EA-XPR-101

LPCXpresso Base Board

The LPCXpresso Base board makes it possible for you to get started with experiments and prototyping immediately. The Base board can also be used together with the **mbed** module.

-        **LPCXpresso Base Board**

Common features
- Socket for LPCXpresso and mbed module
- 50 pin expansion dual row pin list connector (male, 100mil pitch) for simple connection external designs and to a logic analyzer
- 50 pin expansion dual row header connector (female, 100mil pitch) for simple connection to breadboard
- Battery powering (small coin battery)
- USB interface
- Reset pushbutton

Digital IO
- RGB-LED (can be PWM controlled)
- 5-key joystick switch
- 2 pushbuttons, one for activating bootloader
- Rotary switch with quadrature encoding (timer capture)
- Temperature sensor with PWM output (timer capture)

Analog IO
- Trimming potentiometer input (analog input)
- PWM to analog LP-filtering (PWM output and analog input)
- Speaker output (PWM output)
- Oscilloscope probe inout stage

Serial bus - SPI	• Shift register driving 7-segment LED
	• SD/MMC memory card interface
	• Dataflash SPI-NOR flash
Serial bus - I2C	• PCA9532 port expander connected to 16 LEDs
	• 8kbit E2PROM
	• MMA7455L accelerometer with I2C interface
	• Light sensor
Serial bus - I2C/SPI shared	• SC16IS752 - I2C/SPI to 2xUART bridge; connected to RS232 full-modem interface and one expansion UART
	• 96x64 pixel white **OLED** (alternative I2C/SPI interface)
Serial bus - UART	• USB-to-serial bridge, with automatic ISP activation
	• RS422/485 interface
	• Interface socket for XBee RF-module
Specific mbed module support	• CAN bus interface (can be simulated with LPCXpresso)
	• Ethernet RJ45 connector with integrated magnetic
Dimensions	150 x 180 mm
Power	Powered via USB (+5V)