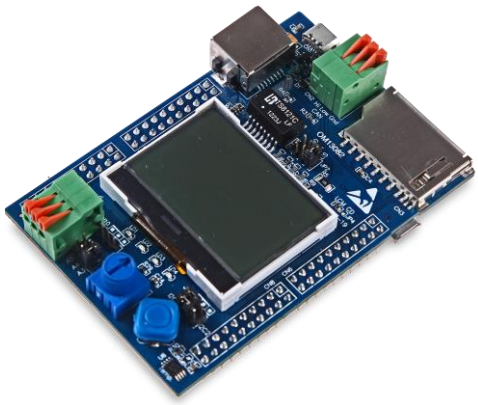
OM13082 Product Brief

LPC General Purpose Shield

Rev. 1.0 — 19th January 2015

The LPC General Purpose Shield Board has 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.



Feature summary

The LPC General Purpose Shield includes the following features:

- 128x64 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 (I^2C)
- Bosch BMI160 inertial measurement unit (3-axis accelerometer and 3-axis gyroscope, I^2C)
- 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 connector (requires LPCXpresso V3 board with USB support via expansion)

Compatibility

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 a 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.

LPCOpen drivers and examples

LPCOpen software packages are available for LPCXpresso boards, and examples for use with the LPC General Purpose Shield are under development. Please check http://www.lpcware.com/lpcopen for availability.

Board specifications

Recommended operating conditions: 0 to 70°C ambient
Weight: 1.6 ounces
Size: 86 x 61mm (3.4 x 2.4 inches) including connectors
The LPC General Purpose Shield Board is RoHS compliant

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Date of release: 19th January 2015