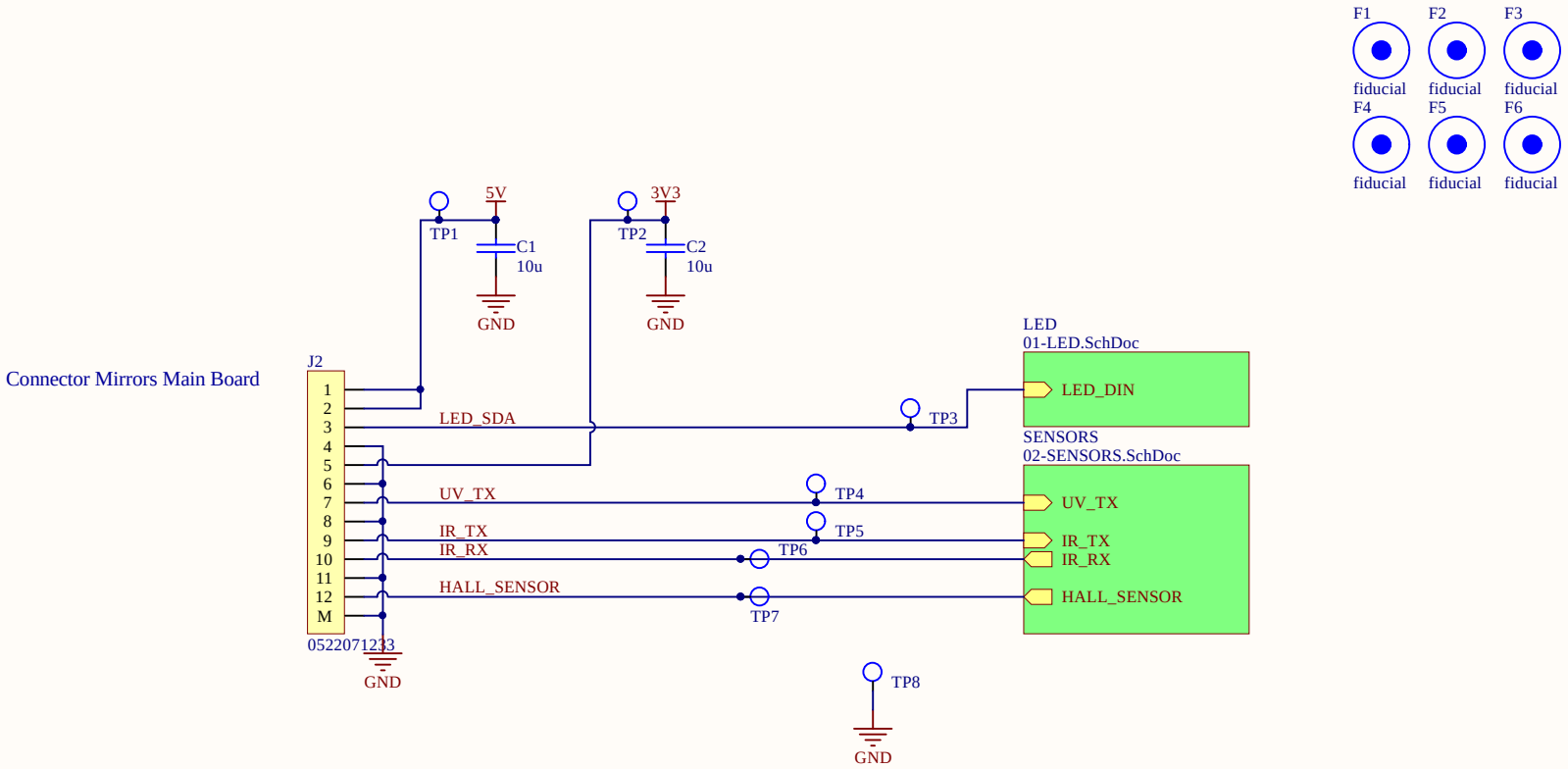
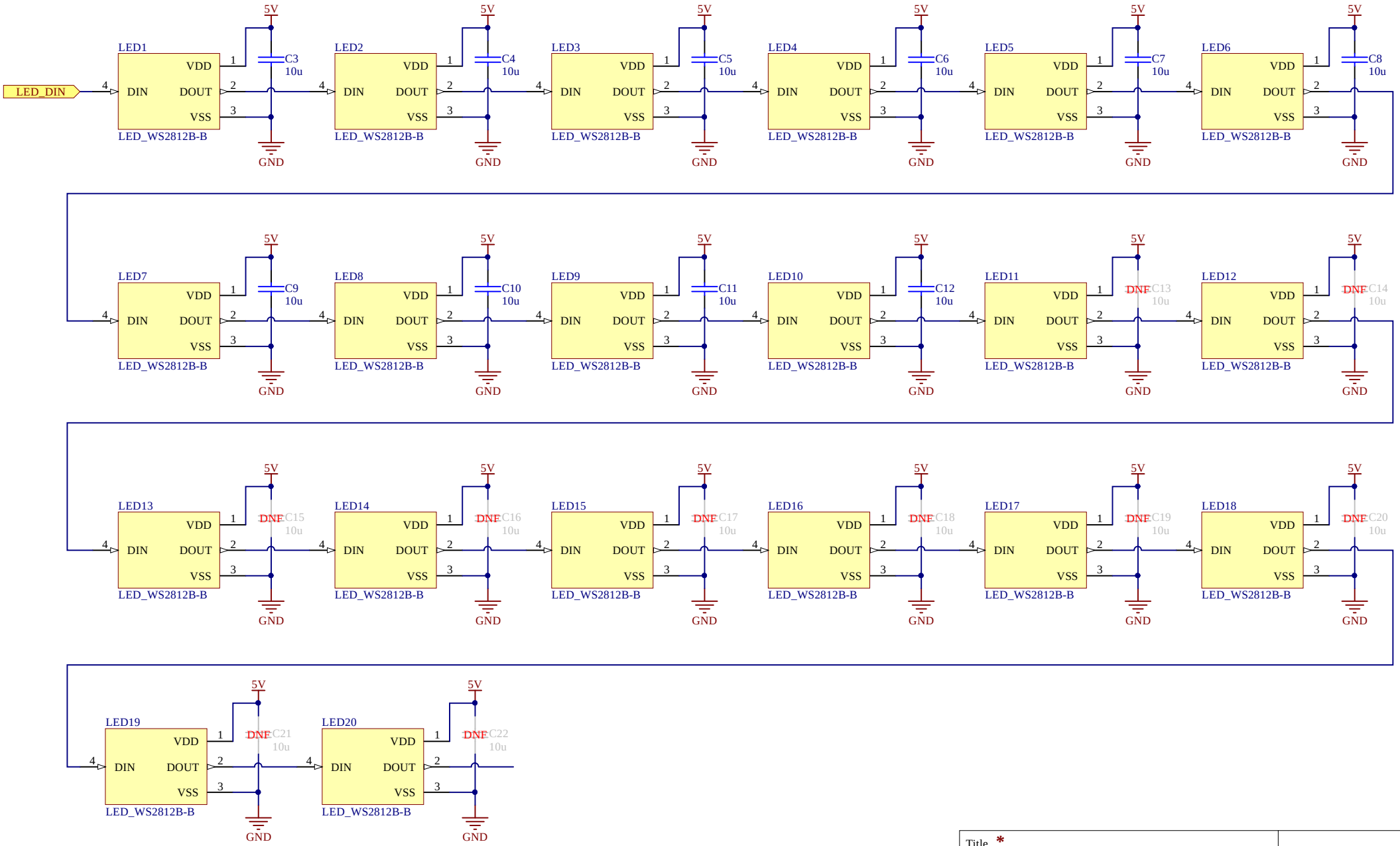



| | | |
|---|---|---|
| Title | | |
| Size: A4 | Number | Revision |
| Date: 2022-08-25 | | Sheet of |
| File: D:\FishWand\..\00-Top-layer.SchDoc | | Drawn By: |



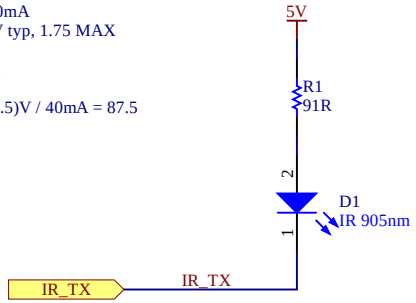

| | | | |
|---|---|---|---|
| Title * | | | FISHWAND |
| Size: A4 | Number:* | Revision:* | |
| Date: 2022-08-25 | | Sheet * of * | |
| File: 01-LED.SchDoc | | Drawn By: * | |

# SENSORS

## IR LED

Wavelength = 905nm
Imax = 70mA
Vf = 1.5V typ, 1.75 MAX

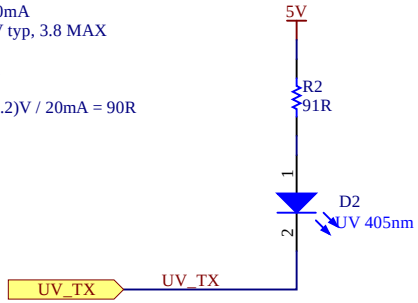
I = 40mA
V = 5V
R = (5 - 1.5)V / 40mA = 87.5




## UV LED

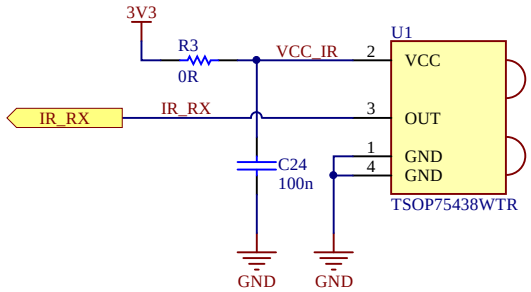
Wavelength = 405nm
Imax = 30mA
Vf = 3.2V typ, 3.8 MAX

I = 20mA
V = 5V
R = (5 - 3.2)V / 20mA = 90R



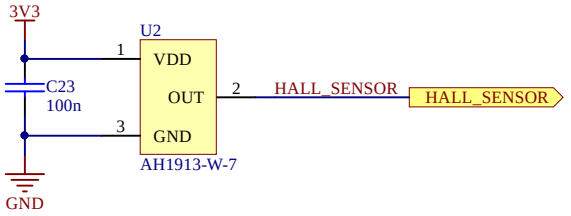

## IR RECEIVER

38Khz

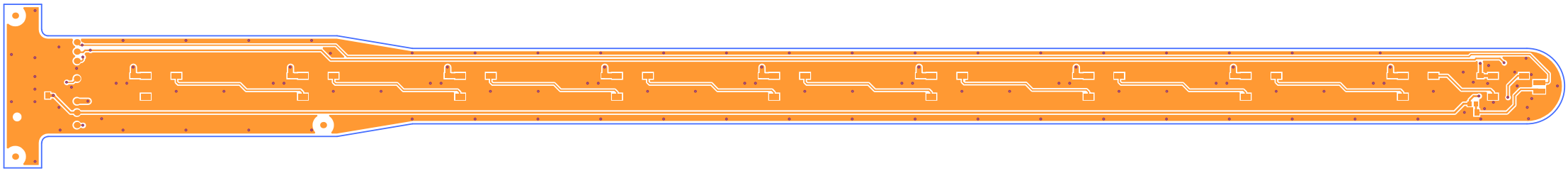


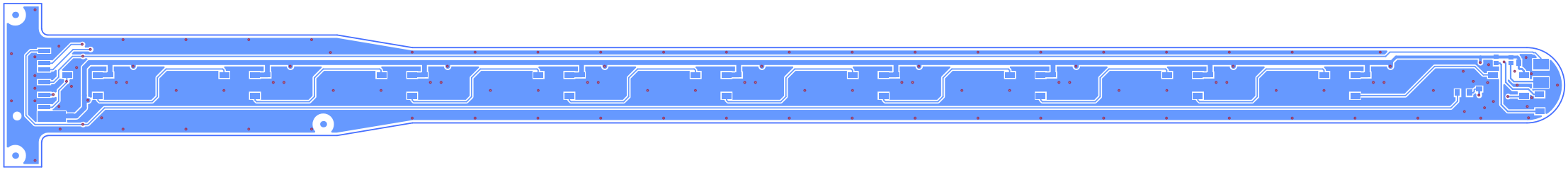

## HALL EFFECT SWITCH

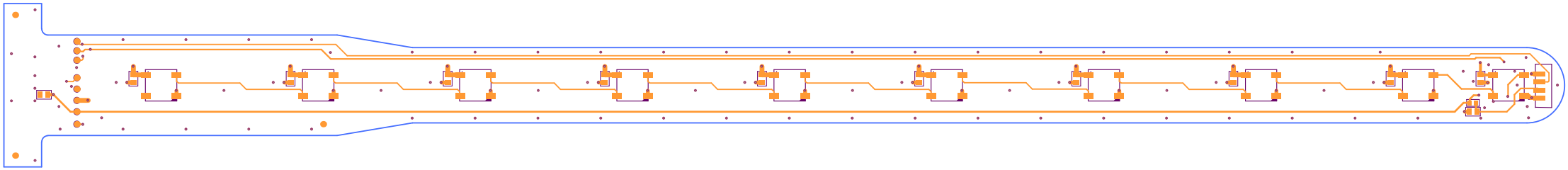
Active Low

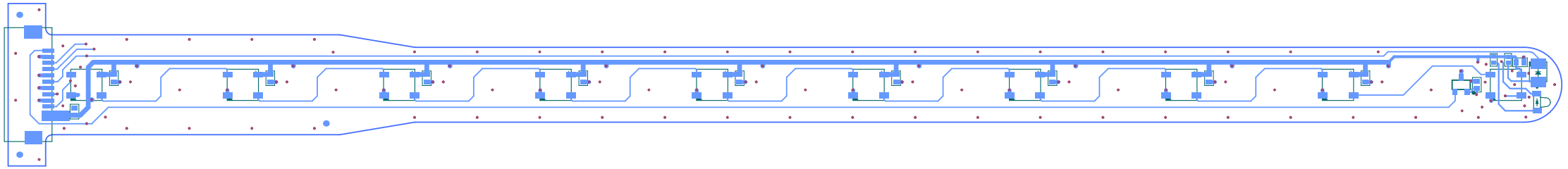


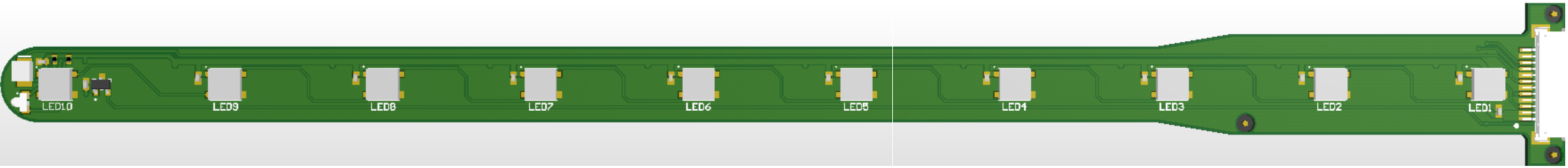

| | | | |
|---|---|---|---|
| Title | ***SENSORS*** | | FISHWAND |
| Size: A4 | Number:* | Revision:1 | |
| Date: 2022-08-25 | | Sheet * of * | |
| File: 02-SENSORS.SchDoc | | Drawn By: Trevor Charmley | |

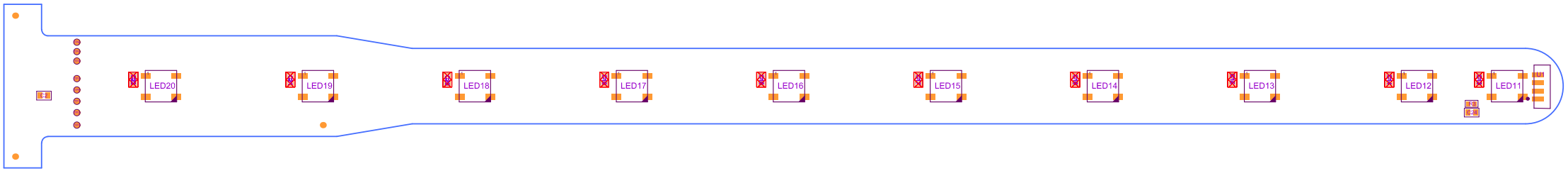


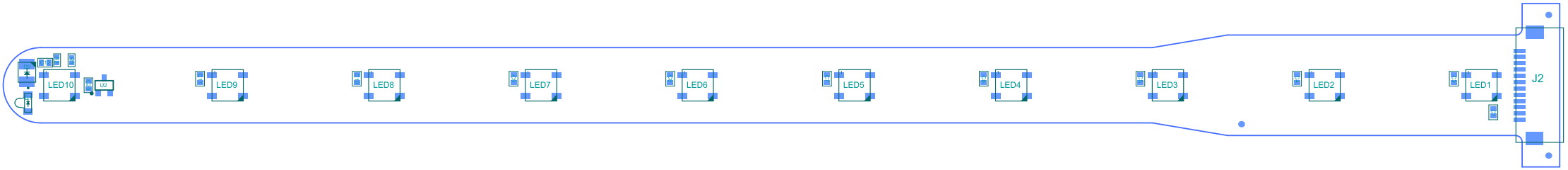







LED10
LED9
LED8
LED7
LED6
LED5
LED4
LED3
LED2
LED1


LED20
LED19
LED18
LED17
LED16
LED15
LED14
LED13
LED12
LED11


LED10
LED9
LED8
LED7
LED6
LED5
LED4
LED3
LED2
LED1
J2
U2

# Design Rules Verification Report

Filename : D:\FishWand\PCB\FishWandTip\FishWantTip\FishWantTip.CSPcbDoc

Warnings 0
Rule Violations 0

| Warnings | |
|---|---|
| Total | 0 |

| Rule Violations | |
|---|---|
| Clearance Constraint (Gap=0.2mm) (All),(All) | 0 |
| Width Constraint (Min=0.2mm) (Max=1816.048mm) (Preferred=0.2mm) (All) | 0 |
| Power Plane Connect Rule(Direct Connect )(Expansion=0.102mm) (Conductor Width=0.102mm) (Air Gap=0.102mm) | 0 |
| Short-Circuit Constraint (Allowed=No) (All),(All) | 0 |
| Un-Routed Net Constraint ( (All) ) | 0 |
| Minimum Annular Ring (Minimum=0.15mm) (All) | 0 |
| Hole Size Constraint (Min=0.2mm) (Max=6.3mm) (All) | 0 |
| Height Constraint (Min=0mm) (Max=1816.048mm) (Prefered=12.7mm) (All) | 0 |
| Hole To Hole Clearance (Gap=0.25mm) (All),(All) | 0 |
| Minimum Solder Mask Sliver (Gap=0.2mm) (All),(All) | 0 |
| Silk To Solder Mask (Clearance=0.127mm) (IsPad),(All) | 0 |
| Silk to Silk (Clearance=0.1mm) (All),(All) | 0 |
| Silk primitive without silk layer | 0 |
| Unpoured Polygon (Allow unpoured: False) | 0 |
| Unpoured Polygon (Allow unpoured: False) | 0 |
| Total | 0 |