name Information

Item	Capability	Reference	Status
1	Request name information	[1] 4.3.5	M
2	Respond to name requests	[1] 4.3.5	M

2.1.8 Link Handling

Table 13: Role Switch

Prerequisite: LMP 2/6 "Role switch"

Item	Capability	Reference	Status
1	Request role switch	[1] 4.4.2	O
2	Accept role switch requests	[1] 4.4.2	M

Table 14: Detach

Item	Capability	Reference	Status
1	Detach connection	[1] 4.1.2	M

Table 14a: Setting up and Removing Enhanced Date Rate ACL Connection

Item	Capability	Reference	Status
1	Enter Enhanced Data Rate	[1] 4.1.11	C.1
2	Exit Enhanced Data Rate	[1] 4.1.11	C.1

C.1: Mandatory IF LMP 2/17 "Enhanced Data Rate ACL (2 Mb/s mode)", otherwise Excluded.

Table 14b: Setting up and Removing Enhanced Data Rate eSCO Connection

Item	Capability	Reference	Status
1	Enter and exit eSCO using Enhanced Data Rate Packets	[1] 4.6.2	C.1

C.1: Mandatory IF LMP 2/18 "Enhanced Data Rate eSCO (2 Mb/s mode)", otherwise Excluded.

Table 15: Hold Mode

Prerequisite: LMP 2/7 "Hold mode"

Item	Capability	Reference	Status
1	Force hold mode	[1] 4.5.1, 4.5.1.2	O
2	Request hold mode	[1] 4.5.1, 4.5.1.3	C.1
3	Respond to hold mode requests	[1] 4.5.1, 4.5.1.3	M
4	Accept forced hold mode	[1] 4.5.1, 4.5.1.2	M

C.1: Mandatory IF LMP 15/1 "Force hold mode", otherwise Optional.

Table 16: Sniff Mode

Prerequisite: LMP 2/8 "Sniff mode"

Item	Capability	Reference	Status
1	No longer used	N/A	N/A
2	Request sniff mode	[1] 4.5.3, 4.5.3.2	O
3	Respond to sniff mode requests (renegotiate or reject)	[1] 4.5.3.2	M
4	No longer used	N/A	N/A
5	Request un-sniff	[1] 4.5.3.2	C.1
6	Accept un-sniff requests	[1] 4.5.3.2	M
7	Sniff Subrating Mode	[1] 4.5.3.2	M

C.1: Mandatory IF LMP 16/2 "Request sniff mode", otherwise Optional.

Table 17: No longer used

Table 18: Power Control

Item	Capability	Reference	Status
1	Request to Increase Power	[1] 4.1.3	C.1
2	Request to Decrease Power	[1] 4.1.3	C.1
3	Respond when max power reached	[1] 4.1.3	C.2
4	Respond when min power reached	[1] 4.1.3	C.2
5	Request to increment power a single step	[1] 4.1.3.1.1	C.3
6	Request to decrease power a single step	[1] 4.1.3.1.1	C.3
7	Request to go to max power	[1] 4.1.3.1.1	C.3
8	Respond to increment power a single step	[1] 4.1.3.1.2	C.3
9	Respond to decrease power a single step	[1] 4.1.3.1.2	C.3
10	Respond to go to max power	[1] 4.1.3.1.2	C.3

C.1: Mandatory IF LMP 2/13a "Power Control Requests", otherwise Excluded.

C.2: Mandatory IF LMP 2/10 "Power Control", otherwise Excluded.

C.3: Mandatory IF LMP 2/20 "Enhanced Power Control", otherwise Excluded.

Table 19: Link Supervision Timeout

Item	Capability	Reference	Status
1	Set link supervision timeout value	[1] 4.1.6	O
2	Accept link supervision timeout setting	[1] 4.1.6	M

2.1.9 Quality of Service

Table 20: Quality of Service

Item	Capability	Reference	Status
1	Channel quality driven change between DM and DH packet types	[1] 4.1.7	C.1
2	Force/Request change of Quality of Service	[1] 4.1.8, 4.1.8.1	M
3	Request change of Quality of Service	[1] 4.1.8, 4.1.8.2	M

C.1: Mandatory IF LMP 2/11 “Channel quality driven data rate”, otherwise Optional.

Table 21: No longer used

2.1.10 Multi-Slot Packets

Table 22: Multi-Slot Packets

Item	Capability	Reference	Status
1	Accept maximum allowed number of slots to be used	[1] 4.1.10	C.1
2	Request maximum number of slots to be used	[1] 4.1.10	C.1
3	Accept request of maximum number of slots to be used	[1] 4.1.10	C.1

C.1: Mandatory IF LMP 2/1 “3-slot packets” OR LMP 2/2 “5-slot packets”, otherwise Optional.

2.1.11 Paging Scheme

Table 23: Paging Scheme

Prerequisite: LMP 2/30 “Paging Parameter Negotiation”

Item	Capability	Reference	Status
1	Request page mode to use	[1] 4.1.9, 4.1.9.1	M
2	Accept suggested page mode	[1] 4.1.9, 4.1.9.1	M
3	Request page scan mode to use	[1] 4.1.9, 4.1.9.2	M
4	Accept suggested page scan mode	[1] 4.1.9, 4.1.9.2	M

2.1.12 Connection Establishment

Table 24: Connection Establishment

Item	Capability	Reference	Status
1	Create connection for higher layers	[1] 4.1.1	M
2	Respond to requests to establish connections for higher layers	[1] 4.1.1	M
3	Indicate that link set-up is completed	[1] 4.1.1	M

2.1.13 Test Mode

Table 25: Test Mode

Item	Capability	Reference	Status
1	Activate test mode	[1] 4.7.1	O
2	Ability to reject activation of test mode if test mode is disabled	[1] 4.7.1	M
3	Control test mode	[1] 4.7.2	O
4	Ability to reject test mode control commands if test mode is disabled	[1] 4.7.2	M

2.1.14 Adaptive Frequency Hopping

Table 26: Adaptive Frequency Hopping

Item	Capability	Reference	Status
1	AFH capable Central	[1] 4.1.4	O
2	AFH capable Peripheral	[1] 4.1.4	O
3	No longer used	N/A	N/A
4	AFH classification Peripheral	[1] 4.1.5	C.2
4a	AFH classification Central	[1] 4.1.5	C.4
5–6	No longer used	N/A	N/A

C.1: No longer used.

C.2: Optional IF LMP 26/2 “AFH capable Peripheral”, otherwise Excluded.

C.3: No longer used.

C.4: Optional IF LMP 26/1 “AFH capable Central”, otherwise Excluded.

2.1.15 Ping

Table 27: Ping

Prerequisite: LMP 2/27 “Ping”

Item	Capability	Reference	Status
1	Initiate LMP Ping	[1] 4.1.13	O
2	Respond to LMP Ping	[1] 4.1.13	M

2.1.16 Piconet Clock Adjust

Table 28: Coarse Clock Adjustment

Prerequisite: LMP 2/28 "Coarse Clock Adjustment"

Item	Capability	Reference	Status
1	Receive Request for Coarse Clock Adjustment	[1] 4.1.14.1	O
2	Send Request for Coarse Clock Adjustment	[1] 4.1.14.1	O

2.1.17 Slot Availability Mask

Table 29: Slot Availability Mask

Prerequisite: LMP 2/29 "Slot Availability Mask"

Item	Capability	Reference	Status
1	Initiate SAM negotiations	[1] 4.1.15	O
2	Respond to SAM negotiations	[1] 4.1.15	M

2.1.18 Inter-layer Requirements

Table 30: BB Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
0a	DM3 packet type	[3] 6.5.4.3	C.0	[6] BB 5/2
0b	DH3 packet type	[3] 6.5.4.4	C.0	[6] BB 5/3
1a	DM5 packet type	[3] 6.5.4.5	C.1	[6] BB 5/4
1b	DH5 packet type	[3] 6.5.4.6	C.1	[6] BB 5/5
11	SCO link	[3] 4.5.1.2, 8.6.2	C.11	[6] BB 2/2
12	HV2 packet type	[3] 6.5.2.2	C.12	[6] BB 6/2
13	HV3 packet type	[3] 6.5.2.3	C.13	[6] BB 6/3
14	μ-law	[3] 9.1	C.14	[6] BB 13/2
15	A-law	[3] 9.1	C.15	[6] BB 13/1
16	CVSD	[3] 9.2	C.16	[6] BB 13/3
19	Transparent Synchronous Data	[3] 6.4.3	C.19	[6] BB 13/4
25	2-DH1 packet type	[3] 6.5.4.8	C.25	[6] BB 5a/1
26	3-DH1 packet type	[3] 6.5.4.11	C.26	[6] BB 5a/4
28	Interlaced Scan during Inquiry Scan	[3] 8.4.1	C.28	[6] BB 10/6
29	Interlaced Scan during Page Scan	[3] 8.3.1	C.29	[6] BB 7/5
31	eSCO link	[3] 4.5.1.4, 8.6.3	C.31	[6] BB 2/3
32	EV4 packet type	[3] 6.5.3.2	C.32	[6] BB 6/6
33	EV5 packet type	[3] 6.5.3.3	C.33	[6] BB 6/7
39	2-DH3 packet type	[3] 6.5.4.9	C.39	[6] BB 5a/2
40	2-DH5 packet type	[3] 6.5.4.13	C.40	[6] BB 5a/3

Item	Capability	Reference	Status	Inter-Layer Dependency
45	2-EV3 packet type	[3] 6.5.3.4	C.45	[6] BB 6a/1
46	3-EV3 packet type	[3] 6.5.3.6	C.46	[6] BB 6a/3
47a	2-EV5 packet type	[3] 6.5.3.5	C.47	[6] BB 6a/2
47b	3-EV5 packet type	[3] 6.5.3.7	C.47	[6] BB 6a/4
48	Extended Inquiry Response	[3] 8.4.3	C.48	[6] BB 10/7
54	Non-flushable Packet Boundary Flag	[3] 7.6.3	C.54	[6] BB 16/1
128	Connectionless Peripheral Broadcast Transmitter	[3] 8.10.1	C.128	[6] BB 3a/1
129	Connectionless Peripheral Broadcast Receiver	[3] 8.10.2	C.129	[6] BB 3a/2
130	Synchronization Train	[3] 8.3.5	C.130	[6] BB 9c/1
131	Synchronization Scan	[3] 8.3.4	C.131	[6] BB 9c/2
133a	Generalized Interlaced Page Scan	[3] 8.3.1	C.133	[6] BB 7/9
133b	Generalized Interlaced Inquiry Scan	[3] 8.4.1	C.133	[6] BB 10/9
134	Coarse Clock Adjustment	[3] 8.6.10.1	C.134	[6] BB 18/1
138	Slot Availability Mask	[3] 8.6.11	C.138	[6] BB 19/1
139a	Train Nudging During Page	[3] 8.3.2	C.139	[6] BB 7/8
139b	Train Nudging During Inquiry	[3] 8.4.2	C.139	[6] BB 10/8

C.0: Mandatory IF LMP 2/1 “3-slot packets”, otherwise not defined.

C.1: Mandatory IF LMP 2/2 “5-slot packets”, otherwise not defined.

C.11: Mandatory IF LMP 2/12 “SCO link”, otherwise not defined.

C.12: Mandatory IF LMP 2a/12 “HV2 packets”, otherwise not defined.

C.13: Mandatory IF LMP 2a/13 “HV3 packets”, otherwise not defined.

C.14: Mandatory IF LMP 2a/14 “μ-law log synchronous data”, otherwise not defined.

C.15: Mandatory IF LMP 2a/15 “A-law log synchronous data”, otherwise not defined.

C.16: Mandatory IF LMP 2a/16 “CVSD synchronous data”, otherwise not defined.

C.19: Mandatory IF LMP 2a/19 “Transparent synchronous data”, otherwise not defined.

C.25: Mandatory IF LMP 2/17 “Enhanced Data Rate ACL (2 Mb/s mode)”, otherwise not defined.

C.26: Mandatory IF LMP 2/17a “Enhanced Data Rate ACL (3 Mb/s mode)”, otherwise not defined.

C.28: Mandatory IF LMP 2a/28 “Interlaced inquiry scan”, otherwise not defined.

C.29: Mandatory IF LMP 2a/29 “Interlaced page scan”, otherwise not defined.

C.31: Mandatory IF LMP 2/15 “eSCO link”, otherwise not defined.

C.32: Mandatory IF LMP 2a/32 “EV4 packets”, otherwise not defined.

C.33: Mandatory IF LMP 2a/33 “EV5 packets”, otherwise not defined.

C.39: Mandatory IF LMP 2a/39 “3-slot Enhanced Data Rate ACL packets”, otherwise not defined.

C.40: Mandatory IF LMP 2a/40 “5-slot Enhanced Data Rate ACL packets”, otherwise not defined.

C.45: Mandatory IF LMP 2/18 “Enhanced Data Rate eSCO (2 Mb/s mode)”, otherwise not defined.

C.46: Mandatory IF LMP 2/18a “Enhanced Data Rate eSCO (3 Mb/s mode)”, otherwise not defined.

C.47: Mandatory to support at least one IF LMP 2a/47 “3-slot Enhanced Data Rate eSCO packets”, otherwise not defined.

C.48: Mandatory IF LMP 2a/48 “Extended Inquiry Response”, otherwise not defined.

C.54: Mandatory IF LMP 2a/54 “Non-flushable Packet Boundary Flag”, otherwise not defined.

C.128: Mandatory IF LMP 2a/128 “Connectionless Peripheral Broadcast - Central Operation”, otherwise not defined.

C.129: Mandatory IF LMP 2a/129 “Connectionless Peripheral Broadcast - Peripheral Operation”, otherwise not defined.

C.130: Mandatory IF LMP 2a/130 “Synchronization Train”, otherwise not defined.

C.131: Mandatory IF LMP 2a/131 “Synchronization Scan”, otherwise not defined.

C.133: Mandatory to support at least one IF LMP 2a/133 “Generalized interlaced scan”, otherwise not defined.

C.134: Mandatory IF LMP 2/28 “Coarse Clock Adjustment”, otherwise not defined.

C.138: Mandatory IF LMP 2/29 “Slot Availability Mask”, otherwise not defined.

C.139: Mandatory to support at least one IF LMP 2a/139 “Train nudging”, otherwise not defined.

3 References

[1] Bluetooth Core Specification, Volume 2, Part C, Link Manager Protocol (LMP)

[2] Bluetooth Core Specification, Volume 2, Part A, Radio Physical Layer (RFPHY)

[3] Bluetooth Core Specification, Volume 2, Part B, Baseband (BB)

[4] Erratum 10734: Pairing Updates

[5] Bluetooth Core Specification, Version 5.1 or later, Volume 2, Part C, Link Manager Protocol (LMP)

[6] ICS Proforma for Baseband (BB)

[7] Bluetooth Core Specification, Volume 4, Part E, Host Controller Interface (HCI)

[8] ICS Proforma for BR/EDR Security (SEC)

4 Bridge mapping (informational)

Bridge mapping provides a logical mapping for ICS items defined in the latest TCRL release to one or more ICS items present in an older TCRL release. The bridge mapping logic can change depending on the old TCRL release. An implementation qualified under an older TCRL release will use the bridge mapping logic to indicate support for an ICS item that is missing from the old TCRL release when upgrading to a new TCRL release. Using bridge mapping when upgrading a design to a new TCRL release should prevent unnecessary consistency check errors.

Table 4.1 provides a bridge mapping example for GAP 7/3a (from the GAP ICS as defined in TCRL pkg103). Depending on the TCRL of the old design, the following apply:

- GAP 7/3a was introduced in TCRL pkg103. Therefore, bridge mapping is not applicable for designs qualified on TCRL pkg103 or newer TCRL releases.
- For old designs qualified before TCRL pkg103, but not before TCRL 2019-2, support for GAP 7/3a in the upgraded design is determined by the support of LL 9/33 in the old design and by whether GAP itself was selected in the original design. The addition of GAP into the bridge mapping logic prevents the GAP layer from being added to the old design in the event that it did not exist before (e.g., in the case of a Core-Controller design), unless it is intended (e.g., automatically adding SEC or LESEC to an older design from before Core v6.0).
- For old designs qualified before TCRL 2019-2, GAP 7/3a is not supported in the upgraded design.

ICS Item	Description	Bridge Mapping Logic	TCRL Information
GAP 7/3a	Isochronous Broadcaster	Not applicable	≥ TCRL pkg103
		GAP AND LL 9/33	< TCRL pkg103
		Not supported	< TCRL 2019-2 (Core v5.2)

Table 4.1: Bridge mapping (Example)

Bridge mapping for this layer is provided in Table 4.2:

ICS Item	Description	Bridge Mapping Logic	TCRL Information
LMP 2b/1	EDR for asynchronous transports (single slot)	Not applicable	≥ TCRL 2024-1
		LMP AND SUM ICS 22/1	≤ TCRL 2023-1
LMP 2b/2	EDR for asynchronous transports (multi-slot)	Not applicable	≥ TCRL 2024-1
		LMP AND SUM ICS 22/2	≤ TCRL 2023-1
LMP 2b/3	EDR for synchronous transports (Core v3.0 or later)	Not applicable	≥ TCRL 2024-1
		LMP AND SUM ICS 22/4	≤ TCRL 2023-1
LMP 2a/53a	HCI Write Default Erroneous Data Reporting command	Not applicable	≥ TCRL pkg103
		LMP AND HCI 9/8	≤ TCRL pkg102
LMP 2a/56a	HCI Link Supervision Timeout Changed event	Not applicable	≥ TCRL pkg103
		LMP AND HCI 13/7	≤ TCRL pkg102

ICS Item	Description	Bridge Mapping Logic	TCRL Information
LMP 2a/132a	HCI Inquiry Response Notification event	Not applicable	≥ TCRL pkg103
		LMP AND HCI 6/23	≤ TCRL pkg102

Table 4.2: Bridge mapping (informational)

5 Mapping of LMP feature bits to ICS items

This section is informative.

Not all LMP features have corresponding ICS items.

Feature	LMP Bit	ICS Item
3 slot packets	0	LMP 2/1
5 slot packets	1	LMP 2/2
Encryption	2	LMP 2/3
Slot offset	3	LMP 2/4
Timing accuracy	4	LMP 2/5
Role switch	5	LMP 2/6
Hold mode	6	LMP 2/7
Sniff mode	7	LMP 2/8
No longer used	8	N/A
Power control requests	9	LMP 2/13a
Channel quality driven data rate (CQDDR)	10	LMP 2/11
SCO link	11	LMP 2/12
HV2 packets	12	LMP 2a/12
HV3 packets	13	LMP 2a/13
μ-law log synchronous data	14	LMP 2a/14
A-law log synchronous data	15	LMP 2a/15
CVSD synchronous data	16	LMP 2a/16
Paging parameter negotiation	17	LMP 2/30
Power control	18	LMP 2/10
Transparent synchronous data	19	LMP 2a/19
Flow control lag (least significant bit)	20	See below
Flow control lag (middle bit)	21	See below
Flow control lag (most significant bit)	22	See below
Broadcast Encryption	23	LMP 2/14
Enhanced Data Rate ACL 2 Mb/s mode	25	LMP 2/17
Enhanced Data Rate ACL 3 Mb/s mode	26	LMP 2/17a
Enhanced inquiry scan	27	See below
Interlaced inquiry scan	28	LMP 2a/28
Interlaced page scan	29	LMP 2a/29
RSSI with inquiry results	30	LMP 2/13
Extended SCO link (EV3 packets)	31	LMP 2/15
EV4 packets	32	LMP 2a/32
EV5 packets	33	LMP 2a/33
AFH capable Peripheral	35	LMP 26/2
AFH classification Peripheral	36	LMP 26/4
No longer used	37	N/A

Feature	LMP Bit	ICS Item
LE Supported (Controller)	38	LMP 2/22
3-slot Enhanced Data Rate ACL packets	39	LMP 2a/39
5-slot Enhanced Data Rate ACL packets	40	LMP 2a/40
Sniff subrating	41	LMP 16/7
Pause encryption	42	LMP 6/10
AFH capable Central	43	LMP 26/1
AFH classification Central	44	LMP 26/4a
Enhanced Data Rate eSCO 2 Mb/s mode	45	LMP 2/18
Enhanced Data Rate eSCO 3 Mb/s mode	46	LMP 2/18a
3-slot Enhanced Data Rate eSCO packets	47	LMP 2a/47
Extended Inquiry Response	48	LMP 2a/48
Simultaneous LE and BR/EDR to Same Device Capable (Controller)	49	LMP 2/23
Secure Simple Pairing (Controller Support)	51	LMP 2/19b
Encapsulated PDU	52	LMP 2a/52
Erroneous Data Reporting	53	LMP 2a/53
Non-flushable Packet Boundary Flag	54	LMP 2a/54
Link Supervision Timeout Changed event	56	LMP 2a/56
Variable Inquiry TX Power Level	57	LMP 2a/57
Enhanced Power Control	58	LMP 2/20
Extended features	63	LMP 11/4
Secure Simple Pairing (Host Support)	64	See below
LE Supported (Host)	65	See below
Simultaneous LE and BR/EDR to Same Device Capable (Host)	66	See below
Secure Connections (Host Support)	67	See below
Connectionless Peripheral Broadcast - Central Operation	128	LMP 2a/128
Connectionless Peripheral Broadcast - Peripheral Operation	129	LMP 2a/129
Synchronization Train	130	LMP 2a/130
Synchronization Scan	131	LMP 2a/131
Inquiry Response Notification event	132	LMP 2a/132
Generalized interlaced scan	133	LMP 2a/133
Coarse Clock Adjustment	134	LMP 2/28
Secure Connections (Controller Support)	136	LMP 2/26
Ping	137	LMP 2/27
Slot Availability Mask	138	LMP 2/29
Train nudging	139	LMP 2a/139

Table 5.1: Mapping of LMP feature bits to ICS items

Feature bits 64, 65, 66, and 67 are set at run-time by the Host; therefore, they do not have a corresponding ICS entry. Tests that check that feature masks match the ICS should ignore these bits.

Feature bits 20, 21, and 22 are the three bits corresponding to the Flow Control Lag. These bits should be ignored when testing the mask.

The value for Feature bit 27 is ignored when testing the mask.

The missing bit numbers are RFU and are 0 when testing the mask.

6 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
	D5r3	2003-11-05	Original Release
	D10R00	2004-03-10	Re-partitioned to match Main Specification Volume/Part partitioning. TSE 523, 524, 525, 545, and 547 incorporated.
	D10r01	2004-03-11	Editorial changes
	D12r02	2004-03-23	Editorial changes. Changed reference and document numbering to D12 to reflect applicable Bluetooth version.
	D12r03	2004-03-25	Editorial Changes
10	1.2.2	2004-03-29	Changed document number and revision number to conform to legacy system. Added Disclaimer and Copyright Notice.
11	1.2.3	2004-06-21	TSE 578 incorporated.
	2.0.E.0 Draft	2004-10-22	Incorporate Enhanced Data Rate Changes, affecting Tables 2, 14a, and 14b.
12	2.0.E.0	2004-11-04	First version for 1.2/2.0/2.0 + EDR available for qualification.
	2.0.E.1r1	2005-03-24	Editorial and format changes. TSE 820: Added Table 8 heading
13	2.0.E.1	2005-10-26	Prepare for publication.
14	2.1.E.0	2006-12-28	Add line 7 to Table 16 for Sniff Subrating (but maybe not needed) Add line 10 to Table 6 for Encryption Pause Resume Update Table 2 and Table 6 for Simple Pairing feature Adjustment to previous Revision History document number. Adjustments to accommodate the introduction of mandatory/ optional settings for 2.1 features
15	2.1.E.1	2007-07-31	TSE 2113: Table 2: Change C.2 and C.3 TSE 2115: Table 26: Fix Prerequisite
16	2.1.E.2	2008-04-29	TSE 2438: Table 26/3: Update description Remove “Prepare for Publication” rows from table
	2.1.E.3r0	2009-02-12	Add rows to Table 2.0 and add new table for EPC
	2.1.E.3r1	2009-03-25	Removed SUM 21/9 as it does not exist Added SUM 21/8 to conditions where SUM 21/5 and SUM 21/6 were used Editorial – replaced 2-1 with 21 and 2-2 with 22.
17	3.0.H.0/2.1.E.3	2009-07-04	Prepare for publication.
18	3.0.H.1	2009-08-12	TSE 2795: New condition for Item LMP:6/10
	3.0.H.2r0	2009-10-6	New PICS due to LMP Enhancements

Publication Number	Revision Number	Date	Comments
	3.0.H.2r1	2009-12-01	Editorial review. Formatted table row height. Fixed Table 4 footnotes. Removed earlier Doc IDs from cover page. Updated title to include Tokyo.
19	4.0.0r2-4.0.0	2009-12-15	Updated document number. Prepare for publication.
	4.0.1r0	2011-01-27	TSE 4220: Address legacy issues by adding “OR SUMMARY 21/9” to: Table 2: C2, C3, C4; Table 6: C1, C2;Table 16: C2 (TSE 3827)
20	4.0.1	2011-07-18	Prepare for publication.
	4.0.2r0	2011-11-07	TSE 4228 Update Table 4 for ESR05 Erratum 2421. TSE 3857: Table 16, C.2—Check for sniff—Implemented in previous release; see TSE 4220.
21	4.0.2	2012-30-12	Prepare for publication.
	4.0.3r0	2012-05-16	TSE 4765: Change 2/16 and 26/2 to O per core spec TSE 4597: Table 2, Footnotes C.2 and C.3
22	4.0.3	2012-07-24	Prepare for publication.
	4.0.4rT	2013-08-09	Template Conversion
	4.0.4rTr3	2013-09-16	Template Review Comment Resolution & Changes Accepted
	4.1.0r01	2013-09-16	BR/EDR Secure Connections CR
	4.1.0r02	2013-10-09	Piconet Clock Adjust CR
23	4.1.0	2013-12-03	Prepare for Publication
	4.1.1r00	2014-04-07	TSE 5446: Removed prerequisite for Table 14, and updated items 18/1 and 18/2.
24	4.1.1	2014-07-07	TCRL 2014-1 Publication
	4.1.2r00	2014-11-06	TSE 6081: Updated Table 2, C.4 to include “OR SUM ICS 21/13 (Core Specification 4.1)”.
	4.2.0r00	2014-11-17	Revved version to align with Core Specification Version 4.2 Release.
25	4.2.0	2014-12-04	Prepare for TCRL 2014-2 publication
	4.2.1r00	2016-03-02	TSE 6593: Updated Table 2 Status column and conditional statements. Deleted Item 25. Added two new conditional statements.
26	4.2.1	2016-07-07	Prepared for TCRL 2016-1 Publication
	5.0.0r00	2016-07-08	Integrated Core Slot Availability Masks CRr06 for Core Specification v5.0 release
	5.0.0r01	2016-08-30	Issue 7534: Updated “TBD” references in Table 2 and 29.
	5.0.0r02	2016-10-05	TSE 7448: In Table 2, C.8 and C.11 were duplicates. 2/28 remapped to C.11. C.8 repurposed for new conditional statement. 2/22 remapped to C.8. Updated blank items in Table 16 and 17.
	5.0.0r03	2016-10-13	TSE 7215: “Packages” changed to “Packets” in the section heading and table title for Table 22.
	5.0.0r03	2016-11-11	Issue 7884: Global edit. Added support in conditionals for Core Spec version 5.0.

Publication Number	Revision Number	Date	Comments
	5.0.0r04	2016-11-14	Update Template. Remove unnecessary parentheses. Replaced with quotation marks. TSE 8069: Revises C.6 in Table 2. Reversed the logic in Conditionals to address the issue of having to add in the next Core Version where it is to indicate “or later” (Table 2, C.4 and C.9; Table 6, C.1 and C.2; Table 16, C.2).
27	5.0.0	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	5.0.1r00	2017-03-27	TSE 8219: Added new conditional to Table 2 to exclude Park mode feature (LMP 2/9) for Bluetooth Core Specification v5.0 or later.
	5.0.1r01	2017-05-18	Removal of Note preceding table 2. This note was found to be inconsistent with how items in table 2 are used (decision in BTI call 18th of May)
28	5.0.1	2017-07-05	Approved by BTI. Prepared for TCRL 2017-1 publication.
	5.0.2r00	2017-07-19	TSE 7437: In C.2 and C.3 of Table 2: Supported Features, add LMP conditions for feature selection to reflect opportunity to optionally claim partial support of Core Configuration EDR, and change “Excluded” to “Optional”.
29	5.0.2	2017-12-07	Approved by BTI. Prepared for TCRL 2017-2 publication.
	5.0.3r00-01	2018-04-27 – 2018-05-10	TSE 10614 (rating 2): Added new C.14 to Table 2 and changed status of 2/29 from O to C.14. TSE 10613 (rating 2): Added C.15 to Table 2 and changed status of item 2/28 from C.11 to C.15. Editorial fix to C.10 and added LMP prefix.
30	5.0.3	2018-07-02	Approved by BTI. Prepared for TCRL 2018-1 publication.
	5.0.4r00	2018-10-16	TSE 10930 (rating 2): Removed items 5/1 and 5/7. Updated revision number to 5.1.0 to align with the adoption of Core Specification version 5.1 Corrected conditional for Item 5/2 to M after removal of 5/1.
	5.1.0r00-r01	2018-11-13 – 2018-12-07	Updated revision number from 5.0.4 to 5.1.0 to align with the adoption of Core Specification version 5.1. Corrected conditional for Item 5/2 to M after removal of 5/1.
31	5.1.0	2018-12-07	Approved by BTI. Prepared for TCRL 2018-2 publication.
	5.1.1r00–r02	2019-04-02– 2019-08-14	TSE 11296 (rating 3): Removed item 2/9 and all of Table 17 due to deprecation of the Park Mode feature.
32	5.1.1	2019-08-01	Approved by BTI. Prepared for TCRL 2019-1 publication.

Publication Number	Revision Number	Date	Comments
	p33r00–r03	2019-10-03 – 2019-12-03	TSE 12761 (rating 2): Added LMP item 2/19a for Erratum 10734 pairing updates and added that erratum and “Specification of the Bluetooth System, Volume 2, Part C, Version 5.1 or later” to the References section. TSE 12606 (rating 2): Removed references to deprecated and/or withdrawn core specs in conditionals by updating C.3 - C.6 and C.9 for Table 2, updating the status of items 1 and 10 and deleting C.1 and C.2 for Table 6, and updating the status of item 7 and deleting C.2 for Table 16; removed multiple table prerequisites, created conditionals C.1-C.4 to replace the removed prerequisites, and updated the status of items 1 - 10 for Table 18 (concatenated all rows into a cohesive table); removed reference to ESR05 by deleting C.3 and updating status of item 7 for Table 4. TSE 13025 (rating 3): Added item 26b and conditional note C.17 to Table 2; also added “(Controller Support)” to item 26 and “(Host Support)” to item 19. Revised document numbering convention, setting last release publication of 5.1.1 as p32; added publication number column to Revision History. Updated Contributors list.
33	p33	2020-01-07	Approved by BTI on 2019-12-22. Prepared for TCRL 2019-2 publication.
	p34r00–r11	2020-03-04 – 2021-06-10	TSE 12735 (rating 2): Removed item 2/16 “Adaptive frequency hopping” as a single selectable item and instead use Table 26 items for better clarity. Cleaned up conditionals and prerequisites that referenced 2/16. Added item LMP 2/13a “Power Control Requests”. Revised conditionals for LMP 2/21 “BR/EDR Not Supported” and LMP 2/27 “Ping”. Fixed Table 2 conditionals. Revised conditional for LMP 11/1 “Request supported features”. Revised conditional C1 of Table 18. Revised conditional applied to LMP 18/7 “Request to go to max power”. Added item LMP 26/4a “Support of Channel Classification reporting as Central”. Removed item LMP 26/3 “Support of Channel Classification reporting — post Role Switch (as Slave)”. Corrections to Table 26 conditionals. Added “Mapping of LMP feature bits to ICS items” section. Revised Table 11 conditional C.2 to refer to the new LMP Feature Bits table. TSE 13061 (rating 3): In Table 2, added items 17a and 18a, modified items 17 and 18, updated conditionals C.2 and C.3, and added conditionals C.19 and C.20. TSE 13586 (rating 2): Revised conditionals for items LMP 2/14 “Broadcast Encryption” and LMP 2/28 “Coarse Clock Adjustment” to show that they are mutually exclusive features.

Publication Number	Revision Number	Date	Comments
			TSE 14935 (rating 3): Added item LMP 2/30 “Paging Parameter Negotiation”. Made LMP 2/30 a prerequisite for Table 23. Updated all conditionals of Table 23 to M. TSE 14942 (rating 3): Added ICS item LMP 2/19b “Secure Simple Pairing (Controller Support)” and updated all relevant conditionals that should reference Secure Simple Pairing (Controller Support) to LMP 2/19b. TSE 15092 (rating 2): Changed items LMP 2/19 and LMP 2/24 to “No Longer Used”; updated Status for LMP 2/19a; deleted conditionals C.7, C.16, and C.21 (added temporarily for TSE 14942); updated conditional C.17. TSE 15175 (rating 2): Updated status of 12/1 to Mandatory. TSE 15488 (rating 1): To address Erratum 15334, globally changed “Master/Slave” language as it relates to role switches. TSE 15452 (rating 1): To address Erratum 15352, globally changed “Master” to “Central” and “Slave” to “Peripheral”. Incorporated Host_To_Controller_Encryption_Key_Control_ Enhancements_TEST_CR_r06: Added Table 5 item 8 and related conditional for “Support for 7 bytes or longer encryption key size”. Template-related and consistency checker editorials.
34	p34	2021-07-13	Approved by BTI on 2021-06-27. Prepared for TCRL 2021-1 publication.
	p35r00	2022-04-04 – 2022-04-05	TSE 18364 (rating 1): Updated C.1 – C.6, C.8, C.9, C.11 – C.15, and C.17 – C.20 for Table 2; C.2 for Table 4; C.1 for Table 5; C.3 for Table 6; C.1 for Table 8; C.1 for Table 14a; C.1 for Table 14b; C.1 for Table 15; C.1 for Table 16; C.1 – C.3 for Table 18; C.1 for Table 20; C.1 – C.4 for Table 21; C.1 for Table 22; and C.2 – C.4 for Table 26. TSE 18406 (rating 2): Updated the status for Table 5 item 8, deleted C.1 for Table 5, and added detail to the revision history for p34r00–r11 (per BTI). Performed template-related formatting fixes. Updated copyright page to align with v2 of the DNMD.
35	p35	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.

Publication Number	Revision Number	Date	Comments
	p36r00–r02	2023-04-05 – 2023-05-26	TSE 22388 (rating 3): Per E22262, removed the 2/21 entry for BR/EDR Not Supported, adjusted all conditionals that referenced it (modified C.1, C.2, C.3, C.5, C.6, C.9, C.12, C.14, C.15, C.18, C.19, and C.20 and deleted C.4, C.8, C.11, and C.13), and revised statuses accordingly for 2/1, 2/2, 2/3, 2/4, 2/5, 2/7, 2/8, 2/11, 2/12, 2/13, 2/13a, 2/15, 2/19a, 2/19b, 2/22, and 2/27. Editorial cleanup of “No longer used” throughout document to align with the latest ICS conventions. Removed Appropriate Language doc reference per the latest ICS conventions.
36	p36	2023-06-29	Approved by BTI on 2023-06-05. Prepared for TCRL 2023-1 publication.
	p37r00–r06	2023-09-26 – 2023-11-20	TSE 22165 (rating 2): Added new reference items to cover the BB ICS, HCI ICS, and Core spec Vol 4 Part E. Added 2/9 back in with associated update to reference and status (new conditional C.21) and added new items 2/31 and 2/32. Added new Tables 30 and 31. Updated BB and HCI ICS Items in the “Mapping LMP feature bits to ICS items” table, and added new LMP items as necessary. TSE 24076 (rating 2): Replaced SUM ICS references. Updated Table 2 conditionals C.2 and C.3 (affecting 2/17 and 2/18) and added new Table 2b for EDR Features. TSE 24180 (rating 2): Added a new section to indicate bridge mapping between the old SUM ICS and new LMP ICS items. Replaced the LMP ICS reference with the BB ICS in the references column per query responses 998513 and 998549. Updated the document to align with the latest standards.
37	p37	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.
	p38r00–r01	2024-07-11 – 2024-07-17	TSE 25027 (rating 1): Set 2/26a and related conditional C.17 to “No longer used”. TSE 25355 (rating 2): Updated the status of 7/1 from Optional to Mandatory. TSE 25389 (rating 2): Set Table 21 to “No longer used” and removed section heading for SCO Links.
38	p38	2024-09-04	Approved by BTI on 2024-08-14. Prepared for TCRL 2024-2 publication.
	p39r00–r01	2024-10-31 – 2024-11-14	TSE 26110 (rating 2): Added a new conditional C.3 to Table 4 and updated the capability name and status of 4/7.
39	p39	2025-02-18	Approved by BTI on 2024-12-26. Prepared for TCRL 2025-1 publication.

Publication Number	Revision Number	Date	Comments
	p40r00	2025-01-27	TSE 26785 (rating 1): To accommodate ES-27096 and ES-25833, updated Table 2 conditionals C.9 and C.18 and updated the references for 6/10. TSE 26826 (rating 2): Added Inter-Layer Dependencies for RF. Updated 2/10 references and related conditional C.1. Added new Table 31. Added a reference to the RF ICS.
40	p40	2025-05-06	Approved by BTI on 2025-04-16. Prepared for TCRL 2025-2 publication.
	p41r00–r03	2025-08-01 – 2025-08-13	TSE 23117 (rating 2): To accommodate changes needed for E23064, updated the ICS Item for LMP Bit 53 in the Mapping of LMP feature bits to ICS items table. TSE 23981 (rating 2): To accommodate changes needed for E23739, updated 2/19b with a new conditional C.22. Updated C.9 and C.18 of Table 2 to include LMP 2/3. TSE 27060 (rating 1): To align with BB ICS changes, added a reference to the SEC ICS, added an ILD column to Table 2, corrected the capability names in Table 2b and added an ILD column, removed the prerequisite from Table 6. Corrected conditionals throughout as necessary. TSE 27222 (rating 1): Added a heading for the Adaptive Frequency Hopping section. Updated the Capability names of 26/1, 26/2, 26/4, and 26/4a. Set 26/5 and 26/6 to “No longer used”. Updated conditionals C.2–C.4 to align. Updated conditional C.15 of Table 2 to align.
41	p41	2025-11-04	Approved by BTI on 2025-10-05. Prepared for TCRL pkg101 publication.
	p42r00–r06	2025-11-25 – 2026-03-24	TSE 27937 (rating 2): Corrected 3/1 and 3/2 to Mandatory; corrected 4/1 and 4/2 to Mandatory and updated the reference section. TSE 28172 (rating 2): Updated Table 2a with new items 53a, 56a, and 132a; removed a reference in items 56 and 132; and updated conditionals C.53, C.56, and C.132. Added a new Bridge Mapping table/section, merging the previous “Bridge mapping between the SUM ICS and the LMP ICS” table/section into the new bridge mapping. TSE 28388 (rating 1): Updated the “Mapping of LMP feature bits to ICS items” table for bit 53 to LMP 2a/53. TSE 28547 (rating 1): Set item 2/9 and its accompanying conditional C.21, as well as Bit 8 in the “Mapping of LMP feature bits to ICS items” table, to “no longer used” as part of Core v4.2 deprecation.
42	p42	2026-05-05	Approved by BTI on 2026-04-07. Prepared for TCRL pkg103 publication.

Publication Number	Revision Number	Date	Comments
	p43r00–r03	2026-07-31 – 2026-08-21	TSE 29109 (rating 1): Updated Bridge mapping section to allow for easier automatic import. TSE 29311 (rating 1): To support the changes needed for ES-29097 to remove Power Classes, changed Table 2/10 Power Control Status from C.1 to O and deleted 2/C.1. Also removed Table 31 (RF Requirements) and 31/C.1, C.2 without replacing Table 31 title/section with "No Longer Used". Editorial updates to references to align with BTI's desired test doc conventions.
43	p43	2026-11-03	Approved by BTI on 2026-10-12. Prepared for TCRL pkg105 publication.

Acknowledgments

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Knut Odman	Broadcom
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