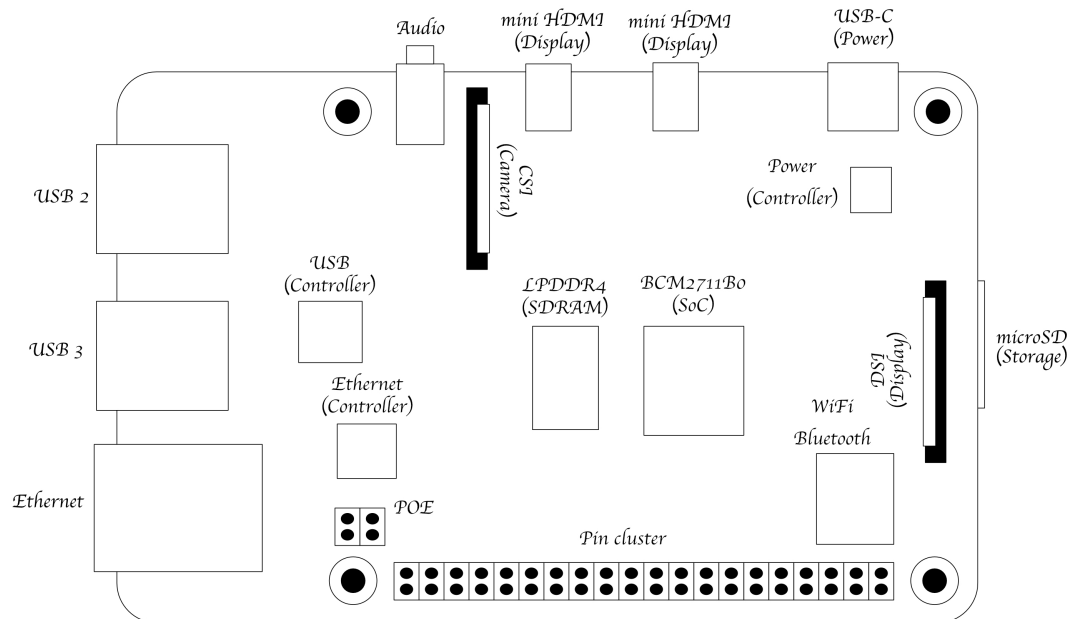


# Supplemental Hardware Requirement for EEP522A (2022)

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*Raspberry Pi 4 Model B*

## Abstract

EEP522-A requires a development board setup. The board used on the course is a *Raspberry Pi 4*. Raspberry Pi 4 is a low-cost, popular development board for prototyping.

***\*\*\* Due to supply chain issues this year, I strongly recommend you start obtaining your equipment early. Make sure you understand the lead times for product arrival. Raspberry Pi 4 is the main board, but due to unique issues this year, alternatives such-as Raspberry Pi 3 and Raspberry Pi Zero 2 W are also allowed.***

## Start

The variation of the Raspberry Pi we will use is the Raspberry Pi "4" Model B. It is always worth exploring the various buying options to find the best solution (most memory, cheapest, etc.). Take some time to watch videos online and read the multiple online sources for extra help. There are complete kits available that provide a lot of the required components.

If you decide to buy the components individually, I recommend you look for a compatible microSD card. Choosing the correct microSD card can save some time getting the Raspberry Pi operational.

If you get confused, I recommend buying one of the Raspberry Pi kits that includes all the components (e.g., microSD card, fan, and power supply). This option may turn out cheaper.

## Checklist

1. **Raspberry Pi 4 Model B** comes in different Ram configurations 2Gb, 4Gb or 8Gb
2. **Power Supply** for Raspberry Pi 4 (make sure it is specific for the Raspberry Pi)
3. **microSD card**, recommend picking a known SD card that works with Raspberry Pi 4
4. **HDMI cable** (may need a cable for specific monitor you have)
5. **Enclosure case** is optional
6. Must have a compatible **heat-sink or fan**, since the Raspberry Pi 4 SoC gets hot.

Other standard hardware required for setup.

- **Ethernet cable**
- **Monitor** with HDMI interface
- **USB Keyboard + Mouse**
- **Ethernet router and/or WiFi router**

## 1 Details

**\*\* Warning \*\*** *information, availability, lead-times, and prices may change, recommend double-checking for alternatives.*

If you do not have any of the individual components I recommend that you go for a starter kit.

- CanaKit Raspberry Pi 4 4GB Starter Kit with Clear Case (4GB RAM)
  - From \$119.99 on *Amazon* <https://tinyurl.com/n3rh3p6f>
  - From \$99 on *CanaKit* <https://www.canakit.com/raspberry-pi-4-4gb.html>

**OR** buy the missing components separately.

- Raspberry Pi 4 Model B 2019 with 4Gb (couldn't find 2Gb availability)
  - From \$95 on *Amazon* <https://tinyurl.com/2ww83xc6>
  - General order <https://www.raspberrypi.com/products/raspberry-pi-4-model-b/>
  - From \$55 on *CanaKit* <https://www.canakit.com/raspberry-pi-4-4gb.html>
- CanaKit 3.5A Raspberry Pi 4 Power Supply with PiSwitch (USB-C)
  - (make sure the power supply is Raspberry Pi 4 compatible)
  - From \$10.99 on *CanaKit* <https://tinyurl.com/j55uxzxy>
- SAMSUNG (MB-ME32GA/AM) 32GB 95MB/s (U1) microSDHC EVO
  - From \$7.99 on *Amazon* <https://tinyurl.com/52suvkca>
- Mini HDMI Adapter Mini HDMI to HDMI Female Cable Adapter
  - (make sure you have the correct cable for your monitor)
  - From \$8.99 on *Amazon* <https://tinyurl.com/zc74463>

### Recommended book

- Exploring Raspberry Pi: Interfacing to the Real World with Embedded Linux 1st Edition
  - From \$21.49 on *Amazon* <https://tinyurl.com/4nyja22z>