

EVAL-M1-IM818-A

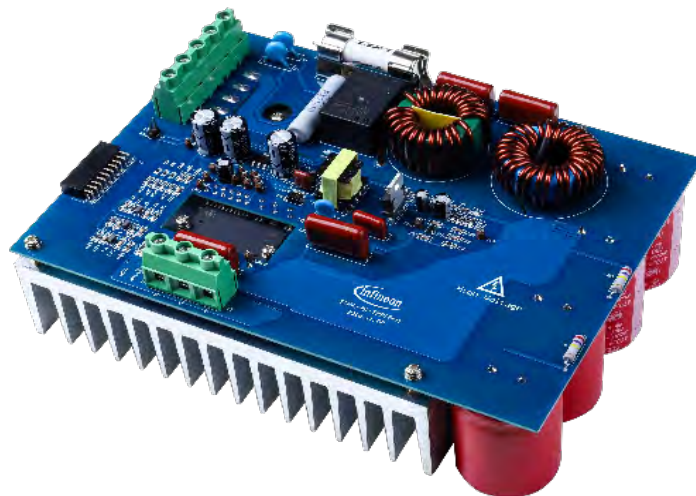
iMOTION™ Modular Application Design Kit



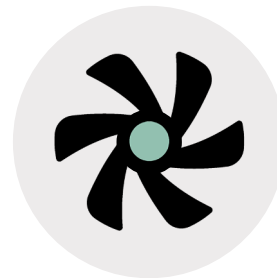
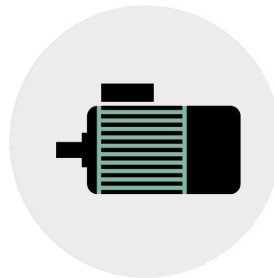
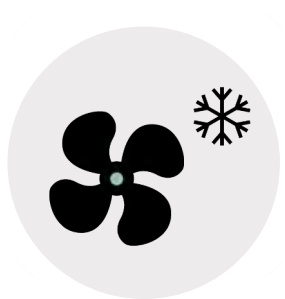
인피니언 전력반도체 솔루션
가상부스에 오신 걸 환영합니다!



Discover EVAL-M1-IM818-A MADK!



Target applications



EVAL-M1-IM818-A
with
CIPOS™ Maxi 10 A IM818-MCC

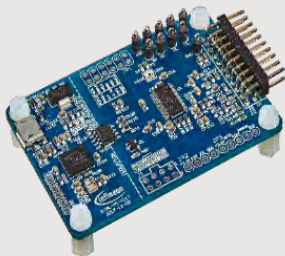


Modular Application Design Kit

iMOTION™ MADK control board

EVAL-M1-101T

with high performance motor control IC,
IMC101T-T038
SP001704752



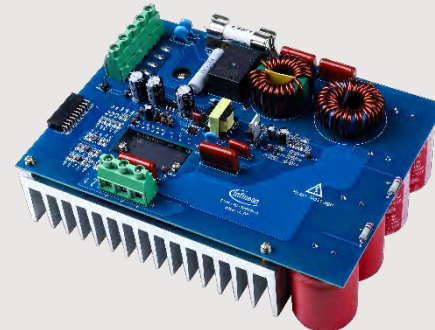
**1 hour or less,
get a motor running!**

M1 Platform Interface

MADK power board with CIPOS™ Maxi IPM

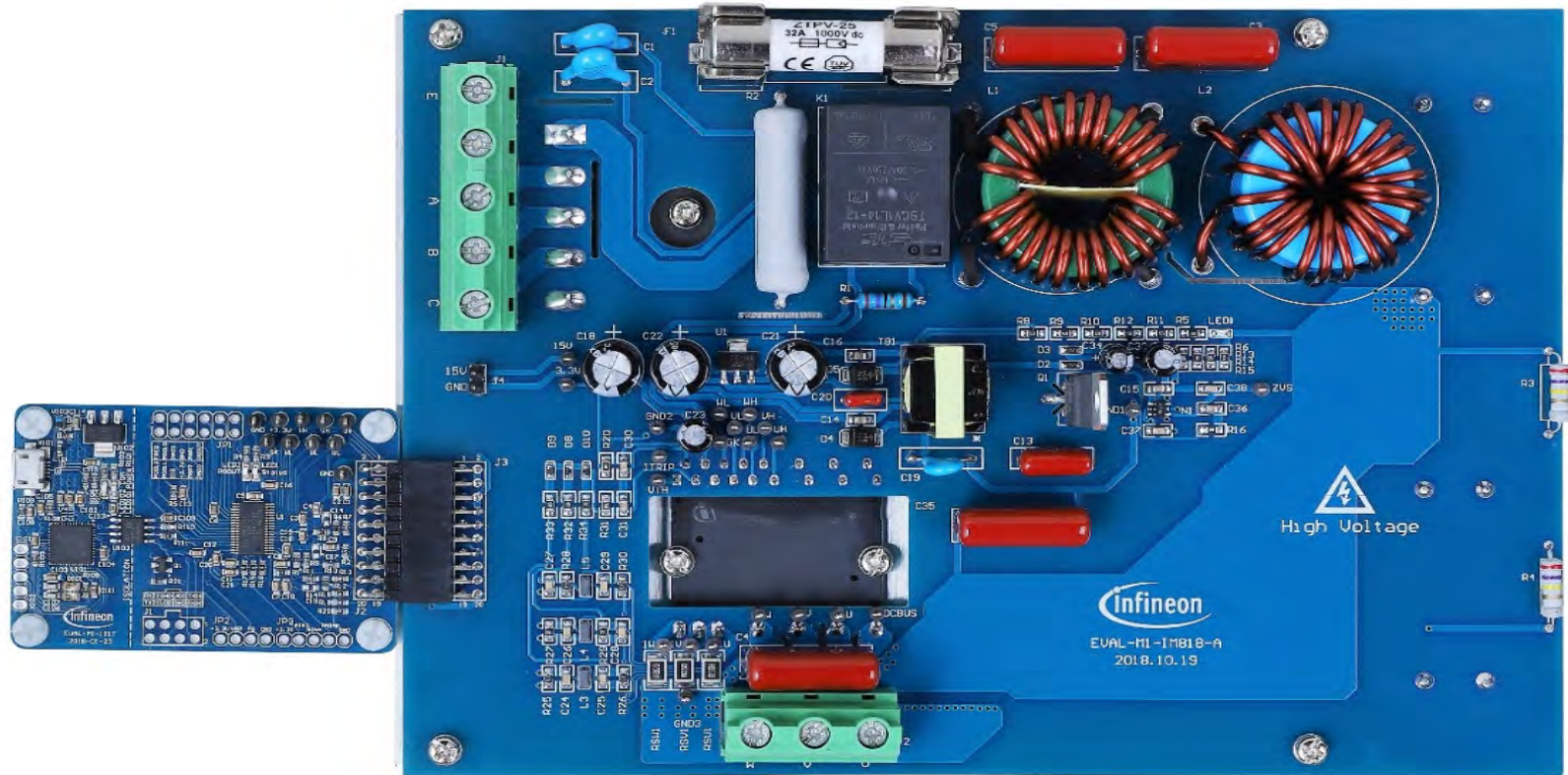
EVAL-M1-IM818-A

with 3 phase 1200V IPM, IM818-MCC
SP001823760

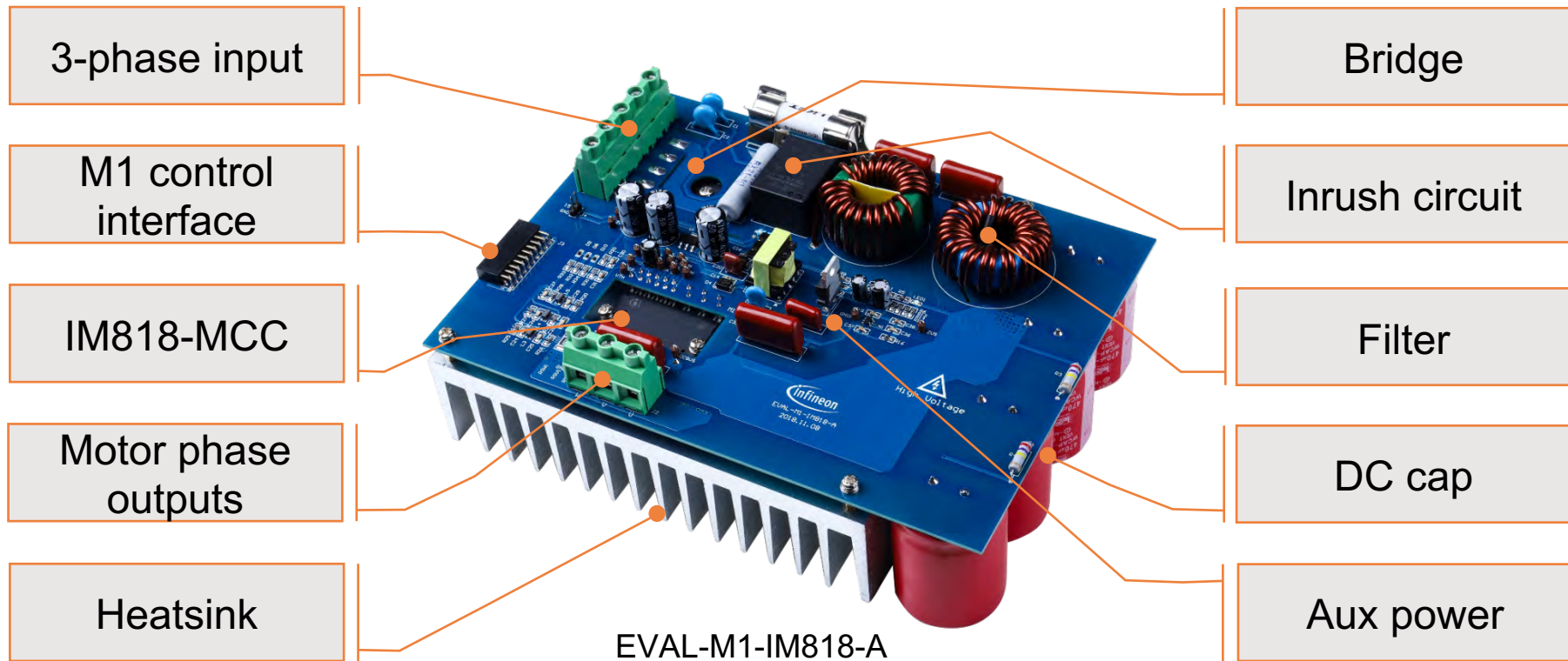


**Compact and flexible
motor drive solutions**

Modular Application Design Kit

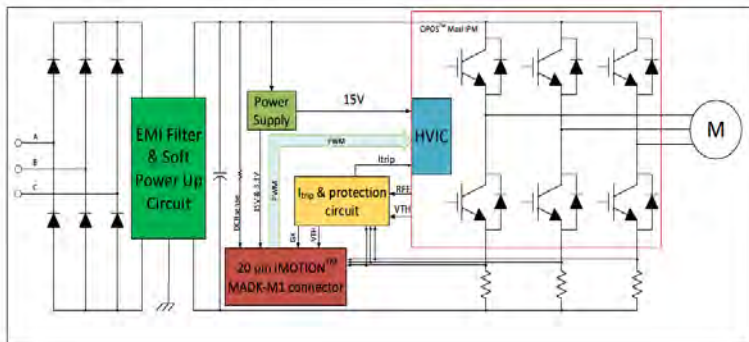


Function groups



EVAL-M1-IM818-A MADK board

Board block diagram overview



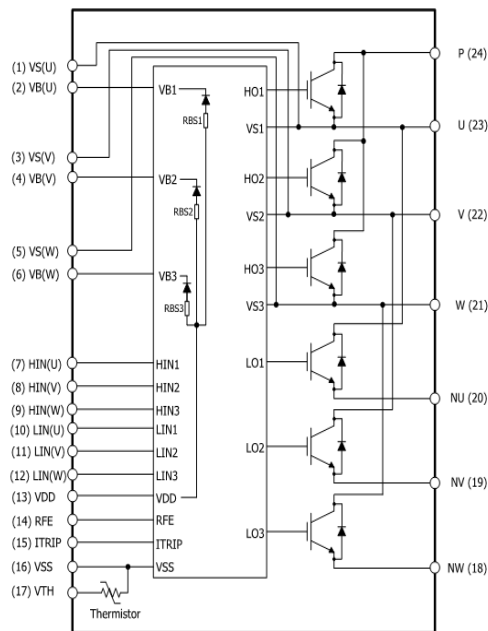
EVAL-M1-IM818-A

- › Input voltage 380 V_{AC}
- › Maximum 1.5 kW motor power output
- › Output current 2.35 A_{rms}

- › On-board EMI filter
- › Current sensing for each phase configured by default
- › Auxiliary power supply with 15 V, 3.3 V

- › Overcurrent protection
- › Overtemperature protection
- › Sensing of DC-link voltage
- › Thermistor output
- › Fault diagnostic output

- › Measurement test points compatible with standard oscilloscope probes
- › PCB is 195 mm × 140 mm and has two layers with 35 µm copper each
- › RoHS compliance



Fully isolated dual in-line molded module with DCB substrate

Integrated TRENCHSTOP™ IGBT and a rugged 1200 V 6-channel SOI gate driver

Integrated bootstrap diodes

Allowable negative VS potential up to -11 V for signal transmission at VBS=15 V

Undervoltage lockout at all channels

RFE pin with multiple functions

ITRIP pin with overcurrent detection

An independent UL-certified thermistor for temperature monitoring

Low-side emitter pins accessible for all phase current monitoring (open emitter)

Discover CIPOS™ IPM MADK: No coding; motor running < 1 hr

1.



iMOTION™ controller board

IPM power boards

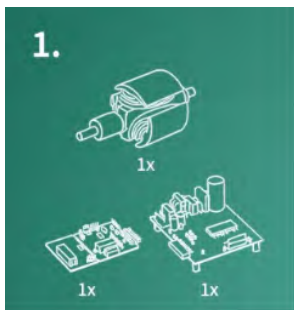
Motor



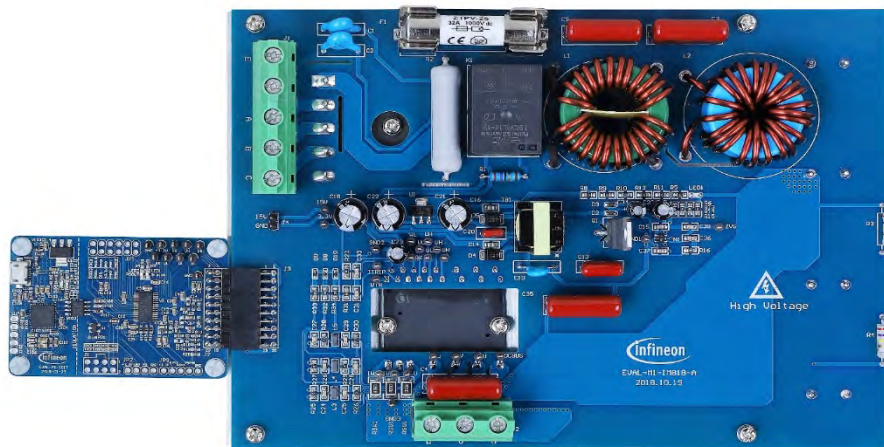
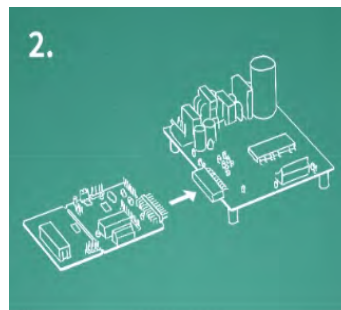
EVAL-M1-05-65D > IPM: IBSM05-065CA > Power rating: 250 W > Max output current: 0.65 Arms	EVAL-M1-05-84D > IPM: IBSM05-084CA > Power rating: 250 W > Max output current: 1.0 Arms	EVAL-M1-05F004 > IPM: IBSM05-800MH > Power rating: 165 W > Max output current: 10.5 Arms	EVAL-M1-05F310 > IPM: IBSM05-310MH > Power rating: 365 W > Max output current: 5.5 Arms	EVAL-M1-3G-45A > IPM: IBSM05-045MA > Power rating: 85 W > Max output current: 0.5 Arms
EVAL-M1-3G-84A > IPM: IBSM05-084MA > Power rating: 150 W > Max output current: 1.0 Arms	EVAL-M1-CM610N3 > IPM: IBSM05-084MA > Power rating: 750 W > Max output current: 2.7 Arms	EVAL-M1-CM615PN > IPM: IBSM05-084MA > Power rating: 650 W > Max output current: 3.0 Arms	EVAL-M1-CTE/F610N3 > IPM: IBSM05-084MA > Power rating: 600 W > Max output current: 3.6 Arms	EVAL-M1-CTE/F620N3 > IPM: IBSM05-084MA > Power rating: 1200 W > Max output current: 6.8 Arms
EVAL-M1-IM018-A > IPM: IM018-MCC > Power rating: 2600 W > Max output current: 4.0 Arms	EVAL-M1-IM231-A > IPM: IM231-LE518 > Power rating: 350 W > Max output current: 1.5 Arms	EVAL-M1-IM240 > IPM: IM240-56 > Power rating: 200W > Max output current: 1.5 Arms	EVAL-IMM101T-015 > IPM: IMM101T-015M > Power rating: 30 W > Max output current: 0.28 Arms	EVAL-IMM101T-046 > IPM: IMM101T-046M > Power rating: 60 W > Max output current: 0.43 Arms



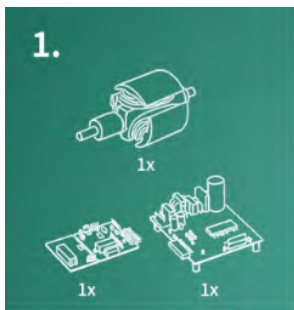
Discover CIPOS™ IPM MADK: No coding; motor running < 1 hr



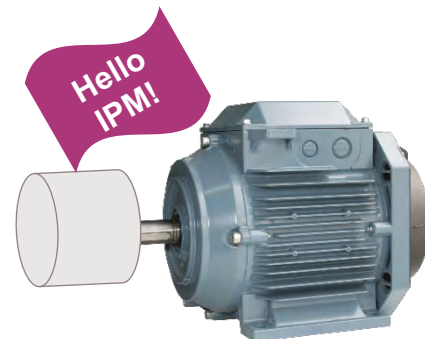
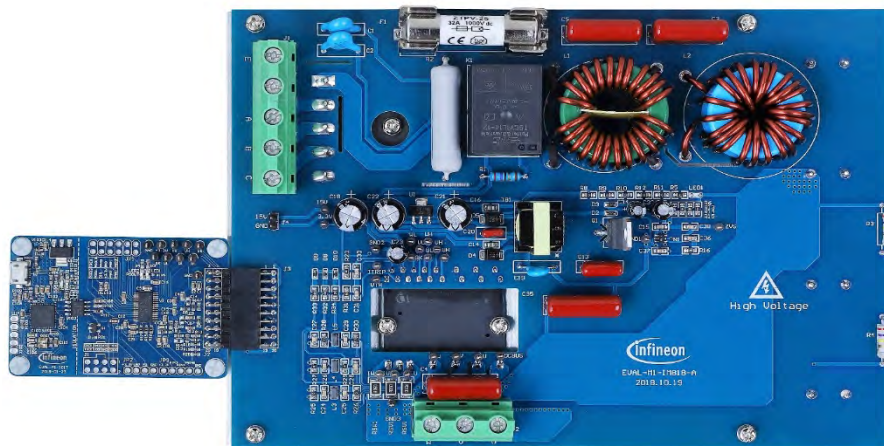
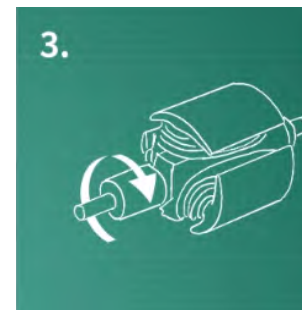
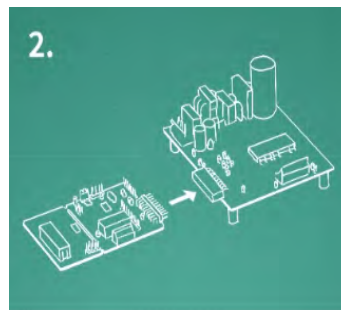
iMOTION™ controller board
IPM power boards
Motor



Discover CIPOS™ IPM MADK: No coding; motor running < 1 hr



iMOTION™ controller board
IPM power boards
Motor



iMOTION™ development tools and software

Easy setup and tuning



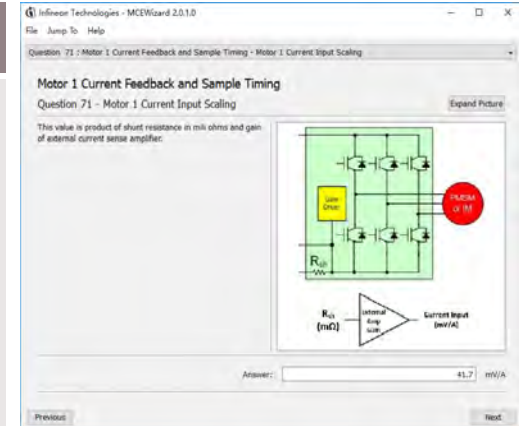
Get any motor running in less than 1 hour!

- › **PC tools** for easy drive setup and tuning
- › Download latest motor control software (MCE) from Infineon website
 - <http://www.infineon.com/imotion-software>
 - Guaranteed compatibility via Secure Chip ID

- › **Three easy steps** to get the drive up and running
 - Generate initial parameters for motor
 - Download parameter set to Evaluation Board
 - Start, monitor & fine-tune the motor drive

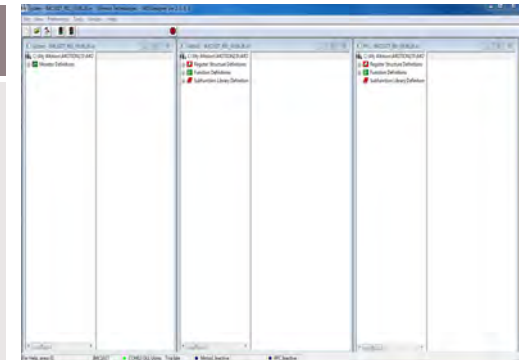
MCEWizard

- › Generate initial drive control parameters
- › Step-by-step guide with easy questions



MCEDesigner

- › Program and update MCE and drive parameters
- › Control, monitor and tune the drive

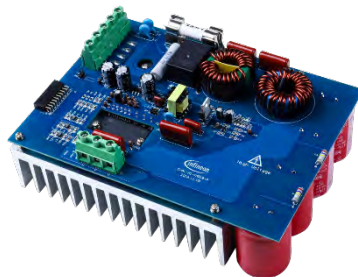


General information



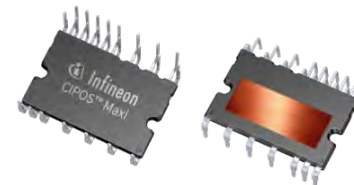
EVAL-M1-101T

OPN: EVALM1101TTOBO1



EVAL-M1-IM818-A

OPN: EVALM1IM818ATOB01



IM818-MCC

OPN: IM818MCCXKMA1





Part of your life. Part of tomorrow.