Raspberry Pi 2020

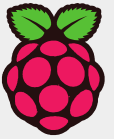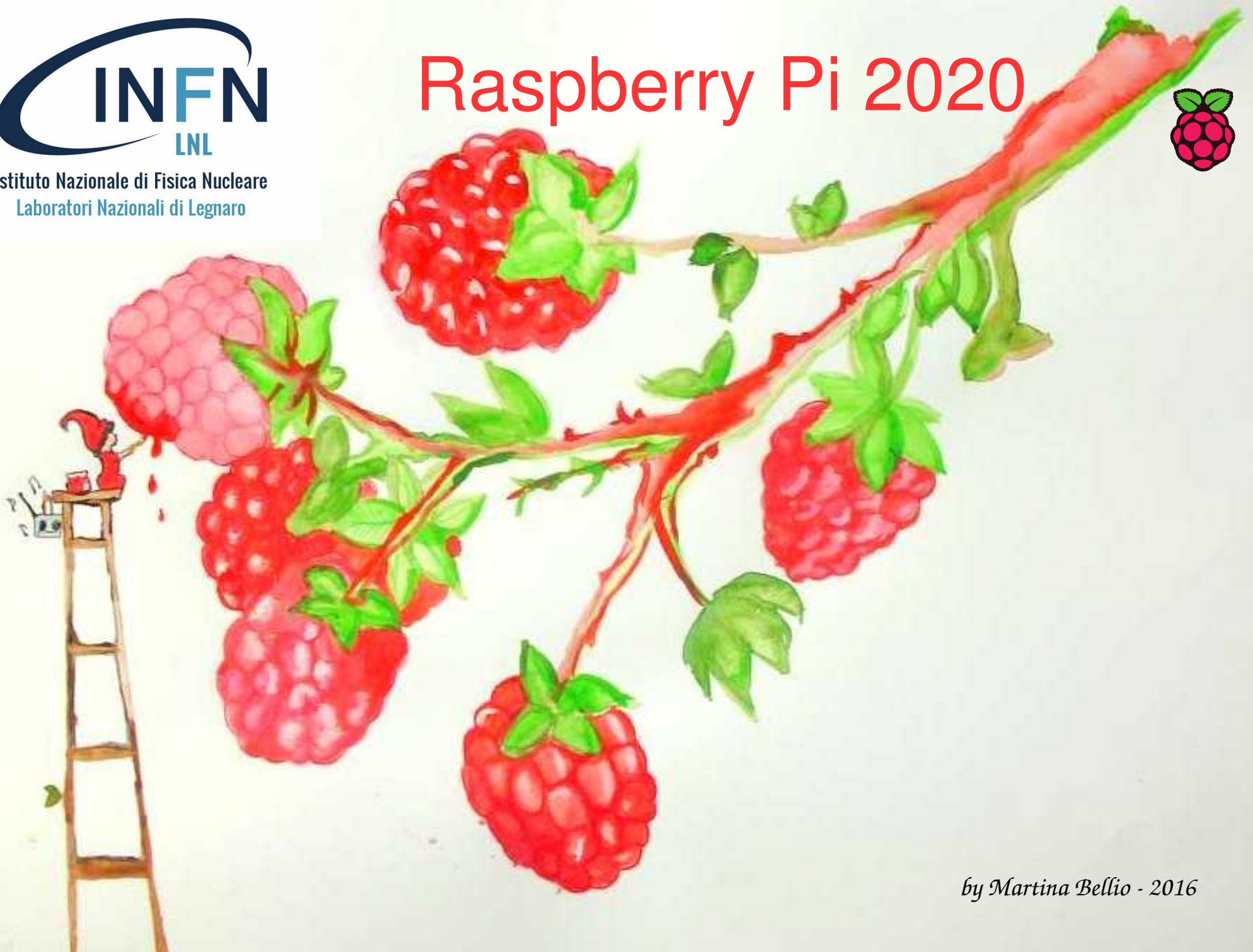by Martina Bellio - 2016

Stefania Canella

Raspberry Pi 2020

https://www.raspberrypi.org

Our mission has never been more vital

Every young person, whatever their background and wherever they are in the world, deserves the opportunity to learn digital skills and gain the confidence to create with digital technologies.

Our response to coronavirus, and what we are doing to support our community

**The next generation of digital makers - Philip Colligan
TED talk x OpenUniversity**

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FluSense takes on COVID-19 with Raspberry Pi
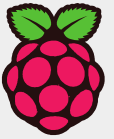
27th Mar 2020 Ashley Whittaker

Researchers at UMass Amherst have created FluSense, a dictionary-sized piece of equipment comprising a cheap microphone array, a thermal sensor, an Intel Movidius 2 neural computing engine, and a Raspberry Pi. FluSense monitors crowd sounds to forecast outbreaks of viral respiratory disease like seasonal flu; naturally, the headlines about their work have focused on its potential relevance to the COVID-19 pandemic.
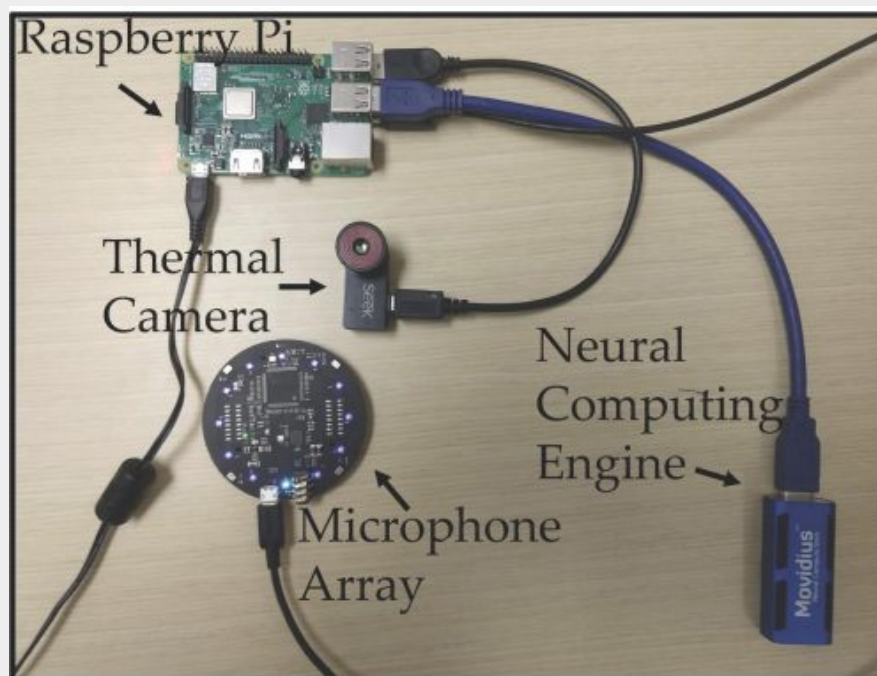
*Image from the University of Massachusetts Amherst*

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Raspberry Pi 2020

And then ... with Raspberry Pi

27th Mar 2020 Ashley Whittaker

And to end on a cheering note, we *heart* this project from @deeplocal on Instagram. They've created a Raspberry Pi-powered soap dispenser which will play 20 seconds of your favourite song to keep you at the sink and make sure you're washing your hands for long enough to properly protect yourself.
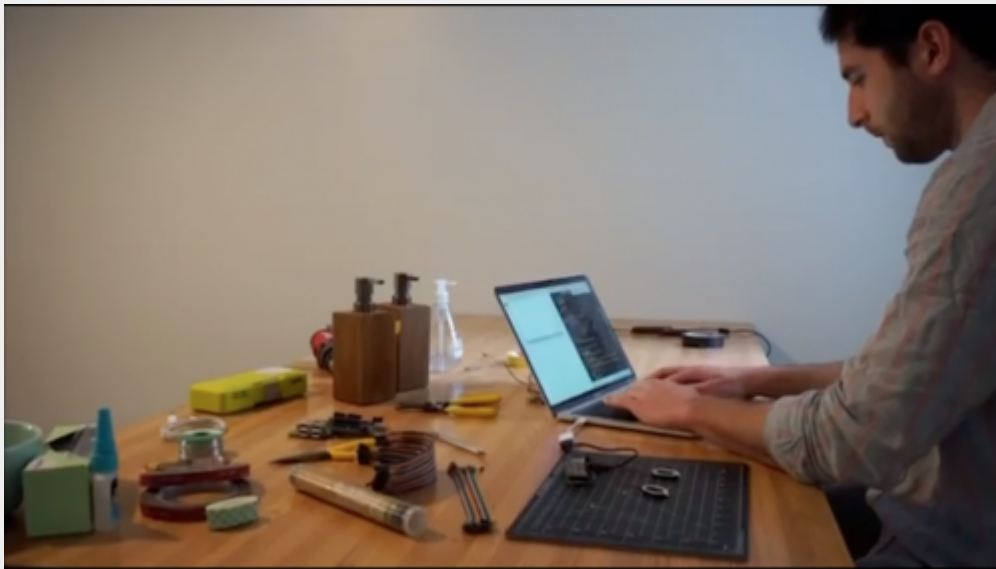
Screenshot via @deeplocal on Instagram

Raspberry Pi 2020

Raspberry Pi 4

Your tiny, dual-display, desktop computer

...and robot brains, smart home hub, media centre, networked AI core, factory controller, and much more

Completely upgraded, re-engineered, faster, more powerful

From $35

Stefania Canella

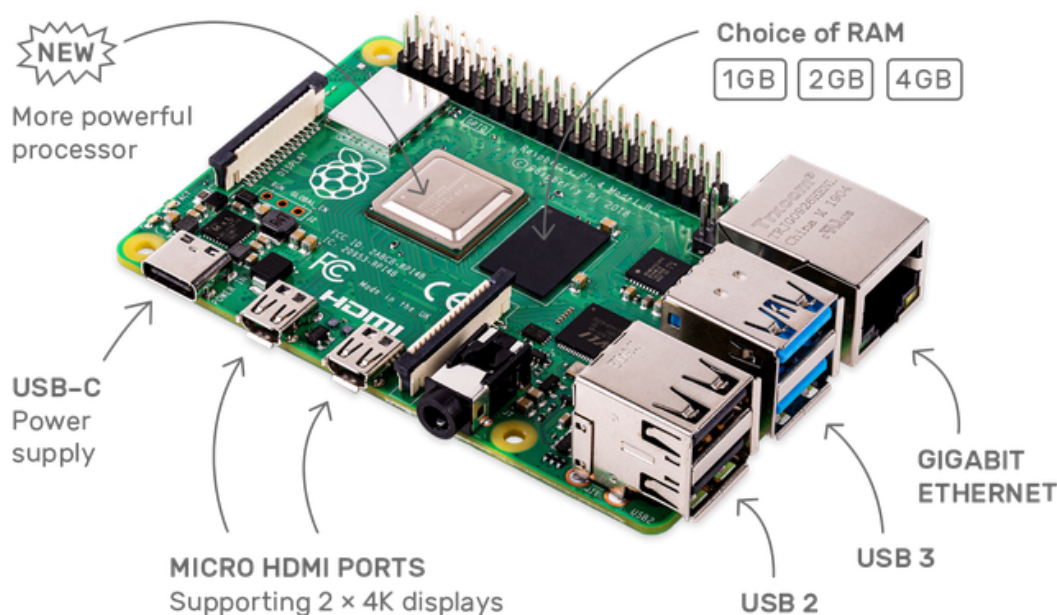# Raspberry Pi 2020

2019: Raspberry Pi 4

Your tiny, dual-display, desktop computer … and robot brains, smart home hub, media centre, networked AI core, factory controller, and much more

Raspberry Pi 2020

Completely upgraded, re-engineered

Faster, more powerful

NEW
More powerful processor

Choice of RAM
1GB 2GB 4GB

From **$35**

You'll recognise the price along with the basic shape and size, so you can simply drop your new Raspberry Pi into your old projects for an upgrade; and as always, we've kept all our software backwards-compatible, so what you create on a Raspberry Pi 4 will work on any older models you own too.

USB-C
Power supply

MICRO HDMI PORTS
Supporting 2 × 4K displays

USB 2

USB 3

GIGABIT ETHERNET

Stefania Canella

Raspberry Pi 2020

Your new desktop computer

The speed and performance of the new Raspberry Pi 4 is a step up from earlier models. For the first time, we've built a complete desktop experience. Whether you're editing documents, browsing the web with a bunch of tabs open, juggling spreadsheets or drafting a presentation, you'll find the experience smooth and very recognisable — but on a smaller, more energy-efficient and much more cost-effective machine.

Silent, energy-efficient

The fanless, energy-efficient Raspberry Pi runs silently and uses far less power than other computers.
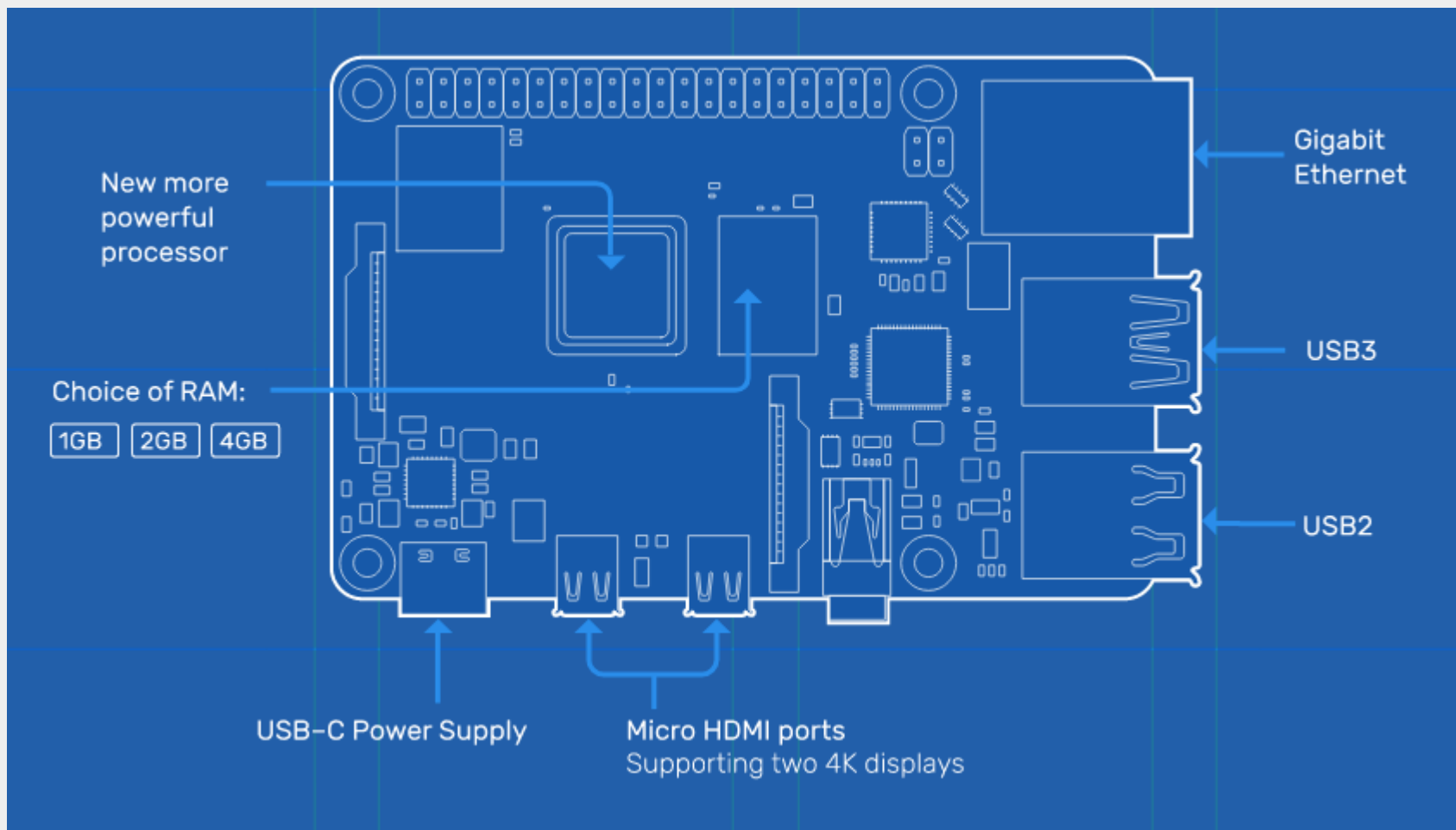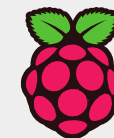
USB 3

Your new Raspberry Pi 4 has upgraded USB capacity: along with two USB 2 ports you'll find two USB 3 ports, which can transfer data up to ten times faster.

Fast networking

Raspberry Pi 4 comes with Gigabit Ethernet, along with onboard wireless networking and Bluetooth.
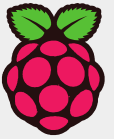
Your choice of RAM

We're making different variants of the Raspberry Pi 4 available, depending on how much RAM you need — 1GB, 2GB or 4GB.

Raspberry Pi 2020

New more powerful processor

Choice of RAM:
1GB 2GB 4GB

Gigabit Ethernet

USB3

USB2

USB-C Power Supply

Micro HDMI ports
Supporting two 4K displays

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Raspberry Pi 2020

- ➢ Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- ➢ 1GB, 2GB or 4GB LPDDR4-3200 SDRAM (depending on model)
- ➢ 2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE
- ➢ Gigabit Ethernet
- ➢ 2 USB 3.0 ports; 2 USB 2.0 ports.
- ➢ Raspberry Pi standard 40 pin GPIO header (fully backwards compatible with previous boards)
- ➢ 2 × micro-HDMI ports (up to 4kp60 supported)
- ➢ 2-lane MIPI DSI display port
- ➢ 2-lane MIPI CSI camera port
- ➢ 4-pole stereo audio and composite video port

Raspberry Pi 2020
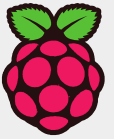
- ➢ H.265 (4kp60 decode), H264 (1080p60 decode, 1080p30 encode)
- ➢ OpenGL ES 3.0 graphics
- ➢ Micro-SD card slot for loading operating system and data storage
- ➢ 5V DC via USB-C connector (minimum 3A*)
- ➢ 5V DC via GPIO header (minimum 3A*)
- ➢ Power over Ethernet (PoE) enabled (requires separate PoE HAT)
- ➢ Operating temperature: 0 – 50 degrees C ambient

* A good quality 2.5A power supply can be used if downstream USB peripherals consume less than 500mA in total.