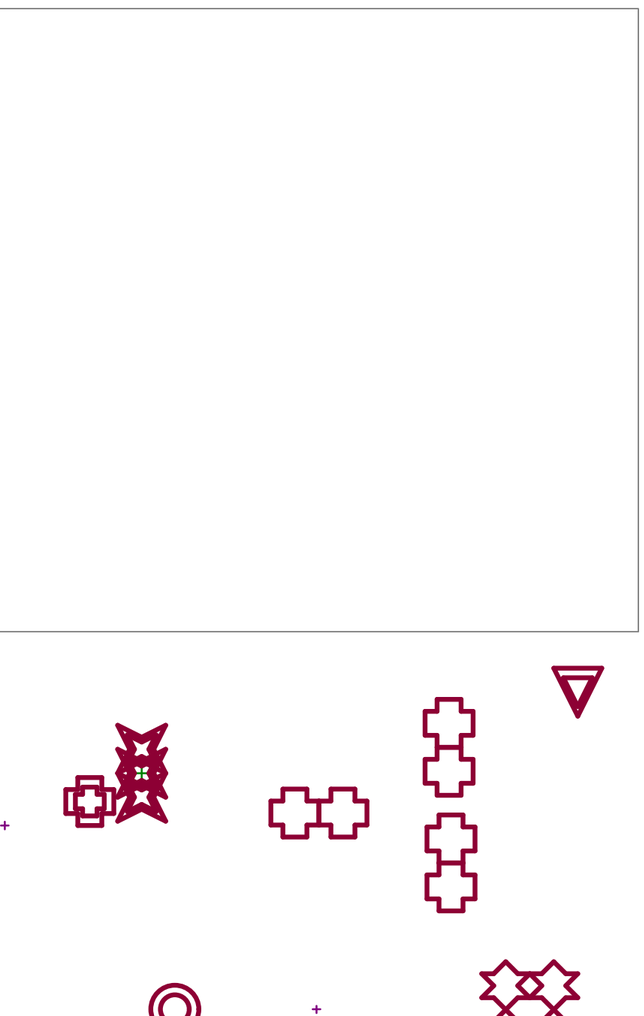
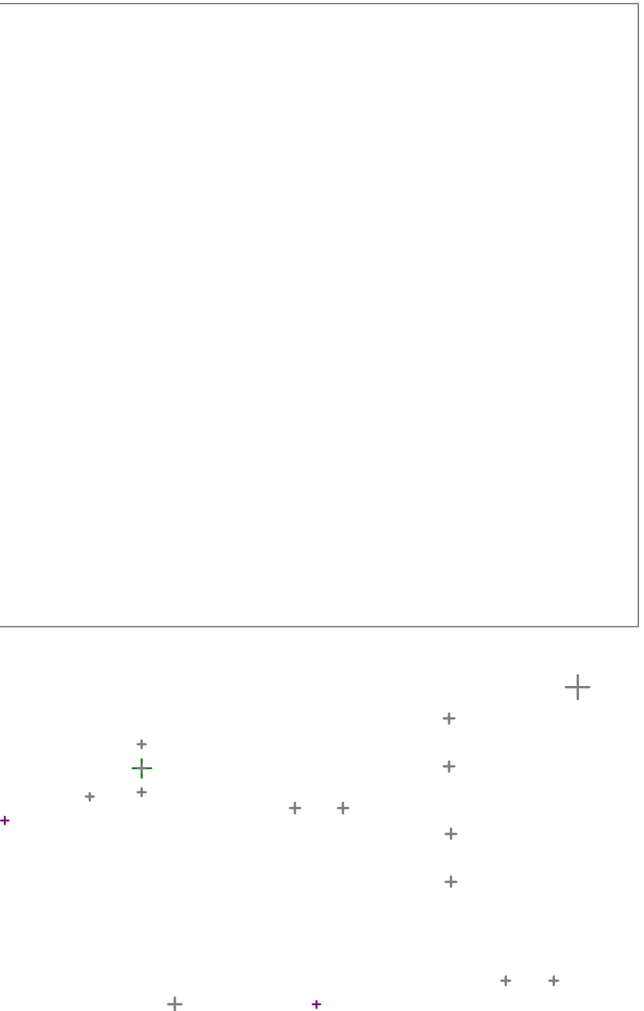
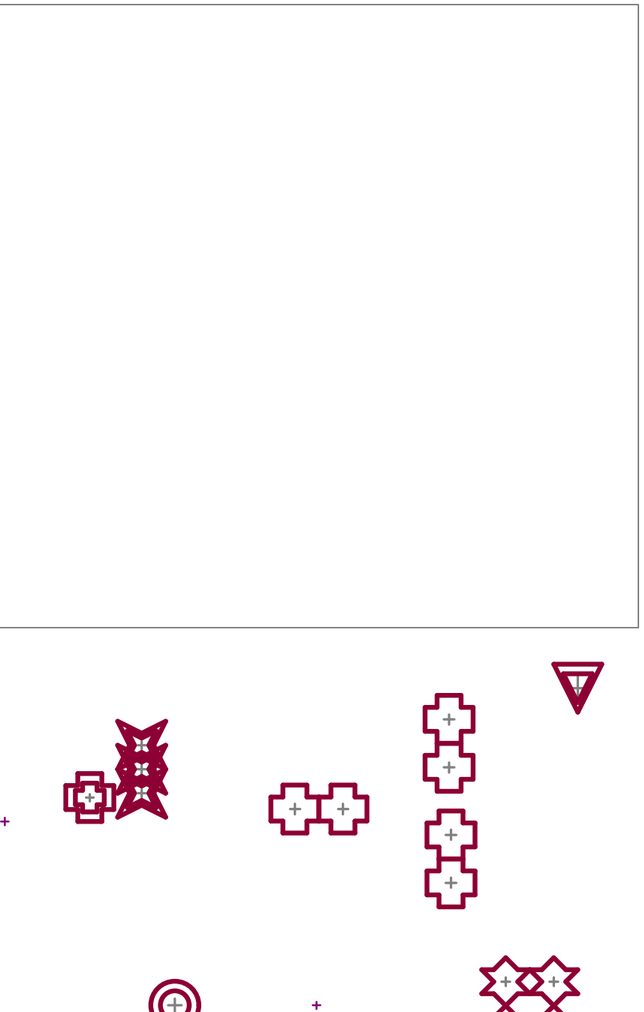


Symbol	Hit Count	Finished Hole Size	Plated	Hole Type
○	3	0.700mm (27.56mil)	PTH	Round
✕	3	0.800mm (31.50mil)	PTH	Round
⊠	4	1.400mm (55.12mil)	PTH	Round
□	6	0.500mm (19.69mil)	PTH	Round
▽	8	2.500mm (98.43mil)	NPTH	Round
◇	16	0.500mm (19.69mil)	NPTH	Round
✿	20	1.100mm (43.31mil)	PTH	Round
✿	25	0.400mm (15.75mil)	PTH	Round
◎	27	0.711mm (28.00mil)	PTH	Round
✕	33	1.000mm (39.37mil)	PTH	Round
✿	37	0.900mm (35.43mil)	PTH	Round
	182 Total			





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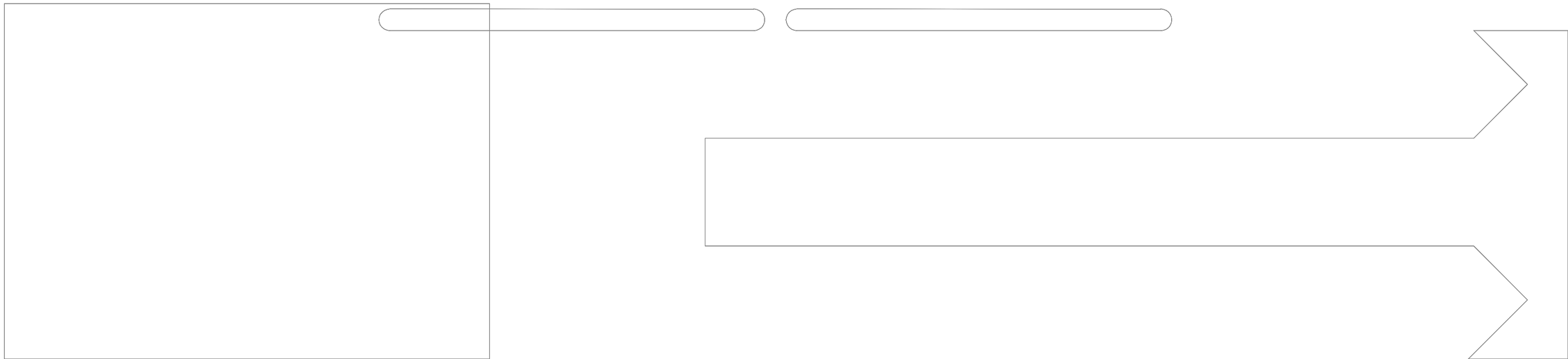
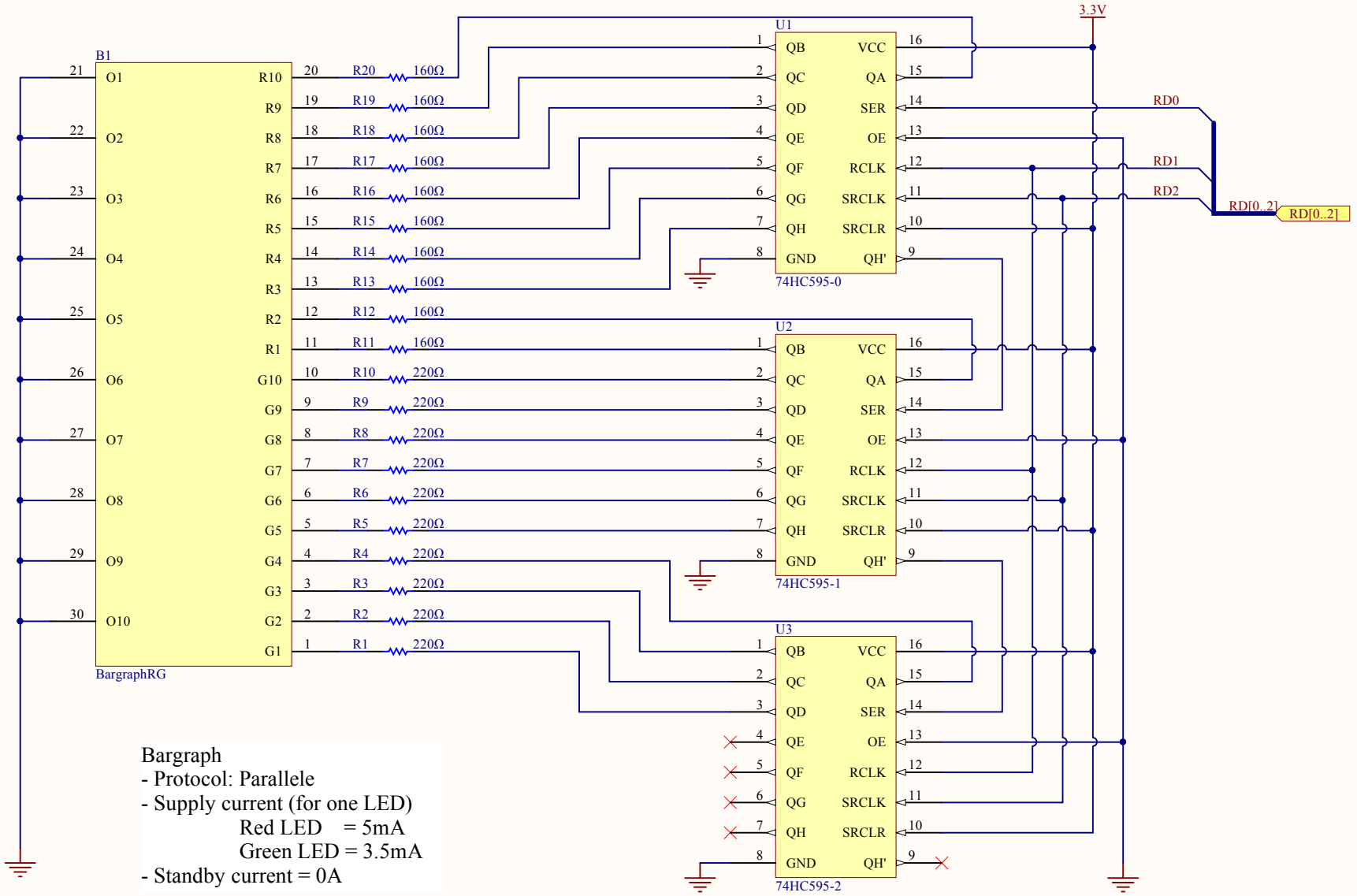
✿	37	0.900mm (35.43mil)	PTH	Round
	182 Total			

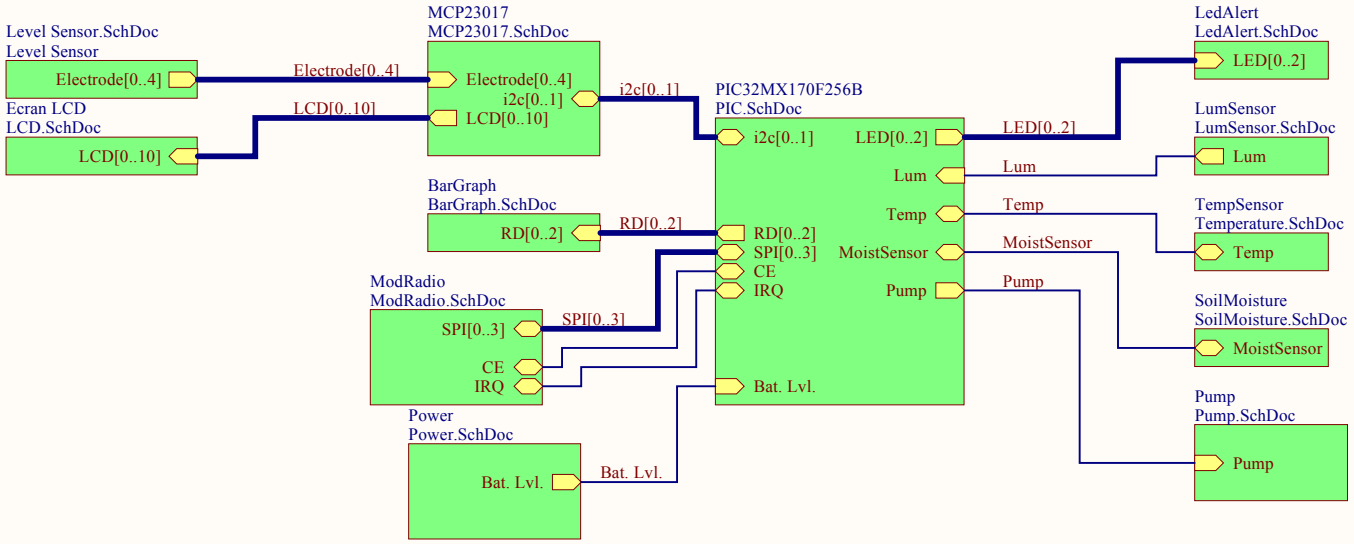
J1
Reset
C4
R39
R40
U1
U2
U3
Y1
C9
C8
C3
U8
C2
C5
U9
R41
R42
R44
D1
C7
C6
Q1
1
3
R43
Moi.
P7
pum
P1
P8
Pow.
D3
U4
1
2
7
8
S1
2 1 3
B1
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R10
R9
R8
R7
R6
R5
R4
R3
R2
R1
20
1
U5
16
15
2
1
D2
R22
R23
R24
U6
R21
R33
R34
R31
R32
R29
R30
R27
R28
R25
R26
P6
P5
P4
P3
P2
R36
R35
R38
R37
P10
Lum.
U7





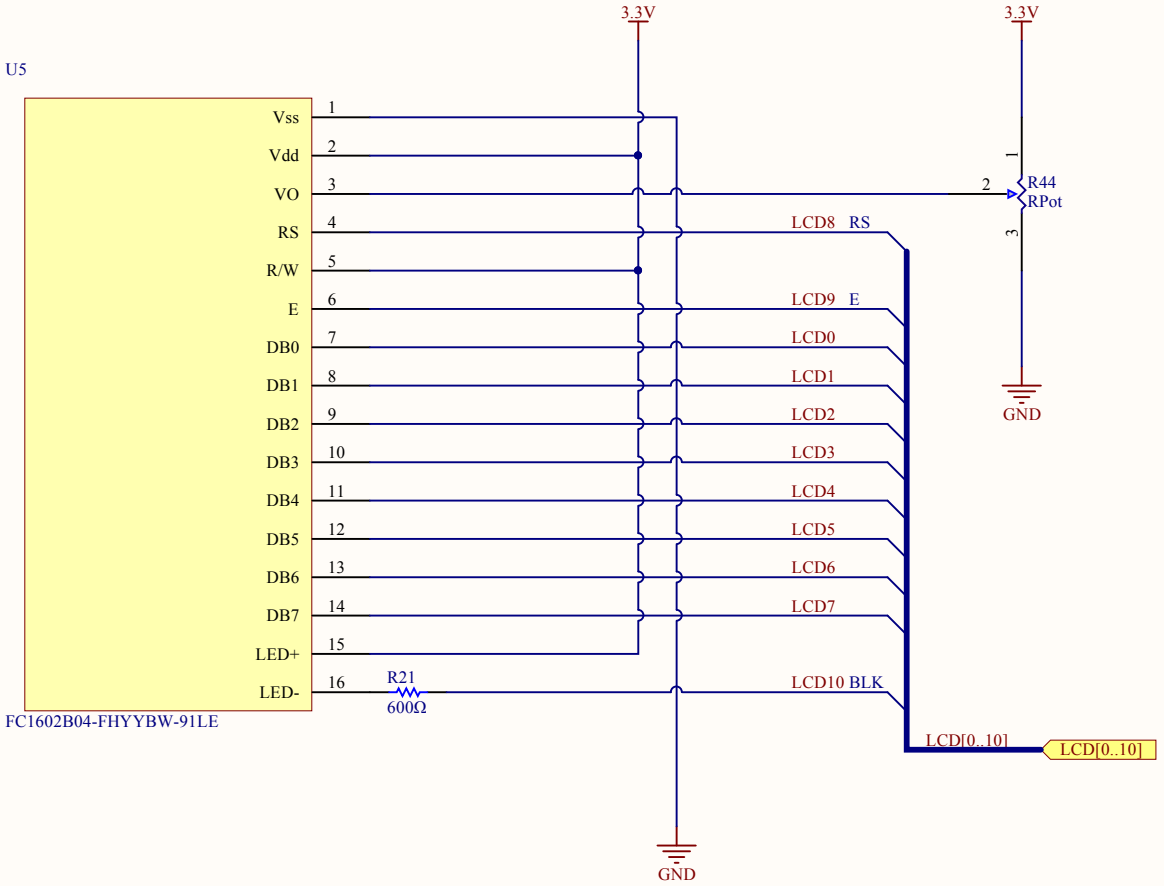
Bargraph
- Protocol: Parallele
- Supply current (for one LED)
  Red LED = 5mA
  Green LED = 3.5mA
- Standby current = 0A

Title		
Size A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\BarGraph.SchDoc		Drawn By:



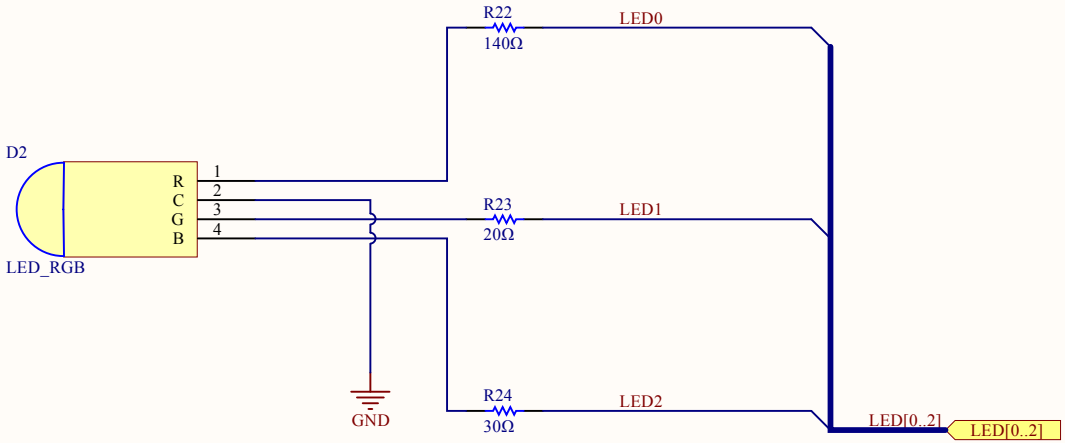
Title		
Size A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\ElectroPlantoE.SchDoc		Drawn By:

LCD 2x16 chars
- Protocol: Parallele
- Supply current
  LED = 5mA
  Electronic = 1.5mA
- Standby current = 1.5mA



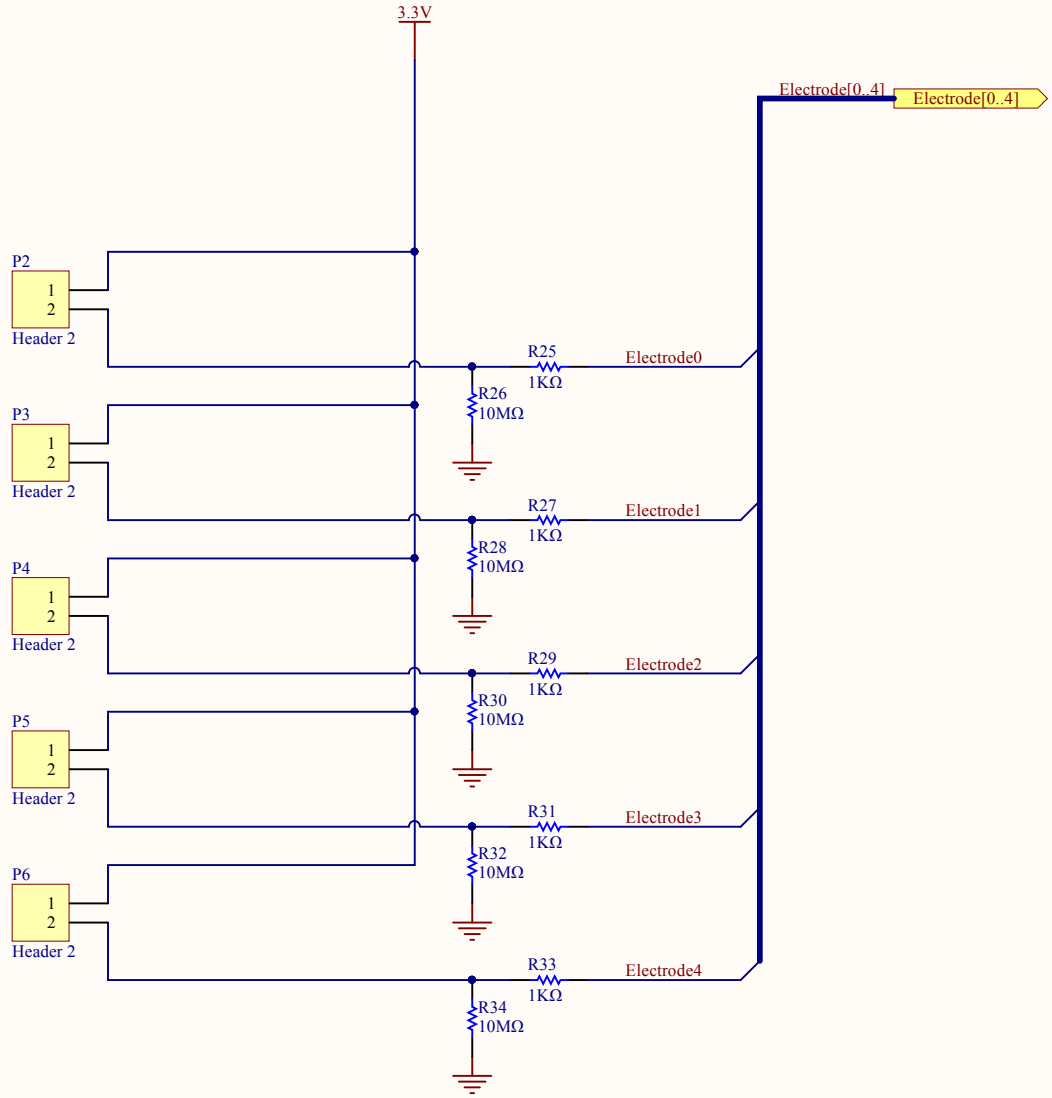
Title		
Size: A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\LCD.SchDoc		Drawn By:

LED RGB
- Protocol: Parallele
- Supply current
  RED = 10mA
  GREEN = 10mA
  BLUE = 10mA
- Standby current = 0A



Title		
Size: A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\LedAlert.SchDoc		Drawn By:

Bargraph
- Protocol: Parallele
- Supply current (per electrode)
  Water = 0.3uA
  Air = 0A



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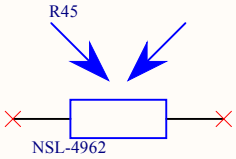
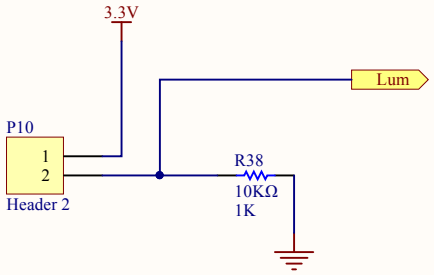
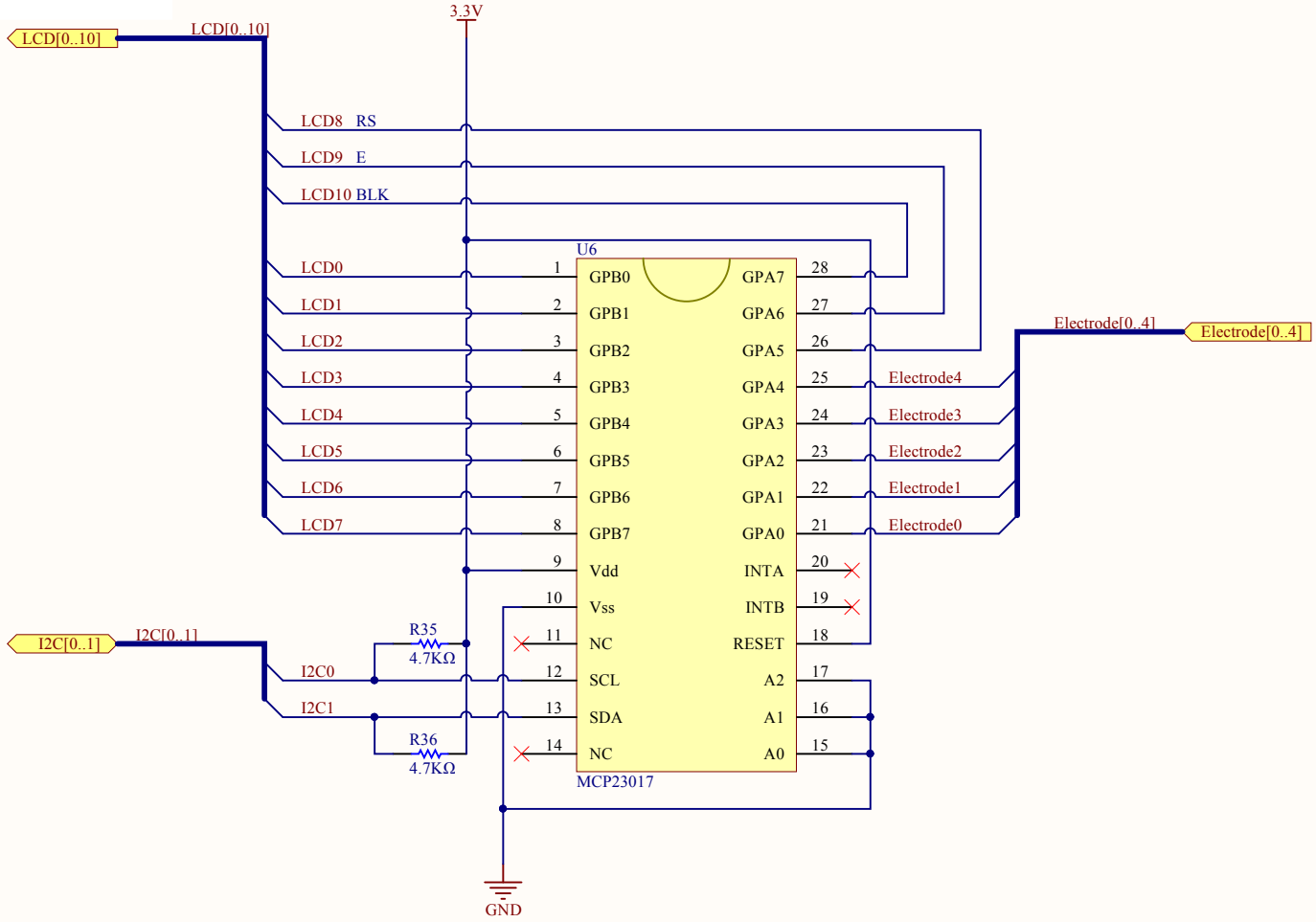




Title		
Size A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\LumSensor.SchDoc		Drawn By:

GPIO Extension
- Protocol: I2C
- Supply current = 1mA
- Standby current = 1uA



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Date: 5/26/2017		Sheet of
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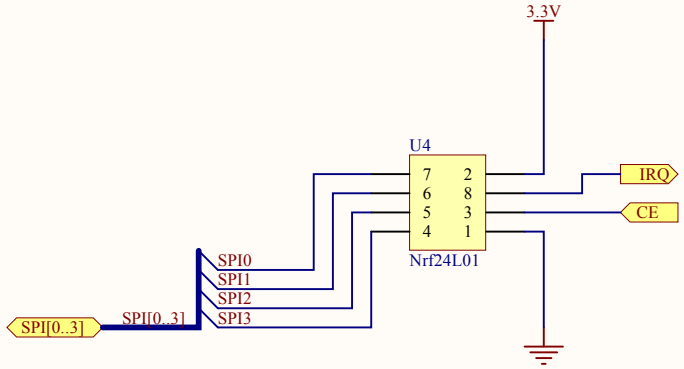

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Date: 5/26/2017		Sheet of
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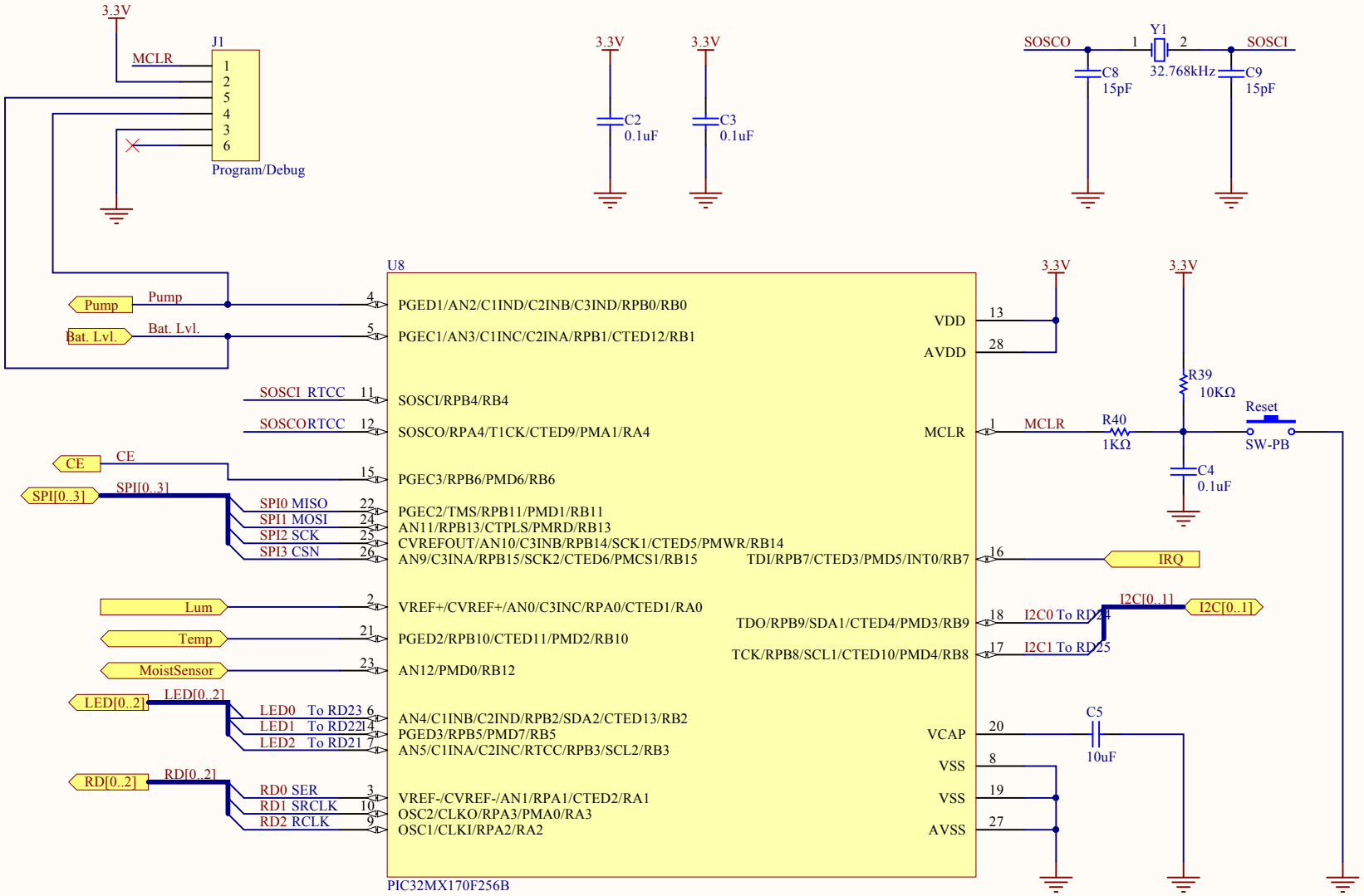

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Date: 5/26/2017		Sheet of
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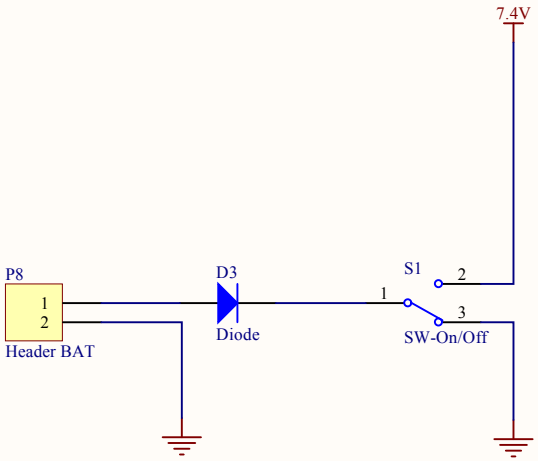

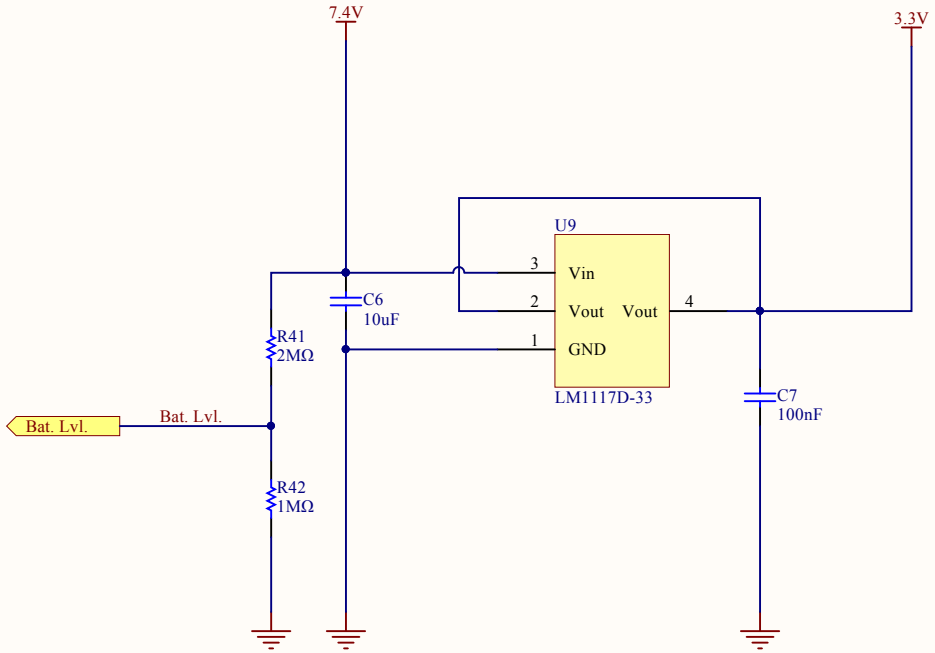

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Size A	Number	Revision
Date: 5/26/2017		Sheet of
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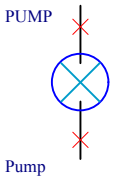

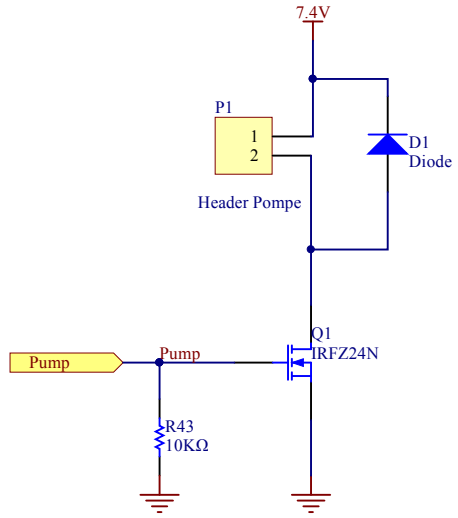

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Size A	Number	Revision
Date: 5/26/2017		Sheet of
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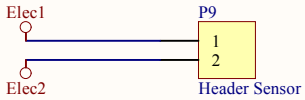

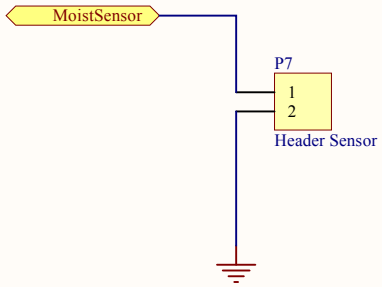

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Date: 5/26/2017		Sheet of
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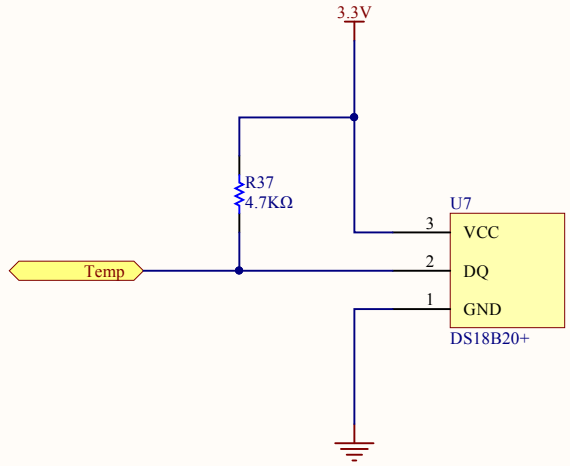

Title		
Size: A	Number	Revision
Date: 5/26/2017		Sheet of
File: C:\Users\..\Temperature.SchDoc		Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
BargraphRG	Bargraph	B1	BargraphRG	BargraphRG	1
0.1uF	Capacitor	C2, C3, C4	C0603	Cap	3
10uF	Capacitor	C5, C6	C0603	Cap	2
100nF	Capacitor	C7	C0603	Cap	1
15pF	Capacitor	C8, C9	C0603	Cap	2
Diode	Diode	D1, D3	SMC	Diode	2
LED_RGB	LedRGB	D2	LED1	LED_RGB	1
Program/Debug	Header, 6-Pin	J1	HDR1X6	Header 6	1
Header Pompe	Header, 2-Pin	P1	BORNIER	Header 2	1
Header 2	Header, 2-Pin	P2, P3, P4, P5, P6, P10	BORNIER	Header 2	6
Header Sensor	Header, 2-Pin	P7, P9	BORNIER	Header 2	2
Header BAT	Header, 2-Pin	P8	BORNIER	Header 2	1
Pump	Pump	PUMP		Pump	1
IRFZ24N	N-Channel MOSFET	Q1	E3	MOSFET-N	1
220O	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10	R0603	Res1	10
160O	Resistor	R11, R12, R13, R14, R15, R16, R17, R18, R19, R20	R0603	Res1	10
600O	Resistor	R21	R0603	Res1	1
140O	Resistor	R22	R0603	Res1	1
20O	Resistor	R23	R0603	Res1	1
30O	Resistor	R24	R0603	Res1	1
1KO	Resistor	R25, R27, R29, R31, R33, R40	R0603	Res1	6
10MO	Resistor	R26, R28, R30, R32, R34	R0603	Res1	5
4.7KO	Resistor	R35, R36, R37	R0603	Res1	3
10KO	Resistor	R38, R39, R43	R0603	Res1	3
2MO	Resistor	R41	R0603	Res1	1
1MO	Resistor	R42	R0603	Res1	1
RPot	Varistor	R44	POTARD	Potard	1
NSL-4962	Ldr	R45	NSL-4962	NSL-4962	1
SW-PB	Switch	Reset	Reset	SW-PB	1
SW-On/Off	SPDT Subminiature Toggle Switch, Right Angle Mounting, Vertical Actuation	S1	Switch on/off	SW-SPDT	1
74HC595-0	ShiftRegister	U1	SN74HC595D	74HC595	1
74HC595-1	ShiftRegister	U2	SN74HC595D	74HC595	1
74HC595-2	ShiftRegister	U3	SN74HC595D	74HC595	1
Nrf24L01	Header, 4-Pin, Dual row	U4	NRF24L01	Header 4X2	1
FC1602B04-FHYYBW-91LE	LCD	U5	FC1602B04-FHYYBW-91LE	FC1602B04-FHYYBW-91LE	1
MCP23017	GPIOExpander	U6	MCP23017	MPC23017	1
DS18B20+	Temp	U7	DS18B20+	DS18B20+	1
PIC32MX170F256B	Pic	U8	PIC32MX170F256B	PIC32MX170F256B	1
LM1117D-33	Battery	U9	VoltReg3.3V	LM1117D-33	1
32.768kHz	Crystal Oscillator	Y1	XTAL	XTAL	1