## Raspberry Pi Model B+



## **DESCRIPTION**

OMG OMG, did you hear? There's a Raspberry Pi called the Model B+ and check it out...more USB ports, more GPIO, better power supply, four mounting holes, less stickyout SD card! Yep, that's right, the fantastic engineers at Raspberry Pi HQ have blessed us with a new design. They've taken all the feedback over the last 3 years and rolled out a nice updated Pi with many fixes and extras...all at the same price! Take a deep breath and buckle up, because Adafruit has this freshness and we're going to break it down for you. We have a big tutorial that we're keeping updated, with all the nitty-gritty details, so check that out when you have a moment

Here's a brief overview of what's new

Dual step-down (buck) power supply for 3.3V and 1.8V

- 5V supply has polarity protection, 2A fuse and hot-swap protection (so you can plug/unplug USB without resetting the board)
- New USB/Ethernet controller chip
- 4 USB ports instead of 2 ports
- 40 GPIO pins instead of 26. The top/first 26 pins match the original layout, 9 additional GPIO and 2 EEPROM Plate identification pins
- Composite (NTSC/PAL) video now integrated into 4-pole 3.5mm 'headphone' jack
- MicroSD card socket instead of full size SD
- Four mounting holes in rectangular layout
- · Many connectors moved around

## What's not new:

- Same basic size, 85mm x 56mm
- Same Processor, Broadcom SoC running at 700MHz (can be overclocked)
- Same RAM, 512MB soldered on top of the Broadcom chip
- Same power connector, microUSB
- Same software be sure to run the latest Raspbian/NooBs but otherwise the overall Linux software is the same
- First 26-pins of GPIO are the same
- Same HDMI port
- Audio part of the A/V jack is the same
- Same Camera and DSI Display connector

So, basically, its the same single-board Linux computer you've known and loved but all cleaned up and easier to use. The good news is many of your existing accessories like cables, hubs, keyboards, monitors, etc will work fine. Many Pi Plates (PCBs that plug into GPIO port directly) will also work.

However 26-pin GPIO cables do not fit this means that you cannot use classic Cobblers, GPIO-cabled boards like the GertBoard/PermaProtoPi without a GPIO downgrading cable. Model B cases will not fit the B+, the cases must be redesigned for the B+ as so

much has moved around! You also need to be running Raspbian or NooBs from after approx June 2014 since earlier ones do not have USB/Ethernet chipset support.

We do carry <u>40-pin GPIO Cables</u>, <u>Pi Cobblers</u>, and <u>Pi T-Cobblers</u> that are specifically designed for the Raspberry Pi Model B+.

Be sure to check out more of our awesome Raspberry Pi accessories including:

- Our absolutely perfect Raspberry Pi B+ Case we really can't think of a better way to protect your Raspberry Pi Model B+. And we've thought a lot about it.
- Assembled Pi Cobbler Plus The best way to break out your Pi's pins into a
  breakout board. We also carry the <u>Assembled T-Cobbler Plus</u> that makes your
  breakout pins a bit easier to read but is less compact.
- <u>8GB Card with NOOBS 1.39</u> This is the fastest way to have a variety of operating systems on your pi.
- <u>Bare 4 GB SD card</u> you'll need this to load the Raspbian/Debian image and is not included in a Pi computer purchase. Tested and works perfectly! <u>We also have a</u> wide range of pre-burned SD cards
- 5V @ 2A Switching Power Supply w/ 6' MicroUSB Cable An all-in-one 5V 2A + MicroUSB cable power adapter that's perfect for powering your pi
- <u>HDMI cable</u> required to connect a Pi to a monitor and is not included in a Pi computer purchase. We also carry the flat version for a more sleek/stylish look.
- <u>Ethernet cable</u> required if you want to connect your Pi to the Internet via a router
- <u>USB WiFi Module</u> This is our recommended WiFi adapter, works out of the box with Pi with good range and speed
- Keyboards and Mice We have a range of wired and wireless options
- A wide range of accessories and essentials
- Various small displays as well as nice Pi-compatible HDMI monitors in a range of sizes, from 2.5" to 10"

Please note: Some boards are made in the UK, some in China. WE DO NOT KNOW IN ADVANCE WHICH ONES YOU MAY RECEIVE!

## . TECHNICAL DETAILS

• PCB Dimensions: 56mm x 85mm x 1.4mm / 2.2" x 3.4" x 0.06"

• Height with USBs: 17mm / 0.7"

• Weight: 42g

• Mechanical Schematic

Connector Schematic

Mechanical Schematic

Raspberry Pi Model B+ specs