Errata Correction 27096: Pause Encryption should be mandatory to support with encryption

***Bluetooth*®** **Errata Correction**

- ▪ **Version:** v1.0
- ▪ **Version Date:** 2025-04-08
- ▪ **Prepared By:** Core Specification Working Group

  This Errata Correction applies to the following specifications (collectively, the "Source Specifications"):

  - Core Specification v6.1 [8]
  - Core Specification v6.0 [1]
  - Core Specification (amended) v5.4 [2]
  - Core Specification (amended) v5.3 [3]
  - Core Specification (amended) v5.2 [4]
  - Core Specification (amended) v5.1 [5]
  - Core Specification (amended) v5.0 [6]
  - Core Specification (amended) v4.2 [7]

Abstract:

Make the Pause Encryption LMP feature mandatory on all devices that support the Encryption LMP feature in the Core Specifications from v4.2 to v6.1.

Version History

Version Number	Date (yyyy-mm-dd)	Comments
v1.0	2025-04-08	Adopted by the Bluetooth SIG Board of Directors.

Acknowledgments

Name	Company
Clive D.W. Feather	Samsung Cambridge Solution Centre

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Contents

1   Drafting conventions

1.1   Language

Refer to and follow any terminology, language conventions, and interpretation sections of the Source Specification(s).

1.2   Formatting and color

The formatting and color conventions described in Table 1.1 below are used in this Errata Correction to describe the specific changes and additions to the Source Specification(s) identified on the cover page.

Text Color	Description
black	Text that is unmodified from the Source Specification.
red	Text that is added to the Source Specification.
red strikethrough	Text that is deleted from the Source Specification.
[green bracketed text]	Comments that explain the changes to be made to the Source Specification.
[…]	Indicates the section of the Source Specification that includes additional text that is not included in black text.
blue	Default color used for section numbers and headings of this document.

Table 1.1: Color key for headings, captions, and body text

2   Changes to Core Specification v6.1

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v6.1.

2.1   Changes to Core Specification v6.1, Volume 2, Part C: Link Manager Protocol Specification

2.1.1   [Modified Section] 3.5 Feature requirements

[Modify Table 3.5 as shown.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

3   Changes to Core Specification v6.0

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v6.0.

3.1   Changes to Core Specification v6.0, Volume 2, Part C: Link Manager Protocol Specification

3.1.1   **[Modified Section]** 3.5 Feature requirements

[Modify Table 3.5 as shown.]

[Note to reviewers: this change is identical to the one in v6.1.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

4   Changes to Core Specification (amended) v5.4

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v5.4.

4.1   Changes to Core Specification v5.4, Volume 2, Part C: Link Manager Protocol Specification

4.1.1   [Modified Section] 3.5.1 Devices supporting BR/EDR

[Modify Table 3.5 as shown.]

[Note to reviewers: though the section number has changed, this change is identical to the one in v6.0.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

5   Changes to Core Specification (amended) v5.3

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v5.3.

5.1   Changes to Core Specification v5.3, Volume 2, Part C: Link Manager Protocol Specification

5.1.1   [Modified Section] 3.5.1 Devices supporting BR/EDR

[Modify Table 3.5 as shown.]

[Note to reviewers: this change is identical to the one in v5.4.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

6   Changes to Core Specification (amended) v5.2

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v5.2.

6.1   Changes to Core Specification v5.2, Volume 2, Part C: Link Manager Protocol Specification

6.1.1   **[Modified Section]** 3.5.1 Devices supporting BR/EDR

[Modify Table 3.5 as shown.]

[Note to reviewers: this change is identical to the one in v5.4 and v5.3.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

7   Changes to Core Specification (amended) v5.1

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v5.1.

7.1   Changes to Core Specification v5.1, Volume 2, Part C: Link Manager Protocol Specification

7.1.1   [Modified Section] 3.5.1 Devices supporting BR/EDR

[Modify Table 3.5 as shown.]

Feature
(2) Encryption
(42) Pause Encryption
(51) Secure Simple Pairing (Controller Support)
(52) Encapsulated PDU

Table 3.5: Mandatory features

8   Changes to Core Specification (amended) v5.0

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v5.0.

8.1   Changes to Core Specification v5.0, Volume 2, Part C: Link Manager Protocol Specification

8.1.1   [Modified Section] 3.2 Feature Definitions

[Modify the rows of Table 3.1 shown (all other rows are omitted).]

Feature	Definition
Pause Encryption [Sheet 3, row 2]	When this feature bit is enabled on both sides, then the encryption pause/resume sequences shall be used. If either side does not support the Pause Encryption feature bit, then the encryption pause/resume sequences shall not be used. This feature ~~bit~~ shall be supported ~~set if the "Secure Connections (Controller Support)" feature bit is set~~.
Secure Simple Pairing (Controller Support) [Sheet 5, row 5]	This feature indicates whether the Link Manager is capable of supporting the Secure Simple Pairing, Section 4.2.7. This feature shall be supported.
Encapsulated PDU [Sheet 5, row 7]	This feature indicates whether the device is capable of supporting the Encapsulated PDU mechanism as defined in Section 4.1.12.1. This feature shall be supported ~~set if Secure Simple Pairing is supported~~.

Table 3.1: Feature Definitions

9 Changes to Core Specification (amended) v4.2

This Section sets forth the specific changes and additions, using the formatting and color conventions described in Section 1.2, to the Core Specification v4.2.

9.1 Changes to Core Specification v4.2, Volume 2, Part C: Link Manager Protocol Specification

9.1.1 [Modified Section] 3.2 Feature Definitions

[Modify the rows of Table 3.1 shown (all other rows are omitted).]

[Note to reviewers: though the positions of the rows in the table have changed and there is additional text in some definitions, this change is identical to the one in v5.0.]

Feature	Definition
Pause Encryption [Sheet 3, row 6]	When this feature bit is enabled on both sides, then the encryption pause/resume sequences shall be used. If either side does not support the Pause Encryption feature bit, then the encryption pause/resume sequences shall not be used. This feature ~~bit~~ shall be supported ~~set if the "Secure Connections (Controller Support)" feature bit is set~~.
Secure Simple Pairing (Controller Support) [Sheet 6, row 1]	This feature indicates whether the Link Manager is capable of supporting the Secure Simple Pairing, Section 4.2.7, "Secure Simple Pairing," on page 294. This feature shall be supported.
Encapsulated PDU [Sheet 6, row 3]	This feature indicates whether the device is capable of supporting the Encapsulated PDU mechanism as defined in Section 4.1.12.1, "Sending an Encapsulated PDU," on page 267. This feature shall be supported ~~set if Secure Simple Pairing is supported~~.

Table 3.1: Feature Definitions

10 References

[1]   Bluetooth Core Specification, Version 6.0

[2]   Bluetooth Core Specification (amended), Version 5.4

[3]   Bluetooth Core Specification (amended), Version 5.3

[4]   Bluetooth Core Specification (amended), Version 5.2

[5]   Bluetooth Core Specification (amended), Version 5.1

[6]   Bluetooth Core Specification (amended), Version 5.0

[7]   Bluetooth Core Specification (amended), Version 4.2

[8]   Bluetooth Core Specification, Version 6.1