USBI2C01A	MLAB

# USBHID TO I2C/TWI

Jan Chroust

The conversion from USB to I2C.
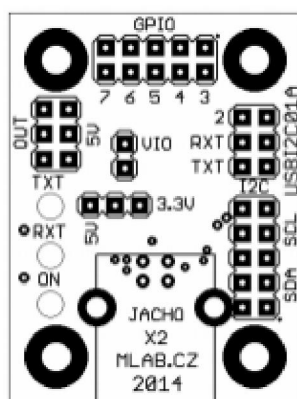
Technical Parameters

Parameter	Value	Description
Interface	USBHID 2.0	Full Speed (12Mb/s)
Connector	USB B	Full Size USB B Female
Power Consumption	56mA Minimum	500mA Maximum
Signals	Serial	Serial & Digital
Flow Control	N/A	N/A
Sleep	130µA	
Power Management PC	N/A	N/A
Board Dimensions	51x31x18mm	

PCB Overview & Parts List
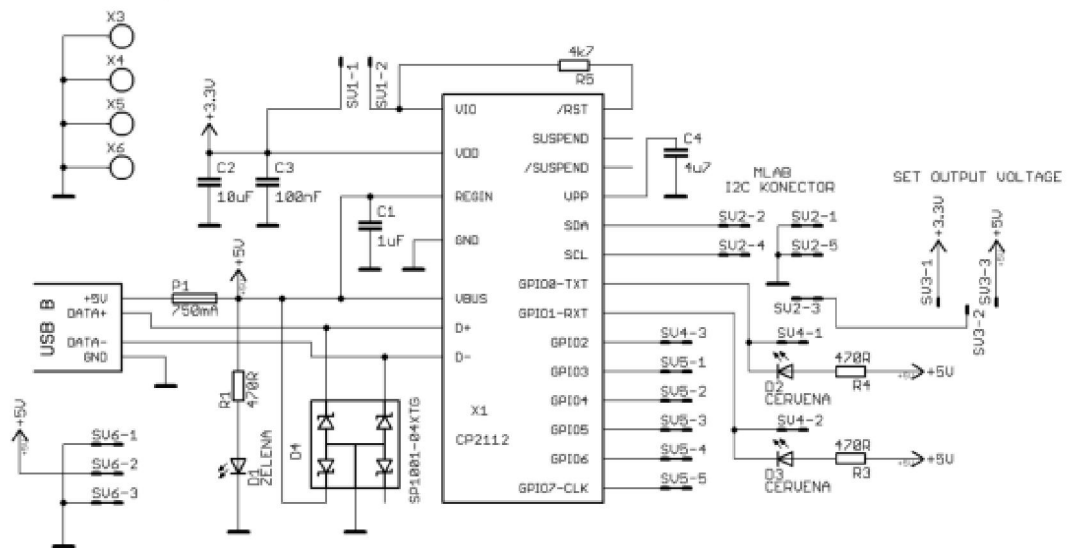
Parts List

Components	Values	Package
C1	1µF	0805
C2	10µF	0805
C3	100µF	0805
C4	4.7µF	0805
R1 , R3 , R4	470R	0805
R5	4K7	0805
D1	LED On	1206
D2 , D3	LED Transmission	1206
D4	SP1001-04XTG	SOT553
P1	750mA	1812
X1	CP2112	QFN24
X2		USB-B
SV1	Jumper	1Row 2Pins
SV2 , SV5	Jumper	2Rows 5Pins
SV3	Jumper	1Row 3Pins
SV4 , SV6	Jumper	2Rows 3Pins

Silkscreen & Component Layout
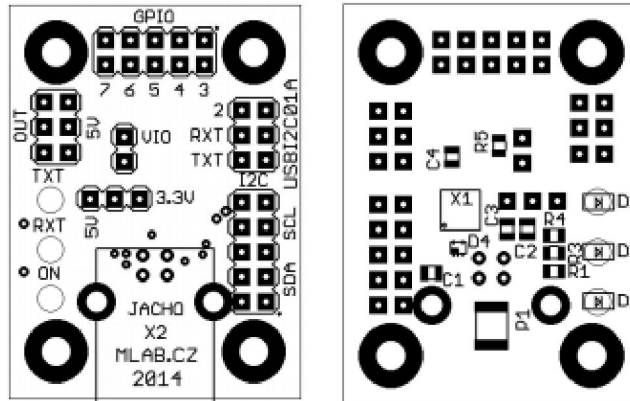
Customisation & Configuration

Silabs CP2112 provides OTP to specify unique Vendor & Product information.
End user can configure GPIO , Power Management & other programmable settings.

Refer to manafacturers Datasheets & Application Notes.

Reference Materials

CP210x-CP211x-Overview-Technical.pdf

Datasheets

CP2112.pdf – SINGLE CHIP HID USB TO SMBUS MASTER BRIDGE

AN495.pdf - CP2112 INTERFACE SPECIFICATION

AN496.pdf - HID USB-TO-SMBUS API SPECIFICATION

AN721.pdf - CP21XX DEVICE CUSTOMIZATION GUIDE

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