**ESP ASSIGNMENT 3**

**COMMON README FILE FOR ALL 3 TASKS**

**Task1**

**HOW TO USE SOFTWARE**

1. Make sure the dir has files -

user-app.c Makefile

2. export PATH=/usr/local/angstrom/arm/bin:$PATH

3. make app

4. Modify the variable SSH\_IP = 192.168.1.113 in Makefile to the target IP address.

Specify the beagleboard directory to push the modules to as SSH\_DIR.

Modify the KDIR to the right kernel directory.

KDIR := /home/rohit/cse598-ESP/TA-copy/kernel/

6. make load-app

7. At Beagleboard do -

insmod i2c-flash.ko

./user-app-task2

**Task2**

**HOW TO USE SOFTWARE**

1. Make sure the dir has files -

i2c-flash.c user-app-task2.c Makefile

2. export PATH=/usr/local/angstrom/arm/bin:$PATH

3. make ARCH=arm CROSS\_COMPILE=arm-angstrom-linux-gnueabi-

3. make app

4. Modify the variable SSH\_IP = 192.168.1.113 in Makefile to the target IP address.

Specify the beagleboard directory to push the modules to as SSH\_DIR.

Modify the KDIR to the right kernel directory.

KDIR := /home/rohit/cse598-ESP/TA-copy/kernel/

5. make load-driver

6. make load-app

7. At Beagleboard do -

insmod i2c-flash.ko

./user-app-task2

**Task3**

**HOW TO USE SOFTWARE**

1. Make sure the dir has files -

i2c-flash-wq.c user-app-task3.c Makefile

2. export PATH=/usr/local/angstrom/arm/bin:$PATH

3. make ARCH=arm CROSS\_COMPILE=arm-angstrom-linux-gnueabi-

3. make app

4. Modify the variable SSH\_IP = 192.168.1.113 in Makefile to the target IP address.

Specify the beagleboard directory to push the modules to as SSH\_DIR.

Modify the KDIR to the right kernel directory.

KDIR := /home/rohit/cse598-ESP/TA-copy/kernel/

5. make load-driver

6. make load-app

7. At Beagleboard do -

insmod i2c-flash-wq.ko

./user-app-task3

**Miscellaneous**

Each registered i2c adapter gets a number, counting from 0. You can

examine

**/sys/class/i2c-dev/**

to see what number corresponds to which adapter.

Alternatively, you can run "i2cdetect -l" to obtain a formated list of all

i2c adapters present on your system at a given time. i2cdetect is part of

the i2c-tools package.

I2C device files are character device files with **major device number 89**

and a **minor device number corresponding to the number assigned as**

**explained above**. They should be called "**i2c-%d**" (i2c-0, i2c-1, ...,

i2c-10, ...). All 256 minor device numbers are reserved for i2c.

EEPROM ADDRESS – 1010010

if(len+offset >256){

mm/util.c

**void** \***memdup\_user**(**const** **void** \_\_user \*src, size\_t len)

linux/ list.h

**static** **inline** **void** **list\_add\_tail**(**struct** list\_head \*new, **struct** list\_head \*head)