
1. INTRODUCTION

This instruction sheet covers the use of the SAMTEC FireFly Insertion Tool CAT-IN-ECUO-02. This tool assists in the insertion of a FireFly cable into UEC5 & UCC8 connectors. Using adapters, this tool can be converted to fit Firefly cables equipped with standard aluminum heatsinks.

2. CUSTOMER SERVICE

Further tooling and product application assistance is available by contacting the **Samtec Application Service Line +1-800-726-8329 (+1-812-944-6733)** 8:00 AM to 5:00 PM eastern time. To expedite your inquiry, have the pertinent part numbers for the product and tooling.

3. DESCRIPTION

Each tool has the side marked with the tooling number. Make sure it matches the tooling number specified in this document.

4. INSTALLATION

The following steps are recommended for installing a FireFly cable:

1. Ensure that the latch located on the heat sink of the FireFly is in the up position, as seen in **Figure 1**.
 - a. Verify that the adapter in the Firefly Insertion Tool matches the the callout in the partnumber. (See **Appendix A** to find correct adapter for each part callout.)
2. Pick up the insertion tool and press the button located on the side, as seen in **Figure 2**.
3. Place the tool over the top of the FireFly and align the retention features inside the tool with the locations denoted by the orange boxes in **Figure 1**. NOTE: The tool should extend past the bottom of the FireFly.

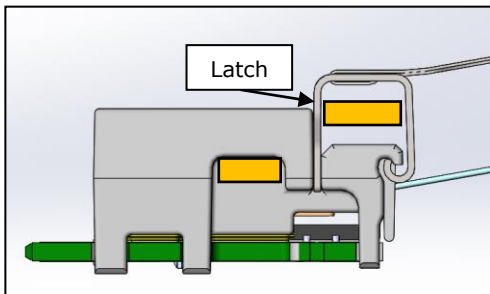


FIGURE 1

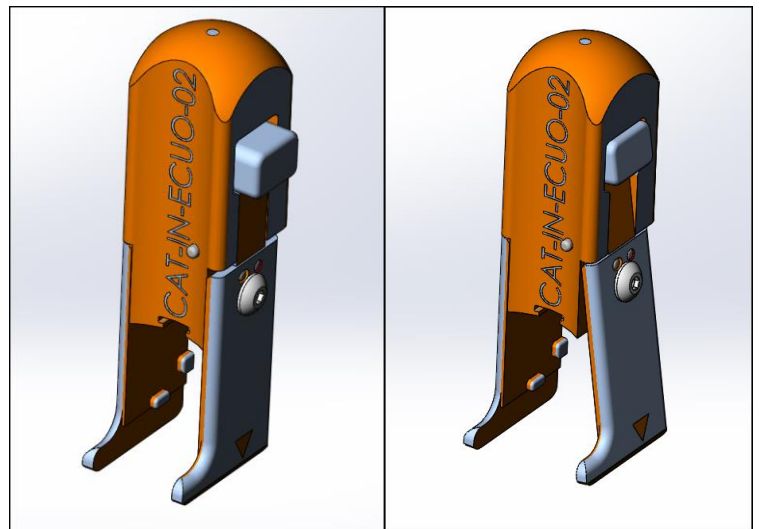


FIGURE 2

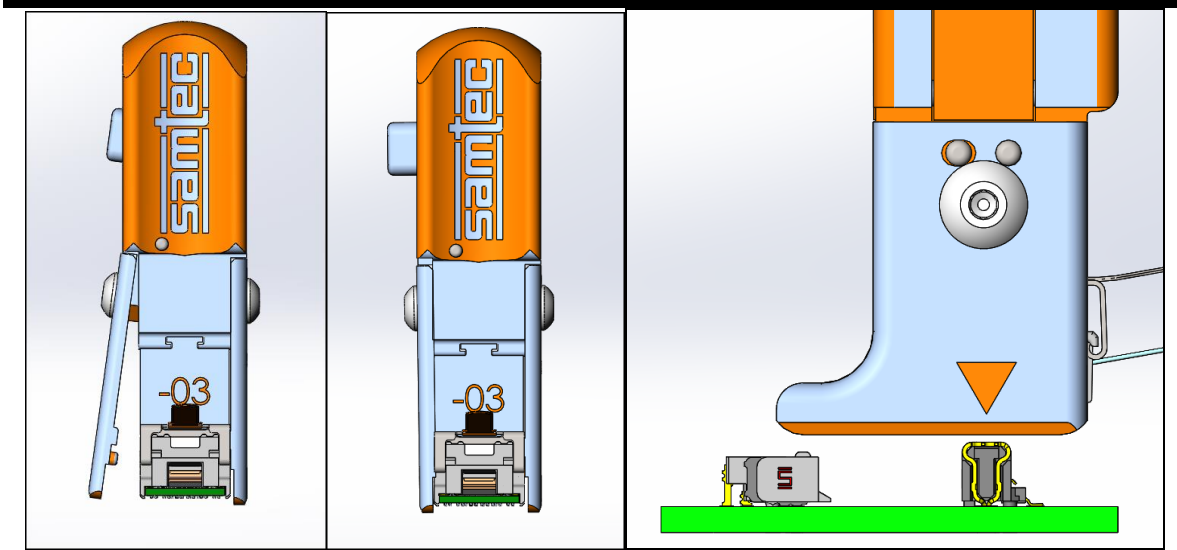


FIGURE 3

FIGURE 4

4. Release the button so that the FireFly is secured in the tool. The side of the tool should be flat as seen in **Figure 3**.
5. Align the arrow located on the sides of the tool over the middle of the UCC8 connector as shown in **Figure 4**. Then lower the tool until the bottom rests on the PCB.
6. Slide forward and mate the FireFly into the UEC5 connector.
7. Once the FireFly is securely mated with the connectors, press the side button and lean the tool slightly to the right and lift upwards. There should be no resistance when removing the tool properly.
8. Push the latch down to secure the FireFly in place.

5. REMOVAL

The following steps are recommended for removing a FireFly cable:

1. Lift the latch located on the heat sink of the FireFly to the up position as seen above in **Figure 1**.
2. Pick up the insertion tool and press the button located on the side, as seen above in **Figure 2**.
3. Place the tool over the top of the FireFly and align the retention feature inside the tool with the locations denoted by the orange boxes on **Figure 1**.
4. Release the button so that the FireFly is secured in the tool. The side of the tool should be flat as seen in **Figure 3**.
5. Slide the tool backwards until the FireFly has been unmated from the UEC5 connector.
6. Lift upwards to remove the Firefly from the UCC8 connector, as seen above in **Figure 4**.
7. Once the FireFly is unmated from the connectors, press the side button to release the FireFly.

**For video instructions of the insertion and removal process, see <https://vimeo.com/171574689>.

6. ADAPTER INSTALLATION

The following steps are recommended for installing or changing adapters:

1. Remove the screw and side panel as shown in **Figure 5**.
2. Slide the adapter into the slot on the front of the tool until it is flush with the tool surface as shown in **Figure 6**.
3. Replace the side panel by aligning the holes of the panel with the dowel pins on the tool.
4. Replace the screw and tighten to complete the installation.

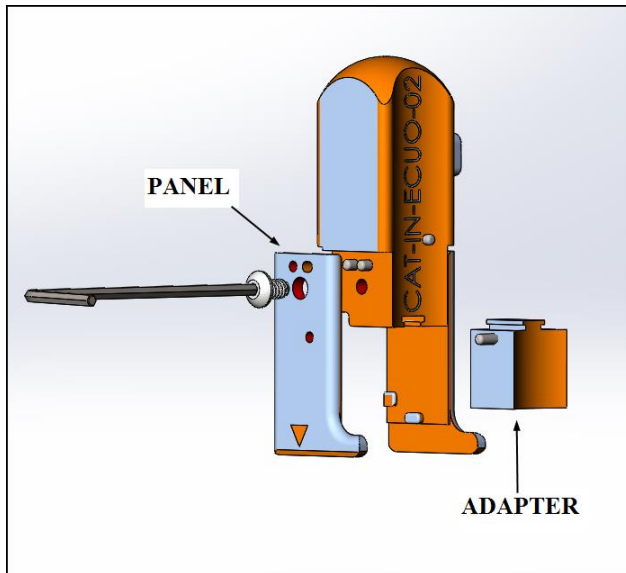


Figure 5

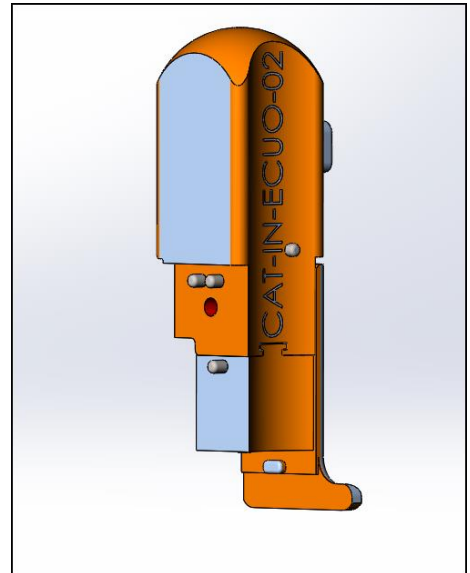


Figure 6

7. Compatibility

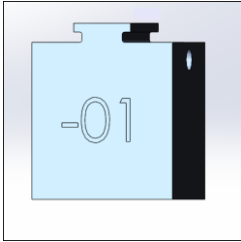
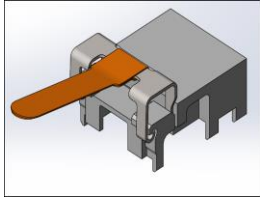
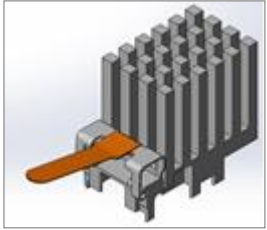

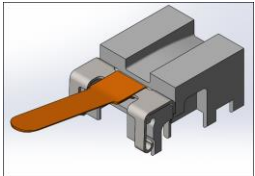
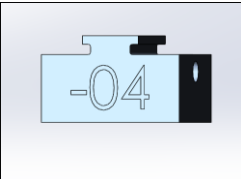
This installation tool is compatible with the following heatsinks:

- -1 Flat
- -2 Pin Fin
- -3 Flat with groove
- -4 PCIe® pin fin

It is not compatible with these heatsinks:

- -5 1.75 cm tall pin fin
- -6 1.75 cm tall straight fin
- -7 Orthogonal 1.75 cm tall straight fin

APPENDIX A: ADAPTER IDENTIFICATION

Adapter	Part Number	Heatsink Type
	<p>E*UO-XXX-XX-XXX-0-1-1-X-XX</p>	<p>Flat</p> 
<p>No Adapter Installed</p>	<p>E*UO-XXX-XX-XXX-0-2-1-X-XX</p>	<p>Pin Fin</p> 
	<p>E*UO-XXX-XX-XXX-0-3-1-X-XX</p>	<p>Flat with Groove</p> 
	<p>E*UO-XXX-XX-XXX-0-4-1-X-XX</p>	<p>PCIe® Pin Fin</p> 