

Heber MultiPi system

The all in one Raspberry Pi CM4 console system for gaming and computer emulation. Optional RGB Analogue video cartridge. Dual full sized HDMI Video output ports, Digital I/O, 7 port USB and more.



MultiPi System

Designed and manufactured in the UK by Heber Ltd. – A company with 40 years of experience in the design and manufacture of Gaming, Arcade, Amusement, Consumer and Industrial electronics.

Connectivity and expansion in mind

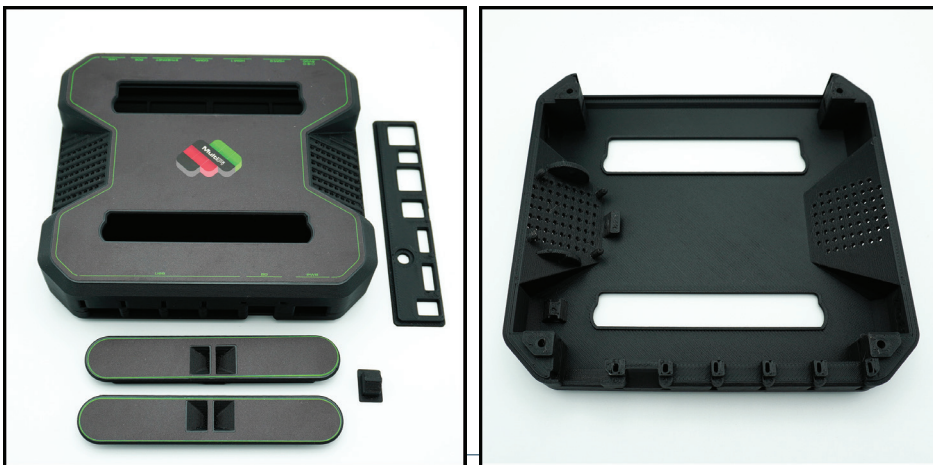
Built using high quality connectors from JST, Molex, Harting, AMP, Amphenol, Wurth, TE, Toby etc.

Full Raspberry Pi I/O expansion including USB 2.0 as a user cartridge port. Analogue cartridge port available now, future cartridges planned.

7 Port USB 2.0 Hub onboard, Ethernet with POE connector, Composite video output, Dual HDMI outputs. PCIe X1 front cartridge expansion for storage or further hardware expansion.

3D Printed enclosure design

MultiPi is supplied in a 3D printed all-in-one enclosure. This enclosure is available for further custom personalised designs - published under a Creative Commons CC-BY-SA Open-Source Commercial license.



The Heber advantage

When you use a Heber product you benefit from:

- Over 40 years of UK design and manufacturing products and systems for a wide range of industries and sectors
- Cost effective, reliable electronic systems
- Our team of dedicated specialist engineers and product support



Heber

Key features

Uses the Raspberry Pi CM4 embedded computer module. Passive cooling with integrated high quality heatsink.

Compatible with alternative CM4 modules. (Fan may be required for alternative modules) - 40mm Fan mount is provided in 3D printed enclosure.

Fully featured Raspberry Pi I/O expansion connector configured as a cartridge port.

PCIe X1 User cartridge port for storage and expansion

Single 5V power supply, with power switch and onboard overcurrent protection.

Integrated powered 7 port USB 2.0 Hub.

Optional RGB Euro SCART, VGA & Stereo audio cartridge for CRT monitor support and analogue video output. Cartridges have identifier EEPROM's for plug-n-play software/hardware configuration.

Micro SD card for O/S & storage. MultiPi can boot from SD, USB or PCIe X1 cartridge.

Dual HDMI, Ethernet with POE, Composite video and fan power connectors. Wifi antenna & 3D printed enclosure.



Retro Collective

The Heber MultiPi has been designed in collaboration with the Retro Collective group. - www.retrocollective.co.uk

To purchase the MultiPi system and accessories, please visit -

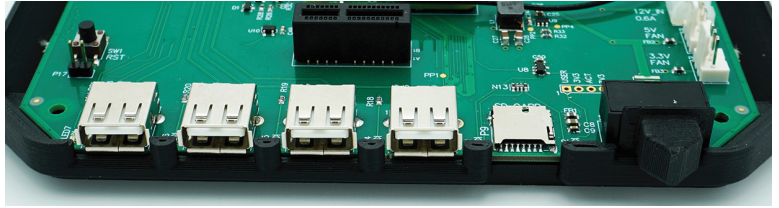
<https://www.shop.heber.co.uk>

Retro Collective

Heber MultiPi Technical Specification

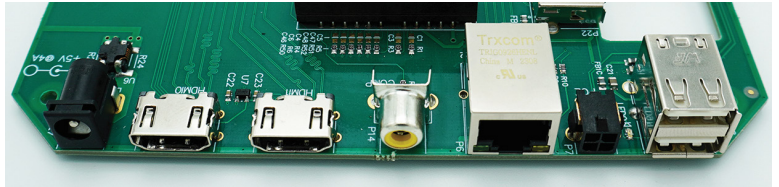
Front panel connections

Easy access front panel connections include -
4 x USB2.0 connection ports for controllers, mass storage, WiFi, Bluetooth etc,
LED indicators for USB active, power on and SD card activity.
Micro SD card slot for O/S and mass storage.
Main system power switch.



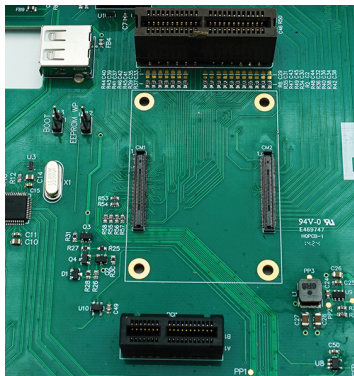
Back panel connections

Ethernet With POE connector, 2 x USB2.0, Composite video output. Dual HDMI Outputs for single, dual or spanned video output.
Power input (5V) DC - Meanwell 4A power supply recommended. Over current protection onboard - self resetting fuse.



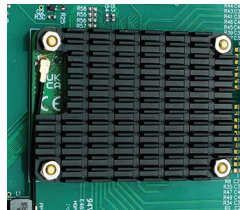
Internal connections and options

1 x Internal USB 2.0 port can be used for mass storage expansion or on a expansion Cartridge.
Dedicated Raspberry Pi I/O cartridge expansion connector, allows both USB 2.0 expansion and almost any Raspberry hat design to be made as an expansion cartridge.
EEPROM identification is provided on cartridges for plug-n-play configuration and O/S setup.



Compatible with alternative CM4 modules

As standard the MultiPi is provided with a Raspberry Pi CM4 module with built in Wifi and Bluetooth.
Alternative Raspberry Pi modules are available along with compatible CM4 modules from alternative suppliers.
MultiPi as an assembled board only is also available if you wish to use your own CM4 module and enclosure.



Raspberry Pi Community

The MultiPi is designed to make using the Raspberry Pi easier for console, computer and gaming emulation. It's a full featured Raspberry Pi computer, so almost any of the Pi 4 / CM4 Operating systems, packages and applications will run on the MultiPi.

Heber provide a reference O/S image using Advanced MAME for getting started with the MultiPi. It does not contain any games. You will need to provide your own or select another O/S package from the many available.

Technical reference documents are available for developers and anyone interested in developing software, drivers, hardware or emulation devices for the MultiPi

For more information about the Raspberry Pi project, developers and community, please visit - <https://www.raspberrypi.com/>

Raspberry Pi CM4 Module Fitted

As standard the MultiPi is fitted with an Official Raspberry Pi CM4 module or as an assembled bare board only.

Power Supply - Single voltage 5V

MEAN WELL 4A 5V (20w) power supply is recommended for use with the MultiPi system - Part number GST25A05-P1J

Temperature and Operation

Recommended ambient temperature 45 Degrees C max.

Optional 40mm x 10mm 5V fan is recommended when using alternative CM4 Modules. Fan mount is provided in the reference design enclosure. 3.3v or 5V operation.

Dimensions - MultiPi PCB

150mm x 150mm with 4 x 3mm screw mounting points.

3D Printed Reference enclosure

170mm x 155mm x 35mm.

Heber Ltd. 2024

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