

FOR IMMEDIATE RELEASE

Media Contact: Mina Galvan
Tel: 408.789.3233
Email: mina.galvan@aosmd.com

Alpha and Omega Semiconductor Introduces latest 80V Power MOSFET with Shield Gate Technology

SUNNYVALE, Calif., Nov. 16, 2021 – [Alpha and Omega Semiconductor Limited](#) (AOS) (Nasdaq: AOSL), a designer, developer, and global supplier of a broad range of power semiconductors, power ICs, and digital power products, today announced the release of our latest 80V Power MOSFET using patented Shield Gate Technology which is optimized for higher switching frequencies used in telecom and server power supply to achieve higher efficiency compared to the previous generation. The new 80V Power MOSFET technology has lower switching losses in hard switching, topologies and have less voltage overshoot than the previous generation. This improved performance from light load operation and throughout the load range results in easier design choices for high-efficiency applications. The 80V MOSFET family of devices offers the highest levels of power density and energy efficiency, which are essential in solar, power supplies, and battery power applications such as in eScooters.

[AONR66820](#) and [AONS66811](#) are Power MOSFETs in DFN3.3x3.3 and DFN 5x6 package, respectively. AONR66820 is perfectly suited for isolated DC-DC converters used in telecom applications. AONS66811 is appropriate for synchronous rectification and provides improved reverse recovery charge and reduced voltage overshoot, which provides higher efficiency and more robustness to the power supply.

The [AOTL66810](#) (80V) in TOLL package has approximately 25% smaller footprint than a standard wire-bonded TO-263 (D2PAK) package. This new device offers a higher power density compared to existing solutions. It is ideally suited for industrial BLDC motor applications and battery management to reduce the number of MOSFETs in parallel. The AOTL66810 has a 1.25mOhms max at 10Vgs with a maximum drain current of 420A at 25°C. The pulsed current at 1700A, is limited by the maximum junction temperature of 175°C.

“With the significant performance improvement with clip technology in a robust TOLL package enables higher current density and higher current capability. The AOTL66810 simplifies new designs to enable savings in overall system cost due to a reduced number of devices in parallel. AOS’s TOLL package is best suited for high power applications,” said Peter H. Wilson, Director of LV/MV MOSFETs at AOS.

Technical Highlights

Part Number	Package	V _{DS} (V)	V _{GS} (±V)	Continuous Drain Current (A)	Pulsed Drain Current (A)	R _{DS(ON) Max (mOhms) @10V}
AOTL66810	TOLL	80	20	420	1700	1.25
AONS66811	DFN5x6	80	20	200	410	2.1
AONR66820	DFN3.3x3.3	80	20	50	150	7.2

Pricing and Availability

AOTL66810, AONS66811 and AONR66820 are immediately available in production quantities.

About AOS

Alpha and Omega Semiconductor Limited, or [AOS](#), is a designer, developer, and global supplier of a broad range of power semiconductors, including a wide portfolio of [Power MOSFET](#), [IGBT](#), [IPM](#), [TVS](#), [HVIC](#), [SiC/GaN](#), [Power IC](#), and [Digital Power](#) products. AOS has developed extensive intellectual property and technical knowledge that encompasses the latest advancements in the power semiconductor industry, which enables us to introduce innovative products to address the increasingly complex power requirements of advanced electronics. AOS differentiates itself by integrating its Discrete and IC semiconductor process technology, product design, and advanced packaging know-how to develop high-performance power management solutions. AOS's portfolio of products targets high-volume applications, including portable computers, flat-panel TVs, LED lighting, smartphones, battery packs, consumer and industrial motor controls, automotive electronics, and power supplies for TVs, computers, servers, and telecommunications equipment. For more information, please visit www.aosmd.com.

Forward-Looking Statements

This press release contains forward-looking statements based on current expectations, estimates, forecasts, and projections of future performance based on management's judgment, beliefs, current trends, and anticipated product performance. These forward-looking statements include, without limitation, references to the efficiency and capability of new products and the potential to expand into new markets. Forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. These factors include, but are not limited to, the actual product performance in volume production, the quality and reliability of the product, our ability to achieve design wins, the general business and economic conditions, the state of the semiconductor industry, and other risks as described in the Company's annual report and other filings with the U.S. Securities and Exchange Commission. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, level of activity, performance, or achievements. You should not place undue reliance on these forward-looking statements. All information provided in this press release is as of today's date unless otherwise stated, and AOS undertakes no duty to update such information, except as required under applicable law.

###