



- 1) USB connector as power supply (5V DC, min 100mA)
- 2) Designed for ATMEGA AVR
- 3) Add to the avrdude v6.3 configuration file "avrdude.conf" (after "ponyser" programmer):


```

programmer
  id = "prog_GS";
  desc = "serial port banging, reset=dtr sck=rts mosi=txd miso=cts";
  type = "serbb";
  connection_type = serial;
  reset = 4;
  sck = 7;
  mosi = 3;
  miso = 8;
  ;
      
```
- 4) R5 value takes into account standard ($\geq 10k$) pull-up of the ~RESET pin that is done on the MCU board. R5 value should guaranty the Input Low Voltage for the ~RESET pin during programming. Input High Voltage for ~RESET pin is not guaranteed.
- 5) R6, R7 selected to be used for MOSI and SCK pins that has external pull-up $> 15k$ (external pull-down $> 6.8k$) or has no external pull-up (pull-down). Recommended value 4.7k (down to 1k).
- 6) Z1 is optional.
- 7) Shielding lines connected in one point only – on COM port's side. The SPI side of the shielding lines are not connected (floating).

Sheet: /

File: avr_prog_gs.sch

Title: AVR programmer GS (COM port, serial)

Size: A4 Date: 2021-04-10

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