USB Evaluation Board

Summary

The USB Evaluation Board is a circuit board for evaluating USB products from Firmware Factory. In any given evaluation, only a small proportion of the components will be fitted. For this reason it is supplied unpopulated and uses through-hole components for easy manual construction.

Compatible USB Products

The evaluation board is compatible with the following USB products from Firmware Factory:

- USB-232 asynchronous serial interface
- TEAleaf-USB security and authentication dongle
- expandIO-USB I/O expander
- USB-SPI synchronous serial interface
- USB-I2C synchronous serial interface
- USB-TakeOff managed power take-off, wakeup and charge controller
- USB-DAQ data logger
- USB-FileSys configuration and diagnostic module

To use the evaluation board with each of these products, please refer to each product's individual data sheet.

Features

The board provides for:

- 20-pin, 28-pin and 40-pin DIL devices
- Type B socket, suitable for standard USB cables
- Type A plug, suitable for USB extension cables
- 12MHz and 32kHz crystal oscillators
- RS232 line driver, 9-pin sockets in DTE and DCE configurations
- RS485 line driver
- Coin cell battery
- SPI serial memory
- 28-pin DIL host processor
- 3 active low LEDs
- 3 active high LEDs
- 3 jumpers
- Photodiode
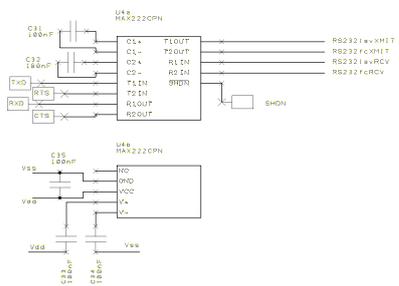- Thermistor
- Li-Ion charge controller
- Prototyping area

Firmware Factory Ltd
2 Marshall St, 3rd Floor
London W1F 9BB, UK
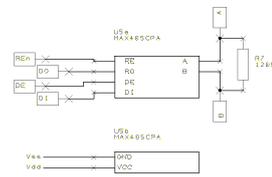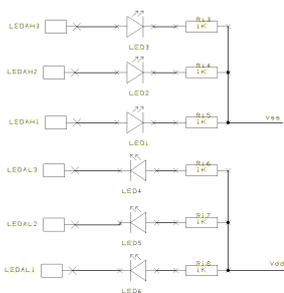sales@firmwarefactory.com
support@firmwarefactory.com
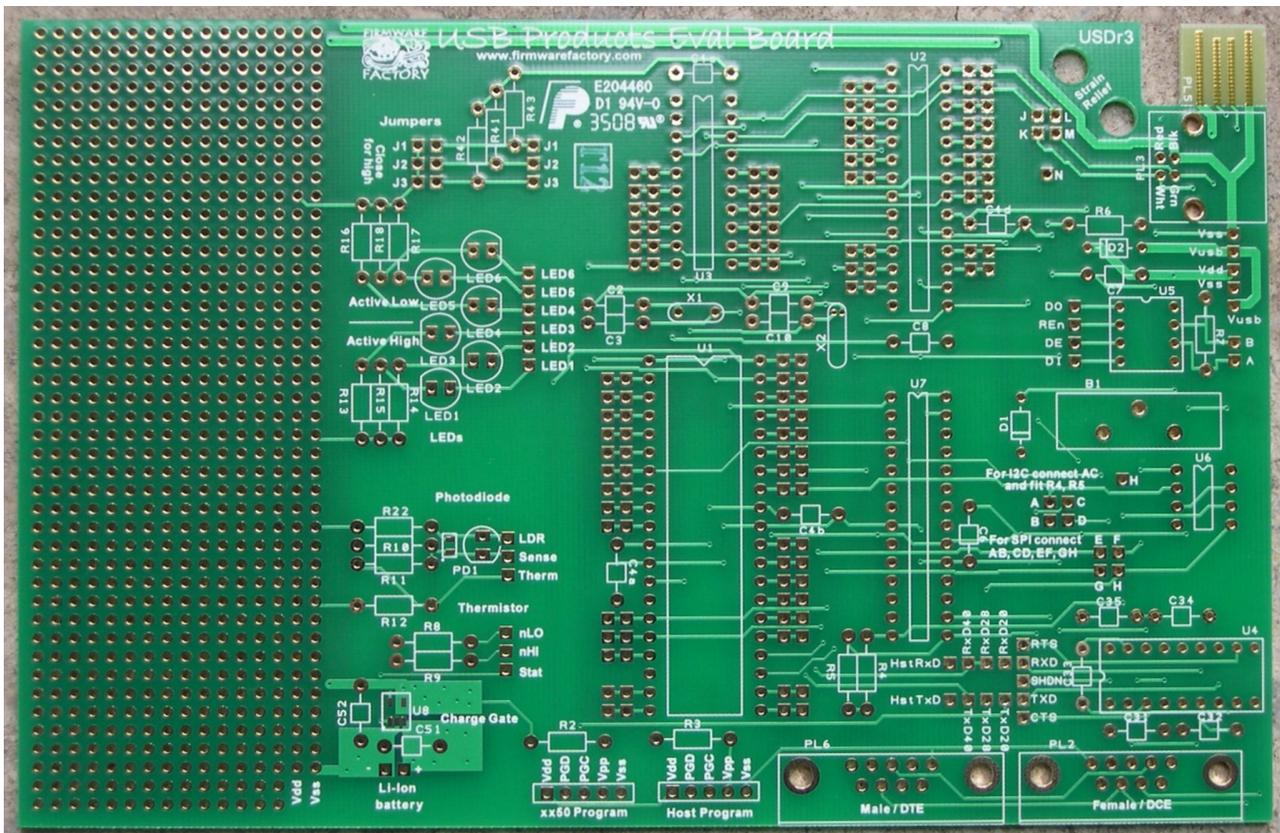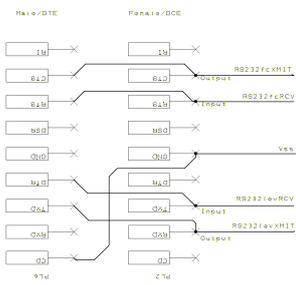
RS232 connectors

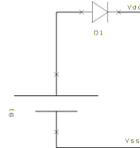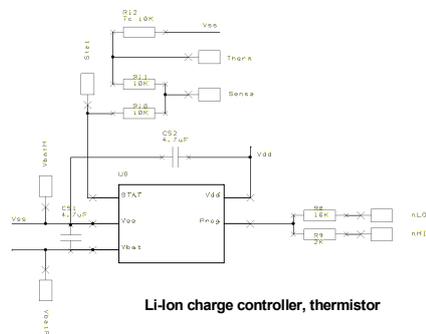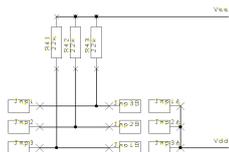**RS232 driver**

MAX485 driver
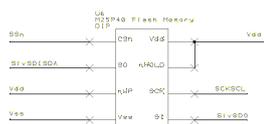
LEDs

Coin cell

Li-Ion charge controller, thermistor
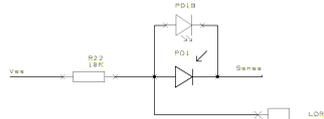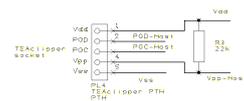
Jumpers

Host controller
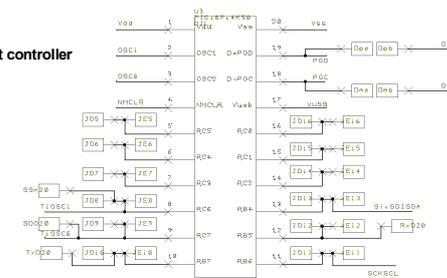
Serial Memory

Photodiode

**TEAclipper connector
for host controller**

40-pin socket

28-pin socket

20-pin socket

Crystals

USB sockets

TEAclipper socket
for USB devices

U1
PIC18F4550-P

U2
PIC18F2550-SP

U7
PIC18F2520-SP

Connect vertically for SPI
Connect SDA's for I2C and fit R4/R5