



DESIGN KIT RELEASE

SEMICONDUCTORS / MAGNETICS



Bourns Releases New Design Kit for High-Speed Ethernet Lines with PoE++ Capabilities

Model POE-LAB1 Design Kit

Riverside, California – June 11, 2024 – Helping to streamline both the designing of power/data delivery and protection in Power over Ethernet (PoE) applications, Bourns announces the availability of its highly functional [POE-LAB1 Design Kit](#) created for high-speed Ethernet lines (up to 10 GbE) with PoE++ (Type 4) capabilities.

The kit includes advanced components from our extensive Semiconductor and Magnetic product lines. This synergistic approach gives developers a useful resource with a wide range of options that can satisfy a variety of power/data delivery and protection requirements specifically for their PoE designs.

The Bourns® POE-LAB1 Design Kit comes with 32 different products in various quantities so designers can explore how multiple product combinations can meet various PoE application specifications, all in a convenient single design kit.

The products in the kit include: Ethernet transformers, isolated DC-DC conversion transformers, a common mode choke, ferrite beads, single and bridge Schottky rectifier diodes, Bourns® TBU® and TCS™ high-speed protectors, diode arrays, and TVS diodes.

Power / Data Delivery

Product Type	Component Models Included
Ethernet Transformer	SM13126PEL, SM42P01EL, SM43001EL, SM51589PEL, SM51625EL, SM453230-231N7YP
DC-DC Conversion Transformer	POE072-PD13120S, POE070-PD13050S, PLN048-ED21A12S, POE028-FD20050S, POE12-PD13120S, POE012-EP13033S
Schottky Rectifier Diode (Bridge/Single)	CD-HD01, CD-HD201, CD-MBL106SL, CD-MBL108S, CD-MBL108SL, CD-MBL110SL, CD-MMBL110S, CD214B-B2100R, CD214B-B3100R

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Protection / Suppression

Product Type	Component Models Included
Common Mode Choke	SRF2012A-801Y
Ferrite Bead	MH3261-601Y
High-Speed Protector	TBU-DT085-300-WH, TCS-DL004-250-WH
Diode Array	CDNBS08-T58CC, CDSOD323-T05LC, CDSOT23-SRV05-4, CDSOT23-T05C, CDFN10-3304NA
TVS Diode	1.5SMBJ64A, 5.0SMDJ64A

Please visit the Bourns website at www.bourns.com/resources/design-tools/design-kits/ for additional details on Bourns® Design Kits. For more information on the specific models included in this kit, please view the product data sheets. Check out the website [Technical Library](#) for application notes, white papers, brochures and many other useful documents for our Semiconductor and Magnetic products.

Should you have any questions or need additional information, please feel free to contact [Customer Service/ Inside Sales](#).