Content (OM13016)

Link to vendor website: http://homesite.ngxtechnologies.com

Link to product on vendor website:
http://shop.ngxtechnologies.com/product_info.php?cPath=21_35&products_id=96

Overview

The mbed-Xpresso Baseboard makes it possible for you to get started with experiments and prototyping immediately. The Baseboard can also be used together with the mbed module. It is compatible with the NGX series of mX-LPCxxxx-S (S symbolizes Stamps), LPCXpresso boards and with the mbed module. It is designed keeping in mind the requirements of a development engineer, who could be working on different controllers but would prefer the same peripheral interface or a company working on different products using different controller and would not prefer to invest huge amount in individual boards or a hobby enthusiast who would be trying out different controllers but would not be willing to invest in different boards for each controller. For all these, the user can buy the required stamp module and work on this board.

mbed-Xpresso BaseBoard and Stamp modules together serve as an excellent platform to evaluate various architectures like ARM7, CORTEX-M3, CORTEX-M0... etc. Here is the list of stamp modules that could be used with Baseboard

- **mX-LPC2148 Stamp**
- **mX-LPC1768 Stamp**
- **mX-LPC1343 Stamp**
- **mX-LPC1114 Stamp**
- **mX-LPC11U14 Stamp**

- **mbed-LPC1768**
- **LPC1114 LPCXpresso**

- **LPC1343 LPCXpresso**

Note: Please note that you need to have at least one of the above mentioned module to be able to work with the mX-Baseboard

Features

mbed-Xpresso Base board has various peripherals with configurable jumpers. Two 27 pin expansion dual row header connectors (P9-P11) and (P10-P12) (male-female, 100mil pitch) for simple connection to breadboard.

(1) Note: The features mentioned for the mbed-Xpresso Base board in this document are directly dependent on the Stamp board(microcontroller) used.

Hardware

- Dimensions of 115 X 155 mm2
- Two layer PCB (FR-4 material)

- **Power**

    - Power supply: DC 7.5V with power LED
    - On-board linear regulators generate +3.3V/500mA and +5v/500mA from power supply
    - USB connector (as alternate power source)

- **Connectors**

    - Extension headers for all microcontroller pins
    - Two RS232 port connectors
    - VGA connector
    - PS/2 connector
    - JTAG connector
    - SD/MMC connector
    - RJ45 connector
    - USB B-type connector
    - All peripheral configurable via jumpers

- **Other Peripherals**

    - 256Kb I2C based EEPROM
    - Audio power amplifier with audio jack
    - 2 line X 16 character LCD with back light control
    - Manual program download using serial port (ISP-In System Programming)