

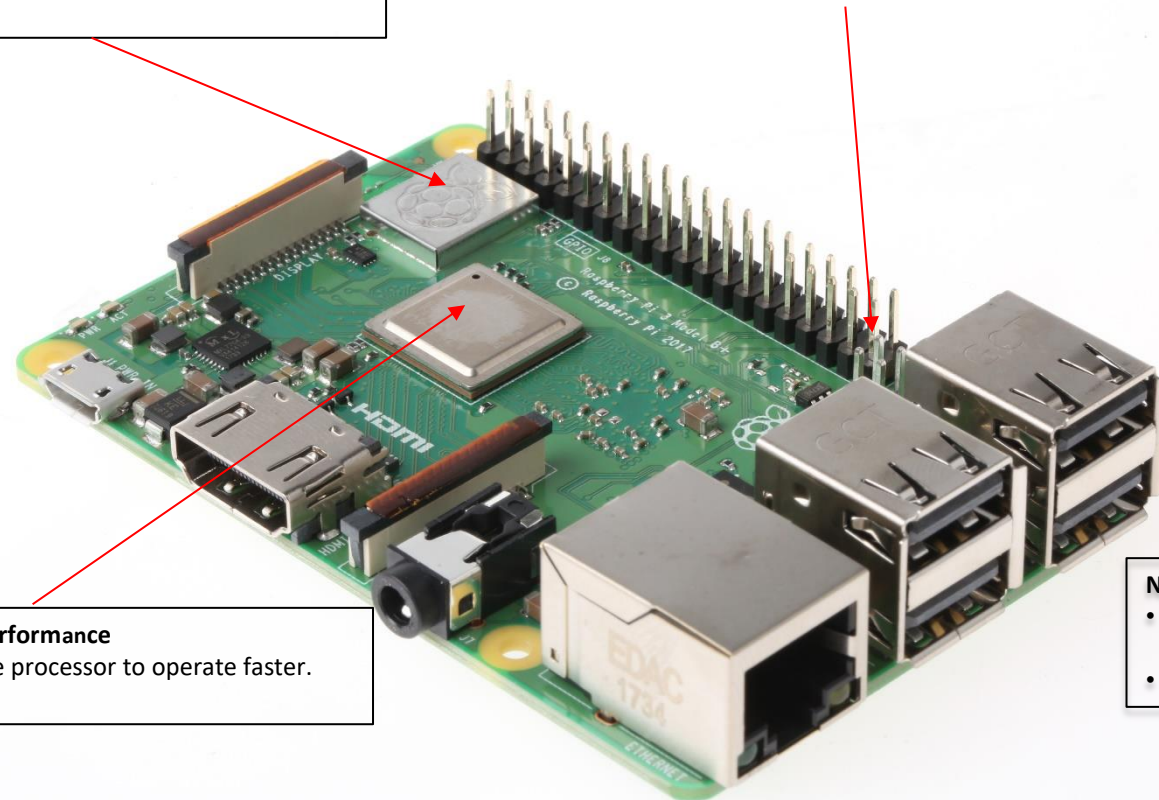
Technical improvements :

Dual band Wireless connectivity 802.11AC (2.4GHz / 5.0GHz)

- Increased connection speed and bandwidth
- Greater range when connected to the 5GHz channel
- Backward compatibility within applications
- Improved streaming HD video over WIFI
- Increased effectiveness as a wireless access point

Power over Ethernet (PoE) enabled

- PoE operation requires the purchase of the new PoE HAT which will be available at launch.
- Without being tethered to an electrical outlet, the Raspberry Pi 3B+ can be located wherever it is needed most, and repositioned easily if required up to a range of 100m.
- Having power available over a network means that installation and distribution of network of Raspberry Pi's becomes simpler and more effective



Improved power performance

- Enabling the core processor to operate faster. Speed TBC

New Ethernet controller

- 3 X Ethernet speed of the current Raspberry Pi3 Model B (~300MBPS)
- Faster network data transfer



Customers and Applications

Resellers



- Resale to consumer customers
- Provide technical support
- Manage customer returns

Makers & Consumers

- Media Centre (Kodi)
- Robotics
- Hacking (hardware)
- Software Programming
- Digital Assistants
- IP Camera
- Connected home
- Smart Art



Teaching & Education

- Software programming
- Robotics
- Smart Art
- Electronics Design
- Games/App development
- Cloud computing
- Neural Networking/AI



Industrial & OEM



Smart Home

- Heating/lighting control
- Environmental sensing
- IP Camera/CCTV
- Audio/Video streaming
- Digital Assistant – Alexa, Google
- Wireless access points
- Software defined radio
- Cloud connectivity
- Interactive toys/robots

Buildings and Retail

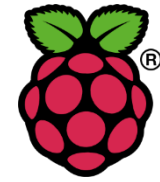
- Heating/lighting control
- Environmental sensing
- IP Camera/CCTV
- Digital signage/advertising
- Wireless access points
- Audio/video streaming
- Electronic Point of Sale
- Cloud connectivity
- LoRaWan & SigFox
- Neural Networking/AI

Connected Vehicles

- In-car Infotainment
- Autonomous drones
- GPS Tracking/Navigation
- Environmental sensing
- IP Camera
- Digital Assistant – Alexa, Google
- Wireless access points
- Software defined radio
- Cloud connectivity
- Neural Networking/AI

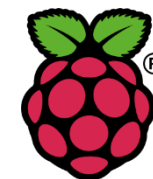
Industry 4.0/Smart Factory

- Environmental sensing
- Connected machines
- IP Camera/CCTV
- Wireless access points
- Software defined radio
- LoRaWan & SigFox
- Automated testing
- Motor control
- Robotic assembly
- Neural Networking/AI



Key Selling points

FEATURE	BENEFIT
BCM2837 processor	More processing power than previous Pi models
Quad-core	Substantial improvement in multithreaded applications
1GB RAM	Same capacity as Pi3B
No change to the form factor	Compatible with all existing accessories (cases, extension boards, etc.)
Made in UK	RS Pi 3B+ are built exclusively in UK ensuring a high quality build
TBC processor speed	Improved from 1.2GHz
Price \$35	Same ball park price as the Model 3B



Raspberry Pi 3B+ vs. 3B Comparison

Raspberry Pi Model	3B+	3B
SoC	Broadcom BCM2837B0	Broadcom BCM2837B0
CPU	X.X GHz 64bit quadcore ARM CortexA53	1.2 GHz 64bit quadcore ARM CortexA53
GPU	4 (via the onboard 5port USB hub)	4 (via the onboard 5port USB hub)
Memory (SDRAM)	1 GB (shared with GPU)	1 GB (shared with GPU)
USB 2.0 Ports	4 (via the onboard 5port USB hub)	4 (via the onboard 5port USB hub)
Video Inputs	15pin MIPI camera interface (CSI) connector, used with the Raspberry Pi camera or Raspberry Pi NoIR camera	15pin MIPI camera interface (CSI) connector, used with the Raspberry Pi camera or Raspberry Pi NoIR camera
Video Outputs	HDMI, composite video (3.5 mm TRRS jack), MIPI display interface (DSI) for raw LCD panels	HDMI, composite video (3.5 mm TRRS jack), MIPI display interface (DSI) for raw LCD panels
Audio Inputs	MicroSDHC slot, USB Boot Mode	MicroSDHC slot, USB Boot Mode
Audio Outputs	Analog via 3.5 mm phone jack; digital via HDMI and, as of revision 2 boards, I ² S	Analog via 3.5 mm phone jack; digital via HDMI and, as of revision 2 boards, I ² S
Onboard storage	MicroSDHC slot, USB Boot Mode	MicroSDHC slot, USB Boot Mode
Onboard network	Gigabit Ethernet over USB 2.0, 802.11AC wireless, Bluetooth 4.2, BLE Power over Ethernet (PoE) enabled via additional HAT	10/100 Mbit/s Ethernet, 802.11n wireless, Bluetooth 4.1
Low level peripherals	Extended 40 pin GPIO Header	Extended 40 pin GPIO Header
Power ratings	TBC	300 mA (1.5 W) average when idle, 1.34 A (6.7 W) maximum under stress (monitor, keyboard, mouse and WiFi connected)
Power source	5.1 V via MicroUSB or GPIO header Power over Ethernet (PoE) enabled via additional HAT	5.1 V via MicroUSB or GPIO header
Size (mm)	85 x 56 x 17	85 x 56 x 17
Weight (g)	TBC	45