LPC4088 IO Connections
Devices on the Quick Start board and Experiment Base board

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LEDs

The LPC4088 Quickstart board has 4 LEDs. The two green LEDs (LED1 and LED2) are connected as part of the USB interface, thoough they can be used independently via GPIO pins. The two blue LEDs (LED3 and LED4) are connected to GPIO pins.

The Experiment Base board has 11 LEDs. Three are housed in the same package as one component on the board. These are a *red*, *green*, and *blue* LED connected to GPIO pins. These can also be driven by PWM outputs from the LPC4088.

The other 8 LEDs are connected to the outputs of a *shift-register* which is connected to the LPC4088 via a SPI bus (under SSP in the LPC User manual).

Board	LED	Port	pin	active	pwm
Quick start	LED1 (green)	P1	18	low	n
	LED2 (green)	P0	13	low	n
	LED3 (blue)	P1	13	high	n
	LED4 (blue)	P2	19	high	n
Experiment	LED1 - red	P1	11	low	y
	LED1 - green	P1	5	low	y
	LED1 - blue	P1	7	low	y
Experiment	LED2 – LED9	Shift Register — (*see below*)			

Table 1: led connections

Shift register

Eight of the LEDs on the Experiment Base Board are connected to the outputs of a shift register. The shift register itself is connected to the SPI bus as follows:

SPI	Port	pin
MOSI	P1	24
SCK	P1	20
SSEL	P1	2

Table 2: Shift register SPI bus connections