

Product End of Life Notice

Epsilon EPS-8100 Family of Ethernet Switches

February 25, 2022



This notice contains important information about products which you or your company may have previously purchased from Diamond Systems (DSC). Please read this notice carefully, as this information may have a significant impact on your company's product design and manufacturing activities. DSC appreciates your business and understands the impact that this information may have, and we want you to be fully informed so that you can make the best decision for your particular situation. DSC's sales department is ready to answer your questions and provide assistance. A replacement product is available.

Part Numbers Affected

| | |
|--------------------|---|
| EPS-8100 | 8 port Ethernet switch, PC/104 form factor, with heat sink |
| EPS-8100-XT | 8 port Ethernet switch, PC/104 form factor, with heat spreader |
| 9110840 | 8 port Ethernet switch, PC/104 form factor, no thermal solution |
| 9110841 | 8 port Ethernet switch, PC/104 form factor, bottom side pin headers |
| 9110842 | 8 port Ethernet switch, PC/104 form factor, direct cable attachment |
| 9110843 | 8 port Ethernet switch, PC/104 form factor, custom heat spreader |
| 9110844 | 8 port Ethernet switch, PC/104 form factor, custom connectors |
| 9110845 | 8 port Ethernet switch, PC/104 form factor, with silicone conformal coating |

Explanation

The EPS-8100 family of Ethernet switches is no longer manufacturable due to the sudden end of life of critical sole-source power supply components by Intel. Although a last time buy program was announced, it did not materialize, and we have been unable to source parts except through brokers at exorbitant prices which we and our customers are not willing to pay. As a result we have fast tracked a replacement product that is directly form / fit / function compatible with the EPS-8100 but uses a different power supply circuit.

End of life mitigation options

Last Time Buy – A last time buy option is available for customers who are willing to pay for broker-sourced parts to build the board. Contact Diamond Systems Sales for pricing and leadtime information. Part availability changes rapidly. Any customer choosing this option will need to act quickly to place an order upon quotation and must be willing to pay up front for the broker-sourced parts. All orders for the original product are NCNR and will carry a 12 month warranty.

A small number of boards may be available from stock due to unsold units from the last production build. These units are first come first served.

Component Safety Stock – Customers may choose to purchase only the EOL components rather than the complete product and consign parts to Diamond Systems for production at a future date. There is a minimum order quantity of 100 units for production, and any such order will be NCNR and carry a 12 month warranty. Diamond cannot guarantee an indefinite availability of the product even with customer-consigned parts. This option should only be selected if the customer expects to build the product within the next 1-2 years.

Replacement Product – Diamond Systems is introducing a replacement product named EPS-8130 which is fully backward compatible with the original EPS-8100 family. More information on the new product is available here: <http://www.diamondsystems.com/products/eps8130>

The original EPS-8100 product information is here: <http://www.diamondsystems.com/products/epsilon8100>

Customers purchasing a custom version of EPS-8100 will need to contact Diamond Systems to obtain a new part number for future orders that indicate the new product.

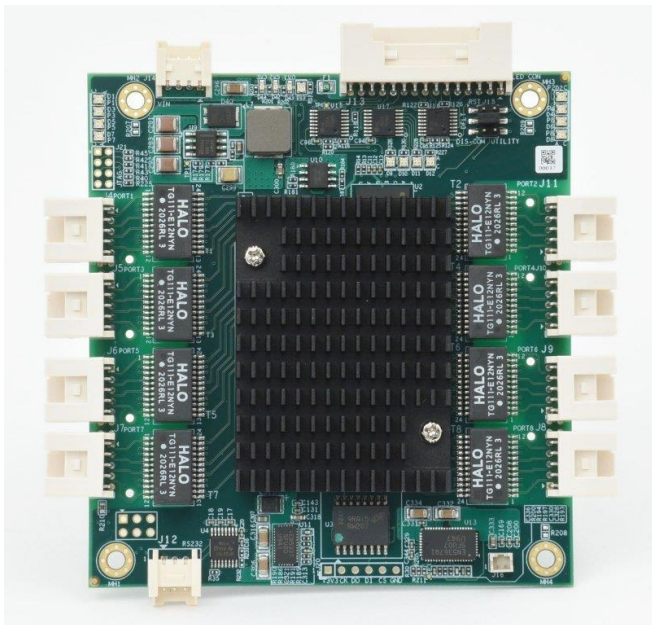
Differences between original and replacement products

The table below lists the differences between the original EPS-8100 and the replacement EPS-8130. These changes do not affect the performance or physical design of the product in any way except as indicated.

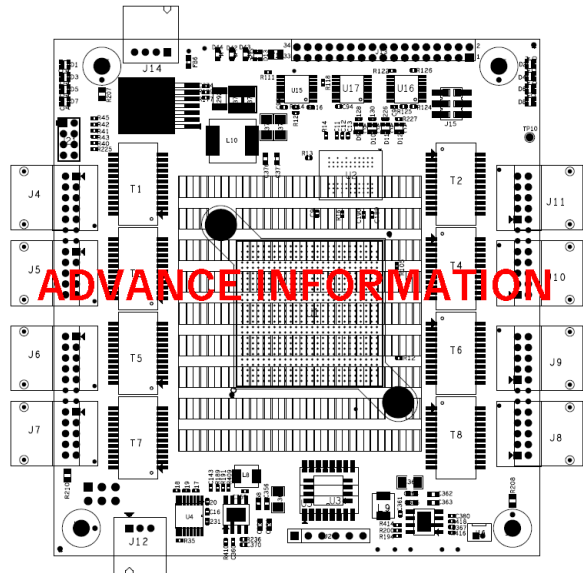
| Item | Changes | Reason for Change | EPS-8100 vs EPS-8130 |
|------|---|--|---|
| 1 | Updated 3.3V power section | Power section is redesigned for better manufacturability | Changed TPS54540 to LM22679TJE-ADJ/NOPB Input supply range is same as EPS-8100 (+5V to +36V) |
| 2 | Updated 2.5V power section | Power section is redesigned for better manufacturability | Changed EN5337QI to RT8073GSP |
| 3 | Updated 1.0V power section | Power section is redesigned for better manufacturability | Changed EN5366QI to RT8073GSP |
| 4 | Updated 1.8V power section | Power section is redesigned for better manufacturability | Changed AP7167-SPG-13 to MIC49150YMM |
| 5 | Updated the magnetics part in the design | Used a cost-effective part with better availability. | Changed the magnetics from TG111-E12NYNRLTR to LP82461ANL. Both the parts are footprint and functionally compatible and hence backward compatibility to EPS-8100 is still maintained. |
| 6 | Changed LED status connector J13 to 2x17 pin header instead of S30B-PUDSS-1(LF)(SN) | S30B-PUDSS-1(LF)(SN) part is difficult to purchase. Hence used pin header for better availability. | This 34-position pin header provides access to ethernet LED signals for each of the eight ports. The pinout is same as 30 pin EPS-8100 connector by keeping extra 4 pins NC (no connect) in EPS-8130. DSC cable 6981509 or a common 2mm pitch 2x17 ribbon cable can be provided to the customers who intend to make use of these signals. |
| 7 | Added a build option to support TTL logic level | Added as an alternate support in case of any customer requirements. | EPS-8130 has support to direct TTL logic or RS-232 mode with no hardware flow control. Logic level signals can provide extended support for any |

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| | signals for the RS-232 port. | | physical signal levels like RS-232/ RS-485/ RS-422 with the use of an appropriate transceiver. |
| 8 | Provided separate GPIO for restoring the default settings | Pin assigned for this feature in EPS-8100 had dual functionality and had logic conflict between LED pattern and restore default settings. | EPS-8130 supports restoring the factory configuration setting with the use of upgraded firmware. The functionality of the signal #DEFAULT connected to the J15 pin header is as follows: * Driven LOW (0): Restore factory configuration settings * Driven HIGH (1): Save configuration settings The firmware of EPS-8100 can be used if this functionality is not mandatory. |
| 9 | Added test points for power | To simplify debugging | Test points are placed at the board edge to facilitate easier testing and debugging. |
| 10 | Heat Sink redesign | To facilitate the component placement for the new design | The dimension of the heat sink designed for EPS-8130 is 51x45 mm whereas the one used for EPS-8100 is 55x40mm. Both heat sinks have the same height. The heat spreader remains the same as on EPS-8100. |

Product Images



Original EPS-8100 with heat sink



Replacement EPS-8130 drawing

(continued on next page)



EPS-8100-XT and EPS-8130-XT use the same heat spreader; no changes are required to the system enclosure to use the new product