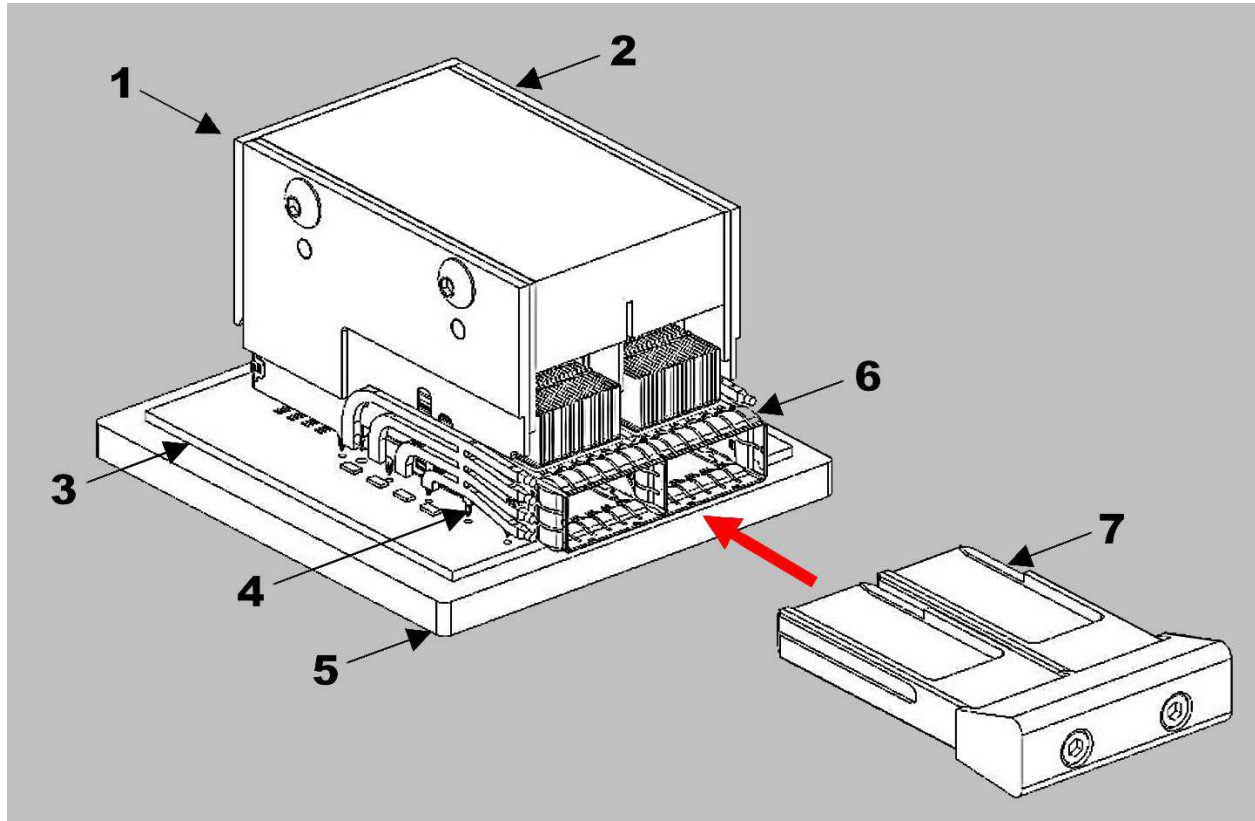


Figure 1: Small Form-Factor Cage Assembly Seating Tool Kit: PN 2185264-[]



- 1 Back of seating tool
- 2 1 x 2 seating tool (bottomed on heat sink and cage assembly)
- 3 Printed circuit (PC) board (for reference only)
- 4 Compliant pin contact
- 5 PC board support fixture (for reference only)
- 6 1 x 2 cage assembly (2324313-1 shown)
- 7 1 x 2 wall support (not shown installed for clarity)

1 Introduction

The QSFP DD cage assembly seating tool shown in Figure 1 is used to seat a cage assembly (see Table 1 through Table 6) listed in onto a printed circuit (PC) board. The cage assembly contains compliant pin contacts to allow solderless PC board installation. For more information about the cage assembly, refer to application specification [114-60025](#).



NOTE

Dimensions in this instruction sheet are in millimeters with [inches in brackets]. Figures are for reference only and are not drawn to scale.

Read these instructions thoroughly before seating cage assemblies.

Table 1: Part numbers for 1 x 1 cage assembly configuration

Seating tool kit	Cage assembly
2185264-7	2327362-5
1-2185264-4	2327362-1
1-2185264-5	2327362-2
1-2185264-6	2327362-3
1-2185264-7	2327362-4
2-2185264-0	2342933-1
	2342934-1
2-2185264-1	2342933-2
	2342934-2
2-2185264-2	2342933-3
	2342934-3
4-2185264-5	2327362-9
5-2185264-1	2324193-9
5-2185264-2	1-2324193-0
6-2185264-0	2333126-2
6-2185264-1	1-2333126-1
6-2185264-3	2345017-3
	2345017-5
6-2185264-4	2345017-2
6-2185264-9	1-2403729-1
7-2185264-0	1-2403729-2

Table 2: Part numbers for 1 x 2 cage assembly configuration

Seating tool kit	Cage assembly
2185264-1	2324313-1
	2325185-1
	2330359-1
2185264-2	2324313-2
	2325185-
	2330359-2
2185264-3	2337452-1,-3
2185264-4	2337452-2,-4
2185264-5	2324313-6
2185264-8	2325125-1
2185264-9	2325125-2
1-2185264-8	2325125-3
1-2185264-9	2325125-4
2-2185264-3	2342935-1
	2342936-1
2-2185264-4	2342935-2
	2342936-2
2-2185264-5	2342935-3
	2342936-3
4-2185264-6	2325125-5
4-2185264-8	2354410-1
4-2185264-9	2354410-2
5-2185264-0	1-2325185-4
5-2185264-4	2357659-1, -3
5-2185264-5	2357659-2, -4
5-2185264-6	2328508-5
5-2185264-9	2375348-1

Table 3: Part numbers for 1 x 3 cage assembly configuration

Seating tool kit	Cage assembly
3-2185264-1	2342886-1
	2342888-1
3-2185264-2	2342886-2
	2342888-2
	2452787-1
3-2185264-3	2342886-3
	2342888-3
4-2185264-4	2338060-1
4-2185264-7	2338060-2
5-2185264-3	1-2342888-4
5-2185264-7	2375132-2
5-2185264-8	2375132-3
6-2185264-6	2388275-1
	1-2388275-2
6-2185264-7	2388744-1
6-2185264-8	2388275-2, -3

Table 4: Part numbers for 1 x 4 cage assembly configuration

Seating tool kit	Cage assembly
2-2185264-6	2324882-3
2-2185264-7	2324882-4
2-2185264-8	2324882-2, -12
2-2185264-9	2324882-1
3-2185264-4	2343988-1, -4, -11
	2343989-1, -11
3-2185264-5	2343988-2, -12
	2343989-2, -12
	2452626-1
3-2185264-6	2343988-3, -13
	2343989-3, -13
4-2185264-0	2324883-1, -2
4-2185264-2	2331930-1
4-2185264-3	1-2331930-2

Table 5: Part numbers for 1 x 5 cage assembly configuration

Seating tool kit	Cage assembly
1-2185264-0	2343986-1, -11
	2343987-1, -11
1-2185264-1	2343986-2, -12
	2343987-2, -12
1-2185264-2	2343986-3, -13
	2343987-3, -13
1-2185264-3	2343986-4
3-2185264-0	2324784-1
4-2185264-1	2324489-1, -2

Table 6: Part numbers for 1 x 6 cage assembly configuration

Seating tool kit	Cage assembly
2185264-6	2330355-1
3-2185264-7	2342891-1
	2342892-1
3-2185264-8	2342891-2
	2342892-2
3-2185264-9	2342891-3
	2342892-3
6-2185264-2	2373908-1
6-2185264-5	

2 Description

Each seating tool kit consists of a seating tool assembly and a wall support.

The wall support fits into the port of the cage assembly. The top of the seating tool provides a surface to accept the force applied by the application tool to seat the connector onto the PC board.

During seating, the back and sides of the seating tool protect the cage assembly from damage. The wall support provides rigidity to the ports of the cage assembly.



NOTE

The seating tool and wall support can be purchased separately.

3 Requirements

3.1 PC board support fixture

A customer-supplied support fixture must be used under the PC board to protect the PC board, connector, and cage assembly from damage. The support fixture must:

- Be at least 25.4 mm [1 in.] longer and wider than the PC board.
- Have flat surfaces with holes or a channel large enough and deep enough to receive any protruding components of the products.

3.2 Application tool

Power for the seating tool kit must be provided by an application tool (with a ram) capable of supplying a downward force greater than that specified in the application specification listed in section 1.



NOTE

For information on available application tools, contact Product Information at the phone number on the bottom of page 1.



CAUTION

Do not over-drive the connector. Doing so deforms parts critical to the quality of the connection.

4 Setup

When setting up equipment to seat the cage assembly, pay attention to the following:

- The seating tool must be matched to the cage assembly.
- The seating tool, cage assembly, and application tool ram must be properly aligned before cycling the application tool.



CAUTION

The tooling or the connector can be damaged if the seating tool and connector are mismatched or improperly aligned.

- Light pipes **must not** be assembled onto the cage assembly.
- The wall support must be properly installed (if applicable).



NOTE

For seating requirements, refer to the application specification listed in section 1.

5 Seating

1. Place the PC board on the support fixture.
2. Slide the wall support into the port of the cage assembly until the wall support is secure.
3. Place the cage assembly on the PC board so that the contacts and alignment posts are aligned and started into the matching holes in the PC board.
4. Orient the seating tool over the cage assembly so that the back of the tool is aligned with the back of the cage assembly.
5. Lower the seating tool onto the cage assembly (ensuring that the cutouts slide over the protruding components of the cage assembly) until the seating tool bottoms on the top of the cage assembly.
6. Center the seating tool (with the cage assembly) under the ram of the application tool.
7. Slowly lower the ram until it just meets the seating tool.
8. Verify the alignment of the PC board support fixture, PC board, cage assembly, and seating tool.



CAUTION

Ensure that the seating tool is properly seated on the cage assembly before cycling the application tool. Failure to seat it properly can damage the PC board, seating tool, or cage assembly.

9. Cycle the application tool to seat the cage assembly onto the PC board.
10. Retract the ram.
11. Carefully remove the seating tool by pulling it straight up from the cage.
12. Remove the wall support by pulling it straight out of the cage assembly.
13. Check the cage assembly for proper seating in accordance with the product specification.



NOTE

For detailed application requirements of the cage, refer to the application specification listed in section 1.

6 Maintenance and inspection

The seating tool kit is assembled and inspected before shipment. When it arrives at your facility, inspect it immediately to verify that it was not damaged during shipping.

6.1 Daily maintenance

Make each operator aware of (and responsible for) the following daily maintenance requirements:

- Remove dust, moisture, and other contaminants with a clean, soft brush or soft, lint-free cloth. **Do not** use objects that could damage the seating tool kit components.
- When the seating tool and wall support are not in use, store them in a clean, dry area.

6.2 Periodic inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied to personnel responsible for the tool. Base your inspection frequency on the amount of use, working conditions, operator training and skill, and established company standards.

7 Replacement and repair

Customer-replaceable parts are listed in the product drawing. Stock and control a complete inventory to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by TE Connectivity to ensure quality and reliability. Order replacement parts through your TE representative. You can also order parts by any of the following methods:

- Go to TE.com and click the **Shop TE Store** link at the top of the page.
- Call +1 800 522 6752.

For customer repair services, call +1 800 522 6752.

8 Revision summary

Since the last revision of this document, the following changes were made:

- Added Cage assembly 2452787-1 applicable for Kit 3-2185264-2, see Table 3.
- Added Cage assembly 2452626-1 applicable for Kit 3-2185264-5, see Table 4.