Riverside Raspberry Pi

04/09/18 meeting

IEPUG intro

-who we are

-don't feel you need to stay the whole time

Sponsors:

Thanks to RiversideI/O & Excite for hosting our meetings

http://www.riverside.io/en: co-working space in downtown Riverside

https://exciteriverside.org/: a unique tech business acceleration program: created in collaboration between business leaders, the City and County of Riverside, and the University of California Riverside

Chat Room:

Raspberry PI now has a chat room on gitter.
Come hang out and talk to us about your
PI project or make suggestions for meeting topics.

https://gitter.im/RiversideRaspberry/Lobby

Publications:

MagPi: Issue #68 available:

https://www.raspberrypi.org/magpi-issues/MagPi68.pdf

Raspberry Pi 3B+ (pg 16)

All issues available here:

https://www.raspberrypi.org/magpi-issues/

Publications:

HackSpace

issue #5 available:

https://hackspace.raspberrypi.org/issues/5

Inside AdaFruit (pg 32)

Raspberry Pi 3B+ (pg 54)

Stirling engine buggy (pg 116)

ZX Spectrum Next development kit (pg 126)

Pi related item:

Joy Bonnet ($15):

A mini gamepad that fits on top of a Pi Zero

https://www.adafruit.com/product/3464

http://www.microcenter.com/product/479246/Joy_Bonnet_for_Raspberry_Pi

Combo w/Pi Zero, case and cables ($33):

https://www.adafruit.com/product/3205

Pi related item:

OctoPart:

https://octopart.com

Website for finding best price on electronic parts

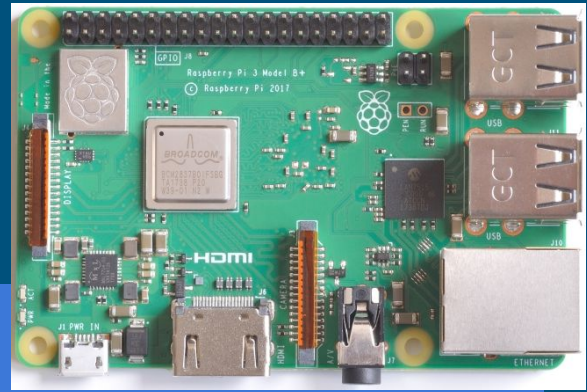# The new Raspberry Pi 3B+

Quick Specs:

- 1.4GHz 64-bit quad-core ARM Cortex-A53 CPU
- Dual-band 802.11ac wireless LAN and Bluetooth 4.2
- Faster Ethernet (Gigabit Ethernet over USB 2.0)
- Power-over-Ethernet support (with separate PoE HAT)
- Improved PXE network and USB mass-storage booting
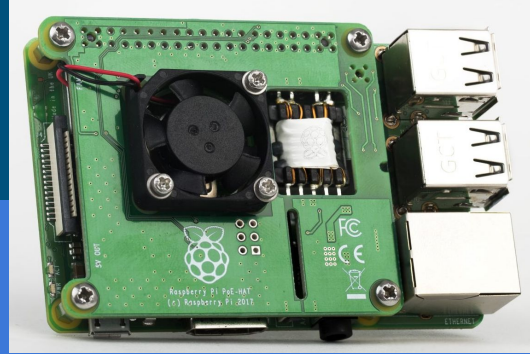- Improved thermal management

The new Raspberry Pi 3B+:

Review:
- http://raspi.tv/2018/new-raspberry-pi-model-3b-1-4-ghz-330mbit-ethernet-802-11ac-poe
- Raspberry Pi 3 B+ Review and Performance Comparison (Jeff Geerling)
  (a down and gritty performance review)

Comparison:
- http://socialcompare.com/en/comparison/raspberrypi-models-comparison
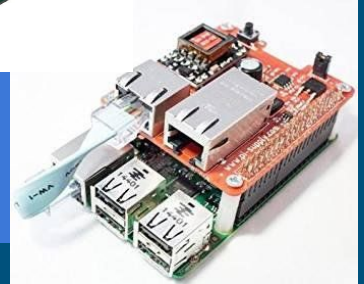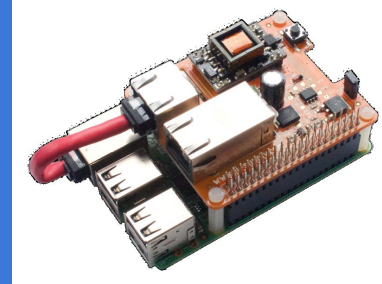
The new Raspberry Pi 3B+:

Integrated POE hat:

- integrated, doesn't extend header?, cost??
- Raspberry Pi PoE HAT

Aftermarket POE ($41-$51):

- Pi PoE Switch HAT - Power over Ethernet for Raspberry Pi
- extends header
- US: meditcore reviews/ UK: good reviews, but overseas ordering
- https://www.amazon.com/Pi-PoE-Switch-HAT-Raspberry/dp/B01E6LV9SK
- https://uk.pi-supply.com/products/pi-poe-switch-hat-power-over-ethernet-for-raspberry-pi

Discussion topic notes from meeting:

- NextCloud NAS: good NAS for PIi for Pi,
  https://ownyourbits.com/category/arm/raspberrypi/

- Gold N West Surplus (surplus desktops/laptops, repair in Corona)
  http://gwsrecycling.com/

- Computer History Museum
  http://www.computerhistory.org/

- TRW swap meet:
  Last Saturday of the month (7:00 AM to 11:30 AM) rain or shine! (this month's date is 4/28/18)
  http://w6trw.com/index.php/w6trw-amateur-radio-club-swap-meet/

Discussion topic notes from meeting:

- Pi-hole: add-blocker DNS server
  https://hackspace.raspberrypi.org/issues/5 (page 56)
  https://github.com/pi-hole/pi-hole/wiki
  https://lifehacker.com/create-a-network-wide-ad-blocker-with-a-raspberry-pi-1727295925

Discussion topic notes from meeting:

- Star Wars ASCII: http://www.asciimation.co.nz/

- Computer RF interference music: https://www.youtube.com/watch?v=EPk8MVEmiTI

- Printer music:
  https://www.youtube.com/watch?v=jufHGUp3xQw
  https://vimeo.com/58200103

- Floppy drive music (I Believe they uses Arduinos to control them):
  2.0: https://www.youtube.com/watch?v=Oym7B7YidKs
  80's music: https://www.youtube.com/watch?v=oqwZzuOXYPU

Riverside Raspberry Pi

End!