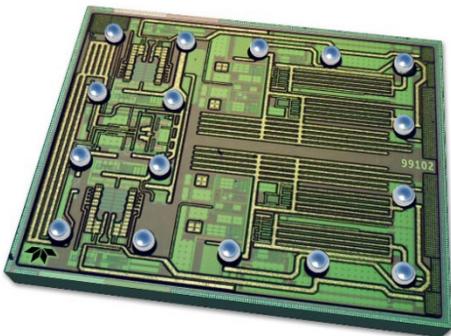


Teledyne e2v HiRel Announces New 100 V High-Speed 20 MHz FET and GaN Transistor Driver Flip Chip Die

Radiation Tolerant Driver is Ideal for Space, Defense and Avionic Markets Where Size, Weight and Power are Critical



TELEDYNE e2v
HIREL ELECTRONICS
TD99102 100 V, 20 MHz GaN Driver



MILPITAS, CA – March 3rd, 2022 – [Teledyne e2v HiRel](#) announces the new TD99102 UltraCMOS® High-speed FET and GaN transistor driver offering very high switching speed of 20 MHz. The new flip-chip part is ideal for driving Teledyne HiRel's 100 V high reliability GaN HEMT devices in DC-DC, AC-DC converters, orbital Point-of-Load (POL) modules and space motor drives.

The [TD99102](#) is an integrated high-speed driver designed to control the gates of external power devices such as enhancement mode gallium nitride (GaN) High Electron Mobility Transistor (HEMT) and power MOSFETs. The outputs of the TD99102 are capable of providing switching transition speeds in the sub-nanosecond range for switching applications up to 20 MHz. The TD99102 is optimized for matched dead time and offers best-in-class propagation delay to improve system bandwidth. High switching speeds result in smaller peripheral components and enable innovative designs for high

reliability orbital motor driver and POL applications. The TD99102 is available as a bumped, flip chip die to enable minimum design footprint required for high-speed switching power applications.

The TD99102 is manufactured on Peregrine's UltraCMOS® process, a patented advanced form of silicon-on-insulator (SOI) technology, offering the performance of GaAs with the economy and integration of conventional CMOS. It features 100 krad(Si) Total Ionizing Dose (TID), Single Event Latch-up (SEL) immunity and dead-time control, the new product offers 2A peak source and 4A peak sink current.

"We've been asked for drivers that get the most out of our 100 V GaN HEMT transistors" said Mont Taylor, VP of Business Development for Teledyne e2v HiRel. "The TD99102's fast edge speeds and radiation tolerance make them ideal for the latest LEO and MEO constellations where efficiency is key".

The TD99102 is available for ordering and immediate purchase from Teledyne e2v HiRel or an [authorized distributor](#).

##

ABOUT TELEDYNE e2v HIREL ELECTRONICS

Teledyne HiRel's innovations lead developments in space, transportation, defense, and industrial markets. HiRel's unique approach involves listening to the market and application challenges of customers and partnering with them to provide innovative standard, semi-custom or fully custom solutions, bringing increased value to their systems. For more information, visit <http://www.tdehirel.com>

ABOUT TELEDYNE DEFENSE ELECTRONICS

Serving Defense, Space and Commercial sectors worldwide, Teledyne Defense Electronics offers a comprehensive portfolio of highly engineered solutions that meet your most demanding requirements in the harshest environments. Manufacturing both custom and off-the-shelf product offerings, our diverse product lines meet emerging needs for key applications for avionics, energetics, electronic warfare, missiles, radar, satcom, space, and test and measurement. www.teledynedefenseelectronics.com/

Media Contact:

Sharon Fletcher
Teledyne Defense Electronics
+1 323-241-1623 sharon.fletcher@teledyne.com