



Three-Level Configurable Slew-Rate Controlled Power Switch from Diodes Incorporated Simplifies and Enhances Power-Rail Management in Solid State Drives

Plano, Texas – December 16, 2022 – Diodes Incorporated (Diodes) (Nasdaq: DIOD) has introduced a new versatile single-channel high-side power switch. The DIODES™ [AP22980](#) features three different selectable slew rates, so that wider capacitance loads can be handled while keeping inrush currents down, ensuring system stability. This power switch is targeted at the solid-state data storage systems used in portable electronic equipment, computer hardware, and edge-based data center deployments.

The N-channel MOSFET, with a built-in charge pump inside the AP22980, has an extremely low $R_{ds(ON)}$ of 5.1m Ω enabling loads reaching 6A while minimizing voltage drops and power losses in high current loading applications. By having a separate VBIAS pin, the minimum input voltage that it is capable of supporting is significantly lower, resulting in a wider input voltage range that can be covered - from 0.285V to 5.5V - enabling greater application flexibility.

With 60 μ A (typical) quiescent supply current, the AP22980 is highly optimized for situations where keeping standby power consumption down is a priority. This device has an operational temperature range of -40°C to 105°C. If the junction temperature exceeds 150°C, an overtemperature protection mechanism is triggered.

The [AP22980](#) three-level selectable slew rate power switches are supplied in the compact W-QFN1520 package that takes up little board space and eases integration. These devices are available at \$0.27 in 1000 piece quantities.

About Diodes Incorporated

Diodes Incorporated (Nasdaq: DIOD), a Standard and Poor's SmallCap 600 and Russell 3000 Index company, delivers high-quality semiconductor products to the world's leading companies in the consumer electronics, computing, communications, industrial, and automotive markets. We leverage our expanded product portfolio of discrete, analog, and mixed-signal products and leading-edge packaging technology to meet customers' needs. Our broad range of application-specific solutions and solutions-focused sales, coupled with worldwide operations of 32 sites, including engineering, testing, manufacturing, and customer service, enables us to be a premier provider for high-volume, high-growth markets. For more information visit www.diodes.com.

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