

LPC2148 Micro-Blox



Easy and Comprehensive ARM7 Evaluation

The LPC2148 Micro-Blox is a flexible evaluation platform for rapid assessment and prototyping. It features the LPC2148 ARM7TDMI-S microcontroller from NXP Semiconductor, allowing quick and easy evaluation of the full range of capabilities and features of the LPC2148. This Micro-Blox board may be used as an independent board or as part of a system using Future Electronics' LongBow base-board. The Micro-Blox connection interface allows board-to-ribbon or board-to-board connection to the LongBow base-board.

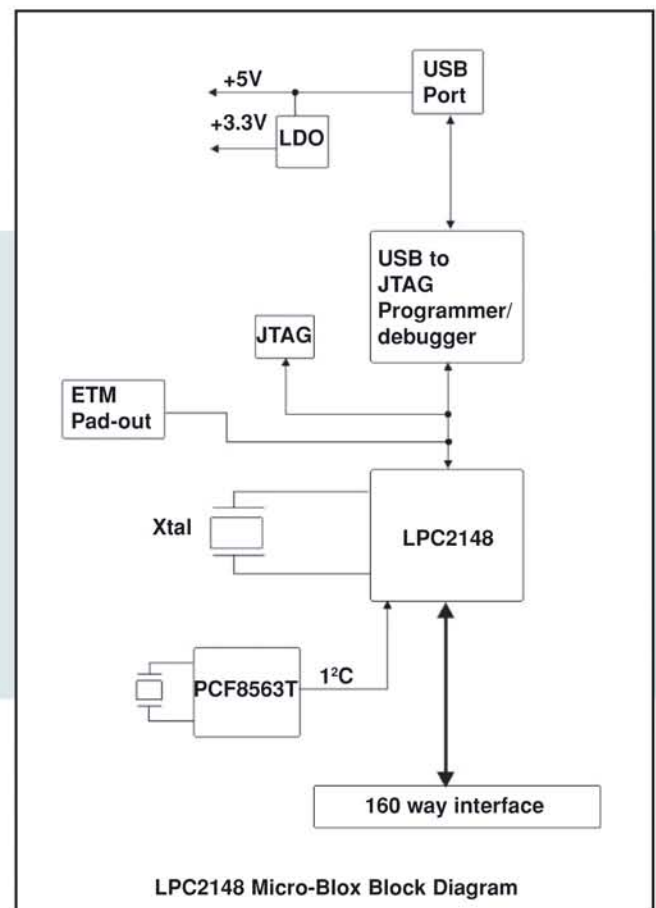
The LPC214x microcontroller family has many features including: an ARM7TDMI-S core capable of operating up to 60MHz; up to 512KB on-chip Flash; up to 40KB on-chip SRAM; USB2.0 Full-speed interface.

LPC2148 Micro-Blox Features:

- LPC2148 ARM7 microcontroller (LQFP64)
- LDO to provide +3.3V locally from a +5V USB supply
- Debugging and programming interface using on-board IC and USB 2.0 interface
- 20 pin JTAG header
- Pad out provision for an Embedded Trace Module connector
- PCF8563T external Real Time Clock circuit
- 160 pin Micro-Blox interface supporting: 3 x UART; USB 2.0 (HOST); USB OTG; SPI; I²C; 8 x ADC; 6 x PWM; 8 x timer/capture; RTC alarm; I²S; DAC, 6x GPIO; MII interface; SD/MMC card interface; LCD interface (8-bit RGB data lines)



LPC2148 Micro-Blox Board



LPC2148 Micro-Blox Block Diagram



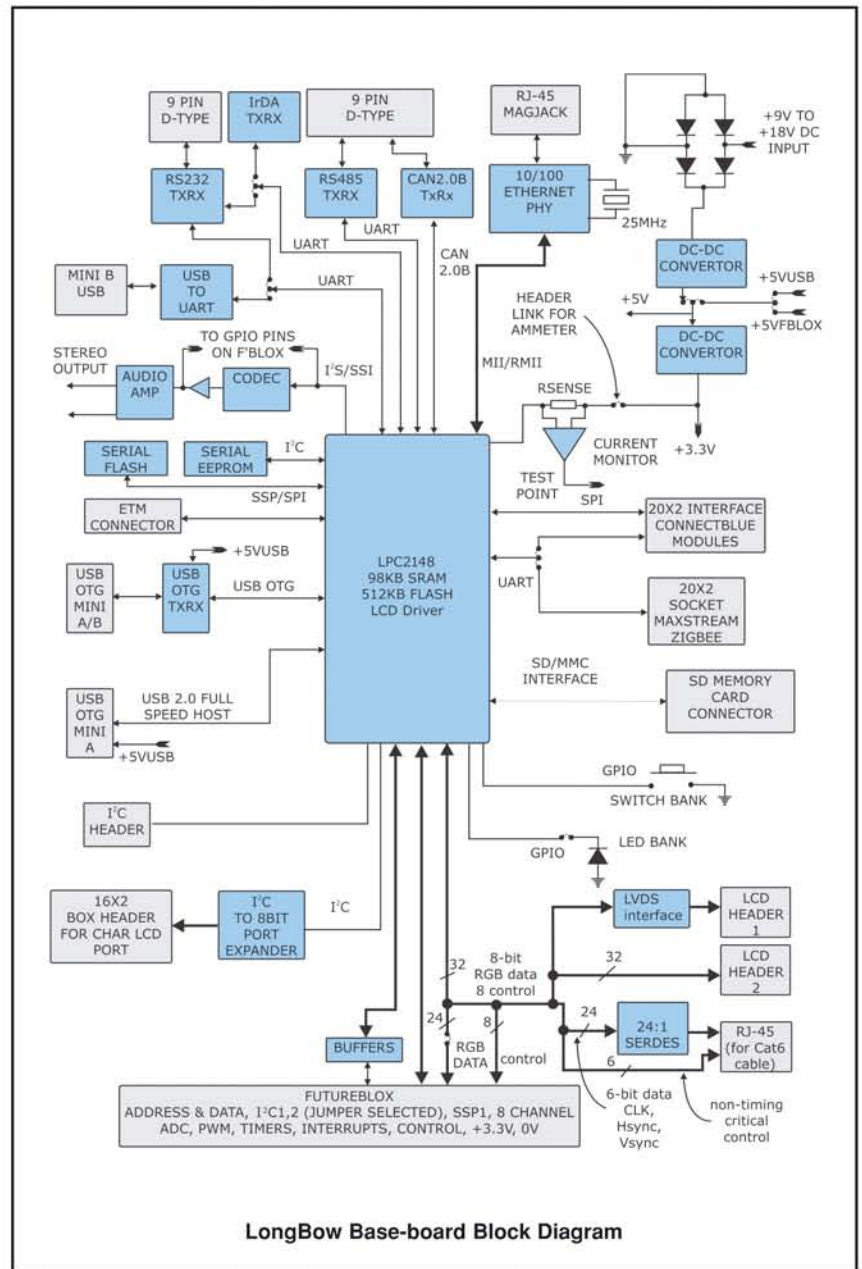
Tools Provided

The LPC2148 comes equipped with evaluation toolset for ARM microcontrollers from IAR. Micrium μ /OS-II is provided in source code for FREE evaluation. A Micrium license will be required for the use of μ /OS-II and μ /TCP-IP in commercial applications.

Added functionality in combination with LongBow base-board

For added capability enabling full system evaluation the LPC2148 Micro-Blox may be used with the LongBow base-board. The combined LongBow and Micro-Blox package allows a wide range of peripheral functionality support on one board solution for the following additional features:

- 160 pin interface supporting Micro-Blox daughter-boards
- RS-232; IrDA; RS-485
- Current monitoring via ammeter or current monitor IC (ZXCT1010E5TA from Zetex)
- USB2.0 device
- Status LEDs and power LEDs
- 20x2 interface for Bluetooth and WILAN modules
- 20x2 header supporting ZigBee wireless modules
- SD memory card interface
- 16 pin header interface supporting 16x2 alphanumeric LCD
- Small buzzer for tone audio feedback
- Audio Codec and Class D audio amp (UDA1344 and SA58670BS-G)
- 160 position Future-Blox Rev 2.3 board-to-board interface supporting:
 - Data and address lines scaleable to 32bit; +3.3V, 5.0 power rails;
 - Gnd connections for analogue and digital signals; 15 control and MCU defined pins;
 - 4 timer channels; 4 interrupt channels; 8 analogue inputs; 6 PWM channels; 11 GPIO;
 - I²C channel; SPI; UART; USB; CAN 2



Ordering Information

Part Number: LPC2148 Micro-Blox.
 Register for your free board through
www.my-boardclub.com