

I2C, SPI Port and bus expanders



Connection of the dynamic display and port expanders

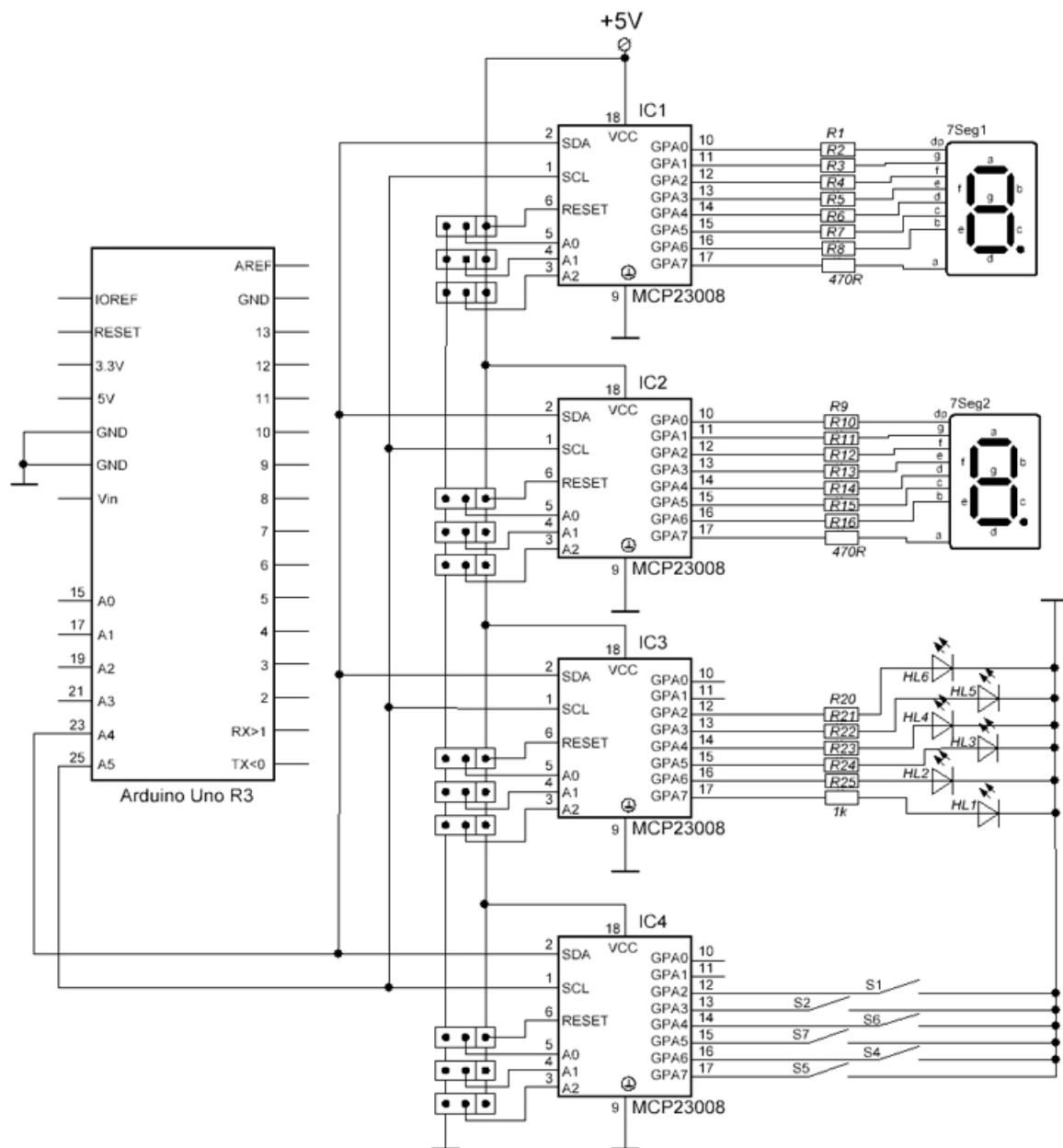
Jumpers for choosing MCP23S17 and MCP23008 chipset addresses can be seen below.



Setting the jumpers for addressing port expanders

Using port expander chipsets, it is possible to add sixteen more digital inputs and outputs to your device communicating with it using a high speed SPI or I2C interface.

Connecting a dynamic display and port expanders using a high-speed SPI interface



Connecting a dynamic display and port expanders using a high-speed I2C interface

Based on the port expander chipsets we added indications on seven-segment displays, keyboard inquiry, control of external devices using relays.

The stand contains a four-digit indicator using seven-segment displays. Two of the digits are connected to the port expander chipset with a I2C bus and two – with an SPI one.