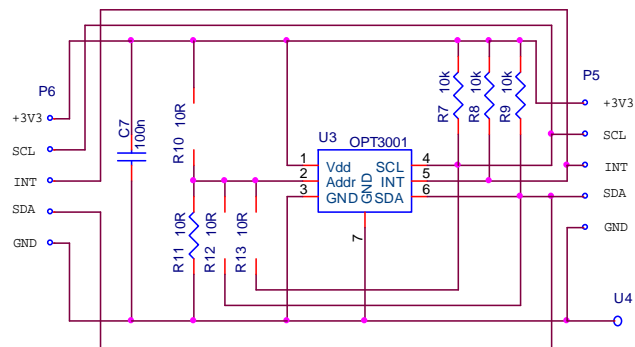


Light meter project description.

OPT3001 and PIC32MX2 based light meter used for simple light source efficacy measurement.

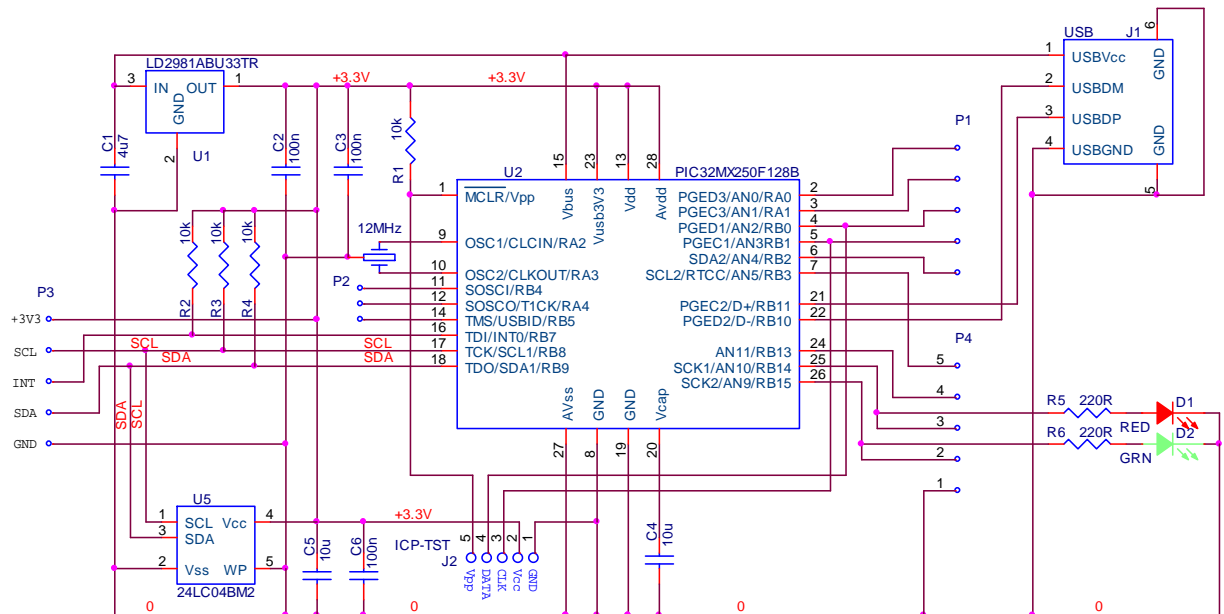


OPT3001 board schematic.



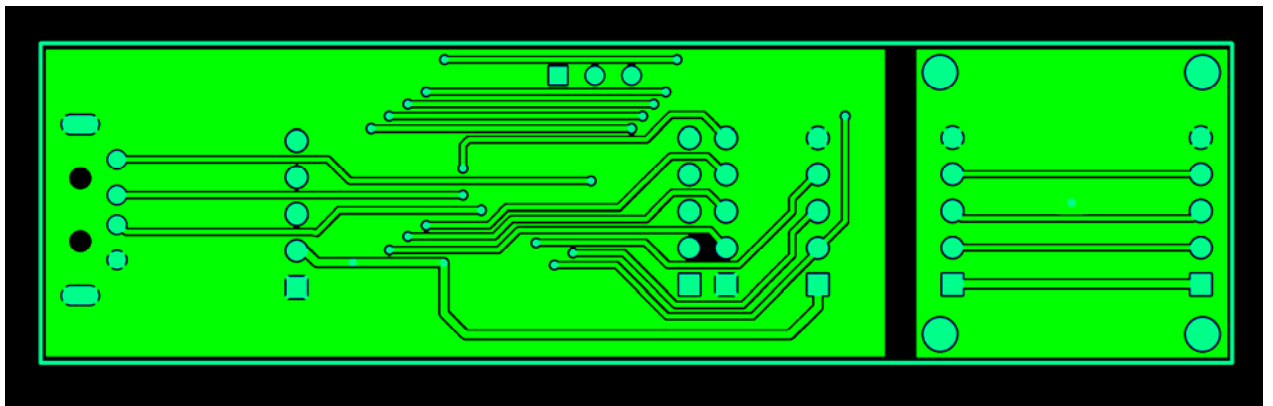
R10..R13 – I²C address selection.

CPU board schematic

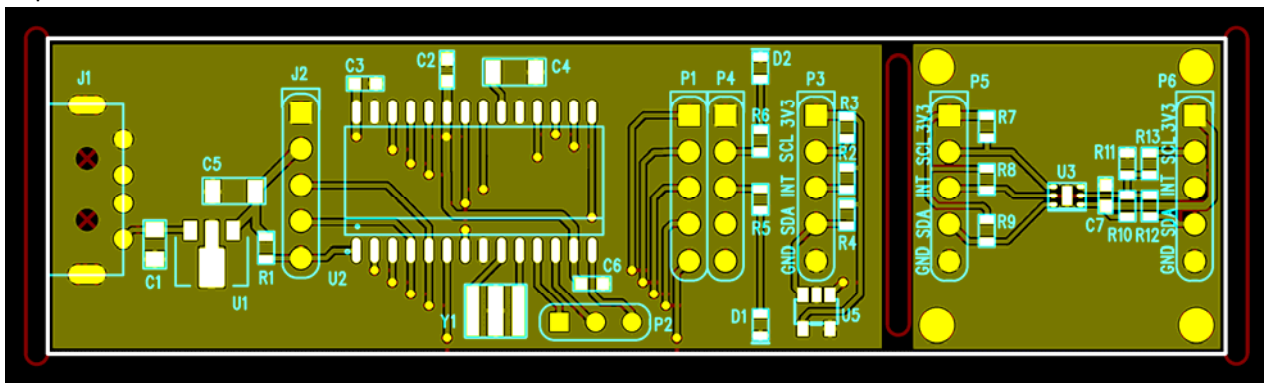


PCB layout.

Bottom:



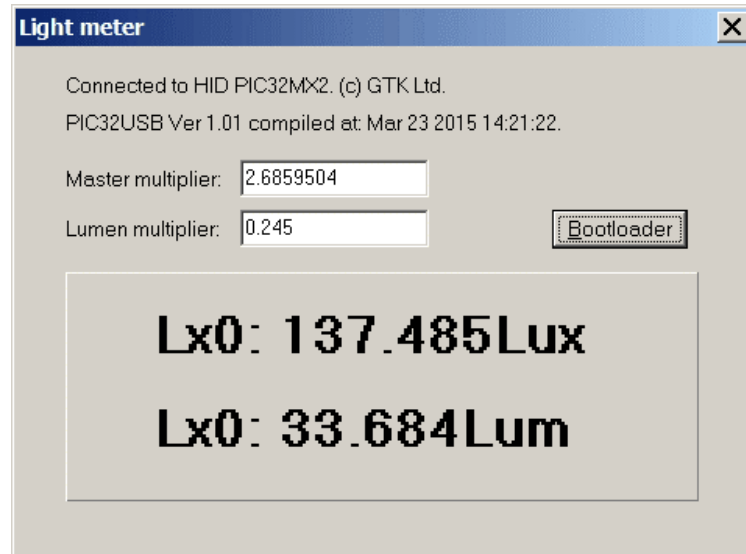
Top:



Firmware based on Microchip application library Generic HID demo and modified for PIC32 (<http://www.look4tech.com/pic32mx220-usb-project-demo-code/>).

I²C firmware don't use I²C hardware of PIC32 and can be easily ported to any pins and CPU.

PC win32 software is simple VCL application created with Borland (Embarcadero) C Builder



Bootloader based on Microchip application library and modified for entering boot mode due short SCL and SDA pins (or DATA (4) and CLK (3) pins on the ICP connector) before connect device to the USB port. Blinking green LED indicates bootloader mode. PC bootloader's part ported to C-builder VCL application from Microchip application note AN1388 (PIC32UBL).

