

Best-in-class products to meet
your application demands

www.infineon.com/powersemiconductors



Never stop thinking



EasyPIM™, EasyPACK

The easy way with compact modules

Product range

600 V, 6 A - 200 A
1,200 V, 10 A - 150 A

Circuit design

- Bridge rectifier
- PIM
- FourPACK, SixPACK
- Dual, halfbridge

Applications

- Air-conditioning
- Household appliances
- General purpose drives from 150 W up to 30 kW
- Pumps, fans
- Uninterruptible power supplies

Features

- Compact module concept
- High reliability and power density
- PressFIT technology available
- Configuration flexibility
- Low cost design of modules
- Modules without base plates
- Easy's with clamping system
- Latest IGBT⁴ 1200 V chip technology with t_{jop} of 150 °C
- IGBT³ 600 V with t_{jop} of 150 °C
- High automated production line
- RoHS compliant



EconoPIM™, EconoPACK™

Trendsetting in case design and IGBT technology

Product range

600 V, 10 A - 200 A
1,200 V, 10 A - 200 A
1,700 V, 50 A - 100 A

Circuit design

- PIM
- FourPACK, SixPACK
- TriPACK
- 12PACK
- Shunt modules
- SixPACK active front-end

Applications

- Variable speed drives
- Uninterruptible Power Supplies
- Welding applications
- Inductive heating
- Renewable energy systems

Features

- Modules with copper base plate
- Optimized heat spread
- Included thermistor (NTC)
- High reliability and power density
- Latest IGBT⁴ chip technology
- New mounting technology PressFIT for EconoPACK™ and EconoPIM™ modules





34 mm, 62 mm, EconoPACK™₄, EconoPACK™₊, EconoDUAL™ modules

The most competitive line of IGBTs from the expert

Product range

- 34 mm/62 mm modules
 - 600 V, 50 A - 400 A
 - 1,200 V, 25 A - 800 A
 - 1,700 V, 50 A - 600 A
- EconoPACK™₄
 - 600V, 100A - 200A
 - 1,200V, 100A - 200A
 - 1,700V, 75A - 150A
- EconoPACK™₊
 - 1,200V, 150 A - 450 A
 - 1,700V, 150 A - 450 A
- EconoDUAL™₂
 - 600V, 200A - 400A
 - 1,200 V, 50 A - 200 A
- EconoDUAL™₃
 - 600 V, 450A - 600A
 - 1,200V, 150 A - 450 A
 - 1,700V, 150 A - 450 A

Circuit design

- 34 mm/62 mm modules
 - Single and Half bridge
 - Chopper modules
 - Diode modules
 - Single switch with series diode

- EconoPACK™₄, EconoPACK™₊, EconoDUAL™
 - SixPACK
 - Dual modules
 - FourPACK
 - Chopper modules

Applications

- Variable speed drives
- Uninterruptible power supplies
- Resonant converters
- Welding applications
- Renewable energy systems
- Inductive heating

Features

- High reliability
- Full product range in various configurations
- Latest IGBT⁺ chip technology for maximum power density and best parallel switching performance
- Symmetrical construction for even and low stray inductance
- Compact inverter designs
- RoHS-compliant



IGBT high current modules IHM, PrimePACK™

The best in class, solution for high power applications

Product range

- IHM
 - 1,200 V, 400 A - 3,600 A
 - 1,700 V, 400 A - 3,600 A
- PrimePACK™
 - 1,200 V, 450 A - 1,400 A
 - 1,700 V, 450 A - 1,000 A

Circuit design

- Single
- Half bridge
- Chopper modules
- H-bridge
- SixPACK
- Diode modules

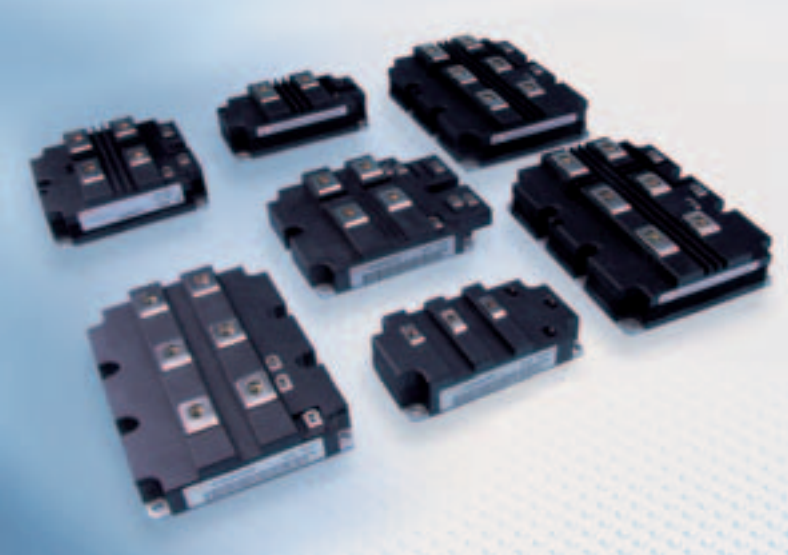
Applications

- Variable speed drives
- Commuter trains
- Tramways and trolleybuses
- Welding applications
- Medical X-ray technology
- Uninterruptible power supplies
- Renewable energy systems
- Inductive heating

Features

- High power density for compact converter designs
- Modules setting a world standard in their class
- Broad range of products
- Increased creepage and clearance for use in rough environments
- Robust module design
- Good saturation and switching characteristics with wide RBSOA
- RoHS compliant





IGBT high voltage modules IHV

Devices for traction and high power industrial drives

Product range

3,300 V, 200 A - 1,500 A
6,500 V, 200 A - 750 A

Circuit design

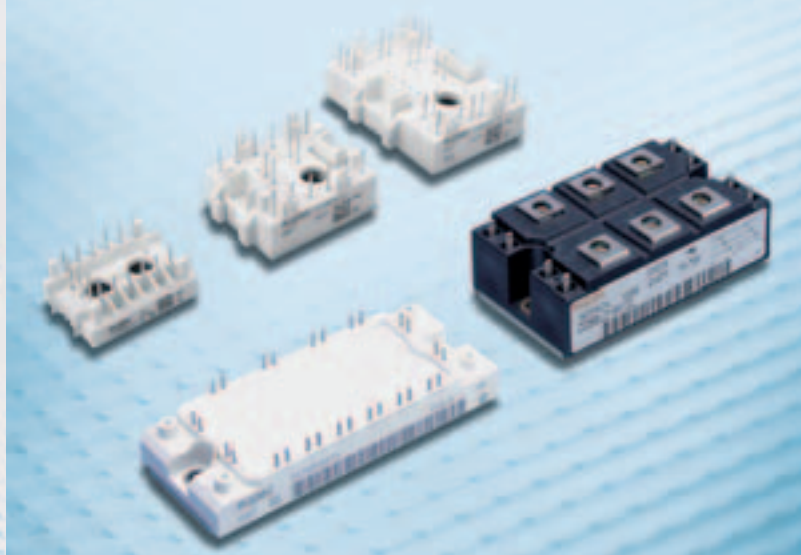
- Single
- Dual
- Chopper modules
- Diode modules

Applications

- Industrial drives for medium AC voltage
- Traction (commuter trains as well as rapid trains)
- Large drives

Features

- High power density for compact converter design
- AlSiC base plate for highest reliability and high power cycling capability
- Increased creepage and clearance for use in rough environments
- Package material with CTI up to 600
- IHV B-series, the second generation with operating temperature up to 150°C available
- Lightweight materials for reduction of overall converter weight
- Extended DC stability
- Fulfills NFF fire and smoke standards



Bridge rectifiers and AC controllers, EasyBRIDGE, eupec™ EconoBRIDGE™, eupec™ IsoPACK™
... for a more compact converter design

Product range

- EasyBRIDGE
800 V, 30 A - 50 A
1,600 V, 30 A - 65 A
- eupec™ IsoPACK™
1,600 V, 85 A up to 205 A
- eupec™ EconoBRIDGE™2
1,600 V, 85 A up to 180 A

Circuit design

- 3-phase rectifier in uncontrolled, half controlled and full controlled bridges
- 3-phase AC switches

Applications

- Frequency converters in drive design
- Power supplies
- Uninterruptible power supplies
- Chopped power supplies for high power SMPS
- Softstarters
- Drives

Features

- EasyBRIDGE and eupec™ EconoBRIDGE™
 - Solderpin modules with optional Brake IGBT and optional NTC resistor in rectifier configuration
- Housing concept matches the EasyPACK and EconoPACK™ inverter module series
- EasyBRIDGE modules also available for single phase applications
- RoHS-compliant
- eupec™ IsoPACK™ bridges
 - Modules with screwable power terminals
 - Concept designed for replacing 3 x 20 mm SCR/diode half bridge modules
- Housing concept matches the 62 mm IGBT modules





Thyristor and diode modules PowerBLOCK

A product range for optimum design

Product range

- Phase control thyristor PowerBLOCK
1,200 V - 3,600 V, 60 A - 800 A
- Rectifier diode PowerBLOCK
800 V - 4,400 V, 85 A - 1,070 A
- Fast Diode PowerBLOCK
800 V - 2,600 V, 46 A - 240 A

Circuit design

- Modules with single diode or thyristor
- Modules with two diodes, thyristors or in combination of both
- In halfbridge configuration for phase rectifier or AC switches

Applications

- Industrial drives
- Softstarters
- Power supplies
- Renewable energy systems
- Welding applications
- Electrolysis
- Traction

Features

- Modules in pressure contact technology with screwable power terminals for high current and blocking voltage
- Highest robustness and reliability
- Nearly all configurations are available for easy rectifier assemblies



Thyristor and diode PressPACK

When maximum power output is required at minimum power losses

Product range

- Phase control thyristor discs
200 V - 8,000 V
86 A - 4,700 A
- Light-triggered thyristors LTT
5,200 V - 8,000 V
500 A - 3,500 A
- Rectifier diode discs
200 V - 9,000 V
120 A - 8,000 A
- Fast rectifier diode discs
600 V - 6,500 V
56 A - 1,460 A

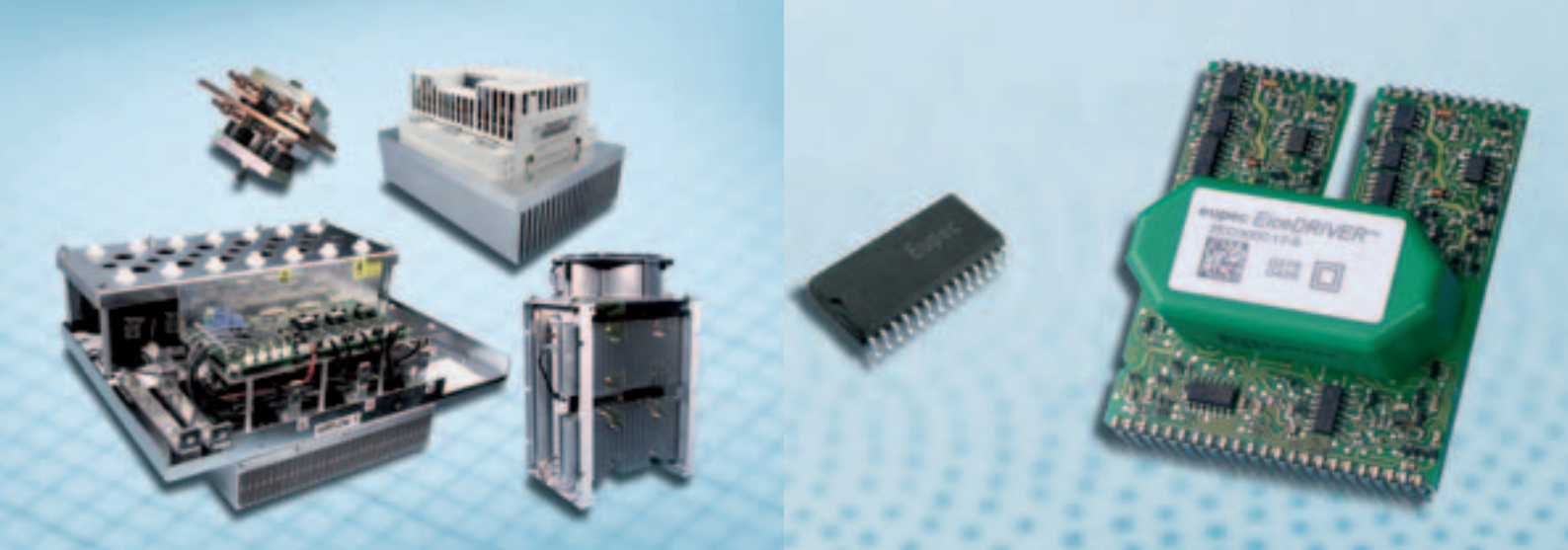
Applications

- Electric energy mains
- Industrial drives
- Softstarters
- Traction
- Power supplies
- Welding
- Electrolysis
- Renewable energy systems
- Pulsed power
- HVDC line transmission systems
- Static VAR compensation (SVC)

Features

- Wide product range
- High current
- High blocking voltage
- Light-triggered
- Highest robustness
- Highest reliability





Stacks and subassemblies

We are the experts for cooling management

EiceDRIVER™ IGBT driver boards and ICs

Driving the intelligent way

Product range

- SCR/diode stacks and sub-assemblies thyristor
180 V - 2,500 V, 10 A - 5,000 A
- IGBT ModSTACK™
180 V - 690 V, 50 kVA - 4 MVA
- IGBT PrimeSTACK
1,200 V IGBT, up to 1,600 A
1,700 V IGBT, up to 1,200 A

Applications

- Industrial drives and elevators
- Renewable energy and other distributed power generation systems
- UPS
- Traction
- Medical technology
- Energy treatment and HVDC conversion
- Galvanic, electrolysis and electroplating
- Pulsed power

Features

- Short time-to-market and reduced system costs due to “ready-to-use” power section
- Flexible system for power solutions due to modular approach
- Modular stack design for industrial approved cabinets
- Various power electronic available
- Optimized integrated thermal management
- Low inductance IGBT stack design

2ED300C17 - S/ST

Features

- For 1,200 V / 1,700 V IGBT modules
- V_{CEsat} monitoring
- “Soft shut down” for fault conditions
- Safe electrical isolation according to EN 50178
- Integrated DC - DC SMPS 8 W
- High peak output current 30 A
- ± 15 V secondary drive voltage

Applications

- Traction
- Large drives
- Distributed power
- Other applications > 100 kVA
- Renewable energy systems

2ED020I12 - F

Features

- Fully operational to 1,200 V
- Gate drive supply range from 13 V to 18 V
- Gate drive currents of +1 A / -2 A
- Matched propagation delay for both channels
- High dV/dt immune
- General purpose operational amplifier
- General purpose comparator

Applications

- General purpose drives
- Other applications up to 15 kVA





Philosophy

Our business philosophy is “our customers first”

WE ARE ALWAYS ANXIOUS to have an open dialogue with our customers. Our customers benefit from innovative technologies and services and we also support in terms of ensuring successful marketing of products. Many product innovations were developed on this basis.

WE HAVE AN EXPERIENCED TEAM of regional application engineers supporting our customers in designing our products into their solutions. We create evaluation boards to enable a fast and reliable solution for the integration of our modules and devices in renewable power systems.

REGULAR QUALITY CERTIFICATION AUDITS together with our customers, strengthen our confidence and make our highly reliable production processes more transparent.

OUTSTANDING CUSTOMER SATISFACTION verifies the success of our work. An open and intensive cooperation in all areas is the basis for long-term partnerships. Both sides consider this to be most important.

INFINEON TECHNOLOGIES SALES OFFICES WORLDWIDE*

(COUNTRY/AREA)

Australia

Infineon Technologies Australia Pty. Ltd.
885 Mountain Highway
Bayswater, Victoria 3153
☎ (+61) 3 - 97 21 88 88
Fax (+61) 3 - 97 21 88 08

Austria

Infineon Technologies Austria AG
Operrgasse 20b/31
1040 Wien
☎ (+43) 0-51 77 71 11 00
Fax (+43) 0-51 77 71 15 00

Belgium/Luxembourg Netherlands

Infineon Technologies Holding B.V.
Sales Division
Westblaak 32
3012 KM Rotterdam
☎ (+31) 10-2 17 68 00
Fax (+31) 10-2 17 68 19

Brazil

Infineon Technologies
South America Ltda.
Avenida Ermano Marchetti,
1435 - 4º andar
**05038-001 Águia Branca
São Paulo-SP**
☎ (+55) 11-39 08 25 64
Fax (+55) 11-39 08 25 64

Canada

Infineon Technologies
North America Corp.
340 March Road, Suite 301
Kanata, Ontario K2K 2E2
☎ (+1) 6 13-5 91 38 35
Fax (+1) 6 13-5 91 89 54

China

Infineon Technologies
International Trade (Shanghai) Co., Ltd.
Beijing Representative Office
12th Floor, Quantum Plaza
No.27 Zhi Chun Road
Haidian District
Beijing 100083
People's Republic of China
☎ (+86) 10 - 82 35 61 18
Fax (+86) 10 - 82 35 54 74

Infineon Technologies
International Trade (Shanghai) Co., Ltd.
No. 7 & 8, Lane 647, Song Tao Road
Zhang Jian Hi-Tech Park
Shanghai 201203, China
☎ (+86) 21-61 01 90 00
Fax (+86) 21-50 80 62 04

Infineon Technologies
International Trade (Shanghai) Co., Ltd.
Shenzhen Office
Room 1502, Block A
Tian An International Building
Renmin Nan Road
Shenzhen 518 001
☎ (+86) 7 55-82 28 91 04
Fax (+86) 7 55-82 28 02 17

Infineon Technologies
Taiwan Ltd.
12F-1, No. 3-2 Yuan Qu Street,
Nan Kang Software Park
Taipei 115
☎ (+8 86) 2-26 55 75 00
Fax (+8 86) 2-2 65 57 50 18

Infineon Technologies
Hong Kong Ltd.
Hong Kong Office
Suite 302, Level 3 Festival Walk
80 Tat Chee Avenue
Kowloon Tong,
Hong Kong
☎ (+8 52) 28 - 32 05 00
Fax (+8 52) 28 - 27 97 62

Denmark

Infineon Technologies Nordic A/S
Herlev Hovedgade 201A
2730 Herlev
☎ (+45) 44 - 50 77 00
Fax (+45) 44 - 50 77 01

Finland

Infineon Technologies Nordic OY
Visitor's Address Upseerinkatu 1
P.O. Box 276
02601 Espoo
☎ (+3 58) 10-6 80 84 00
Fax (+3 58) 10-6 80 84 01

France

Infineon Technologies France S.A.S
Industrial Sales
2 ter, rue Marcel Doret
Burolines II
31700 Blagnac
☎ (+33) 5-34 55 13 30
Fax (+33) 5-34 55 13 34

Infineon Technologies France S.A.S.
39 - 47, Boulevard Ornano
93527 Saint-Denis CEDEX 2
☎ (+33) 1-48 09 72 00
Fax (+33) 1-48 09 72 90

Germany

Infineon Technologies AG
Siemensstraße 31 - 33
71254 Ditzingen/Stuttgart
☎ (+49) 71 56 - 17 91 90
Fax (+49) 71 54 - 1 79 19 90

Infineon Technologies AG
Düsseldorfer Landstraße 401,
47259 Duisburg
☎ (+49) 20 3 - 7 29 87 11
Fax (+49) 20 3 - 7 29 87 60

Infineon Technologies AG
Naegelsbacherstraße 26
91052 Erlangen
☎ (+49) 91 31 - 97 00 10
Fax (+49) 91 31 - 9 70 01 99

Infineon Technologies AG
Paderborner Straße 1
30539 Hannover
☎ (+49) 5 11-8 76 56 20
Fax (+49) 5 11-87 65 62 90

Infineon Technologies AG
Am Campeon 1 - 12
81726 Munich
☎ (+49) 89-23 40
Fax (+49) 89-23 42 46 94

Infineon Technologies AG
Südwestpark 65
90449 Nuremberg
☎ (+49) 9 11-25 29 30
Fax (+49) 9 11-2 52 93 93

Infineon Technologies AG
Industrial Sales
Max-Planck-Str. 5
59581 Warstein
☎ (+49) 29 02 - 764 - 0
Fax (+49) 29 02 - 764 - 11 67

India

Infineon Technologies
India Pvt. Ltd.
13th Floor, Discoverer Building
International Technology Park
Whitefield Road
Bangalore 560 066
☎ (+91) 80-51 39 20 00
Fax (+91) 80-51 39 23 33

Ireland

Infineon Technologies Ireland Ltd.
69 Fitzwilliam Lane
Dublin 2
☎ (+3 53) 1-7 99 95 00
Fax (+3 53) 1-7 99 95 01

Israel

Nisko Ltd.
2 A, Habarzel Street
Tel Aviv 69710
☎ (+9 72) 3-7 65 73 00
Fax (+9 72) 3-7 65 73 33

Italy

Infineon Technologies Italia S.r.l.
Via Vipiteno, 4
20128 Milano
☎ (+39) 02 - 25 20 41
Fax (+39) 02 - 2 52 04 43 95

Japan

Infineon Technologies Japan K.K.
Maruyama Nissei Building 14F
2-14-21 Nishiki, Naka-ku
Nagoya-shi, Aichi 460-0003
☎ (+81) 52 - 2 23 15 70
Fax (+81) 52 - 2 23 14 61

Infineon Technologies Japan K.K.
ORIX-Dojima Building 8F
2-1-31, Dojima, Kita-ku
Osaka-shi,
Osaka 530-0003
☎ (+81) 6 - 47 97 44 60
Fax (+81) 6 - 47 97 44 62

Infineon Technologies Japan K.K.
Takanawa Park Tower
8F/9F/10F/12F/17F
3-20-14, Higashi-Gotanda,
Shinagawa-ku,
Tokyo 141-0022
☎ (+81) 3 - 54 49 64 11
Fax (+81) 3 - 54 49 64 01

Korea

Infineon Technologies Korea Co., Ltd.
4th floor Sigma Tower
7-19 Shincheon-dong Songpa-gu
Seoul 138-734
☎ (+82) 2 - 34 60 09 00
Fax (+82) 2 - 34 60 09 01

Malaysia

Infineon Technologies
Malaysia SDN BHD
Krystal Point II
1-4-11/12, Lebuah Bukit Kecil 6
11900 Bayan Lepas
Penang, Malaysia
☎ (+60) 4 - 6 44 77 66
Fax (+60) 4 - 6 41 48 72

Mexico

Infineon Technologies
Everest Sales & Solutions
Av. Manuel Acuña 2674-101
Col. Ladrón de Guevara
44680 Guadaluajara
☎ (+52) 33 - 36 42 21 01
Fax (+52) 33 - 36 40 65 62

Poland

Siemens Sp. z o.o.
Ul. Żupnicza 11
03-821 Warszawa
☎ (+48) 22-8 70 91 50
Fax (+48) 22-8 70 91 59

Portugal

Infineon Technologies F.S.,
Portugal, S.A.
Avenida 1º de Maio, 801
Mindela
4485-629 Vila do Conde
☎ (+3 51) 2 52-24 60 00
Fax (+3 51) 2 52-24 60 01

Russia

Infineon Technologies RUSS LLC
Leninsky prospect 113/1
Moscow 117 198
☎ (+7) 4 95-9 56 51 95
Fax (+7) 4 95-9 56 51 95

Singapore

Infineon Technologies Asia
Pacific Pte. Ltd.
8 Kallang Sector
Singapore 349 282
☎ (+65) 68-76 28 88
Fax (+65) 68-76 31 22

South Africa

Siemens Components
P.O. Box 3438
Halfway House 1680
2146 Sandton
☎ (+27) 11 - 6 52 20 00
Fax (+27) 11 - 6 52 26 14

Spain

Siemens, S.A.
División Componentes
Ronda de Europa, 5
28760 Tres Cantos-Madrid
☎ (+34) 91-5 14 71 55
Fax (+34) 91-5 14 70 14

Sweden

Infineon Technologies Sweden AB
Isafjordsgatan 16
16481 Kista
☎ (+46) 8-7 57 50 00
Fax (+46) 8-7 57 46 12

Switzerland

Infineon Technologies
Schweiz AG
Badenerstrasse 623
P.O. Box 1570
8048 Zürich
☎ (+41) 44 - 4 97 80 40
Fax (+41) 44 - 4 97 80 50

Turkey

Siemens Sanayi ve Ticaret A.S.
Yakacik Yolu No: 111
34861 Kartal, Istanbul
☎ (+90) 2 16 - 4 59 28 51
Fax (+90) 2 16 - 4 59 28 51

United Kingdom

Infineon Technologies UK Ltd.
Infineon House
Fleet Mill
Minley Road
Fleet, Hampshire GU51 2RD
☎ (+44) 12 - 52 77 22 00
Fax (+44) 12 - 52 77 22 01

U.S.A.

Infineon Technologies
North America Corp.
3700 West Parmer Lane, Suite 102
Austin, TX 78727
☎ (+1) 5 12 - 3 41 71 27
Fax (+1) 5 12 - 3 41 99 26

Infineon Technologies
North America Corp.
3000 CentreGreen Way
Cary, NY 27513
☎ (+1) 9 19 - 6 77 27 00
Fax (+1) 9 19 - 6 78 19 34

Infineon Technologies
North America Corp.
8203 Willow Place South, Suite 200
Houston, TX 77070
☎ (+1) 2 81 - 7 74 05 55
Fax (+1) 2 81 - 7 74 05 61

Infineon Technologies
North America Corp.
485 Route 1 South, Building C, Suite 105
Iselin, NJ 08830
☎ (+1) 7 32 - 8 55 92 00
Fax (+1) 7 32 - 8 55 92 06

Infineon Technologies
North America Corp.
2529 Commerce Drive, Suite H
Kokomo, IN 46902
☎ (+1) 7 65 - 4 56 19 28
Fax (+1) 7 65 - 4 56 38 36

Infineon Technologies
Industrial Power, Inc.
1050 Route 22
Lebanon, NJ 08833
☎ (+1) 9 08 - 23 6 56 - 00
Fax (+1) 9 08 - 2 36 56 - 20

Infineon Technologies
North America Corp.
19111 Victor Parkway
Livonia, MI 48150
☎ (+1) 734 - 7 79 50 00
Fax (+1) 734 - 7 79 50 01

Infineon Technologies
North America Corp.
1730 North First Street
San José, CA 95112
☎ (+1) 4 08 - 5 01 60 00
Fax (+1) 4 08 - 5 01 24 24

Infineon Technologies
North America Corp.
1901 N. Roselle Rd., Suite 1020
Schaumburg, IL 60195
☎ (+1) 8 47 - 8 84 70 09
Fax (+1) 8 47 - 8 84 75 99

Infineon Technologies
North America Corp.
238 Littleton Rd, Suite 200
Westford, MA 01886
☎ (+1) 9 78 - 6 92 05 50
Fax (+1) 9 78 - 6 92 23 09

Headquarters
Infineon Technologies
Industrial Power, Inc.
1050 Route 22
Lebanon, NJ, 08833
☎ (+1) 9 08 - 2 36 56 0
Fax (+1) 9 08 - 2 36 56 20

Eastern Region
Infineon Technologies
Industrial Power, Inc.
P.O. Box 187
Concord, MA 01742-0187
☎ (+1) 7 81 - 2 75 90 16

Central Region
Infineon Technologies
Industrial Power, Inc.
165 St James Circle
Union Grove, WI 53182
☎ (+1) 2 62 - 8 78 98 98
Fax (+1) 2 62 - 8 78 28 98

Infineon Technologies
Industrial Power, Inc.
21175 Tomball Pkwy
PMB 710
Houston, TX 77070
☎ (+1) 2 81 - 3 74 76 22
Fax (+1) 2 81 - 3 74 76 21

Western Region
Infineon Technologies
Industrial Power, Inc.
7829 Center Blvd. SE
Suite 162
Snoqualmie, WA 98065
☎ (+1) 4 25 - 3 96 50 60
Fax (+1) 4 25 - 3 96 50 61

* and representative offices

www.infineon.com