# Product End of Life Notice Epsilon EPS-8100 Family of Ethernet Switches



Revised October 28, 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	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 from 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.

**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: https://www.diamondsystems.com/products/eps8130

The original EPS-8100 product information is here: https://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.

For more information please contact <a href="mailto:sales@diamondsystems.com">sales@diamondsystems.com</a>.

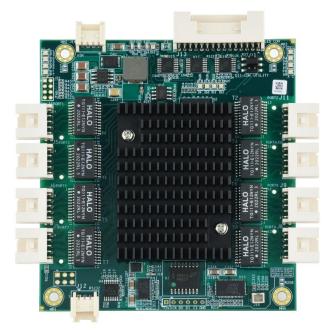
### Differences between original and replacement products

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

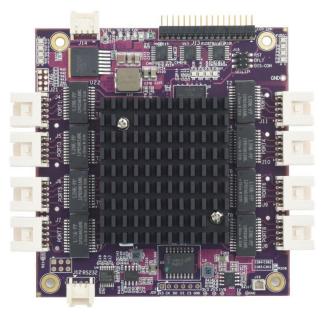
Item	Changes	Reason for Change	EPS-8100 vs EPS-8130
1	Updated 3.3V power section	Power section is redesigned for better manufacturability	Changed TPS54540 to LM22679TJE-ADJ/NOPB Input supply range is same as EPS-8100 (+5V to +36V)
2	Updated 2.5V power section	Power section is redesigned for better manufacturability	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 signals for the RS-232 port.	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 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	To simplify debugging	Test points are placed at the board edge to
	for power		facilitate easier testing and debugging.
			The dimension of the heat sink designed for EPS-
10	Heat Sink redesign	To facilitate the component	8130 is 51x45 mm whereas the one used for EPS-
		placement for the new	8100 is 55x40mm. Both heat sinks have the same
		design	height. The heat spreader remains the same as on
			EPS-8100.

## **Product Images**



Original EPS-8100 with heat sink



Replacement EPS-8130 with heat sink



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