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MNT RCM4 with A311D Upgrade for Pocket Reform

Dear MNT Customer,

thank you for purchasing the MNT RCM4 with A311D Upgrade for Pocket Reform, a processor module for your MNT Pocket Reform that offers a significant performance increase. We hope you will enjoy the enhanced productivity and fun it brings.

Installation

During installation, refer to the pictures on the right side of this page for guidance.

- Completely power down MNT Pocket Reform by toggling the standby switch on the top left side of the device (for example with a SIM ejector tool).
- Open the top back plate and remove your previous CPU module from MNT Pocket Reform, but keep one end of the MIPI DSI cable connected to the motherboard. Connect the other end to the matching connector on the RCM4 module.
- 3. Push the module into the CPU slot of your MNT Pocket Reform motherboard at a 45 degree angle and then press it down until it clicks into place.
- 4. (Optional: replace your existing WiFi antenna with the included Ezurio antenna.) Attach the antenna's plug to to one of the connectors on the CM4 module or the optional M.2 WiFi card. Experiment with configurations to arrive at the best reception. You can also try dual antennas, but in our tests so far, a single antenna works better.
- 5. Install the thermal pad for heat transfer between the CM4's System-on-Chip and the Pocket Reform's back plate. Remove the protective films from the thermal pad before attaching it.

Safety Instructions A

- The module and the adapter are sensitive electronic parts that can be damaged by static electricity. Make sure to ground yourself before touching.
- Before installation, consult the safety instructions of MNT Pocket Reform and turn off the power switch.

Specifications

- Includes BPi CM4 (Amlogic A311D, 4GB RAM)
- 4×2.2GHz Cortex-A73 + 2×1.8GHz Cortex-A53
- ARM Mali G52 MP4 (OpenGL/ES 3.1)
- RTL8822CS WiFi 5 / Bluetooth 5.0
- Size: 68×67.5mm. PCB thickness 1mm.
- Card Edge Connector: 200 pin SO-DIMM card edge (mates with TE 1717254-1 or TE 1473005-1)
- FPC Connectors for: 1x internal HDMI (works only with Raspberry Pi CM4), 1x MIPI-DSI, 1x MIPI-CSI

Contents

- RCM4 circuit board with BPi CM4 installed
- 2mm thermal pad
- Optional: AsiaRF M27612-BU3 Wi-Fi Card with antenna
- · Optional: M.2 NVMe SSD

Software and Sources

All MNT Reform Processor Modules use a unified kernel and Debian GNU/Linux distribution, but each uses a different bootloader configuration. Your module comes preinstalled with Debian, but should you ever need to reinstall, download the **pocket-a311d** image from the following URL, unpack and image it to a MicroSD card: https://mnt.re/system-image

Hardware sources, schematics and software instructions are published at:

https://source.mnt.re/reform/mnt-reform-raspberry-pi-cm4-som

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: RED Directive 2014/53/EU (EN 300 328 V2.2.2, EN 301 893 V2.1.1, EN 300 440 V2.2.1, EN 62368-1:2020) RoHS Directive 2011/65/EU (EN 63000:2018)

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 on: irc.libera.chat



