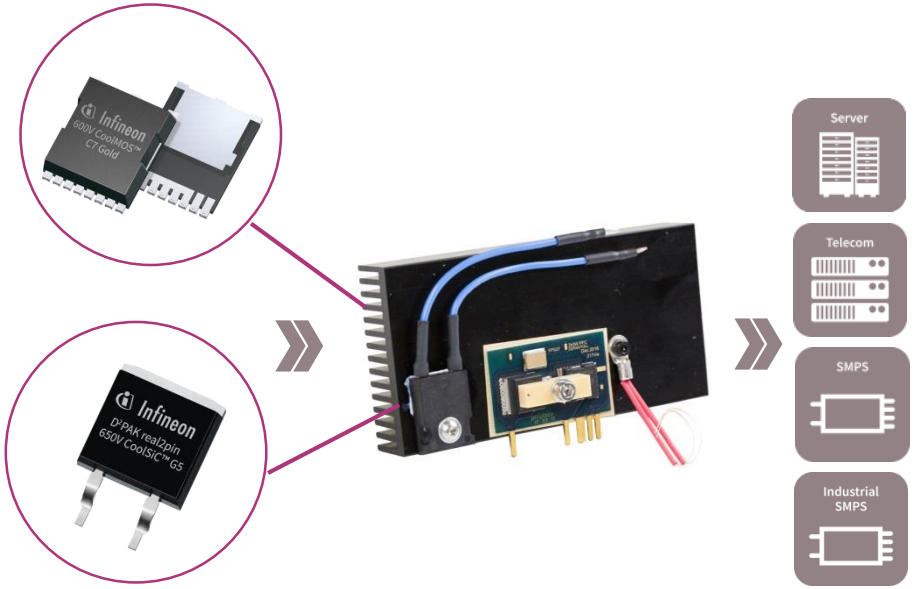
Toll upgrade kit KIT_2K5W_CCM_TOLL

To be used with
EVAL_2K5W_CCM_4P_V2

- restricted -

Adaptor kit

KIT 2K5W CCM TOLL



Technical & order details

To be used together with:
EVAL_2K5W_CCM_4P_V2

Parameter	Value
Input voltage	85 V_{AC} ~ 265 V_{AC}
Input current	14A_{eff}
Output Voltage & current	400$V_{DC,}$ 6,25 A
Output power	2.5kW@V_{in}=230V;
Peak efficiency	>98% @ 230V_{AC}

Learn more	
Sales name	KIT_2K5W_CCM_TOLL
SAP Mat number	SP001690906
Infineon Order Code	KIT2K5WCCMTOLLTOBO1

Features

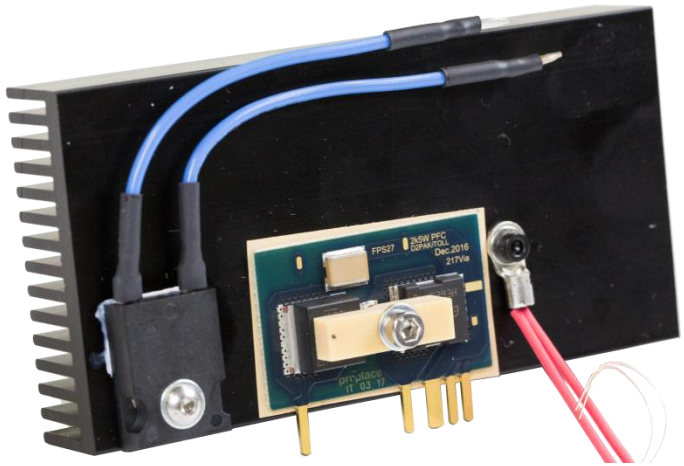
- Made in order to upgrade the EVAL_2K5W_CCM_4P_V2 evaluation board for SMD devices in the PFC stage by just exchanging the heatsink with the already assembled devices on it.
- Topology: CCM PFC
- Assembled on heat sink for plug and play

Benefits

- Easy to use SMD solution
- Thermal management example
- SMD vs. THD comparison in same environment
- Plug and play module for CCM PFC

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Toll upgrade kit
KIT_2K5W_CCM_TOLL



Ordering code:
KIT_2K5W_CCM_TOLL

Infineon 2.5 kW CCM PFC SMD CoolMOS™ G7 TOLL upgrade Kit for EVAL_2.5KW_CCM_4PIN
featuring Infineon CoolMOS™ IPT60R028G7 and Sic Diode 5th Generation thinQ!™ IDK12G65C5

Board components
- CoolMOS™ IPT60R028G7
- Sic Diode 5th G thinQ!™ IDK12G65C5

To be used with the following board
- EVAL_2K5W_CCM_4P_V2

Target Applications
- Telecom
- Server
- Industrial
- General SMPS

www.infineon.com/KIT_2K5W_CCM_TOLL

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Product Features

IPT60R028G7

CoolMOS™ C7 Gold in TO-Leadless (G7) - a new SMD package using Kelvin source concept

- Infineon Technologies introduces the 600V and 650V CoolMOS™ C7 Gold (G7) technology in latest surface mount device (SMD) TO-Leadless (TOLL) package.
- The CoolMOS™ G7 for the first time brings together the benefits of the improved 600V and 650V CoolMOS™ G7 technology, 4pin Kelvin source capability and the improved thermal properties of the TO-Leadless package to enable an SMD solution for high current hard switching topologies such as power factor correction (PFC) up to 3kW and for 600V CoolMOS™ G7 also for resonant circuits such as high end LLC.

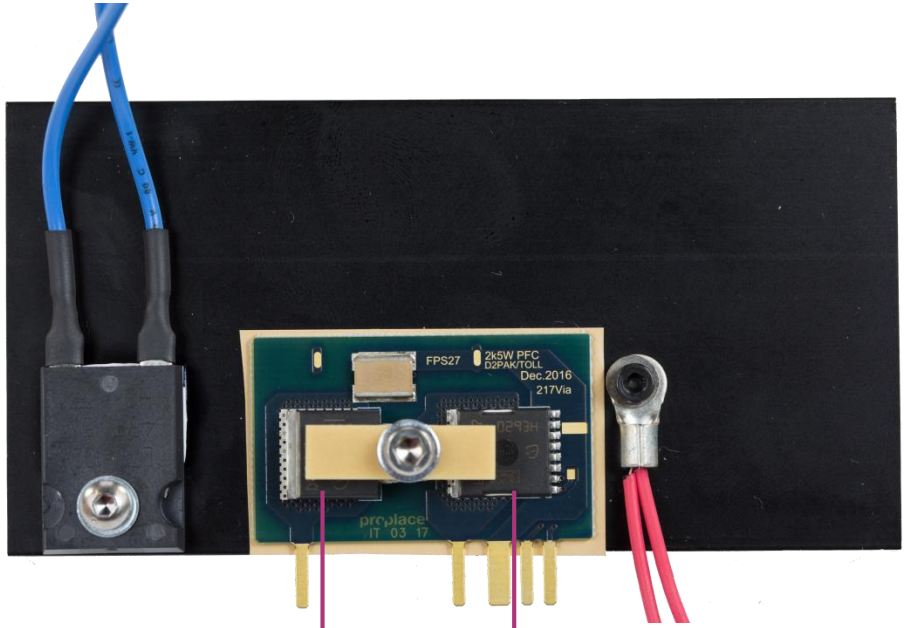
IDK12G65C5

CoolSiC™ generation 5 SiC Schottky Barrier diodes

- CoolSiC™ generation 5 represents Infineon's leading edge technology for SiC Schottky Barrier diodes. The Infineon proprietary diffusion soldering process, already introduced with G3, is now combined with a new, more compact design and thin wafer technology. The result is a new family of products showing improved efficiency over all load conditions, coming from both the improved thermal characteristics and a lower figure of merit (Q_c x V_f). Benchmark switching behavior
- No reverse recovery charge
- Smooth recovery curve
- Temperature independent switching behavior
- High operating temperature (T_j max = 175°C)

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Toll upgrade kit
KIT_2K5W_CCM_TOLL



CoolMOS™ C7 Gold
IPT60R028G7

CoolSiC™ 5G SiC Schottky Diode
IDK12G65C5

Ordering code:
KIT_2K5W_CCM_TOLL

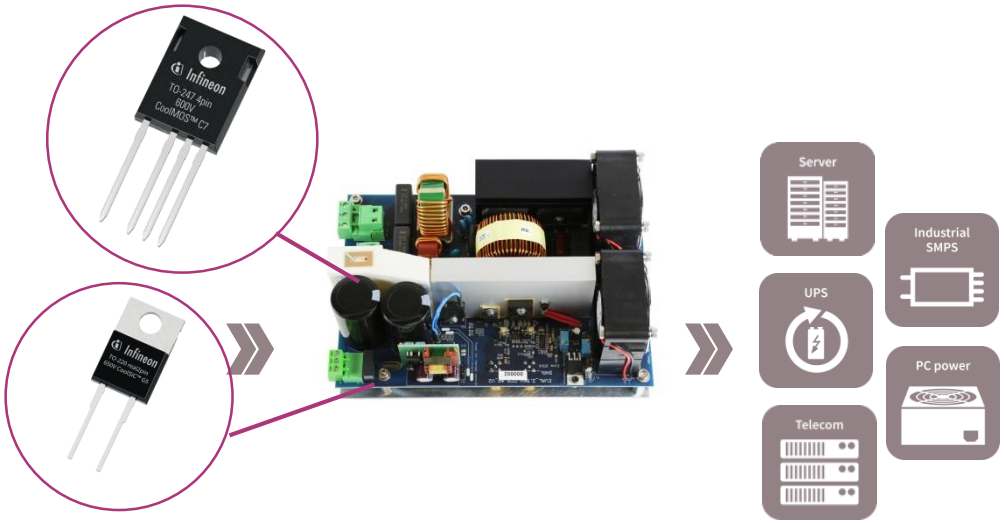
- This TO-lead less (TOLL) adapter kit is special made in order to upgrade the EVAL_2.5KW_CCM_4PIN evaluation board for SMD devices in the PFC stage by just exchanging the heatsink with the already assembled devices on it. The C7 GOLD series (G7) for the first time brings together the benefits of the improved C7 GOLD 600V CoolMOS™ technology, 4 pin Kelvin Source capability and the improved thermal properties of the TOLL package to enable a possible SMD solution for high current applications.
- Benefits: Easy to use SMD solution Thermal management example SMD vs. THD comparison in same environment.

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To be used with Evaluation board 600V CoolMOS™C6 & 650V SiC Diode

EVAL 2K5W CCM 4P V2



Technical & order details

Parameter	Value
Input voltage	85 V_{AC} ~ 265V_{AC}
Output voltage	400V
Output power	2.5kW @ V_{in} = 230V_{AC} 1kW @ V_{in} = 90V_{AC}
Peak Efficiency	>98%

Learn more	
Sales name	EVAL_2K5W_CCM_4P_V2
SAP Mat number	SP001712686
Infineon Order Code	EVAL2K5WCCM4PV2TOBO1

Features

- The board is developed for the laboratory use
- The aim of this evaluation board is to help the customers to get familiar with Infineon products and to evaluate different behavior of conventional 3pin devices compared to the high performance CoolMOS™ C7 devices in TO-247 4pin within a PFC application.
- The version V2 also enables the evaluation of the SMD TOLL adaptor kit.
- Variable switching frequency: 40-200kHz

Benefits

- Able to analyze the switching performance of different package variants in a very common used PFC topology. It helps to understand the switching behavior and parasitic influences.
- With the various option settings via "solder jumper" it is possible to modify the circuit without changing any layout. Therefore the evaluation board offers plenty investigation variants.
- It shows how to boost the efficiency in a standard PFC topology.

Following expertkits are available

- KIT_2K5W_CCM_TOLL Easy to use SMD solution
- KIT_6W_12V_BIAS_ICE3 DC-DC Bias board
- KIT_6W_12V_BIAS_ICE5 DC-DC Bias board

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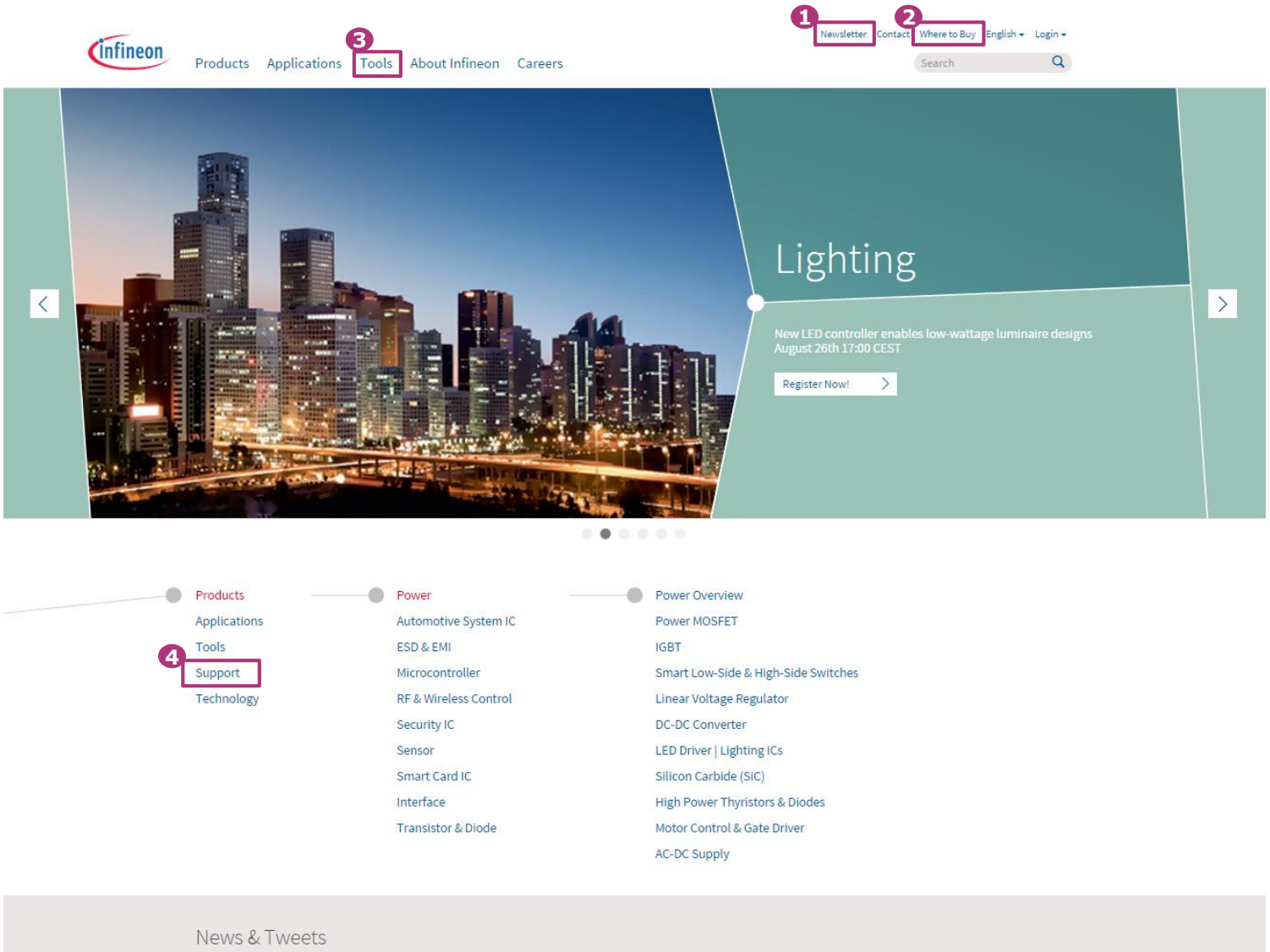
Support



Technical Material	› Application Notes › Simulation Models › Datasheets › PCB Design Data	› KIT_2K5W_CCM_TOLL - Infineon Technologies › EVAL_2K5W_CCM_4P_V2 - Infineon Technologies
Evaluation Boards	› Evaluation Boards › Demoboards › Reference Designs	› www.infineon.com/evaluationboards
Videos	› Technical Videos › Product Information Videos	› www.infineon.com/mediacenter

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