

MNT Reform i.MX8MPlus Module

Dear MNT Customer,

thank you for purchasing the i.MX8MPlus Module, which doubles the amount of RAM of your MNT Reform to 8GB and bumps the clock speed to 2 GHz. We hope you'll enjoy it.

Installation

1. It's easiest if you first connect the module's MIPI-DSI output to the motherboard's MIPI-DSI input (underneath/near the matching connector on the module). Use your existing FPC cable to do that.
2. Push the module into the CPU slot of your MNT Reform motherboard at a 45 degree angle and then press it down until it clicks into place.
3. If you want to employ the module's integrated WiFi/BT chip (recommended), you can use the included WiFi antenna, hex spacer acrylic antenna holder to mount the antenna over the SD card slot.
4. Install the included heatsink using the thermal pad for heat transfer between the module's System-on-Chip and the heatsink. See **Figure 1** for reference. After placing the spacers, mount the heatsink with 3x included M2 screws.

Safety Instructions

- The module is a sensitive electronic part that can be damaged by static electricity. Make sure to ground yourself before touching.
- Before installation, consult the safety instructions of MNT Reform and remove all power sources including batteries from the system.

Specifications

- Size: 50×67.5mm. PCB thickness 1mm.
- Card Edge Connector: 200 pin SO-DIMM card edge (mates with TE 1717254-1 or TE 1473005-1)
- FPC Connector for: MIPI-DSI

PCIe

Please note that the i.MX8MPlus module supports only one PCIe lane. It is routed to the mPCIe slot on the MNT Reform motherboard, so you will not be able to use a WiFi card in the mPCIe slot. Instead, we recommend to use the QCA9377 WiFi chip integrated in the module itself, and use the included mPCIe to M.2 adapter to install an NVMe SSD.

OSHW Sources and Software

i.MX8MPlus support is integrated into MNT Reform's System Image, which is preinstalled on eMMC flash. For help with migrating an existing system, please ask in our IRC channel or our community forum.

Hardware sources, schematics and software instructions are published at: <https://source.mnt.re/reform/reform/reform2-imx8mplus>

Contents

- i.MX8MPlus adapter circuit board with Boundary Devices Nitrogen8MPlus SOM (with 8GB DDR4 and 128GB eMMC) mounted
- MNT Reform Generic Heatsink (Aluminum)
- Thermal Pad
- mPCIe to M.2 Key M Adapter
- 2x Tall and 1x Short Heatsink Spacers
- 3x Heatsink Screws
- 1x WiFi Antenna with Acrylic Holder
- 1x Screw and Spacer for Acrylic Holder

Warranty

MNT Research covers the warranty to the extent required by law for the unmodified product and following the safety instructions. Warranty does not cover any modifications made to the product.



The product complies with the requirements of the European Directives and DIN standards:
EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU
RoHS Directive 2011/65/EU, DIN EN 55022:2011-12
DIN EN 55024:2016-05, DIN EN 61000-6-1:2007
DIN EN 61000-6-3:2007/A1:2011/AC:2012
DIN EN 61000-3-2:2014, DIN EN 61000-3-3:2013



Get updates and source code at: mntre.com/reform

Need help? Join community.mnt.re or write to support@mntre.com

Join our IRC channel [#mnt-reform](https://irc.libera.chat) on: irc.libera.chat

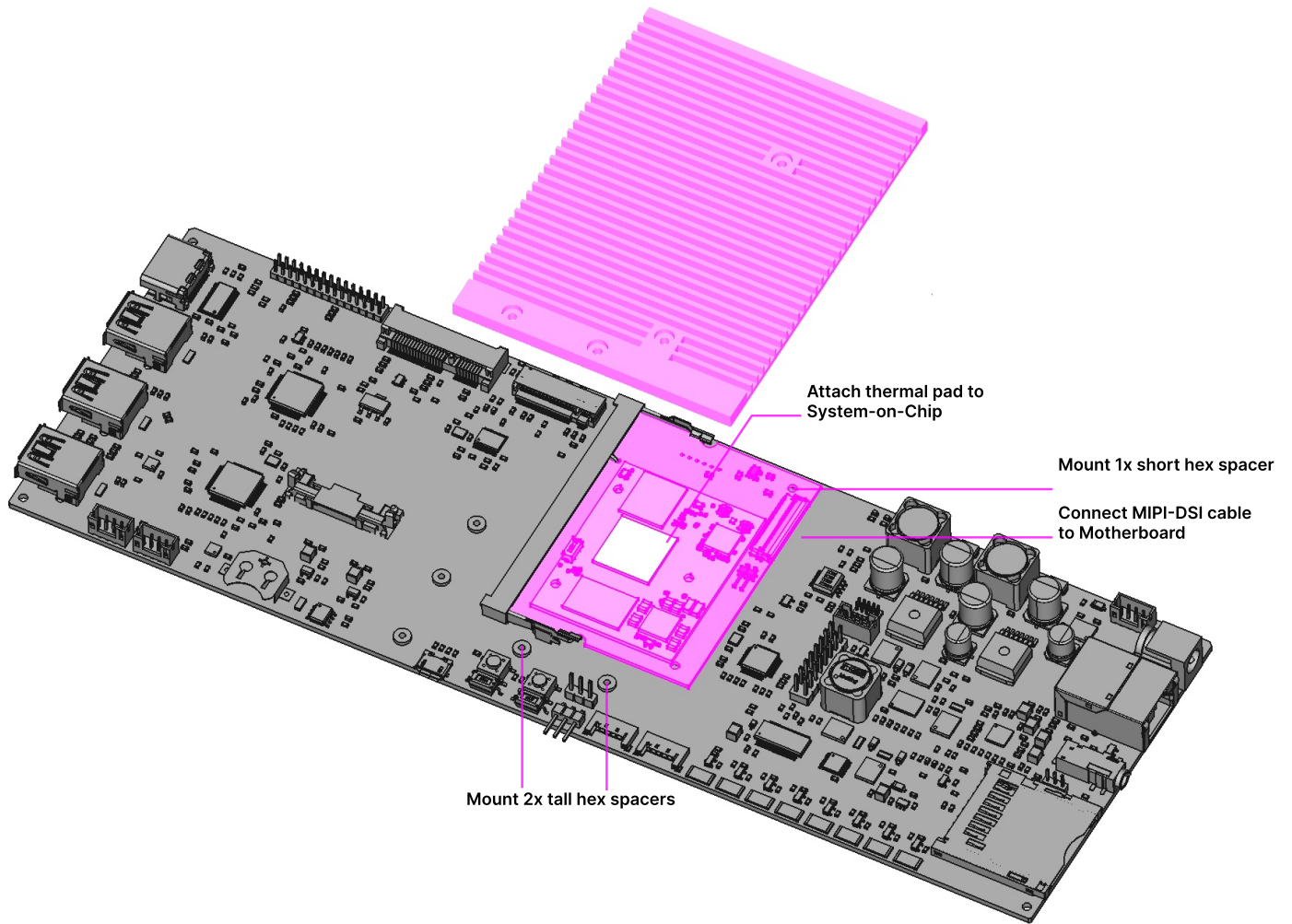


Figure 1: Installation of i.MX8MPlus module