DEVICE DRIVERS DEVELOPMENT

TECHNICAL LOG 1 NOV 15, 2017

SUBMITTED BY:

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MT2016159

November 09, 2017 and November 10,2017:

- 1. Firstly, I collected general information needed for setting up lirc driver on my pi.
- 2. Faced issues in setting up the internet connection in pi, successfully resolved it.
- 3. After getting internet connection in pi, started installing lirc driver using command

\$ sudo apt-get install lirc.

We followed all the steps in order to install lirc as given in the link

http://alexba.in/blog/2013/01/06/setting-up-lirc-on-the-raspberrypi/.

- 4. We looked at documentation of lirc driver from **sourceforge.net**.
- 5. Setting up lirc configurations.

References:

- 1. http://alexba.in/blog/2013/01/06/setting-up-lirc-on-the-raspberrypi/
- 2. http://www.lirc.org/
- 3. https://sourceforge.net/projects/lirc/files/LIRC/0.10.0/

November 11, 2017:

- 1. Setting up of the circuit for building ir led receiver and sender module.
- 2. Wired ir led at gpio pin 22 and ir receiver at gpio pin 23.
- 3. Created a new configuration file for remote.
- 4. Used TSOP because of weak signal received.
- 5. IR Recording: This program will record the signals from our remote control and create a config file for lircd. If file is not specified it defaults to "irrecord.lircd.conf". If file already exists and contains a valid config irrecord will use the protocol description found there and will only try to record the buttons.
- 6. When outputting raw data from IR receiver using **mode2**, I was getting continuous output even without pressing the buttons of projector remote. Figured out that it happened because we did not made the ground common for two circuits the ir receiver and raspberry pi.

November 13,2017:

- 1. Tried to find something about tv service, looks like it's not very well documented. So, couldn't find any proper documentation.
- 2. Studied basics of mailbox from https://msreekan.com/tag/mailbox/.

November 14, 2017:

1. Tested the lirc driver for casio projector remote using irsend and irw successfully.