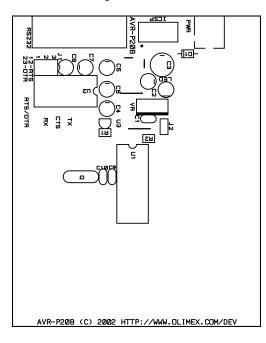
AVR-P20B PROTOTYPE BOARD WITH 10 PIN ICSP CONNECTOR FOR 20 PIN AVR MICROCONTROLLERS

Features:

AVR-P20B is prototype board for 20 pin AVR microcontrollers with following features:

- RS232 Tx, Rx interface with MAX232 IC
- ICSP 10 pin connector (STK compatible)
- RESET IC ZM33064C
- Status LED connected to PB7 via removable jumper
- 4MHz, 10MHz or 12MHz quartz oscillator
- extension slot on each microcontroller pin
- DIL20 microcontroller socket
- power supply plug in connector
- +5V power supply voltage regulator
- 0.1" (2.54 mm) grid
- dimensions: 100x80 mm
- four mounting holes



Programming:

To program AVR-P20B you need serial port or parallel port AVR-ICSP programmer dongle (Olimex part # AVR-PG1B or AVR-PG2B).

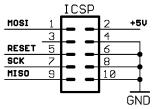
The serial port ICSP programmer (AVR-PG1B) works with PonyProg software by from Claudio Lanconelli and the latest release may be download for free from <u>http://www.lancos.com</u>

The parallel port ICSP programmer (AVR-PG2B) works with AVR ISP from Atmel and may be download for free from Atmel's web site.

ICSP interface:

The ICSP connector is 2x5 pin with 0,1" step and Atmel STKxxx compatible layout. The PIN.1 is marked with square pad on bottom and arrow on top. ICSP signals are: 1- MOSI, 2- VCC, 3- NC, 4- GND, 5- RST, 6- GND, 7- SCK, 8- GND, 9-MISO, 10- GND

TOP view PCB board layout:



RS232 interface:

J1 removable jumper selects where RTS/DTR line to be connected. In position 12 the line is connected to RTS, in position 23 is connected to DTR.

Status LED:

Connected to PB7 via removable jumper J2. The jumper should be left open while programming.

Oscillator circuit:

Crystal resonator connected to XTAL1 and XTAL2.

RESET supervisor circuit:

IC ZM33064C with 4.6V threshold.

Supported devices:

AT90S1200 and AT90S2313 microcontrollers.

Power supply:

The power supply should be in range +7.5 +18VDC.

Ordering codes:

AVR-P20B-4MHz	 assembled and tested
AVR-P20B-10MHz	- assembled and tested
AVR-P20B-12MHz	- assembled and tested
AVR-P20B/PCB	- only PCB

Copyright(c) 2002, OLIMEX Ltd, All rights reserved.

Development boards for PIC, AVR and MSP430 microcontrollers http://www.olimex.com/dev

