

Project Details

Product Type Controller Subsystem Product Type Controller Subsystem TCRL Version: CRL 2019-2 Referenced Qualified Design Used in this Qualified Design Use								
TCRL Version: TCRL 2019-2 TCRL	Project Name	ESP32-WROVER-E/E	SP32-WRO	VER-IE				
Referenced Qualified Design (See Note of the Content of the Conten	Product Type	Controller Subsysten	ı					
Previously Qualified Design Used in listing Qualified Design Used in 2020-07-06 Dectaration ID D D51055 Product Listing(s) Name Vebsite Category Publish Date Model Number Description 2.4 GHz Wi-Fi /Bluetooth module Vebsite Category Publish Date Model Number ESP32-WROVER-E ESP32-WROVER-E [24 GHz Wi-Fi /Bluetooth module] Unique Products 7/6/2020 12:00:00 AM ESP32-WROVER-E ESP32-WROVER-E ESP32-WROVER-IE ESP32-WROVER-IE (ESP32-WROVER-IE) ESP32-WROVER-	TCRL Version:	TCRL 2019-2						
this Qualification(s) Listing Date 2020-70-6 DoS 1055 Product Listing(s) Name Vebsite	Referenced Qualified Design(s)							
Declaration ID D051055 Product Listing(s) Name Velosite Category Publish Date Model Number Description 24. GHz Wi-Fi /Bluetooth module	Previously Qualified Design Used in this Qualification(s)	124871						
Product Listing(s) Name Website Category Publish Date Model Number Description 2,4 GHz Wi-Fi /Bluetooth module 2,4 GHz Wi-Fi /Bluetooth module Vinique Products 7/6/2020 12:00:00 AM ESP32-WROVER-IE ESP32-WROVER-IE ESP32-WROVER-IE ESP32-WROVER-IE ESP32-WROVER-IE 2,4 GHz Wi-Fi /Bluetooth module Vinique Products 7/29/2020 12:00:00 AM ESP32-WROVAR-IE ESP32-WROVER-IE Vember Company Espressif Systems/in- Vinited Contact / Person Espressif Systems/in- Sitema Vinique Products 7/29/2020 12:00:00 AM ESP32-WROVER-IE ESP32-WROVER-IE Vember Company Espressif Systems/in- Vinited Contact / Person Espressif Systems/in- Sitema Sitema Sitema Sitema Mame Espressif Espressif Espressif Espressif Espressif City Shanghai Espressif Espressif Espressif Espressif State Shanghai Espressif Espressif Espressif Espressif City Shanghai Espressif Espressif Espressif Espressif City Shanghai Espressif Espressif Espressif Espressif	Listing Date	2020-07-06						
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/Bluetooth module Products 12:00:00 AM 24 GHz Wi-Fi Unique 7/29/2020 ESP32-WROOM-32E ESP32-WROOM-32E Member Company Espressif Systems (strateging definition of the strateging definition of								
Image: Member Company Espressif Systems (S-), Ltd. Declaring Member Contact / Listing Contact / Listing Contact Person Name Espressif Espressif Address 690 Bibs Road, Block 2, Suite 204, Zhangjiang High-tech Park, City Shanghai State Shanghai Country China				•		ESP32-WROOM-32UE	ESP32-WROOM-32UE	
Declaring Member Contact / Listing Contact Person Name Espressif Espressif Address 690 Bibo Road, Block 2, Suite 204, Zhangjiang High-tech Park, City Shanghai State Shanghai Country China						ESP32-WROOM-32E	ESP32-WROOM-32E	
Declaring Member Contact / Listing Contact Person Name Espressif Espressif Address 690 Bibo Road, Block 2, Suite 204, Zhangjiang High-tech Park, City Shanghai State Shanghai Country China								
Name Espressif Address 690 Bibo Road, Block 2, Suite 204, Zhangjiang High-tech Park, City Shanghai State Shanghai Country China	Member Company	Espressif Systems (S	Shanghai) Co	o., Ltd.				
Address690 Bibo Road, Block 2, Suite 204, Zhangjiang High-tech Park,CityShanghaiStateShanghaiCountryChina	Declaring Member Contact / Listing Contact Person	Name	Espressif	Espressif				
StateShanghaiCountryChina	5	Address	690 Bibo Road, Block 2, Suite 204, Zhangjiang High-tech Park,					
Country China		City	Shanghai					
		State	Shanghai					
Postal Code 201203		Country	China					
		Postal Code	201203					

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 Espressif Systems (Shanghai) Co., Ltd. ("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:

Barry Wu

BLUETOOTH® LAUNCH STUDIO TERMS OF USE

Effective Date: November 10th, 2017.

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 your use of the Launch Studio Tool and Submissions (e.g., for declaration IDs, 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 will not be entitled to receive or be permitted to use any item purchased (e.g., declaration ID). Except as set forth in Section 4(c) below, all sales are final and all payments are non-refundable.

(b) If you receive a discount on any fees based on your Member's level of membership and your Member's membership level changes (e.g., the Member moves from an associate to an adopter level), you will no longer be entitled to receive the discount and any fees owed and any outstanding invoices from Bluetooth SIG as of the date of the membership level change will be increased to reflect the amount owed without the discount. Further, if you purchased any declaration IDs at a discount and you have not used them as of the date of the membership level change, you may not use the previously purchased declaration IDs unless you pay the difference between the then-current standard fee and the discounted fee previously paid.

(c) If you have purchased declaration IDs and have not used them and you would like to request a refund, you may click this contact us link and submit a request to return the declaration IDs. All refunds processed by Bluetooth SIG will be made less a 10% processing fee. Declaration IDs purchased from Bluetooth SIG are non-transferable and may not be transferred to another member.

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 ("**Re cords**") 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 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.

Summary ICS

Table 21: Controller Core Configuration

ltem	Capability	Reference	Support	Status	Comment
21/14	Core Specification Version 4.2, Adopted 02 December 2014	Core 4.2	C.1		C.1: Mandatory to support only one Controller Core Specification Version. IF 11/1 "End Product" OR 11/3 "Controller Subsystem" is Supported, Mandatory to Support only one Controller Core Spec version IF (11/4 "Component tested" OR 11/5 "Component non-tested") AND (BB OR LL OR LMP OR RF OR RF-PHY) is Supported, otherwise Excluded.
21/17	Core Erratum 10734 Pairing Updates. Adopted 16 July 2018	Erratum 10734	C.3		C.3: Mandatory IF 21/14 "Core 4.2" OR 21/16 "Core 5.0" 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		C.4: Mandatory IF 21/14 "Core 4.2" OR 21/16 "Core 5.0" OR 21/18 "Core 5.1" 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

ltem	Capability	Reference	Support	Status	Comment
22/1	EDR for asynchronous transports (single slot)	Core 2.0+EDR or later	C.1		C.1: Mandatory to support at least one IF an AVP Controller Core supporting + HS (41/1 "Core 3.0 + HS or later") is supported, otherwise Optional.
22/2	EDR for asynchronous transports (multi-slot)	Core 2.0+EDR or later	C.1		C.1: Mandatory to support at least one IF an AVP Controller Core supporting + HS (41/1 "Core 3.0 + HS or later") is supported, otherwise Optional.
22/4	EDR for synchronous transports (Core 3.0 or later)	CSA1 and 3.0+HS or later	C.1		C.1: Mandatory to support at least one IF an AVP Controller Core supporting + HS (41/1 "Core 3.0 + HS or later") is supported, otherwise Optional.

Table 31: Host Core Specification

ltem	Capability	Refer	ence		Support	Status	Comment
Table	able 34: LE Host Specification Parts						
ltem	Capability	Refer	ence		Support	Status	Comment
Table	41: AMP Controller C	AMP Controller Core Specification					
ltem	Capability	Refer	ence		Support	Status	Comment
Table	Fable 42: AMP Controller Specification Parts						
ltem	Capability	Refer	ence		Support	Status	Comment
Table	51: Low Energy Cont	roller Configurat	ion				
ltem	Capability	Reference	Support	Status	Comment		
51/1	Low Energy Controller	Core 4.0 or Later	C.1		C.1: Mandatory if PROD 2	/4 or 2/5 or 2/6 is suppo	rted, otherwise Excluded.
Table	52: Low Energy Host	Core Specificati	on				
ltem	Capability	Refer	ence		Support	Status	Comment

Product Type

Table 1: Product Types

ltem	Capability	Reference	Support	Status	Comment
1/5	Controller Subsystem	Vol. 0 Part B	C.1		C.1: Mandatory to support one and only one Product Type.

Table 2: Controller Core Configuration

ltem	Capability	Reference	Support	Status	Comment
2/5	BR/EDR/LE Combined 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	
	_				

4.0 Host Controller Interface

Table 1a: IUT Configuration

ltem	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: -

ltem	Capability	Reference	Support	Status	Comment
1/1	Command Complete event	[1] 7.7.14	Μ		
1/1d	Support all LE Controller commands	[1] 3.3, 7.7	0		
1/2	Command Status event	[1] 7.7.15	Μ		
1/3	Hardware Error event	[1] 7.7.16	0		

Table 2: -

ltem	Capability	Reference	Support	Status	Comment
2/1	Reset command	[1] 7.3.2	Μ		

Table 3: -

ltem	Capability	Reference	Support	Status	Comment
3/5	LE Read Buffer Size command [v1]	[1] 7.8.2	Μ		

Table 4: -

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

ltem	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 White List Size command	[1] 7.8.14	Μ		
5/15	LE Add Device To White List command	[1] 7.8.16	Μ		
5/16	LE Clear White List command	[1] 7.8.15	Μ		
5/17	LE Remove Device From White List command	[1] 7.8.17	Μ		

Table 6: -

ltem	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.

Table 7: -

ltem	Capability	Reference	Support	Status	Comment
7/5	Disconnect command	[1] 7.1.6	C.3a		C.3a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AMP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/23	LE Create Connection command	[1] 7.8.12	C.3		C.3: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/24	LE Create Connection Cancel command	[1] 7.8.13	C.3		C.3: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/25	LE Connection Complete event	[1] 7.7.65.1	C.3		C.3: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/26	Disconnection Complete event	[1] 7.7.5	C.3a		C.3a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AMP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/27	LE Connection Update command	[1] 7.8.18	C.3		C.3: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" 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 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.

Table 8: -

ltem	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 "Slave Role" OR LL 1/5 "Master 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 "Slave Role" OR LL 1/5 "Master 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 "Slave Role" OR LL 1/5 "Master 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 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.

Table 10: -

ltem	Capability	Reference	Support	Status	Comment
Table 13: -					

lt	em Cap	pability	Reference	Support	Status	Comment
1		Set Host Channel ssification command	[1] 7.8.19	C.36		C.36: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Optional IF LL 3/9 "Extended Advertising" OR LL 9/33 (Isochronous Broadcaster) is supported, otherwise Excluded.

Table 14: -

ltem	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	Μ		
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 "AVP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master 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	0		
14/12	Number of Completed Packets event	[1] 7.7.19	C.3a		C.3a: Mandatory IF HCl 1a/1 "BR/EDR" OR HCl 1a/3 "AMP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
14/13	Data Buffer Overflow event	[1] 7.7.26	0		
14/14	LE Set Event Mask command	[1] 7.8.1	Μ		

Table 15: -

ltem	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 "Slave Role" OR LL 1/5 "Master 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 "Slave Role" OR LL 1/5 "Master 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 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.

Table 16: -

ltem	Capability	Reference	Support	Status	Comment

Table 17: -

Item	Capability	Reference	Support	Status	Comment
17/7	LE Receiver Test command [⁄1]	[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 Test command [v1]	[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 Excluded.
17/9	LE Test End command	[1] 7.8.30	Μ		
Table 20: -					

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Item Capability Reference Support Status Comment
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Baseband Conformance

Table 1: Physical Channel

ltem	Capability	Reference	Support	Status	Comment
1/1	Frequency band and 79 RF channels	[1] 2.1	Μ		
1/2	Adaptive Frequency Hopping Kernel	[1] 2.6	Μ		

Table 1a: Modulation

Item	Capability	Reference	Support	Status	Comment
1a/1	Basic Data Rate, 1 Mops payload data rate	[2] 3.1	Μ		
1a/2	Enhanced Data Rate, 2 Mops payload data rate	[2] 3.2	C.1		C.1: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)" SUMICS 22/4 "EDR for synchronous transports, CSA1 and 3.0+HS or later") is supported, otherwise Optional.
1a/3	Enhanced Data Rate, 3 Mbps payload data rate	[2] 3.2	C.2		C.2: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)") is supported; Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate" is supported, otherwise Excluded.

Table 2: Link Types

ltem	Capability	Reference	Support	Status	Comment
2/1	ACL link	[1] 5.2	Μ		
2/2	SCOlink	[1] 5.4	0		
2/4	Enhanced Data Rate ACL links	[1] 6.5.4	C.1		C.1: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)") is supported, otherwise Excluded
2/5	Enhanced Data Rate eSCO links	[1] 6.5.3	C.2		C.2: Mandatory IF SUMICS 22/4 "EDR for synchronous transports (Core 3.0 or later)" is supported, otherwise Excluded.

Table 3: SCO and eSCO Link Support

ltem	Capability	Reference	Support	Status	Comment
3/1	SCO links to same Slave	[1] 4.3	C.1		C.1: Mandatory to support at least 1 SCO link type IF BB 2/2 "Support of SCO link" is supported.
3/2	SCO links to different Slaves	[1] 4.3	C.3		C.3: Optional IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.
3/3	SCO links from same Master	[1] 4.3	C.1		C.1: Mandatory to support at least 1 SCO link type IF BB 2/2 "Support of SCO link" is supported.
3/5	eSCO links to same Slave	[1] 4.2	C.2		C.2: Mandatory to support at least 1 eSCO link type IF BB 2/3 "Support of eSCO link" is supported.
3/7	eSCO links from same Master	[1] 4.2	C.2		C.2: Mandatory to support at least 1 eSCO link type IF BB 2/3 "Support of eSCO link" is supported.

Table 3a: Profile Broadcast Data Link Support

Prerequisite: BB 2/6 "Support of Broadcast Data Link"

ltem	Capability	Reference	Support	Status	Comment	
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Table 4: Common Packet Types

ltem	Capability	Reference	Support	Status	Comment
4/1	ID packet type	[1] 6.5.1, [1] 6.5.1.1	Μ		
4/2	NULL packet type	[1] 6.5.1, [1] 6.5.1.2	Μ		
4/3	POLL packet type	[1] 6.5.1, [1] 6.5.1.3	Μ		
4/4	FHS packet type	[1] 6.5.1, [1] 6.5.1.4	Μ		

Μ

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Table 5: ACL Packet Types

ltem	Capability	Reference	Support	Status	Comment
5/1	DH1 packet type	[1] 6.5.4, [1] 6.5.4.2	Μ		
5/2	DM3 packet type	[1] 6.5.4, [1] 6.5.4.3	C.1		C.1: Mandatory IF (BB 9c/1 "Synchronization Train" OR BB 9c/2 "Synchronization Scan") is supported, otherwise Optional.
5/3	DH3 packet type	[1] 6.5.4, [1] 6.5.4.4	0		
5/4	DM5 packet type	[1] 6.5.4, [1] 6.5.4.5	0		
5/5	DH5 packet type	[1] 6.5.4, [1] 6.5.4.6	0		
5/6	AUX1 packet type	[1] 6.5.4, [1] 6.5.4.7	0		

Table 5a: Enhanced Data Rate ACL Packet Types

Prerequisite: BB 2/4 "Support of Enhanced Date Rate ACL links"

ltem	Capability	Reference	Support	Status	Comment
5a/1	2-DH1 packet type	[1] 6.5.4.8	C.1		C.1: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)") is supported; Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate" is supported; otherwise Excluded.
5a/2	2-DH3 packet type	[1] 6.5.4.9	C.2		C.2: Mandatory IF SUM ICS 22/2 "EDR for asynchronous transports (multi-slot)" is supported; Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate is supported; otherwise Excluded.
5a/3	2-DH5 packet type	[1] 6.5.4.10	C.2		C.2: Mandatory IF SUM ICS 22/2 "EDR for asynchronous transports (multi-slot)" is supported; Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate is supported; otherwise Excluded.
5a/4	3-DH1 packet type	[1] 6.5.4.11	C.3		C.3: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)") is supported; Optional IF BB 1a/3 "Enhanced Data Rate, 3 Mbps payload data rate" is supported; otherwise Excluded.
5a/5	3-DH3 packet type	[1] 6.5.4.12	C.4		C.4: Mandatory IF SUMICS 22/2 "EDR for asynchronous transports (multi-slot)" is supported; Optional IF (BB 5a/2 "Support 2-DH3 packet type" AND BB 5a/4 "Support 3-DH1 packet type") are supported; otherwise Excluded.
5a/6	3-DH5 packet type	[1] 6.5.4.13	C.5		C.5: Mandatory IF SUMICS 22/2 "EDR for asynchronous transports (multi-slot)" is supported; Optional IF (BB 5a/3 "Support 2-DH5 packet type" AND BB 5a/4 "Support 3-DH1 packet type") are supported; otherwise Excluded.

Table 6: SCO and eSCO Packet Types

ltem	Capability	Reference	Support	Status	Comment
6/1	HV1 packet type	[1] 6.5.2, [1] 6.5.2.1	C.1		C.1: Mandatory IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.
6/3	HV3 packet type	[1] 6.5.2, [1] 6.5.2.3	C.2		C.2: Optional IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.
6/4	DV packet type	[1] 6.5.2, [1] 6.5.2.4	C.1		C.1: Mandatory IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.

Table 6a: Enhanced Data Rate eSCO Packet Types

Prerequisite: BB 2/5 "Support of Enhanced Data Rate eSCO links"

ltem	Capability	Reference	Support	Status	Comment
6a/1	2-EV3 packet type	[1] 6.5.3.4	C.1		C.1: Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mops payload data rate" is supported; otherwise Excluded.
6a/2	2-EV5 packet type	[1] 6.5.3.5	C.2		C.2: Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate" is supported, otherwise Excluded.
6a/3	3-EV3 packet type	[1] 6.5.3.6	C.3		C.3: Mandatory IF SUM ICS 22/4 "EDR for synchronous transports, CSA1 and 3.0+HS or later" is NOT supported; Optional IF BB 1a/3 "Enhanced Data Rate, 3 Mbps payload data rate" is supported; otherwise Excluded.

Table 7: Page Procedures

ltem	Capability	Reference	Support	Status	Comment
7/1	Paging	[1] 8.3.2	Μ		
7/2	Page scan	[1] 8.3.1	Μ		
7/5	Interlaced Scan during page scan	[1] 2.4	0		

Table 8: Paging Schemes

ltem	Capability	Reference	Support	Status	Comment
8/1	Mandatory scan mode	[1] 8.3, Table 6.5	Μ		

Table 9: Paging Modes

ltem	Capability	Reference	Support	Status	Comment
9/1	Paging mode R0	[1] 8.3.1, Table 8.1	C.1		C.1: At least one of the paging scan modes must be supported.
9/2	Paging mode R1	[1] 8.3.1, Table 8.1	C.1		C.1: At least one of the paging scan modes must be supported.
9/3	Paging mode R2	[1] 8.3.1, Table 8.1	C.1		C.1: At least one of the paging scan modes must be supported.

Table 9b: Paging Train Repetition

ltem	Capability	Reference	Support	Status	Comment
9b/1	Npage >= 1	[1] 8.3.2, Table 8.2	0		
9b/2	Npage >= 128	[1] 8.3.2, Table 8.2	0		
9b/3	Npage >= 256	[1] 8.3.2, Table 8.2	Μ		

Table 9c: Synchronization Modes Support

Prerequisite: BB 2/6 "Support of Broadcast Data Link"

	ltem	Capability	Reference	Support	Status	Comment	
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Table 10: Inquiry Procedures

ltem	Capability	Reference	Support	Status	Comment
10/1	Inquiry	[1] 8.4.2	0		
10/2	Inquiry scan with first FHS	[1] 8.4.2	0		
10/5	Dedicated inquiry access code	[1] 6.3.1	0		
10/6	Interlaced Scan during inquiry scan	[1] 2.5	0		
10/7	Extended Inquiry Response	[1] 8.4.2, 8.4.3	C.1		C.1: Mandatory IF GAP 1/3 "Initiate LMP-Authentication" is supported, otherwise Optional.

Table 11: Piconet Capabilities

ltem	Capability	Reference	Support	Status	Comment
11/1	Broadcast messages	[1] 7.6.1 [1] 7.6.5	0		
11/2	Point-to-multipoint connections	[1] 1	0		

Table 12: Scatternet Capabilities

ltem	Capability	Reference	Support	Status	Comment
12/1	Act as Master in one piconet and Slave in another piconet	[1] 1	0		
12/2	Act as Slave in more than one piconet	[1] 1	0		

Table 13: Synchronous Coding Schemes

Prerequisite: BB 2/2 "SCO link support"

ltem	Capability	Reference	Support	Status	Comment
13/1	Alaw	[1] 9.1	0		
13/2	u-law	[1] 9.1	0		
13/3	CVSD	[1] 9.2	0		
13/4	Transparent Synchronous Data	[1] 5.4, 5.5	0		

Table 14: Erroneous Data Reporting

ltem	Capability	Reference	Support	Status	Comment
14/1	Erroneous Data Reporting for SCO	[1] 7.7	C.1		C.1: Optional IF HCI 9/6 "SCO data via HCI" is supported, otherwise Excluded.
14/2	Erroneous Data Reporting for eSCO	[1] 7.7	C.2		C.2: Optional IF HCI 9/7 "eSCO data via HCI" is supported, otherwise Excluded.

Table 16: Non-flushable Packet Boundary Flag

ltem	Capability	Reference	Support	Status	Comment
16/1	Non-flushable Packet Boundary Flag	[1] 7.6.3	C.1		C.1: Mandatory IF HCI 12/10 "Enhanced Flush Command" is supported; otherwise Optional.

Table 17: Connection States

ltem	Capability	Reference	Support	Status	Comment
17/1	Sniff Subrating Mode	[3] 4.5.3.3	C.1		C.1: Mandatory IF LMP 2/8 "Sniff Mode" is supported; otherwise Optional.

Table 18: Coarse Clock Adjust

ltem	Capability	Reference	Support	Status	Comment
Table 10, Sle	t Availability Mask				

Table 19: Slot Availability Mask

	ltem	Capability	Reference	Support	Status	Comment	
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Host Controller Interface

Table 1a: IUT Configuration

ltem	Capability	Reference	Support	Status	Comment
1a/1	BR/EDR Controller	[1] 1.0	C.0		C.0: Mandatory to support at least one of the defined IUT Configurations

Table 1: -

ltem	Capability	Reference	Support	Status	Comment
1/1	Command Complete event	[1] 7.7.14	М		
1/2	Command Status event	[1] 7.7.15	Μ		

ltem	Capability	Reference	Support	Status	Comment
2/1	Reset command	[1] 7.3.2	Μ		

Table 3: -

Item	Capability	Reference	Support	Status	Comment
3/1	Read Buffer Size command	[1] 7.4.5	C.5a		C.5a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AVP" is supported, otherwise Optional.

Table 4: -

Item	Capability	Reference	Support	Status	Comment
4/1	Read Local Version Information command	[1] 7.4.1	Μ		
4/2	Read Local Supported Commands command	[1] 7.4.2	Μ		
4/3	Read Local Supported Features command	[1] 7.4.3	М		
4/4	Read Local Extended Features command	[1] 7.4.4	C.220		C.220: Mandatory IF LMP 11/4 "Extended Features" is supported, otherwise Excluded.
4/5	Read BD_ADDR command	[1] 7.4.6	Μ		

Table 5: -

Item	Capability	Reference	Support	Status	Comment
5/1	Read Local Name command	[1] 7.3.12	М		
5/2	Write Local Name command	[1] 7.3.11	Μ		
5/3	Read Class of Device command	[1] 7.3.25	Μ		
5/4	Write Class of Device command	[1] 7.3.26	Μ		
5/5	Read Number of Supported IAC command	[1] 7.3.43	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
5/6	Read Current IAC LAP command	[1] 7.3.44	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
5/7	Write Current IAC LAP command	[1] 7.3.45	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
5/8	Read Scan Enable command	[1] 7.3.17	М		
5/9	Write Scan Enable command	[1] 7.3.18	М		

Table 6: -

ltem	Capability	Reference	Support	Status	Comment
6/1	Inquiry command	[1] 7.1.1	C.127		C.127: Mandatory IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/2	Inquiry Cancel command	[1] 7.1.2	C.127		C.127: Mandatory IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/3	Periodic Inquiry Mode command	[1] 7.1.3	C.128		C.128: Optional IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/4	Exit Periodic Inquiry Mode command	[1] 7.1.4	C.103		C.103: Mandatory IF HCI 6/3 "Periodic Inquiry Mode command" is supported, otherwise Excluded.
6/5	Read Inquiry Scan Activity command	[1] 7.3.21	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/6	Write Inquiry Scan Activity command	[1] 7.3.22	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/7	Read Inquiry Scan Type command	[1] 7.3.47	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/8	Write Inquiry Scan Type command	[1] 7.3.48	C.125		C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/9	Read Inquiry Mode command	[1] 7.3.49	C.115		C.115: Mandatory IF HCI 6/10 "Write Inquiry Mode command" is supported, otherwise Excluded.

6/10 Write Inquiry Mode command	[1] 7.3.50	C.146	C.146: Mandatory IF HCI 6/46 "Extended Inquiry Result event" OR HCI 16/54 "IO Capability Request event" is supported, otherwise Optional IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/11 Read Inquiry Response Transmit Power Level command	[1] 7.3.61	C.125	C.125: Mandatory IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/12 Write Inquiry Transmit Power Level command	[1] 7.3.62	C.127	C.127: Mandatory IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/13 Read Extended Inquiry Response command	[1] 7.3.55	C.205	C.205: Mandatory IF BB 10/7 "Extended Inquiry Response" is supported, otherwise Excluded.
6/14 Write Extended Inquiry Response command	[1] 7.3.56	C.205	C.205: Mandatory IF BB 10/7 "Extended Inquiry Response" is supported, otherwise Excluded.
6/23 Inquiry Response Notification event	[2] 7.7.74	C.126	C.126: Optional IF BB 10/2 "Inquiry Scan" is supported, otherwise Excluded.
6/24 Read Extended Inquiry Length command	[1] 7.3.98	C.113	C.113: Mandatory IF HCI 6/25 "Write Extended Inquiry Length command" is supported, otherwise Excluded.
6/25 Write Extended Inquiry Length command	[1] 7.3.99	C.128	C.128: Optional IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/45 Inquiry Result event	[1] 7.7.2	C.127	C.127: Mandatory IF BB 10/1 "Inquiry" is supported, otherwise Excluded.
6/48 Inquiry Complete event	[1] 7.7.1	C.127	C.127: Mandatory IF BB 10/1 "Inquiry" is supported, otherwise Excluded.

Table 7: -

ltem	Capability	Reference	Support	Status	Comment
7/1	Create Connection command	[1] 7.1.5	Μ		
7/2	Accept Connection Request command	[1] 7.1.8	Μ		
7/3	Reject Connection Request command	[1] 7.1.9	Μ		
7/4	Create Connection Cancel command	[1] 7.1.7	Μ		
7/5	Disconnect command	[1] 7.1.6	C.3a		C.3a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AVP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/6	Read Page Timeout command	[1] 7.3.15	Μ		
7/7	Write Page Timeout command	[1] 7.3.16	Μ		
7/8	Read Page Scan Activity command	[1] 7.3.19	Μ		
7/9	Write Page Scan Activity command	[1] 7.3.20	Μ		
7/10	Read Page Scan Type command	[1] 7.3.51	C.119		C.119: Mandatory IF HCI 7/11 "Write Page Scan Type command" is supported, otherwise Excluded.
7/11	Write Page Scan Type command	[1] 7.3.52	C.154		C.154: Mandatory IF BB 7/5 "Interlaced Page Scan" is supported, otherwise Optional.
7/12	Read Connection Accept Timeout command	[1] 7.3.13	Μ		
7/13	Write Connection Accept Timeout command	[1] 7.3.14	Μ		
7/26	Disconnection Complete event	[1] 7.7.5	C.3a		C.3a: Mandatory IF HCI 1a/1 "BR/EDR" OR HCI 1a/3 "AWP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
7/44	Connection Request event	[1] 7.7.4	Μ		
7/45	Connection Complete event	[1] 7.7.3	Μ		

Table 8: -

ltem	Capability	Reference	Support	Status	Comment
8/1	Remote Name Request command	[1] 7.1.19	0		
8/2	Remote Name Request Cancel command	[1] 7.1.20	C.106		C.106: Mandatory IF HCI 8/1 "Remote Name Request command" is supported,

				otherwise Excluded.
8/3	Read Remote Supported Features command	[1] 7.1.21	Μ	
8/4	Read Remote Extended Features command	[1] 7.1.22	C.220	C.220: Mandatory IF LMP 11/4 "Extended Features" is supported, otherwise Excluded.
8/11	Read Remote Extended Features Complete event	[1] 7.7.34	C.220	C.220: Mandatory IF LMP 11/4 "Extended Features" is supported, otherwise Excluded.
8/12	Read Remote Supported Features Complete event	[1] 7.7.11	Μ	
8/13	Remote Host Supported Features Notification event	[1] 7.7.50	C.106	C.106: Mandatory IF HCl 8/1 "Remote Name Request command" is supported, otherwise Excluded.
8/14	Remote Name Request Complete event	[1] 7.7.7	C.106	C.106: Mandatory IF HCI 8/1 "Remote Name Request command" is supported, otherwise Excluded.

Table 9: -

ltem	Capability	Reference	Support	Status	Comment
9/1	Setup Synchronous Connection command	[1] 7.1.26	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/2	Accept Synchronous Connection Request command	[1] 7.1.27	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/3	Reject Synchronous Connection Request command	[1] 7.1.28	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/4	Read Voice Setting command	[1] 7.3.27	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/5	Write Voice Setting command	[1] 7.3.28	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/6	SCO data via HCI	[1] 5.4.3	0		
9/7	eSCO data via HCI	[1] 5.4.3	0		
9/8	Write Default Erroneous Data Reporting command	[1] 7.3.65	C.135		C.135: Optional IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/9	Read Default Erroneous Data Reporting command	[1] 7.3.64	C.112		C.112: Mandatory IF HCI 9/8 "Write Default Erroneous Data Reporting command" is supported, otherwise Excluded.
9/10	Enhanced Setup Synchronous Connection command	[1] 7.1.45	C.135		C.135: Optional IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/11	Enhanced Accept Synchronous Connection Request command	[1] 7.1.46	C.135		C.135: Optional IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/12	Synchronous Connection Complete event	[1] 7.7.35	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
9/13	Synchronous Connection Changed event	[1] 7.7.36	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.

Table 10: -

ltem	Capability	Reference	Support	Status	Comment
10/2	Sniff Mode command	[1] 7.2.2	C.214		C.214: Mandatory IF LMP 2/8 "Sniff mode" is supported, otherwise Excluded.
10/3	Exit Sniff Mode command	[1] 7.2.3	C.214		C.214: Mandatory IF LMP 2/8 "Sniff mode" is supported, otherwise Excluded.
10/6	Read Link Policy Settings command	[1] 7.2.9	C.141		C.141: Mandatory IF LMP 2/6 "Role Switch" OR LMP 2/7 "Hold mode" OR LMP 2/8 "Sniff mode" is supported, otherwise Excluded.
10/7	Write Link Policy Settings command	[1] 7.2.10	C.141		C.141: Mandatory IF LMP 2/6 "Role Switch" OR LMP 2/7 "Hold mode" OR LMP 2/8 "Sniff mode" is supported, otherwise Excluded.
10/8	Read Default Link Policy Settings command	[1] 7.2.11	C.141		C.141: Mandatory IF LMP 2/6 "Role Switch" OR LMP 2/7 "Hold mode" OR LMP 2/8 "Sniff mode" is supported, otherwise Excluded.
10/9	Write Default Link Policy Settings command	[1] 7.2.12	C.141		C.141: Mandatory IF LMP 2/6 "Role Switch" OR LMP 2/7 "Hold mode" OR LMP 2/8 "Sniff mode" is supported, otherwise Excluded.

10/35	Max Slots Change event	[1] 7.7.27	C.132	
10/36	Mode Change event	[1] 7.7.20	C.144	
10/37	Role Change event	[1] 7.7.18	C.212	
10/38	Connection Packet Type Changed event	[1] 7.7.29	C.133	

C.132: Mandatory IF BB 5/2 "DM3" OR BB 5/3 "DH3" OR BB 5/4 "DM5" OR BB 5/5 "DH5" OR SUM ICS 22/2 "EDR for asynchronous transports (multi-slot)" is supported, otherwise Excluded.

C.144: Mandatory IF LMP 2/7 "Hold mode" OR LMP 2/8 "Sniff mode" is supported, otherwise Excluded.

C.212: Mandatory IF LMP 2/6 "Role Switch" is supported, otherwise Excluded.

C.133: Mandatory IF BB 5/2 "DM3" OR BB 5/3 "DH3" OR BB 5/4 "DM5" OR BB 5/5 "DH5" OR BB 6/2 "HV2" OR BB 6/3 "HV3" OR BB 2/4 "Enhanced Data Rate ACL links" is supported, otherwise Excluded.

Table 11: -

ltem	Capability	Reference	Support	Status	Comment
11/1	Role Discovery command	[1] 7.2.7	0		
11/2	Switch Role command	[1] 7.2.8	C.212		C.212: Mandatory IF LMP 2/6 "Role Switch" is supported, otherwise Excluded.

Table 12: -

ltem	Capability	Reference	Support	Status	Comment
12/1	Flow Specification command	[1] 7.2.13	М		
12/2	QoS Setup command	[1] 7.2.6	М		
12/3	Flush command	[1] 7.3.4	М		
12/4	Read Automatic Flush Timeout command	[1] 7.3.29	Μ		
12/5	Write Automatic Flush Timeout command	[1] 7.3.30	Μ		
12/6	Read Failed Contact Counter command	[1] 7.5.1	Μ		
12/7	Reset Failed Contact Counter command	[1] 7.5.2	Μ		
12/8	Read Num Broadcast Retransmissions command	[1] 7.3.31	C.118		C.118: Mandatory IF HCI 12/9 "Write Num Broadcast Retransmissions command" is supported, otherwise Excluded.
12/9	Write Num Broadcast Retransmissions command	[1] 7.3.32	0		
12/10	Enhanced Flush command	[1] 7.3.66	М		
12/17	Sniff Subrating command	[1] 7.2.14	C.221		C.221: Mandatory IF LMP 16/7 "Sniff subrating" is supported, otherwise Excluded.
12/18	Sniff Subrating event	[1] 7.7.37	C.221		C.221: Mandatory IF LMP 16/7 "Sniff subrating" is supported, otherwise Excluded.
12/22	Flush Occurred event	[1] 7.7.17	М		
12/23	Enhanced Flush Complete event	[1] 7.7.47	Μ		
12/24	Flow Specification Complete event	[1] 7.7.32	Μ		
12/26	QoS Setup Complete event	[1] 7.7.13	Μ		
12/27	QoS Violation event	[1] 7.7.30	Μ		

Table 13: -

ltem	Capability	Reference	Support	Status	Comment
13/3	Read AFH Channel Assessment Mode command	[1] 7.3.53	C.140		C.140: Mandatory IF LMP 26/1 "AFH master" OR LMP 26/6 "Support of Channel Classification", otherwise Excluded.
13/4	Write AFH Channel Assessment Mode command	[1] 7.3.54	C.140		C.140: Mandatory IF LMP 26/1 "AFH master" OR LMP 26/6 "Support of Channel Classification", otherwise Excluded.
13/5	Set AFH Host Channel Classification command	[1] 7.3.46	C.140		C.140: Mandatory IF LMP 26/1 "AFH master" OR LMP 26/6 "Support of Channel Classification", otherwise Excluded.
13/6	Change Connection Packet Type command	[1] 7.1.14	C.133		C.133: Mandatory IF BB 5/2 "DM3" OR BB 5/3 "DH3" OR BB 5/4 "DM5" OR BB 5/5 "DH5" OR BB 6/2 "HV3" OR BB 2/4 "Enhanced Data Rate ACL links" is supported, otherwise

Table 14: -

ltem	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	Μ		
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 "AVP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master 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.
14/6	Read Synchronous Flow Control Enable command	[1] 7.3.36	C.122		C.122: Mandatory IF HCI 14/7 "Write Synchronous Flow Control Enable command" is supported, otherwise Excluded.
14/7	Write Synchronous Flow Control Enable command	[1] 7.3.37	C.135		C.135: Optional IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
14/12	Number of Completed Packets event	[1] 7.7.19	C.3a		C.3a: Mandatory IF HCl 1a/1 "BR/EDR" OR HCl 1a/3 "AMP" OR LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
14/13	Data Buffer Overflow event	[1] 7.7.26	0		
14/15	Read LE Host Support command	[1] 7.3.78	C.116		C.116: Mandatory IF HCI 14/16 "Write LE Host Support command" is supported, otherwise Excluded.
14/16	Write LE Host Support command	[1] 7.3.79	C.153a		C.153a: Mandatory IF HCI 1a/1 "BR/EDR" AND HCI 1a/4 "LE" is supported, otherwise

Optional.

Table 15: -

ltem	Capability	Reference	Support	Status	Comment
15/1	Read LMP Handle command	[1] 7.1.25	C.134		C.134: Mandatory IF BB 2/2 "SCO" OR BB 2/3 "eSCO" is supported, otherwise Excluded.
15/2a	Read Enhanced Transmit Power Level command	[1] 7.3.74	C.217		C.217: Mandatory IF LMP 2/20 "Enhanced Power Control" is supported, otherwise Excluded.
15/2b	Read Transmit Power Level command on BR/EDR	[1] 7.3.35	C.152		C.152: Mandatory IF LMP 2/10 "Power Control" is supported, otherwise Optional.
15/5	Read Clock Offset command	[1] 7.1.24	0		
15/6	Read Clock command	[1] 7.5.6	0		
15/7	Read AFH Channel Map command	[1] 7.5.5	C.139		C.139: Mandatory IF LMP 26/1 "AFH master" OR LMP 26/2 "AFH Slave" is supported, otherwise Excluded.
15/10	Read Clock Offset Complete event	[1] 7.7.28	C.104		C.104: Mandatory IF HCI 15/5 "Read Clock Offset command" is supported, otherwise Excluded.

Table 16: -

ltem	Capability	Reference	Support	Status	Comment
16/1	Read Authentication Enable command	[1] 7.3.23	C.111		C.111: Mandatory IF HCI 16/2 "Write Authentication Enable command" is supported, otherwise Excluded.
16/2	Write Authentication Enable command	[1] 7.3.24	0		
16/5	Link Key Request Reply command	[1] 7.1.10	Μ		
16/6	Link Key Request Negative Reply command	[1] 7.1.11	М		
16/7	PIN Code Request Reply command	[1] 7.1.12	Μ		
16/8	PIN Code Request Negative Reply command	[1] 7.1.13	М		
16/9	Authentication Requested command	[1] 7.1.15	0		
16/10	Set Connection Encryption command	[1] 7.1.16	Μ		

Excluded.

16/11	Change Connection Link Key command	[1] 7.1.17	0	
16/12	Master Link Key command	[1] 7.1.18	C.215	(
16/13	Read PIN Type command	[1] 7.3.5	C.120	
16/14	Write PIN Type command	[1] 7.3.6	0	
16/15	Read Stored Link Key command	[1] 7.3.8	C.121	
16/16	Write Stored Link Key command	[1] 7.3.9	0	
16/17	Delete Stored Link Key command	[1] 7.3.10	C.121	(
16/18	Create New Unit Key command	[1] 7.3.7	Core v.5.0 or earlier O	
16/19	User Confirmation Request Reply command	[1] 7.1.30	Μ	
16/20	User Confirmation Request Negative Reply command	[1] 7.1.31	М	
16/21	User Passkey Request Reply command	[1] 7.1.32	М	
16/22	User Passkey Request Negative Reply command	[1] 7.1.33	Μ	
16/23	IO Capability Request Reply command	[1] 7.1.29	Μ	
16/23a	IO Capability Request Negative Reply command	[1] 7.1.36	М	
16/24a	Remote OOB Data Request Reply command	[1] 7.1.34	М	
16/25	Remote OOB Data Request Negative Reply command	[1] 7.1.35	М	
16/26	Read Local OOB Data command	[1] 7.3.60	Μ	
16/27	Write Simple Pairing Mode command	[1] 7.3.59	Μ	
16/28	Read Simple Pairing Mode command	[1] 7.3.58	Μ	
16/29	Refresh Encryption Key command	[1] 7.3.57	Μ	
16/30	Read Encryption Key Size command	[1] 7.5.7	Μ	
16/31	Send Keypress Notification command	[1] 7.3.63	Μ	
16/37a	Encryption Change event on BR/EDR	[1] 7.7.8	Μ	
16/38a	Encryption Key Refresh Complete event on BR/EDR	[1] 7.7.39	Μ	
16/40	Link Key Notification event	[1] 7.7.24	Μ	
16/54	IO Capability Request event	[1] 7.7.40	Μ	
16/55	IO Capability Response event	[1] 7.7.41	Μ	
16/56	Link Key Request event	[1] 7.7.23	Μ	
16/57	Return Link Keys event	[1] 7.7.21	C.121	(
16/58	Change Connection Link Key Complete event	[1] 7.7.9	C.102	i
16/59	Master Link Key Complete event	[1] 7.7.10	C.215	(
16/60	Keypress Notification event	[1] 7.7.49	Μ	
16/61	PIN Code Request event	[1] 7.7.22	Μ	
16/62	Remote OOB Data Request event	[1] 7.7.44	Μ	
16/63	User Passkey Request event	[1] 7.7.43	Μ	
16/64	User Passkey Notification event	[1] 7.7.48	Μ	
16/65	User Confirmation Request event	[1] 7.7.42	Μ	

C.215: Mandatory IF LMP 2/14 "Broadcast Encryption" is supported, otherwise Excluded.
C.120: Mandatory IF HCI 16/14 "Write PIN Type command" is supported, otherwise Excluded.
C.121: Mandatory IF HCI 16/16 "Write Stored Link Key command" is supported, otherwise Excluded.
C.121: Mandatory IF HCI 16/16 "Write Stored Link Key command" is supported, otherwise Excluded.
C.121: Mandatory IF HCI 16/16 "Write Stored Link Key command" is supported, otherwise Excluded.
C.102: Mandatory IF HCI 16/11 "Change Connection Link Key command" is supported, otherwise Excluded.
C.215: Mandatory IF LMP 2/14 "Broadcast Encryption" is supported, otherwise Excluded.

16/66	Authentication Complete event	[1] 7.7.6	C.101	C.101: Mandatory IF HCI 16/9 "Authentication Requested command" is supported, otherwise Excluded.
16/67	Simple Pairing Complete event	[1] 7.7.45	Μ	

Table 17: -

ltem	Capability	Reference	Support	Status	Comment
17/1	Read Loopback Mode command	[1] 7.6.1	C.123		C.123: Mandatory IF LMP 25/1 "BR/EDR Test Mode" is supported, otherwise Excluded.
17/2	Write Loopback Mode command	[1] 7.6.2	C.123		C.123: Mandatory IF LMP 25/1 "BR/EDR Test Mode" is supported, otherwise Excluded.
17/3a	Enable Device Under Test Mode command on BR/EDR	[1] 7.6.3	C.123		C.123: Mandatory IF LMP 25/1 "BR/EDR Test Mode" is supported, otherwise Excluded.
17/4	Write Simple Pairing Debug Mode command	[1] 7.6.4	Μ		
17/22	Loopback command event	[1] 7.7.25	C.123		C.123: Mandatory IF LMP 25/1 "BR/EDR Test Mode" is supported, otherwise Excluded.

Table 18: -

ltem	Capability	Reference	Support	Status	Comment	

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Table 9: Supported Features

ltem	Capability	Reference	Support	Status	Comment
9/4	Extended Reject Indication	[1] 4.6.3	C.3		C.3: IF LL 9/3 "Connection Parameter Request Procedure" OR LL 9/14 "Connection CTE Request" OR LL 9/15 "Connection CTE Response" is supported; otherwise Optional.
9/5	Slave-initiated Features Exchange	[1] 4.6.4	0		

Table 10: Scatternet Capabilities

ltem	Capability	Reference	Support	Status	Comment
10/1	Act as LE Master and LE Slave at the same time	[3] 1.1.1	0		
10/2	Act as LE Slave to more than one LE Master at the same time.	[3] 1.1.1	0		

Table 11: Protocol Synchronizing Features

Prerequisite: LL 1/3a "Synchronized State"

	ltem	Capability	Reference	Support	Status	Comment	
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Table 1: Controller States/Roles

ltem	Capability	Reference	Support	Status	Comment
1/1	Advertising State	[1] 4.4.2	C.1		C.1: Mandatory to support at least one of (1/1 or 1/2 or 1/3).
1/2	Scanning State	[1] 4.4.3	C.1		C.1: Mandatory to support at least one of (1/1 or 1/2 or 1/3).
1/3	Initiating State	[1] 4.4.4	C.1		C.1: Mandatory to support at least one of (1/1 or 1/2 or 1/3).
1/4	Slave Role	[1] 4.5.5	C.3		C.3: Optional if 1/1 is supported, otherwise Excluded.
1/5	Master Role	[1] 4.5.4	C.2	\checkmark	C.2: Mandatory if 1/3 is supported, otherwise Excluded

Table 12: Protocol Isochronous Broadcasting Features

Prerequisite: LL 1/6 "Isochronous Broadcasting State"

ltem	Capability	Reference	Support	Status	Comment	
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Table 2: Device Addresses 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 2/3 "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 2/3 "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 2/3 "Static Address").

Table 3: Protocol Advertising Features

Prerequisite: LL 1/1 "Advertising State"

ltem	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; Optional if GAP 5/3 (Peripheral), otherwise Not Defined.
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 Not Defined.
3/3	Advertising Data	[1] 4.4.2.3, 4.4.2.5, 4.4.2.6	Μ		
3/4	Connectable Directed Events	[1] 4.4.2.4	0		
3/5	Scannable Undirected Events	[1] 4.4.2.5	0		
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	0		

Table 4: Protocol Scanning Features

Prerequisite: LL 1/2 "Scanning State"

ltem	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; Optional IF GAP 5/4 "Central" is supported, otherwise Optional.
4/2	Receiving Advertising Data	[1] 4.4.3.1, 4.4.3.2	Μ		
4/3	Active Scanning	[1] 4.4.3.2	C.2		C.2: Mandatory IF GAP 5/4 "Central" AND NOT LL 4/1 "Passive Scanning" is supported; Optional IF (GAP 5/4 "Central" AND NOT LL 4/1 "Passive Scanning") OR GAP 5/2 "Observer" is supported; otherwise Optional.
4/4	Backoff Procedure	[1] 4.4.3.2	Μ		
4/5	Filtering Policies	[1] 4.3.3	Μ		

Table 5: Protocol Initiating Features

Prerequisite: LL 1/3 "Initiating State"

ltem	Capability	Reference	Support	Status	Comment
5/1	Requesting Connections	[1] 4.4.4	Μ		
5/2	Requesting to Directed Advertising	[1] 4.4.4	Μ		
5/3	Initiator Filtering	[1] 4.3.4	Μ		

Table 6: Protocol Slave Role Features

Prerequisite: LL 1/4 "Slave Role"

ltem	Capability	Reference	Support	Status	Comment
6/1	Slave Transmissions	[1] 4.5.1, 4.5.5, 4.5.6	Μ		
6/2	Acknowledgement Scheme	[1] 4.5.9	Μ		
6/3	Unknown Response	[1] 5.1.4, 2.4.2	Μ		
6/4	Responding in Feature Setup	[1] 5.1.4	Μ		
6/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	Μ		

6/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	Μ	
6/7	More Data	[1] 4.5.6	0	
6/10	Accepting Parameter Update	[1] 5.1.1	Μ	
6/11	Accepting Channel Map Update	[1] 5.1.2	Μ	
6/13	Connection Control Timer	[1] 5.2	Μ	
6/14	Sending Termination	[1] 5.1.6	Μ	
6/15	Accepting Termination	[1] 5.1.6	Μ	
6/16	Connection Supervision Timer	[1] 4.5.2	Μ	
6/19	Slave Version Exchange	[1] 5.1.5	Μ	
6/20	Slave listens to multiple packets per connection event	4.5.7	0	

Table 7: Protocol Master Role Features

Prerequisite: LL 1/5 "Master Role"

ltem	Capability	Reference	Support	Status	Comment
7/1	Master Transmissions	[1] 4.5.1, 4.5.4, 4.5.6	Μ		
7/2	Acknowledgement Scheme	[1] 4.5.9	Μ		
7/3	Unknown Responses	[1] 5.1.4, 2.4.2	Μ		
7/4	Requesting Feature Setup	[1] 5.1.4	Μ		
7/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	Μ		
7/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	Μ		
7/7	Mbre Data	[1] 4.5.6	0		
7/10	Requesting Parameter Update	[1] 5.1.1	Μ		
7/11	Requesting Channel Map Update	[1] 5.1.2	Μ		
7/13	Connection Control Timer	[1] 5.2	Μ		
7/14	Sending Termination	[1] 5.1.6	Μ		
7/15	Accepting Termination	[1] 5.1.6	Μ		
7/16	Connection Supervision Timer	[1]4.5.2	Μ		
7/20	Master Version Exchange	[1] 5.1.5	Μ		

Table 8: Physical Channels

ltem	Capability	Reference	Support	Status	Comment
8/1	Data channels (channel index 0 to 36)	[1] 1.4	C.1		C.1: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.
8/2	Advertising channels (at least one of channel index 37, 38, 39)	[1] 1.4.1	Μ		
8/3	Support Data channel selection algorithm	[1] 4.5.8	C.1		C.1: Mandatory IF LL 1/4 "Slave Role" OR LL 1/5 "Master Role" is supported, otherwise Excluded.

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Table 1: Response Messages

ltem	Capability	Reference	Support	Status	Comment
1/1	Accept message	[1] 2.7	Μ		
1/2	Rejectmessage	[1] 2.7	Μ		

Table 2: Supported Features

2/1	3-slot packets	[1] 3.3, 4.1.10	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/2	5-slot packets	[1] 3.3, 4.1.10	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/3	Encryption	[1] 3.3, 4.2.5	C.5	C.5: Excluded IF LMP 2/21 "BR/EDR Not Supported" is supported, otherwise Mandatory.
2/4	Slotoffset	[1] 3.3, 4.4.1	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/5	Timing accuracy	[1] 3.3, 4.3.1	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/6	Role switch (Master/Slave)	[1] 3.3, 4.4.2	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/8	Sniff mode	[1] 3.3, 4.5.3	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/10	Power Control	[1] 3.3, 4.1.3 [2] 3	C.1	C.1: Mandatory IF RF 1/1 "Power Class 1" is supported; Excluded IF LMP 2/21 "BR/EDR Not Supported" is supported, otherwise Optional.
2/11	Channel quality driven data rate	[1] 3.3, 4.1.7	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/12	SCO link	[1] 3.3, 4.6.1	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/13	RSSI	[1] 3.3	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/14	Broadcast encryption	[1] 3.3, 4.2.5	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/15	eSCO link	[1] 4.6.2	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/16	Adaptive frequency hopping	[1] 4.1.4	C.11	C.11: Excluded IF LMP 2/21 (BR/EDR Not Supported) is supported, otherwise Optional.
2/17	Enhanced Data Rate ACL	[3] 6.5.4 [1] 3.3	C.2	C.2: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)") is supported AND LMP 2/21 "BR/EDR Not Supported" is NOT supported; Excluded IF LMP 2/21 "BR/EDR Not Supported" is supported, otherwise Optional.
2/18	Enhanced Data Rate eSCO	[3] 6.5.3 [1] 3.3	C.3	C.3: Mandatory IF SUMICS 22/4 "EDR for synchronous transports, CSA1 and 3.0 + HS or later" is supported AND LMP 2/21 "BR/EDR Not Supported" is NOT supported; Excluded IF LMP 2/21 "BR/EDR Not Supported" is supported, otherwise Optional.
2/19	Simple Pairing (Host Support)	[1] 4.2.7	C.4	C.4: Mandatory IF LMP 2/21 "BR/EDR Not Supported" is NOT supported, otherwise Excluded.
2/19a	Simple Pairing Updates	[6] [7] 4.2.7.4	C.16	C.16: Mandatory IF LMP 2/19 "Simple Pairing" is supported, otherwise Excluded.
2/20	Enhanced Power Control	[1] 3.3, 4.1.3.1	C.6	C.6: Excluded IF LMP 2/21 "BR/EDR Not Supported" is supported, Optional IF LMP 2/10 "Power Control" AND LMP 2/13 "RSSI" are supported.

Table 3: Authentication

ltem	Capability	Reference	Support	Status	Comment
3/1	Initiate authentication before connection completed	[1] 4.2.1	0		
3/2	Initiate authentication after connection completed	[1] 4.2.1	0		
3/3	Respond to authentication request	[1] 4.2.1	Μ		

Table 4: Pairing

ltem	Capability	Reference	Support	Status	Comment
4/1	Initiate pairing before connection completed	[1] 4.4.2	0		
4/2	Initiate pairing after connection completed	[1] 4.4.2	0		
4/3	Respond to pairing request	[1] 4.2.2.1, 4.2.2.3	Μ		

4/4	Use fixed PIN and request responder to initiator switch	[1] 4.2.2.2	C.1	
4/5	Use variable PIN	[1] 4.2.2.2	C.1	
4/6	Accept initiator to responder switch	[1] 4.2.2.2	C.2	
4/7	TSPC_Change_of_IO_Capabilities	[1] 4.2.7.3.4	Μ	

C.1: Mandatory to support at least one of LMP 4/4 "Use fixed PIN and request responder to initiator switch" OR LMP 4/5 "Use variable PIN".

C.1: Mandatory to support at least one of LMP 4/4 "Use fixed PIN and request responder to initiator switch" OR LMP 4/5 "Use variable PIN".

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") is supported.

Table 5: Link Keys

ltem	Capability	Reference	Support	Status	Comment
5/2	Creation of link key - Combination Key	[1] 4.2.2.4	Μ		
5/3	Initiate change of link key	[1] 4.2.3	0		
5/4	Accept change of link key	[1] 4.2.3	Μ		

Table 6: Encryption

Prerequisite: LMP 2/3 "Encryption supported"

Item	Capability	Reference	Support	Status	Comment
6/1	Initiate encryption	[1] 4.2.5.1	Μ		
6/2	Accept encryption requests	[1] 4.2.5.1	Μ		
6/5	Key size negotiation	[1] 4.2.5.2	Μ		
6/6	Start encryption, as master	[1] 4.2.5.3	М		
6/7	Accept start of encryption	[1] 4.2.5.3	Μ		
6/8	Stop encryption , as master	[1] 4.2.5.4	Μ		
6/9	Accept stop of encryption	[1] 4.2.5.4	Μ		
6/10	Encryption Pause/Resume	[1] 4.2.5.3	Μ		

Table 7: Clock Offset Information

ltem	Capability	Reference	Support	Status	Comment
7/1	Request clock offset information	[1] 4.3.2	0		
7/2	Respond to clock offset requests	[1] 4.3.2	Μ		

Table 8: Slot Offset Information

Prerequisite: LMP 2/4 "Slot offset"

ltem	Capability	Reference	Support	Status	Comment
8/1	Send slot offset information	[1] 4.4.1	C.1		C.1: Mandatory IF LMP 13/1 "Request Master/Slave switch" is supported, otherwise Optional.

Table 9: Timing Accuracy Information

Prerequisite: LMP 2/5 "Timing Accuracy"

ltem	Capability	Reference	Support	Status	Comment
9/1	Request timing accuracy information	[1] 4.3.1	0		
9/2	Respond to timing accuracy information requests	[1] 4.3.1	Μ		

Table 10: LM Version Information

ltem	Capability	Reference	Support	Status	Comment
10/1	Request LM version information	[1] 4.3.3	0		
10/2	Respond to LM version information requests	[1] 4.3.3	Μ		

Table 11: Feature Support

ltem	Capability	Reference	Support	Status	Comment
11/1	Request supported features	[1] 4.3.4	C.1		C.1: Mandatory IF any of the Optional features in LMP 2/1 "3-slot packets", LMP 2/2 "5-slot packets", LMP 2/3 "Encryption", LMP 2/5 "Timing accuracy", LMP 2/7 "Hold mode", LMP 2/8 "Sniff mode", LMP 2/9 "Park mode", LMP 2/10 "Power Control", LMP 2/11 "Channel quality driven data rate", LMP 2/12 "SCO link", LMP 2/14 "Broadcast encryption", LMP 2/15 "eSCO link", LMP 2/16 "Adaptive Frequency Hopping" OR LMP 26/1 "Support of AFH switch as master" is supported, otherwise Optional.
11/2	Respond to supported features requests	[1] 4.3.4	Μ		
11/3	Request extended features mask	[1] 4.3.4	C.2		C.2: Mandatory if a feature requiring another features page is supported, otherwise Optional.
11/4	Respond to extended features Request	[1] 4.3.4	C.2		C.2: Mandatory if a feature requiring another features page is supported, otherwise Optional.

Table 12: Name Information

ltem	Capability	Reference	Support	Status	Comment
12/1	Request name information	[1] 4.3.5	0		
12/2	Respond to name requests	[1] 4.3.5	Μ		

Table 13: Role Switch

Prerequisite: LMP 2/6 "Role switch"

ltem	Capability	Reference	Support	Status	Comment
13/1	Request Master Slave switch	[1] 4.4.2	0		
13/2	Accept Master Slave switch requests	[1] 4.4.2	Μ		

Table 14: Detach

ltem	Capability	Reference	Support	Status	Comment
14/1	Detach connection	[1] 4.1.2	М		

Table 14a: Setting Up and Removing Enhanced Data Rate ACL Connection

ltem	Capability	Reference	Support	Status	Comment
14a/1	Enter Enhanced Data Rate	[1] 4.1.11	C.1		C.1: Mandatory IF LMP 2/17 "Enhanced Data Rate ACL" is supported, otherwise Excluded.
14a/2	Exit Enhanced Data Rate	[1] 4.1.11	C.1		C.1: Mandatory IF LMP 2/17 "Enhanced Data Rate ACL" is supported, otherwise Excluded.

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

ltem	Capability	Reference	Support	Status	Comment				
14b/1	Enter and Exit eSCO Using Enhanced Rate Packets	Data [1] 4.6.2	C.1		C.1: Mandatory IF LMP 2/18 "Enhan- otherwise Excluded.	ced Data Rate eSCO" is supported,			
Table	Fable 15: Hold Mode								
Prerec	uisite: LMP 2/7 "Hold mode"								
ltem	Capability	Reference		Suppo	ort Status	Comment			

Prerequisite: LMP 2/8 "Sniff mode"

ltem	Capability	Reference	Support	Status	Comment
16/2	Request sniff mode	[1] 4.5.3, 4.5.3.2	0		
16/3	Respond to sniff mode requests (renegotiate or reject)	[1] 4.5.3.2	Μ		
16/5	Request un-sniff	[1] 4.5.3.2	C.1		C.1: Mandatory IF LMP 16/2 "Request sniff mode" is supported, otherwise Optional.
16/6	Accept un-sniff requests	[1] 4.5.3.2	Μ		
16/7	Sniff Subrating Mode	[1] 4.5.3.2	Μ		

Table 18: Power Control

ltem	Capability	Reference	Support	Status	Comment
18/1	Request to increase power	[1] 4.1.3	C.1		C.1: Mandatory IF LMP 2/13 "RSSI" is Supported, otherwise Excluded.
18/2	Request to decrease power	[1] 4.1.3	C.1		C.1: Mandatory IF LMP 2/13 "RSSI" is Supported, otherwise Excluded.
18/3	Respond when maxpower reached	[1] 4.1.3	C.2		C.2: Mandatory IF LMP 2/10 "Power Control" is Supported, otherwise Excluded.
18/4	Respond when min power reached	[1] 4.1.3	C.2		C.2: Mandatory IF LMP 2/10 "Power Control" is Supported, otherwise Excluded.
18/5	Request to increment power a single step	[1] 4.1.3.1.1	C.3		C.3: Mandatory IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.
18/6	Request to decrease power a single step	[1] 4.1.3.1.1	C.3		C.3: Mandatory IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.
18/7	Request to go to max power	[1] 4.1.3.1.1	C.4		C.4: Optional IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.
18/8	Respond to increment power a single step	[1] 4.1.3.1.2	C.3		C.3: Mandatory IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.
18/9	Respond to decrease power a single step	[1] 4.1.3.1.2	C.3		C.3: Mandatory IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.
18/10	Respond to go to max power	[1] 4.1.3.1.2	C.3		C.3: Mandatory IF LMP 2/20 "Enhanced Power Control" is Supported, otherwise Excluded.

Table 19: Link Supervision Timeout

ltem	Capability	Reference	Support	Status	Comment
19/1	Set link supervision timeout value	[1] 4.1.6	0		
19/2	Accept link supervision timeout setting	[1] 4.1.6	Μ		

Table 20: Quality of Service

ltem	Capability	Reference	Support	Status	Comment
20/1	Channel quality driven change between DM and DH packet type	[1] 4.1.7	C.1		C.1: Mandatory IF LMP 2/11 "Channel quality driven data rate" is supported, otherwise Optional.
20/2	Force/Request change of Quality of Service	[1] 4.1.8, 4.1.8.1	Μ		
20/3	Request Change of Quality of Service	[1] 4.1.8, 4.1.8.2	Μ		

Table 21: SCO Links

Prerequisite: LMP 2/12 "SCO link"

ltem	Capability	Reference	Support	Status	Comment
21/1	Initiate SCO links, as Master	[1] 4.6.1, 4.6.1.1	0		
21/2	Initiate SCO links, as Slave	[1] 4.6.1, 4.6.1.2	0		
21/3	Accept SCO links	[1] 4.6.1, 4.6.1.1, 4.6.1.2	0		

21/4	Remove SCO links, as Master	[1] 4.6.1, 4.6.1.5	C.1	C.1: Mandatory IF LMP 21/1 "Initiating SCO links, as Master" is supported, otherwise Optional.
21/5	Remove SCO links, as Slave	[1] 4.6.1, 4.6.1.5	C.2	C.2: Mandatory IF LMP 21/2 "Initiating SCO links, as Slave" is supported, otherwise Optional.
21/6	Negotiate SCO link parameters, as Master	[1] 4.6.1, 4.6.1.3	C.3	C.3: Mandatory IF (LMP 21/1 "Initiating SCO links, as Master" OR LMP 21/3 "Accept SCO links") is supported, otherwise Optional.
21/7	Negotiate SCO link parameters, as Slave	[1] 4.6.1, 4.6.1.4	C.4	C.4: Mandatory IF (LMP 21/2 "Initiating SCO links, as Slave" OR LMP 21/3 "Accept SCO links") is supported, otherwise Optional.

Table 22: Multi-Slot Packets

ltem	Capability	Reference	Support	Status	Comment
22/1	Accept maximum allowed 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" are supported, otherwise Optional.
22/2	Request 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" are supported, otherwise Optional.
22/3	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" are supported, otherwise Optional.

Table 23: Paging Scheme

ltem	Capability	Reference	Support	Status	Comment

Table 24: Connection Establishment

ltem	Capability	Reference	Support	Status	Comment
24/1	Create connection for higher layers	[1] 4.1.1	Μ		
24/2	Respond to requests to establish connections for higher layers	[1] 4.1.1	Μ		
24/3	Indicate that link set-up is complete	[1] 4.1.1	Μ		

Table 25: Test Mode

ltem	Capability	Reference	Support	Status	Comment
25/1	Activate test mode	[1] 4.7.1	0		
25/2	Ability to reject activation of test mode if test mode is disabled	[1] 4.7.1	Μ		
25/3	Control test mode	[1] 4.7.2	0		
25/4	Ability to reject est mode control commands if test mode is disabled.	[1] 4.7.2	Μ		

Table 26: Adaptive Frequency Hopping

Prerequisite: LMP 2/16 "AFH"

ltem	Capability	Reference	Support	Status	Comment
26/1	Support of AFH switch as master	[1] 4.1.4	0		
26/2	Support of AFH switch as slave	[1] 4.1.4	Μ		
26/3	Support of Channel Classification reporting - post Role Switch (as Slave)	[1] 4.1.5	C.1		C.1: Optional IF LMP 26/6 "Support of Channel Classification" is supported, otherwise Excluded.
26/4	Support of Channel Classification reporting as slave	[1] 4.1.5	C.2		C.2: Mandatory IF LMP 26/6 "Support of Channel Classification" is supported, otherwise Excluded.
26/5	Support channel classification from host	[1] 4.1.5	C.3		C.3: Mandatory IF LMP 26/1 "Support of AFH switch as master" OR LMP 26/4 "Support of Channel Classification reporting as slave" is supported, otherwise Optional.
26/6	Support of Channel Classification	[1] 4.1.5	0		

Table 27: Ping

Prerequisite: LMP 2/27 "Ping"

ltem	Capability	Reference	Support	Status	Comment				
Table 28: Coarse Clock Adjustment									
Prerequisite: LMP 2/28 "Support of Coarse Clock Adjustment"									
ltem	Capability	Reference	Support	Status	Comment				
Table 29: 3	Table 29: Slot Availability Mask								
Prerequisite: LMP 2/29 "Slot Availability Mask"									
ltem	Capability	Reference	Support	Status	Comment				

Radio

Table 1: RF Capabilities

ltem	Capability	Reference	Support	Status	Comment
1/2	Power Class 2	[1] 3	C.5		C.5: At least one of RF 1/1 "Power Class 1" OR RF 1/2 "Power Class 2" OR 1/3 "Power Class 3" shall be supported.
1/4	Power Control	[1] 3	C.1		C.1: Mandatory IF RF 1/1 "Power Class 1" is supported; Optional IF RF 1/2 "Power Class 2" OR RF 1/3 "Power Class 3" is supported, otherwise Excluded.
1/5	1-slot packets supported	[2] 6.5	Μ		
1/6	3-slot packets supported	[2] 6.5	0		
1/7	5-slot packets supported	[2] 6.5	0		
1/8	79 Channels	[1] 2	Μ		
1/9	Support for GFSK modulation	[1] 3.1	Μ		
1/10	Support for pi/4-DQPSK modulation	[1] 3.2	C.2		C.2: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot)" OR SUMICS 22/3 "EDR for synchronous transports" OR SUMICS 22/4 "EDR for synchronous transports") is supported, otherwise Excluded.
1/11	Support for 8DPSK modulation	[1] 3.2	C.3		C.3: Mandatory IF (SUMICS 22/1 "EDR for asynchronous transports (single slot)" OR SUMICS 22/2 "EDR for asynchronous transports (multi-slot) OR SUMICS 22/3 "EDR for synchronous transports") is supported; Optional IF (SUMICS 22/4 "EDR for synchronous transports") is supported, otherwise Excluded.

Low Energy RF PHY

Table 1: Bluetooth LE RF Capabilities

ltem	Capability	Reference	Support	Status	Comment
1/1	LE Transmitter	[1] 3	C.1		C.1: Mandatory to support at least one of these capabilities. Note that selecting both RF PHY 1/1 "LE Transmitter" and RF PHY 1/2 "LE Receiver" is equivalent to selecting RF PHY 1/3 "LE Transceiver" and vice versa.
1/2	LE Receiver	[1] 4	C.1		C.1: Mandatory to support at least one of these capabilities. Note that selecting both RF PHY 1/1 "LE Transmitter" and RF PHY 1/2 "LE Receiver" is equivalent to selecting RF PHY 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 these capabilities. Note that selecting both RF PHY 1/1 "LE Transmitter" and RF PHY 1/2 "LE Receiver" is equivalent to selecting RF PHY 1/3 "LE Transceiver" and vice versa.

Table 2: Bluetooth LE Test Interface Capabilities

ltem	Capability	Reference	Support	Status	Comment
2/1	HCI Test Interface	[2] 2	C.1		C.1: At least one of the capabilities shall be supported.