

Photologic V OPB9000 Reflective Sensor Evaluation Kit

User Manual



System Requirements

Windows 7 or newer OS based computer.

Kit Contents

- 1 x mainboard
- 2 x OPB9000 daughter boards
- 1 x USB flash drive with electronic collateral
- 1 x 4-pin extension cable
- 1 x USB cable



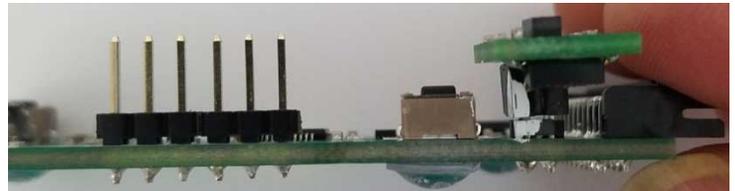
Mainboard



Daughter Board (x2)



Main and daughter board connection (top view)



Main and daughter board connection (side view)

Instructions



Step 1 - Connect mainboard with daughter board containing OPB9000 samples as shown above. Daughter board orients outwards from Main board.

Step 2 - Plug in USB cable into Main Board and into PC USB port. Windows OS should automatically install USB drivers.

Step 3 - Once USB drivers are installed, Main Board will go through start-up routine which will flash LED lights on the board.

Step 4 - Install Photologic® 5 Evaluation Kit application provided on USB drive with the kit. After installation has completed successfully it will create shortcut on your desktop.



Step 5 – Run the application. If the evaluation kit is connected, status indicated on the bottom will show message that Device Found: Attached State = TRUE.



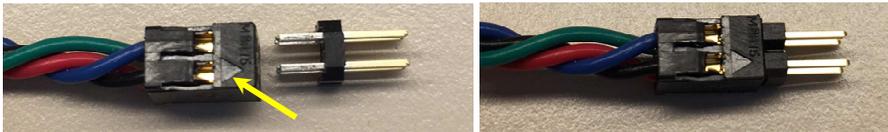
Application will allow user to perform following operation on the Photologic® 5 parts i.e. OPB9000.

- 1) Read EEPROM content
- 2) Write EEPROM content – Bank 2*
- 3) Auto Calibrate the sensor
- 4) Read Sensor output

*Depending on the application and user needs change content of this bank to achieve desired results.

General Notes

- The removable 4-pin extension adapter should only be inserted into the connector end with the embossed arrow without the white mark



- Ensure that Pin 1 on each connector/adapter/daughter board are aligned when connected:
 - Pin 1 of the J4 connector on the mainboard is indicated with a white mark on the corner
 - Pin 1 of the extension cable assembly is marked with a white mark on the corner
 - Pin 1 of the daughter board is marked with a white mark on the corner
- As show in the LED indicator table D5 LED will flash when Evaluation kit successfully completes Read or Write operation to EEPROM bank.
- All faults are indicated by either D7 or D8 LEDs (red in color).
- Kit has 2 LED's which indicate sensor output state, D3 on mainboard and D2 on daughter board.
- S1 is calibration switch, which allows user to auto calibrate device if application is not running.
- Reset button can be used to reset the device if needed.