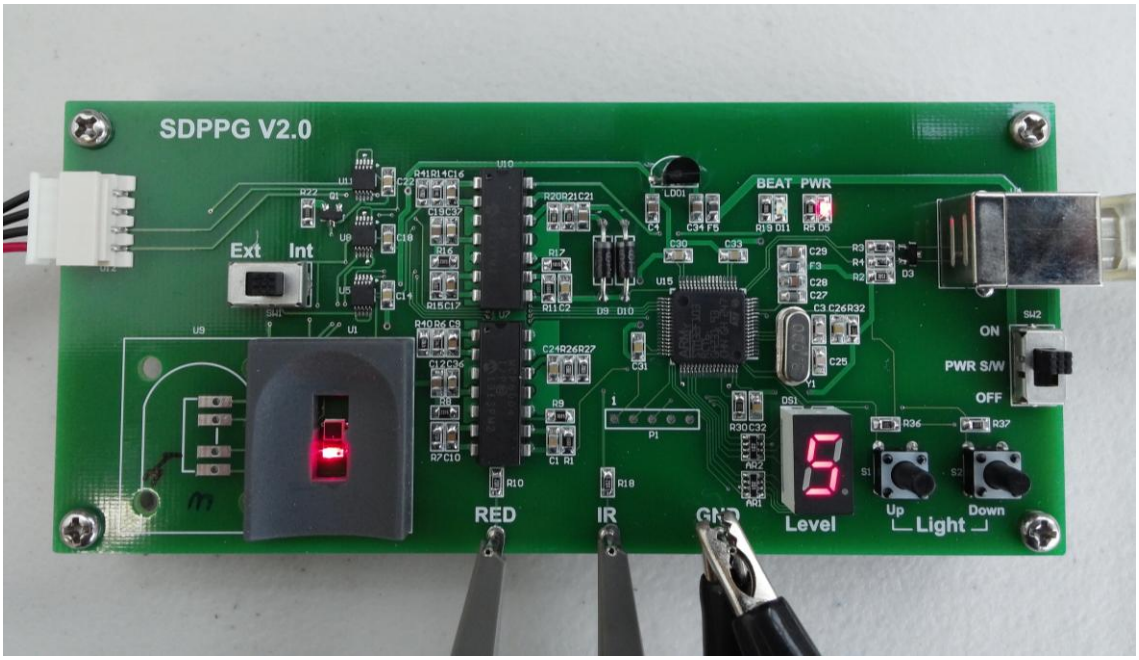
SDPPG_V2.0 User Guide



1. Feature

- 12bit ADC
- 32bit Cortex-m3 MCU
- USB Interface
- Supply DC 5V via USB port
- Sampling Rate : 2KHz
- Sensitivity level of Sensor : 1~9 step
- Data saving
- Real time monitoring
- Support over Windows XP, Windows 7 (32bit and 64bit)
- Digital graphic output : PPG Visible, FDPPG Visible, SDPPG Visible, PPG IR, FDPPG IR, SDPPG IR
- Able to monitor analog PPG signals (Visible and IR) output by oscilloscope
- LED Heart beat indicator

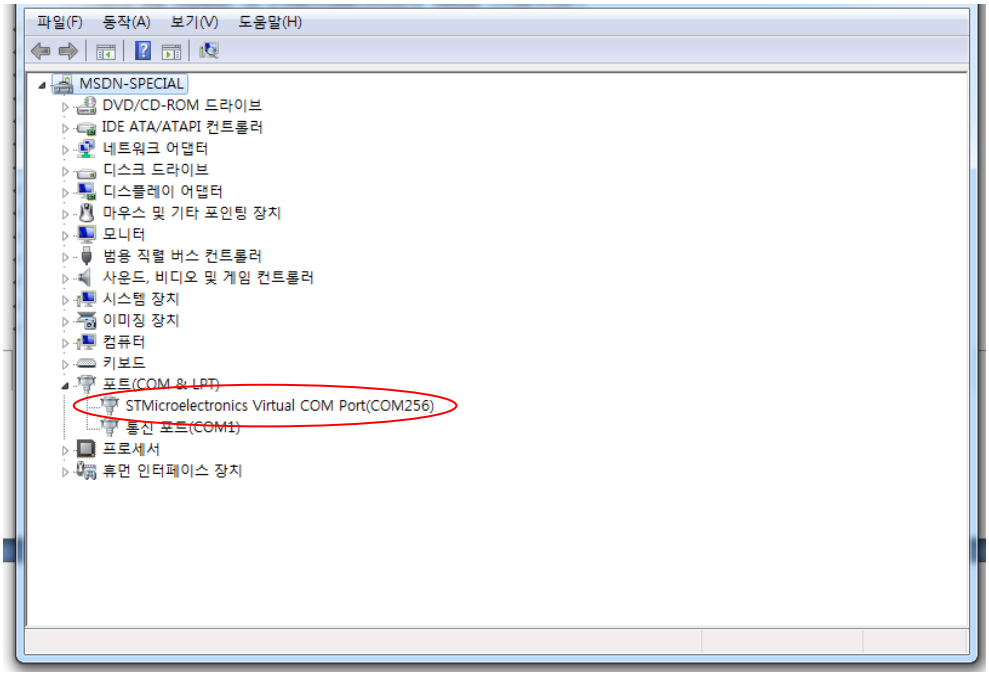
2. Installation SW

1) Install driver

① Install proper USB driver from the SDPPG driver folder.
- VCP_V1.3.1_Setup.exe (32bit) or VCP_V1.3.1_Setup_x64.exe (64bit)

② Connect the device to PC through USB cable, then board power on.

③ Check current COM Port in the Windows device manager.(setting>control panel>system>hardware>)
- Check the number of STMicroelectronics Virtual COM Port.

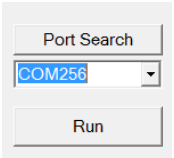


3. Operation

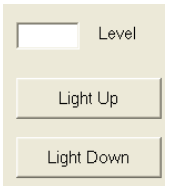
1) Copy or Move folder "SDPPG_V2" to convenient any place.

2) Run "SDPPG_V2.exe".

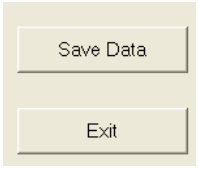
3) Set COM Port number as searched by "Port Search" button, then click "Run".



4) Control lighting power by "Light Up/Down" button, 1~9 level



5) Click "Save Data" for data logging, click again to stop saving.
Data will be saved as .txt in a low as,
1st column is PPG, 3rd first derivative of PPG, 5th second derivative PPG of **Visible Red**
2nd column is PPG, 4th first derivative of PPG, 6th second derivative PPG of **Infra Red**
Data will be saved in the "SaveData" folder.



6) Click Exit to out SDPPG_V2