Soldering by numbers !

MATRIX1   8x8_RGB

PORTC   **11**
ICSP   SW   RST + ı   MI SPI
6   **9**   ⊘ SC MO

D1   **5**
R26
R1
C5   RE   IC2
7 IC5
10
IC1
ATmega8 **1**
2 C1   C2 **3**
IC3   X1 IC4
4
C3   C4 **8**
R25
R27 ▲ R1
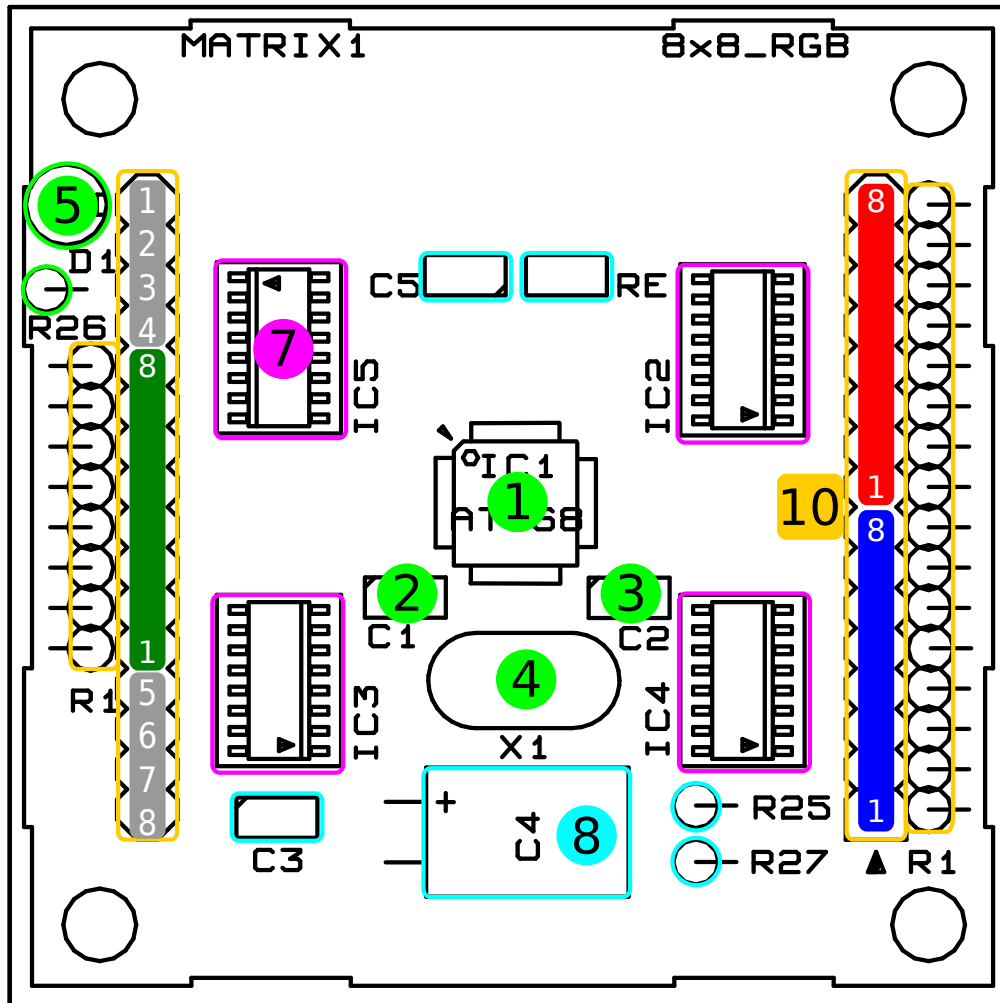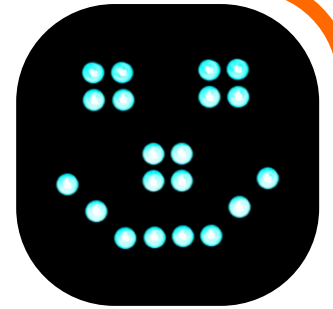
FTDI

PORTD   + ı

8x8 RGB Driver V3.03 - blog.spitzenpfeil.org - 2009
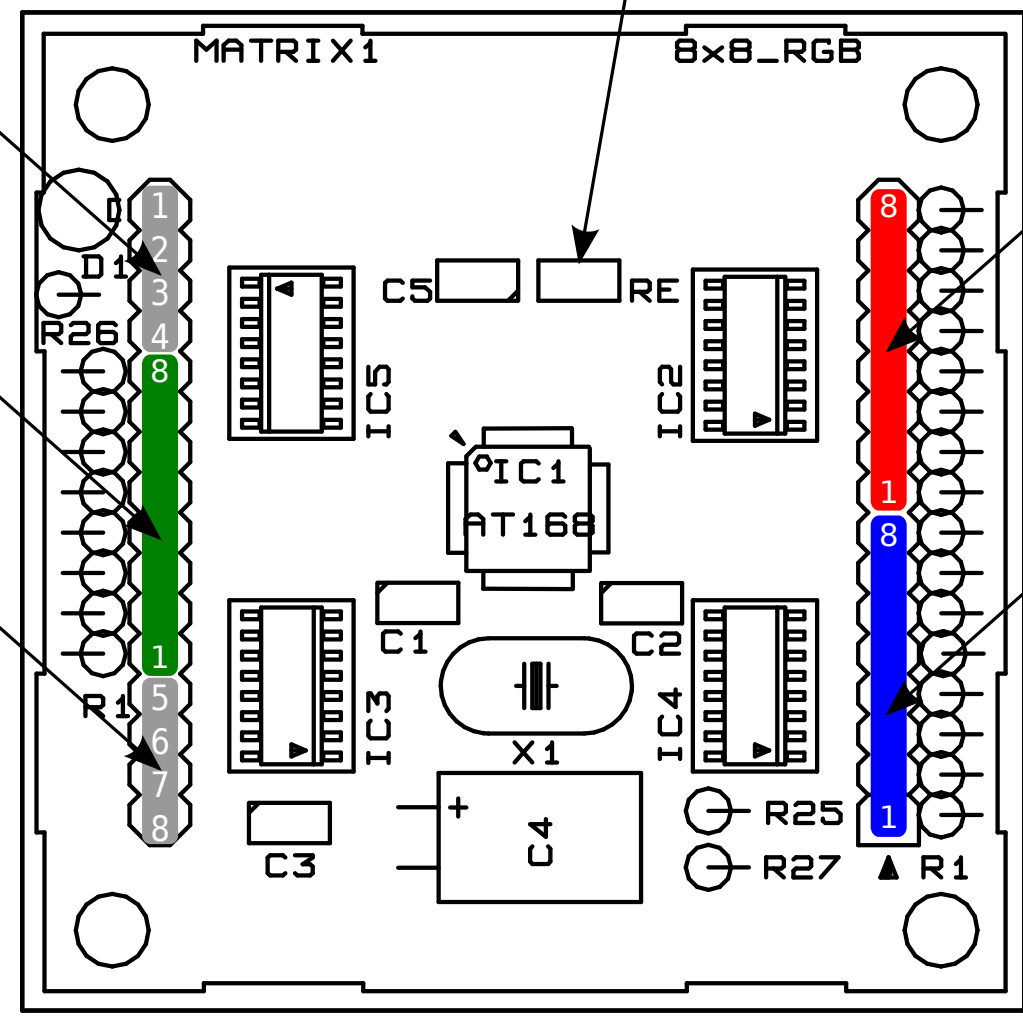
disable auto reset
(USB/Serial adapter must provide DTR !

LED Matrix
Connectors: ROWS
(**anodes** / cathodes)

LED Matrix
Connectors: COLUMNS
(anodes / **cathodes**)

LED Matrix
Connectors: ROWS
(**anodes** / cathodes)

LED Matrix
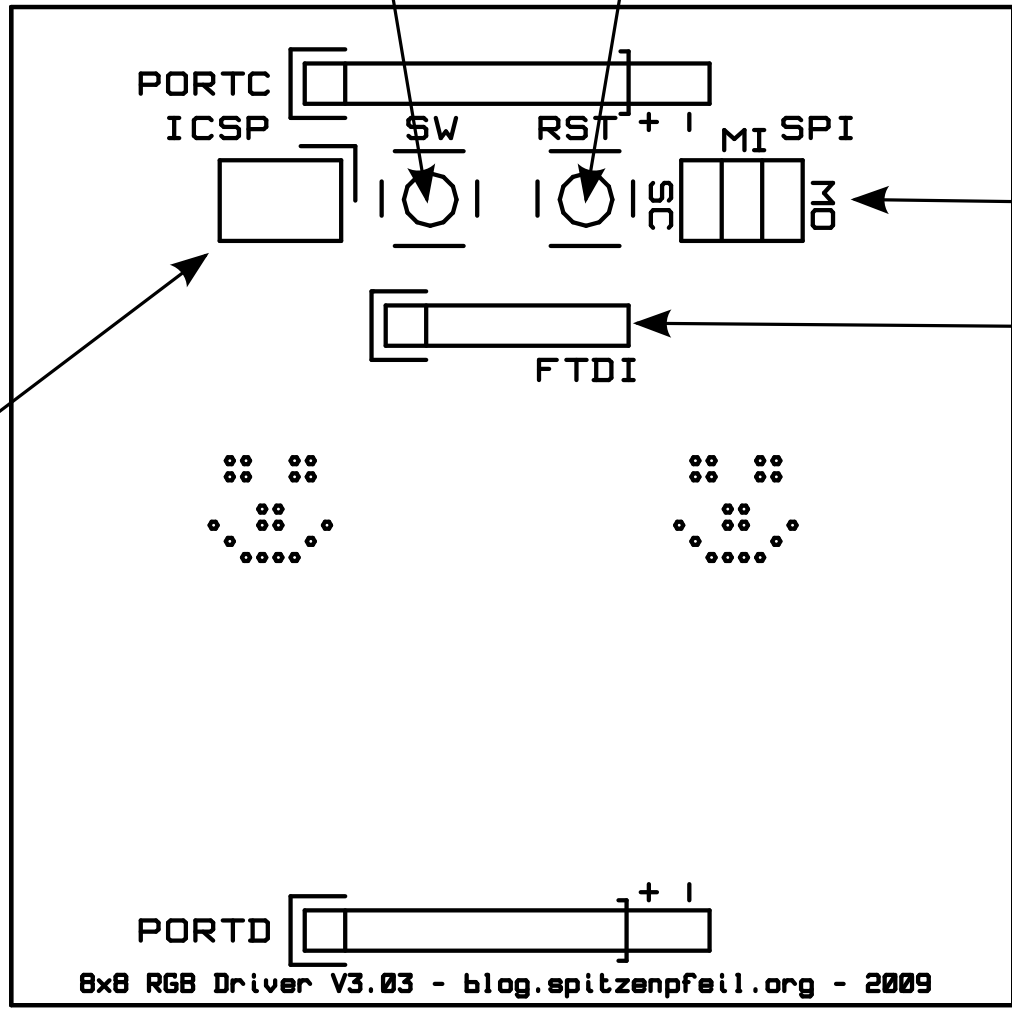Connectors: COLUMNS
(anodes / **cathodes**)

LED Matrix
Connectors: COLUMNS
(anodes / **cathodes**)

MATRIX1   8x8_RGB

D1

R26

R1

IC5

IC2

IC1
AT168

C5   RE

C1   C2

IC3   IC4

X1

C3

C4

R25

R27   R1

optional / **default**

BUTTON

RESET

PORTC

ICSP   SW   RST   + │   MI SPI

release SPI lines
(if ICSP is used)

ICSP
programming header
(remove SPI jumpers)

FTDI

FTDI USB/Serial
(uses bootloader)

PORTD   + │

8x8 RGB Driver V3.03 - blog.spitzenpfeil.org - 2009
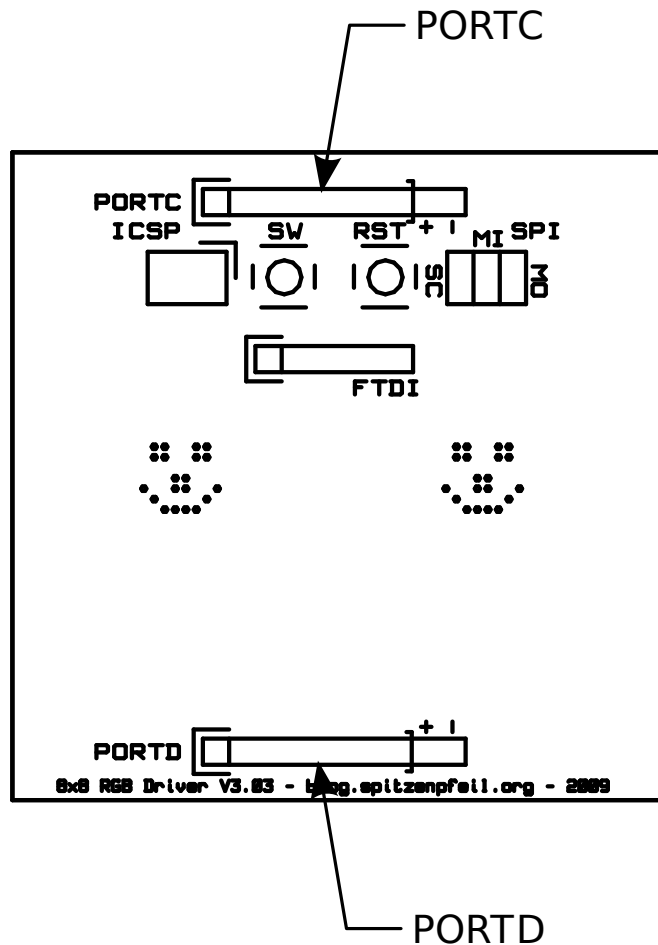
"PORTC" :

PIN	NAME	FUNCTION	ARDUINO PIN	ARDUINO PIN
1	PC0	ADC0	analog IN 0	digital IN/OUT 14
2	PC1	ADC1	analog IN 1	digital IN/OUT 15
3	PC2	ADC2	analog IN 2	digital IN/OUT 16
4	PC3	ADC3	analog IN 3	digital IN/OUT 17
5	PC4	ADC4, SDA	analog IN 4	digital IN/OUT 18
6	PC5	ADC5, SCL	analog IN 5	digital IN/OUT 19
7	ADC6	ADC6	analog IN 6	(only on SMD boards)
8	ADC7	ADC6	analog IN 7	(only on SMD boards)
9	+	5V	-	-
10	-	GND	-	-

"PORTD" :

PIN	NAME	FUNCTION	ARDUINO PIN	ARDUINO PIN
1	PD0	RXD	RXD	digital IN/OUT 0
2	PD1	TXD	TXD	digital IN/OUT 1
3	PD2	INT0	-	digital IN/OUT 2
4	PD3	INT1, OC2B	PWM	digital IN/OUT 3
5	PD4	XCK, T0	-	digital IN/OUT 4
6	PD5	T1, OC0B	PWM	digital IN/OUT 5
7	PD6	AIN0, OC0A	PWM	digital IN/OUT 6
8	PD7	AIN1	-	digital IN/OUT 7
9	+	5V	-	-
10	-	GND	-	-

- The button "SW" is connected to PB0 / digital IN/OUT 8
- The LED is connected to PD4 / digital IN/OUT 4