

# EVAL-M1-05F804

## Overview

### Description:

This evaluation board is a complete power stage, powered by **IRSM005-800MH (/cms/en/product/power/intelligent-power-modules-ipm/irsm005-800mh/)**. The board is purposed to drive 3-phase motors in low voltage domain. It is equipped with **MADK™ (/cms/en/product/promopages/madk/)** M1 20 pin interface connector. Therefore, it can be used with **Eval-M1-1302 (/cms/en/product/evaluation-boards/eval-m1-1302/)** or **Eval-M1-099M-C (/cms/en/product/evaluation-boards/eval-m1-099m-c/)** control boards. In combination with these boards, it is a complete motor control system.

### Summary of Features:

- Power stage to drive 3-phase motor
- 40V blocking voltage
- Up to 80A initial current
- Testpads with hooks to attach standard oscilloscope probes
- Standard **MADK™ (/cms/en/product/promopages/madk/)** M1 interface connector

### Benefits:

- Evaluate IRSM005-800MH module for your application
- Get your motor running within one hour in combination with Eval-M1-1302 or Eval-M1-099M
- Start to learn more about motor control in low voltage domain

### Target Applications:



(/cms/productpage-application/battery-powered)



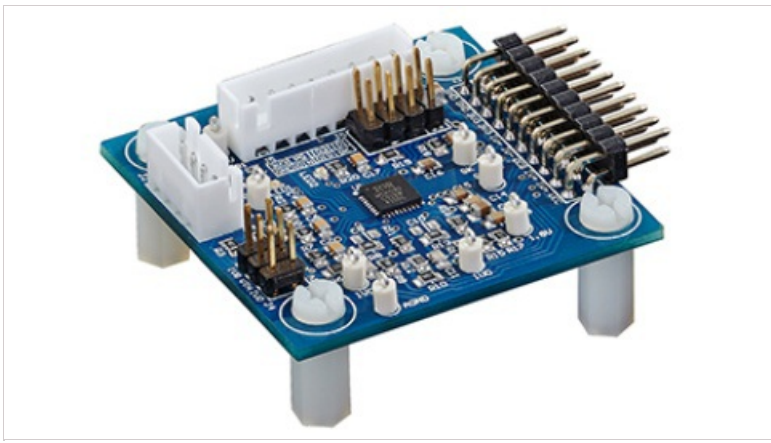
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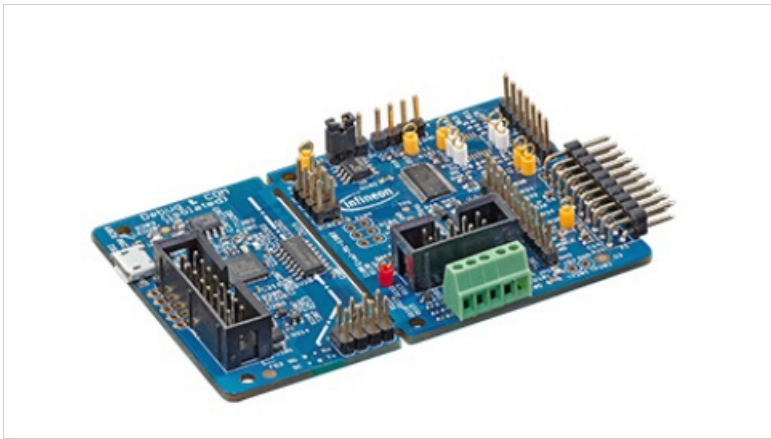
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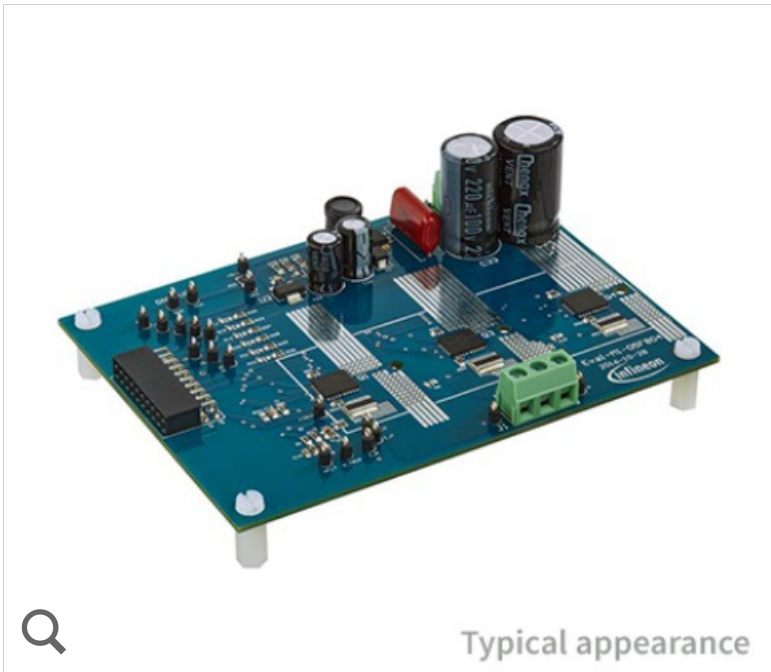
(/cms/productpage-application/multicopters)



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.



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  $\mu$ C-Probe is provided.




Typical appearance

Parametrics	EVAL-M1-05F804
Applications	Power Tools Home Appliances ; Battery
Configuration	3x half-bridges for 3-phase motor voltage and current measurement MADK™ M1 connector
Description	Evaluation board powered by IRSM005-800MH, equipped with MADK™ M1 20 pin interface connector used with Eval-M1-1302 or Eval-M1-099M control boards.
Family	Motor Driver Microcontroller
Input Type	DC
Product Description	This evaluation board is a complete power stage, powerd by IRSM005-800MH. The board is purposed to drive 3-phase motors in low voltage domain. It is equipped with MADK™ M1 20 pin interface connector.
Product Name	Eval-M1-05F804
Target Application	Automation Consumer ; Motor Control & Drives
Topology	3-Phase Motor
Type	Evaluation Board

+ Expand all


+ Getting Started



iMOTION™ MADK Sensorless FOC with XMC™ (/dgd/Infineon-iMOTION MADK Sensorless FOC with XMC-GS-v01\_00-EN.pdf?fileId=5546d46255dd933d0155edee06717683)

> EN (/dgd/Infineon-iMOTION MADK Sensorless FOC with XMC-GS-v01\_00-EN.pdf?fileId=5546d46255dd933d0155edee06717683)01\_00 | 2016-07-15 | pdf | 3.1 MB

+ Application Notes



Eval-M1-05F804 - iMOTION™ Modular Application Design Kit (/dgd/Infineon-AN2017-10\_Eval-M1-05F804-AN-v01\_00-EN.pdf?fileId=5546d4625cc9456a015d07dbf7ce7f05)

> EN (/dgd/Infineon-AN2017-10\_Eval-M1-05F804-AN-v01\_00-EN.pdf?fileId=5546d4625cc9456a015d07dbf7ce7f05)01\_00 | 2017-06-29 | pdf | 1.2 MB

Sales Product Name	EVAL-M1-05F804
OPN	EVALM105F804TOBO1

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

Videos

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8:39

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





13:24

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.



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Technical Assistance Center (TAC)

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Company website (URL)

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Other Industry

Country / Territory\*

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Product Name\*

Estimated annual production volume (pieces) per year\*

Please post your technical question as detailed as possible\*

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