Press Release

May 16, 2017

SCHWEIZER presents innovation at PCIM 2017

- **Shunts for current measurement can now be embedded into the printed circuit board in combination with the p² Pack® ensuring further system advantages.**

Schramberg, May 16, 2017 –The SCHWEIZER p² Pack® allowing to embed power electronics semiconductors into the printed circuit board (PCB) is a preferred solution for future high current motor drives. This embedding technology does not only save valuable installation space but offers further system advantages such as: improved conduction losses (R_{DSon}) of the power electronics, improved thermal resistance and thermal impedance (R_{TH} und Z_{TH}) of the system, a low-inductive design, improved switching charcteristics, improved electromagnetic compatibility (EMC) as well as higher reliability.

Schweizer Electronic AG now takes the next integration step by embedding shunts in combination with a half bridge for the first time. Thus the components' thermal dissipation is optimised and further installation space can be saved, which is a considerable technical advantage in today's trend towards miniaturisation. First demonstrators of this innovation will be shown at the SCHWEIZER booth (hall 7, booth 240) on occasion of PCIM, taking place in Nuremberg from May 16 to 18, 2017.

Many power electronics applications, e.g. motors, use shunts for current measurement. A shunt is a low-resistance precision resistor, applied for measuring electric currents. The current passing the shunt triggers a proportional voltage drop, which is measured. Shunts so far have usually been mounted on the PCB. As a consequence, the resulting heat has to be conducted through the substrate PCB first before reaching the cooling system.

Technical details for embedded shunts
Resistance values 0.05 up to 0.1 mΩ
Currents: 0 - 300 A
Voltage drop: 0.5 – 30 mV
Dissipation: 4.5 – 9 W
Temperature rise: 3 – 5 K
Contact resistance: < 1% of precision resistor.

Contact:
Christina Blake| Media & Communications | Schweizer Electronic AG | Einsteinstraße 10 | 78713 Schramberg
Phone: + 49 7422 / 512-213 | Fax: + 49 7422 - 512 777 213 | Mobile: + 49 151 - 15119010
E-mail: Communications@schweizer.ag | Please visit our website: www.morethanPCBs.com

Press Release

May 16, 2017

About Schweizer

Schweizer Electronic AG stands for state-of-the-art technology and consultancy competence. SCHWEIZER's premium printed circuit boards and innovative solutions and services for automotive, solar, industry and aviation electronics address key challenges in the areas of Power Electronics, Embedding and System Cost Reduction. Its products are distinguished for their superior quality and their energy-saving and environmentally-friendly features. Together with its partners WUS Printed Circuit (Kunshan) Co., Ltd., Meiko Electronics Co. Ltd. and Elekonta Marek GmbH & Co. KG the company offers in its division electronics cost- and production-optimised solutions for small, medium and large series. Together with its partner Infineon Technologies AG, SCHWEIZER plans to jointly tap the chip embedding market in future.

With 787 employees SCHWEIZER achieved sales of 116.1 million euro in Fiscal Year 2016 (ending December). The company was founded in 1849, is managed by the family and listed at the Stuttgart and Frankfurt Stock Exchanges (ticker symbol „SCE", „ISIN DE 000515623").

For further information please contact:

Christina Blake
Schweizer Electronic AG
Einsteinstraße 10
78713 Schramberg
Phone: +49 7422 / 512-213
Fax: +49 7422 / 512-777-213
E-mail: communications@schweizer.ag
Please visit our website: www.morethanPCBs.com