

## Strengthening the link between the real and the digital world (/cms/en/about-infineon/company/cypress-acquisition/)

> Home (/cms/en/) > Products (/cms/en/product/)

> Evaluation Boards (/cms/en/product/evaluation-boards/) > KIT\_LGPWR\_BOM005

# KIT\_LGPWR\_BOM005

### Overview

Kit power board for low voltage drives scalable power demoboard

This kit power board module with 100V

**OptiMOS™ (/cms/en/product/power/mosfet/n-channel/optimos-and-strongirfet-latest-family-selection-guide/)**

MOSFET in D<sup>2</sup>PAK-7 package represents the power building block of the

**LVD scalable power demo board platform (/cms/en/product/promopages/lv-drives-scalable-power-demoboard-platform/?redirId=103443)**

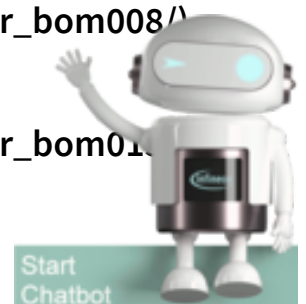
. The power board represents the basic building block. It serves as a single half-bridge with power and gate drive interconnections, enabling easy buildup of any half-bridge based power topology.

Variations of the power board employing Infineon's power MOSFET family

**OptiMOS™ (/cms/en/product/power/mosfet/n-channel/)** in the D<sup>2</sup>PAK, D<sup>2</sup>PAK-7 and the TO-Leadless packages demonstrate power MOSFET performance in terms of parallelization and thermal behavior.

Variations of the power boards:

- **KIT\_LGPWR\_BOM003 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom003/)** (80V TO-Leadless)
- **KIT\_LGPWR\_BOM004 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom004/)** (60V TO-Leadless)
- **KIT\_LGPWR\_BOM006 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom006/)** (150V D<sup>2</sup>PAK 7-pin)
- **KIT\_LGPWR\_BOM007 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom007/)** (200V D<sup>2</sup>PAK)
- **KIT\_LGPWR\_BOM008 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom008/)** (250V D<sup>2</sup>PAK)
- **KIT\_LGPWR\_BOM013 (/cms/en/product/evaluation-boards/kit\_lgpwr\_bom013/)** (100V TOLG)



### Summary of features

- IMS PCB for increased cooling

- SMD power terminals with M5 thread
- Onboard test point terminals

## List of components

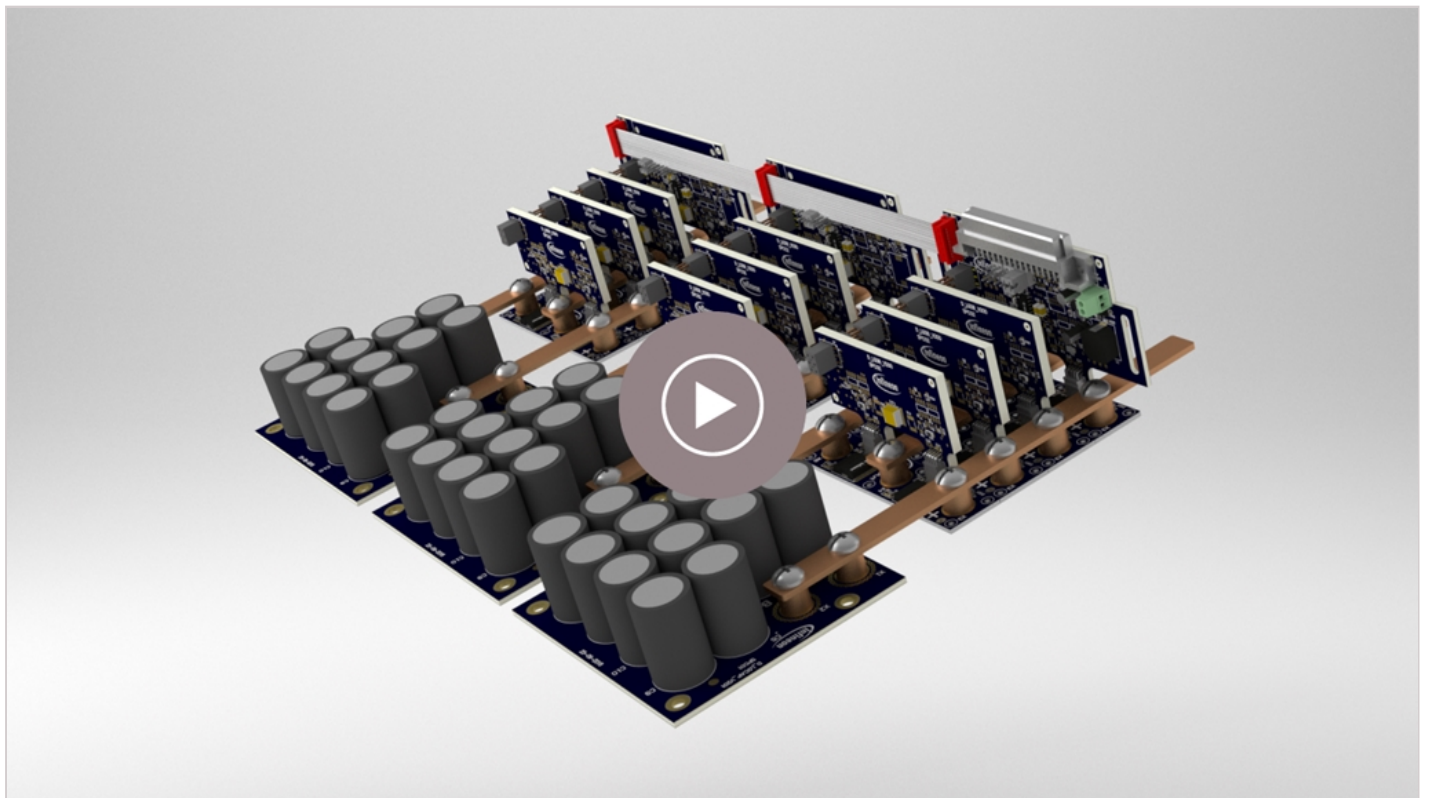
- OptiMOS™ 100V power MOSFET ([IPB017N10N5](/cms/en/product/power/mosfet/n-channel/ipb017n10n5/))

## Target applications

- Prototyping forklifts and **LEVs** (</cms/en/applications/light-electric-vehicles/>) (low speed cars, e-scooters, 3-wheelers, golf cars)

---

## Interactive 3D board model

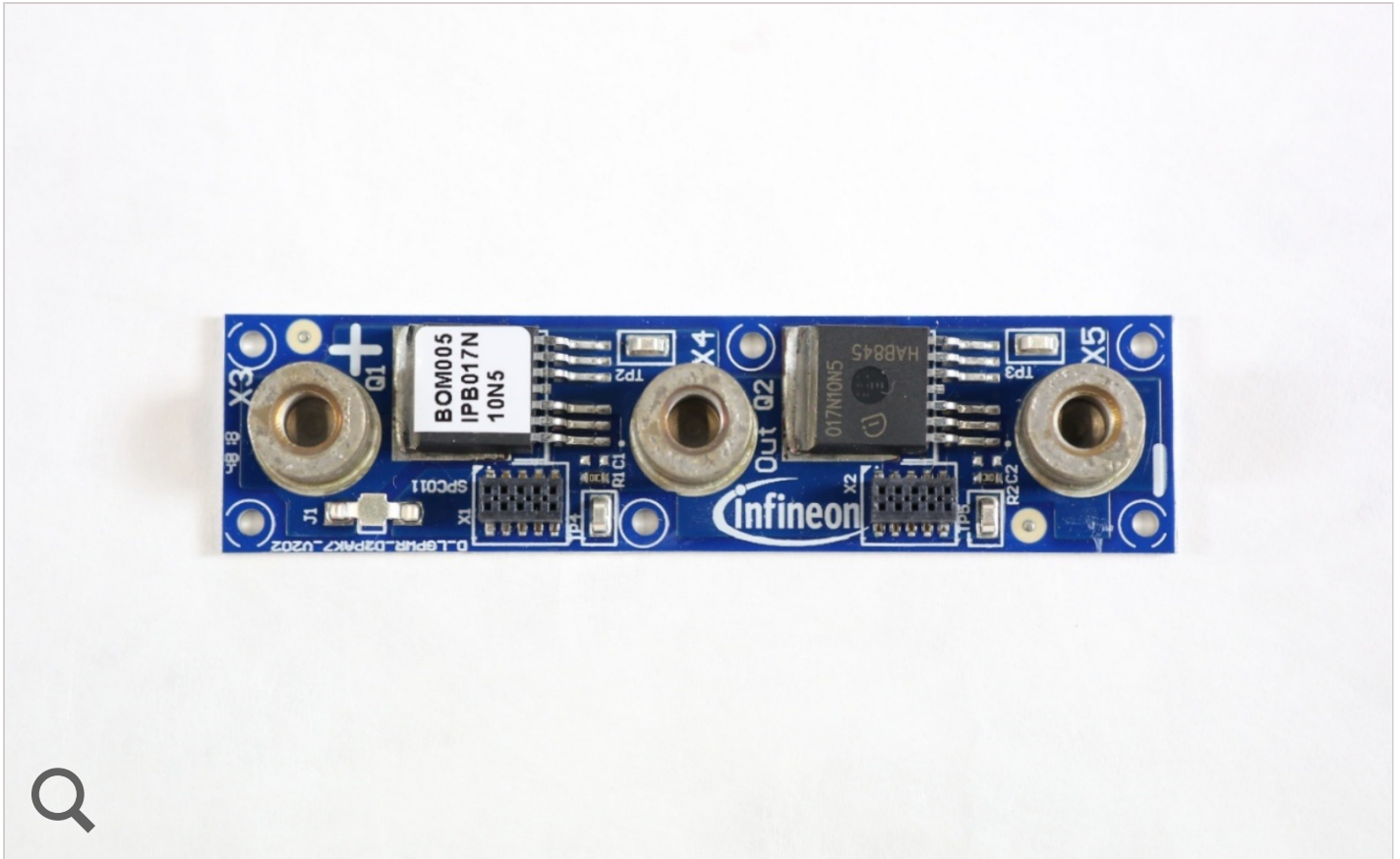


([https://www.infineon.com/cms/media/PMM\\_3dmodels/LVD-scalable-power-demoboard.html](https://www.infineon.com/cms/media/PMM_3dmodels/LVD-scalable-power-demoboard.html))



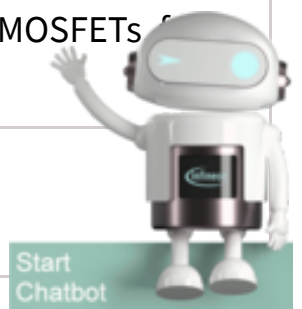
(</cms/en/product/promopages/productregistration/?intc=PSS.P.B.2021>)





### Parametrics

Parametrics	KIT_LGPWR_BOM005
Board Type	Demo Board
Dimensions	75mm x 19mm
Family	OptiMOS™ 5
Input Type	DC
Output Current max	273 A
Product Description	Modular Half-Bridge Power PCB with OptiMOS™ Power MOSFETs for individual or paralleled MOSFET applications
Product Name	KIT_LGPWR_BOM005
Qualification	Industrial
Supply	48 V



Voltage min Parametrics	KIT_LGPWR_BOM005
Target Application	E-Bikes & Small E-Vehicles
Topology	Half Bridge ; B6 Bridge ; Full Bridge ; Buck ; Boost ; DC-DC converter

## Documents

> Login (/sec/login?)

ret=https%3A%2F%2Fwww.infineon.com%2Fcms%2Fen%2Fproduct%2Fevaluation-boards%2Fkit\_lgpwr\_bom005%2F%23!documents)  
to myInfineon to see all documents available

+ Expand all

## + Data Sheets



Infineon-IPB017N10N5-DS-v02\_00-EN (/dgdl/Infineon-IPB017N10N5-DataSheet-v02\_05-EN.pdf?fileId=5546d4624a75e5f1014ac4a981111eed)

> EN (/dgdl/Infineon-IPB017N10N5-DataSheet-v02\_05-EN.pdf?fileId=5546d4624a75e5f1014ac4a981111eed)

[Share](#)

02\_05 | 2019-11-13 | pdf | 955 KB

## + Application Notes



Demoboard low voltage drives scalable power (/dgdl/Infineon-Demoboard\_Low\_Voltage\_Drives\_Scalable\_Power-ApplicationNotes-v02\_00-EN.pdf?fileId=5546d4626bb628d7016bfa95275b6009)


> EN (/dgdl/Infineon-Demoboard\_Low\_Voltage\_Drives\_Scalable\_Power-ApplicationNotes-v02\_00-EN.pdf?fileId=5546d4626bb628d7016bfa95275b6009)

[Share](#)

02\_00 | 2021-03-03 | pdf | 4.7 MB

## + Whitepaper

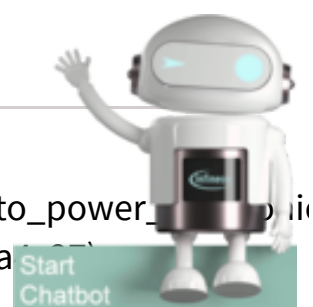


Modular approach to power electronics  (/dgdl/Infineon-White\_paper\_Light\_electric\_vehicles\_Modular\_approach\_to\_power\_electronics-WP-v02\_00-EN.pdf?fileId=5546d462696dbf120169babb2b6a4c27)

> EN (/dgdl/Infineon-

White\_paper\_Light\_electric\_vehicles\_Modular\_approach\_to\_power\_electronics-WP-v02\_00-EN.pdf?fileId=5546d462696dbf120169babb2b6a4c27)

[Share](#)



Start Chatbot

## + User Manual




User manual for low voltages drives scalable power demoboard -LVDSPP (/dgdl/Infineon-UserManual\_LVDSPP\_low\_voltage\_drives\_scalable\_power\_demonstration\_bo  
UserManual-v02\_00-EN.pdf?fileId=5546d462696dbf120169b58bda49538e)  
> EN (/dgdl/Infineon-UserManual\_LVDSPP\_low\_voltage\_drives\_scalable\_power\_demonstration\_board-UserManual-v02\_00-EN.pdf?fileId=5546d462696dbf120169b58bda49538e)  
> CN (/dgdl/Infineon-LVDSPP\_low\_voltage\_drives\_scalable\_power\_demonstration\_board-UserManual-v01\_00-CN.pdf?fileId=8ac78c8c7d718a49017d9df4d3c01bc1)

[Share](#)

02\_00 | 2019-03-25 | pdf | 3 MB

### Order

<b>Sales Product Name</b>	KIT_LGPWR_BOM005
<b>OPN</b>  Info	KITLGPWRBOM005TOBO1
<b>Product Status</b>	active
<b>Infineon Package name</b>	--
<b>Standard Package name</b>	
<b>Order online</b>	
<b>Completely lead free</b>	
<b>Halogen free</b>	
<b>RoHS compliant</b>	yes
<b>Packing Size</b>	1
<b>Packing Type</b>	CONTAINER
<b>Moisture Level</b>	
<b>Moisture Packing</b>	NON DRY

