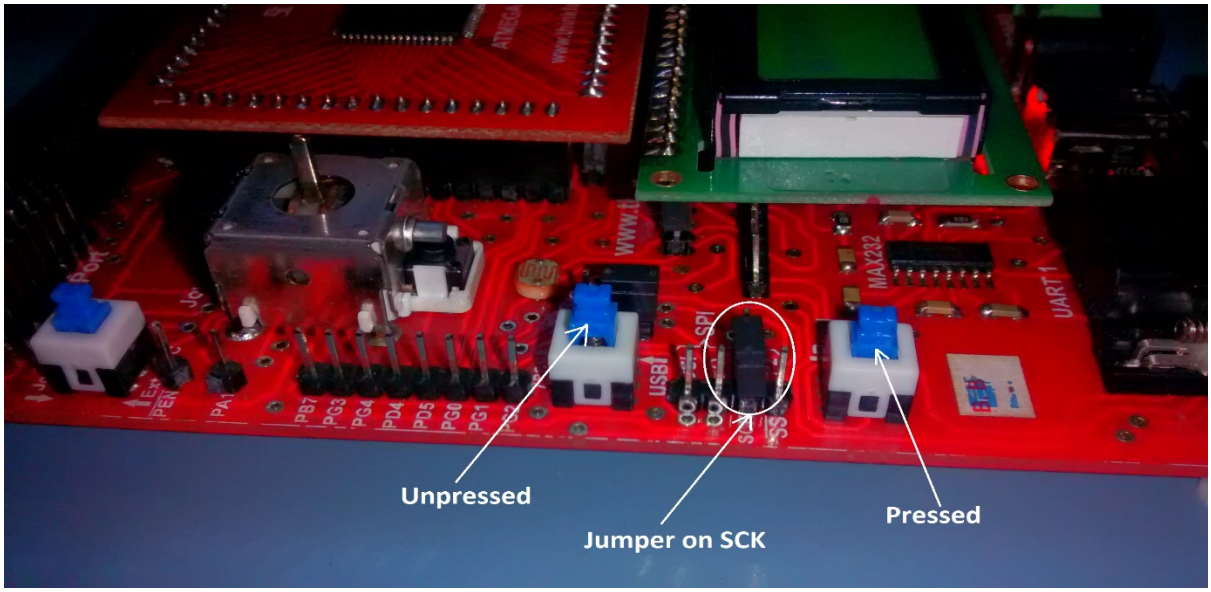
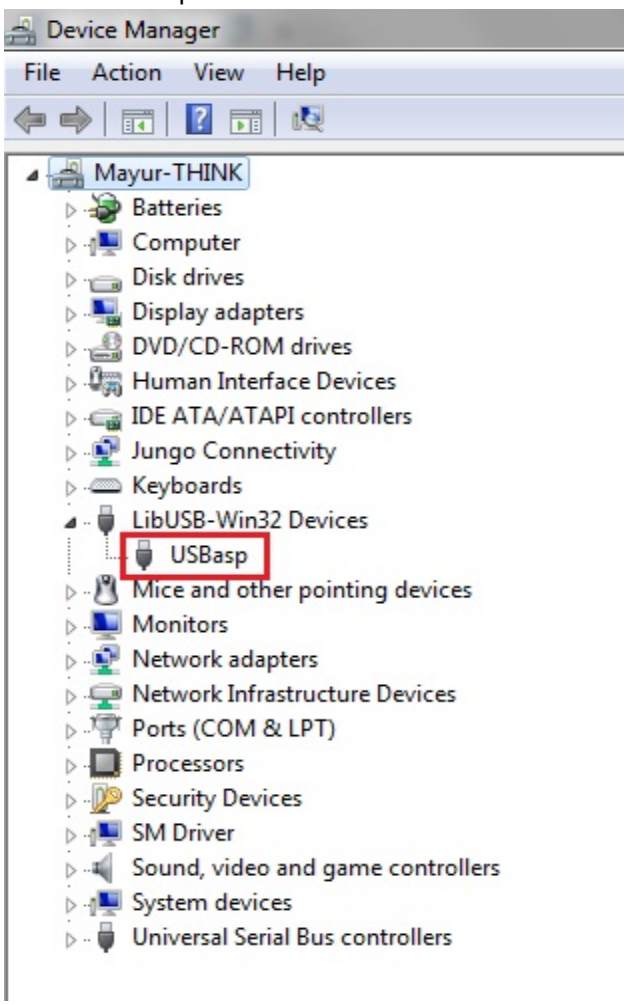
UniBoard Getting Started Guide

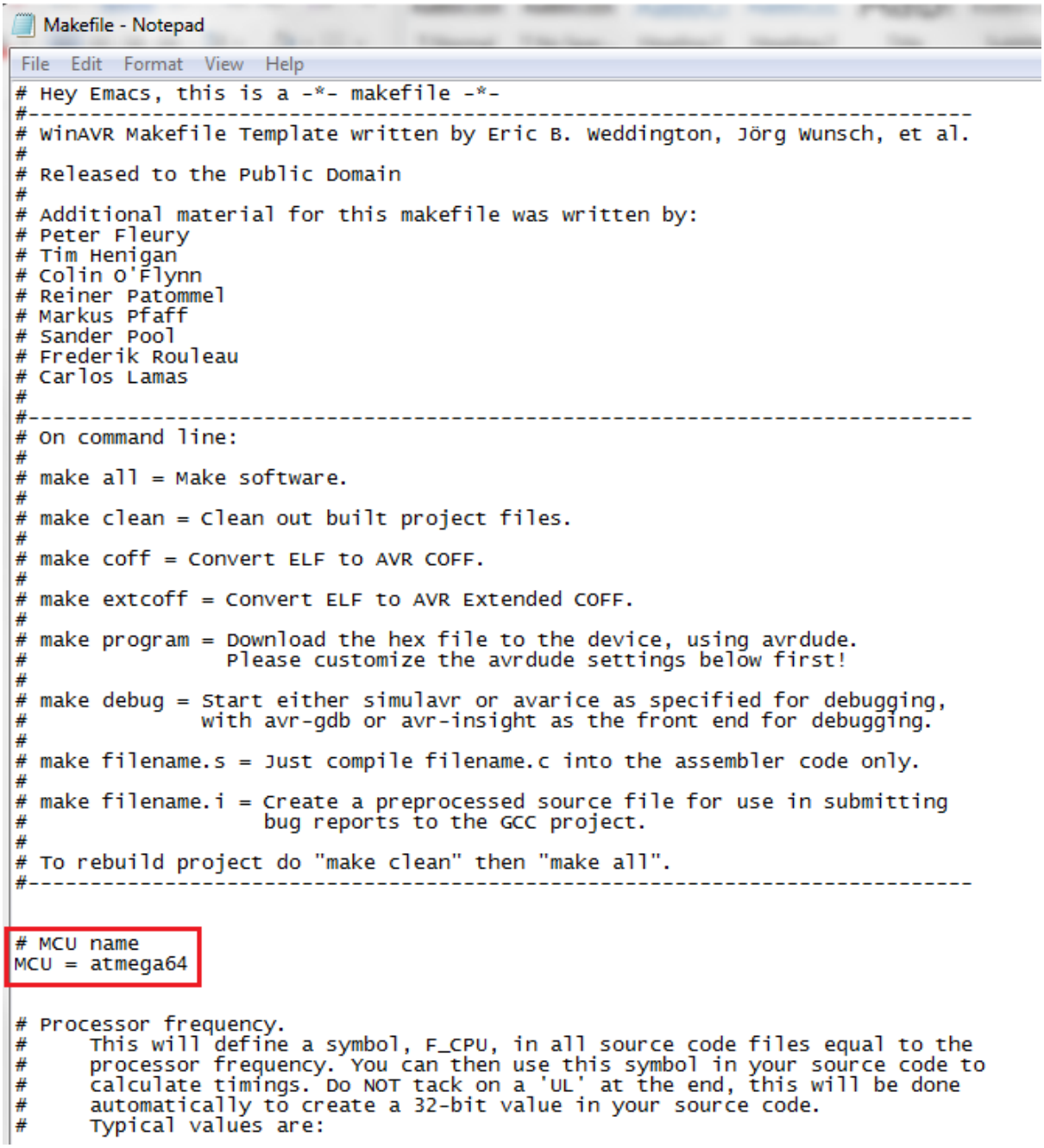
1) Check and verify the *jumper* and *switch* position as shown below:



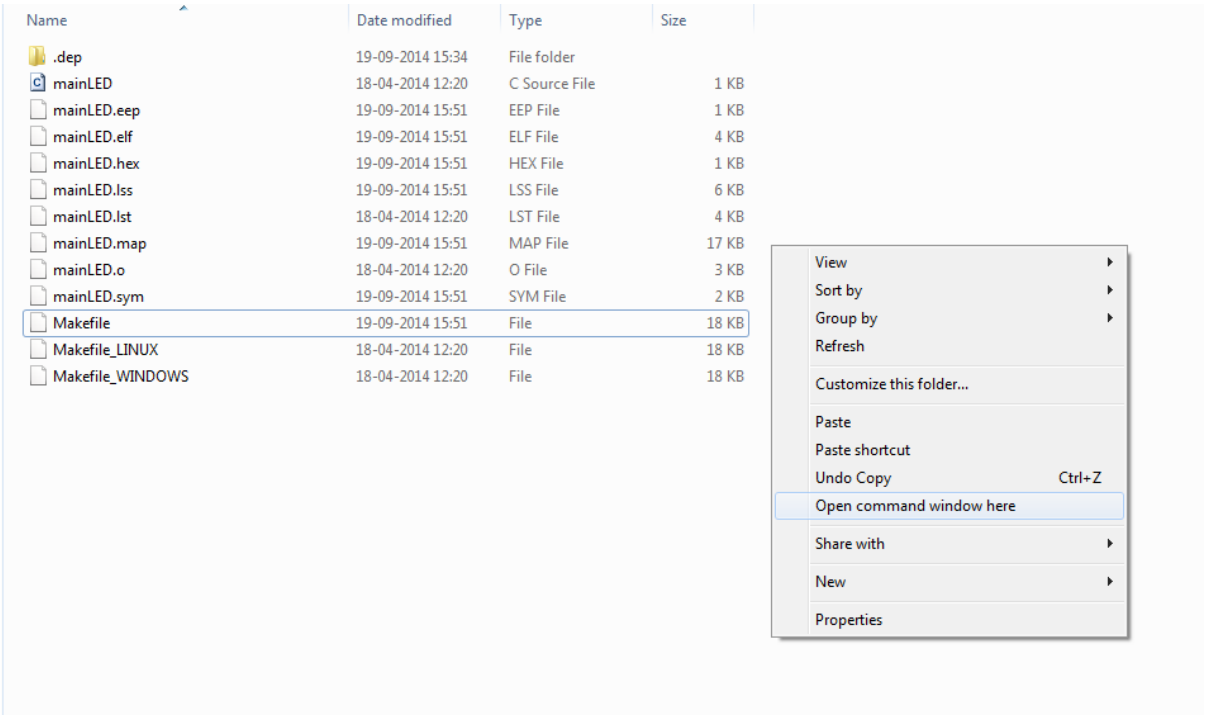
2) Also check if 10-pin *FRC cable* from *PORTC* to *LED Port* is connected.
3) Now connect USB and check if board is powered ON or not.
4) Check if USBasp driver exists and it is detected in device manager



5) Download uniboard folder from FTP
6) Navigate to *uniboard\UNIBOARD_SAMPLE_CODES\non_rtos\1_ports*
7) Open Makefile in notepad and edit MCU as per your hardware (atmega128/atmega64)



8) Save and close notepad
9) while holding *Shift* key, right click on explorer and click on open command window here.



10) now enter following commands one by one.
    a. Make clean
    b. Make all
    c. Make program
11) If everything goes right, you will get following output.

```
E:\Uniboard\UNIBOARD_SAMPLE_CODES\non_rtos\1_ports>make program
avrdude -p atmega64 -P usb -c usbasp    -U flash:w:mainLED.hex

avrdude: warning: cannot set sck period. please check for usbasp firmware update
.
avrdude: AVR device initialized and ready to accept instructions

Reading | ################################################## | 100% 0.02s

avrdude: Device signature = 0x1e9602
avrdude: NOTE: FLASH memory has been specified, an erase cycle will be performed

         To disable this feature, specify the -D option.
avrdude: erasing chip
avrdude: warning: cannot set sck period. please check for usbasp firmware update
.
avrdude: reading input file "mainLED.hex"
avrdude: input file mainLED.hex auto detected as Intel Hex
avrdude: writing flash (242 bytes):

Writing | ################################################## | 100% 0.11s



avrdude: 242 bytes of flash written
avrdude: verifying flash memory against mainLED.hex:
avrdude: load data flash data from input file mainLED.hex:
avrdude: input file mainLED.hex auto detected as Intel Hex
avrdude: input file mainLED.hex contains 242 bytes
avrdude: reading on-chip flash data:

Reading | ################################################## | 100% 0.08s



avrdude: verifying ...
avrdude: 242 bytes of flash verified

avrdude: safemode: Fuses OK

avrdude done.  Thank you.
```

12) The LEDs should blink now. If not, check the FRC cable and command prompt output for any errors.

13) In this way you can try other sample codes also. Try LCD code and you will see some output on LCD.

14) Now try for UART code.

15) Connect serial cable to your PC.

16) Open hyper terminal application.

17) Select bit per second as 9600, Data bits as 8, Parity as None, Stop bits 2 and Flow control as None and Click ‘Apply’ and ‘Ok’

18) Press reset switch on board and then you will see a message printed on hyper terminal. Follow instructions on hyper terminal.

19) If all these things work, then you can conclude that your kit is working properly.

- Feel free to contact me if any problem persists.

- Happy Coding!

Digitally signed by Mayur Kulkarni
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