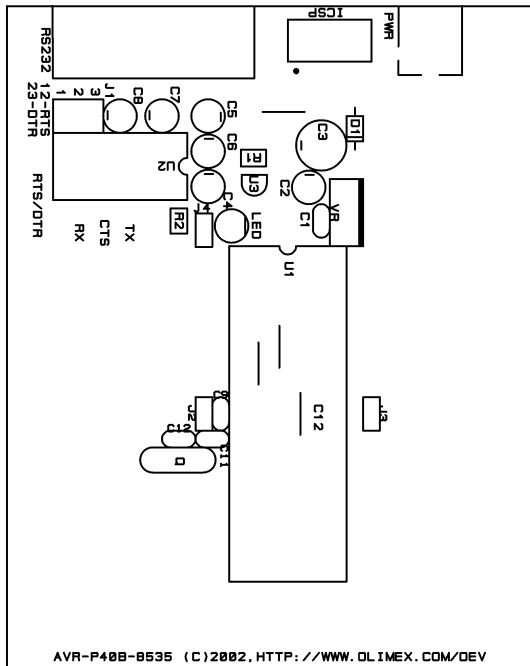


AVR-P40B-8535 PROTOTYPE BOARD WITH 10 PIN ICSP CONNECTOR FOR AT90S8535 AVR MICROCONTROLLERS

Features:

AVR-P40B-8535 is prototype board for AT90S8535 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 PB0 via removable jumper
- 4MHz, 8MHz quartz oscillator
- extension slot on each microcontroller pin
- DIL40 microcontroller socket
- AGND-GND and AVCC-VCC jumpers
- power supply plug in jack connector
- +5V power supply voltage regulator
- 0.1" (2.54 mm) grid
- dimensions: 100x80 mm
- four mounting holes



Programming:

To program AVR-P40B-8535 you need serial port or parallel port AVR-ICSP programmer dongle (Olimex part # AVR-PG1B or AVR-PG2B).

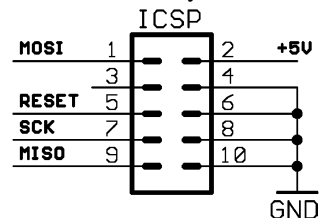
The serial port ICSP programmer (AVR-PG1B) works with PonyProg software by from Claudio

Lanconelli and the latest release may be download for free from <http://www.lancos.com> 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 PB0 via removable jumper.

Oscillator circuit:

Crystal resonator connected to XTAL1 and XTAL2.

Analog VCC and GND:

J2 connects AVCC to VCC.

J3 connects AGND to GND.

RESET supervisor circuit:

IC ZM33064C with 4.6V threshold.

Supported devices:

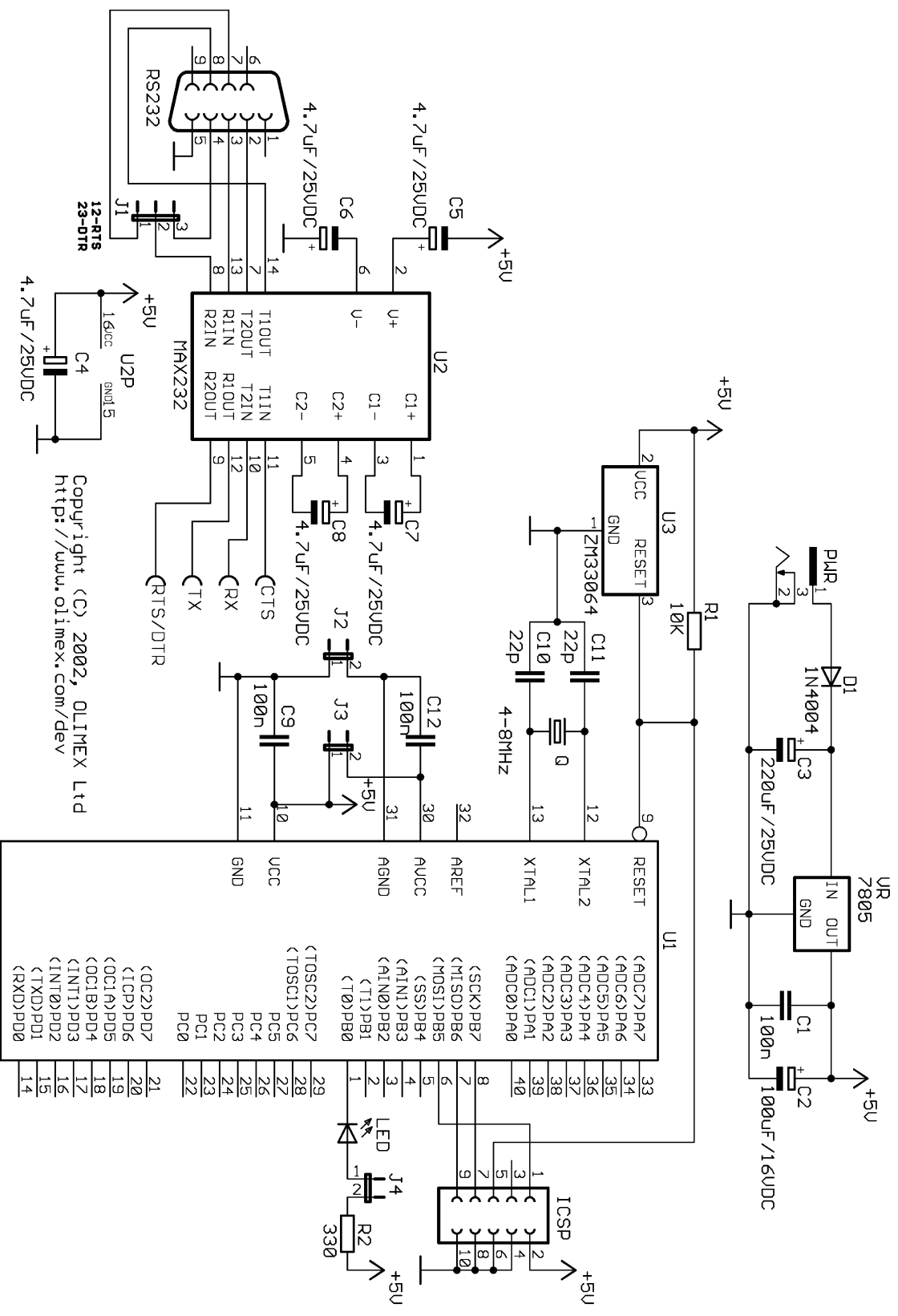
AT90S8535 and AT90S4434 microcontrollers.

Ordering codes:

AVR-P40B-8535-4Mhz - assembled and tested

AVR-P40B-8535-8MHZ - assembled and tested

AVR-P40B-8535/PCB - only PCB



AT90S8535

RESET	33	<ADC7>PA7	34
XTAL2	35	<ADC6>PA6	35
XTAL1	36	<ADC5>PA5	36
	37	<ADC4>PA4	37
	38	<ADC3>PA3	38
	39	<ADC2>PA2	39
	40	<ADC1>PA1	40
		<ADC0>PA0	
		<SCK>PB7	
		<MISO>PB6	
		<MOSI>PB5	
		<SS>PB4	
		<AIN1>PB3	
		<AIN0>PB2	
		<T1>PB1	
		<T0>PB0	
	29	<TOSC2>PC7	29
	28	<TOSC1>PC6	28
	27	PC5	27
	26	PC4	26
	25	PC3	25
	24	PC2	24
	23	PC1	23
	22	PC0	22
	21	<OC2>PD7	21
	20	<ICP>PD6	20
	19	<OC1A>PD5	19
	18	<OC1B>PD4	18
	17	<INT1>PD3	17
	16	<INT0>PD2	16
	15	<TXD>PD1	15
	14	<RXD>PD0	14