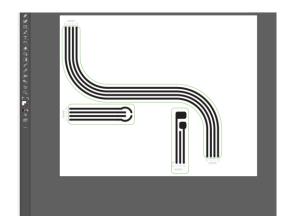
## **How It Works**

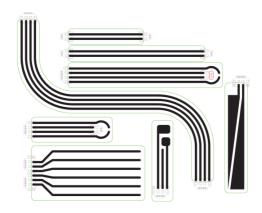
1



### **DESIGN YOUR FILE:**

Create a .DXF or .AI file of your component that follows our design rules

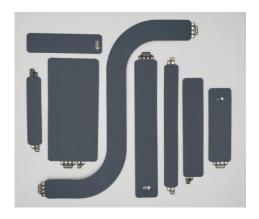
2



### **SUBMIT YOUR FILE:**

Send your file to <a href="https://www.lomia.com/lel-builder">www.lomia.com/lel-builder</a>
We will return with a quote and proof or file feedback within 1 week.

3



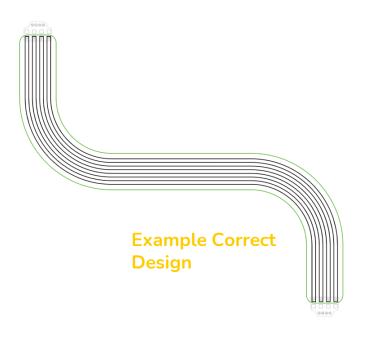
## **FUFILLMENT:**

We will build your part and ship within 2 weeks of payment



# **Design Rules and Component Information**

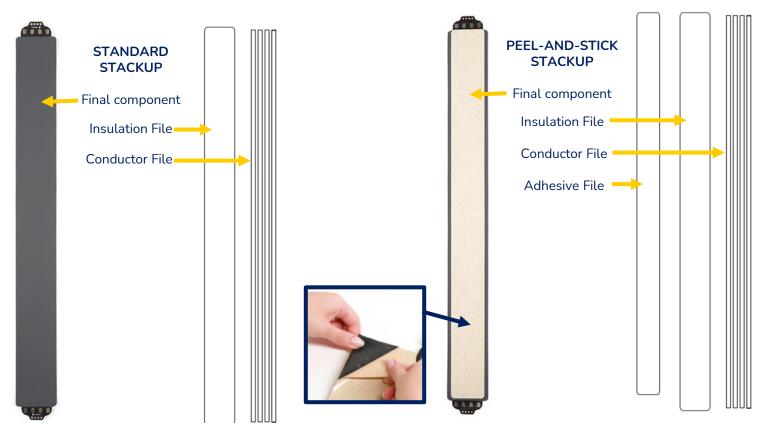
Max Part Size	11" x 19" or 279mm x 482mm			
Trace Termination	All traces must end in a .1" square to connect to a Loomia Flex PCB Termination			
Minimum feature size, trace width and spacing	0.1" or 2.54mm (this means no tapered off triangle features)			
File Layers	Each submission can include up to 4 layers: -Conductive trace file -Insulation file top - Insulation file bottom - Adhesive Outline (if you want a peel-and-stick piece)			
File Format	.DXF (saved as <mark>1" = 1")</mark> or .AI file			
Max Leads	6 traces			
Outlines	All lines must be converted into shapes			





# **Adhesive Options**

Components can be made as a standard component, or as a peel-and-stick component. If you would like a peel-and-stick adhesive added to your component, please submit a layer for the adhesive along with your submission



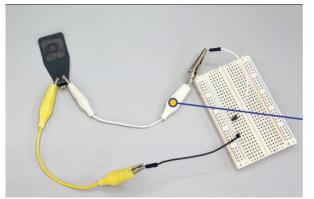


## **Termination**

All buses terminate in the Loomia Flex PCB connector.

If you would like a different termination, please contact us directly.

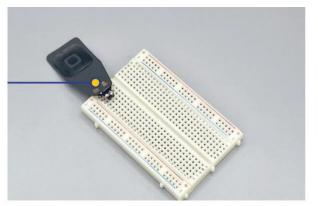
See all Loomia connectors in the appendix.



## CONNECTING: Alligator Clips

You can easily connect to any LOOMIA Part using alligator clips. Simply clip directly to the exposed pad to get a good connection.

This technique works well for experimentation where you are still broadly testing a circuit.



# \*Note, Image above shows clip pads in the insulation. This is an outdated design. Actual deliverables will have clip pads blow the insulation to avoid the risk of melting the TPU while soldering.

## CONNECTING: Headers

All LOOMIA Parts can be easily soldered to standard pitch headers. Simply solder them in to the bottom of the interconnect for easy breadboarding and attachments. Repetitive stress can break the interconnect, so this technique is best when your circuit is more settled. Do not use the component as a lever for removal from the breadboard - remove components by the headers, not the LEL portion.

CONNECTIONS



## Nominal Data and Technical Specs

## **Electrical Properties**

Max Voltage: 28V \*trace design may allow for more Max Current: 6A \*trace design may allow for more

#### Data Protocols:

### Interfaces which are OK with the LEL

- RS-485
- CAN
- LIN
- Short runs (<12") of I2C, SPI, UART depending on outside environmental influence

### Interfaces not generally recommended with the LEL

USB

HDMI

Ethernet

Standard LEL Assembly (12 square inches or 77 square centimeters)				
Number of layers	Weight (g)	Thickness (inch)	Thickness (mm)	
1	2.67	0.010	0.254	
2	4.17	0.016	0.406	
3	5.64	0.022	0.559	
4	7.10	0.028	0.711	
5	8.54	0.033	0.838	
6	9.97	0.039	1.00	



# **Customer Support**

Need help? Contact us anytime at www.loomia.com/contact-us

