

## Product Brief

# Evaluation and adapter boards

Our evaluation boards have been designed in several configurations to drive IGBT modules. These boards use specially designed transformers for driving power modules as well as coreless driver ICs our the 1ED020112-F.

### Module selection chart for evaluation boards and driver circuitry

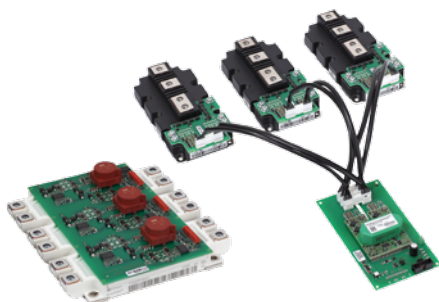
Driver families Product families	EiceDRIVER™ 2ED300C17-S	1ED (CLT chip)	2ED (CLT chip)	Other
IHM	2ED300E17-SFO			
	MA401E17			
	MA401E12			
	MA400E17			
	MA400E12			
PrimePACK™	2ED300E17-SFO	2ED250E12-F		
	MA300E12			
	MA300E17			
EconoPACK™ +		6ED100E12-F2		
EconoDUAL™ 3	MA200E17	2ED100E12-F2		
	MA200E12			
62 mm modules	MA070E12			
	MA070E17			
EconoPACK™ 4 3-level		F3L020E07-F-P		
		MA3L080E07		
		F3L2020E07-F-P		
		MA3L120E07		
		F3L2020E12-F-P		
	MA3L120E12			
SmartPIM 1			7ED020E12-Fi_U1	
EasyPACK 2B 3-level		F3L030E07-F-W2		
EasyPIM™ 2B			7ED020E12-Fi-W2	
MIPAQ™				MA3AE12
				MA040E12

### Key features

- > Plug & play solution
- > Includes transformer as well as coreless transformer technology
- > Mechanical adaption to module package










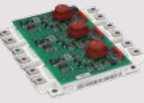



### Applications

- > Save design time
- > Enable fast evaluation
- > Allow easy modification of driver circuit
- > Offer driving solutions even for modules up to 1700 V
- > Demonstrate the capabilities of our driver IC with coreless transformer technology



# Evaluation boards

## Product summary

	Name of evaluation board	Supported products	Description
	7ED020E12-FI-W2	EasyPIM™ 2B 2ED020I12-FI	<ul style="list-style-type: none"> <li>› Evaluation driver board for EasyPIM™</li> <li>› Designed for Easy PressFIT</li> <li>› Designed with 2ED020I12-FI</li> </ul>
	F3L030E07-F-W2	EasyPACK 2B 3-level	<ul style="list-style-type: none"> <li>› Evaluation board for EasyPACK 2B 3-level NPC1 topology</li> <li>› Designed with 1ED020I12-F</li> </ul>
	7ED020E12_FI_U1	SmartPIM 1	<ul style="list-style-type: none"> <li>› Evaluation board for SmartPIM 1</li> <li>› Designed with 2ED020I12-FI</li> </ul>
	MA3AE12	MIPAQ™ base	<ul style="list-style-type: none"> <li>› Isolating amplifier for current measurement with MIPAQ™ base</li> </ul>
	MA040E12	MIPAQ™ serve	<ul style="list-style-type: none"> <li>› n Isolated gate driver power supply and logic interface for MIPAQ™ serve</li> </ul>
	F3L020E07-F-P	EconoPACK™ 4 3-level	<ul style="list-style-type: none"> <li>› Evaluation driver board for EconoPACK™ 4 3-level modules in NPC1 topology (650V)</li> <li>› Designed with 1ED020I12-F</li> </ul>
	F3L2020E07-F-P	EconoPACK™ 4 3-level	<ul style="list-style-type: none"> <li>› Evaluation driver board for EconoPACK™ 4 3-level modules in NPC2 topology(650V)</li> <li>› Designed with 1ED020I12-F</li> </ul>
	F3L2020E12-F-P	EconoPACK™ 4 3-level	<ul style="list-style-type: none"> <li>› Evaluation driver board for EconoPACK™ 4 3-level modules in NPC2 topology (1200V)</li> <li>› Designed with 1ED020I12-F</li> </ul>
	2ED100E12-F2	EconoDUAL™ 3 EiceDRIVER™ 1ED020I12-F	<ul style="list-style-type: none"> <li>› Evaluation driver board for EconoDUAL™ 3 modules</li> <li>› Designed with 1ED020I12-F</li> <li>› Suitable for 600V &amp; 1200V</li> </ul>
	6ED100E12-F2	EconoPACK™ + EiceDRIVER™ 1ED020I12-F	<ul style="list-style-type: none"> <li>› Evaluation driver boards for EconoPACK™+ modules</li> <li>› Designed with 1ED020I12-F</li> <li>› Suitable for 600V &amp; 1200V</li> </ul>
	2ED250E12-F	PrimePACK™ 1200V EiceDRIVER™	<ul style="list-style-type: none"> <li>› Evaluation driver board for 1200V PrimePACK™ modules</li> </ul>
	MA300E12	PrimePACK™ adapter board	<ul style="list-style-type: none"> <li>› PrimePACK™-adapter board for 1200V modules</li> </ul>
	MA300E17	PrimePACK™ adapter board	<ul style="list-style-type: none"> <li>› PrimePACK™-adapter board for 1700V modules</li> </ul>

Power portion not included.

# Evaluation boards








## Product summary

	Name of evaluation board	Supported products	Description
	MA3L080E07	EconoPACK™ 4 3-level	> EconoPACK™ 4 3-level adapter board for 650V modules in NPC1 topology
	MA3L120E07	EconoPACK™ 4 3-level	> EconoPACK™ 4 3-level adapter board for 650V modules in NPC2 topology
	MA3L120E12	EconoPACK™ 4 3-level	> EconoPACK™ 4 3-level adapter board for 1200V modules in NPC2-topology
	MA070E12	62mm modules	> Adapter board for 62mm modules (1200V)
	MA070E17	62mm modules	> Adapter board for 62mm modules (1700V)
	MA200E12	EconoDUAL™ 3	> EconoDUAL™ 3 adapter board for 1200V modules
	MA200E17	EconoDUAL™ 3	> EconoDUAL™ 3 adapter board for 1700V modules
	MA400E12	IHM 130 mm x 140 mm	> IH4 Adapter board for 1200V modules
	MA400E17	IHM 130 mm x 140 mm	> IH4 Adapter board for 1700V modules
	MA401E12	IHM 140 mm x 190 mm	> IH7 Adapter board for 1200V modules
	MA401E17	IHM 140 mm x 190 mm	> IH7 Adapter board for 1700V modules
	2ED300E17-SFO	EiceDRIVER™ 2ED300C17-S / -ST	> Evaluation board for EiceDRIVER™ 2ED300C17-S / -ST

Power portion not included.

# Evaluation boards

## Product summary

	Name of evaluation board	Supported products	Description
	EVAL-1ED020I12-B2	1ED020I12-B2, 1ED020I12-F2 Easy 1B power module e.g. FS25R12W1T4	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› Desaturation detection</li> <li>› Bootstrap supply</li> </ul>
	EVAL-1ED020I12-BT	1ED020I12-BT, 1ED020I12-FT high-speed 3 IGBT e.g. IK-W25N120H3	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› 2-level turn-off and desaturation detection</li> <li>› Isolated supply</li> </ul>
	EVAL-1EDI60I12AF	1EDI60I12AF, 1EDI40I12AF, 1EDI20I12AF, 1EDI05I12AF Trenchstop™ 5 IGBT e.g. IK-W50N65F5	<ul style="list-style-type: none"> <li>› Single resonant half-bridge configuration</li> <li>› Short circuit detection</li> <li>› Bootstrap supply</li> </ul>
	EVAL-2ED020I12-F2	2ED020I12-F2 Highspeed 3 IGBT e.g. IKP20N60H3	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› Desaturation detection</li> <li>› Bootstrap supply</li> </ul>
	EVAL-2EDL05I06PF	2EDL05I06PF, 2EDL05N06PF RC-D IGBT e.g. IKD04N60RF	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› Short circuit detection</li> <li>› Integrated ultrafast bootstrap circuit</li> </ul>
	EVAL-2EDL23I06PJ	2EDL23I06PJ Highspeed 3 IGBT e.g. IKP20N60H3	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› Short circuit detection</li> <li>› Integrated ultrafast bootstrap circuit</li> </ul>
	EVAL-2EDL23N06PJ	2EDL23N06PJ CoolMOS™ e.g. IPL60R199CP	<ul style="list-style-type: none"> <li>› Single half-bridge configuration</li> <li>› Short circuit detection</li> <li>› Integrated ultrafast bootstrap circuit</li> </ul>
	EVAL-6EDL04I06PT	6EDL04I06PT, 6EDL04I06NT RC-D IGBT e.g. IKD04N60RF	<ul style="list-style-type: none"> <li>› Three-phase configuration</li> <li>› Short circuit detection</li> <li>› Integrated ultrafast bootstrap circuit</li> </ul>
	EVAL-6EDL04N02PR	6EDL04N02PR OptiMOS™ e.g. BSB044N08NN3G	<ul style="list-style-type: none"> <li>› Three-phase configuration</li> <li>› Short circuit detection</li> <li>› Integrated ultrafast bootstrap circuit</li> </ul>

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