

NEWS RELEASE

Power Integrations Introduces InnoSwitch4-CZ Flyback Switcher ICs for a New Class of Mobile Charging Devices

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Anker selects zero voltage switching InnoSwitch4-CZ ICs with PowiGaN technology for new ultra-compact 30, 45 & 65 W USB-C Nano II charger series

SAN JOSE, Calif.--(BUSINESS WIRE)-- **Power Integrations** (Nasdaq: **POWI**), the leader in high-voltage integrated circuits for energy-efficient power conversion, today announced the **InnoSwitch™4-CZ** family of high frequency, zero voltage switching (ZVS) flyback switcher ICs. InnoSwitch4-CZ devices incorporate a robust 750 V primary switch using Power Integrations' PowiGaN™ technology and a novel high frequency active clamp flyback controller to facilitate a new class of ultra-compact chargers suitable for phones, tablets, and laptops. The first consumer devices based on InnoSwitch4-CZ devices were introduced earlier today by Anker, the global charging experts for mobile devices, through a YouTube Live event which can be accessed [here](#).

Power Integrations Introduces InnoSwitch4-CZ Flyback Switcher ICs for a New Class of Mobile Charging Devices (Photo: Business Wire)

Balu Balakrishnan, CEO of Power Integrations said: "The introduction of the InnoSwitch4-

CZ family of ICs marks a significant milestone for GaN technology. PowiGaN switches, in conjunction with our active clamp solution – ClampZero™, enable a highly efficient design and an extremely compact form-factor. We're pleased to have worked closely with the Anker team to bring this new class of mobile charger to market."

Steven Yang, CEO at Anker added: "We are excited to work with Power Integrations as their exclusive launch partners for their InnoSwitch4 chipsets. The InnoSwitch4-CZ was a natural choice for Anker's new Nano II series of USB-C chargers. Its outstanding levels of integration and efficiency are key to the Nano II series' extremely compact

design.”

Note to editors: View a short video on the InnoSwitch4-CZ [here](#).

The InnoSwitch4-CZ family incorporates 750 V switch, primary and secondary controllers, ClampZero interface, synchronous rectification, and safety-rated feedback in a single, compact InSOP-24D package. A steady state switching frequency of up to 140 kHz minimizes transformer size, further increasing power density. In contrast with older active clamp flyback approaches, the InnoSwitch4-CZ and ClampZero combination provides up to 95% efficiency and maintains very high efficiency across variations in line voltage, system load and output voltage. This is achieved with variable frequency asymmetrical control of the active clamp with intelligent zero-voltage switching, enabling both discontinuous and continuous conduction modes of operation, greatly enhancing design flexibility and maximizing efficiency across the entire operating envelope. The new flyback switcher ICs enable exceptional CV/CC accuracy, independent of external components, and consume less than 30 mW no-load including line-sensing safety and protection features.

Targeting high efficiency compact USB PD adapters, high-density flyback designs up to 110 W and high-efficiency CV/CC power supplies, InnoSwitch4-CZ ICs provide variable output voltage and constant current profiles. Devices are fully protected featuring auto-restart or latching fault response for output over-voltage and under-voltage protection, multiple output under-voltage fault thresholds and latching or hysteretic primary over-temperature protection.

Availability & Resources

A technical overview video of the InnoSwitch4-CZ and ClampZero devices is available [here](#). The new InnoSwitch4-CZ ICs are priced at \$3.85 per unit in 10,000-unit quantities. For further inquiries contact a Power Integrations sales representative.

About Power Integrations

Power Integrations, Inc. is a leading innovator in semiconductor technologies for high-voltage power conversion. The company’s products are key building blocks in the clean-power ecosystem, enabling the generation of renewable energy as well as the efficient transmission and consumption of power in applications ranging from milliwatts to megawatts. For more information, please visit www.power.com.

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Media Contact

Diane Vanasse

Power Integrations

(408) 242-0027

diane.vanasse@power.com

Press Agency Contact

Nick Foot

BWW Communications

+44-1491-636 393

nick.foot@bwwcomms.com

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