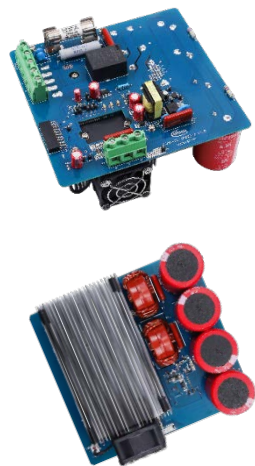




# Modular Application Design Kit EVAL-M1-IM828-A Introduction

Infineon's virtual show 2020





### Description

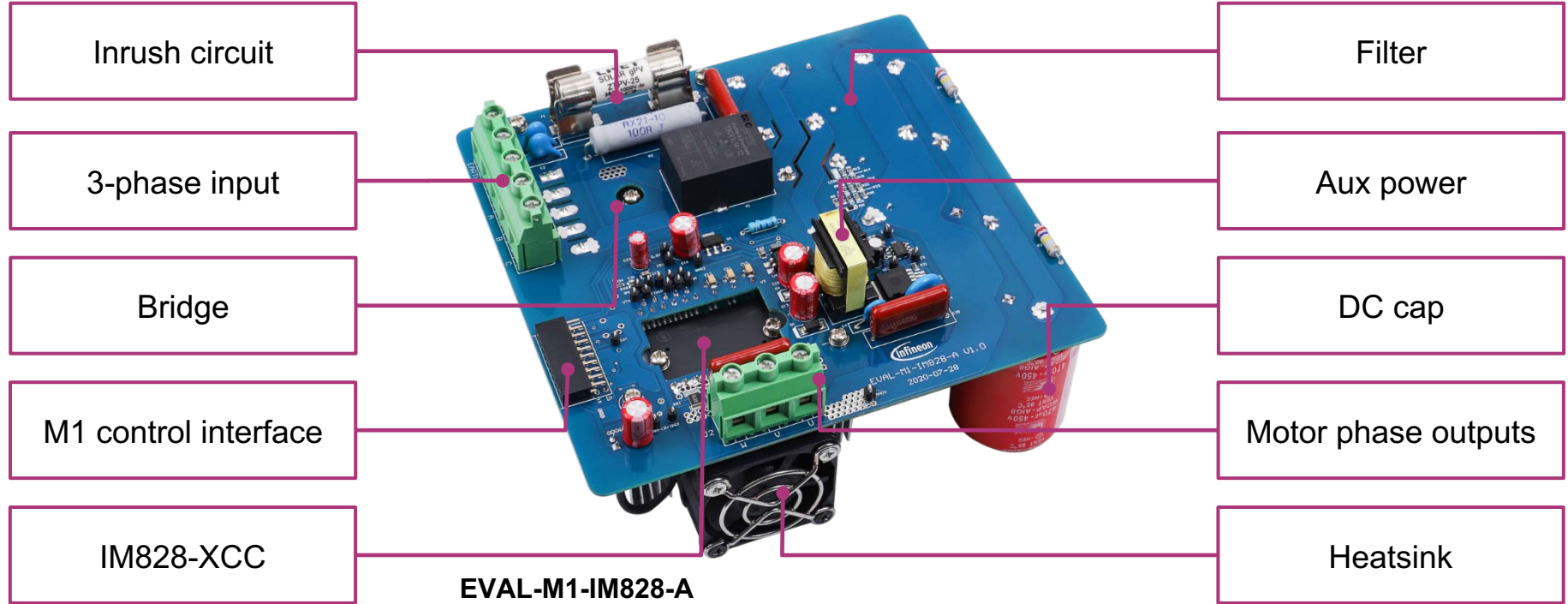
- › EVAL-M1-IM828-A is a complete evaluation board including a 3-phase CIPOS™ Maxi Intelligent Power Module (IPM) for motor drive application. In combination with control boards equipped with the M1 20-pin interface connector, like EVAL-M1-101T, it features and demonstrates Infineon's CIPOS™ Maxi SiC IPM technology for motor drive.
- › The evaluation board EVAL-M1-IM828-A was developed to support customers during their first steps in designing applications with CIPOS™ Maxi SiC IPM.
- › CIPOS™ Maxi IPM in this board is IM828-XCC, which has 3-phase inverter with 1200 V CoolSiC™ MOSFETs and Emitter Controlled diodes combined with an optimized 6-channel SOI gate driver. It is optimized to industrial applications like motor drive applications and power factor correction.

### Product portfolio

Part No.	Normal Input Voltage	Default motor power output	Remark
EVAL-M1-IM828-A	380~480 VAC	8 KW @ 6 kHz	Available

# EVAL-M1-IM828-A

## Evaluation board overview



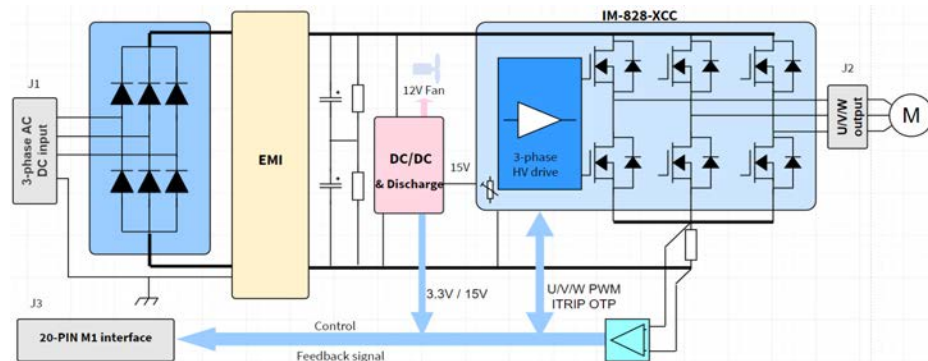
# EVAL-M1-IM828-A

## Evaluation board overview

### Main specifications

- › Input voltage 380~480 VAC
- › Default 8 kW motor power output
- › Output current 15 A<sub>rms</sub>/ 19 A<sub>rms</sub> (low speed)
- › On board EMI filter
- › Single shunt current sensing configured by default
- › Auxiliary power supply with 15 V, 3.3 V
- › Over-current protection
- › Over-temperature protection
- › Sensing of DC-link voltage
- › Thermistor output
- › Fault diagnostic output
- › Measurement test-points compatible to standard oscilloscope probes
- › PCB is 150 mm × 140 mm and has two layers with 70 µm copper each
- › RoHS complaint

### Block diagram



### Target applications





Part of your life. Part of tomorrow.