

Press release

EBV Elektronik introduces high-voltage, single-phase BLDC motor controller solution based on Power Integrations' BridgeSwitch™ devices

Poing, Germany, 4th March 2021 – EBV Elektronik, an [Avnet](#) company (NASDAQ: [AVT](#)), demonstrates the design simplicity with the Power Integrations BridgeSwitch devices with the introduction of the EBV BridgeSwitch MB high-voltage, single-phase brushless DC (BLDC) motor control demonstrator and evaluation board. The fully-featured stand-alone solution can be powered directly from the mains AC. It requires no additional external components besides the BLDC motor, enabling engineers to quickly develop a highly cost-efficient and reliable design.

At the heart of the EBV BridgeSwitch MB solution is an integrated half-bridge device from Power Integrations. The BridgeSwitch device offers a rich set of features that simplify the development and production of high-voltage inverter-driven BLDC or IM applications. It supports inverter output power up to 400W with no heat sink and can achieve up to 99.2% efficiency while providing current, voltage and temperature protection circuitry.

The EBV BridgeSwitch demonstrator PCB's modular design has a break-away format, which enables each submodule to be physically separated and protected from the high-voltage components and the motor. An isolated programming/debugging interface reduces the risk of equipment damage and electric shock during development - even while the demonstrator is plugged directly into the mains, and where an isolating transformer is not available. The high voltage module includes an input rectifier that can accept DC or up to 220AC voltage and a switched output with two BRD1160C BridgeSwitch devices. This module also has an NTC header for remote thermal sensing and optional external current sensing circuitry.

"The EBV BridgeSwitch MB gives the engineer a fresh new start in developing their motor driver design," said Milan Ivkovic, Director Segment Analog/Power & Technical Support Center Manager at EBV Elektronik. "It overcomes the challenges engineers face when

developing specialised driver circuits, allowing them to focus more on application software as safety is handled by hardware.”

Comments Cristian Ionescu-Catrina, senior product marketing manager at Power Integrations: “BridgeSwitch half-bridge motor driver ICs eliminate heatsinks, feature best-in-class EMI performance, and reduce BOM count, typically by 50%. This is achieved by integrating functions such as junction temperature monitoring, motor current feedback and high voltage protection. Hardware-based motor fault protection circuitry reduces certification time to IEC-60335 and IEC-60730 by two to three months.”

For more information on the EBV BridgeSwitch MB high-voltage, single-phase BLDC motor control demonstrator and evaluation board, please visit :[EBV BridgeSwitch MB Blog Article](#) or www.ebv.com.

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About EBV Elektronik

EBV Elektronik, an Avnet (NASDAQ:AVT) company, was founded in 1969 and is the leading specialist in European semiconductor distribution. EBV maintains its successful strategy of personal commitment to customers and excellent services. 240 Technical Sales Specialists provide a strong focus on a selected group of long-term manufacturing partners. 120 continuously trained Application Specialists offer extensive application know-how and design expertise. With the EBVchips Program, EBV, together with its customers, defines and develops new semiconductor products. Targeted customers in selected growth markets will be supported by the Vertical Sales Segments. Warehouse operations, complete logistics solutions and value-added services such as programming, taping & reeling and laser marking are fulfilled by Avnet Logistics, EBV's logistical backbone and Europe's largest service centre. EBV operates from 65 offices in 29 countries throughout EMEA (Europe – Middle East – Africa). For more information about EBV Elektronik, please visit www.ebv.com.

About Avnet

Avnet is a global technology solutions provider with an extensive ecosystem delivering design, product, marketing and supply chain expertise for customers at every stage of the product lifecycle. We transform ideas into intelligent solutions, reducing the time, cost and complexities of bringing products to market. For nearly a century, Avnet has helped its customers and suppliers around the world realise the transformative possibilities of technology. Learn more about Avnet at www.avnet.com.

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