



USER'S GUIDE

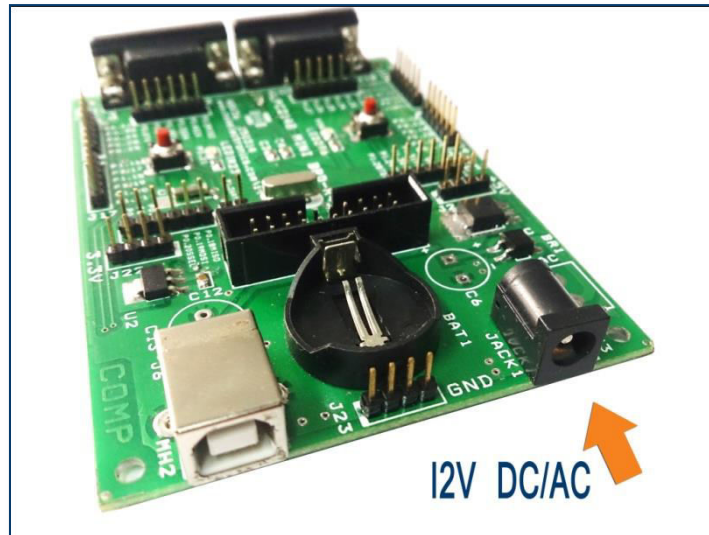
NSK
ELECTRONICS

LPC2148 PROGRAMMING PROCEDURE

LPC2148 PROGRAMMING PROCEDURE

STEP: 1

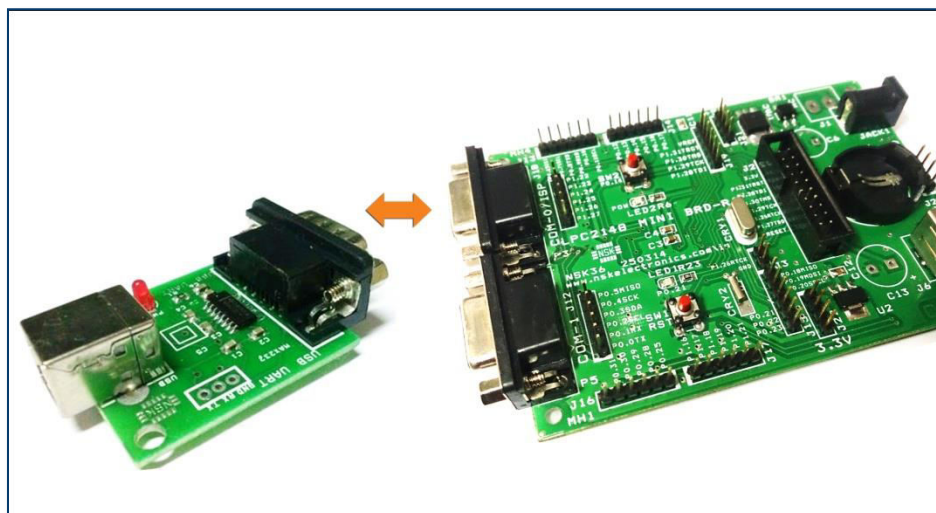
Supply Input Voltage **12V AC/DC** {or} Connect to **USB** for Power Input.



NOTE: LPC2148 Board Can Work either in 12V AC/DC or USB Power.
Do not connect both.

STEP: 2

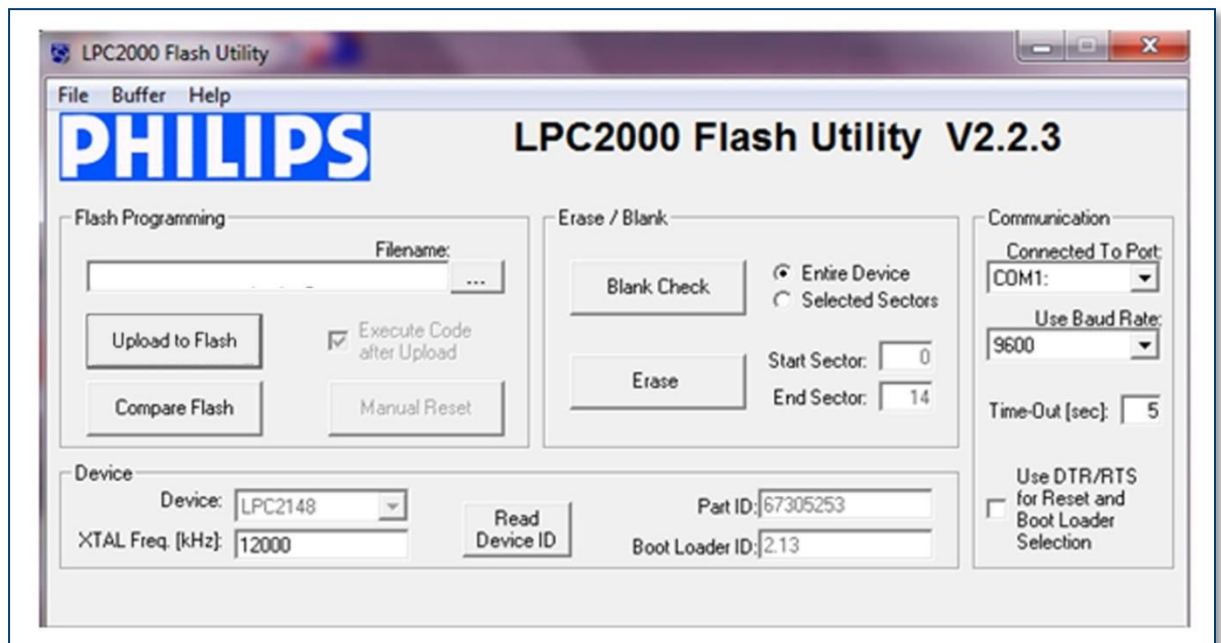
Connect **LPC2148 – COM0/ISP Port** to PC via RS232 Port. If RS232 Port is not available in your PC, use USB to UART Converter.



STEP: 3

In **Flash Utility**,

- Select Correct **COM** port Number, **BAUD RATE(9600)** and **XTAL Frequency(12000)**. **COM** Port can be identified in Device Manager (My Computer → Properties) in PC.
- Do not select Device, Part Id and Bootloader Id, It Will automatically Identify.
- Disable DTR/RTS For Reset and Bootloader Selection.



STEP: 4

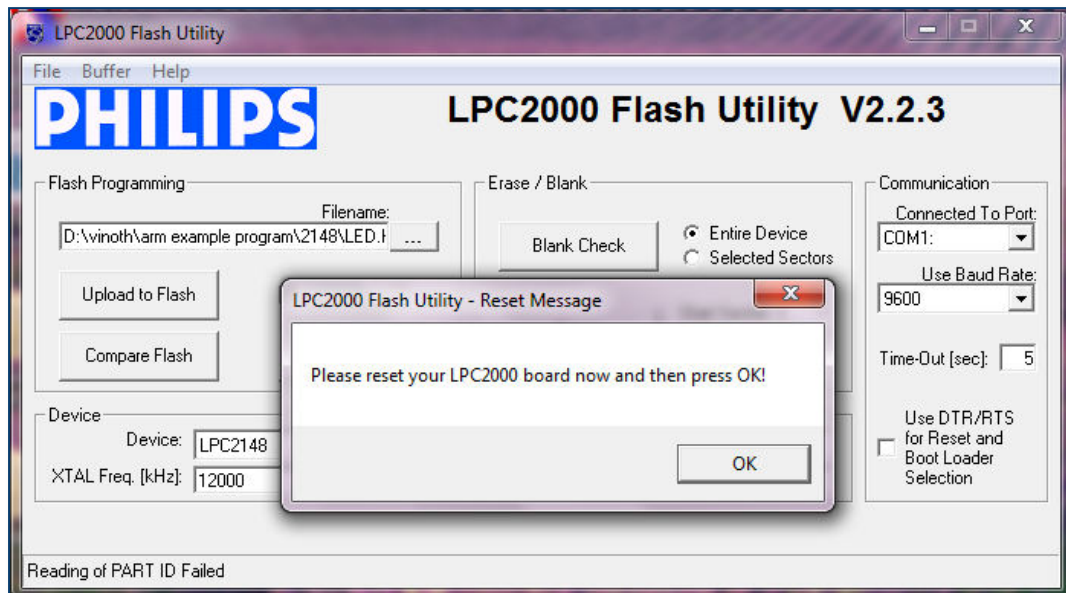
How to Enter into ISP mode manually

- Click **Read Device Id**.

If **p0.14** is pulled low during **RESET**, it will enter into ISP mode. In ISP only we can Flash, Read, and verify hex file.

The bootloader uses UART#0 for downloading new program images(Hex) into the processor FLASH. If the processor samples P0.14 low after reset the bootloader is entered, else the application code is executed.

- It will ask for “**Please Reset Your Lpc2000 Board**”.

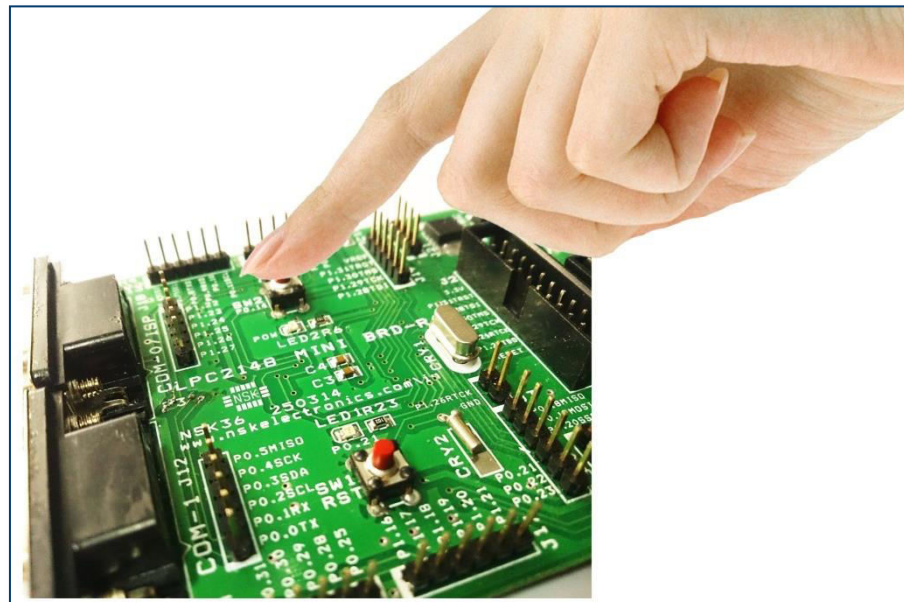


Sometimes if error message like “**Cannot Communicate with Test Board**” Comes

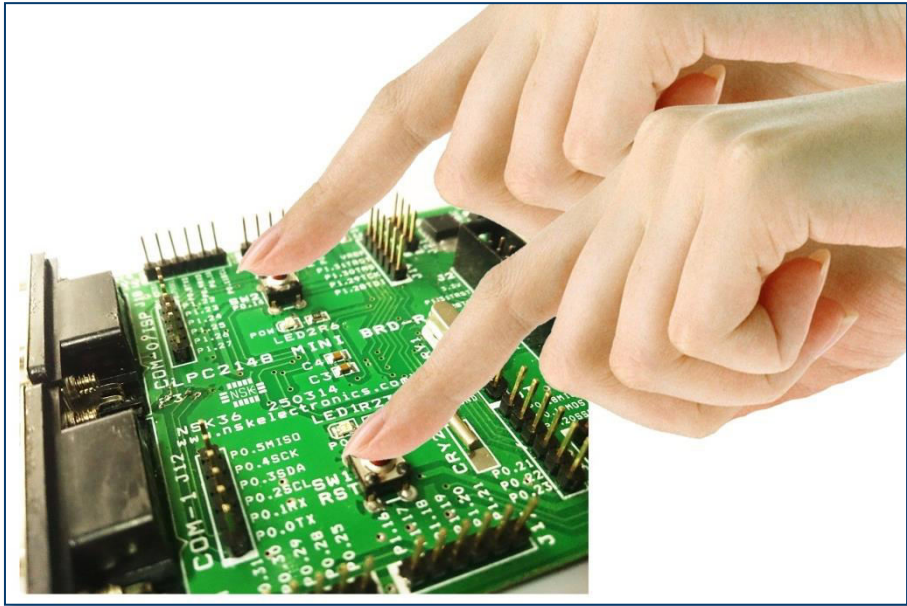


Click **Read Device Id** again It will ask for
“**Please Reset Your Lpc2000 Board**”.

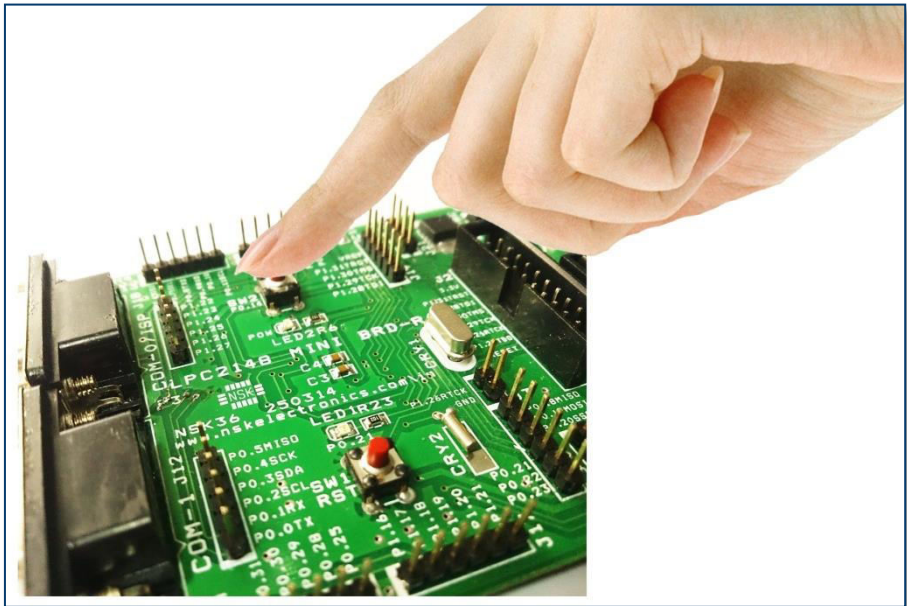
Now in LPC 2148 board press **ISP switch (sw2)**



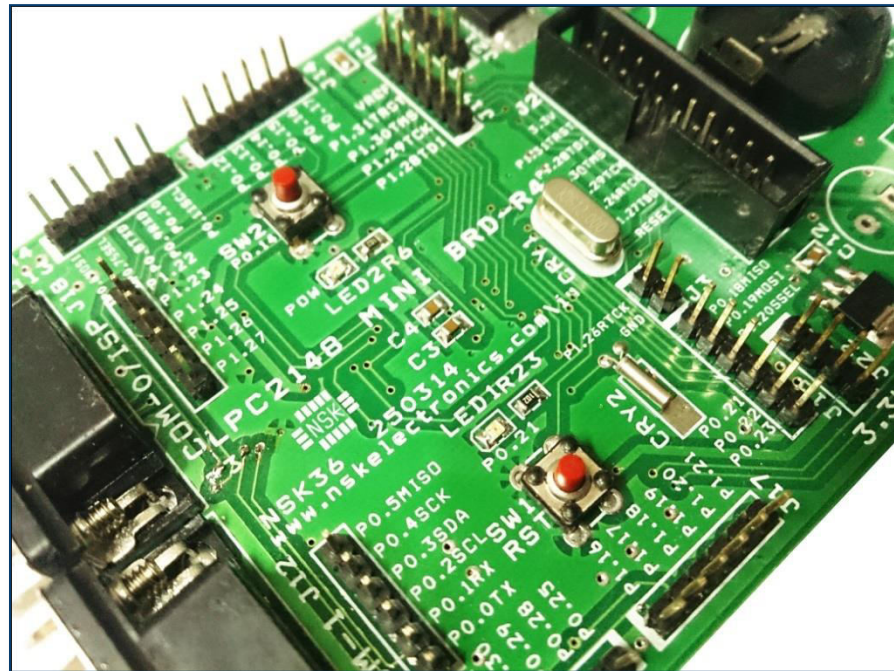
By holding ISP switch, press **RESET switch (sw1)**



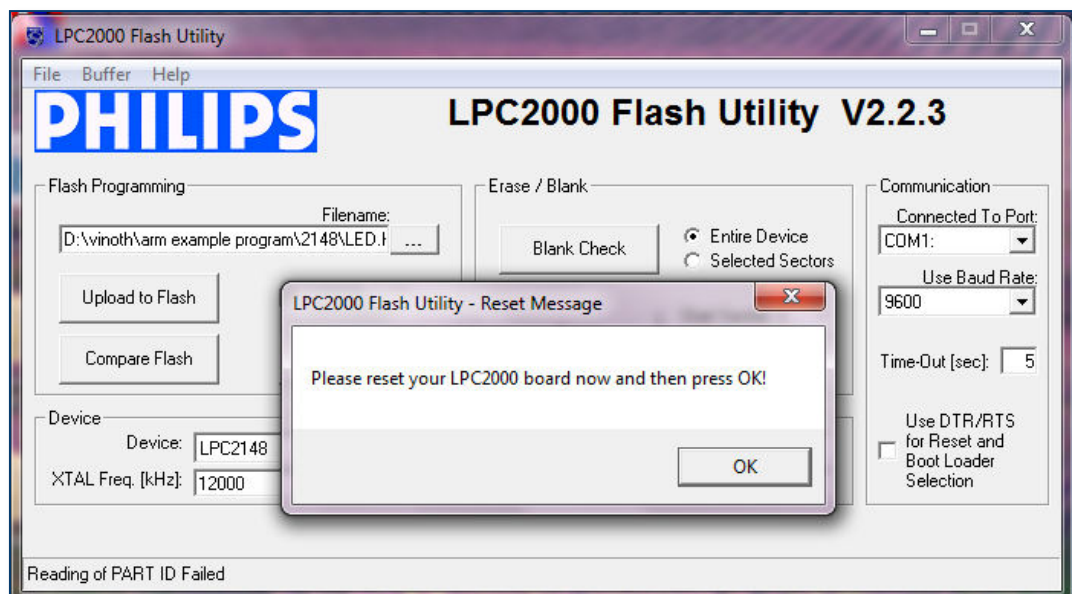
Now release **RESET switch (sw1)**



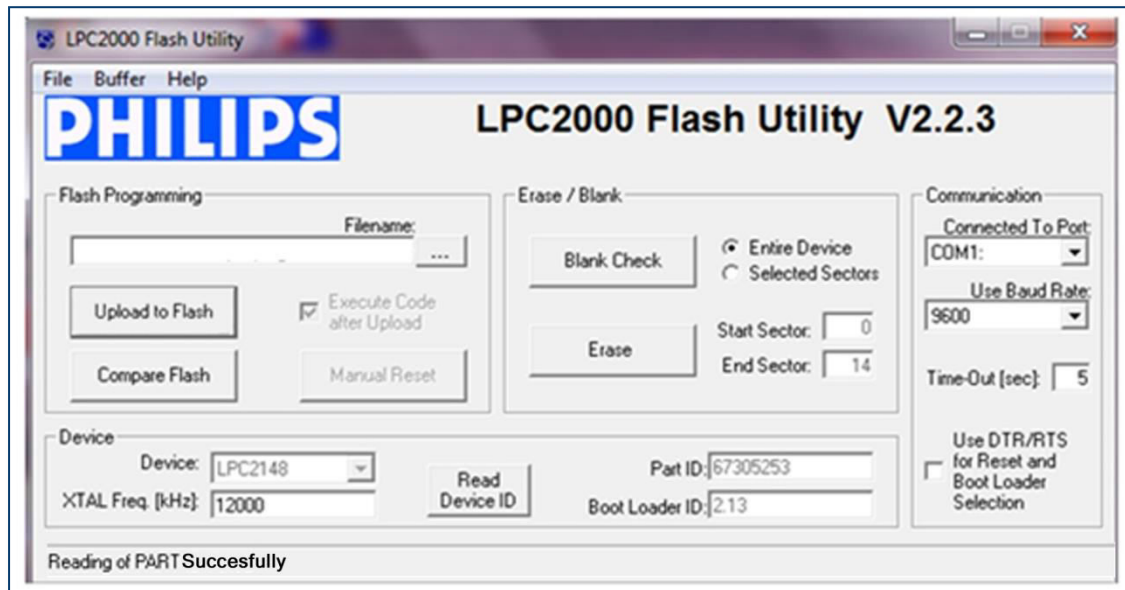
Then release **ISP switch (sw2)** also.



Now click **OK**.

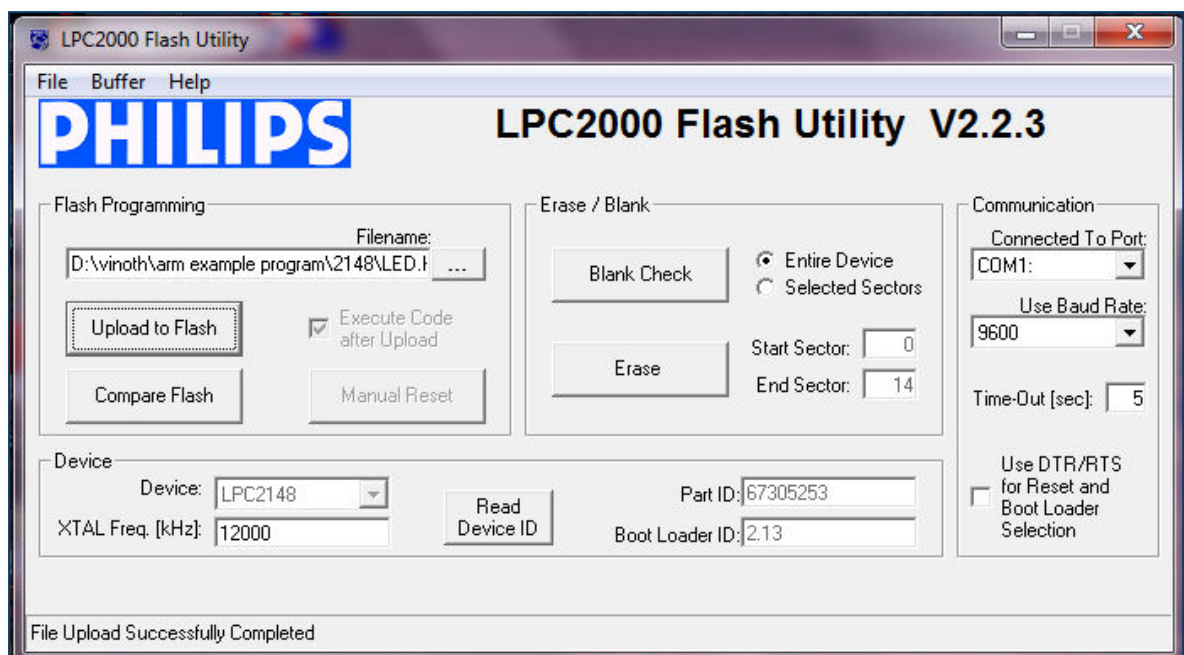


Device, Part Id and Bootloader Id is Read Successfully.



STEP: 5

Select the **HEX** File and click **Upload** to FLASH after Uploading Press **RESET** Switch (sw1) for Return the LPC2148 Board into **Application mode**.



NSK
ELECTRONICS

POWER OF IMAGINATION

www.nskelectronics.in