

Intel® NUC 8 Rugged Kit NUC8CCHKR

User Guide

September 2019

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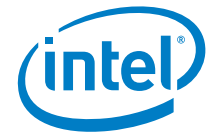
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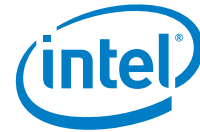
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Revision History

Date	Revision	Description
September 2019	1.0	Initial release.



1.0 Introduction

This User Guide provides step-by-step installation instructions for the Intel® NUC 8 Rugged Kit NUC8CCHKR.

Before You Begin



CAUTIONS

The steps in this guide assume you're familiar with computer terminology and with the safety practices and regulatory compliance required for using and modifying computer equipment.

Disconnect the computer from its power source and from any network before performing any of the steps described in this guide.

Failure to disconnect power, telecommunications links, or networks before you open the computer or perform any procedures can result in personal injury or equipment damage. Some circuitry on the board can continue to operate even though the front panel power button is off.

Follow these guidelines before you begin:

- Always follow the steps in each procedure in the correct order.
- Create a log to record information about your computer, such as model, serial numbers, installed options, and configuration information.
- Electrostatic discharge (ESD) can damage components. Perform the procedures described in this chapter only at an ESD workstation using an antistatic wrist strap and a conductive foam pad. If such a station isn't available, you can provide some ESD protection by wearing an antistatic wrist strap and attaching it to a metal part of the computer chassis.

Installation Precautions

When you install and test the Intel NUC, observe all warnings and cautions in the installation instructions.

To avoid injury, be careful of:

- Sharp pins on connectors
- Sharp pins on circuit boards
- Rough edges and sharp corners on the chassis
- Hot components (such as SSDs, processors, voltage regulators, and heat sinks)
- Damage to wires that could cause a short circuit

Observe Safety and Regulatory Requirements

If you don't follow these instructions, you increase your safety risk and the possibility of noncompliance with regional laws and regulations.

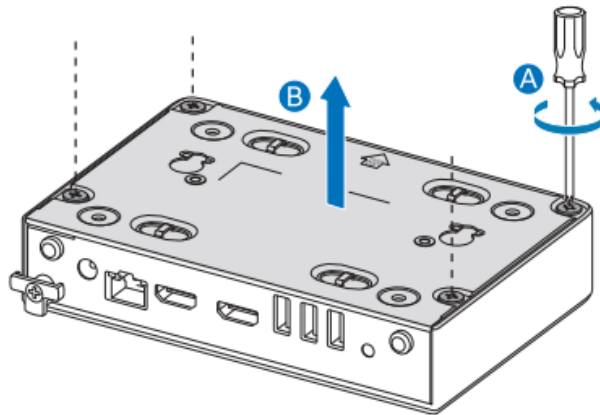
2.0 *Install an M.2 SSD (Optional)*

Intel NUC 8 Rugged Kit NUC8CCHKR comes with a soldered-down 64GB eMMC storage device. You can add an 80mm M.2 SSD.

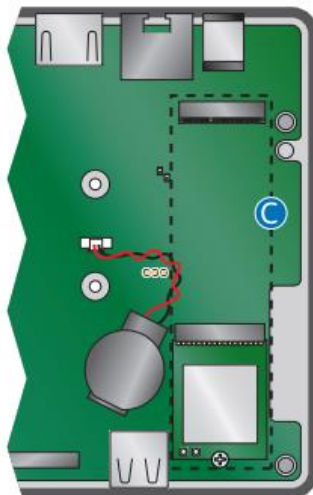
Find compatible M.2 SSDs in the [Intel Product Compatibility Tool](#):

To install an M.2 SSD:

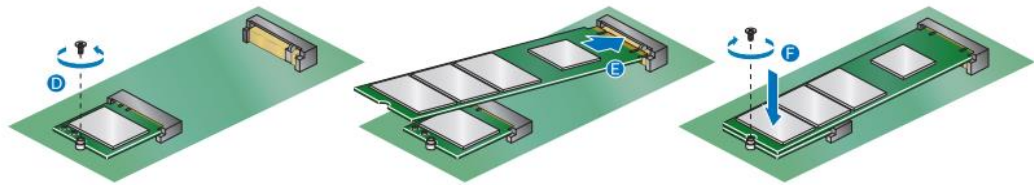
1. Unscrew the four corner screws on the bottom of the chassis (A) and lift the cover (B).



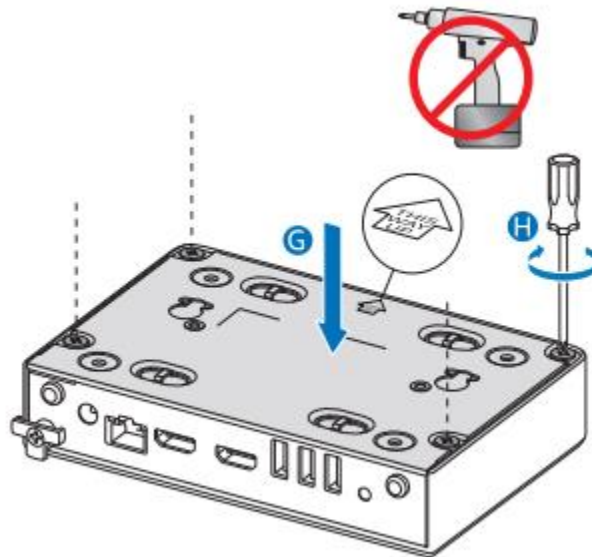
Note: the M.2 SSD is placed over the top of the pre-installed wireless card (C).



2. Remove the small silver screw from the 80mm metal standoff on the board (D).
3. Align the space at the bottom of the M.2 SSD to the key on the connector.
4. Insert the bottom edge of the M.2 SSD into the connector (E).
5. Secure the card to the standoff with the small silver screw (F).



6. Close the chassis. Intel recommends this be done by hand with a screwdriver to avoid over-tightening and possibly damaging the screws.

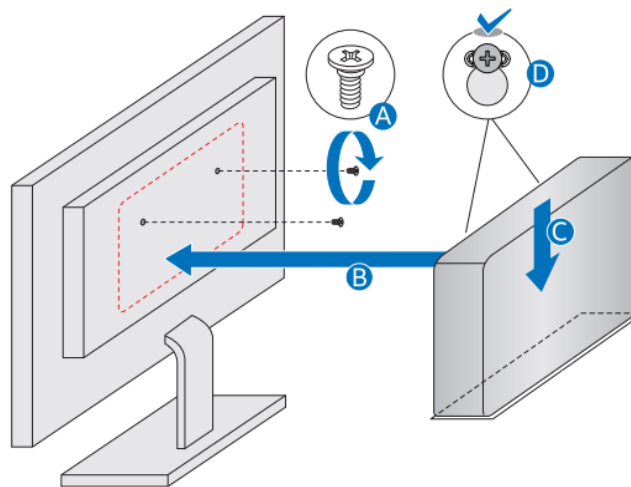


3.0 *Attach the Intel NUC with Keyhole Mounts (Optional)*

The bottom chassis cover has two picture frame keyholes. The keyholes are 100mm apart, so will fit any 100mm VESA mount. A VESA bracket is NOT included in the Intel NUC box and must be purchased separately.

Follow these instructions to attach the Intel NUC to a VESA mount using these keyholes.

1. Attach the two large silver screws to the monitor's VESA mount.
2. Slide the Intel NUC onto the VESA mount bracket, lining up the keyholes to the screws.

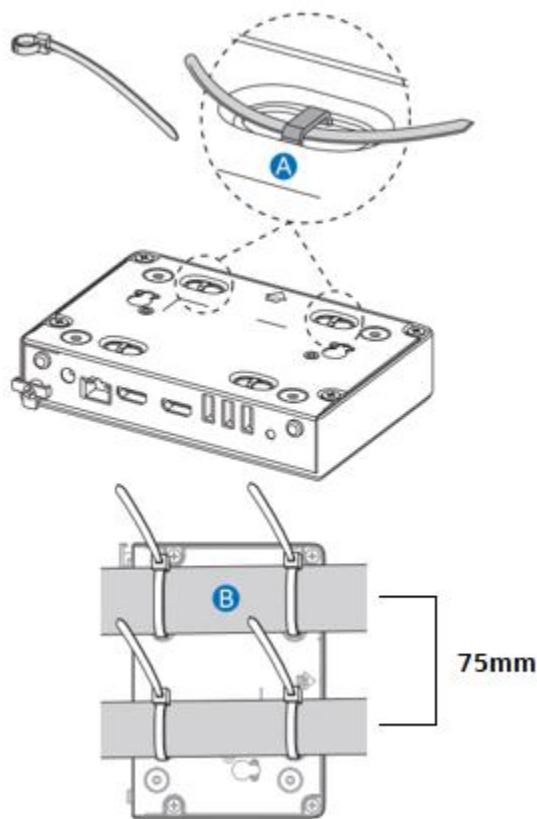


4.0 *Attach the Intel NUC to DIN Rail (Optional)*

The bottom chassis cover has four indentations that can be used to zip-tie the Intel NUC to a 75mm DIN rail system.

Follow these instructions to attach the Intel NUC to a DIN rail.

1. Insert four zip-ties into the indentations.
2. Secure the Intel NUC with the zip-ties to the DIN rail system.



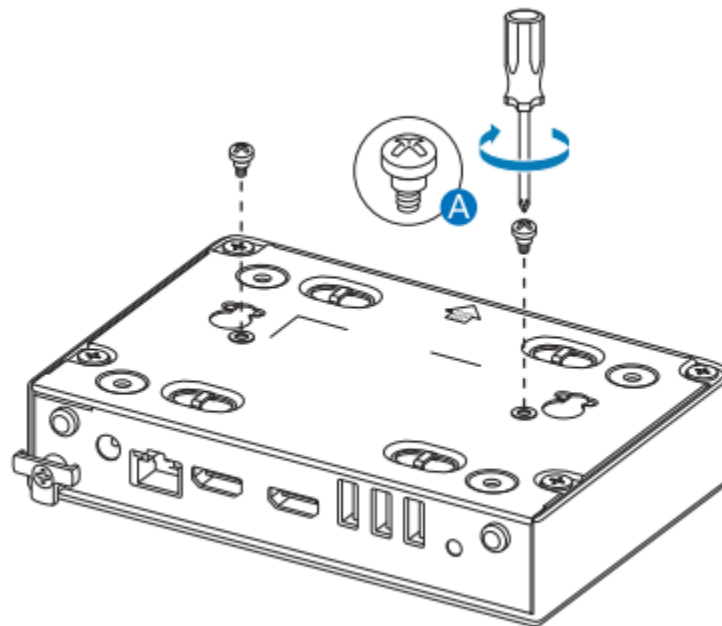
Note: UL safety standards require the Intel NUC should be mounted at a height of 2 meters or less.

5.0 *Attach the Intel NUC with VESA Bracket* *(Optional)*

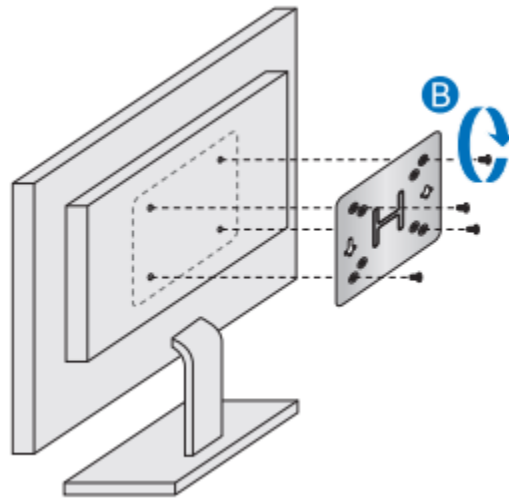
The bottom chassis cover has two VESA mount holes. The holes are 85mm apart, so will fit any 85mm VESA mount. A VESA bracket is NOT included in the Intel NUC box and must be purchased separately.

Follow these instructions to attach the Intel NUC to a VESA mount bracket.

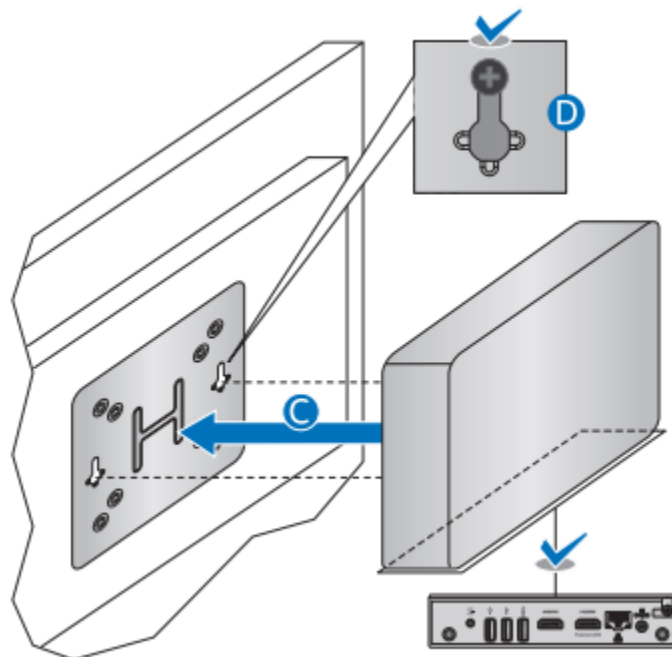
1. Attach the two large black screws to the bottom chassis cover of the Intel NUC.



2. Attach the 85mm VESA bracket (purchased separately) to the back of the monitor or TV.



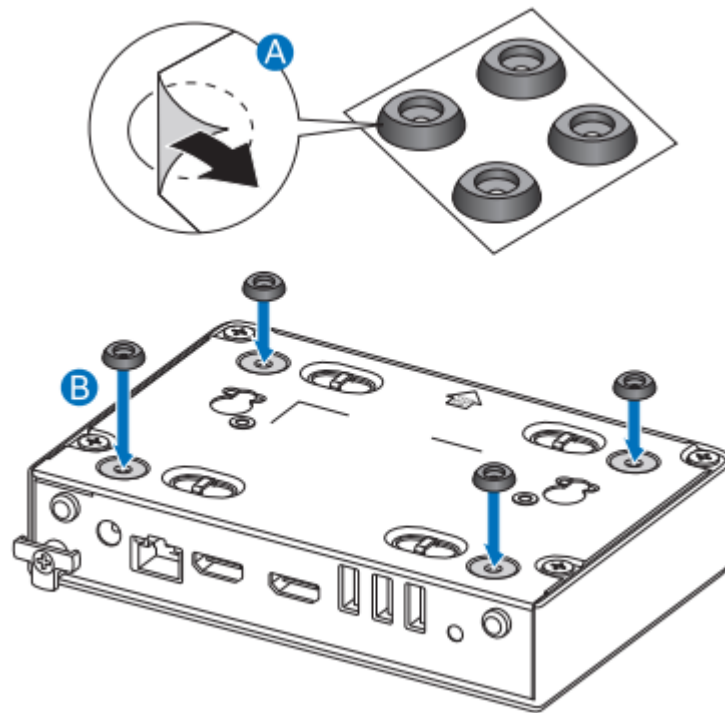
3. Slide the Intel NUC onto the VESA mount bracket.



6.0 *Attach Rubber Feet (Optional)*

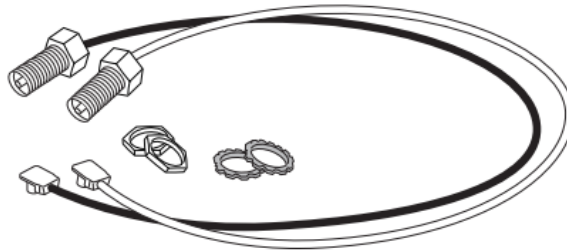
Rubber feet are included in the Intel NUC box. Follow these instructions to attach them to the bottom of the chassis.

1. Peel the rubber feet from the paper backing and place them on the four corners of the chassis bottom, as shown.
2. Secure the rubber feet with the 4 small black screws included in the box.



7.0 Install External Wireless Antennas (Optional)

Two RP-SMA antenna extension cables are included in the Intel NUC box.

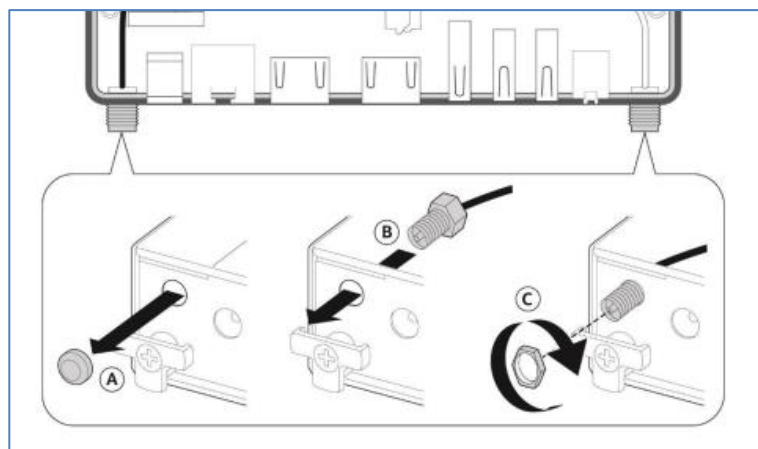


These can be used to install external antennas through the external antenna expansion ports on the back panel. External antennas are NOT included in the Intel NUC box and must be purchased separately.

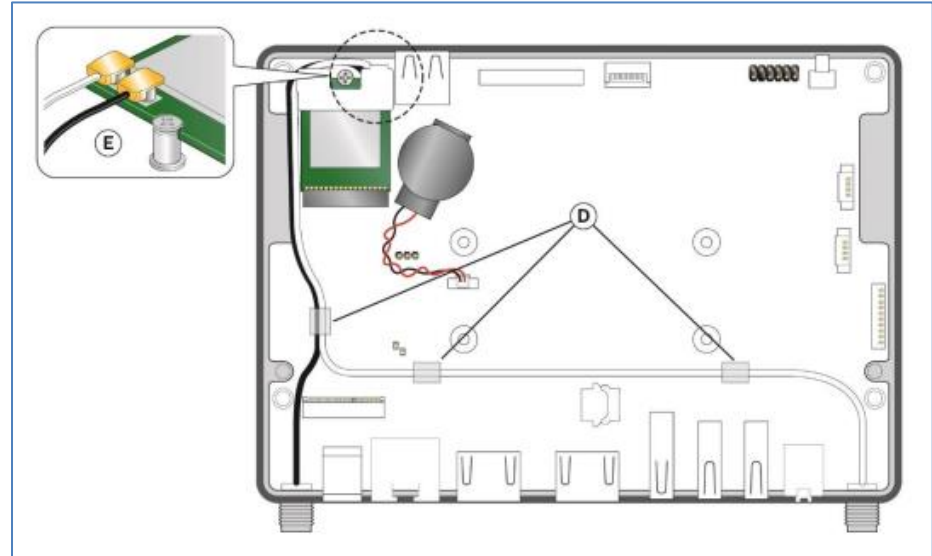


To install the external antennas:

1. Remove the rubber plugs from the back panel (A).
2. Insert the bolt ends of the antenna cables through the ports (B) and secure with the hex nuts (C).



3. Route the black and white antennas as shown (D).
4. Connect the antenna connectors to the wireless card (E).

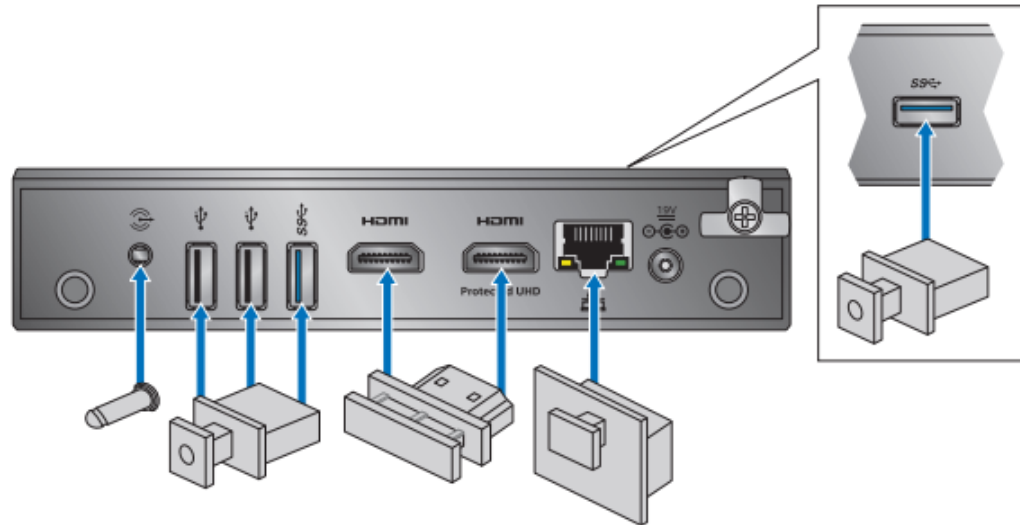


5. Attach external dual band RP-SMA wireless antennas, such as shown below.




8.0 Block I/O Ports from Dust (Optional)

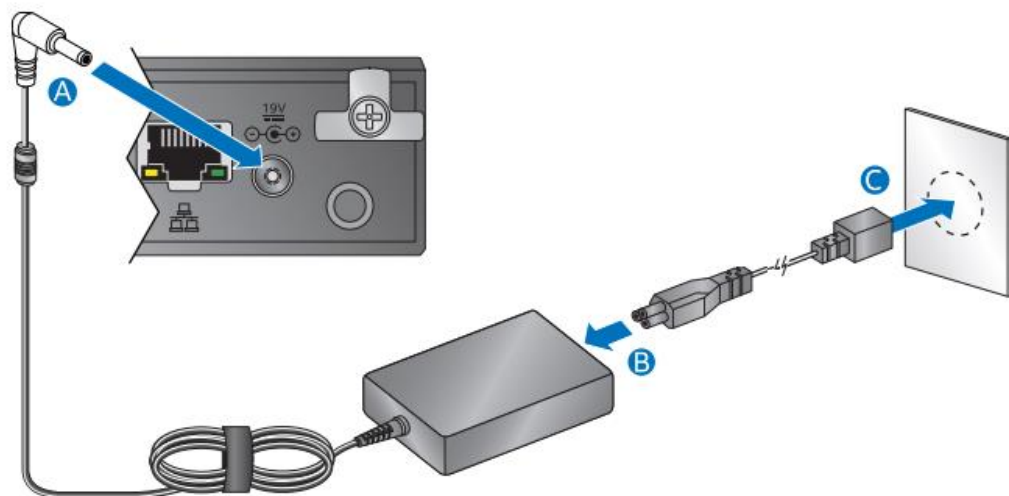
Included in the box are plugs that can be used to block I/O ports that are not in use. Blocking open I/O ports helps to prevent dust from getting inside the chassis.

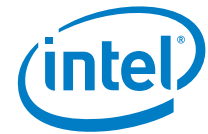


9.0 Connect Power

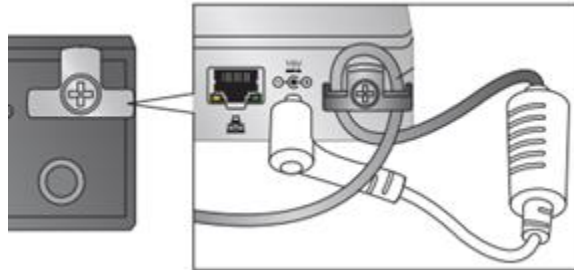
Each Intel NUC model includes either a region-specific AC power cord or no AC power cord (only the power adapter).

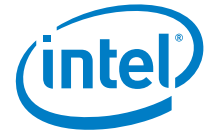
Product code	Power cord type
BKNUC8CCHKR	No power cord included. An AC power cord needs to be purchased separately. Power cords are available at many Internet sites for use in multiple countries. The connector on the power adapter is a C5 type connector. 
BKNUC8CCHKR1	US power cord included
BKNUC8CCHKR2	EU power cord included
BKNUC8CCHKR3	UK power cord included
BKNUC8CCHKR4	Australia/New Zealand power cord included
BKNUC8CCHKR5	India power cord included





Optionally, you can wrap the power adapter cable around the cable locking arm to relieve strain on the cable.





10.0 *Install an Operating System*

See [Supported Operating Systems](#) for a list of Intel-validated Windows* operating systems.

Refer to [Operating System Installation](#) for system requirements and installation steps.

The [Intel Product Compatibility Tool](#) lists versions of Linux* that have been reported as compatible by Intel NUC owners. If you need assistance with Linux on your Intel NUC, check the distribution's website and forums for peer assistance.



11.0 *Install the Latest Device Drivers and Software*

Here are the options for keeping device drivers current:

- Allow the [Intel® Driver & Support Assistant \(Intel® DSA\)](#) to detect out-of-date drivers and BIOS.
- Manually download drivers, BIOS, and software from [Download Center](#).

The following device drivers and software are available.

- Intel® Chipset Device Software
- Intel® HD Graphics
- Intel® Trusted Execution Technology
- Intel® Gigabit Ethernet
- Intel® Wireless
- Intel® Bluetooth
- Realtek* High Definition Audio