

2019 Cost Update - Electronics

With the re-addition of the electronics to the cost report there are several items that will be added to the cost catalog for these components.

This update will include cost for

- PCBs
 - Electrical Components (i.e. resistors, capacitors, inductors)
 - Wire
 - Connectors
 - Process Charges
-

PCBs and Electrical Components

Due to the custom nature of electronics and the goal of cost event to provide an accurate and consistent prototype cost, we have developed a formula that should be used by teams when adding PCBs and the components mounted on them.

The formula is \$5 per square inch for a 2 layer PCB and \$10 per square inch for a 4 layer PCB. For the electrical components mounted, the cost is \$4 per square inch.

For example, a 2 layer PCB that is 4 square inches would have a total prototype cost of \$36 for the material.

Process cost will be \$0.05 for each soldered connection on the board.

Wire and Connectors

The cost of wire will be charged in the number for segments. The cost of each segment of wire is \$1.00. That will include the end preparation for insert it into a connector.

Connectors will be \$1.00, regardless of the number of wires or pins on the connector.

For example, a wire harness with 8 wires and a connector on each end will have a material cost of \$10. The length of the harness will not effect the cost of the harness.

Process cost has been upload to the catalog and is based on style of connector.

Items Not Covered

This document is for common and simple electrical components. Microcontrollers, screens/displays and other components should be submitted for addition to the cost catalog using the add item request process.

Thanks!

Remember to check for updated info at <https://bajasae.net/go/cost> and follow Baja SAE on social media to make sure you don't miss any updates through this transition period.
