EVAL-M1-05-65D

Overview

Description:

This evaluation board is a complete power stage to drive 3-phase motor, powered by **IRSM505-065DA2 CIPOS™ Micro (/cms/en/product/power/intelligent-power-modules-ipm/irsm505-065da/)**. It is equipped with a standardized **iMOTION™ MADK M1 platform (/cms/en/product/promopages/madk/)** interface. Several measurement points give easy access for standard oscilloscope probes. The featured IRSM505-065DA2 is a 2.6A, 500V **Integrated Power Module (IPM) (/cms/en/product/power/intelligent-power-modules-ipm/)** designed for advanced appliance motor drive applications such as energy efficient fans and pumps.

Summary of Features:

- power stage to drive 3-phase motor
- Standardized **iMOTION™ MADK M1 platform (/cms/en/product/promopages/madk/)** interface
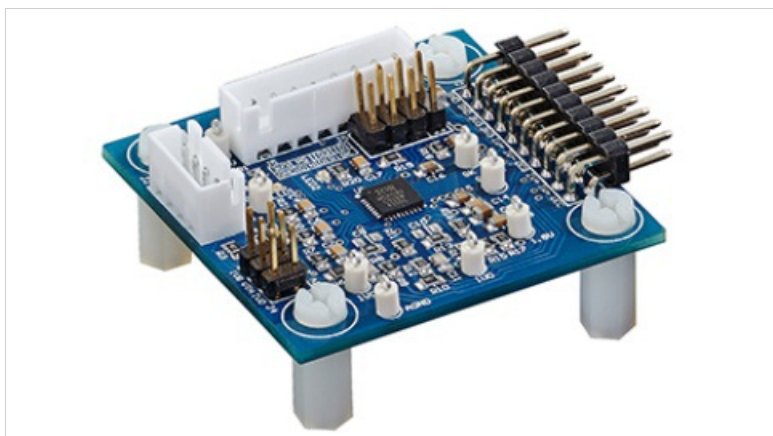- 230V Grid
- Rohs compliant

Benefits:

- Easy to design-in – fast time to market
- Same PCB design can address multiple markets due to featured IRSM505-65DA2
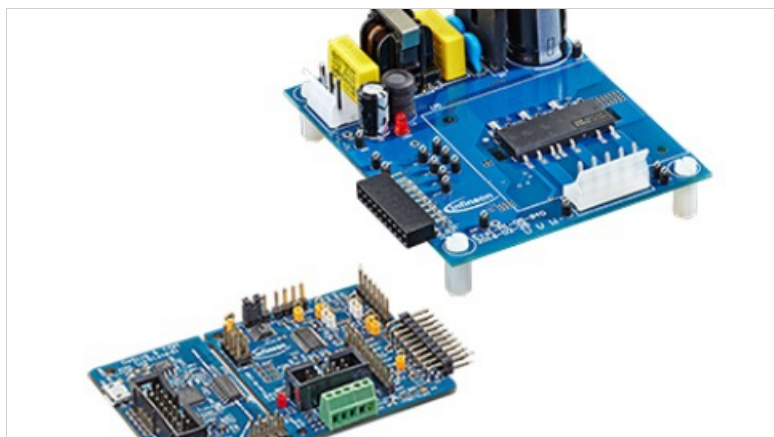- UL certified package and temperature sensor due to featured IRSM505-65DA2

Target Applications:

(/cms/productpage-application/drives)   (/cms/productpage-application/aircon)   (/cms/productpage-application/pumps)

This Evaluation Boards can be combined with our **EVAL-M1-099M-C (/cms/en/product/evaluation-boards/eval-m1-099m-c/)** control board. Including a debug interface card and powered by an
IRMCK099M (/cms/en/product/power/motor-control-ics/digital-motor-controller-imotion/irmck099m/) Motor Control IC. In addition a MCE Designer GUI for parametrization and tunig is offered. It is designed for motor drive applications such as fans, pumps, multicopter or aircon.
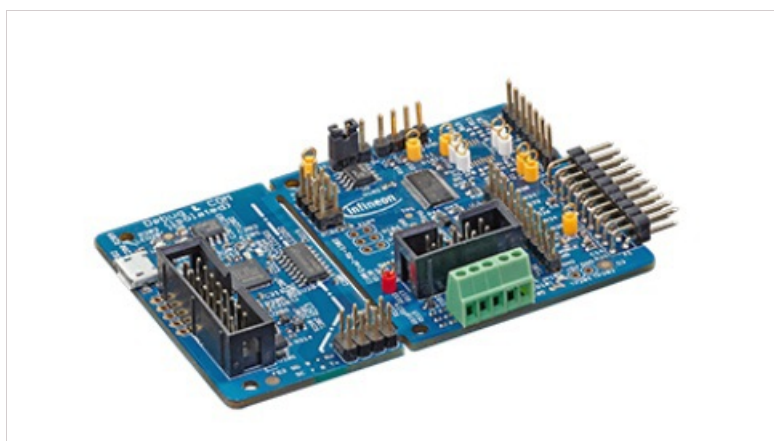

Read more about compact and flexible 3-phase motor drive kits. These system solution kits are powered by various **CIPOS™ Nano IPMs (/cms/en/product/power/intelligent-power-modules-ipm/)** and
XMC 1302 MCU (/cms/en/product/channel.html?channel=db3a30433c1a8752013c1aa35a6a0029). Everything needed to get a functioning motor system running in less than 1 hour is included. Motor control software is preloaded or available for download. An easy to use GUI software for parametirization and tuning is available as well:

EVAL-M1-1302_05-65D (2.6A, 500V) (/cms/en/product/evaluation-boards/eval-m1-1302_05-65d/)
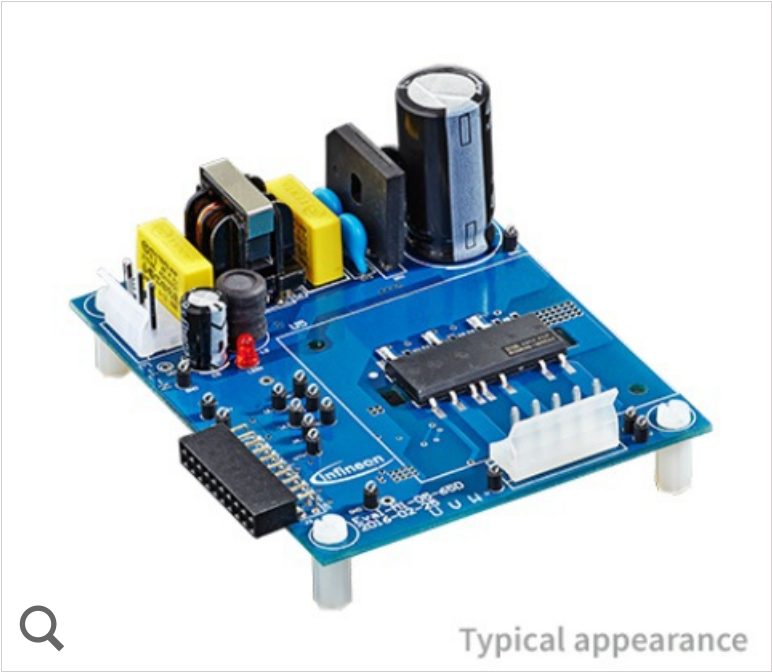
EVAL-M1-1302_05-84D (7A, 250V) (/cms/en/product/evaluation-boards/eval-m1-1302_05-84d/)

EVAL-M1-1302_36-45A (4A, 500V) (/cms/en/product/evaluation-boards/eval-m1-1302_36-45a/)

EVAL-M1-1302_36-84A (7A, 250V) (/cms/en/product/evaluation-boards/eval-m1-1302_36-84a/)

Discover more about our **EVAL-M1-1302 (/cms/en/product/evaluation-boards/eval-m1-1302/)** motor control board powered by **XMC 1302 (/cms/en/product/channel.html?channel=db3a30433c1a8752013c1aa35a6a0029)**. It includes an isolated J-Link interface by Segger. The Hardware is prepared to use HALL- or latest innovation of 3D Magnetic Sensor. A complete development suite consisting of DAVE and µC-Probe is provided.

Typical appearance

Parametrics ⌄

Parametrics	EVAL-M1-05-65D
Configuration	Equipped with IRSM505-065DA2 CIPOS™ Micro iMOTION™ MADK complete power stage to drive 3-phase motor
Description	Evaluation board for CIPOS™ Nano & powerboard for iMOTION™ MADK M1-Platform with CIPOS™ Micro(230V)
Family	Motor Driver Microcontroller
Input Type	AC
Product Description	This evaluation board is a complete power stage to drive 3-phase motor, powered by IRSM505-065DA2 CIPOS™ Micro
Product Name	Eval-M1-05-65D
Target Application	Automation Consumer ; Industrial ; Motor Control & Drives
Topology	3-Phase Motor
Type	Evaluation Board

Documents ⌄

+ Expand all

+ Data Sheet

 IRSM505-065 and IRSM515-065 Series (/dgdl/Infineon-IRSM505-065_and_IRSM515-065_Series-DS-v02_00-EN.pdf?fileId=5546d462533600a40153567bfeae2882)
› EN (/dgdl/Infineon-IRSM505-065_and_IRSM515-065_Series-DS-v02_00-EN.pdf?fileId=5546d462533600a40153567bfeae2882)
02_00 | 2016-10-18 | pdf | 872 KB

➕ Product Brief

📄 XMC Wireless Charging (/dgdl/Infineon-XMC-wireless-power-controller-PB-v01_00-EN.pdf?
fileId=5546d46253f650570154995339cd6ec8)
> EN (/dgdl/Infineon-XMC-wireless-power-controller-PB-v01_00-EN.pdf?fileId=5546d46253f650570154995339cd6ec8)
01_00 | 2017-12-21 | pdf | 138 KB

➕ Application Notes

📄 EVAL-M1-05-65D - iMOTION™ Modular Application Design Kit (/dgdl/Infineon-AN2016-24_EVAL-M1-05-65D-AN-v01_00-EN.pdf?
fileId=5546d4625696ed760156da2dccd96f4a)
> EN (/dgdl/Infineon-AN2016-24_EVAL-M1-05-65D-AN-v01_00-EN.pdf?fileId=5546d4625696ed760156da2dccd96f4a)
01_00 | 2016-08-30 | pdf | 1 MB

➕ Presentations

📄 iMOTION™ MADK - How to Measure Motor Parameters (/dgdl/Infineon-How-to-Measure-Motor-Parameters-PP-v01_00-EN.pdf?
fileId=5546d462566bd0c701568d655bd643ed)
> EN (/dgdl/Infineon-How-to-Measure-Motor-Parameters-PP-v01_00-EN.pdf?fileId=5546d462566bd0c701568d655bd643ed)
> CN (/dgdl/Infineon-How-to-Measure-Motor-Parameters-PP-v01_00-CN.pdf?fileId=5546d462566bd0c701568cd2e6694248)
01_00 | 2016-08-15 | pdf | 706 KB

📄 Introduction: iMOTION™ Modular Application Design Kit (MADK) Platform (/dgdl/Infineon-MADK-the-modular-design-platform-
PP-v01_00-EN.pdf?fileId=5546d462566bd0c701568d6562d343f9)
> EN (/dgdl/Infineon-MADK-the-modular-design-platform-PP-v01_00-EN.pdf?fileId=5546d462566bd0c701568d6562d343f9)
> CN (/dgdl/Infineon-MADK-the-modular-design-platform-PP-v01_00-CN.pdf?fileId=5546d462566bd0c701568cd2ef424255)
01_00 | 2016-08-15 | pdf | 888 KB

Order ⌄

Sales Product Name	EVAL-M1-05-65D
OPN	EVALM10565DTOBO1
Product Status	active and preferred
Package name	--
Order online	
Completely lead free	
Halogen free	
RoHS compliant	yes
Packing Size	1
Packing Type	BLISTER TRAY
Moisture Level	
Moisture Packing	NON DRY

Moisture Packing		NON DRY		

Boards ⌄

Image	Board ▾▴	Family ▾▴	Description ▾▴	Status ▾▴
	EVAL-M1-099M-C (/cms/en/product/evaluation-boards/eval-m1-099m-c/)	Microcontroller, Motor Driver	iMOTION™ MADK control card • Equipped with IRMCK099M iMOTION™ Motor Control IC	active and preferred
	EVAL-M1-1302 (/cms/en/product/evaluation-boards/eval-m1-1302/)	Motor Driver, Microcontroller	High Performance Sensorless Motor Control Card • Equipped with µC XMC 1302 ARM® Cortex® M0 • iMOTION™ MADK motor control board	active and preferred
	EVAL-M1-1302_05-65D (/cms/en/product/evaluation-boards/eval-m1-1302_05-65d/)	Motor Driver, Microcontroller	This Kit is a compact and flexible 3-phase motor drive system solution platform with control card and power stage, powered by IRSM505-065DA2 µIPM™ DIP and XMC 1302 • Equipped with IRSM505-065DA2 µIPM™-DIP • Equipped with µC XMC™ 1302 ARM® Cortex® M0 • iMOTION™ MADK complete Kit with control- and power-board	active and preferred

Tools & Software ⌄

➕ Software

99 Series Installer (/dgdl/Infineon-99series-kit-mce-installer-SW-v02_02-EN.exe?fileId=5546d46253f65057015437c4a4e44339)
› EN (/dgdl/Infineon-99series-kit-mce-installer-SW-v02_02-EN.exe?fileId=5546d46253f65057015437c4a4e44339)
02_02 | 2017-03-16 | exe | 113.5 MB

DAVE4 Project - Eval-M1-1302_05-65D (/dgdl/Infineon-DAVE4_Project_Eval-M1-1302_05-65D-SW-v01_01-EN.zip?fileId=5546d46258fc0bc101591aff31d248a0)
› EN (/dgdl/Infineon-DAVE4_Project_Eval-M1-1302_05-65D-SW-v01_01-EN.zip?fileId=5546d46258fc0bc101591aff31d248a0)
01_01 | 2016-12-16 | zip | 2.9 MB

Software Package Eval-M1-1302_05-65D (/dgdl/Infineon-Software Package Eval-M1-1302_05-65D-SW-v01_01-EN.zip?fileId=5546d46255dd933d0155eddbc3b2763f)
› EN (/dgdl/Infineon-Software Package Eval-M1-1302_05-65D-SW-v01_01-EN.zip?fileId=5546d46255dd933d0155eddbc3b2763f)
01_01 | 2016-08-05 | zip | 234 KB

Videos ⌄

Introduction: iMOTION™ MADK platform

This video offers an overview of the current available iMOTION™ MADK board Solutions.

iMOTION**™** - How to measure motor parameters

This videos demonstrates how to set up the system for XMC1302 and IRMCK099 of the iMOTION™ Modular Application Design Kit Platform. It demonstrates how to determine Motor parameters by measurement.

Support   ⌄

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Last Name*

E-Mail*

Phone

Company*

Company website (URL)

Industry*

[please select] ▾

Other Industry

Country / Territory*

[please select] ▾

Preferred Distributor / Reseller*

[please select] ▾

Other Distributor / Reseller

Product Name*

EVAL-M1-05-65D

Estimated annual production volume (pieces) per year*

[please select] ▾

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