

Study of two Raspberry Pis and Power adapters

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1 Raspberry Pi and Power Adapters

Two raspberry pis and two adapters and two different adapters were used for measuring EMI on channel and differences are documented.

1. Raspberry Pi Model B + V1.2 (Fig 2a)
2. Raspberry Pi 3 Model BV1.2 (Fig 2b)
 1. Adapter 1 (Fig 3a) using a USB cable
 2. Adapter 2 (Fig 3b) usual usual cable (non-USB)

1.1 Compare EMI of two power adapters

Figure 1 shows that the two adapters have distinct EMI on the channel. The two Raspberry Pis show same signature when one use the same adapter, showing not much of difference in the two versions released.

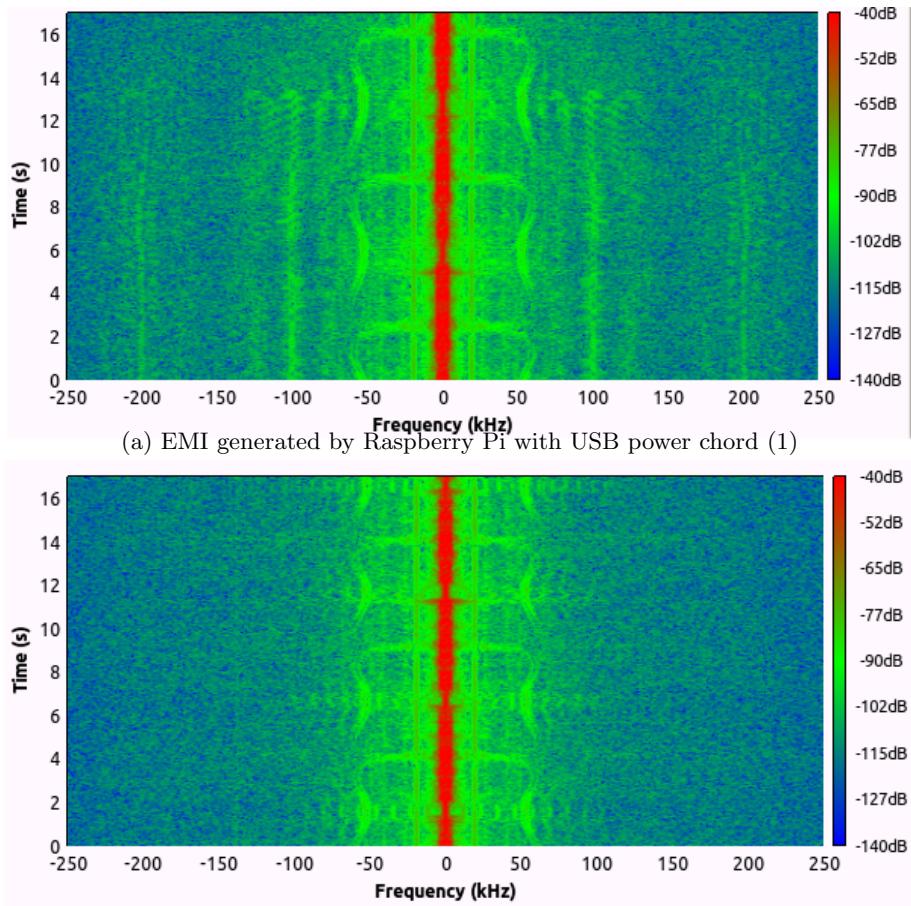
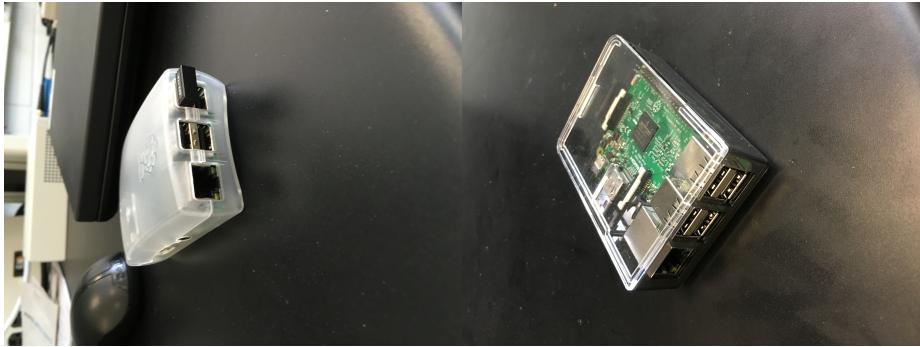


Figure 1: Same Raspberry Pi-2 shows two different EMI signatures for two different power-chords

2 Miscellaneous

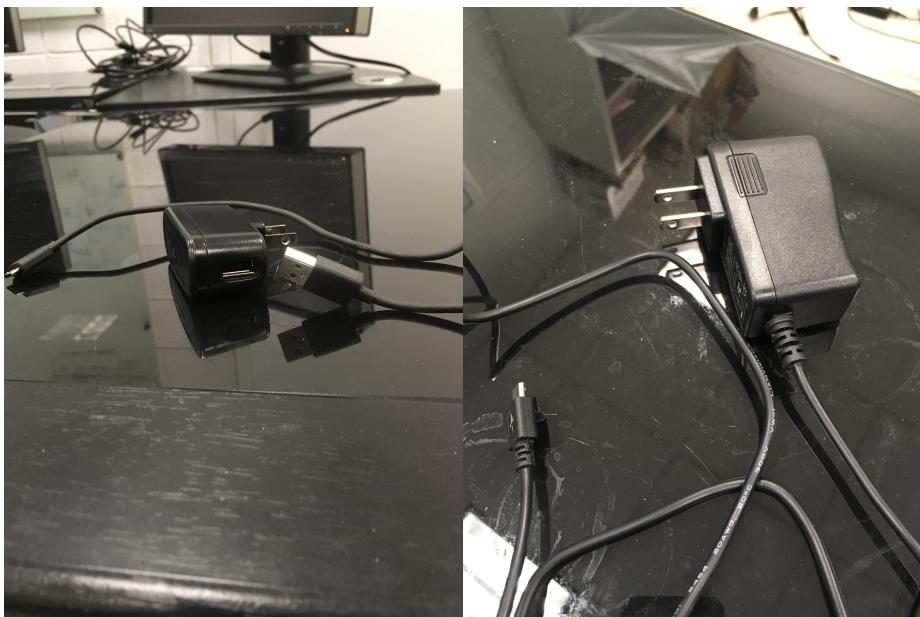
The Raspberry Pis are shown below

The Adapters are displayed below, first one showing a USB socket and the second one with usual chord.



(a) Raspberry 1 (Raspberry Pi)

(b) Raspberry 2 (Raspberry Pi 3)



(a) Adapter 1

(b) Adapter 2