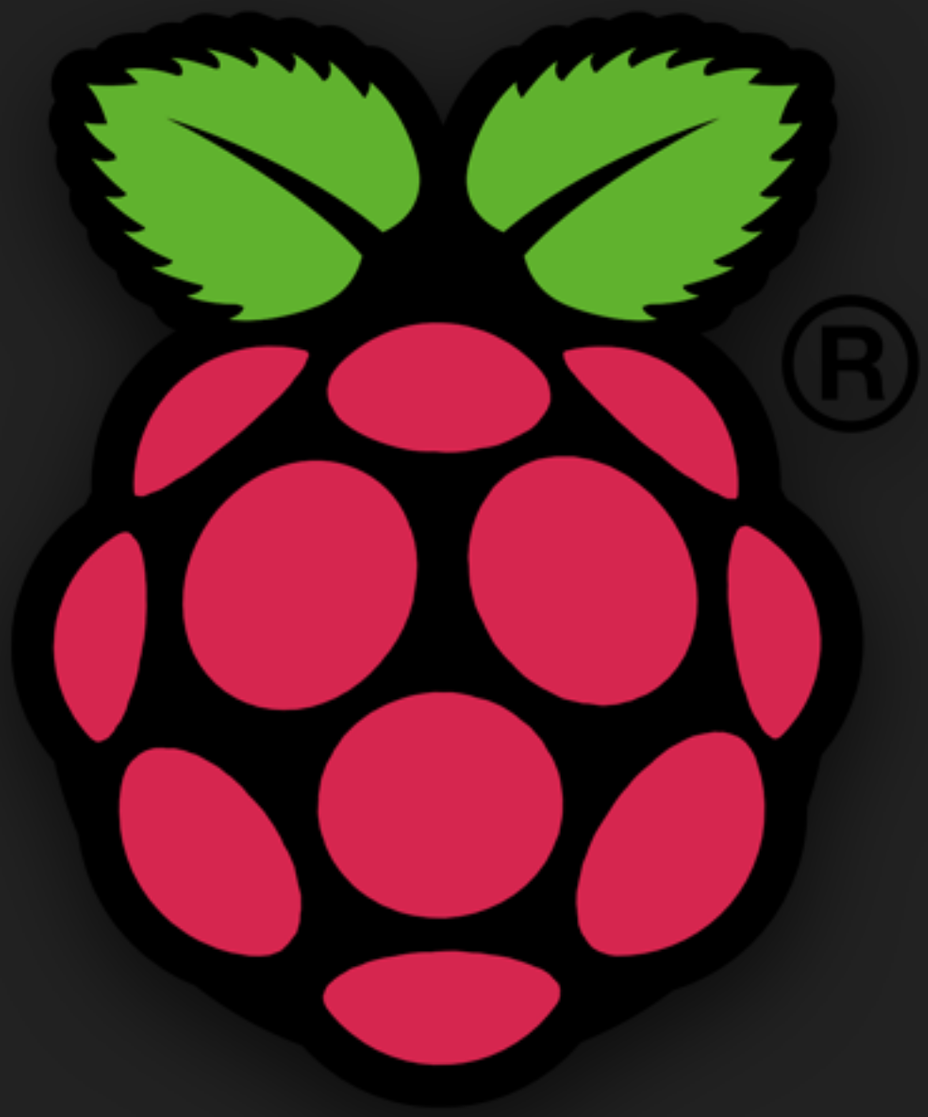
# RASPBERRY PI

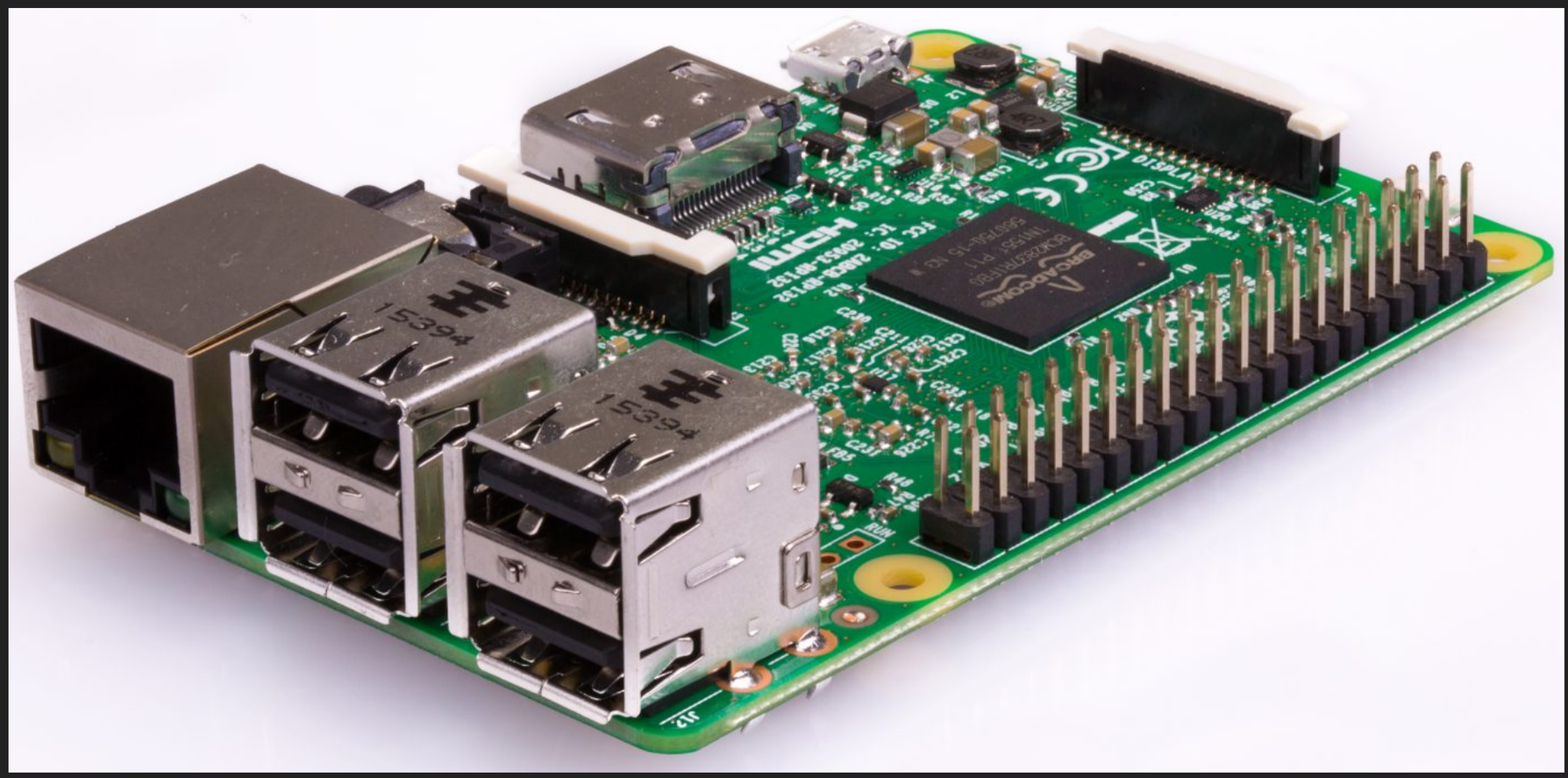


# WHAT IS RASPBERRY PI?

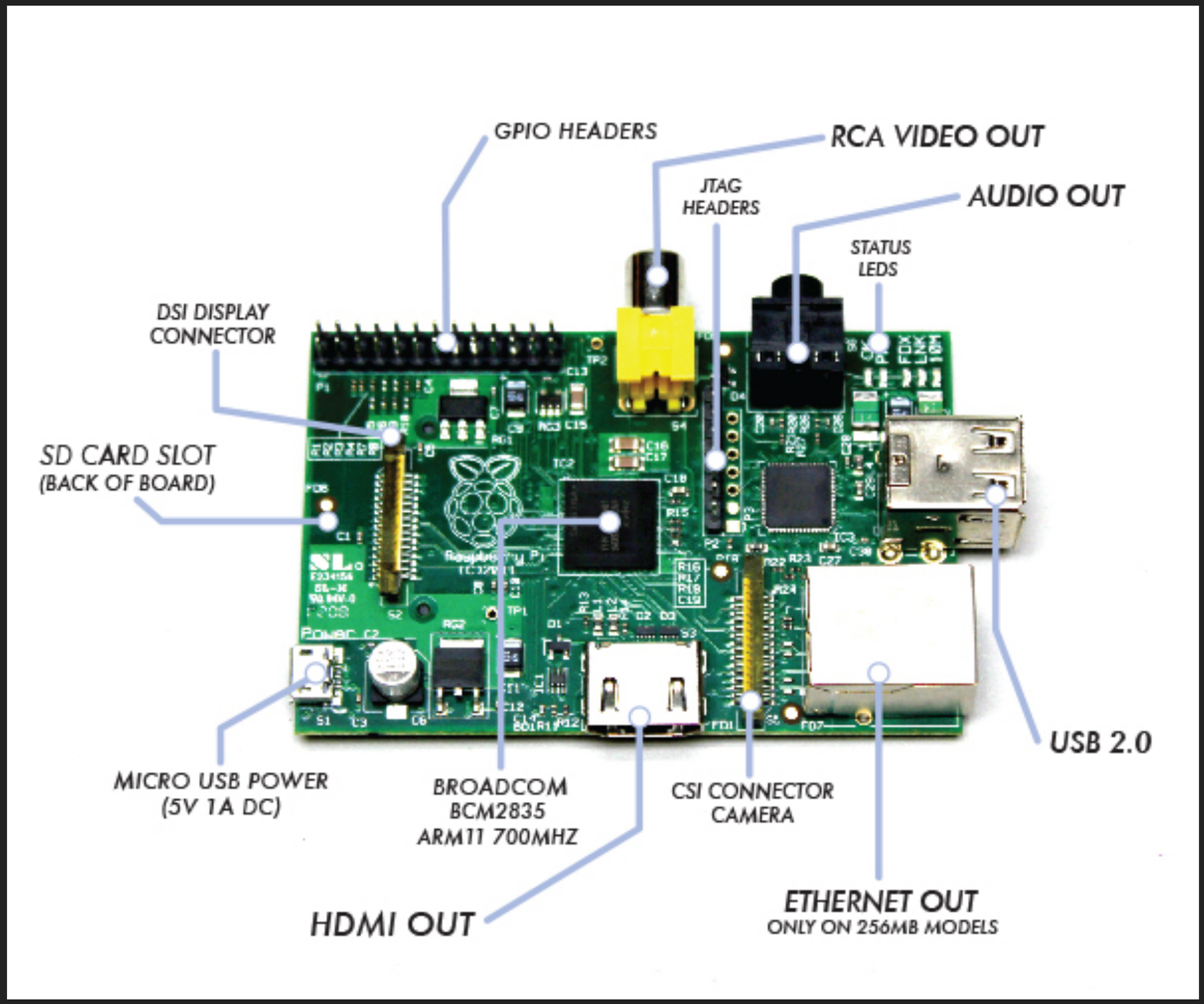
- The Raspberry Pi is a low cost, credit-card sized computer that plugs into a computer monitor or TV, and uses a standard keyboard and mouse.
- It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python.
- It’s capable of doing everything you’d expect a desktop computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games.

# SPECIFICATIONS (PI 3)

SoC: Broadcom BCM2837 (roughly 50% faster than the Pi 2)
CPU: 1.2 GHZ quad-core ARM Cortex A53 (ARMv8 Instruction Set)
GPU: Broadcom VideoCore IV @ 400 MHz.
Memory: 1 GB LPDDR2-900 SDRAM.
USB ports: Four USB 2.0 with 480Mbps data transfer
Network: 10/100 MBPS Ethernet, 802.11n Wireless LAN, Bluetooth 4.0.
Audio: Combined 3.5mm audio out jack and composite video



# DETAILED DIAGRAM



# OPERATING SYSTEM

- The Pi can run the official Raspbian OS
- Apart from Raspbian OS, it can run Ubuntu Mate, Snappy Ubuntu Core, the Kodi-based media centers OSMC and LibreElec, the non-Linux based Risc OS.
- It can also run Windows 10 IoT Core, which is very different to the desktop version of Windows.

# PROGRAMMING LANGUAGES

- The raspberry pi has a lot of programming languages ported to it which make it extremely flexible for developers
- A few of these languages are – Scratch, Python, Java, SQL, C, C++, JavaScript, HTML 5, PERL, ERLANG, etc
- Due to these programming languages being ported, Raspberry Pi has an array of applications associated to it.

# APPLICATIONS

- Wireless Print Server
- Media Centre & Streaming Service
- Gaming Machine
- Mars Rover/Robot Controller
- FM Radio Station
- Motion Detecting Security Camera

# THANK YOU!