

ESR Laser Cutting Update

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Materials

Genmitsu CFL55P Compressed Spot
Fixed Focus Laser Module

- 5.5W diode laser.

- Wavelength 445nm

Genmitsu 3018-PROVer V2 CNC Router
Machine

LaserGRBL Software

Fusion360 CAD Software



Additional Downloads Required

Download the following files at <https://github.com/mrodr324/Laser-Downloads>

Genimitsu Tool Library

- Genimitsu.tools

LaserGRBL/Fusion360 Post Process Configuration

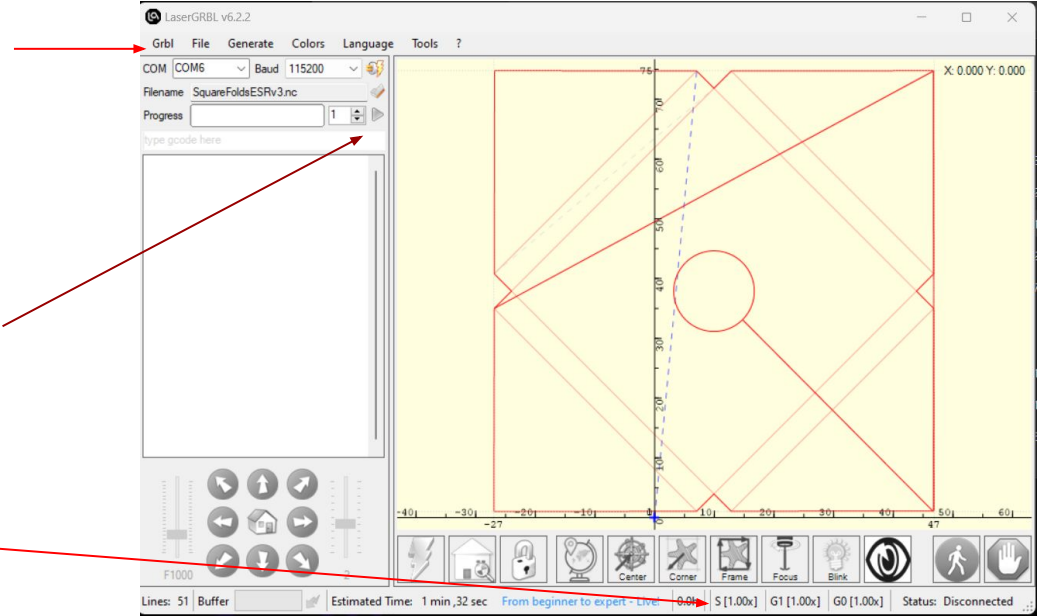
- grbl Laser.cps

LaserGRBL

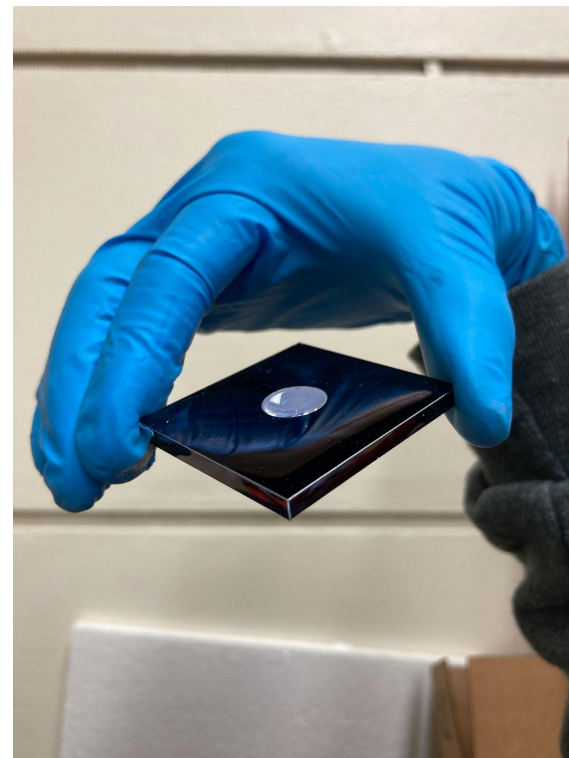
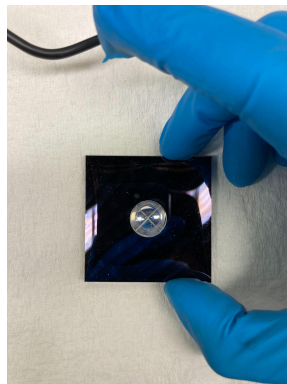
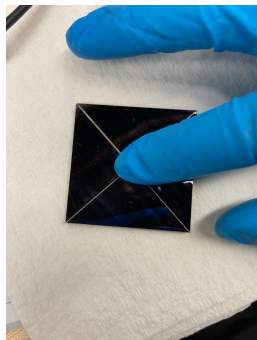
Open LaserGRBL. In Grbl menu select connect to connect to the laser.(Laser/cnc should be on and connected to usb)

Select file and open the nc file that was created.

Set the power to 0.5x



Results



Conclusions

Folding pattern for single SiPM-on-tile cell is cut without problem in ~2 min.

Future improvement include finding a way to produce these same results without having to the color in one side with black sharpie.

We have compiled a “Manual” to reproduce what we have so far (it is attached).

