

USB Pass-Through and Tap

Current Flow
USB-B should source VBUS and USB-A should sink it

USB Receiver

Isolation Barrier

Current Monitor

Measure USB VBUS current and output over UART TXD

IC2

CON1

AVR-ISP-6

Attiny25

ADC2 > ADC3 voltage

Opennect-Module-MCU-3V3

U3

SE0 must be a capturable even

Truth Table

Vp	Vm	Y
0	0	1
0	1	0
1	0	0
1	1	1

AT32UC3A3-XPLD

U5

USB Protocol Analyzer Front-End

www.Opendous.org/USBProtocolAnalyzerFE

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Opendous Inc. (www.opendous.org)

File: USB_Protocol_Analyzer_Front-End.sch

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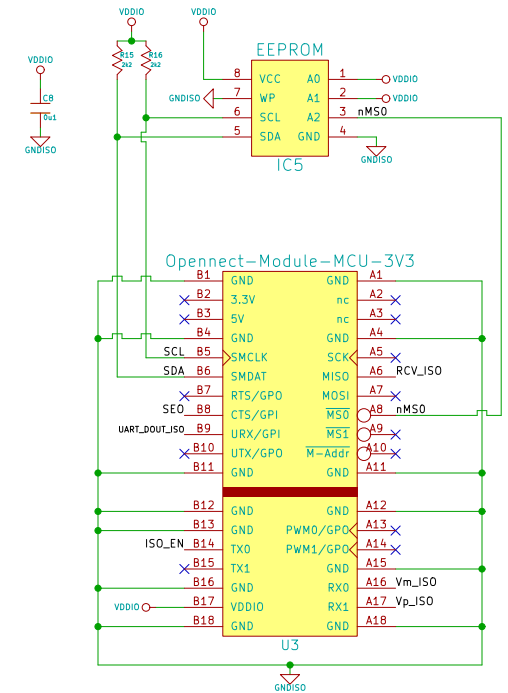
Title: USB Protocol Analyzer Front-End

Size: A4 Date: 5 dec 2011

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Rev:

Id: 1



Current Monitor

Measure USB VBUS current and output over UART TXD

IC2

Attiny25

CON1

AVR-ISP-6

74LVC245

U4

AT32UC3A3-XPLD

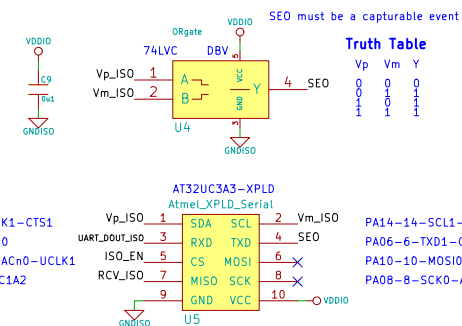
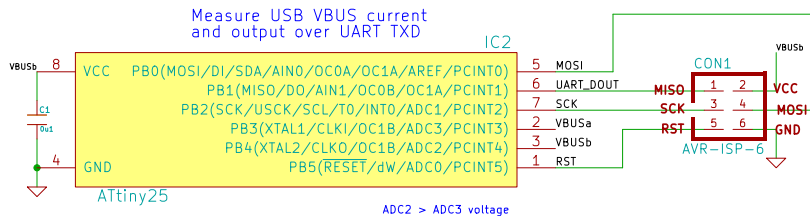
U5

Truth Table

Vp	Vm	Y
0	0	0
1	0	1
0	1	1
1	1	0

ADC2 > ADC3 voltage

SEO must be a capturable even



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