The NCA95XX family of devices provides 16 bits of General-Purpose Input/Output (GPIO) expansion for I²C bus/SMBus applications. The device features a wide supply range of 1.65 V to 5.5 V and additionally includes an output interrupt mechanism and default pull-up resistors on GPIOs. NCA95XX EVB is compatible with Arduino™ UNO Rev3 ecosystem and the product page includes demonstration software for the NCA95XX EVB. The EVB can also be used with other microcontroller platforms via the I²C interface pins on the header pins.

**Features:**
- NCA95XX Device
- Input voltage = 1.6 V to 5.5 V
- I²C to parallel port expansion
- # GPIOs = 2 ports with 8 bits
- Current drive capability = +/- 25 mA
- I²C interface, FastMode 400 kHz
- Open-drain active-low interrupt output
- On board Features:
  - Arduino™ compatible header connection
  - LED output indicators
  - Compatible with Arduino™ UNO ecosystem

**Steps**
1. Connect NCA95XX EVB to Arduino™ UNO Rev3
2. Connect USB cable to Arduino™ UNO and PC
3. Download Arduino™ 1.8 or later at https://www.arduino.cc/en/software
   1. Install and invoke programs at startup menu.
   2. Select the correct board* (Arduino™ Uno) and Port by clicking into “Tools>Board” and “Tools>Port”. Port info can be found through Windows Device Manager.
   * When using Serial Monitor select correct baud rate.
4. Upload and Run the Arduino™ sketch
   - Program “nca95xx_demo.ino” writes to PORT 1 to flash LEDs back and forth. PORT O is continuously read back and byte value is updated through Arduino IDE. Serial Monitor is used to monitor PORT O.
   - Program “nca95xx_main.ino” interfaces with Labview GUI. This complete GUI program is further explained in the NCA95XX EVB User’s Guide.