Optional LPC1xxx and JTAG connectors

Expansion connectors

USB, CAN, ETH, RS422/485 interfaces

Direct digital I/O peripherals

Analog peripherals

I2C peripherals

SPI peripherals

Shared SPI/I2C peripherals

USB-to-UART bridge, RF-module, power supply

UL = UnLoaded = normally not mounted component.

Default jumper settings are indicated in the schematic. However, always check jumper positions on actual boards since there is no guarantee that all jumpers are in default place.

Rev B1
Changed to generic pin naming since many different LPCXpresso target boards exist.

Rev B
Added J60/J61/R216/R217 (page 5) for USB Host i/f.
Added J62 (page 6) to support LPC17xx bootload.
Added J58 (page 10) to support spi i/f to OLED or mbed.

Rev A
First rev
Battery Holder
Note: battery not included!
Note: battery will quickly drain since complete board is powered via D2. Battery powering only included for demonstration purpose.

Note: Pins between rows are not connected (for example on LPC176x and LPC1227).
Note: See User's Manual for information about pinning for all different LPCXpresso target boards!
Optional LPC1114/LPC1343 for standalone boards
go between LPCXpresso/mbed connector

45 ohm impedance routing, 90 ohm differential
No tracks within 10 times trace width
No via's and no sharp angles
Direct Digital IO peripherals

RGB-LED

Temp sensor: MAX6576 (temp-to-period)

Rotary switch - Quadrature signals

Bootloader Enable

Wakeup

Joystick Switch

Pos 1-2 for LPC17xx else pos 2-3

Default for J62

Default for J25

Default for J26

Default for J56

Default for J62

ESD protection grounding

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Analog Input

PWM LP filter

Speaker Amplifier

Analog peripherals

BNC input (oscilloscope probe)

Pads for oscilloscope

Input stage has x0.25 amplification, Rin=1Mohm
DC: 0-10V or 0-1.0V input
AC: -5V to +5V or -0.5V to +0.5V input

Default for J33
Default for J27
Default for J31
Default for J28
Default for J29,J57
DC-coupling
AC-coupling
Set both J29 & J37 equal

Open: x1, Shorted: x10 amplification
Default: not inserted

GPIO_11
GPIO_14
GPIO_21
GPIO_22
GPIO_23
GPIO_16-WAKEUP

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PCA9532 I2C 16-bit Port Expander

8kbit I2C-E2PROM

I2C peripherals

Light Sensor - ISL29003

MMA7455 Accelerometer with I2C interface
USB-to-UART bridge interface

ISP Functionality

Digi XBee(R) RF-module

To RS422/485 interface

Power Supply

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45 ohm impedance routing, 90 ohm differential
No tracks within 10 times trace width
No vias and no sharp angles

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