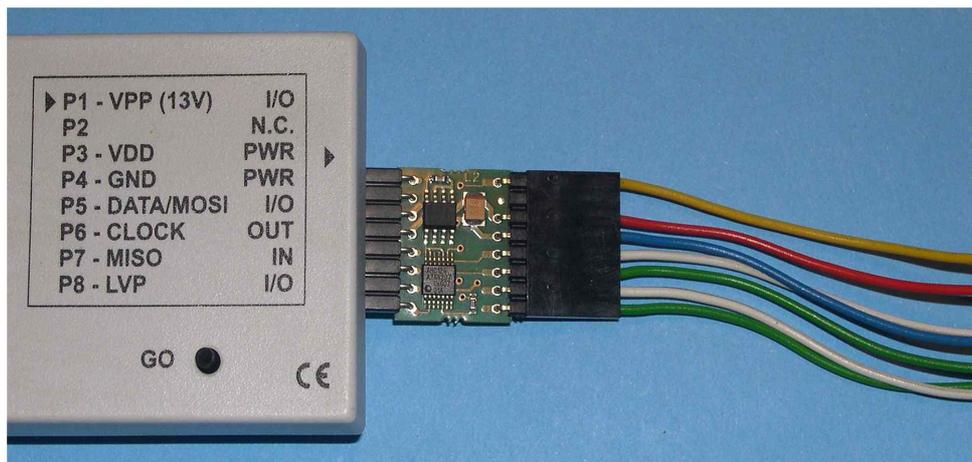




HPR3V3

3.3 V Level Shifter for PRESTO User's Guide



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Note: This document contains hyperlinks pointing to web pages on the Internet. If the links happen to be broken (point to non existing page), please download recent version of this manual from www.asix-tools.com.

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1. INTRODUCTION

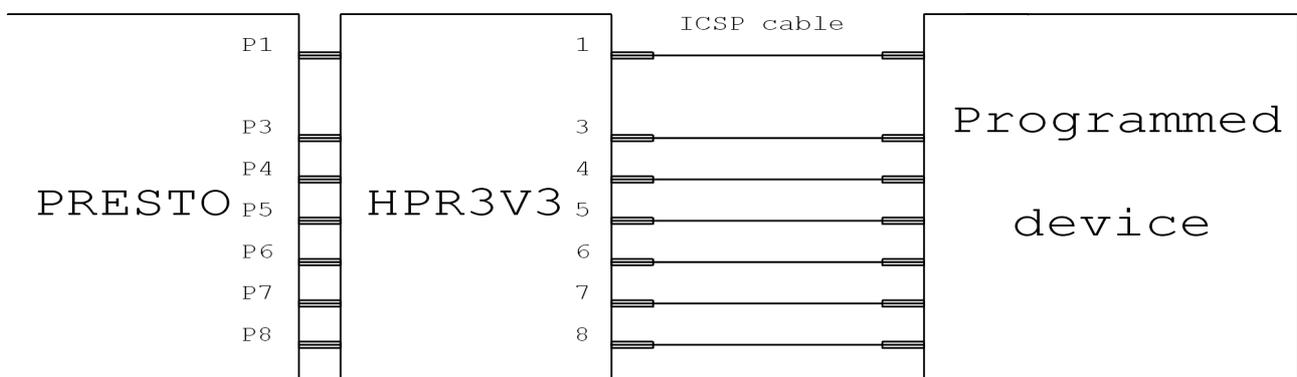
HPR3V3 is an optional accessory to the PRESTO programmer for programming of stand-alone 3.3 V devices as for example DataFlash Memories. The PRESTO programmer can supply a programmed device with 5 V. However, some devices require 3.3 V supply voltage and 3.3 V logic levels on their pins. In such case, the HPR3V3 level shifter or an external 3.3 V power supply have to be used.

2. USAGE

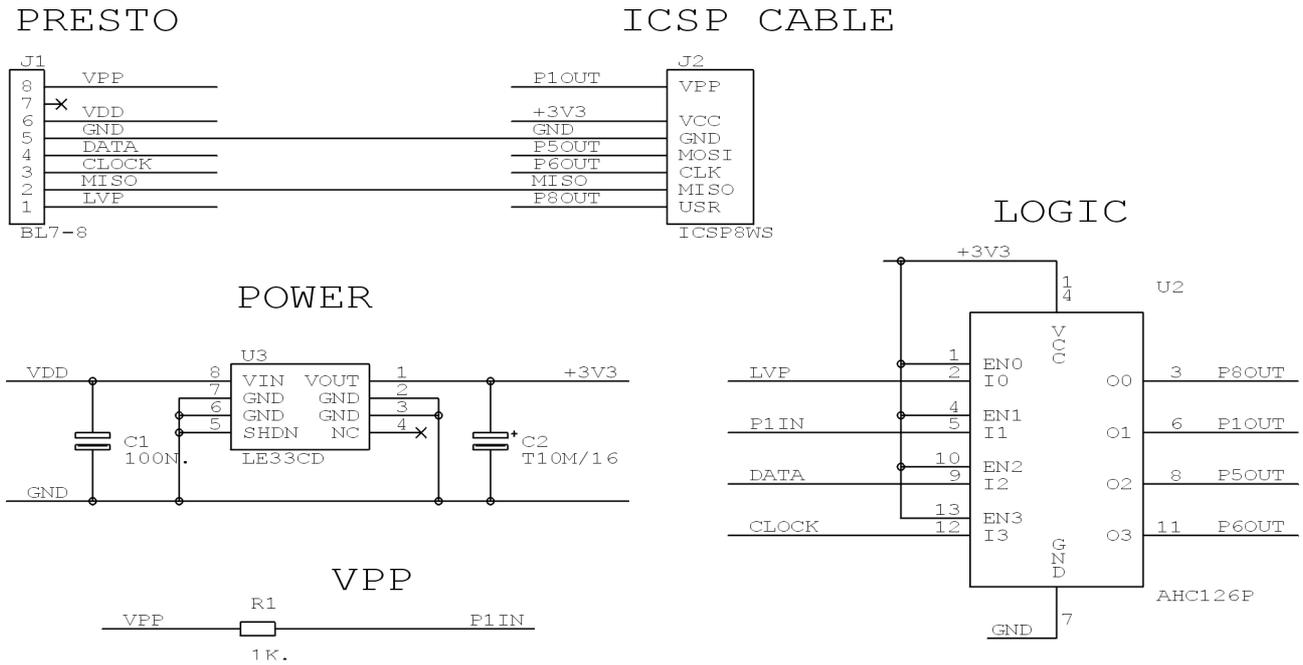
The HPR3V3 level shifter can be used very simply. Plug it directly to the pins of the PRESTO programmer (**NOT to the programmed device connector!**). Pin 2 is used as a key, so that is not possible to connect it wrong way. Now connect the programmed device to HPR3V3 using ICSP cable. Connection of the programmed device pins is same as connection of the device to the PRESTO. Common connection diagram is below.

Notes:

- The HPR3V3 pins are unidirectional, so this level shifter can be used for AVR devices, SPI Flash memories or MSP430 devices without SBW interface, but it's not intended for PIC devices and MSP430 devices with SBW interface.
- **Never connect external voltage to the output 3.3 V supply pins!**



3. HPR3V3 SCHEMATICS



4. TECHNICAL SPECIFICATION

	<i>min.</i>	<i>typ.</i>	<i>max.</i>	
V _{CC} output supply voltage	3.2	3.3	3.37	V
I _{CC} output supply current			90	mA
V _{OH} output pin voltage log.1	2.9			V
V _{OL} output pin voltage log.0 (25 °C)			0.36	V
I _{OUT} output pin current			4	mA

5. REVISION HISTORY

Date	Revision	Main changes
2007-09-11	1.0	Initial version