



Project Details

Project Name	MHCWB6G-IB
Product Type	Controller Subsystem
TCRL Version:	TCRL 2021-1
Referenced Qualified Design(s)	141499
Previously Qualified Design Used in this Qualification(s)	163547
Listing Date	2021-12-01
Declaration ID	D057990

Product Listing(s)

Name	Website	Category	Publish Date	Model Number	Description
2.4GHz WiFi+Bluetooth dual-mode module		Unique Products	12/1/2021 12:00:00 AM	MHCWB6G-IB	2.4GHz WiFi+Bluetooth dual-mode module

Member Company	Xiaomi Inc.
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Declaring Member Contact / Listing Contact Person

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State	Beijing
Country	China
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Complete the Project and Submit Product(s) for Qualification

By typing my name or other symbol of my signature into the "Signature" field below, I agree on behalf of Xiaomi Inc. ("Company") to [Bluetooth Launch Studio Terms of Use](#), and I make the following representations and warranties personally and on behalf of Company. The following representations and warranties, together with all project information and the [Bluetooth Launch Studio Terms of Use](#), are the Supplier Declaration of Conformity and Declaration of Compliance described in the [Program Reference Document \(PRD\)](#) and [Declaration Process Document \(DPD\)](#).

- I am authorized by Company to submit all of the information included in this project and all information is complete and accurate.
- Company does not, by its governing documents or other applicable law, require more than one signatory, a stamp or seal, or a witnessed signature to be legally bound.
- I agree on behalf of Company to contract in English and electronically, and adopt the characters and symbols input in the signature field below as my signature, with the same effect as an ink signature.
- The products included in this project are owned and distributed by Company under a Product name that identifies Company as the source of the Product. Company has the right to use and reference all Qualified Designs referenced in the project, and the products and referenced Qualified Designs comply with the version of the Bluetooth Specification identified in the project submission.
- The product(s) included in this project and the corresponding Qualified Designs comply with the [Bluetooth Launch Studio Terms of Use](#).

If any of the foregoing is not correct or you do not agree, you must exit this form without signing.

Signature:

yanfang hu

BLUETOOTH[®] LAUNCH STUDIO TERMS OF USE

Last Updated: February 25, 2021.

These Bluetooth Launch Studio Terms of Use (“**Launch Studio Terms**”) are a supplement to the [Bluetooth SIG Website Terms of Use](#) (“**WTOU**”) and together the Launch Studio Terms and WTOU are a legal agreement (collectively the “**Bluetooth Terms**”) between you and Bluetooth SIG, Inc., a Delaware corporation (“**Bluetooth SIG**”) that governs your access to and use of the Bluetooth Launch Studio (the “**Launch Studio Tool**”).

The Launch Studio Tool is a Service (as defined in the WTOU) offered by Bluetooth SIG. Terms used but not defined in these Launch Studio Terms have the meanings ascribed to them in the WTOU. In the event of a conflict between these Launch Studio Terms and the WTOU, these Launch Studio Terms will govern.

PLEASE READ THE BLUETOOTH TERMS CAREFULLY. BY ACCESSING OR USING THE LAUNCH STUDIO TOOL AND/OR CLICKING TO INDICATE THAT YOU AGREE TO THE LAUNCH STUDIO TERMS, YOU REPRESENT THAT YOU ARE AUTHORIZED TO BIND THE ENTITY UNDER WHOSE BLUETOOTH SIG MEMBERSHIP YOU OBTAINED A USER ACCOUNT AND THAT YOU AND THAT MEMBER AGREE TO BE BOUND BY THE BLUETOOTH TERMS. IF YOU ARE NOT AUTHORIZED OR DO NOT AGREE TO THE BLUETOOTH TERMS, DO NOT ACCESS OR USE THE LAUNCH STUDIO TOOL OR CLICK TO INDICATE THAT YOU AGREE TO THESE LAUNCH STUDIO TERMS.

1. MEMBERSHIP ACCOUNT REQUIREMENT.

To access and use the Launch Studio Tool, you must have an Account (as defined in the WTOU) issued under the membership account of a current Bluetooth SIG member and log into the Launch Studio Tool with that Account. You acknowledge and agree that when you access the Launch Studio Tool that you are doing so on behalf of the member your Account is associated with (“**Member**”) and you represent and warrant that you are authorized by Member to access and use the Launch Studio Tool and provide Submissions (defined below) on Member’s behalf.

2. BLUETOOTH QUALIFICATION PROCESS.

The “**Bluetooth Qualification Process**” is the process created by Bluetooth SIG for qualifying Products. The Launch Studio Tool is the Bluetooth SIG tool designed to implement the Bluetooth Qualification Process. A “**Product**” means a product that:

- (a) if sold, is sold as a single item (consisting of software, firmware, drivers, applications, hardware, or a combination of some or all of the foregoing);
- (b) contains one or more Portions; and
- (c) if marketed, is marketed under a name and/or trademark that uniquely identifies Member as the source of the product. A “**Portion**” means hardware, software, or a combination of hardware and software that implements a Bluetooth Specification. If the hardware, software, or combination contains or consists of more than an implementation of the Bluetooth specification, the “**Portion**” is only the implementation of the Bluetooth Specification. “**Bluetooth Specification**” is defined in the Bylaws of Bluetooth SIG.

3. REPRESENTATIONS AND ACKNOWLEDGEMENTS.

- (a) You represent and warrant that you have permission to submit to Bluetooth SIG all information and materials (including design information, product information, test reports, and test results) that you provide through the Launch Studio Tool (“**Submissions**”) and that all Submissions are true, complete, and accurate.
- (b) You represent and warrant that you and Member will comply with the SIG Member Terms (as defined in the WTOU).
- (c) You represent and warrant that all Submissions that you make through the Launch Studio Tool and all Products listed in your Submissions comply with the SIG Member Terms (as defined in the WTOU) and the Bluetooth Specification(s) referenced in your Submission.

(d) You represent and warrant that the products referenced in your Submissions that you submit to the Bluetooth Qualification Process via the Launch Studio Tool will only be Products that, if marketed or distributed, are done so by Member under a name or trademark that uniquely identifies Member as the source of the Product.

(e) You acknowledge and agree that a product is not a Bluetooth Product under the Bluetooth Trademark License Agreement and you and Member will not market or distribute any product that uses any Bluetooth® trademark on it or in connection with any related marketing, promotion, or advertising unless you or Member have been notified by Bluetooth SIG that it has completed the Bluetooth Qualification Process (e.g., via a confirmation screen or email from Bluetooth SIG expressly stating that the Product has completed the Bluetooth Qualification Process).

4. FEES AND PAYMENT TERMS.

(a) Bluetooth SIG may charge you fees in connection with the Bluetooth Qualification Process including within the Launch Studio Tool and Submissions (e.g., declaration fees, etc.). The type and amount of fees may change at any time. You agree that Member will pay all fees required by Bluetooth SIG in accordance with the instructions provided within the Launch Studio Tool. Bluetooth SIG may accept credit card payments or, if offered within the Launch Studio Tool, may permit you to pay fees offline. If you choose to pay offline, you will pay the invoice issued to you by Bluetooth SIG, according to the terms stated in the invoice. If you provide credit card payment information, you agree that Bluetooth SIG or its third party payment processor may charge your credit card immediately. You acknowledge that, until Bluetooth SIG has processed your payment and received the funds: you and Member will not acquire any of the rights or benefits for those fees. All sales are final and all payments are non-refundable.

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5. CONFIDENTIALITY OF SUBMISSIONS.

You and the Bluetooth SIG agree that Submissions are Confidential Information subject to the Bluetooth SIG Confidentiality Policy even if you do not label the Submission "Confidential." Notwithstanding anything in the Bluetooth SIG Confidentiality Policy and except as described in the following sentence, you agree that Bluetooth SIG will treat your Submissions as confidential, including by not making them available through the searchable database on Bluetooth SIG's web site until the date that you have selected as the "listing date" within the Launch Studio Tool when you click to submit your Submission. Bluetooth SIG further agrees that

(a) if, when you submit a Submission, the "publish date" in your Submission is after the listing date, the following information will be treated as Member Confidential Information and not included in the searchable database on Bluetooth SIG's web site until the "publish date": product name, product number, category, subset ID (if applicable), publish date, and product description and

(b) the test plan and test evidence provided as part of your Submission will continue to be

treated as Member Confidential Information for the period of time required under the Bluetooth SIG Confidentiality Policy regardless of any listing date or publish date in the Submission. To the extent that this Section conflicts with the Bluetooth SIG Confidentiality Policy, this Section supersedes the Bluetooth SIG Confidentiality Policy with respect to Bluetooth SIG's obligations of confidentiality of Submissions.

6. RECORD KEEPING AND AUDIT.

You agree to maintain a complete copy of your Submissions as well as all supporting information and documentation related to each Product you submit for qualification through the Launch Studio Tool ("**Records**") in order to document your compliance with the SIG Member Terms and Bluetooth Specifications. You agree that Bluetooth SIG may request copies of Records relating to or pertaining to your Submissions and all Products referenced therein and you will provide copies of Records and permit Bluetooth SIG and its representatives to audit, examine, and make copies of or extracts from all Records (in whatever form they may be kept, whether written, electronic, or other) in order to verify the truth, accuracy, and completeness of your Submissions as well as compliance with the SIG Member Terms and Bluetooth Specifications. Bluetooth SIG will be responsible for the cost of any audit, unless the audit reveals that any Submission is incomplete or inaccurate or that you, Member, any of your Submissions, or any Product fails to comply with the SIG Member Terms or Bluetooth Specifications, in which case Member will reimburse Bluetooth SIG for the costs of the audit within 30 days after receiving Bluetooth SIG's request for reimbursement.

7. ADDITIONAL DISCLAIMERS.

The Launch Studio Tool is not a record-keeping or storage tool. You are responsible for backing up all of Your Content (as defined in the WTOU) submitted to the Launch Studio Tool. In addition to the disclaimers in the WTOU, Bluetooth SIG does not guarantee that Your Content will not be removed, damaged, corrupted, or lost.

Appendix A

Summary ICS

Table 21: Controller Core Configuration

Item	Capability	Reference	Support	Status	Comment
21/16	Core Specification Version 5.0. Adopted 06 December 2016	Core 5.0	C.1	<input checked="" type="checkbox"/>	C.1: Mandatory to support one and only one of SUMICS 21/14 "Core v4.2" OR SUMICS 21/16 "Core v5.0" OR SUMICS 21/18 "Core v5.1" OR SUMICS 21/20 "Core v5.2" OR SUMICS 21/21 "Core v5.3".
21/17	Core Erratum 10734 Pairing Updates. Adopted 16 July 2018	Erratum 10734	C.3	<input checked="" type="checkbox"/>	C.3: Mandatory IF SUMICS 21/14 "Core v4.2" OR SUMICS 21/16 "Core v5.0" is supported, otherwise Excluded. (Applicable as a separate item in addition to specifications adopted prior to this erratum, integrated in specifications adopted later)
21/19	Core Erratum 11838 Key Size Updates. Adopted 13 August 2019	Erratum 11838	C.4	<input checked="" type="checkbox"/>	C.4: Mandatory IF SUMICS 21/14 "Core v4.2" OR SUMICS 21/16 "Core v5.0" OR SUMICS 21/18 "Core v5.1" is supported, otherwise Excluded. (Applicable as a separate item in addition to specifications adopted prior to this erratum, integrated in specifications adopted later)

Table 22: EDR Features

Item	Capability	Reference	Support	Status	Comment
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Table 31: Host Core Specification

Item	Capability	Reference	Support	Status	Comment
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Table 34: LE Host Specification Parts

Item	Capability	Reference	Support	Status	Comment
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Table 41: AMP Controller Core Specification

Prerequisite: SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" OR SUM ICS 21/20 "Core v5.2"

Item	Capability	Reference	Support	Status	Comment
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Table 42: AMP Controller Specification Parts

Prerequisite: SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" OR SUM ICS 21/20 "Core v5.2"

Item	Capability	Reference	Support	Status	Comment
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Table 51: Low Energy Controller Configuration

Item	Capability	Reference	Support	Status	Comment
51/1	Low Energy Controller	Core 4.0 or Later	C.1	<input checked="" type="checkbox"/>	C.1: Mandatory if PROD 2/4 or 2/5 or 2/6 is supported, otherwise Excluded.

Table 52: Low Energy Host Core Specification

Item	Capability	Reference	Support	Status	Comment
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Product Type

Table 1: Product Types

Item	Capability	Reference	Support	Status	Comment
1/5	Controller Subsystem	Vol. 0 Part B	C.1	<input checked="" type="checkbox"/>	C.1: Mandatory to support one and only one Product Type.

Table 2: Controller Core Configuration

Item	Capability	Reference	Support	Status	Comment
2/4	LE Controller	Vol. 0 Part B	C.1	☑	C.1: Mandatory to support only one Controller Configuration. Optional if 1/2 or 1/3 is Supported.

Table 3: Host Core Configuration

Item	Capability	Reference	Support	Status	Comment
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4.0 Host Controller Interface

Table 1a: IUT Configuration

Item	Capability	Reference	Support	Status	Comment
1a/4	LE Controller	[1] 1.0	C.0	☑	C.0: Mandatory to support at least one of the defined IUT Configurations.

Table 1:

Item	Capability	Reference	Support	Status	Comment
1/1	Command Complete event	[1] 7.7.14	M	☑	
1/1d	Support all LE Controller commands	[1] 3.3, 7.7	O	☑	
1/2	Command Status event	[1] 7.7.15	M	☑	
1/3	Hardware Error event	[1] 7.7.16	O	☑	

Table 2:

Item	Capability	Reference	Support	Status	Comment
2/1	Reset command	[1] 7.3.2	M	☑	

Table 3:

Item	Capability	Reference	Support	Status	Comment
3/5	LE Read Buffer Size command [M]	[1] 7.8.2	M	☑	

Table 4:

Item	Capability	Reference	Support	Status	Comment
4/1	Read Local Version Information command	[1] 7.4.1	M	☑	
4/2	Read Local Supported Commands command	[1] 7.4.2	M	☑	
4/3	Read Local Supported Features command	[1] 7.4.3	M	☑	
4/5	Read BD_ADDR command	[1] 7.4.6	M	☑	
4/8	LE Read Local Supported Features command	[1] 7.8.3	M	☑	
4/9	LE Read Supported States command	[1] 7.8.27	M	☑	

Table 5:

Item	Capability	Reference	Support	Status	Comment
5/13	LE Set Random Address command	[1] 7.8.4	C.1	☑	C.1: Mandatory IF RF PHY 1/1 "LE Transmitter" OR RF PHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
5/14	LE Read Filter Accept List Size command	[1] 7.8.14	M	☑	
5/15	LE Add Device To Filter Accept List command	[1] 7.8.16	M	☑	
5/16	LE Clear Filter Accept List	[1] 7.8.15	M	☑	

Item	Capability	Reference	Support	Status	Comment
	command				
5/17	LE Remove Device From Filter Accept List command	[1] 7.8.17	M	☑	
5/27	LE Add Device To Resolving List command	[4] 7.8.38	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/28	LE Remove Device From Resolving List command	[4] 7.8.39	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/29	LE Clear Resolving List command	[4] 7.8.40	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/30	LE Read Resolving List Size command	[4] 7.8.41	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/31	LE Set Address Resolution Enable command	[4] 7.8.44	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/32	LE Set Resolvable Private Address Timeout command	[4] 7.8.45	C.9	☑	C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
5/33	LE Set Advertising Set Random Address command	[5] 7.8.52	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/34	LE Set Extended Advertising Parameters command	[5] 7.8.53	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/35	LE Set Periodic Advertising Parameters command	[5] 7.8.61	Core v.5.0 or later C.18	☑	Core v.5.0 or later C.18: Mandatory IF LL 3/10 "Periodic Advertising" is supported, otherwise Excluded.
5/36	LE Set Extended Advertising Data command	[5] 7.8.54	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/37	LE Set Periodic Advertising Data command	[5] 7.8.62	Core v.5.0 or later C.18	☑	Core v.5.0 or later C.18: Mandatory IF LL 3/10 "Periodic Advertising" is supported, otherwise Excluded.
5/38	LE Set Extended Scan Response Data command	[5] 7.8.55	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/39	LE Scan Request Received event	[5] 7.7.65.19	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/40	LE Set Extended Advertising Enable command	[5] 7.8.56	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/41	LE Set Periodic Advertising Enable command	[5] 7.8.63	Core v.5.0 or later C.18	☑	Core v.5.0 or later C.18: Mandatory IF LL 3/10 "Periodic Advertising" is supported, otherwise Excluded.
5/42	LE Read Maximum Advertising Data Length command	[5] 7.8.57	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/43	LE Read Number of Supported Advertising Sets command	[5] 7.8.58	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/44	LE Read Transmit Power command	[5] 7.8.74	Core v.5.0 or later C.64	☑	Core v.5.0 or later C.64: Optional IF RFPHY 1/1 "LE Transmitter" OR RFPHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
5/45	LE Write RF Path Compensation command	[5] 7.8.76	Core v.5.0 or later C.22	☑	Core v.5.0 or later C.22: Mandatory IF LL 3/12 "Sending Tx Power in Advertisements" OR LL 9/37 "LE Power Control Request" is supported, otherwise Optional.
5/46	LE Read RF Path Compensation command	[5] 7.8.75	Core v.5.0 or later C.22	☑	Core v.5.0 or later C.22: Mandatory IF LL 3/12 "Sending Tx Power in Advertisements" OR LL 9/37 "LE Power Control Request" is supported, otherwise Optional.
5/47	LE Remove Advertising Set command	[5] 7.8.59	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/48	LE Clear Advertising Sets command	[5] 7.8.60	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
5/49	LE Advertising Set Terminated event	[5] 7.7.65.18	Core v.5.0 or later C.17	☑	Core v.5.0 or later C.17: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.

Table 6:

Item	Capability	Reference	Support	Status	Comment
6/15	LE Set Advertising Enable command	[1] 7.8.9	C.97	☑	C.97: Mandatory IF LL 1/1 "Advertising State" is supported, otherwise Excluded.
6/16	LE Set Advertising Parameters command	[1] 7.8.5	C.97	☑	C.97: Mandatory IF LL 1/1 "Advertising State" is supported, otherwise Excluded.
6/17	LE Set Scan Response Data command	[1] 7.8.8	C.15	☑	C.15: Mandatory IF LL 3/5 "Scannable Undirected Events" OR LL 3/5a "Scannable Directed Events" is supported, otherwise Excluded.
6/18	LE Set Advertising Data command	[1] 7.8.7	C.97	☑	C.97: Mandatory IF LL 1/1 "Advertising State" is supported, otherwise Excluded.

6/19	LE Advertising Report event	[1] 7.7.65.2	C.98	☑	C.98: Mandatory IF LL 1/2 "Scanning State" is supported, otherwise Excluded.
6/20	LE Set Scan Enable command	[1] 7.8.11	C.98	☑	C.98: Mandatory IF LL 1/2 "Scanning State" is supported, otherwise Excluded.
6/21	LE Set Scan Parameters command	[1] 7.8.10	C.98	☑	C.98: Mandatory IF LL 1/2 "Scanning State" is supported, otherwise Excluded.
6/22	LE Read Advertising Physical Channel Tx Power command	[1] 7.8.6	C.97	☑	C.97: Mandatory IF LL 1/1 "Advertising State" is supported, otherwise Excluded.
6/26	LE Directed Advertising Report event	[4] 7.7.65.11	C.63	☑	C.63: Mandatory IF LL 1/2 "Scanning State" AND LL 9/13 "LL Privacy" is supported, otherwise Excluded.
6/27	LE Set Extended Scan Parameters command	[5] 7.8.64	Core v.5.0 or later C.19	☑	Core v.5.0 or later C.19: Mandatory IF LL 4/7 "Extended Scanning" is supported, otherwise Excluded.
6/28	LE Set Extended Scan Enable command	[5] 7.8.65	Core v.5.0 or later C.19	☑	Core v.5.0 or later C.19: Mandatory IF LL 4/7 "Extended Scanning" is supported, otherwise Excluded.
6/29	LE Extended Advertising Report event	[5] 7.7.65.13	C.19	☑	C.19: Mandatory IF LL 4/7 "Extended Scanning" is supported, otherwise Excluded.
6/36	LE Scan Timeout event	[5] 7.7.65.17	Core v.5.0 or later C.19	☑	Core v.5.0 or later C.19: Mandatory IF LL 4/7 "Extended Scanning" is supported, otherwise Excluded.

Table 7:

Item	Capability	Reference	Support	Status	Comment
7/5	Disconnect command	[1] 7.1.6	C.3b	☑	C.3b: Mandatory IF HCI 1a/1 "BR/EDR" OR LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
7/23	LE Create Connection command	[1] 7.8.12	C.59	☑	C.59: Mandatory IF LL 1/5 "Central Role" is supported, otherwise Excluded.
7/24	LE Create Connection Cancel command	[1] 7.8.13	C.94	☑	C.94: Mandatory IF HCI 7/23 "LE Create Connection command" OR HCI 7/41 "LE Extended Create Connection command" is supported, otherwise Excluded.
7/25	LE Connection Complete event	[1] 7.7.65.1	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
7/26	Disconnection Complete event	[1] 7.7.5	C.3b	☑	C.3b: Mandatory IF HCI 1a/1 "BR/EDR" OR LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
7/27	LE Connection Update command	[1] 7.8.18	C.62	☑	C.62: Mandatory IF LL 1/5 "Central Role" OR (LL 1/4 "Peripheral Role" AND LL 9/3 "Connection Parameters Request Procedure") is supported, otherwise Excluded.
7/28	LE Connection Update Complete event	[1] 7.7.65.3	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
7/35	LE Remote Connection Parameter Request Reply command	[1] 7.8.31	C.6	☑	C.6: Mandatory IF LL 9/3 "Connection Parameters Request procedure" is supported, otherwise Excluded.
7/36	LE Remote Connection Parameter Request Negative Reply command	[1] 7.8.32	C.6	☑	C.6: Mandatory IF LL 9/3 "Connection Parameters Request procedure" is supported, otherwise Excluded.
7/37	LE Remote Connection Parameter Request event	[1] 7.7.65.6	C.6	☑	C.6: Mandatory IF LL 9/3 "Connection Parameters Request procedure" is supported, otherwise Excluded.
7/38	LE Enhanced Connection Complete event	[1] 7.7.65.10	C.24	☑	C.24: Mandatory IF (LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role") AND (LL 9/13 "LL Privacy" OR LL 5/4 "Request Connection Using Extended Advertising") is supported, otherwise Optional IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
7/39	LE Read Peer Resolvable Address command	[1] 7.8.42	C.10	☑	C.10: Optional IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
7/40	LE Read Local Resolvable Address command	[1] 7.8.43	C.10	☑	C.10: Optional IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
7/41	LE Extended Create Connection command	[5] 7.8.66	Core v.5.0 or later C.20	☑	Core v.5.0 or later C.20: Mandatory IF LL 5/4 "Request Connection Using Extended Advertising" is supported, otherwise Excluded.
7/42	LE Channel Selection Algorithm event	[5] 7.7.65.20	Core v.5.0 or later C.23	☑	Core v.5.0 or later C.23: Mandatory IF LL 9/10 "Channel Selection Algorithm #2" is supported, otherwise Excluded.
7/43	LE Set Privacy Mode command	[1] 7.8.77	Core v.5.0 or later	☑	Core v.5.0 or later C.9: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.

Table 8:

Item	Capability	Reference	Support	Status	Comment
8/5b	Read Remote Version Information command on LE	[1] 7.1.23	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
8/6	LE Read Remote Features command	[1] 7.8.21	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
8/7	LE Read Remote Features Complete event	[1] 7.7.65.4	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
8/8b	Read Remote Version Information Complete event on LE	[1] 7.7.12	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.

Table 10:

Item	Capability	Reference	Support	Status	Comment
10/12	LE Set Data Length command	[4] 7.8.33	C.8	☑	C.8: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Optional.
10/13	LE Data Length Change event	[4] 7.7.65.7	C.8	☑	C.8: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Optional.
10/14	LE Read Suggested Default Data Length command	[4] 7.8.34	C.8	☑	C.8: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Optional.
10/15	LE Write Suggested Default Data Length command	[4] 7.8.35	C.8	☑	C.8: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Optional.
10/16	LE Read Maximum Data Length command	[4] 7.8.46	C.8	☑	C.8: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Optional.

Table 13:

Item	Capability	Reference	Support	Status	Comment
13/8	LE Set Host Channel Classification command	[1] 7.8.19	C.36	☑	C.36: Mandatory IF LL 9/44 "LE Channel Classification" OR LL 1/5 "Central Role" is supported, otherwise Optional IF (LL 9/41 "Extended Advertising" AND LL 1/1 "Advertising State") OR LL 9/33 "Isochronous Broadcaster" is supported, otherwise Excluded.
13/9	LE Read PHY command	[5] 7.8.47	Core v.5.0 or later C.11	☑	Core v.5.0 or later C.11: Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.
13/10	LE Set Default PHY command	[5] 7.8.48	Core v.5.0 or later C.11	☑	Core v.5.0 or later C.11: Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.
13/11	LE Set PHY command	[5] 7.8.49	Core v.5.0 or later C.11	☑	Core v.5.0 or later C.11: Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.
13/12	LE PHY Update Complete event	[5] 7.7.65.12	Core v.5.0 or later C.11	☑	Core v.5.0 or later C.11: Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.

Table 14:

Item	Capability	Reference	Support	Status	Comment
14/1	Host Buffer Size command	[1] 7.3.39	C.107	☑	C.107: Mandatory IF HCI 14/4 "Set Controller To Host Flow Control command" is supported, otherwise Excluded.
14/2	Set Event Mask command	[1] 7.3.1	M	☑	
14/4	Set Controller to Host Flow Control command	[1] 7.3.38	C.96a	☑	C.96a: Optional IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AMP" OR LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.

14/5	Host Number of Completed Packets command	[1] 7.3.40	C.107	☑	C.107: Mandatory IF HCI 14/4 "Set Controller To Host Flow Control command" is supported, otherwise Excluded.
14/8	Set Event Mask Page 2 command	[1] 7.3.69	O	☑	
14/12	Number of Completed Packets event	[1] 7.7.19	C.3a	☑	C.3a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AMP" OR LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
14/13	Data Buffer Overflow event	[1] 7.7.26	O	☑	
14/14	LE Set Event Mask command	[1] 7.8.1	M	☑	

Table 15:

Item	Capability	Reference	Support	Status	Comment
15/2c	Read Transmit Power Level command on LE	[1] 7.3.35	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
15/4c	Read RSSI command on LE	[1] 7.5.4	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
15/8	LE Read Channel Map command	[1] 7.8.20	C.3	☑	C.3: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.

Table 16:

Item	Capability	Reference	Support	Status	Comment
16/32	LE Encrypt command	[1] 7.8.22	C.4	☑	C.4: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/33	LE Rand command	[1] 7.8.23	C.4	☑	C.4: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/34	LE Long Term Key Request Reply command	[1] 7.8.25	C.61	☑	C.61: Mandatory IF LL 1/4 "Peripheral Role" AND LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/35	LE Enable Encryption command	[1] 7.8.24	C.60	☑	C.60: Mandatory IF LL 1/5 "Central Role" AND LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/36	LE Long Term Key Request event	[1] 7.7.65.5	C.61	☑	C.61: Mandatory IF LL 1/4 "Peripheral Role" AND LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/37b	Encryption Change event [v1] on LE	[1] 7.7.8	C.4	☑	C.4: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/38b	Encryption Key Refresh Complete event on LE	[1] 7.7.39	C.4	☑	C.4: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/39	LE Long Term Key Request Negative Reply command	[1] 7.8.26	C.61	☑	C.61: Mandatory IF LL 1/4 "Peripheral Role" AND LL 9/1 "LE Encryption" is supported, otherwise Excluded.
16/46b	Authenticated Payload Timeout Expired event on LE	[4] 7.7.75	C.155b	☑	C.155b: Mandatory IF HCI 16/48b "Write Authenticated Payload Timeout on LE" is supported, otherwise Optional.
16/47b	Read Authenticated Payload Timeout command on LE	[4] 7.3.93	C.155b	☑	C.155b: Mandatory IF HCI 16/48b "Write Authenticated Payload Timeout on LE" is supported, otherwise Optional.
16/48b	Write Authenticated Payload Timeout command on LE	[4] 7.3.94	C.7	☑	C.7: Mandatory IF LL 9/1 "LE Encryption" and LL 9/2 "LE Ping procedure" are supported, otherwise Excluded.
16/50	LE Read Local P-256 Public Key command	[4] 7.8.36	O	☑	
16/51	LE Generate DHKey command [v1]	[4] 7.8.37	C.99	☑	C.99: Mandatory IF HCI 16/51a "LE Generate DHKey command [v2]" is supported, otherwise Optional.
16/52	LE Read Local P-256 Public Key Complete event	[4] 7.7.65.8	O	☑	
16/53	LE Generate DHKey Complete event	[4] 7.7.65.9	O	☑	

Table 17:

Item	Capability	Reference	Support	Status	Comment
17/7	LE Receiver Test command [v1]	[1] 7.8.28	C.2	☑	C.2: Mandatory IF RF PHY 1/2 "LE Receiver" OR RF PHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
17/8	LE Transmitter	[1] 7.8.29	C.1	☑	C.1: Mandatory IF RF PHY 1/1 "LE Transmitter" OR RF PHY 1/3 "LE Transceiver" is supported, otherwise

Item	Capability	Reference	Support	Status	Comment
17/9	LE Test End command	[1] 7.8.30	M	☑	Excluded.
17/10	LE Receiver Test command [v2]	[5] 7.8.28	Core v.5.0 or later C.13	☑	Core v.5.0 or later C.13: Mandatory IF LL 9/6a "Multiple PHYs" OR RF PHY 1/6 "Stable Modulation Index-Receiver" is supported, otherwise Optional IF RF PHY 1/2 "LE Receiver" OR RF PHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
17/11	LE Transmitter Test command [v2]	[5] 7.8.29	Core v.5.0 or later C.12	☑	Core v.5.0 or later C.12: Mandatory IF LL 9/6a "Multiple PHYs" OR RF PHY 1/5 "Stable Modulation Index-Transmitter" is supported, otherwise Optional IF RF PHY 1/1 "LE Transmitter" OR RF PHY 1/3 "LE Transceiver" is supported, otherwise Excluded.

Table 20:

Item	Capability	Reference	Support	Status	Comment
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Low Energy Link Layer

Table 1: Controller States/Roles

Item	Capability	Reference	Support	Status	Comment
1/1	Advertising State	[1] 4.4.2	C.1	☑	C.1: Mandatory to support at least one of LL 1/1 "Advertising State" OR LL 1/2 "Scanning State" OR LL 1/3 "Initiating State".
1/2	Scanning State	[1] 4.4.3	C.1	☑	C.1: Mandatory to support at least one of LL 1/1 "Advertising State" OR LL 1/2 "Scanning State" OR LL 1/3 "Initiating State".
1/3	Initiating State	[1] 4.4.4	C.1	☑	C.1: Mandatory to support at least one of LL 1/1 "Advertising State" OR LL 1/2 "Scanning State" OR LL 1/3 "Initiating State".
1/4	Peripheral Role	[1] 4.5.5	C.3	☑	C.3: Optional IF LL 1/1 "Advertising State" is supported, otherwise Excluded.
1/5	Central Role	[1] 4.5.4	C.2	☑	C.2: Mandatory IF LL 1/3 "Initiating State" is supported, otherwise Excluded.

Table 2: Device Address Types

Prerequisite: LL 1/1 "Advertising State" OR LL 1/2 "Scanning State" OR LL 1/3 "Initiating State"

Item	Capability	Reference	Support	Status	Comment
2/1	Public Address	[1] 1.3	C.1	☑	C.1: Mandatory to support at least one of LL 2/1 "Public Address" OR LL 2/2 "Random Address" OR LL 2/3 "Static Address".
2/2	Random Address	[1] 1.3	C.1	☑	C.1: Mandatory to support at least one of LL 2/1 "Public Address" OR LL 2/2 "Random Address" OR LL 2/3 "Static Address".
2/3	Static Address	[4] 1.3.2.1	C.1	☑	C.1: Mandatory to support at least one of LL 2/1 "Public Address" OR LL 2/2 "Random Address" OR LL 2/3 "Static Address".
2/4	Generation of private addresses	[4] 1.3.2.2	O	☑	
2/5	Resolution of private addresses	[4] 1.3.2.3	C.2	☑	C.2: Mandatory IF LL 2/4 "Generation of private addresses" is supported, otherwise Excluded.
2/6	Network Privacy Mode – Ignore Identity Address when IRK is present in resolving list	[4] 4.7	C.4	☑	C.4: Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
2/7	Device Privacy Mode	[4] 4.7	C.5	☑	C.5: Optional IF LL 9/13 "LL Privacy" AND SUMICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.

Table 3: Protocol Advertising Features

Prerequisite: LL 1/1 "Advertising State"

Item	Capability	Reference	Support	Status	Comment
3/1	Non-Connectable and Non-Scannable Undirected Events	[1] 4.4.2.6	C.1	☑	C.1: Mandatory IF GAP 5/1 "Broadcaster" is supported, otherwise Optional IF GAP 5/3 "Peripheral" is supported, otherwise Optional.
3/1a	Non-Connectable and Non-Scannable Directed Events	[7] 4.4.2.9	C.10	☑	C.10: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
3/2	Connectable and Scannable Undirected Events	[1] 4.4.2.3	C.2	☑	C.2: Mandatory IF GAP 5/3 "Peripheral" is supported, otherwise Optional.

3/3	Advertising Data	[1] 4.4.2.3, 4.4.2.5, 4.4.2.6	M	☑	
3/4	Connectable Directed Events	[1] 4.4.2.4	O	☑	
3/4a	Low Duty Cycle Direct Advertising	[1] 4.4.2.4	O	☑	
3/4b	Connectable Undirected Events	[7] 4.4.2.7	C.10	☑	C.10: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
3/5	Scannable Undirected Events	[1] 4.4.2.5	O	☑	
3/5a	Scannable Directed Events	[7] 4.4.2.8	C.10	☑	C.10: Mandatory IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
3/6	Sending Scan Responses	[1] 4.4.2.3, 4.4.2.5	C.2	☑	C.2: Mandatory IF GAP 5/3 "Peripheral" is supported, otherwise Optional.
3/7	Accepting Connection Requests	[1] 4.4.2.3, 4.4.2.4	C.2	☑	C.2: Mandatory IF GAP 5/3 "Peripheral" is supported, otherwise Optional.
3/8	Filtering Policies	[1] 4.3.2	O	☑	
3/9	Extended Advertising	[5] 4.6.12	C.6	☑	C.6: Mandatory IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.
3/10	Periodic Advertising	[5] 4.4.2.12	C.12	☑	C.12: Mandatory IF LL 9/42 "Periodic Advertising" is supported, otherwise Excluded.
3/11	Multiple Advertising Sets	[5] 4.4.2.10	C.7	☑	C.7: Optional IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.
3/12	Sending Tx Power in Advertisements	[5] 2.3.4.7	C.7	☑	C.7: Optional IF LL 3/9 "Extended Advertising" is supported, otherwise Excluded.

Table 4: Protocol Scanning Features

Prerequisite: LL 1/2 "Scanning State"

Item	Capability	Reference	Support	Status	Comment
4/1	Passive Scanning	[1] 4.4.3.1	C.1	☑	C.1: Mandatory IF GAP 5/2 "Observer" is supported, otherwise Optional IF GAP 5/4 "Central" is supported, otherwise Optional.
4/2	Receiving Advertising Data	[1] 4.4.3.1, 4.4.3.2	M	☑	
4/3	Active Scanning	[1] 4.4.3.2	C.2	☑	C.2: Mandatory IF GAP 5/4 "Central" is supported AND LL 4/1 "Passive Scanning" is not supported, otherwise Optional IF (GAP 5/4 "Central" is supported AND LL 4/1 "Passive Scanning" is not supported) OR GAP 5/2 "Observer" is supported, otherwise Optional.
4/4	Backoff Procedure	[1] 4.4.3.2	M	☑	
4/5	Filtering Policies	[1] 4.3.3	M	☑	
4/6	Extended Scanner filter policies	[4] 4.4.3	O	☑	
4/6a	Periodic Sync Establishment Filtering Policies	[5] 4.6.13	C.6	☑	C.6: Mandatory IF LL 4/8 "Scanning for Periodic Advertising" is supported, otherwise Excluded.
4/7	Extended Scanning	[5] 4.6.12	C.4	☑	C.4: Mandatory IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.
4/8	Scanning for Periodic Advertising	[5] 4.4.3.4	C.5	☑	C.5: Mandatory IF LL 9/42 "Periodic Advertising" is supported, otherwise Excluded.

Table 5: Protocol Initiating Features

Prerequisite: LL 1/3 "Initiating State"

Item	Capability	Reference	Support	Status	Comment
5/1	Requesting Connections	[1] 4.4.4	M	☑	
5/2	Requesting to Directed Advertising	[1] 4.4.4	M	☑	
5/3	Initiator Filtering	[1] 4.3.4	M	☑	
5/4	Requesting connections using extended advertising	[5] 4.6.12	C.1	☑	C.1: Mandatory IF LL 9/9a "LE Extended Advertising" is supported, otherwise Excluded.

Table 6: Protocol Peripheral Role Features

Prerequisite: LL 1/4 "Peripheral Role"

Item	Capability	Reference	Support	Status	Comment
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6/1	Peripheral Transmissions	[1] 4.5.1, 4.5.5, 4.5.6	M	✓	
6/2	Acknowledgement Scheme	[1] 4.5.9	M	✓	
6/3	Unknown Response	[1] 5.1.4, 2.4.2	M	✓	
6/4	Responding in Feature Setup	[1] 5.1.4.1	M	✓	
6/4a	Requesting Feature Setup	[1] 5.1.4.2	C.18	✓	C.18: Mandatory IF LL 9/5 "Peripheral-initiated Features Exchange" is supported, otherwise Excluded.
6/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	M	✓	
6/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	M	✓	
6/7	More Data	[1] 4.5.6	O	✓	
6/10	Accepting Parameter Update	[1] 5.1.1	M	✓	
6/10a	Initiating Connection Parameter Request	[1] 5.1	O	✓	
6/10b	Accepting Connection Parameter Request	[1] 5.1	C.2	✓	C.2: Mandatory IF LL 6/10a "Initiating Connection Parameter Request" is supported, otherwise Excluded.
6/11	Accepting Channel Map Update	[1] 5.1.2	M	✓	
6/12	Encryption Start	[1] 5.1.3	C.17	✓	C.17: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
6/13	Connection Control Timer	[1] 5.2	M	✓	
6/14	Sending Termination	[1] 5.1.6	M	✓	
6/15	Accepting Termination	[1] 5.1.6	M	✓	
6/16	Connection Supervision Timer	[1] 4.5.2	M	✓	
6/18	Peripheral Pause Encryption	[1] 5.1.3	C.17	✓	C.17: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
6/19	Peripheral Version Exchange	[1] 5.1.5	M	✓	
6/20	Peripheral listens to multiple packets per connection event	[1] 4.5.7	O	✓	
6/21	LE Authenticated Payload Timeout	[3] 5.4	C.5	✓	C.5: Mandatory IF LL 9/2 "LE Ping Procedure" is supported, otherwise Excluded.
6/22	Data Length Update Procedure	[4] 5.1.9	C.4	✓	C.4: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Excluded.
6/23	Minimum Number Of Used Channels Procedure	[5] 4.6.15	C.6	✓	C.6: Mandatory IF LL 9/12 "Minimum Number of Used Channels Procedure" is supported, otherwise Excluded.
6/23a	PHY Update procedure	[5] 5.1.10	C.9	✓	C.9: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.

Table 7: Protocol Central Role Features

Prerequisite: LL 1/5 "Central Role"

Item	Capability	Reference	Support	Status	Comment
7/1	Central Transmissions	[1] 4.5.1, 4.5.4, 4.5.6	M	✓	
7/2	Acknowledgement Scheme	[1] 4.5.9	M	✓	
7/3	Unknown Responses	[1] 5.1.4, 2.4.2	M	✓	
7/4	Requesting Feature Setup	[1] 5.1.4.1	M	✓	
7/4a	Responding in Feature Setup	[1] 5.1.4.2	C.18	✓	C.18: Mandatory IF LL 9/5 "Peripheral-initiated Features Exchange" is supported, otherwise Excluded.
7/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	M	✓	
7/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	M	✓	
7/7	More Data	[1] 4.5.6	O	✓	
7/10	Requesting Parameter Update	[1] 5.1.1	M	✓	
7/10a	Initiating Connection Parameter Request	[1] 5.1	C.2	✓	C.2: Mandatory IF LL 7/10b "Accepting Connection Parameter Request" is supported, otherwise Excluded.

7/10b	Accepting Connection Parameter Request	[1] 5.1	O	☑	
7/11	Requesting Channel Map Update	[1] 5.1.2	M	☑	
7/12	Encryption Start	[1] 5.1.3	C.17	☑	C.17: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
7/13	Connection Control Timer	[1] 5.2	M	☑	
7/14	Sending Termination	[1] 5.1.6	M	☑	
7/15	Accepting Termination	[1] 5.1.6	M	☑	
7/16	Connection Supervision Timer	[1] 4.5.2	M	☑	
7/19	Central Pause Encryption	[1] 5.1.3	C.17	☑	C.17: Mandatory IF LL 9/1 "LE Encryption" is supported, otherwise Excluded.
7/20	Central Version Exchange	[1] 5.1.5	M	☑	
7/21	LE Authenticated Payload Timeout	[3] 5.4	C.5	☑	C.5: Mandatory IF LL 9/2 "LE Ping Procedure" is supported, otherwise Excluded.
7/22	Data Length Update Procedure	[4] 5.1.9	C.4	☑	C.4: Mandatory IF LL 9/6 "LE Data Packet Length Extension" is supported, otherwise Excluded.
7/23	Minimum Number Of Used Channels Procedure	[5] 4.6.15	C.6	☑	C.6: Mandatory IF LL 9/12 "Minimum Number of Used Channels Procedure" is supported, otherwise Excluded.
7/23a	PHY Update procedure	[5] 5.1.10	C.9	☑	C.9: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.

Table 8: Physical Channels

Item	Capability	Reference	Support	Status	Comment
8/1	Data channels (channel index 0 to 36)	[1] 1.4.1	C.1	☑	C.1: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.
8/2	Advertising channels (at least one of channel index 37, 38, 39)	[1] 1.4.1	M	☑	
8/3	Support Data channel selection algorithm	[1] 4.5.8	C.1	☑	C.1: Mandatory IF LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role" is supported, otherwise Excluded.

Table 9: Supported Features

Item	Capability	Reference	Support	Status	Comment
9/1	LE Encryption	[1] 4.6.1	O	☑	
9/2	LE Ping Procedure	[3] 4.6.5	O	☑	
9/3	Connection Parameters Request Procedure	[1] 4.6.2	C.2	☑	C.2: Mandatory IF (LL 6/10a "Initiating Connection Parameter Request" OR LL 7/10b "Accepting Connection Parameter Request") are supported, otherwise Excluded.
9/4	Extended Reject Indication	[1] 4.6.3	C.3	☑	C.3: Mandatory IF LL 9/3 "Connection Parameters Request Procedure" OR LL 9/14 "Connection CTE Request" OR LL 9/15 "Connection CTE Response" is supported, otherwise Optional.
9/5	Peripheral-initiated Features Exchange	[1] 4.6.4	O	☑	
9/6	LE Data Packet Length Extension	[4] 4.6.6	O	☑	
9/6a	Multiple PHYs	[5] 4.6.9	C.6	☑	C.6: Mandatory IF LL 9/7 "LE 2MPHY" OR LL 9/9 "LE Coded PHY" is supported, otherwise Excluded.
9/7	LE 2MPHY	[4] 2.1	C.5	☑	C.5: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.
9/8	Asymmetric Connections	[5] 4.6.9.1	C.7	☑	C.7: Optional IF LL 9/6a "Multiple PHYs" is supported, otherwise Excluded.
9/9	LE Coded PHY	[5] 2.2	C.5	☑	C.5: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.
9/9a	LE Extended Advertising	[5] 4.6.12	C.25	☑	C.25: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/9 "LE Coded PHY" is supported, otherwise Optional.
9/10	Channel Selection Algorithm #2	[5] 4.6.14	C.8	☑	C.8: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF (LL 9/9a "LE Extended Advertising" AND (LL 1/4 "Peripheral Role" OR LL 1/5 "Central Role")) OR LL 9/9b "LE Periodic Advertising" is supported, otherwise Optional.
9/12	Minimum Number of Used Channels Procedure	[5] 4.6.15	C.10	☑	C.10: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.

9/13	LL Privacy	[5] 4.6.7	O	☑	
9/25	Remote Public Key Validation	[6] 4.6.23, [7] 4.6.26	O	☑	
9/41	Extended Advertising	[7] 4.6.12	C.38	☑	C.38: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.
9/42	Periodic Advertising	[7] 4.6.13	C.39	☑	C.39: Optional IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.

Table 10: Scatternet Capabilities

Item	Capability	Reference	Support	Status	Comment
10/1	Act as LE Central and LE Peripheral at the same time	[3] 1.1.1	O	☑	
10/2	Act as LE Peripheral to more than one LE Central at the same time.	[3] 1.1.1	O	☑	

Table 11: Protocol Synchronizing Features

Prerequisite: LL 1/3a "Synchronized State"

Item	Capability	Reference	Support	Status	Comment
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Table 11a: Synchronized Receiver Features

Prerequisite: LL 9/34 "Synchronized Receiver"

Item	Capability	Reference	Support	Status	Comment
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Table 12: Protocol Isochronous Broadcasting Features

Prerequisite: LL 1/6 "Isochronous Broadcasting State"

Item	Capability	Reference	Support	Status	Comment
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Low Energy RF PHY

Table 1: Bluetooth LE RF Capabilities

Item	Capability	Reference	Support	Status	Comment
1/1	LE Transmitter	[1] 3	C.1	☑	C.1: Mandatory to support at least one of RFPHY 1/1 "LE Transmitter" OR RFPHY 1/2 "LE Receiver" OR RFPHY 1/3 "LE Transceiver". Note: Selecting both RFPHY 1/1 "LE Transmitter" and RFPHY 1/2 "LE Receiver" is equivalent to selecting RFPHY 1/3 "LE Transceiver" and vice versa.
1/2	LE Receiver	[1] 4	C.1	☑	C.1: Mandatory to support at least one of RFPHY 1/1 "LE Transmitter" OR RFPHY 1/2 "LE Receiver" OR RFPHY 1/3 "LE Transceiver". Note: Selecting both RFPHY 1/1 "LE Transmitter" and RFPHY 1/2 "LE Receiver" is equivalent to selecting RFPHY 1/3 "LE Transceiver" and vice versa.
1/3	LE Transceiver	[1] 3, 4	C.1	☑	C.1: Mandatory to support at least one of RFPHY 1/1 "LE Transmitter" OR RFPHY 1/2 "LE Receiver" OR RFPHY 1/3 "LE Transceiver". Note: Selecting both RFPHY 1/1 "LE Transmitter" and RFPHY 1/2 "LE Receiver" is equivalent to selecting RFPHY 1/3 "LE Transceiver" and vice versa.
1/4	LE 2MPHY	[3] 3, 4	C.2	☑	C.2: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.
1/5	Stable Modulation Index-Transmitter	[3] 3.1.1	C.3	☑	C.3: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional IF RFPHY 1/1 "LE Transmitter" OR RFPHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
1/6	Stable Modulation Index-Receiver	[3] 3.1.1	C.4	☑	C.4: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional IF RFPHY 1/2 "LE Receiver" OR RFPHY 1/3 "LE Transceiver" is supported, otherwise Excluded.
1/7	LE Coded PHY	[3] 3, 4	C.2	☑	C.2: Excluded IF SUMICS 21/14 "Core v4.2" is supported, otherwise Optional.

Table 2: Bluetooth LE Test Interface Capabilities

Item	Capability	Reference	Support	Status	Comment
2/1	HCI Test Interface	[2] 2	C.1	☑	C.1: Mandatory to support at least one of RFPHY 2/1 "HCI Test Interface" OR RFPHY 2/2 "UART Test Interface".