

600Amp Half-Bridge Development Platform

6 x V22 in parallel with excellent current sharing capability

VisIC Technologies, a GaN power semiconductor device leader in the fast-developing automotive, data centers and industrial markets, today announced the availability of its 6 x V22N65A half bridge paralleling development platform. 600 Ampere peak current at 500V bus voltage could be achieved with this board. The board is designed for optimal current sharing with inductance compensation between the 6 parallel devices. This platform is an ideal tool to start a high current, high power inverter drive train design used in Electrical Vehicles (EV), high power off-board chargers, large UPS systems, solar farms and industrial motor drives.



The development platform provides a great tool to test VisIC devices in a paralleling configuration for high power systems with high power density. It makes it possible for designers to speed up the design of a parallel system using the parallel development board as reference.

VisIC Direct-Drive D-Mode GaN technology (D³GaN technology), reliable and commercially available, simplifies the design by using standard off-the-shelf drivers. The high +5V threshold voltage of the D³ GaN products enhances device immunity to high noise conditions, leading to a much more reliable, simpler and manufacturable power system design. It's the first time that such a powerful GaN development platform is available on the market.



The development platform uses twelve 22mOhm, 650V GaN transistors, V22N65A, in a half bridge paralleled configuration. It supports the flexibility to use between 2 to 6 devices in parallel for different current and power targets. Furthermore, the frequency can be adjusted up to 100kHz. Compared to SiC, MOSFET or IGBT transistors, this represents an improvement of up to 50% in power losses. The reduced thermal resistance leads to significant simplifications of the cooling design and system cost savings in any high-power application.

“We are excited to announce this high current paralleling development platform to help our customers accelerate the design cycle for a new set of high-power applications using VisIC’s GaN technology.”, says Ran Soffer, VisIC’s SVP Sales & Marketing. “Our V22 device with VisIC’s D³GaN technology is the most reliable and simple to use and integrate in high power systems for automotive and other market segments. This platform proves the benefits and improvements VisIC’s GaN technology can bring to xEV drive trains, supercharger stations and high-power industrial applications.”

To meet the ever-increasing climate challenge, the use of VisIC’s GaN devices will be a significant contributor to tomorrow’s leading-edge efficient automotive, green energy and industrial power systems.

Meet us at PCIM Europe 2019: 5-7 May, Nuremberg, booth 9-137.

About VisIC Technologies:

Based in Israel, VisIC Technologies, Ltd. was established by experts in Gallium Nitride (GaN) technology to develop and market advanced GaN-based power conversion products. VisIC has successfully developed, and is bringing to market, high power GaN-based transistors and modules. (GaN is expected to replace most of the Silicon-based (Si) products currently used in power conversion systems). Its high efficiency and reliable products designed for high power conversion for hybrid and electric vehicles, Data-centers, renewable energy and industrial motors. VisIC has been granted keystone patents for GaN technology and has additional patents pending. For more information about VisIC Technologies please visit www.visic-tech.com.

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