

Sullins Connector Solutions

Glossary

1. **.032” PCB Card Slot:** Thickness of daughter card the edgecard will accept.
2. **.062 PCB card slot:** Thickness of daughter card the edgecard will accept.
3. **.093” PCB card slot:** Thickness of daughter card the edgecard will accept.
4. **.125” PCB card slot:** Thickness of daughter card the edgecard will accept.
5. **Adjustable Insertion Force:** A style of edgecard where the insertion force can be adjusted by varying pin depth to achieve different insertion forces.
6. **Adjustable Row Spacing:** A style of edgecard where the pins, through an additional operation, can change the row spacing as needed and according to customer requirements.
7. **Back up spring:** In a half loaded parts, pins installed on the un-used side of the connector, to act as springs to maintain an acceptable insertion force for the daughter card.
8. **Bi-Level:** A connector containing two levels of contacts. This connector has 2 halves that have pins that mesh together, creating a double density connector, with staggering upper and lower pins.
9. **Cantilever:** A pin style where there is only one flex point on the pin.
10. **Card Edge:** A connector style where the connector acts as the mechanical interface between the mother and daughter cards, in a multi-board assembly.
11. **Card Extender Termination:** A termination style where the pins will straddle the motherboard on both sides. Is attached on the edge of the board horizontally.
12. **Card Slot:** The part of an edgecard connector that the daughter card is plugged into.
13. **Connector:** A device that is used to achieve electrical connections between devices & other electronics, such as circuit boards.
14. **Contact:** The pin enclosed in a connector that carries the electrical signal.
15. **Contact Area:** The area of the pin that makes contact with the mating connector\PC-Board.
16. **Contact Center:** The distance between contacts on a connector, as measured in length.
17. **Contact material:** The material that the pin or contact is made from. The most common contact materials used by Sullins are Beryllium Copper for high temperature and Phosphor Bronze for standard temperature.
18. **Contact Point:** The small point of a pin that is where the pin is making contact with the mating connector\PC-Board.
19. **Cross Competitors part #s:** The Sullins equivalent part that can be used as a replacement of a competitor’s part.
20. **Cycle:** The number of times a daughter card can be inserted and withdrawn from an edgecard connector before failure of the edgecard will occur.
21. **Daughter Card:** The circuit board that is plugged into the cardslot side of an edgecard connector.

- 22. Dip solder termination:** A termination style where the pins are usually short and straight. These are used for direct soldering into a motherboard.
- 23. Dual Row:** A connector that contains 2 rows of pins.
- 24. Edgecard:** See Card Edge
- 25. Eyelet contacts:** A type of termination where the pin has a hole through it for the purpose of soldering a wire to the contact.
- 26. Full Loop Contacts:** A contact type where the head of the contact loops around in a manner that the pin has 3 points
- 27. Hairpin Contacts:** A contact type where the contact has one loop over the top and comes down.
- 28. Half Load:** Edgecard where only one row of pins are loaded. This is used for situations where the customer's daughter card is only one sided.
- 29. Header:** A connector style that consists of straight pins (male) to insert into a socket header (Female)
- 30. High cycle:** A connector that can withstand a large amount (usually 500 or more) insertions and withdrawals of the mating connector\Daughter Card, before failure.
- 31. High density:** Connectors that have a small pin pitch; the pins are close together. Usually .050" or closer.
- 32. High Profile:** The connector series of Edgecards that have a height of .710"
- 33. High Temp:** A connector that can withstand temperatures of 150°C or higher
- 34. Injection molding:** The method used to create the connector housings. Molten plastic is injected into a mold, and cooled to a solid.
- 35. Insertion force:** the amount of force (usually measured in ounces) it takes to insert a daughter card into an edgecard, or amount of force for a connector set to be mated.
- 36. Insulator:** The housing which contains the contacts. Also referred to as connector body. Usually made of a combination of glass and plastic depending on temperature & customer requirements.
- 37. Lead Time:** The time it takes from the time an order is taken to the time the order is shipped to the customer.
- 38. Low insertion force:** A connector where the force required installing the mating connector\PC-Board is lower than normal. This is usually achieved by a spread head operation.
- 39. Low Profile:** The connector series of Edgecards that have an overall height of .431".
- 40. Mold Tooling:** The pieces of steel that make up the mold.
- 41. Mold:** The Steel tool that the molten plastic is injected into, to create the connector housing or insulator.
- 42. Molded Key:** Where, in the place of a pin, the cavity has plastic in its place. This is most commonly used as a clocking feature of the connector, allowing the daughter card to be installed in only one direction.
- 43. Mounting Styles:** The style of "ears" that are on the connector. These are on the ends of the connector. Different styles are available depending how the customer wants to mount the connector to their PCB.

- 44. Nickel Under plating:** A coating of Nickel that is applied to the connector pins. This is the first coating to be applied to protect the pin from corrosion, stop the copper from contaminating the gold\ tin, and to help the gold\ tin adhere better.
- 45. Open Cardslot:** An Edgecard where there are no lengthwise walls on the cardslot. This is used by customers who wish to have a long flat edge on their daughter card, and also for mounting end to end to make a long edgecard that could not be molded as one unit.
- 46. Part Marking:** The application of ink to the edgecard to identify its part number, Sullins Website, and the distinct 4 digit lot number for that part.
- 47. PCB:** Stands for "Printed Circuit Board". A flat plastic or fiberglass board on which interconnected circuits and Pitch
- 48. Plating:** The coating applied over the bare contact material to increase its electrical carrying capacity, protect the contact from corrosion, and give a material that the end user can solder to the PCB with.
- 49. Position:** The number of "sets" of pins on an edgecard connector.
- 50. Press Fit:** A connector that has a pin shape, such that it has an interference fit with the PCB during installation, allowing the customer to not have to use solder for connection.
- 51. Private label:** Labeling of a part as yours, but the part is made by a different manufacturer. This is done with permission from the Manufacturer
- 52. Right angle termination:** A connector or edgecard, where the pins on the termination side are bent at a 90° angle, so as the connector\edgecard sit parallel to the motherboard.
- 53. Row spacing:** The distance between the pins, located within the same position of an edgecard connector.
- 54. Selective plating:** The process of plating one area of a pin with gold, and another section with gold. Most commonly the area of the pin that will make contact with the mating PCB\ Daughter Card will be gold, and the portion of the pin that is to be soldered to the PCB will be tin.
- 55. Single Row:** An edgecard where there are both rows where the daughter card is inserted, but the termination side exits the insulator as a single row of pins.
- 56. Surface Mount:** A connector that has a pin shape allowing the component to be soldered to the PCB without its terminations having to go through the PCB.
- 57. Tail Length:** The length of the tail from the insulator. On a traveler this length will be listed as FB (From Body) or FS (From Standoff).
- 58. Termination:** The shape of the pin on the bottom side (Side to be soldered to the PCB).
- 59. Tooling:** The tools that are used to mold or assemble a connector.
- 60. Traceability:** Being able to track a part assembly from a barcode or serial number, back to all the information on where the components came from, and whom they were purchased from. Also used in the upward direction, of being able to know all connectors and customers a component has been integrated into.
- 61. Wire Wrap Termination:** a termination where the customer will be soldering wires to the termination pins of the connector. They are usually longer than other terminations. These pins are square, so that the corners of the square pins will "dig" into the customer's wire, and provide an electrically better solder joint.

62. Withdrawal force: The amount of force that is required to remove a daughter card connector from an edgecard connector.