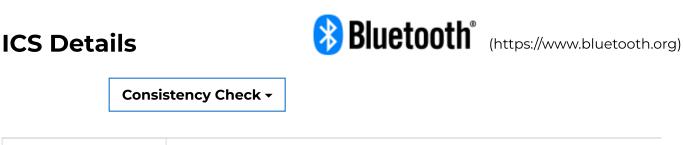
• Updated Launch Studio Terms of Use go into effect on 15 November 2022. Changes clarify Declaration ID validity period. Learn more (https://support.bluetooth.com/hc/enus/articles/360054636252)

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Frequency band and 79 RF

Adaptive Frequency

Hopping Kernel

Core Specification

Baseband Conformance

Capability Statement

Table 1: Physical Channel

Support Item Capability

channels

1/1

1/2

4.0HCI (4.0 Host Controlle BB (Baseband Conformar HCI (Host Controller Interf LL (Low Energy Link Layer LMP (Link Manager) PROD (Product Type) RF (Radio)

RFPHY (Low Energy RF PI

SUM ICS (Summary ICS)

GATT Profiles and Ser LE Audio Specification Mesh Specifications

Traditional Profiles

Capability Statement

Table 1a: Modulation

Support Item Capability Reference Status Comment \checkmark 1a/1 Basic [2] 3.1 Μ Data Rate, 1 Mbps payload data rate 1a/2 Enhanced [2] 3.2 C.1 Data Rate, 2 Mbps payload data rate

Reference Status Comment

Μ

Μ

[1] 2.1

[1] 2.6

C.1: Mandatory IF (SUM ICS 22/1 "EDR for asynchronous transports (single slot)" OR SUM ICS 22/2 "EDR for asynchronous transports (multi-slot)" SUM ICS 22/4 "EDR for synchronous transports, CSA1 and 3.0+HS or later") is supported, otherwise Optional.

Ia/3 Enhanced [2] 3.2 C.2
 Data Rate,
 3 Mbps
 payload
 data rate

C.2: Mandatory IF (SUM ICS 22/1 "EDR for asynchronous transports (single slot)" OR 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.

Capability Statement

Table 2: Link Types

Support	Item	Capability	Reference	Status	Comment
\checkmark	2/1	ACL link	[1] 5.2	М	
\checkmark	2/2	SCO link	[1] 5.4	0	
\checkmark	2/3	eSCO link	[1] 4.3	0	
	2/4	Enhanced Data Rate ACL links	[1] 6.5.4	C.1	C.1: Mandatory IF (SUM ICS 22/1 "EDR for asynchronous transports (single slot)" OR SUM ICS 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 SUM ICS 22/4 "EDR for synchronous transports (Core 3.0 or later)" is supported, otherwise Excluded.
	2/6	Profile Broadcast Data Link	[1] 5.7	0	
	2/7	ACL with AES-CCM and MIC	[4] 8.3.2	C.4	C.4: Mandatory IF LMP 2/26 "Secure Connections" is supported, otherwise Excluded.
	2/8	eSCO with AES-CCM	[4] 8.3.1	C.5	C.5: Mandatory IF LMP 2/26 "Secure Connections" AND BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.

Capability Statement

Table 3: SCO and eSCO Link Support

Support	ltem	Capability	Reference	Status	Comment
---------	------	------------	-----------	--------	---------

Launch Studio - ICS Details

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.
3/4	SCO links from different Masters	[1] 4.3	C.3	C.3: Optional IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.
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.
3/6	eSCO links to different Slaves	[1] 4.2	C.4	C.4: Optional IF BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.
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.
3/8	eSCO links from different Masters	[1] 4.2	C.4	C.4: Optional IF BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.

Capability Statement

Table 3a: Profile Broadcast Data Link Support

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

Support	ltem	Capability	Reference	Status	Comment
	3a/1	Connectionless Slave Broadcast Transmitter	[1] 8.10.1 [2] 3.3, Table 3.4, Item 128	C.1	C.1: Mandatory to support at least one of the defined roles.
	3a/2	Connectionless Slave Broadcast Receiver	[1] 6.5.1 [1] 6.5.1.2	C.1	C.1: Mandatory to support at least one of the defined roles.

Capability Statement

Table 4: Common Packet Types

Support	ltem	Capability	Reference	Status	Comment
\checkmark	4/1	ID packet type	[1] 6.5.1, [1] 6.5.1.1	М	
~	4/2	NULL packet type	[1] 6.5.1, [1] 6.5.1.2	М	
~	4/3	POLL packet type	[1] 6.5.1, [1] 6.5.1.3	М	
\checkmark	4/4	FHS packet type	[1] 6.5.1, [1] 6.5.1.4	М	
~	4/5	DM1 packet type	[1] 6.5.1, [1] 6.5.1.5, [1] 6.5.4, [1] 6.5.4.1	М	

Capability Statement

Table 5: ACL Packet Types

Support	ltem	Capability	Reference	Status	Comment
√	5/1	DH1 packet type	[1] 6.5.4, [1] 6.5.4.2	М	
V	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	
V	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	

Capability Statement

Table 5a: Enhanced Data Rate ACL Packet Types

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

Support Item Capability Reference Status Comment

	Eddi		Botallo	
5a/1	2-DH1 packet type	[1] 6.5.4.8	C.1	C.1: Mandatory IF (SUM ICS 22/1 "EDR for asynchronous transports (single slot)" OR 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/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 (SUM ICS 22/1 "EDR for asynchronous transports (single slot)" OR SUM ICS 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 SUM ICS 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

 \checkmark

[1] 6.5.4.13 C.5

C.5: Mandatory IF SUM ICS 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.

Capability Statement

Table 6: SCO and eSCO Packet Types

type

Support	Item	Capability	Reference	Status	Comment
 Image: A second s	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.
 Image: A second s	6/2	HV2 packet type	[1] 6.5.2, [1] 6.5.2.2	C.2	C.2: Optional IF BB 2/2 "Support of SCO link" is supported, otherwise Excluded.
 Image: A second s	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.
 Image: A set of the set of the	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.
 Image: A second s	6/5	EV3 packet type	[1] 6.5.3, [1] 6.5.2.1	C.3	C.3: Mandatory IF BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.
 Image: A set of the set of the	6/6	EV4 packet type	[1] 6.5.3, [1] 6.5.2.2	C.4	C.4: Optional IF BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.
	6/7	EV5 packet type	[1] 6.5.3, [1] 6.5.2.3	C.4	C.4: Optional IF BB 2/3 "Support of eSCO link" is supported, otherwise Excluded.

Capability Statement

Table 6a: Enhanced Data Rate eSCO Packet Types

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

Support Item Capability Reference Status Comment

Launch Studio - ICS Details

	6a/1	2-EV3 packet type	[1] 6.5.3.4	C.1	C.1: Optional IF BB 1a/2 "Enhanced Data Rate, 2 Mbps payload data rate" is supported; otherwise Excluded.
 Image: A start of the start of	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.
 Image: A second s	6a/4	3-EV5 packet type	[1] 6.5.3.7	C.4	C.4: Optional IF BB 1a/3 "Enhanced Data Rate, 3 Mbps payload data rate" is supported, otherwise Excluded.

Capability Statement

Table 7: Page Procedures

Support	Item	Capability	Reference	Status	Comment
	7/1	Paging	[1] 8.3.2	М	
	7/2	Page scan	[1] 8.3.1	М	
√	7/5	Interlaced Scan during page scan	[1] 2.4	0	
	7/6	Truncated Paging	[1] 8.3.3	C.1	C.1: Mandatory IF BB 3a/2 "Connectionless Slave Broadcast Receiver" is supported, otherwise Optional.
	7/7	Page Response Timeout Detection	[1] 8.3	C.2	C.2: Mandatory IF BB 3a/1 "Connectionless Slave Broadcast Transmitter" is supported, otherwise Optional.
	7/8	Train Nudging During Page	[4] 8.3.2	0	

7/9 Generalized [4] 8.3.1 O Interlaced Page Scan

Capability Statement

Table 8: Paging Schemes

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

Capability Statement

Table 9: Paging Modes

Support	ltem	Capability	Reference	Status	Comment
V	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.
V	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.

Capability Statement

Table 9b: Paging Train Repetition

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

Capability Statement

Table 9c: Synchronization Modes Support

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

Support	Item	Capability	Reference	Status	Comment
	9c/1	Synchronization Train	[1] 8.3.5, [2] 3.3, Table 3.4, Item 130	C.1	C.1: Mandatory IF BB 3a/1 "Connectionless Slave Broadcast Transmitter" is supported, otherwise Excluded.

9c/2 Synchronization [1] 8.3.4, [2] C.2 Scan 3.3, Table 3.4, Item 131

C.2: Mandatory IF BB 3a/2 "Connectionless Slave Broadcast Receiver" is supported, otherwise Excluded.

Capability Statement

Table 10: Inquiry Procedures

Support	Item	Capability	Reference	Status	Comment
\checkmark	10/1	Inquiry	[1] 8.4.2	0	
 Image: A start of the start of	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.
	10/8	Train Nudging During Inquiry	[4] 8.4.2	0	
	10/9	Generalized Interlaced Inquiry Scan	[4] 8.4.1	0	

Capability Statement

Table 11: Piconet Capabilities

Support	Item	Capability	Reference	Status	Comment
\checkmark	11/1	Broadcast messages	[1] 7.6.1 [1] 7.6.5	0	
\checkmark	11/2	Point-to-multipoint connections	ן [1] ו	0	

Capability Statement

Table 12: Scatternet Capabilities

Support Item Capability

Reference Status Comment

Launch Studio - ICS Details

 Image: A start of the start of	12/1	Act as Master in one piconet and Slave in another piconet	ן [ו]	0
\checkmark	12/2	Act as Slave in more than one piconet	ן [ו]	0

Capability Statement

Table 13: Synchronous Coding Schemes

Prerequisite: BB 2/2 "SCO link support"

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

Capability Statement

Table 14: Erroneous Data Reporting

Support	ltem	Capability	Reference	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.

Capability Statement

Table 16: Non-flushable Packet Boundary Flag

Support	Item	Capability	Reference	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.

Capability Statement

Table 17: Connection States

Support Item Capability Reference Status Comment

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

Capability Statement

Table 18: Coarse Clock Adjust

Support	ltem	Capability	Reference	Status	Comment
	18/1	Coarse Clock Adjustment	[4] 8.6.10.1	0	

Capability Statement

Table 19: Slot Availability Mask

Support	ltem	Capability	Reference	Status	Comment
	19/1	Slot Availability Mask	[5] 8.6.11	C.1	C.1: Excluded IF SUM ICS 21/14 "v4.2" is supported, otherwise Optional.

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