

**camera**

#!/bin/bash

#export GST\_DEBUG=\*:5

export DISPLAY=:0.0

export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:/usr/lib/aarch64-linux-gnu/gstreamer-1.0

#export GST\_DEBUG=ispsrc:5

#export GST\_DEBUG\_FILE=/tmp/2.txt

echo "Start RKISP Camera Preview!"

gst-launch-1.0 v4l2src device=/dev/video0 ! video/x-raw,format=NV12,width=1920,height=1080, framerate=30/1 ! xvimagesink

**Updating leds**

cd /sys/class/gpio/

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 154 > export"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 156 > export"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo out > gpio154/direction"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo out > gpio156/direction"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 1 > gpio154/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 1 > gpio156/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 0 > gpio154/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 0 > gpio156/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 1 > gpio156/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 1 > gpio154/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 0 > gpio154/value"

**radxa@rock-4se**:**/sys/class/gpio**$ sudo sh -c "echo 0 > gpio156/value"

Note

**radxa@rock-4se**:**/sys/class/gpio**$ omitt this

**A PROGRAM FOR CHANGING LED WITH A PUSH BUTTON FOR 5 SECONDS**

#! /bin/bash

cd /sys/class/gpio

sudo sh -c "echo 157 > export"

sudo sh -c "echo 156 > export"

sudo sh -c "echo 133 > export"

sudo sh -c "echo in > gpio157/direction"

sudo sh -c "echo out > gpio156/direction"

sudo sh -c "echo out > gpio133/direction"

sudo sh -c "echo 'high' > gpio157/direction"

sudo sh -c "echo 'low' > gpio156/direction"

sudo sh -c "echo 'low' > gpio133/direction"

# Set the duration of the timer in seconds

duration=5

# Main loop

while [ $duration -gt 0 ]; do

buttonstat=$(cat gpio157/value)

echo $buttonstat

if [ $buttonstat -eq 1 ]; then

    echo "turning on green led"

sudo sh -c "echo 1 > gpio156/value"

sudo sh -c "echo 0 > gpio133/value"

    sleep 1

else

    echo "turning on red led"

sudo sh -c "echo 0 > gpio156/value"

sudo sh -c "echo 1 > gpio133/value"

    sleep 1

fi

    echo "Time remaining: $duration seconds"

    sleep 1

    ((duration--))

done

sudo sh -c "echo 0 > gpio133/value"

sudo sh -c "echo 0 > gpio156/value"

sudo sh -c "echo 157 > unexport"

sudo sh -c "echo 156 > unexport"

sudo sh -c "echo 133 > unexport"

**Connecting to remote host**

Command

sudo ufw enable

   sudo ufw allow 22

Sudo service ssh start

And on remote computer

ssh [radxa@192.168.0.213](mailto:radxa@192.168.0.213)

**TO TRANSFER THE FILES**

from ubuntu to cmd(PC)

u must be inside your destination pc's directory where file is located

scp [radxa@192.168.0.193](mailto:radxa@192.168.0.193):/home/radxa/Desktop/a2.txt .

from cmd(PC) to ubuntu

u must be inside your source pc's directory where file is located

scp 1a.txt [radxa@192.168.0.193](mailto:radxa@192.168.0.193):/home/radxa/Desktop/

**Temperature sensor**

**radxa@rock-4se:/sys/bus/w1/devices$ sudo modprobe w1-gpio**

radxa@rock-4se:/sys/bus/w1/devices$ sudo modprobe w1-therm

ls cd /sys/bus/w1/devices

Find out the device

cat ./28-8000002c89f0/w1\_slave