

# 2019 Cost Update - Electronics

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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
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# PCBs and Electrical Components

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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.

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# Wire and Connectors

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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.

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# Items Not Covered

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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!

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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.

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