

USB Level Shifter Stick Basic

Datasheet

- The USB Level Shifter converts an existing USB interface to a TTL-UART interface with variable operating voltage, as it is often used for trace and debug functions.
- The UART interface level automatically adapts to the operating voltage of the target.
- Level conversion takes place for the UART signals TxD and RxD.
- The RxD and TxD signal cross over takes place in the USB Level Shifter.
- A 6-pin 1:1 connection cable for the target connection is included.



General technical data

Power supply from USB Target operating voltage 1.8V to 5.0V

Power consumption USB typ 20mA; max. 100mA;

Target 5.0V - max. 3.5mA

3.3V - max. 2.0mA 1.8V - max. 0.5mA

Connection to Target 6 pin male header

Target cable Flat ribbon cable 280mm

2 x 6 pin female connector on both ends

Pin1 is marked*

Connection to PC USB 2.0 Type A Housing ABS, transparent

Dimensions $L \times W \times H = 71 \times 23 \times 9 \text{ mm}$

(71 x 23 x 22 mm**)

Control and display elements 3 x LED: red, yellow, green

Interfaces to Target:

UART, TTL level 1.8V to 5.0V 300 baud to 1 mega-baud 7 or 8 data bit; 1 or 2 stop bit parity odd / even / mark / space / no

to PC:

USB 2.0 Full Speed compatible

Operating temperature +5 to +40°C Storage temperature -25 to +70°C

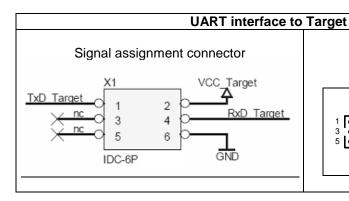
Type of protection IP20 **Technical** Data

^{*} cable - colored edge marking; jack - marked with arrow

^{**} including connected target cable



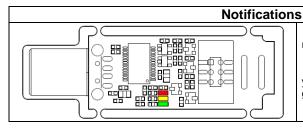
Pin configuration



View onto wiring pin

1 0 0 2 3 0 0 4 5 0 0 6	1	RxD / (TxD Target)
	2	Vcc Target
	3	not connected
	4	TxD / (RxD Target)
	5	not connected
	6	GND

Pin configuration



red Level Shifter operational

- enumerated by USB host

- Target voltage in place

yellow receiving data over USB green transmitting data over USB

Scope of delivery USB Level Shifter Stick Basic with Target Cable	Order No. BN-031648	Scope of
Accessories / Spare parts USB Level Shifter Target Cable USB Cable Type A / A-socket; length 1.8m	BN-031644 BN-018198	Delivery / Accessories
Versions USB Level Shifter Stick Low Power	BN-031645	
Suitable for deRFtoRCB Adapter Sensor Terminal Board SAM-ICE Adapter deRFnode family deRFgateway family deRFdevelopment Kits	BN-028216 BN-026533 BN-028337 see homepage see homepage see homepage	

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