# OM13082
LPC General Purpose Shield for LPCXpresso

Demo board description

The LPC General Purpose Shield Board has been designed to complement NXP's range of LPCXpresso MCU development boards by providing easy access to several commonly used peripherals. The LPC General Purpose Shield plugs into the top-side expansion connectors of LPCXpresso V2, V3, and MAX boards.

LPCXpresso™ is a low-cost development platform available from NXP, supporting NXP's ARM-based microcontrollers. The platform is comprised of a simplified Eclipse-based IDE and low-cost target boards which include an attached JTAG debugger. LPCXpresso is an end-to-end solution enabling embedded engineers to develop their applications from initial evaluation to final production.
The order code for this board is OM13082.
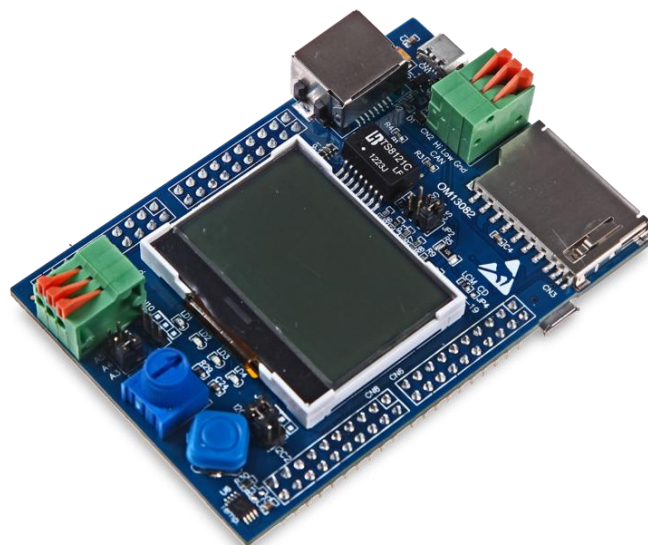
Features

- 128 x 64 LCD dot matrix display connected via SPI
- 4 user LEDs and 5 position joystick, controlled via an NXP PCA9535BS I²C port expander
- NXP LM75D temperature sensor (I²C)
- Bosch BMI160 inertial measurement unit (3-axis accelerometer and 3-axis gyroscope, I²C)
- Potentiometer
- SD/MMC card slot (requires LPCXpresso V3 board with SDIO interface)
- Ethernet RJ45 connector and magnetics (requires LPCXpresso V3 board with on-board PHY)
- CAN terminal block (requires LPCXpresso V3 board with CAN interface)
- Micro USB B device connector (requires LPCXpresso V3 board with USB support via expansion)

Descriptive Summary

Overview:

The LPC General Purpose Shield connectors have more pins than are available on LPCXpresso V2 and MAX boards, but may still be used with those boards with some loss of functionality. The I²C and SPI connected devices may be routed to the Arduino UNO connections on the V2 and MAX boards; check schematics available at http://www.lpcware.com/LPCXpressoBoards to ensure the functions are available for any given requirement/configuration.
Kit content:
LPC General Purpose Shield Board