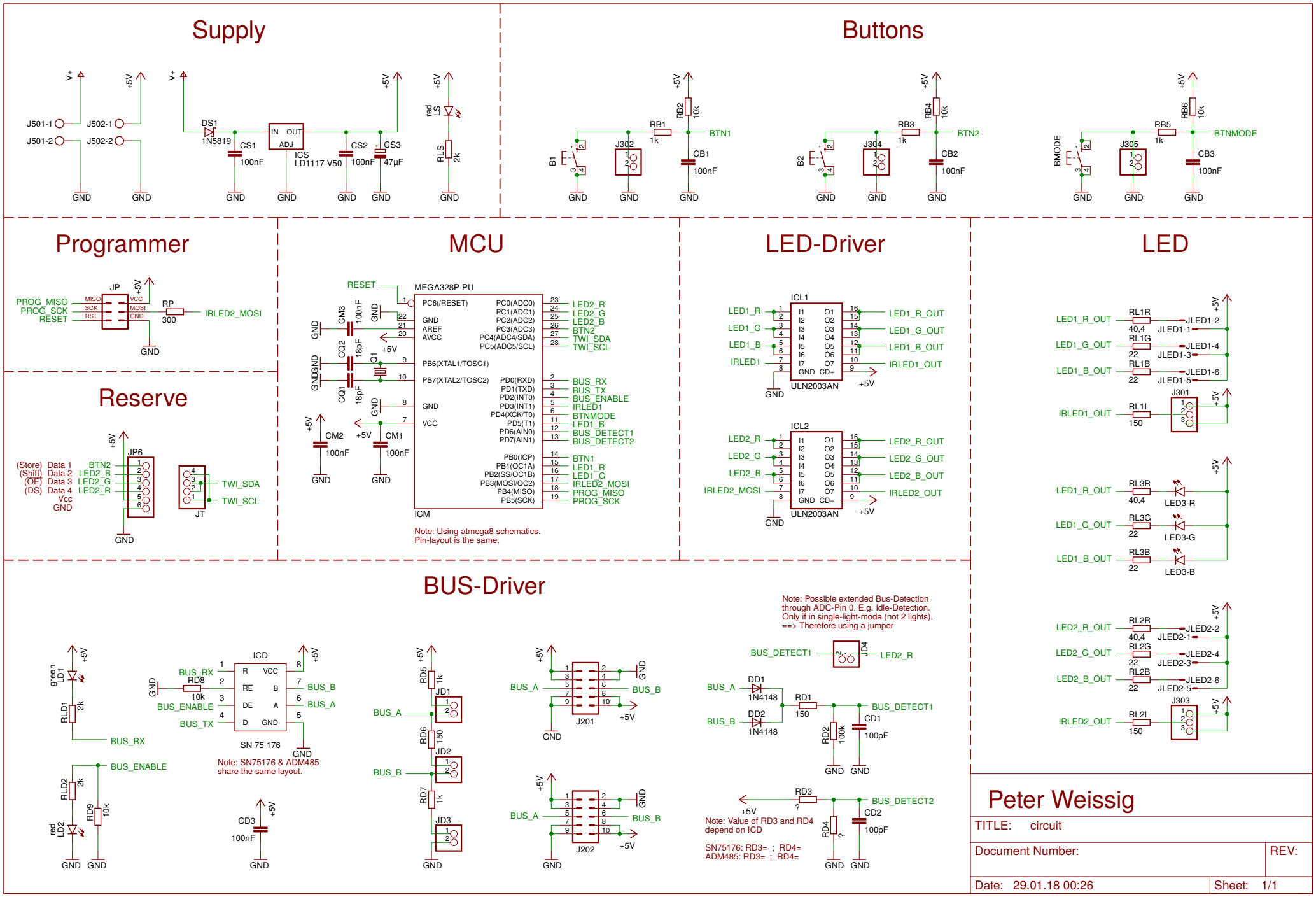
Supply
V+
+5V
J501-1
J501-2
J502-1
J502-2
GND
DS1
1N5819
CS1
100nF
IN
OUT
ADJ
ICS
LD1117 V50
CS2
100nF
CS3
47µF
red
LS
RLS
2k
Buttons
RB1
1k
RB2
10k
BTN1
B1
J302
CB1
100nF
RB3
1k
RB4
10k
BTN2
B2
J304
CB2
100nF
BMODE
RB5
1k
RB6
10k
BTNMODE
J305
CB3
100nF
Programmer
JP
PROG_MISO
PROG_SCK
RESET
MISO
SCK
RST
VCC
MOSI
GND
RP
300
IRLED2_MOSI
Reserve
JP6
(Store) Data 1
(Shift) Data 2
(OE) Data 3
(DS) Data 4
Vcc
GND
BTN2
LED2_B
LED2_G
LED2_R
JT
TWI_SDA
TWI_SCL
MCU
RESET
MEGA328P-PU
PC6(/RESET)
GND
AREF
AVCC
PB6(XTAL1/TOSC1)
PB7(XTAL2/TOSC2)
GND
VCC
PC0(ADC0)
PC1(ADC1)
PC2(ADC2)
PC3(ADC3)
PC4(ADC4/SDA)
PC5(ADC5/SCL)
PD0(RXD)
PD1(TXD)
PD2(INT0)
PD3(INT1)
PD4(XCK/T0)
PD5(T1)
PD6(AIN0)
PD7(AIN1)
PB0(ICP)
PB1(OC1A)
PB2(SS/OC1B)
PB3(MOSI/OC2)
PB4(MISO)
PB5(SCK)
LED2_R
LED2_G
LED2_B
BTN2
TWI_SDA
TWI_SCL
BUS_RX
BUS_TX
BUS_ENABLE
IRLED1
BTNMODE
LED1_B
BUS_DETECT1
BUS_DETECT2
BTN1
LED1_R
LED1_G
IRLED2_MOSI
PROG_MISO
PROG_SCK
CM3
100nF
CO2
18pF
Q1
CO1
18pF
CM2
100nF
CM1
100nF
ICM
Note: Using atmega8 schematics.
Pin-layout is the same.
LED-Driver
ICL1
LED1_R
LED1_G
LED1_B
IRLED1
LED1_R_OUT
LED1_G_OUT
LED1_B_OUT
IRLED1_OUT
ULN2003AN
ICL2
LED2_R
LED2_G
LED2_B
IRLED2_MOSI
LED2_R_OUT
LED2_G_OUT
LED2_B_OUT
IRLED2_OUT
LED
LED1_R_OUT
LED1_G_OUT
LED1_B_OUT
IRLED1_OUT
RL1R
RL1G
RL1B
RL1I
40,4
22
150
JLED1-1
JLED1-2
JLED1-3
JLED1-4
JLED1-5
JLED1-6
J301
LED3-R
LED3-G
LED3-B
RL3R
RL3G
RL3B
LED2_R_OUT
LED2_G_OUT
LED2_B_OUT
IRLED2_OUT
RL2R
RL2G
RL2B
RL2I
JLED2-1
JLED2-2
JLED2-3
JLED2-4
JLED2-5
JLED2-6
J303
BUS-Driver
green
LD1
RLD1
2k
BUS_RX
BUS_ENABLE
RLD2
red
LD2
RD9
10k
ICD
RD8
10k
BUS_TX
BUS_RX
BUS_ENABLE
BUS_B
BUS_A
SN 75 176
Note: SN75176 & ADM485
share the same layout.
CD3
100nF
RD5
1k
JD1
RD6
150
JD2
RD7
1k
JD3
J201
J202
Note: Possible extended Bus-Detection
through ADC-Pin 0. E.g. Idle-Detection.
Only if in single-light-mode (not 2 lights).
==> Therefore using a jumper
BUS_DETECT1
JD4
LED2_R
DD1
1N4148
DD2
1N4148
RD1
150
RD2
100k
CD1
100pF
RD3
RD4
CD2
100pF
Note: Value of RD3 and RD4
depend on ICD
SN75176: RD3= ; RD4=
ADM485: RD3= ; RD4=
Peter Weissig
TITLE: circuit
Document Number:
REV:
Date: 29.01.18 00:26
Sheet: 1/1