

# Penguin Edge™ ATCA-7540-D Quick Start Guide

P/N: 6806871A05B October 2022

## 1 Box contents

Make sure you receive all items of your shipment:

- One ATCA-7540-D blade
- One printed copy of *Quick Start Guide* (this document)
- One printed copy of *Safety Notes Summary*
- Any optional items ordered



When installing or servicing the system or accessories, strictly observe the safety precautions in the *Safety Notes Summary*. Ignoring these instructions can void the system warranty and cause personal injury or property damage.

## 2 ESD

**Use ESD protection** Electrostatic discharge and incorrect installation or removal of the product can damage circuit or shorten its life.



Use a properly grounded ESD wrist strap or work in an ESD-safe environment.

Connect to the ESD connector at the front or the rear of the system.

## 3 Site preparation

Prior to installation, prepare your site. For information on the environmental and power requirements, see the *ATCA-7540 Series Installation and Use* manual.

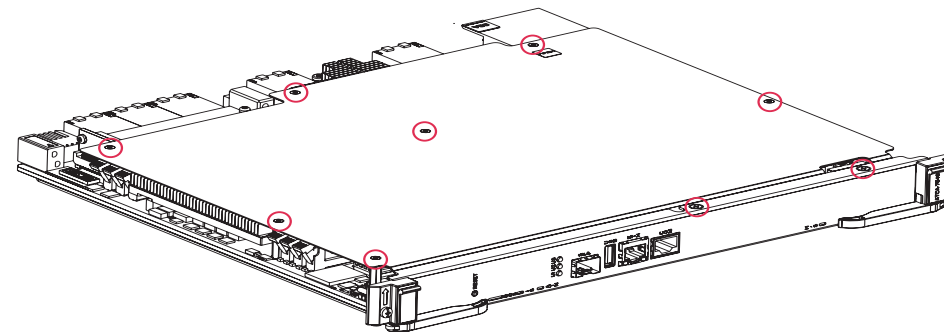
Operating temperatures refer to the temperature of the air circulating around the blade and not to the actual component temperature.

## 4 Install the DIMM

The ATCA-7540-D is equipped with a specially designed DIMM cover with foam supports to ensure a secure connection of each DIMM in its slot during operation in rugged environments.

**NOTE:** Some blade variants come with the DIMM already installed. For thermal safety concerns, no 4-rank DIMMs or stacked DIMMs are allowed. At least one DDR4 VLP RDIMM must be installed in a socket labeled DIMM A through DIMM F, see the marking on the outside edge of the blade. Installing RDIMMs in the remaining sockets is optional. For a list of tested memory modules, refer to the *ATCA-7540 Series Installation and Use* manual.

1. Remove nine (9) screws that secure the DIMM cover to the blade as shown below.



2. From the connector side of the blade, carefully lift the DIMM cover at a slant (about 35°), and pull the cover from the blade, clearing the battery near the front panel.

3. Store the DIMM cover close to the blade.

**NOTE:** The serial number on the DIMM cover and the serial number on the blade are the same. If DIMMs are being installed on more than one blade, make sure that the correct DIMM cover is installed on the corresponding blade so that the serial numbers match.

4. Open the locks of the memory module socket.
5. Press the module carefully into socket. As soon as the memory module has been fully inserted, the locks automatically close.
6. If applicable, repeat the steps 4 and 5 to install additional memory modules.
7. When re-installing the DIMM cover, make sure the serial number of the blade and the serial number on the DIMM cover match.
8. To re-install the DIMM cover, hold it at a 35° angle and slide the edge under the front panel of the blade.
9. Line up the screw holes and replace all nine (9) screws to secure the DIMM cover to the blade.
10. Install the blade into the system (see **Step 6, Install the blade**).

## 5 Install the M.2 NVME SSD module

Some blade variants come with up to two M.2 NVME SSD modules already installed. In this case, the blade can be installed directly into the system (see Step 6).

Some blade variants do not have M.2 NVME SSD modules installed. If SSD modules are needed, please refer to the *SSD Module and Hardware Kit NVME-M.2-1TB Quick Start Guide* (P/N 6806868A01) for installation instructions. This document can be found using the Documentation Search function at <https://www.smartembedded.com/support/>. Once installed, proceed to **Step 6, Install the blade**.



# 6 Install the blade

The following procedure assumes that the system is powered. If it is not powered, disregard the blue LED information below and skip its respective step(s).

1. Prior to installing the blade into the slot, slide the top and bottom latches into the handle release position and pull the handles outward to unlatch the handles from the faceplate. Do not pull the handles fully outward.
2. Insert the blade into the shelf by aligning the top and bottom edges of the blade in the card guides of the shelf.
3. Apply equal and steady pressure to the blade to carefully slide the blade into the shelf until you feel resistance. Continue to push the blade gently until the blade connectors engage.
4. Fully insert the blade and push the handles towards the faceplate. The latches automatically slide inwards and lock the handles.

**NOTE:** If the shelf is powered, the blue LED (H/S) illuminates as soon as the blade is connected to the backplane power pins. When the blade is completely installed, the blue LED starts to blink. This indicates that the blade has signified its presence to the shelf management controller.

5. Wait until the blue LED is switched off and then fasten the faceplate screws to secure the blade to the shelf. Torque the faceplate screws to 0.40 N-m.

**NOTE:** When the blue LED is switched off and the green LED (IS) is switched on, this indicates that the payload has been powered up and the blade is active.

6. Connect cables to the face plate, if applicable. Refer to the *ATCA-7540 Series Installation and Use* manual.

**NOTE:** If an RTM is connected to the ATCA-7540-D blade, make sure that the handles of both the RTM and the ATCA-7540-D blade are closed in order to power up the blade's payload.

### Technical Assistance

For technical assistance or to report product damage or shortages, contact your local Penguin Solutions sales representative or visit <https://www.penguin-solutions.com/edge/support/>.

### Get More Information

For more information on this product, see the *ATCA-7540 Series Installation and Use* manual and other related technical documentation, which can be found using the Documentation Search at <https://www.penguin-solutions.com/edge/support/>.



Penguin Solutions is a trade name used by SMART Embedded Computing, Inc., a wholly owned subsidiary of SMART Global Holdings, Inc. Penguin Edge is a trademark owned by Penguin Computing, Inc., a wholly owned subsidiary of SMART Global Holdings, Inc. All other logos, trade names, and trademarks are the property of their respective owners. These materials are provided as a service to our customers and may be used for informational purposes only. For full legal terms and conditions, please visit [www.penguin-solutions.com/edge/legal/](http://www.penguin-solutions.com/edge/legal/).  
©2022 SMART Embedded Computing, Inc.