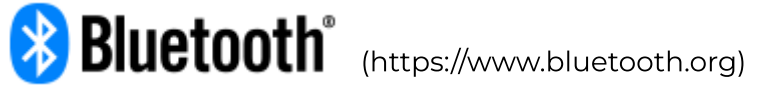


Updated Launch Studio Terms of Use go into effect on 15 November 2022. Changes clarify Declaration ID validity period. Learn more (<https://support.bluetooth.com/hc/en-us/articles/360054636252>)

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# ICS Details



Consistency Check ▾

Core Specification	Low Energy Link Layer					
Controller States/Roles	Table 1: Controller States/Roles					
	Support	Item	Capability	Reference	Status	Comment
4.0HCI (4.0 Host Controller Interface)	<input checked="" type="checkbox"/>	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).
BB (Baseband Conformance)	<input checked="" type="checkbox"/>	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).
HCI (Host Controller Interface)	<input checked="" type="checkbox"/>	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).
LL (Low Energy Link Layer)	<input type="checkbox"/>	1/3a	Synchronized State	[7] 4.4.5	C.4	C.4: Mandatory IF LL 6/28 "Accepting Periodic Advertising Sync Transfer Procedure" OR LL 7/28 "Accepting Periodic Advertising Sync Transfer Procedure" OR LL 4/8 "Scanning for periodic advertising" is supported, otherwise Excluded.
LMP (Link Manager)	<input checked="" type="checkbox"/>	1/4	Slave Role	[1] 4.5.5	C.3	C.3: Optional if 1/1 is supported, otherwise Excluded.
PROD (Product Type)	<input checked="" type="checkbox"/>	1/5	Master Role	[1] 4.5.4	C.2	C.2: Mandatory if 1/3 is supported, otherwise Excluded
RF (Radio)						
RFPHY (Low Energy RF PHY)						
SUM ICS (Summary ICS)						
<b>GATT Profiles and Services</b>						
<b>LE Audio Specifications</b>						
<b>Mesh Specifications</b>						
<b>Traditional Profiles</b>						

<input type="checkbox"/>	1/6	Isochronous Broadcasting State	[8] 4.4.6	C.5	C.5: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" is supported, otherwise Optional.
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## Device Addresses

**Table 2: Device Addresses Types**

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

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	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").
<input checked="" type="checkbox"/>	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").
<input type="checkbox"/>	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").
<input type="checkbox"/>	2/4	Generation of private addresses	[4] 1.3.2.2	O	
<input type="checkbox"/>	2/5	Resolution of private addresses	[4] 1.3.2.3	C.2	C.2: Mandatory if 2/4 (Generation of private address) is supported, otherwise Excluded.
<input type="checkbox"/>	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.

<input type="checkbox"/>	2/7	Device Privacy Mode	[4] 4.7	C.5	C.5: Optional IF LL 9/13 "LL Privacy" AND SUM ICS 21/14 "Core 4.2" is supported, otherwise Mandatory IF LL 9/13 "LL Privacy" is supported, otherwise Excluded.
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## Advertising Features

**Table 3: Protocol Advertising Features**

Prerequisite: LL 1/1 "Advertising State"

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	3/3	Advertising Data	[1] 4.4.2.3, 4.4.2.5, 4.4.2.6	M	
<input checked="" type="checkbox"/>	3/4	Connectable Directed Events	[1] 4.4.2.4	O	
<input type="checkbox"/>	3/4a	Low Duty Cycle Direct Advertising	[1] 4.4.2.4	O	
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	3/5	Scannable Undirected Events	[1] 4.4.2.5	O	

<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	3/8	Filtering Policies	[1] 4.3.2	O	
<input type="checkbox"/>	3/9	Extended Advertising	[5] 4.6.12	C.6	C.6: Mandatory IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	3/10	Periodic Advertising	[5] 4.4.2.12	C.12	C.12: Mandatory IF LL 9/42 "Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	3/12a	Sending Channel Map Update Indication in ACAD	[10] 1.20	C.11	C.11: Optional IF LL 3/10 "Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	3/13	Connectionless CTE Transmitter	[7] 4.6.18	C.8	C.8: Mandatory IF LL 9/16 "Connectionless CTE Transmitter" is supported, otherwise Excluded.

## Scanning Features

**Table 4: Protocol Scanning Features**

Prerequisite: LL 1/2 "Scanning State"

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	4/2	Receiving Advertising Data	[1] 4.4.3.1, 4.4.3.2	M	
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	4/4	Backoff Procedure	[1] 4.4.3.2	M	
<input checked="" type="checkbox"/>	4/5	Filtering Policies	[1] 4.3.3	M	
<input type="checkbox"/>	4/6	Extended Scanner filter policies	[4] 4.4.3	O	
<input type="checkbox"/>	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.
<input type="checkbox"/>	4/7	Extended Scanning	[5] 4.6.12	C.4	C.4: Mandatory IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	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.

### Initiator Features

**Table 5: Protocol Initiating Features**

Prerequisite: LL 1/3 "Initiating State"

Support	Item	Capability	Reference	Status	Comment
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<input checked="" type="checkbox"/>	5/1	Requesting Connections	[1] 4.4.4	M	
<input checked="" type="checkbox"/>	5/2	Requesting to Directed Advertising	[1] 4.4.4	M	
<input checked="" type="checkbox"/>	5/3	Initiator Filtering	[1] 4.3.4	M	
<input type="checkbox"/>	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.

## Slave Features

**Table 6: Protocol Slave Role Features**

Prerequisite: LL 1/4 "Slave Role"

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	6/1	Slave Transmissions	[1] 4.5.1, 4.5.5, 4.5.6	M	
<input checked="" type="checkbox"/>	6/2	Acknowledgement Scheme	[1] 4.5.9	M	
<input checked="" type="checkbox"/>	6/3	Unknown Response	[1] 5.1.4, 2.4.2	M	
<input checked="" type="checkbox"/>	6/4	Responding in Feature Setup	[1] 5.1.4	M	
<input type="checkbox"/>	6/4a	Requesting Feature Setup	[1] 5.1.4.2	C.2	C.2: Mandatory IF LL 6/10a "Initiating Connection Parameter Request" is supported, otherwise Excluded.
<input checked="" type="checkbox"/>	6/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	M	
<input checked="" type="checkbox"/>	6/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	M	
<input checked="" type="checkbox"/>	6/7	More Data	[1] 4.5.6	O	
<input checked="" type="checkbox"/>	6/10	Accepting Parameter Update	[1] 5.1.1	M	

<input type="checkbox"/>	6/10a	Initiating Connection Parameter Request	[1] 5.1	O	
<input type="checkbox"/>	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.
<input checked="" type="checkbox"/>	6/11	Accepting Channel Map Update	[1] 5.1.2	M	
<input checked="" type="checkbox"/>	6/12	Encryption Start	[1] 5.1.3	C.17	C.17: Mandatory if LL 9/1 "LE Encryption" is supported, otherwise Excluded.
<input checked="" type="checkbox"/>	6/13	Connection Control Timer	[1] 5.2	M	
<input checked="" type="checkbox"/>	6/14	Sending Termination	[1] 5.1.6	M	
<input checked="" type="checkbox"/>	6/15	Accepting Termination	[1] 5.1.6	M	
<input checked="" type="checkbox"/>	6/16	Connection Supervision Timer	[1] 4.5.2	M	
<input checked="" type="checkbox"/>	6/18	Slave Pause Encryption	[1] 5.1.3	C.17	C.17: Mandatory if LL 9/1 "LE Encryption" is supported, otherwise Excluded.
<input checked="" type="checkbox"/>	6/19	Slave Version Exchange	[1] 5.1.5	M	
<input type="checkbox"/>	6/20	Slave listens to multiple packets per connection event	4.5.7	O	
<input type="checkbox"/>	6/21	LE Authenticated Payload Timeout	[3] 5.4	C.5	C.5: Mandatory IF LL 9/2 "LE Ping" is supported, otherwise Excluded.

<input type="checkbox"/>	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.
<input type="checkbox"/>	6/23	Minimum Number Of Used Channels Procedure	[5] 4.6.15	C.6	C.6: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Optional.
<input type="checkbox"/>	6/23a	PHY Update procedure	[5] 5.1.10	C.9	C.9: Excluded IF SUM.ICS 21/14 "Core v4.2" is supported; otherwise Mandatory IF LL 9/6a "Multiple PHYs" is supported; otherwise Optional.
<input type="checkbox"/>	6/24	Constant Tone Extension Request Procedure as Initiator	[7] 5.1.12	C.7	C.7: Mandatory IF LL 9/14 "Connection CTE Request" is supported, otherwise Excluded.
<input type="checkbox"/>	6/25	Constant Tone Extension Request Procedure as Responder	[7] 5.1.12	C.8	C.8: Mandatory IF LL 9/15 "Connection CTE Response" is supported, otherwise Excluded.
<input type="checkbox"/>	6/26	Initiating Periodic Advertising Sync Transfer Procedure for Local Periodic Advertising	[7] 5.1.13	C.10	C.10: Mandatory IF LL 9/28 "Initiating Periodic Advertising Sync Transfer for Local Periodic Advertising" is supported, otherwise Excluded.



<input type="checkbox"/>	6/27	Initiating Periodic Advertising Sync Transfer Procedure for Remote Periodic Advertising	[7] 5.1.13	C.11	C.11: Mandatory IF LL 9/29 "Initiating Periodic Advertising Sync Transfer for Remote Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	6/28	Accepting Periodic Advertising Sync Transfer Procedure	[7] 5.1.13	C.12	C.12: Mandatory IF LL 9/27 "Periodic Advertising Sync Transfer – Recipient" is supported, otherwise Excluded.
<input type="checkbox"/>	6/29	Sending Long Control PDUs	[7] 4.5.11	C.13	C.13: Mandatory IF (LL 6/26 "Initiating Periodic Advertising Sync Transfer Procedure for Local Periodic Advertising" OR LL 6/27 "Initiating Periodic Advertising Sync Transfer Procedure for Remote Periodic Advertising") is supported, otherwise Excluded.
<input type="checkbox"/>	6/30	Receiving Long Control PDUs	[7] 4.5.11	C.14	C.14: Mandatory IF LL 6/28 "Accepting Periodic Advertising Sync Transfer Procedure" is supported, otherwise Excluded.
<input type="checkbox"/>	6/31	Can Change Sleep Clock Accuracy	[7] 4.6.25	C.15	C.15: Mandatory IF LL 9/40 "Can Change Sleep Clock Accuracy" is supported, otherwise Excluded.

<input type="checkbox"/>	6/32	Bi-Directional Data in Single Connected Isochronous Stream	[8] 4.5.14	C.16	C.16: Mandatory to support at least one (LL 6/32 "Bi-Directional Data in Single Connected Isochronous Stream" OR LL 6/33 "Bi-Directional Data in Multiple Connected Isochronous Streams") IF LL 9/32 "Connected Isochronous Stream Slave" is supported, otherwise Excluded.
<input type="checkbox"/>	6/33	Bi-Directional Data in Multiple Connected Isochronous Streams	[8] 4.5.14	C.16	C.16: Mandatory to support at least one (LL 6/32 "Bi-Directional Data in Single Connected Isochronous Stream" OR LL 6/33 "Bi-Directional Data in Multiple Connected Isochronous Streams") IF LL 9/32 "Connected Isochronous Stream Slave" is supported, otherwise Excluded.

## Master Features

**Table 7: Protocol Master Role Features**

Prerequisite: LL 1/5 "Master Role"

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	7/1	Master Transmissions	[1] 4.5.1, 4.5.4, 4.5.6	M	
<input checked="" type="checkbox"/>	7/2	Acknowledgement Scheme	[1] 4.5.9	M	
<input checked="" type="checkbox"/>	7/3	Unknown Responses	[1] 5.1.4, 2.4.2	M	
<input checked="" type="checkbox"/>	7/4	Requesting Feature Setup	[1] 5.1.4	M	

<input type="checkbox"/>	7/4a	Responding in Feature Setup	[1] 5.1.4.2	C.2	C.2: Mandatory IF LL 7/10b "Accepting Connection Parameter Request" is supported, otherwise Excluded.
<input checked="" type="checkbox"/>	7/5	Sending Data (Device supports data output from a Host)	[1] 4.5.1, 4.5.6	M	
<input checked="" type="checkbox"/>	7/6	Receiving Data (Device supports data input to a Host)	[1] 4.5.1, 4.5.6	M	
<input checked="" type="checkbox"/>	7/7	More Data	[1] 4.5.6	O	
<input checked="" type="checkbox"/>	7/10	Requesting Parameter Update	[1] 5.1.1	M	
<input type="checkbox"/>	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.
<input type="checkbox"/>	7/10b	Accepting Connection Parameter Request	[1] 5.1	O	
<input checked="" type="checkbox"/>	7/11	Requesting Channel Map Update	[1] 5.1.2	M	
<input checked="" type="checkbox"/>	7/12	Encryption Start	[1] 5.1.3	C.17	C.17: Mandatory if LL 9/1 "LE Encryption", otherwise Excluded.
<input checked="" type="checkbox"/>	7/13	Connection Control Timer	[1] 5.2	M	
<input checked="" type="checkbox"/>	7/14	Sending Termination	[1] 5.1.6	M	
<input checked="" type="checkbox"/>	7/15	Accepting Termination	[1] 5.1.6	M	
<input checked="" type="checkbox"/>	7/16	Connection Supervision Timer	[1] 4.5.2	M	

<input checked="" type="checkbox"/>	7/19	Master Pause Encryption	[1] 5.1.3	C.17	C.17: Mandatory if LL 9/1 "LE Encryption", otherwise Excluded.
<input checked="" type="checkbox"/>	7/20	Master Version Exchange	[1] 5.1.5	M	
<input type="checkbox"/>	7/21	LE Authenticated Payload Timeout	[3] 5.4	C.5	C.5: Mandatory IF LL 9/2 "LE Ping" is supported, otherwise Excluded.
<input type="checkbox"/>	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.
<input type="checkbox"/>	7/23	Minimum Number Of Used Channels Procedure	[5] 4.6.15	C.6	C.6: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Optional
<input type="checkbox"/>	7/23a	PHY Update procedure	[5] 5.1.10	C.9	C.9: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/6a "Multiple PHYs" is supported, otherwise Optional.
<input type="checkbox"/>	7/24	Constant Tone Extension Request Procedure as Initiator	[7] 5.1.12	C.7	C.7: Mandatory IF LL 9/14 "Connection CTE Request" is supported, otherwise Excluded.
<input type="checkbox"/>	7/25	Constant Tone Extension Request Procedure as Responder	[7] 5.1.12	C.8	C.8: Mandatory IF LL 9/15 "Connection CTE Response" is supported, otherwise Excluded.

<input type="checkbox"/>	7/26	Initiating Periodic Advertising Sync Transfer Procedure for Local Periodic Advertising	[7] 5.1.13	C.10	C.10: Mandatory IF LL 9/28 "Initiating Periodic Advertising Sync Transfer for Local Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	7/27	Initiating Periodic Advertising Sync Transfer Procedure for Remote Periodic Advertising	[7] 5.1.13	C.11	C.11: Mandatory IF LL 9/29 "Initiating Periodic Advertising Sync Transfer for Remote Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	7/28	Accepting Periodic Advertising Sync Transfer Procedure	[7] 5.1.13	C.12	C.12: Mandatory IF LL 9/27 "Periodic Advertising Sync Transfer – Recipient" is supported, otherwise Excluded.
<input type="checkbox"/>	7/29	Sending Long Control PDUs	[7] 4.5.11	C.13	C.13: Mandatory IF (LL 7/26 "Initiating Periodic Advertising Sync Transfer Procedure for Local Periodic Advertising" OR LL 7/27 "Initiating Periodic Advertising Sync Transfer Procedure for Remote Periodic Advertising") is supported, otherwise Excluded.
<input type="checkbox"/>	7/30	Receiving Long Control PDUs	[7] 4.5.11	C.14	C.14: Mandatory IF LL 7/28 "Accepting Periodic Advertising Sync Transfer Procedure" is supported, otherwise Excluded.

<input type="checkbox"/>	7/31	Can Change Sleep Clock Accuracy	[7] 4.6.25	C.15	C.15: Mandatory IF LL 9/40 "Can Change Sleep Clock Accuracy" is supported, otherwise Excluded
<input type="checkbox"/>	7/32	Connected Isochronous Stream – Sequential	[8] 4.5.14	C.16	C.16: Mandatory to support at least one (LL 7/32 "Connected Isochronous Stream – Sequential" OR LL 7/33 "Connected Isochronous Stream – Interleaved") IF LL 9/31 "Connected Isochronous Stream Master" is supported, otherwise Excluded.
<input type="checkbox"/>	7/33	Connected Isochronous Stream – Interleaved	[8] 4.5.14	C.16	C.16: Mandatory to support at least one (LL 7/32 "Connected Isochronous Stream – Sequential" OR LL 7/33 "Connected Isochronous Stream – Interleaved") IF LL 9/31 "Connected Isochronous Stream Master" is supported, otherwise Excluded.

## Physical Channels

**Table 8: Physical Channels**

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	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.

<input checked="" type="checkbox"/>	8/2	Advertising channels (at least one of channel index 37, 38, 39)	[1] 1.4.1	M	
<input checked="" type="checkbox"/>	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.

## Supported Channels

**Table 9: Supported Features**

Support	Item	Capability	Reference	Status	Comment
<input checked="" type="checkbox"/>	9/1	LE Encryption	[1] 4.6.1	O	
<input type="checkbox"/>	9/2	LE Ping Procedure	[3] 4.6.5	O	
<input type="checkbox"/>	9/3	Connection Parameter 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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	9/5	Slave-initiated Features Exchange	[1] 4.6.4	O	
<input type="checkbox"/>	9/6	LE Data Packet Length Extension	[4] 4.6.6	O	
<input type="checkbox"/>	9/6a	Multiple PHYs	[5] 4.6.9	C.6	C.6: Mandatory IF LL 9/7 "LE 2M PHY" OR LL 9/9 "LE Coded PHY" is supported, otherwise Excluded.

<input type="checkbox"/>	9/7	LE 2M PHY	[4] 2.1	C.5	C.5: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Optional.
<input type="checkbox"/>	9/8	Asymmetric Connections	[5] 4.6.9.1	C.7	C.7: Optional IF LL 9/6a "Multiple PHYs" is supported, otherwise Excluded.
<input type="checkbox"/>	9/9	LE Coded PHY	[5] 2.2	C.5	C.5: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Optional.
<input type="checkbox"/>	9/9a	LE Extended Advertising	[5] 4.6.12	C.25	C.25: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF LL 9/9 "LE Coded PHY" is supported, otherwise Optional.
<input type="checkbox"/>	9/9b	LE Periodic Advertising	[5] 4.6.13	C.26	C.26: Optional IF LL 9/9a "LE Extended Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	9/10	Channel Selection Algorithm #2	[5] 4.6.14	C.8	C.8: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Mandatory IF (LL 9/9a "LE Extended Advertising" AND (LL 1/4 "Slave Role" OR LL 1/5 "Master Role")) OR LL 9/9b "LE Periodic Advertising" is supported, otherwise Optional.
<input type="checkbox"/>	9/11	LE Power Class 1	[5] 4.6	C.9	C.9: Excluded IF NOT SUM ICS 21/15 "CSA5" AND (SUM ICS 21/14 "Core 4.2") is supported, otherwise Optional if RF-PHY 1/1 "LE Transmitter" OR RF-PHY 1/3 "LE Transceiver" is supported, otherwise Excluded.



<input type="checkbox"/>	9/12	Minimum Number of Used Channels Procedure	[5] 4.6.15	C.10	C.10: Mandatory IF (LL 6/23 "Slave role - Minimum Number of Used Channels Procedure" or LL 7/23 "Master Role - Minimum Number of Used Channels Procedure") is supported, otherwise Excluded.
<input type="checkbox"/>	9/13	LL Privacy	[5] 4.6.7	O	
<input type="checkbox"/>	9/14	Connection CTE Request	[7] 4.6.16	C.11	C.11: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" is supported, otherwise Optional IF (LL 1/4 "Slave Role" OR LL 1/5 "Master Role") AND RF PHY 1/11 "2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/15	Connection CTE Response	[7] 4.6.17	C.4	C.4: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" is supported, otherwise Optional IF (LL 1/4 "Slave Role" OR LL 1/5 "Master Role") AND RF PHY 1/8 "Transmitting Constant Tone Extensions" is supported, otherwise Excluded.
<input type="checkbox"/>	9/16	Connectionless CTE Transmitter	[7] 4.6.18	C.12	C.12: Excluded IF SUM ICS 21/16 "Core v5.0" is supported, otherwise Optional IF LL 3/10 "Periodic Advertising" AND RF PHY 1/8 "Transmitting Constant Tone Extensions" is supported, otherwise Excluded.

<input type="checkbox"/>	9/17	Connectionless CTE Receiver	[7] 4.6.19	C.13	C.13: Optional IF LL 11/1 "Synchronizing to Periodic Advertising" AND RF PHY 1/11 "2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/18	2 $\mu$ s Antenna Switching During Constant Tone Extension Transmission (AoD)	[7] 4.6.20	C.14	C.14: Optional IF LL 9/19 "No Antenna Switching During Constant Tone Extension Transmission (AoA)" AND RF PHY 1/9 "2 $\mu$ s Antenna Switching During Constant Tone Extension Transmission (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/19	No Antenna Switching During Constant Tone Extension Transmission (AoA)	[7] 4.6.21	C.15	C.15: Optional IF RF PHY 1/8 "Transmitting Constant Tone Extensions" is supported, otherwise Excluded.
<input type="checkbox"/>	9/20	2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)	[7] 4.6.20	C.16	C.16: Optional IF RF PHY 1/11 "2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/21	2 $\mu$ s Antenna Switching And Sampling During Constant Tone Extension Reception (AoA)	[7] 4.6.21	C.27	C.27: Optional if LL 9/20 "2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" AND RF PHY 1/12 "2 $\mu$ s Antenna Switching and Sampling During Constant Tone Extension Reception (AoA)" is supported, otherwise Excluded.

<input type="checkbox"/>	9/22	1 $\mu$ s Antenna Switching During Constant Tone Extension Transmission (AoD)	[7] 4.6.20	C.17	C.17: Optional IF LL 9/18 "2 $\mu$ s Antenna Switching During Constant Tone Extension Transmission (AoD)" AND RF PHY 1/10 "1 $\mu$ s Antenna Switching During Constant Tone Extension Transmission (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/23	1 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)	[7] 4.6.20	C.18	C.18: Optional IF LL 9/20 "2 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" AND RF PHY 1/13 "1 $\mu$ s Antenna Sampling During Constant Tone Extension Reception (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/24	1 $\mu$ s Antenna Switching and Sampling During Constant Tone Extension Reception (AoA)	[7] 4.6.21	C.19	C.19: Optional IF LL 9/21 "2 $\mu$ s Antenna Switching And Sampling During Constant Tone Extension Reception (AoA)" AND RF PHY 1/14 "1 $\mu$ s Antenna Switching and Sampling During Constant Tone Extension Reception (AoD)" is supported, otherwise Excluded.
<input type="checkbox"/>	9/25	Remote Public Key Validation	[6] 4.6.23 [7] 4.6.26	O	
<input type="checkbox"/>	9/26	Periodic Advertising Sync Transfer – Sender	[7] 4.6.23	C.21	C.21: Mandatory IF (LL 9/28 "Initiating Periodic Advertising Sync Transfer for Local Periodic Advertising" OR LL 9/29 "Initiating Periodic Advertising Sync Transfer for Remote Periodic Advertising") is supported, otherwise Excluded.

<input type="checkbox"/>	9/27	Periodic Advertising Sync Transfer – Recipient	[7] 4.6.24	C.22	C.22: Optional IF (LL 11/1 “Synchronizing to Periodic Advertising” AND (LL 1/4 “Slave Role” OR LL 1/5 “Master Role”)) are supported, otherwise Excluded.
<input type="checkbox"/>	9/28	Initiating Periodic Advertising Sync Transfer for Local Periodic Advertising	[7] 5.1.13	C.23	C.23: Excluded IF SUM ICS 21/16 “Core v5.0” is supported, otherwise Optional IF (LL 3/10 “Periodic Advertising” AND (LL 1/4 “Slave Role” OR LL 1/5 “Master Role”)) are supported, otherwise Excluded.
<input type="checkbox"/>	9/29	Initiating Periodic Advertising Sync Transfer for Remote Periodic Advertising	[7] 5.1.13	C.22	C.22: Optional IF (LL 11/1 “Synchronizing to Periodic Advertising” AND (LL 1/4 “Slave Role” OR LL 1/5 “Master Role”)) are supported, otherwise Excluded.
<input type="checkbox"/>	9/30	Sleep Clock Accuracy Update	[7] 4.6.25	C.24	C.24: Excluded IF SUM ICS 21/14 “Core 4.2” OR SUM ICS 21/16 “Core 5.0” is supported, otherwise Mandatory IF LL ICS 6/31 “Can Change Sleep Clock Accuracy” OR LL ICS 7/31 “Can Change Sleep Clock Accuracy” is supported, otherwise Optional.
<input type="checkbox"/>	9/31	Connected Isochronous Stream Master	[8] 4.6.27	C.28	C.28: Excluded IF SUM ICS 21/14 “Core v4.2” OR SUM ICS 21/16 “Core v5.0” OR SUM ICS 21/18 “Core v5.1” is supported, otherwise Optional IF LL 1/5 “Master Role” is supported, otherwise Excluded.
<input type="checkbox"/>	9/32	Connected Isochronous Stream Slave	[8] 4.6.27	C.29	C.29: Excluded IF SUM ICS 21/14 “Core v4.2” OR SUM ICS 21/16 “Core v5.0” OR SUM ICS 21/18 “Core v5.1” is supported, otherwise Optional IF LL 1/4 “Slave Role” is supported, otherwise Excluded.

<input type="checkbox"/>	9/33	Isochronous Broadcaster	[8] 4.6.28	C.30	C.30: Mandatory IF LL 1/6 "Isochronous Broadcasting State" is supported, otherwise Excluded.
<input type="checkbox"/>	9/34	Synchronized Receiver	[8] 4.6.29	C.31	C.31: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" is supported, otherwise Optional IF LL 1/3a "Synchronized State" is supported, otherwise Excluded.
<input type="checkbox"/>	9/35	Isochronous Receive Test	[9] 7.8.112, 7.8.113, 7.8.114	C.32	C.32: Mandatory IF LL 1/3a "Synchronized State" OR LL 9/31 "Connected Isochronous Stream Master" OR LL 9/32 "Connected Isochronous Stream Slave" is supported, otherwise Excluded.
<input type="checkbox"/>	9/36	Isochronous Transmit Test	[9] 7.8.111, 7.8.114	C.33	C.33: Mandatory IF LL 1/6 "Isochronous Broadcasting State" OR LL 9/31 "Connected Isochronous Stream Master" OR LL 9/32 "Connected Isochronous Stream Slave" is supported, otherwise Excluded.
<input type="checkbox"/>	9/37	LE Power Control Request	[8] 4.6.31	C.34	C.34: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" is supported, otherwise Mandatory IF LL 9/38 "LE Power Change Indication" is supported, otherwise Optional.
<input type="checkbox"/>	9/38	LE Power Change Indication	[8] 4.6.30	C.35	C.35: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" is supported, otherwise Mandatory IF LL 9/39 "LE Path Loss Monitoring" is supported, otherwise Optional.

<input type="checkbox"/>	9/39	LE Path Loss Monitoring	[8] 4.6.32	C.36	C.36: Excluded IF SUM ICS 21/14 "Core v4.2" OR SUM ICS 21/16 "Core v5.0" OR SUM ICS 21/18 "Core v5.1" is supported, otherwise Optional.
<input type="checkbox"/>	9/40	Can Change Sleep Clock Accuracy	[7] 4.6.25	C.37	C.37: Excluded IF SUM ICS 21/14 "Core 4.2" OR SUM ICS 21/16 "Core 5.0" is supported, otherwise Optional.
<input type="checkbox"/>	9/41	Extended Advertising	[7] 4.6.12	C.38	C.38: Excluded IF SUM ICS 21/14 "Core v4.2" is supported, otherwise Optional.
<input type="checkbox"/>	9/42	Periodic Advertising	[7] 4.6.13	C.39	C.39: Optional IF LL 9/41 "Extended Advertising" is supported, otherwise Excluded.

## Scatternet Capabilities

**Table 10: Scatternet Capabilities**

Support	Item	Capability	Reference	Status	Comment
<input type="checkbox"/>	10/1	Act as LE Master and LE Slave at the same time	[3] 1.1.1	O	
<input type="checkbox"/>	10/2	Act as LE Slave to more than one LE Master at the same time.	[3] 1.1.1	O	

## Synchronized Features

**Table 11: Protocol Synchronizing Features**

Prerequisite: LL 1/3a "Synchronized State"

Support	Item	Capability	Reference	Status	Comment
<input type="checkbox"/>	11/1	Synchronizing to Periodic Advertising	[7] 4.4.3.4	C.3	C.3: Mandatory IF LL 9/42 "Periodic Advertising" is supported, otherwise Excluded.
<input type="checkbox"/>	11/2	Connectionless CTE Receiver	[7] 4.6.19	C.1	C.1: Mandatory IF LL 9/17 "Connectionless CTE Receiver" is supported, otherwise Excluded.


<input type="checkbox"/>	11/3	Receiving Data on Single Broadcast Isochronous Stream	[8] 4.4.5.2	C.2	C.2: Mandatory to support at least one (LL 11/3 “Receiving Data on Single Broadcast Isochronous Stream” OR LL 11/4 “Receiving Data on Multiple Broadcast Isochronous Streams”) IF LL 9/34 “Synchronized Receiver” is supported, otherwise Excluded.
<input type="checkbox"/>	11/4	Receiving Data on Multiple Broadcast Isochronous Streams	[8] 4.4.5.2	C.2	C.2: Mandatory to support at least one (LL 11/3 “Receiving Data on Single Broadcast Isochronous Stream” OR LL 11/4 “Receiving Data on Multiple Broadcast Isochronous Streams”) IF LL 9/34 “Synchronized Receiver” is supported, otherwise Excluded.

## Isochronous Broadcasting Features

**Table 12: Protocol Isochronous Broadcasting Features**

Prerequisite: LL 1/6 “Isochronous Broadcasting State”

Support	Item	Capability	Reference	Status	Comment
<input type="checkbox"/>	12/1	Encrypting a Broadcast Isochronous Stream	[8] 4.4.6.1 4.4.6.10	C.1	C.1: Mandatory to support at least one (LL 12/1 “Encrypting a Broadcast Isochronous Stream” OR LL 12/2 “Non-encrypted Broadcast Isochronous Stream”) IF LL 9/33 “Isochronous Broadcaster” is supported, otherwise Excluded.
<input type="checkbox"/>	12/2	Non-encrypted Broadcast Isochronous Stream	[8] 4.4.6.1	C.1	C.1: Mandatory to support at least one (LL 12/1 “Encrypting a Broadcast Isochronous Stream” OR LL 12/2 “Non-encrypted Broadcast Isochronous Stream”) IF LL 9/33 “Isochronous Broadcaster” is supported, otherwise Excluded.

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