Tips: Flash address used by LPC51U68 flash command such as flash-erase-region, -flash-write-memory, flash-fill-memory should be page-aligned(256Byte-aligned), Otherwise, normal functions cannot be realized.

1. LPC51U68 Flash Loader project is located in \boards\lpcxpresso51u68\bootloader\_examples\flashloader\mdk.
2. Connect LPCXpress51U68 Rev A board(OM40005) using USB cable to PC as the figure 1 shown.

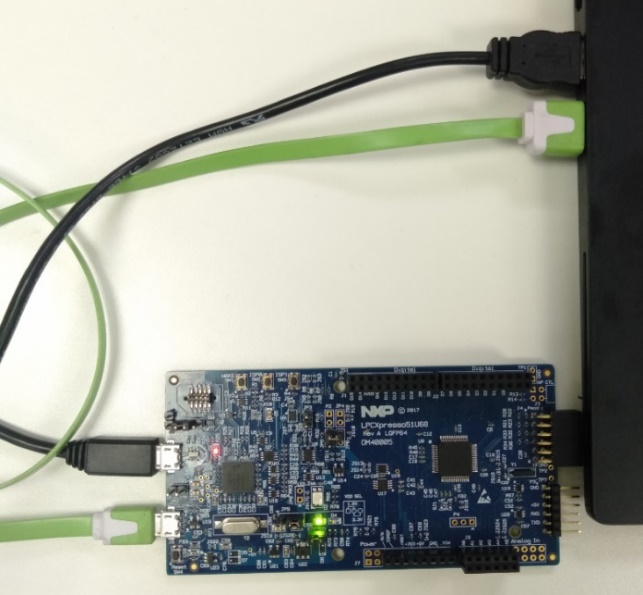


Fig 1. Connection between LPC51U68 Expresso board to PC

1. Connect JP10 using jumper as the figure 2 shown to establish a connection between J5 (USB Header) to LPC51U68 VBUS pin.

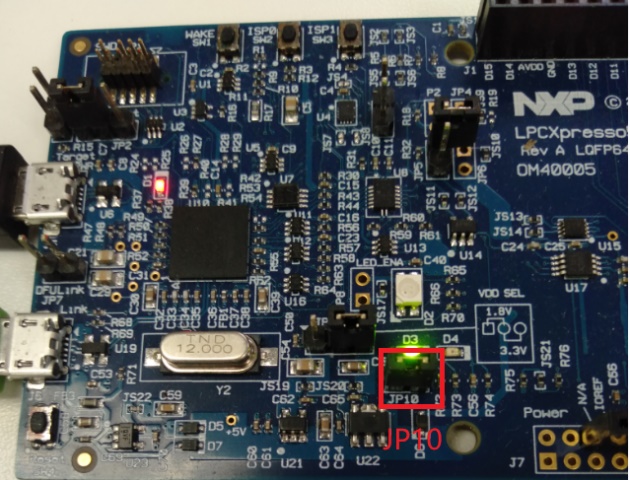


Fig 2. Connect JP10 jumper

4.Open flash loader project and enter debug mode, then run this project in full speed. The operating steps are shown in figure 3.

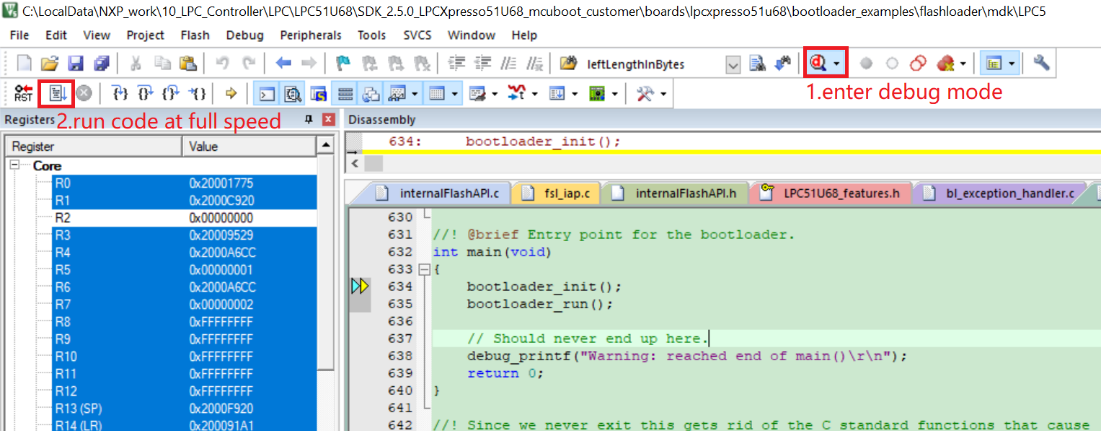


Fig 3. Run flash loader

1. Open blhost.exe located in \middleware\mcu-boot\bin\Tools\blhost\win as figure 4 shown.

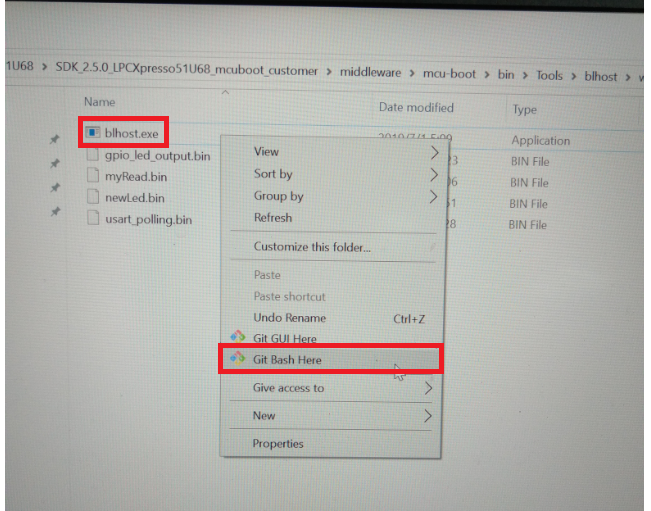


Fig 4. Open blhost.exe

1. A command line interface is shown as figure 5.

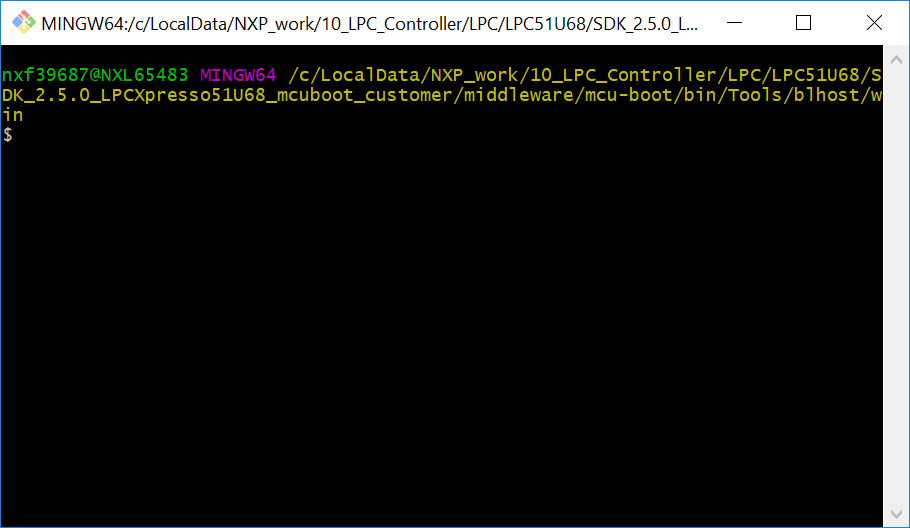


Fig 5. blhost command line interface

1. Verify whether blhost running in PC is able to communicate with flash loader running in LPCXpresso51U68 board using get-property command or not. Command get-property 1 can be used to obtain flash loader version.

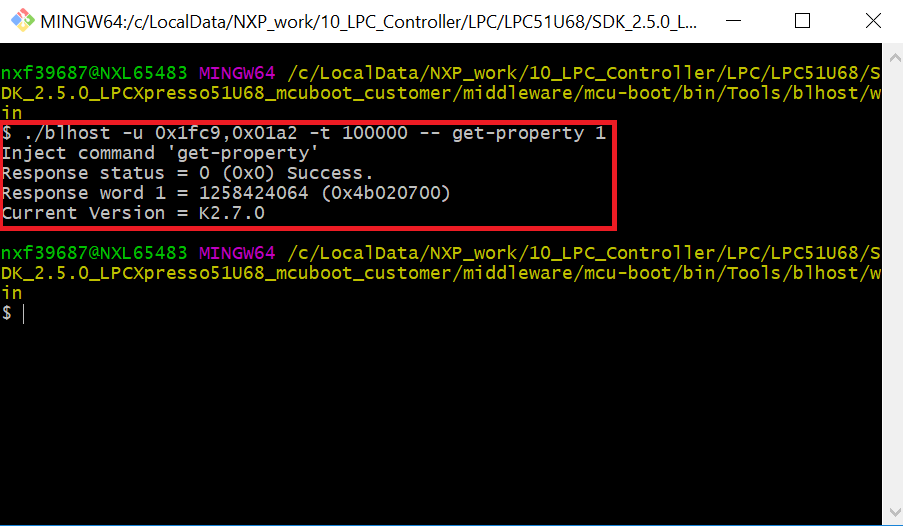


Fig 6. Get flash loader version

1. Update firmware
   1. erase flash occupied by firmware as shown in figure 7 using

./blhost -u 0x1fc9,0x01a2 -t 100000 -- flash-erase-all

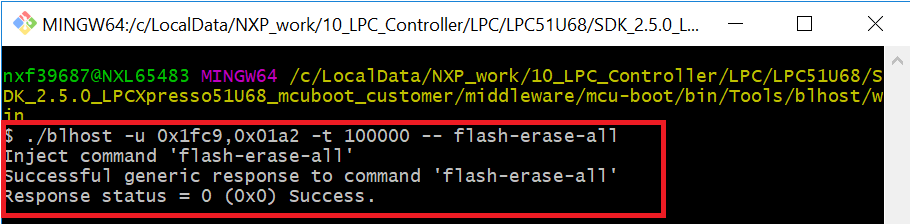


Fig 7.flash erase

* 1. program firmware

8.2.1

place firmware and blhost.exe in the same file directory. Here, demo firmware gpio\_led\_output.bin is placed at the same file directory with blhost.exe as shown in figure 8.

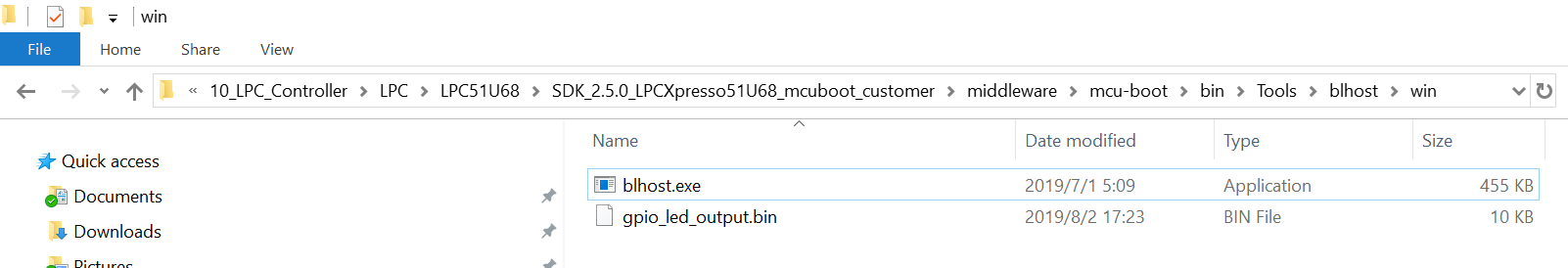


Fig 8. specify firmware file path

8.2.2

Run command below to program firmware – gpio\_led\_output.bin at starting address 0 in LPC51U68 flash. The command is shown below:

./blhost -u 0x1fc9,0x01a2 -t 100000 -- write-memory 0 gpio\_led\_output.bin

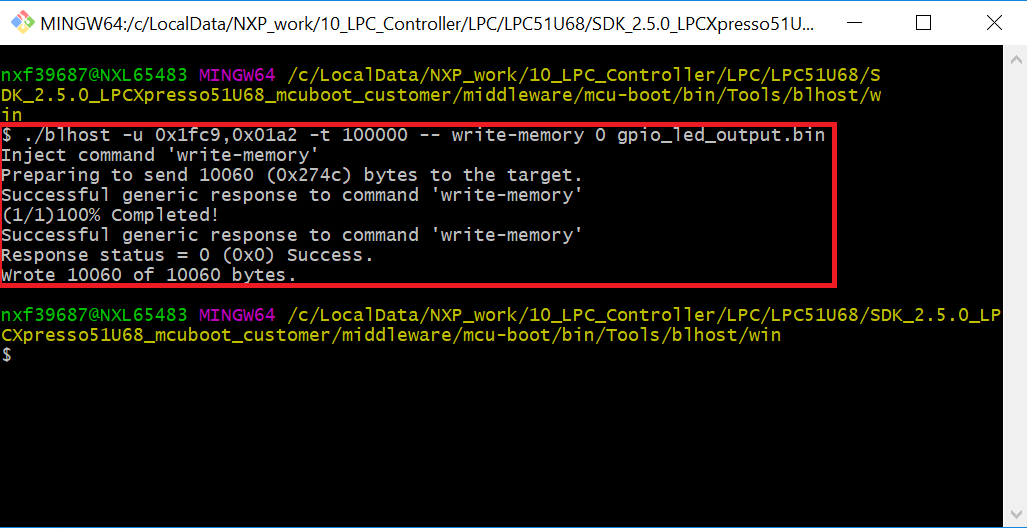


Fig 9. Program firmware

* 1. run firmware

run firmware using command as shown below:

./blhost -u 0x1fc9,0x01a2 -t 100000 -- reset

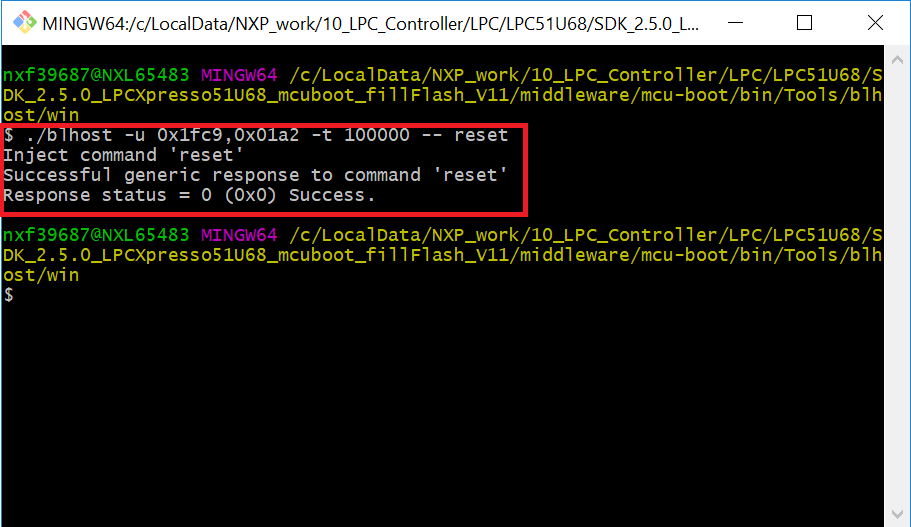


Fig 10. Run firmware