



Market News

700 V CoolMOS™ P7 family from Infineon for quasi resonant flyback topologies

Munich, Germany – January 17, 2017 – Infineon Technologies AG (FSE: IFX / OTCQX: IFNNY) developed the new 700 V CoolMOS™ P7 family to serve today's and tomorrow's trends in quasi resonant flyback topologies. These new MOSFETs offer unmatched performance improvements compared to currently used superjunction technologies. Soft switching topologies like smart phone and tablet chargers but also [notebook adapters](#) profit from this advantage. Additionally, the new CoolMOS supports fast switching and high power density designs for [TV adapters](#), lighting, [Audio](#), and Aux power. The new family conveys an improved form factor for very slim designs.

Compared to competitor parts the new 700 V CoolMOS P7 technology delivers reduced switching losses (E_{OSS}) from 27 up to 50 percent. In a flyback based charger application the technology leads to up to 3.9 percent higher efficiency. Furthermore, the device temperature is reduced by up to 16 K. In comparison to the previous 650 V C6 technology it offers a 2.4 percent gain in efficiency and 12 K lower device temperature.

The integrated Zener diode ensures an increased ESD ruggedness of up to HBM Class 2 level. Customers profit from an improved assembly yield which leads to less production related failures and finally saves manufacturing costs. Additionally, the 700 V CoolMOS P7 shows low losses due to its very low $RDS_{(on)} * Q_g$ and $RDS_{(on)} * E_{OSS}$. Compared to C6 technology as well as to some competitor devices, the new family features an additional extra 50 V blocking voltage.

Keeping the ease-of-use in mind, the technology has been developed with a V_{GSth} of 3 V and a very narrow tolerance of ± 0.5 V. This makes the new P7 family very easy to design-in and enables the usage of lower gate source voltage, which makes it easier to drive and leads to less idle losses. Especially in price sensitive segments, the new 700 V CoolMOS P7 offers an attractive price performance ratio that helps customers in taking further advantages in competitiveness.

For the Trade Press: INFPM201701.02Xe

Media Relations:
Worldwide Headquarters
U.S.A.
Asia
Japan
Investor Relations

Name:
Fabian Schiffer
Sian Cummings
Chi Kang David Ong
Yoko Sasaki
EU/APAC/USA/CAN

Phone:
+49 89 234 25869
+1 310 252 7148
+65 6876 3070
+81 3 5745 7340
+49 89 234 26655

Email:
fabian.schiffer@infineon.com
sian.cummings@infineon.com
david.ong@infineon.com
yoko.sasaki@infineon.com
investor.relations@infineon.com

Availability

The 700 V CoolMOS P7 family is available with the most relevant $R_{DS(on)}$ package combinations including 360 m Ω up to 1400 m Ω in IPAK SL, DPAK and TO-220FP. The $R_{DS(on)}$ range of this superjunction technology will be complemented with additional variants and combined with new package innovations from Infineon soon. More information is available at www.infineon.com/700V-p7.

For the Trade Press: INFPMM201701.02Xe

Media Relations:
Worldwide Headquarters
U.S.A.
Asia
Japan
Investor Relations

Name:
Fabian Schiffer
Sian Cummings
Chi Kang David Ong
Yoko Sasaki
EU/APAC/USA/CAN

Phone:
+49 89 234 25869
+1 310 252 7148
+65 6876 3070
+81 3 5745 7340
+49 89 234 26655

Email:
fabian.schiffer@infineon.com
sian.cummings@infineon.com
david.ong@infineon.com
yoko.sasaki@infineon.com
investor.relations@infineon.com