

LINECARD

Industrial & Transportation



by Application



Summary

by Application

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Who we are

“Dimac Red’s mission is to support the success of our customers through the professional supply of innovative electronic products, solutions, design services and consultancy services”

Consulting and Sales of High Quality Electronic Products

Dimac Red Spa is a professional sales organization, established in 1979, dedicated to serving the European market with High Reliability electronic products. Our mission is to provide customers with products and services that require a unique level of technical support.

Our services include design, prototypes and subsystems production, hirel procurement activities, design analyses (WCA, FMECA, radiation) and additional screening/testing.

Focused mainly on the aerospace, military, railway markets (but also on automotive, telecom and medical markets), our experienced technical engineers provide Design-In and Added Value in order to help professionals and designers use High Reliability electronic components and sub-systems. Using this resource, our customers have an easy access to a wide knowledge of the latest advanced technologies suitable for their needs.

Markets

We continue to work as partners with the most significant players in these industries, from the early stages of design right up to the production phase.

In addition to this, Dimac Red is able to support startup and mid-size companies with small volumes often associated with the implementation of cutting-edge technologies.

You will find Dimac Red Hi-Rel products and services suitable to the most relevant markets.



Automotive



Avionic



Railway



Industry



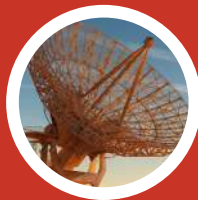
Medical



Space



Hi-Rel



RF&Telecom



Grid&Energy



Defence



Transportation

LINECARD

Industrial & Transportation

Industrial & Transportation Division encompasses a comprehensive range of product lines primarily dedicated to the industrial and transportation sectors. We are committed to delivering innovative solutions that address the unique challenges and needs of these dynamic industries.

Our offerings cover an extensive array of applications within the transportation sector, including automotive, railway, agricultural machinery, construction equipment, bicycles, scooters, and more. On the industrial side, we provide cutting-edge products for a variety of non-hi-rel applications, including the medical field.

By focusing on these specific sectors, our division is able to tailor solutions that meet the stringent requirements and evolving demands of industrial and transportation environments. We are dedicated to continuously scouting for new products and integrating the latest technologies to ensure that our clients benefit from the most advanced and efficient solutions available.

Join us as we drive innovation and excellence in the industrial and transportation sectors, delivering products that enhance performance, safety, and sustainability.



Embedded Computer Solutions and Displays





DISPLAY VISIONS is an innovative German manufacturer of a wide range of high-quality industrial displays, located in Gilching, near Munich. DISPLAY VISIONS has always placed a strong focus on the industrial automation, medical and automotive markets, thus becoming an important landmark for many customers, due to the long-

term availability (mostly 10 years), shortest delivery times, highest quality requirements, and their technically excellent support.

Inventiveness, pioneering spirit and innovation are the driving force behind the company's 50-year history.

Product / services supplied

LCD, OLED AND TFT DISPLAYS

Market Sector

Industrial, Medical



More info on
our website

Best Products



PLC - Small Control Unit with up to 50 satellite displays

The new PLC series expands the classic small control unit in the control cabinet with an integrated color display inclusive touch. In addition, this solution enables visualization on up to 50 satellite displays. There, measured values can be displayed and settings can be made by touch. Thanks to edge computing, even complex and visually appealing screen layouts can be easily implemented.



Color HMI control touch panels

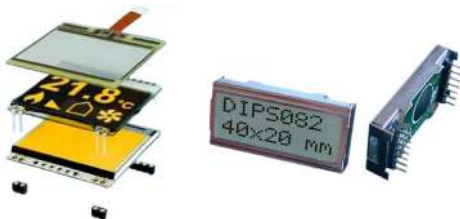
These outstanding ready-to-use displays are the ideal solution for a wide range of applications. Brilliant, bright and with touch panel, they are an excellent choice as a replacement for physical switches and controllers in home automation, lab analyzers, wellness and fitness equipment, etc. The HMI displays can be mounted on the wall or in a front panel/door and support communication with over 20 different PLC models.



Industrial OLED Display

A bright and durable OLED display family with pins (pitch 2.54mm) that can be easily mounted directly on a breadboard, thus facilitating all mounting needs.

These OLED displays are characterized by wide temperature range (-40...+80 °C), contrast > 1:1000, display response time typ. 10µs and a wide viewing angle of more than 170°. They are equipped with an integrated controller and support SPI and I²C bus directly.



LCD Displays

Display Vision produces a wide variety of robust text and graphic LCD displays available in different colors and sizes. They are characterized by a high level of contrast, wide temperature range (-20...+70 °C) and a rapid response time.

The LCD displays are available in 2 versions with different mounting types, that is Chip-on-Glass or Soldering.

Getac

Getac is a global leader in rugged mobile technology and intelligent video solutions, including laptops, tablets, software, body-worn cameras, in-car video, interview rooms, and evidence management software. Getac specializes in creating tailored products and solutions for customers challenged by extreme working conditions.

The wide range of rugged devices, accessories, and software, along with expert service, means innovation is never compromised.

Product / services supplied

Laptops, Tablets, Accessories, Software

Market Sector

Industrial, Medical, Defence



More info on
our website

Complementary Products



Best Products



S510 Laptops, Rugged, 15.6-Inch, Windows

Powered by AMD Ryzen AI 5 340 / 7 350 processors and AMD Radeon 800M graphics, with its brilliant 15.6" large screen, edge-ready AI capabilities, and sleek rugged profile integrating sustainable design, the S510 laptop delivers uncompromising computing performance in challenging environments.



UX10 Tablets, Fully Rugged, 10-Inch, Windows

The UX10 fully rugged tablet delivers ultra-fast AI processing for data collection and real-time decision-making in harsh environments, powered by Intel® Core™ Ultra processors and Intel® AI Boost technology. It features ultra-fast LPDDR5X memory of up to 32GB, a 13MP autofocus rear camera, Wi-Fi 7 and dual Thunderbolt™ 4 ports, ensuring highly efficient connectivity.



X600Pro Laptops, Fully Rugged, 15.6-Inch, Windows

The X600 Pro never comes up short with its Intel® 11th Generation i5/i7 Processor (up to 8 cores), optional NVIDIA® Quadro® RTX3000 discrete graphics controller, and up to 128GB DDR4 RAM available. Its dual-fan design keeps each of these computing components cool and capable, even during the most computationally-intensive tasks, while data storage can include up to three user-removable PCIe solid-state drives (SSDs), totaling 6TB. X600 Pro's connectivity exceeds the rugged standard, featuring Dual 2.5GBASE-T Ethernet, wireless LAN broadband, enabled via the new Wi-Fi 6E standard, Thunderbolt™ 4 (Type-C), Bluetooth 5.2 and optional 4G-LTE with integrated GPS.



Energy and Power

Batteries, Capacitors and Ultracapacitors

Through a network of qualified partners, DIMAC RED develops and produces a small range of custom products, based on super-capacitors and ultra-capacitors technology and designed according to customer's specifications and needs. These products are mainly used in ESS (Energy Storage System) applications, such as Start & Stop Systems, automatic warehouses, packaging machines, etc. The Dimac Red products are characterized by high power density, compact dimensions, high flexibility, very long lifetime, wide range of operating temperature and no maintenance requirement.

Market Sector

Industrial, Automotive, Transport



More info on
our website

Best Products



X-BOOST 100 LBA

A compact module composed of 6 Supercapacitors (2,7V – 600F) mounted in series, that is suitable for Start&Stop applications, hybrid vehicles and cranking systems.

The technical characteristics are the following:

Capacitance: 100F _ Voltage: 16,2 V
Current: 62 A _ Power :1 kW



X-BOOST 50 / 55/ 70

Standard modules from 50 to 70 farads, very flexible and suitable for electrical and mechanical integration of storage systems. Allows to reach various levels of energy stored and rated voltage.

The technical characteristics are the following:

Capacitance: from 50F up to 70F
Voltage: 16,2 V _ Current: 30 A
Power: 0,5 kW



CBOX-0050-P048

A module composed of 54 Supercapacitors (2,8V – 350F) used as power supply for automatic shuttle handling materials in cooled warehouses. The technical characteristics are the following:

Capacitance: 50F _ Voltage: 48,6 V
Current: 36 A _ Power: 1,8 kW



CBOX-0110-P048

It's a bigger and more powered version of the previous one, that is composed of 18 Supercapacitors (2,7V – 2000F) and used as power supply for automatic shuttle handling materials in cooled warehouses. The technical characteristics are the following:

Capacitance: 110F _ Voltage: 48,6 V
Current: 79 A _ Power: 3,8 kW



ITELCOND is a historic Italian company that has been producing large-capacity aluminium electrolytic capacitors since 1976 for applications where a high level of quality is required. Their product range ranges from large screw capacitors to small printed circuit capacitors, always in the professional field. With over 45 years of experience, they have all the necessary skills to contribute to the most complicated projects, supplying from capacitors to more integrated solutions that use them.

Product / services supplied

Electrolytic aluminum capacitors

Market Sector

Railway, Industrial, Grid&Renewable Energy, Automotive, Medical, Defence, Telecom, Transportation



More info on our website



Snap-in Capacitors

- Features: Self-extinguishing electrolyte, From 5k to 20k hours lifetime at 85°C, Low ESR, High ripple, Temperature from -55°C up to 85°C
- Certifications: ISO 9001, ISO 14001, REACH, RoHS, Up to 500V



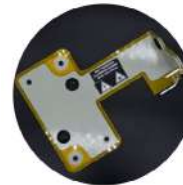
Screw terminal Capacitors

- Features: Self-extinguishing electrolyte, From 5k to 20k hours lifetime at 85°C, Low ESR, High ripple, Temperature from -55°C up to 85°C
- Certifications: ISO 9001, ISO 14001, REACH, RoHS, Up to 500V



Energy storage

Itelcond energy storage systems are entirely designed in-house, where they are then assembled and tested. The energy storage module connections are available with or without a central point.



Bus bars

Itelcond design their bus bars, assemble them and test them internally. They are 3-layer sandwiches in aluminum with a thickness of 2mm, insulated with gray polyamide resin with a thickness of 0.25mm and insulating layers in PET + polyamide film tested 100% at 5kVac.



Customized capacitors

Itelcond produce over 40% of their capacitors ad hoc for customers. Their know-how is the greatest contribution to the success of their clients' projects for which we create tailor-made solutions.



For over forty years, the Tecate Group has been a global manufacturer and supplier of high-quality ultracapacitors, capacitors and hybrid capacitors.

Product / services supplied

Ultracapacitors, Hybrid capacitors

Market Sector

Railway, Industrial, Grid&Renewable Energy, Automotive, Medical, Defence, Transportation



Ultracapacitor cells and modules

Tecate Group's offers a wide range of ultracapacitor cells from small with radial or snap-in terminals for PCB application to large cylindrical cells with screw terminals. Also, modules offered could be for PCB application with small capacitance or big ruggedized ones.



Hybrid capacitors

At Tecate Group, they offer single, 3.8V hybrid capacitor cells in a variety of capacitances. These cells come with radial wire leads or a Molex 87439-0200 quick connector for ease of handling.



More info on our website



LICAP Technologies Inc. (LICAP) is a world-class manufacturer of supercapacitor and lithium-ion capacitor products with market-leading performance. LICAP successfully demonstrated commercial viability and superior performance of Activated Dry Electrode® technology in ultracapacitor electrodes.

Product / services supplied

Ultracapacitors, Lithium Ion Capacitors

Market Sector

Railway, Industrial, Grid/Renewable energy, Automotive, Medical, Transportation



Lithium Ion Capacitors

LICAP offers different LIC with rated capacitance of 200F, 800F, 2200F and 3000F.

As compared to ultracapacitor cells, LIC cells offer a higher energy density, higher per cell voltage and lower self-discharge. LIC cells offer a much longer life than lithium-ion batteries, and higher power capability as well.



More info on our website

LS Materials is a South Korea company specialized in the production of ultracapacitors and it is a core company in LS Group's carbon-neutral value chain with growth potential and stability. LS Materials is the leading partner for new-generation energy storage devices with great power and reliability. LS Materials has been producing ultracapacitor for 20 years and supplying it to more than 500 customers over the world, becoming one of the leading global manufacturers of Ultracapacitors.

Product / services supplied

Ultracapacitors

Market Sector

Railway, Industrial, Grid&Renewable Energy, Automotive, Medical, Transportation



More info on our website

Best Products

CellDule module 16.2V 200F

Innovative structure with jelly roll directly into the module. This innovative structure allows to have more energy density with the same dimensions or to have a compact size with the same energy density. Furthermore, it has the 50% less of component than a traditional ultracapacitor module, allowing to reduce the manufacturing procedures and then the cost.



LS Materials Small cells line-up

This range of supercapacitors is ideal for applications such as industrial automation, smart meters and IoT devices, power tools, automotive, electronics, telecommunications equipment, medical devices, and small-scale renewable energy systems. These compact cells are engineered for high power density and rapid charge/discharge cycles, delivering reliable performance across a wide operating temperature range. Their smaller form factor enables easy integration into space-constrained systems.



LS UltraGrid 19" Rack

Made by several ultragrid module connected in series, this system could reach 1440V and 7F. It could be used for short-term peak power (1/1000 sec) for MV-GW scale grid. It is equipped with Capacitor management system, State-of-health and State-of-Age. Each module 70F 144V has CAN 2.0B communication interface. Furthermore, it has smart balancing software for improving lifetime and power demand and State-of-health estimation software.



CTC modules

CTC (Cell to Cell) modules are made by direct connection through nuts of the cells, allowing a reduction of contact resistance and a better dissipation of the heat. Furthermore, the aluminium external case makes this type of module suited for heavy duty applications such as electric vehicles.



LSUM 054R0C 0188F EA AMD1

LSUM 054R0C 0188F EA AMD1 is a 54V 188F module equipped with CAN bus 2.0. This allows the module to communicate with an external system its status in real-time. It is also featured with warning and protection monitoring and related alarms.



LSUC 003R0L 0360F LE

New 360F 3V cells that has half the internal resistance of its predecessor of 380F. This make this cell suitable for heavy duty application in which high frequency cycles and high rms current are requested.





Enabling Energy's Future™

Maxwell technologies Korea is now a brand of UCAP Power™, a global provider of ultracapacitor-based power solutions across a wide range of renewable markets. Their ultracapacitor products provide power solutions for applications in consumer and industrial electronics, renewable energy, automotive, transportation, and information technology.

Product / services supplied

Ultracapacitors

Market Sector

Railway, Industrial, Grid/Renewable energy, Automotive, Medical, Transportation



More info on our website

Best Products



Maxwell's XP™ Series

Maxwell's XP™ Series (3F to 540F cells) comprises ultracapacitor cells designed specifically for reliable performance in applications operating in adverse temperature and humidity conditions thanks to the advanced structure and sealing for additional protection necessary in demanding environmental conditions and 3X the lifetime of Standard Series cells in high heat and humidity environments.



5.0 – 7.5 Volt Modules

The 5.0 and 7.5-volt small cell modules are available in 1.0, 1.5 and 2.5 farad versions and are suitable for applications that require pulse power in small form factors. These modules provide a long lifetime with up to 500,000 duty cycles.



Maxwell Durablue ultracapacitors

Maxwell Technologies' DuraBlue® Advanced Shock and Vibration Technology combines Maxwell's patented electrode formulation and manufacturing process with a robust proprietary cell structure, resulting in a product line specialized for the most demanding shock and vibration requirements.

skeleton⁺

Based on patented Curved Graphene, Skeleton's energy storage solutions represent the biggest technological advancement in the industry in the last 20 years. Curved Graphene significantly increases the energy density of their supercapacitors. Skeleton is also well-positioned to help their customers in the grid industry with their grid solutions, which are unprecedented in the energy storage sector. Their grid solutions could be used in application such as UPS, Statcom, Microgrid stability and virtual inertia.

Product / services supplied

Supercapacitors

Market Sector

Railway, Industrial, Grid&Renewable Energy, Automotive, Medical, Transportation



More info on
our website

Best Products



Skelcap series

Class-leading performance and a large variety of options offer you the upper hand over the competition.



Skeleton ultracapacitor modules

Skeleton offers ultracapacitor module for different application such as 12V and 24V engine start module, SkelMod 51V 177F rail-certified supercapacitor module for transportation market and 19" rack compatible module.



SkelGrid supercapacitor energy storage systems

SkelGrid supercapacitor energy storage systems is the turn-key energy storage solutions for megawatt-level power needs. The SkelGrid energy storage system is designed for demanding applications such as voltage and frequency regulation, peak shaving.



Novac's EDLC supercapacitor portfolio consists of pouch-format cells engineered for high power density, long cycle life, and extreme space efficiency, addressing applications where fast energy delivery and compact integration are critical. The range is structured around two main performance classes: VHP – High Performance, designed for wide operating temperatures from $-40\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$, and VHT – High Temperature, designed for operation from $-20\text{ }^{\circ}\text{C}$ to $+100\text{ }^{\circ}\text{C}$, targeting applications exposed to sustained elevated temperatures.

Product / services supplied

Ultracapacitors

Market Sector

Railway, Industrial, Grid/Renewable energy, Automotive, Medical, Transportation, Defence, Aerospace



More info on our website

Best Products



Pouch-format cells

Novac supercapacitors are manufactured in pouch format, enabling exceptional flexibility in geometry, thickness, and tab configuration. Cell dimensions scale from the smallest 12 F cell (sub-millimetric thickness and few cubic centimeters) to the largest 1320 F cell, with progressively increasing footprint and thickness to maximize stored energy while preserving high power capability



Custom Modules

Novac complements its cell portfolio with module-level engineering and production, transforming individual supercapacitor cells into fully integrated, application-ready energy storage units. Modules are designed and assembled in-house, with custom mechanical cases, electrical architectures, and connector layouts tailored to the specific operating environment and system interface.



Novac SCMS (SuperCapacitor Management System)

The Novac SuperCapacitor Management System (SCMS) is a dedicated electronic platform designed to ensure the safe, reliable, and efficient operation of supercapacitor cells and modules across a wide range of applications. Developed in-house, the SCMS continuously monitors key electrical and thermal parameters, manages cell balancing, and protects the system

High-Voltage High-Precision Solutions





PRODUCTS BY:
DEAN
TECHNOLOGY

Dean Technology, Inc. (DTI) has a long and exceptional history of designing and supplying world-class products and solutions for high-voltage and high-power applications. Headquartered in Dallas, Texas, with manufacturing facilities in the US and China, DTI is an advanced multinational partner. The true strength of Dean Technology

is its long-term dedication: where other manufacturers abandon niche markets, DTI guarantees continuous support, top quality, and constant innovation to ensure the success of their customers' projects over time.

Product / services supplied

Diodes and Rectifiers, Suppressors, High Voltage Power Supply, High Voltage Capacitors, Power Components, Optical Devices, High Voltage Test equipment.

Market Sector

Medical, Industrial, Defence



More info on
our website

Best Products

High Voltage Power Supplies

Standard and custom high-voltage and high-power modules suitable for biasing and capacitor charging applications.



UMR-A Series: Specific biasing modules offering high stability. Range: Output voltages up to 40kV.

UMR-HPC Series: High power capacitor charging modules. Range: Power levels up to 250W and voltages up to 30kV.

High Voltage Ceramic Capacitors

Highly stable ceramic capacitors manufactured with advanced dielectric materials, ideal for high-voltage and high-temperature conditions.



Y6P Class II Dielectric Series: Offers high dielectric constant, low dissipation factor, and excellent thermal stability. RoHS and REACH compliant. Range: Capacitance from 100pF to 3200pF. Voltages from 3kVDC to 20kVDC. Operating temperature: -30°C to +105°C.

High Voltage Diodes & Rectifiers

High-performance diodes designed for extreme reliability, fast recovery, and maximum efficiency in critical environments.



XGF Series: Features the newest XOE™ (eXtreme Optimized Efficiency) technology. Range: 25kV to 30kV.

BRxXF Series: Fast reverse recovery diodes (40ns) with high forward surge capability (50A to 80A) and low leakage current. Range: 2kV to 10kV / 600mA to 1500mA.

Transient Voltage Suppressors

High-grade protection devices engineered to shield sensitive circuits from destructive voltage spikes and transient surges.



Offers fast response times and high peak-current handling capabilities, covering a broad spectrum of clamping voltages to ensure safety in high-power industrial and medical systems.



High Voltage Test Equipment & Optics

Professional instruments and components to complete the high-voltage ecosystem. Includes precision measurement devices, high-voltage test probes, and optical opto-couplers designed for safe isolation and precise control in high-stress applications.





We connect High Voltage

GES High Voltage is a manufacturer of premium high voltage connectors located near Seattle/USA and Munich/Germany (HQ). Transmitting voltages up to 100 kV DC in precision equipment and facilities, GES is established in high-technology markets. GES High Voltage provides a large variety of HV connectors in diverse configurations and designs application specific customizations and modifications. GES products are favored by demanding customers worldwide and are deemed as highly reliable and well-engineered solutions for sensitive applications in industry and science.

Product / services supplied

High-voltage interconnection, Hybrid HV-conconnector systems

Market Sector

Railway, Transportation, Industrial, Medical



More info on our website

Best Products



Series 100 HV connectors

Single-Pin HV Connectors

- Operating voltage: 10 - 100 kV DC
- Testing voltage: 15 - 150 kV DC
- Rated current: 30 - 80 A
- Number of pins: 1
- Termination method: solder or screw
- Wire size: AWG 14
- Protection class: IP 50
- Flammability: UL94 V-0 or HB



Series M connectors

Multi-pin HV Connectors

- Operating voltage: 12 kV DC
- Testing voltage: 18 kV
- Rated current: 30 A
- Number of pins: 2 - 9
- Termination method: solder
- Wire size: AWG 14
- Protection class: IP 54
- Flammability: UL94 V-0 or HB



VP Series connectors

Variable HV-Connectors

- Operating voltage: 13 kV DC
- Testing voltage: 20 kV DC
- Rated current: 13 A
- Number of pins: 1-3
- Termination method: crimp
- Wire size: AWG 26-14
- Protection class: IP 20
- Flammability: UL94 V-0



Series MOD connectors

Series MOD, System Components

- High voltage, 2 Pin per module, up to 12 kVDC
- Signal transmission, 3 - 20 pin per module, up to 630 V
- Coaxial, 3 pin per module, 250 V
- Data transmission, RJ45 CAT5e / USB Type 2, 4 x 400 V contacts
- Diverse frames and housings for up to 7 modules



Best Products

Nicom Electronic was founded in 1993 by engineers with more than 30 years of experience in Thick Film technology. Our purpose is to design and manufacture High Voltage, High Power, High Precision and Low TC Resistors. Products are 100% designed and manufactured in Switzerland. The development of products begins with a careful selection of the materials to guarantee high precision and quality. Special designs and process technologies provide outstanding performances and technical solutions for most exacting customers.

Product / services supplied

High Voltage Resistors

Market Sector

Railway, Transportation, Industrial, Medical



More info on
our website



Low TC High Voltage Resistors Series 425

Cylindrical high voltage resistors with low temperature coefficient of 25 ppm/°C, non-inductive design, high precision, low voltage coefficient, high stability, silicone coating.

Voltage Ratings to 60 KV, Power Ratings to 10 Watts, Resistance range to 1 GOhm, Low TC of 25 ppm/°C, Tolerance to 0.1%, Non-Inductive



High Voltage Surge Resistors Series P400

Cylindrical high voltage surge resistors with proprietary power film design, non-inductive, high stability, high pulse energy and high frequency, high temperature silicone coating.

Voltage Ratings to 90 KV, Power Ratings to 20 Watts, Resistance range to 1 MOhm, High Energy to 250 J, Tolerance to 1%, Non-Inductive



SMD High Voltage Chip Dividers Series HVCD

SMD high voltage chip dividers with fine line non-inductive design, high precision, low ratio temperature coefficient, tight ratio tolerances, low voltage coefficient and high stability.

Voltage Ratings to 10 KV, Power Ratings to 1.3 Watt, Resistance range to 100 GOhm, Low Ratio TC to 10 ppm/°C, Ratio Tolerance to 0.1%, Ratio from 1:100 to 1:10'000



VPG Foil Resistors

VFR • ALPHA ELEC. • POWERTRON • APR

VPG Foil Resistors (a business unit of Vishay Precision Group) delivers deep engineering expertise in the design and manufacturing of high-value precision resistors and measurement systems. Known for innovative market-leading brands, VPG has built a reputation over the last six decades for products that provide the highest levels of accuracy, stability, and reliability.

Product / services supplied

Bulk Metal® Foil Resistors, Power Current Sensor, Hermetic Sealed Resistors, MIL Qualified Resistors

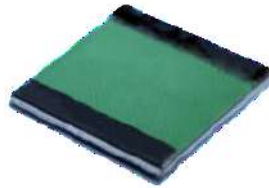
Market Sector

Avionics, Defence, Industrial, Medical, Space, Telecom, Grid&Energy



More info on our website

Best Products



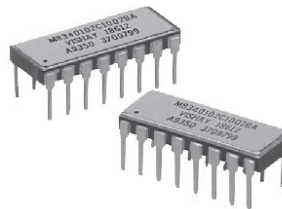
Bulk Metal® Foil Resistors

Since the introduction of the technology (which Vishay Group spearheaded in the '60s), Bulk Metal® Foil devices have had the best precision and stability of any resistor available. The product portfolio includes discrete resistors and resistor networks in surface mount and through-hole (fixed-lead) configurations.



Power Current Sensors

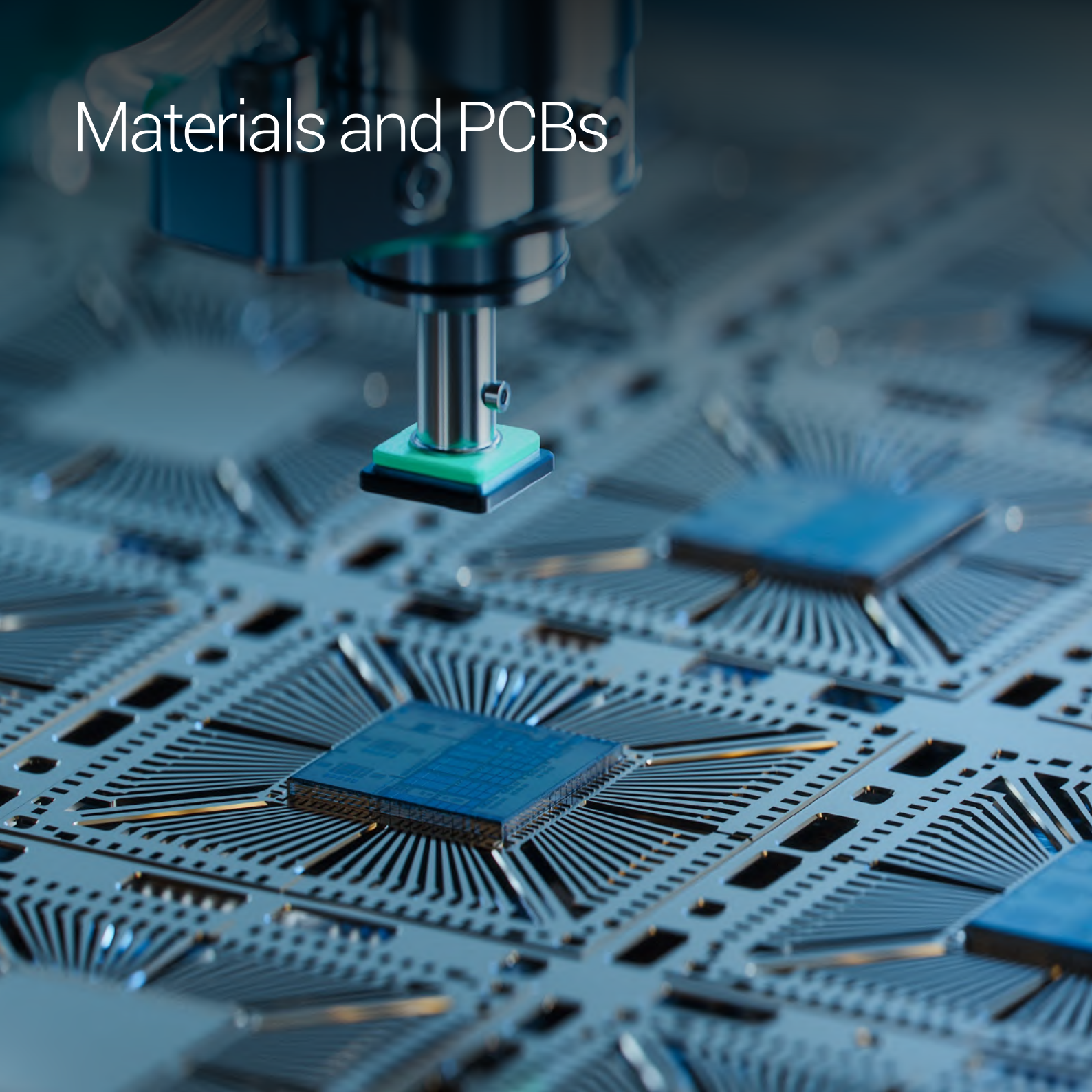
Power current sensors available in SMD or axial versions with optional heat sinks, and are available with 4terminal Kelvin connections for precise measurement.



QPL & EPPL resistors

Vishay Foil resistors have been used for more than 40 years in space and military equipment, even before a suitable MIL SPEC was established. In the late '60s, MIL R 55182 was established and the RNC90 style applied to the Vishay Foil resistors; they have been used continuously ever since. Specific parts have been included also in the European EPPL.

Materials and PCBs





Flux is a leading expert in the development and production of magnetic components of superior performance for power supplies. Typical applications are those where standard components are not suitable and that require extensive testing and quality assurance, in defence and space, commercial space, renewable energy, automotive and industrial markets. Flux applies a full control of the product development, from design to manufacturing. Reliability encompasses the whole supply chain, from dual sourcing material solutions, to 0% fail-rate testing program. Quality system meets the most exacting standards, among which, ESA Certificate of Technology Flow Qualification No. 364 and IATF 16949 Automotive Quality Management.

Product / services supplied

Chokes, Transformers, Inductors

Market Sector

Automotive, Avionic, Railway, Industry, Space, Hi-Rel, RF&Telecom, Grid&Energy, Defence, Transportation



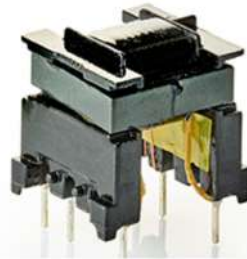
More info on
our website

Best Products



Chokes

(output chokes, differential mode and common mode). Transformers produced according to UL systems; wide range of temperature ranges available.



Transformers

in the 1W - 10kWh power range, with custom-design bobbins and cores shapes. Transformers include traditional (Half/full bridge, forward, push-pull), resonant transformers (Half/full bridge LLC, DAB, Forward), current sense transformers and GFCI.



Inductors

(PFC, Boost, Buck, Resonant) custom-designed to get optimized solutions, concerning efficiency and physical size. Flux inductors are typically used in power supplies for industrial applications, EV Charging, eMobility systems, aviation, and in advanced electronics for satellites, spacecraft, and rocket boosters.



Indium Corporation is a world leader provider of cutting-edge technologies and material solutions for advanced electronics assembly, with the highest quality and the widest selection of materials.

Formulations are designed to deliver low-voiding and withstand extreme temperatures, thermal cycles and mechanical stress for demanding operating environments. Solder pastes are based on six alloys families (GA, Bi, In, Sn, Pb, Au); melting temperatures range from 7 to 1064°C.

Product / services supplied

Solder pastes, wires, preforms, ribbons, solder spheres, fluxes, thermal interface solutions

Market Sector

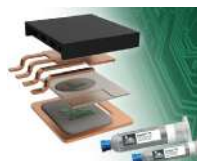
Space, Avionics, Defence, Automotive, Railways, Industrial, Telecom, Medical

Contact

sales.indium@dimacred.com



Best Products



Durafuse® HT

Two-alloy system solder paste, High-Temperature and Pb-Free Solder. Drop-in replacement for high-lead solders, high shear strength, excellent thermal and electrical performance comparable or superior to high-lead solders in demanding environments. Ideal for die-attach and clip-bonding in discrete power devices and multi-chip modules.



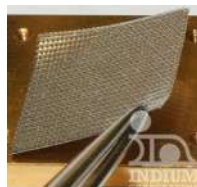
InFORM®

Reinforced solder composite with a copper grid inside, to improve strength and control bondline.



NanoFoil®

Reactive material that act as a heat source for ambient temperature soldering, to preserve thermal sensitive components. It acts as localized heat source to melt adjoining solder layers at room temperature. It eliminates the need for an oven and manages CTE mismatch.



Heat Spring®

Soft and patterned metal alloy, used as a thermal interface between two compressed surfaces. The indium content makes it ductile: the pressure allows its pattern to deform and create a more intimate contact between the surfaces. Suitable for immersion cooling.



NANOFEA

NanoFEA is a research, development, and manufacturing company specializing in cutting-edge getter technology, that leverages nanomaterials for superior performance in gas, moisture, organic, and particle scavenging applications. This next-generation getters are designed to deliver exceptional efficiency and reliability under extreme and demanding conditions. High adsorption capacity without activation. Substrate materials: Glass (borosilicate glass and silicate glass), ceramics (alumina, purity 92-99%), metals (Ti, Cu, Kovar, aluminum alloys).

Product / services supplied

Getters, getter mounted lids

Market Sector

Space, Avionics, Defence, Medical, Telecom, Industrial



Hierarchical porous nanostructured polymer composite



More info on our website

Best Products



HyMAX-HP

Advanced hydrogen-active powder designed for high-loading films, offering excellent H₂ adsorption for trace removal in process-gas lines, WLP getter layers, vacuum assemblies, fiber-optic gels, superconducting cables, and pressure stabilizers. Operating T. from -55 °C to +100 °C.



HyMAX

Solid state hydrogen getter available in standard (-55 °C to +125 °C) and HT (-162 °C to +300 °C) versions, offering 5–10 wt% H₂ absorption and long term protection against outgassed hydrogen for up to 20 years in MEMS sensors, photodiodes, implantable devices, optoelectronic modules, and aerospace avionics.



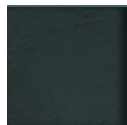
CryoMAX

Discrete powder getter designed to capture outgassed hydrogen in vacuum insulated cryogenic systems. Typical applications include cryogenic tanks, Dewars, vacuum insulated pipes, cryostats, and superconducting cables. Operating T. from -253 °C to >250 °C and an absorption capacity of 180 cc/g.



AllMAX

Provides a comprehensive getter solution, effectively eliminating all known and unknown outgassing species from vacuum systems and hermetically sealed packages.



ParticleMax

Absorbs magnetic, electric, dielectric, fine dust, foreign object debris, and microbial contaminants in vacuum system, optical, MEMS, and hermetic packaging systems.

Best Products

Hi-Rel, part of the Qnnect group, supplies highly specialized metal components for the microelectronic packaging industry and the hermetic sealing, including getters & absorbers, lids, and specialty solder preform. Hi-Rel Alloys is specialized in:

- Chemical etching of a wide range of ferrous materials, including Kovar, Dilver, Nickel, Alloy 42, Alloy 46, Invar, and various grades of stainless steel;
- Electrolytic and High-Phosphorus Electroless Ni and Au plating to NADCAP standards.
- Precision Assembly with controlled atmosphere brazing (low- and high-temperature, including gold-tin and copper).
- Getter integration for moisture, hydrogen, and organics management.

Product / services supplied

Hi-Rel Lids: Getters, Window Lids, Domed Lids, Solder Seal Lids, Stepped/Flat Lids, thermal management materials.

Hi-Rel Alloys: ring frames and specialty solder preforms.

Market Sector

Space, Avionics, Defence, Medical, Telecom, Industrial.

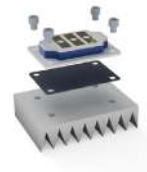


More info on
our website



DiaCool™

Thermal Interface Material, Silver-Diamond, Copper-Diamond and Aluminum-Diamond isotropic composites with Thermal conductivity up to 850 W/mK.



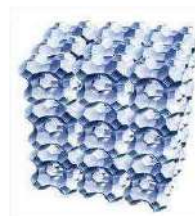
TIMCool

Graphene based thermal interface material with TC up to 90 W/mK in Z axis.



Getters

Zeolite-based micro-porous material for the absorption of target species (H₂, CO₂, H₂O and organics), even for medical implants. Getters with custom shapes can be integrated into lids as foil, tablet or ink printed forms. Operating temperatures from 150 to 500°C. rocket boosters.



Zeolite structure

Winslow Adaptics has more than 40 years of experience in developing robust and innovative solutions for all electronic interconnect needs, in several markets. Winslow remanufactures legacy components for fast, cost effective obsolescence solutions and supply chain shortages, with adaptability to any footprint. Winslow has reverse engineering capability of plastic & metal parts where drawings no longer exist. Precision engineering capability with experienced toolmakers who can work a broad range of ferrous and non-ferrous metals and engineering plastics, or can propose materials, treatments, surface finishes and coating specifications suited to client's requirement.

Market Sector

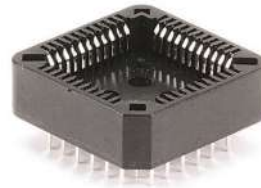
Automotive, Avionic, Railway, Industry, Medical, Space, Hi-Rel, RF&Telecom, Grid&Energy, Defence, Transportation



More info on our website

Best Products

Winslow product includes transistor clips, mounting pads, sockets, heatsinks, and other accessories used in semiconductor applications and a broad line of industry standard Interconnect, including legacy lines.



PLCC (Plastic Leaded Chip Carrier) Sockets



SIMM Sockets (Single In-line Memory Modules)



Transistor and IC circular sockets



Opto/Diode Display Sockets

Power Conversion and Railway

DC-DC Converter, AC-DC Converter, GSM-R Module, Security Data-recorders



AUTRONIC, is a German company specializing in the development and production of high-quality power solutions. Known for their reliability, Autronic focuses on delivering efficient and robust power systems that meet strict industry standards, particularly for applications requiring high levels of safety and durability. Their product's power range goes from 3W to 350W and complies with key international standards such as EN50155, EN45545, EN50121-3-2, and EN61373, ensuring top safety, quality, and reliability in the railway and industrial sectors. Autronic blends innovative technology with deep industry expertise to meet specific customer needs.

Product / services supplied

DC-DC Converter, Custom specific solution

Market Sector

Railway, Industrial, Transportation



More info on
our website

Best Products



PCB Mounting

Compact, railway-approved converters like the AER and HPC series offer power ranging from 3W to 75W, with wide input ranges for harsh environments ideal for compact, high-efficiency applications.



Wall Mounting

Includes high-power options like the HFC and HFBC series providing from 30W up to 500W with ultra-wide input ranges from 14.4V to 154V. Standard features include active reverse polarity protection, inrush current limitation, and overvoltage, overtemperature protection, they are open-circuit proof, permanently short-circuit proof, and can be switched off externally.



19" Rack

HEC series is designed for 19" rack installation, have an ultra-wide input voltage range between 14,4 V and 154V with a power of 120W and 150W, efficiency up to 91%, temperature range of -40 °C to 85°C according class OT4. The galvanically isolated DC/DC converter has many features integrated, such as active inrush current limitation and polarity reverse protection, temperature, overcurrent and overvoltage protection, parallel and redundancy operation with integrated O-ring controllers, 10 ms hold up time and a high insulation resistance.



DIN Rail Mounting

Key models include the HPBC20-WT and HFC100-W/T series, offering power outputs from 20 W to 100 W. These converters features ultra-wide input voltage range between 14,4 V and 154 V, protection against short circuits, over-temperature, and over-voltage, ensuring consistent and reliable performance in harsh environments.



GAIA Converter is a leading manufacturer of DC-DC converters with modular power conversion solutions. Their products are designed to offer high efficiency, reliability, and compactness, making them ideal for a wide range of Avionics, Military, Railway/Transportation and high-end Industrial application. GAIA's converters comply with key standards such as MIL-STD-461, MIL-STD-704, MIL-STD-1275, DO-160, EN50155 ensuring robust performance under harsh conditions. With power ranges from 4W to 500W converters, front-ends, filters, bus conditioners and protection modules GAIA provides unprecedented advantages to facilitate the design of sophisticated power architectures, regardless of requirements and standards.

Product / services supplied

DC-DC Converter, DC-DC Front-End Modules, AC-DC Power Factor Corrected Front-Ends

Market Sector

Avionics, Defence, Railway, Industrial



More info on our website

Best Products



Isolated DC/DC Converter

GAIA Converter offers a wide range of high density and low profile Isolated DC-DC Converters from 4W to 500W divided into 3 technology families. This includes ultra-wide input range and a large range of voltages to enable you to meet the requirements of any input voltage standard. - MGDxx Series



Non-Isolated DC/DC converter

Small size Non-Isolated DC-DC Converters with a maximum input voltage of over 35V. These converters have low output voltage for use as PoL, with sequencing and synchronization capability. They deliver maximum current of 14A at low output voltage and 260W at higher output voltage. Output voltage is adjustable over a wide range and adapted to fast-load transients - MPGS-14A Series



DC-DC Front-End Modules

GAIA Converter offers a complete range of Front-End elements to protect and adapt the power conversion stage, like EMI filter, reverse polarity, surge limiter, under voltage limiter, inrush current limitation, hold-up (transparency during momentary input bus drop-outs), On/Off, supply of commentary signals to ensure perfect management of power supply. LGDS, PGDS, LHUG and FLHG Series

CISSOID is a leader in power semiconductor solutions, delivering multi-phase, high-current power switching motor control systems and software, across a wide range of power requirements. It proposes a wide range of solutions, from system-on-chip to complete SiC (Silicon Carbide) and GaN (Gallium Nitride) based inverter reference designs, characterized by extremely high-temperature working range, high reliability and excellent efficiency and therefore are ideal for harsh and demanding environments.

Product / services supplied

Power Modules, Inverter Reference Design, Gate Drivers, Diodes, Inverter Control Modules

Market Sector

Industrial, Automotive, Transport, Oil & Gas



More info on
our website

Best Products



SiC Intelligent Power Module (IPM)

The 3-phase 1200V Silicon Carbide (SiC) MOSFET Intelligent Power Module platform integrates the power switches and gate drivers, based on the CISSOID HADES2® chipset. There are 3 variants of the IPM, with different current ratings (350A, 450A and 550A).



SiC Inverter Control Module (ICM)

It offers optimal mechanical and electrical integration of the 3-Phase 1200V/340A-550A SiC MOSFET Intelligent Power Module, developed by Cissoid, and the OLEA® T222 Field Programmable Control Unit (FPCU) based controller board and OLEA® APP – T222 INVERTER application software, developed by Silicon Mobility.



Benchtop Inverter Reference Design

It's a SiC inverter reference design based on SiC Inverter Control Module, which mechanically and electrically integrates the OLEA® T222 Field Programmable Control Unit (FPCU) based controller board and OLEA® APP – T222 INVERTER application software from Silicon Mobility, together with the 3-Phase 1200V/340A-550A SiC MOSFET Intelligent Power Module from CISSOID. The benchtop inverter reference designs are made to boost the development of electric drivetrains and drastically accelerate time-to-market. This reference design can support up to 800V operating bus voltages and 300kW continuous power output.



Gate Driver

SiC gate drivers offer higher efficiency and increased power density and are ideal for electrical vehicles and industrial power converters, including motor drive inverters and battery chargers.

M+R Multitronik, power supply specialist for industrial, medical and LED power supplies based in Rellingen, was founded in 1981. They cover the entire power range of power supplies and offer support for design-in projects, technically sophisticated advice and a large range of standard power supplies immediately available from stock. They represent a wide range of manufacturers and have been an authorized Mean Well distributor since 1993. To complement the portfolio, they have inrush current limiters from Camtec, piezoceramic signal generators and loudspeakers from Sonitron and EAST.

Product / services supplied

DC-DC Converter, AC-DC Converter, Loudspeakers, LED power supply, Signal Generator

Market Sector

Railway, Industrial, Transportation, Medical



More info on
our website

Best Products

Power supplies in the housing/U-frame

AC/DC switching power supplies in a housing or in a U-frame for installation and DIN rail mounting.

We can access a power range from 15 to 10,000 watts. Depending on the type and series, they deliver up to 14 output voltages and have an active integrated PFC function from 75 W

We also have power supplies for DIN rail mounting. These are available with outputs from 10 to 960 W. They are each equipped with an output voltage and, depending on the output, have a 1- or 3-phase input.



Power supplies in open frame/modular design

As an open version, the AC/DC switching power supplies provide outputs of 5–300 W. Depending on the type and series, they are equipped with up to four output voltages and are also available with medical approval according to IEC60601.

Switching power supplies are also available as encapsulated print modules.



DC/DC power supplies

Our DC/DC converters in the power range from 0.5 to 600 W are available in more than 20 different housings: with one, two or three output voltages for circuit board and partly also SMD mounting. All converters are galvanically isolated (at least 500 VDC standard, optionally up to 6 kV), short-circuit proof and mostly have a wide input range (2:1); many series are also available with a 4:1 range or with 43-160 VDC for railway applications.

These products are mainly used in industrial, medical and railway applications.



Signal Generator

Sonitron's piezoceramic signal generators were designed for a wide range of applications.

The compact design of the SMA series is suitable for installation in a housing and is available as a pin or SMD version. The SMB series has an individually controllable multi-frequency range.

These signal generators are shock and water resistant according to IP65 and are therefore suitable for use in harsh environments.



LED power supplies

Our AC/DC power supplies specifically for LED lighting cover a power range from 8 to 600 W and have an active PFC function. With the universal input of up to 305 VAC, they are used worldwide. The highlights are the extremely compact and flat design high efficiency and optional dimming using 1-10 VDC, PWM signal, resistor, triac or DALI protocol.



MPO

MICROPOWER DIRECT

MICRO POWER DIRECT, is a leading supplier of high-performance DC/DC power converters and AC/DC power supplies. Our AC/DC power supplies deliver consistent power, ranging from 3W to 550W, and come in a variety of packaging options, including PCB mount, chassis mount, and DIN-rail mount. Our extensive range of DC/DC converters are available from 1W to 150W and many feature industrial-grade packaging ensuring durability and reliability in harsh environments.

Product / services supplied

DC-DC Converter, AC-DC Converter, IGBT drivers & SiC DC-DC, Medical Approved Power Supplies, POL Regulators

Market Sector

Railway, Transportation, Industrial, Medical



More info on our website

Best Products

DC-DC Converter

SMD package from 1 to 6W, SIP (System In a Package) package from 0.25 to 9W, DIP (Dual in Line Package) package from 0.25 to 15W, modules from 6 to 50W, Photovoltaic and Railway from 6 to 75W, Medical from 1 to 40W.



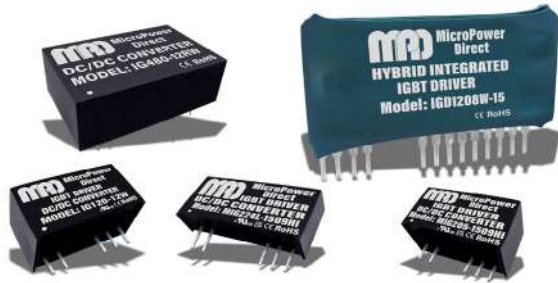
AC-DC Converter

Modules from 1 to 60W in compact packaging, Open frame from 1 to 500W, DIN rail from 20 to 240W, Medical from 5 to 400W, Enclosed from 35 to 320W, U-channel from 60 to 600W.



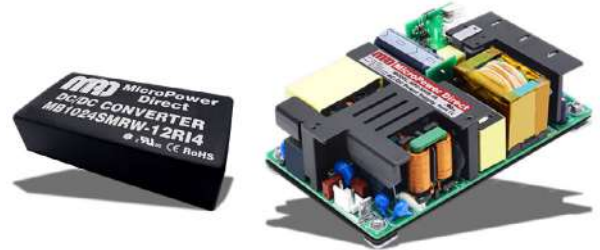
IGBT drivers & SiC DC-DC

IGBT and SiC DC/DC converters are designed to help simplify the task of controlling high-speed semiconductor switches. Unlike the typical DC/DC converter, these units feature asymmetrical outputs. Units are available that provide the specific output levels required to control a wide variety of high speed IGBT and SiC semiconductors.



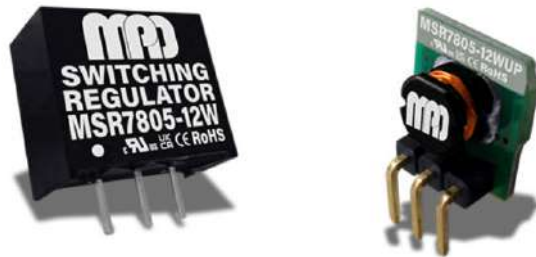
Medically Approved Power Supplies

Medically approved power supplies comply with stringent international safety standards such as IEC 60601-1, ensuring patient safety and minimizing risks of electrical shock, leakage currents, and fire hazards. Our broad range of medically approved DC/DC converters and AC/DC power supplies ensure you can power your healthcare innovations with confidence.



POL Regulators

POL regulators simplify board design and optimize space by integrating various functionalities like switching, control, and protection within a single compact package. Our POL regulators are compact, easy to integrate and have enhanced efficiency.





NETPOWER, is an industry leading supplier of high efficiency high power density DC-DC converters. NetPower's designs provide excellent thermal management in the industry, leading to higher performance and longer reliability. DC-DC modules includes 2:1, 4:1 and 8:1 ranges operating voltages and have many product sizes including thirty-second brick to the full brick, SIP, DIP and SMT packages. Netpower products are extensively applied in networking, communication, railway, medical, EV and industrial application. NetPower can build fully customized products.

Product / services supplied

DC-DC Converter, E-mobility Converter, Heatsinks, EMI Filters and Baseplates

Market Sector

Industrial, Transportation



More info on our website

Best Products

Isolated DC-DC Converters

NetPower isolated DC-DC converters feature high efficiency and high power density, and are available open-frame and/or encapsulated. The input voltage spans from 9V to 650V in 8:1, 4:1 and 2:1 ratios. The output power of these converters ranges from 15W to 1000W. These DC-DC converters are in industry-standard packages including bricks (1/32, 1/16, 1/8, 1/4, 1/2, and full) and 1"x1" DIP.



EV on-board DC-DC Converters

NetPower e-Mobility power converters include on-board DC/DC, on-board charger (OBC) and OBC+DC/DC combo with various input voltage ranges. To comply with the automotive quality standard, NetPower has implemented total quality control for efficient and high-quality manufacturing and lifecycle traceability.





Best Products

POLYAMP, since 1960s manufactures DC/DC converters that are used in applications where the electrical/ physical environment is tough and/or the customers have high demands on reliability, EMC and safety. They can be installed in any weather-protected area and are convection cooled. As such they can be mounted in any direction. The DC-DC can be mounted in environments that are sensitive to interference, such as military, marine and telecom. At the same time, they can be in electrically poor environments such as switchgear, power industry, trains and heavy industry.

Product / services supplied

DC-DC Converter, AC-DC Converter, DC-AC Inverted

Market Sector

Railway, Transportation, Industrial, Telecom, Grid&Energy



More info on our website



DC-DC Converter

The standard operating temperature is -25 to $+55$ °C optionally -40 or $+70$ °C with full output. They have units 19"- cabinet compatible 2 - 3U and Euroformat 3 & 6 HE or DIN TS-35 mounting. Their designs are made for convection cooling. Self standing units with no need for forced ventilation. Can be mounted in any direction.
MTBF > 1 Million hours



AC-DC Converter

Input voltage 176 - 264 Va.c., 85 - 264 Va.c., 85 - 135 Va.c.
Single outputs 5 - 48 V, 100 - 150 W
Single outputs 12 - 220 V, 200 - 240 W
Output over voltage limit OVL
Temperature power limit
Alarm circuit with relay
Accessible on front panel
Output OK status green/red LED
Output voltage adjustment
Output voltage measurement
Wall, case, DIN mounting



DC-AC Inverted

DC-AC inverters are available for input/battery voltages 24, 48/60, 110/125 and 220 Vdc with programmable 230 Vac 50 Hz output. These can be supplemented with automatic by-pass, manual switch and fuse distribution. Modular power conversion architecture 1 - 24 kVA. Configuration as 1-phase or 3-phase systems, with or without true redundance hot swappable.

Empower Semiconductor is a leader in developing high-performance power management solutions. Focused on efficiency, Empower delivers innovative power integrated circuits (ICs) that minimize energy consumption, size, and complexity in modern electronics. Their patented technology supports a wide range of applications, from data centers to portable devices, ensuring optimal power delivery. Key sectors benefiting from their solutions include data centers, networking, telecom, computing, storage, and consumer electronics, where power efficiency and compact design are crucial.

Product / services supplied

Voltage Regulators

Market Sector

Industrial, Medical



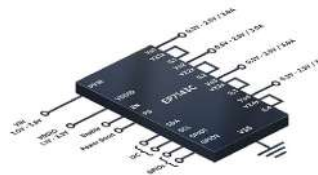
More info on our website

Best Products

Power Conversion Integrated Voltage Regulators (IVR)

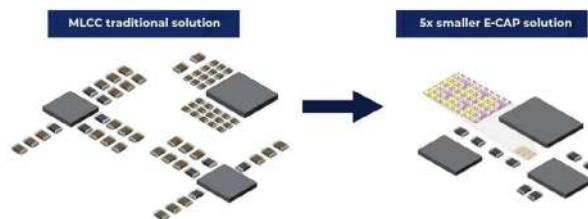
Empower's 3.3V and 1.8V IVRs offer highly efficient power conversion with ultra-fast transient response. These compact regulators reduce board space and enhance performance, making them ideal for applications in computing, telecom, and IoT devices where efficiency and size are critical. Empower's patented IVR™ technology eliminates dozens of discrete components. The result is power delivery with unprecedented simplicity, speed, accuracy, and no discrete components!

EP70XX	EP71XX
10A total current	12A total current
1-3 outputs	1-4 outputs
1.8V _{IN} optimized	3.3V _{IN} optimized
I ² C interface	I ² C interface
5mm x 5mm package	5mm x 7mm package



Silicon Capacitor ECAP

The ECAP silicon capacitor offers superior reliability, high capacitance density, and temperature stability. Its small form factor makes it perfect for high-frequency applications in RF, 5G, and medical devices, ensuring performance where miniaturization and stability are essential.





Best Products

ALLWAYTON specializes in high-speed railway wireless communication products, particularly GSM-R phones and modules. The company, staffed by experts in mobile communication, emphasizes adherence to both Chinese and European railway standards. AllWayTon aims to deliver reliable products while actively engaging in the development of 5G communication technologies (FRMCS) and contributing to industry standards. Their products are designed for high performance and durability, suitable for global markets.

Product / services supplied

GSM-R Phone, GSM-R Module

Market Sector

Railway



More info on
our website



GSM-R Phone

Advanced GSM-R phones designed for reliable railway communication. These devices feature a 2.2-inch TFT display, IP68-rated rugged construction, and battery standby time up to 262h. Supporting voice group call, SMS, and emergency call functions, they meet industry standards for safety and performance, ensuring clear and secure connectivity in challenging environments.



GSM-R Module

GSM-R modules provide essential communication capabilities, enabling seamless integration into railway systems. They support voice, data, and SMS services. Designed for high performance, these modules feature low power consumption, robust performance, and compliance with EIRENE standards, ensuring reliable communication in demanding railway environments.

Synics Rail is a Swiss company, system provider of electronic journey data registration systems and accessories for public transport. With over 30 years of expertise in data recording and vehicle safety, they serve vehicle manufacturers, municipal transport, and railway companies. Their products are known for reliability (SIL2-SIL3), low obsolescence, regulatory compliance, and customizability.

Product / services supplied

Security data recorders, Crash Protected Memory

Market Sector

Railway, Transportation



More info on
our website

Best Products

Asis VS-100 Data recording and control system

Asis VS-100 is an advanced data recording and control system designed to provide detailed journey monitoring. The system also controls essential vehicle functions such as vigilance, dead man, roll-back protection, wheel flange lubrication, deceleration monitoring and others, enhancing safety. Additionally, it offers comprehensive journey data analysis tools to optimize performance and efficiency. This makes the AsisVS-100 a critical component for improving operational effectiveness.

Instead of SDHC card removal, device status and data can be transferred via WLAN to customer-defined servers, enabling centralized monitoring of the vehicle fleet.



Asis JRU CPM

The asis@JRU CPM records precise journey data, is fully compatible with the European Train Control System (ETCS) and uses the fast Train Real Time Data Protocol (TRDP) for seamless communication.

- Crash Protected Memory (CPM) for optimum protection
- Compact solution for driving data registration
- Fully compatible with ETCS
- Real-time communication via TRDP
- Online monitoring for maximum transparency
- Ideal for retrofitting



Radio Frequency Solutions

Antennas, EMI filter and High-voltage capacitors

Cernex Inc. specializes in advanced thin-film hybrid, MMIC, and discrete microwave/millimeter-wave components, along with subsystems, waveguide solutions, and ferrite products for commercial and defense applications. Cernex, Inc. is a leader in custom design capabilities and offers a variety of optional features, which include components such as integral isolators, limiters, filters, attenuators, gain control, and coupled output ports for our amplifier products.

Product / services supplied

Microwave active and passive components, antennas, filters, subsystems

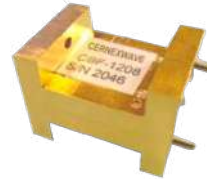
Market Sector

Aerospace, Defence, Telecom



More info on our website

Best Products



Filters (Waveguide and Coaxial)

Cernex's low-, high- and band-pass filters have well matched, full waveguide pass band and thereafter a very wide stop band. Due the natural waveguide cutoff, these filters can also function as full waveguide band-pass filters. These filters are small in size and compact by design.



SMT Microstrip Isolators and Circulators

CernexWave's CMIS and CCMS SMT microstrip isolators and circulators are offered in different frequency bandwidths from 2 to 30 GHz. These isolators and circulators are designed and manufactured to provide low insertion loss and high isolation for microstrip based component and module integrations. While the isolator is an important device where port isolation or VSWR is concerned, the circulator offers duplexing functions in many radar and communication systems



Power Amplifiers and LNAs

Cernex manufactures a complete line of solid-state power amplifiers for various applications such as line of sight, point to point, point to multipoint microwave and millimeter-wave radio transmitters and TWT driver amplifiers. Cernex's Low Noise Amplifiers series are suitable for a wide range of applications in commercial and military systems where low to high gain block amplifiers are required.



ANATECH ELECTRONICS INC
RF & Microwave Filters & Products
AN ISO 9001:2008 CERTIFIED COMPANY

Best Products

Anatech Electronics Inc. is a US manufacturer which offers the industry's largest portfolio of high-performance RF filters and related products covering the range of 10 kHz to 40 GHz. Anatech Electronics also provides tailored solutions to fit customer requirements.

Product / services supplied

RF Filters, Multiplexers, Specs Matched Filters, Custom Filters

Market Sector

Defence, Space, Telecom, Industrial

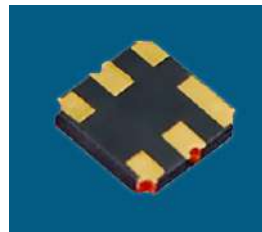


More info on
our website



Cavity Bandpass Filters

Anatech Electronics cavity bandpass filters are available in a wide range of frequencies, power levels, bandwidths, and rejection. The resonators and cavities are silver plated for low RF resistivity, in order to achieve low insertion loss and high selectivity.



Surface Acoustic Wave (SAW) Filters

These filters employ the piezoelectric effect to convert an electromagnetic signal into an acoustic signal and vice versa. SAW bandpass filters provide sharp cut-off, very linear phase characteristics, high stability, and are highly reliable. These extremely compact surface-mount devices can be specified for operating frequencies from 4.75 MHz up to 6 GHz.



Duplexers/LNAs

Combining a high-performance duplexer filter with an integrated low-noise amplifier, these products are well suited for both commercial and military applications. The LNA increases the dynamic range and sensitivity of the receive portion of the duplexer or when combining signals will increase the sensitivity of the receiver. The LNA/duplexers operate in the C, X, and Ku bands (2 to 20 GHz).

Johanson Dielectrics has been a worldwide producer of high-quality ceramic chip capacitors for over 60 years. Their corporate mission is to satisfy the customer's requirements for high quality, technologically advanced ceramic chip capacitors.

Johanson Dielectrics designs and manufactures capacitors in a state-of-the-art facility in Southern California. Located in Camarillo, this facility produces Standard and High Voltage SMT Ceramic Capacitors, as well as a variety of standard and custom High Voltage & High Capacitance value Ceramic Capacitors.

Product / services supplied

Power Capacitors, EMI Filters

Market Sector

Automotive, Transportation, Industrial, Medical, Telecom, Defence, Avionics



More info on
our website

Best Products

EMI X2Y filters

EMI X2Y Filters are multilayer ceramic devices that combines two balanced shunt capacitors, with mutual inductance cancellation and shielding effect. Used for both EMI filtering and noise attenuation, the component is an effective EMC solution for common mode noise issue, and it allows to get rid of differential noise as well. Automotive version (AEC-Q200) is available for many values.



Leaded stacked ceramic capacitors

SMPS Switch-Mode Stacked ceramic capacitors feature large capacitance values and exhibit low ESR and low ESL (equivalent series inductance) making them well suited for high power and high frequency applications where tantalum or aluminium electrolytic capacitors may not be suitable. Furthermore Mini-Switchmode® Capacitors are suitable for DC-DC power circuits in high-stress environments.



Surface mount capacitors

Johanson dielectrics design and produce different surface mount capacitors:

- High voltage and high temperature MLCC capacitors;
- Automotive Grade MLCC capacitors;
- Tanceram® capacitors for replacing tantalum capacitors;
- AC Power and AC Safety capacitors for power handling and line-to-ground protection.



Johanson Technology has over twenty-five years experience specializing in the design and manufacture of high-quality RF & Microwave ceramic chip capacitors for wireless communications (cellular, WiFi, Bluetooth, etc.), inductors and integrated passives. Johanson Technology focus their high frequency expertise in meeting customer needs for specialized and custom ceramic capacitor products for the wireless market sector. Johanson Technology is dedicated in providing the highest level of customer satisfaction through high quality components, superior customer service and forward looking, advanced products.

Product / services supplied

RF Capacitors, RF inductors, Integrated passive

Market Sector

Automotive, Transportation, Industrial, Medical, Telecom, Defence, Avionics



More info on our website

Best Products



RF ceramic chip antennas

They are among the smallest ceramic chip antennas on the market, ideal for space-constrained RF designs. They support a wide range of applications such as WiFi, Bluetooth, Zigbee, LoRa, GNSS, LTE and they are certified to meet AEC-Q200 standards for harsh environments—ideal for in-vehicle WiFi, telematics, and smart mobility applications.

Integrated Passive Components

Integrated Passive Components (IPC) can operate over several RF bands from 400 MHz to 30 GHz and are based on a proprietary Low-Temperature Cofired Ceramic (LTCC) process. IPC solutions cover a wide range of supported application bands, including all ISM bands, GSM, GPRS, Bluetooth, WiFi, Zigbee, and more. They include Baluns, Couplers, Diplexers, Filters and Power dividers.



RF Ceramic Capacitors

Johanson Technology offers different ceramic capacitors for RF applications:

- Single layer capacitor for very high frequency applications;
- High- quality multi-layer capacitors for high power RF designs where low ESR and low loss performance are critical;
- Laser trim capacitors that are laser adjustable monolithic ceramic surface mount devices designed for precise functional tuning of RF circuits.



Additional information: Contact
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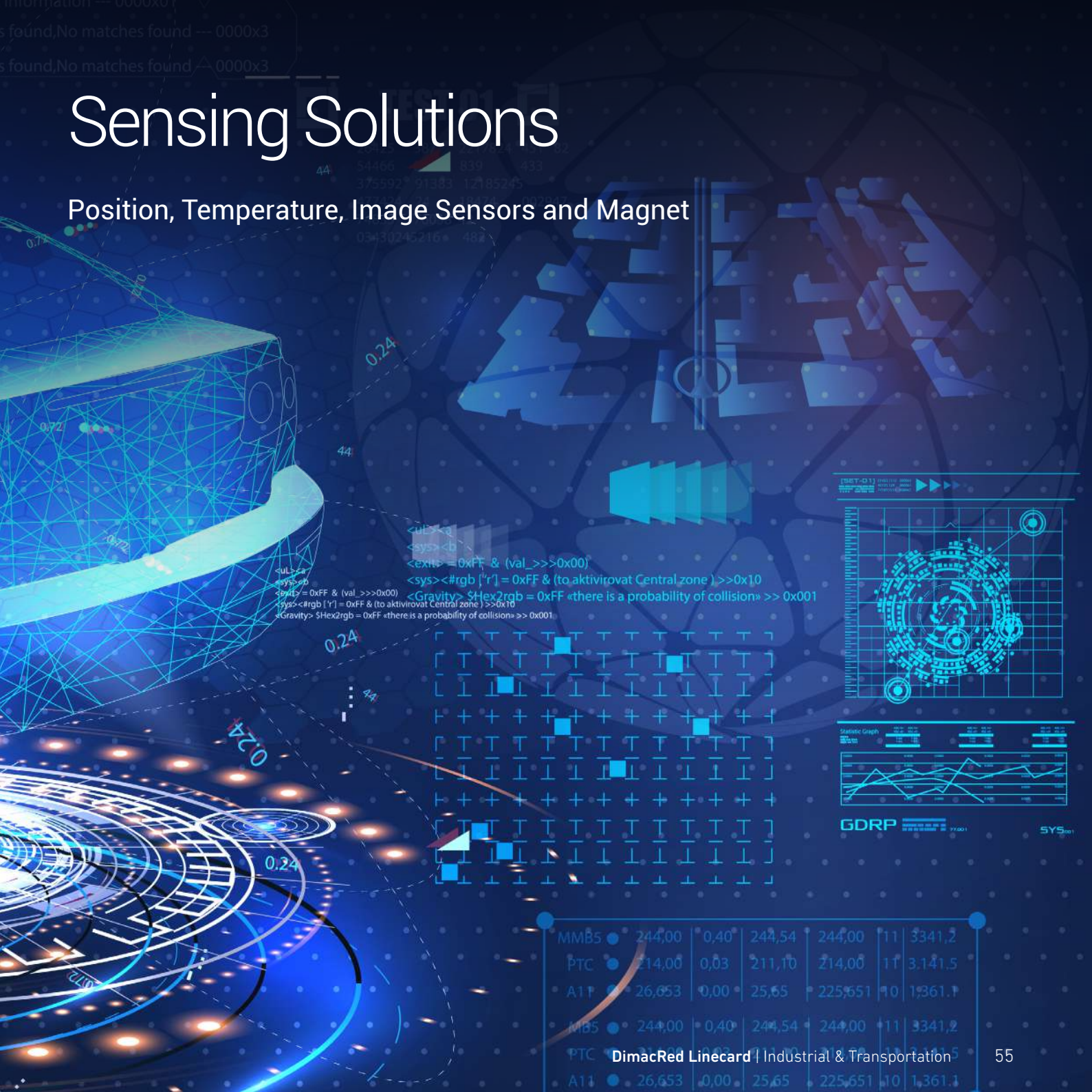
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Sensing Solutions

Position, Temperature, Image Sensors and Magnet



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MMB5	244,00	0,40	244,54	244,00	11	3341,2
PTC	214,00	0,03	211,10	214,00	11	3.141.5
A11	26,653	0,00	25,65	225,651	10	1361.1
MMB5	244,00	0,40	244,54	244,00	11	3341,2
PTC	214,00	0,03	211,10	214,00	11	3.141.5
A11	26,653	0,00	25,65	225,651	10	1,361.1

NVE Corporation specializes in the development of innovative spintronic products, utilizing nanotechnology for sensing and communication. They are renowned for their high-performance magnetic sensors and isolators, offering precise and reliable solutions for industrial, automotive, and medical applications, ensuring robust performance even in demanding environments.

Product / services supplied

Voltage Regulators, Sensors, Isolators

Market Sector

Industrial, Automotive, Medical

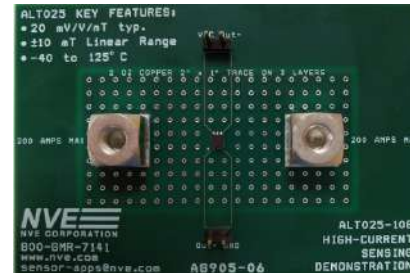


More info on our website

Best Products

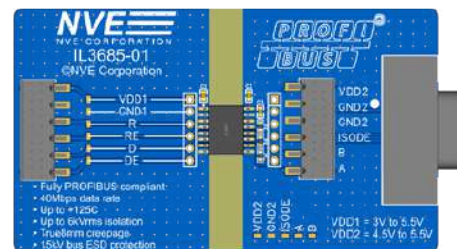
Sensors

NVE's sensors leverage Giant Magnetoresistance (GMR) and Tunnel Magnetoresistance (TMR) technologies, which provide high sensitivity and precision in magnetic field detection. Their current sensors offer accurate current measurement, while proximity and position sensors detect the presence or movement of objects. These technologies ensure low power consumption and high reliability in industrial, automotive, and medical applications.



Isolators

NVE's isolators provide high-speed, reliable digital signal transmission while protecting circuits from electrical surges. They include couplers and transceivers that ensure data integrity and safety in industrial, automotive, and healthcare applications, offering robust isolation and fast communication.





OMNIVISION is a leading company in developing and delivering advanced digital imaging, analog and touch & display solutions for multiple applications across several industries. Its innovative technologies, as a global fabless semiconductor organization, have enabled smoother human/machine interfacing solutions within the automotive, medical, security & surveillance, computing, mobile phone and IoT/emerging markets.

Product / services supplied

CMOS image sensors, Camera Cube Chips (CCC), LCOS (Liquid Crystal On Silicon), ASIC (Application-Specific Integrated Circuit)

Market Sector

Automotive, Industrial, Medical, IoT/Emerging, Mobile devices



More info on our website

Best Products



CMOS image sensor

A CMOS image sensor is the core of every advanced image system solution. This sensor converts the optical image into an electric signal: each pixel has a photodiode and a CMOS transistor to amplify the output signal. Available in CSP (Chip Scale Package) or in reconstructed wafer package (bare die).



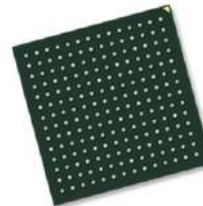
Camera Cube Chip

Miniature camera module that integrates image sensor and lenses in a very tiny space. Can be directly soldered to the printed circuit board without any socket or insertion.



Liquid Crystal On Silicon

Miniaturized liquid crystal display made by a liquid crystal layer on a silicon baseplate, for a variety of display applications.



Application-Specific Integrated Circuit

intelligently empowered video processor that can be used for automotive, mobile camera and IoT applications.

Best Products

Melexis is a global supplier of micro-electronic semiconductor solutions, offering innovative and advanced products primarily in the automotive, industrial, medical, and consumer markets. With a strong focus on sensing, driving, and communication technologies, Melexis delivers a wide range of integrated circuits (ICs).

Product / services supplied

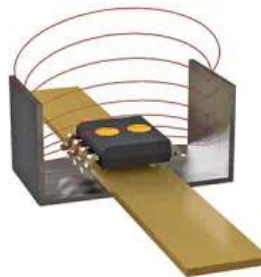
Magnetic Position sensors and Current sensors, Temperature sensors, Pressure sensors, Optical sensors, Motor drivers, LED drivers, Wireless communication ICs, LIN/CAN Transceivers

Market Sector

Automotive, Transportation, Railway, Industrial, Medical.



More info on
our website



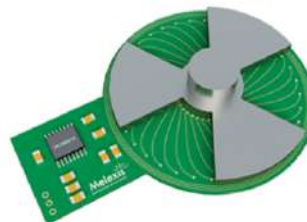
Magnetic Current Sensor

Available in standard magnetic core, IMC-Hall with ferromagnetic shield, or fully integrated solutions with direct current flow. Comes in SOIC-9 or TSSOP-16 package. Suitable for applications from a few amperes to 2kA (AC/DC) with isolation up to 4.8 kV and analog outputs. Automotive grade qualified for reliable performance in demanding environments.



Magnetic Position Sensor

Designed for precise and reliable position detection in automotive and industrial applications, featuring high accuracy and robust performance. Utilizing advanced Hall effect and Triaxis® technology, they offer contactless position sensing, reducing wear and enhancing durability. Compatible with various interfaces (Analog/PWM/SENT/PSI-5/SPC Sin/Cos), ideal for rotary, linear, and joystick applications. Automotive grade qualified for stable position measurements.



Inductive Sensor

Offer precise, reliable position detection for automotive and industrial applications with contactless, wear-free operation. Key features include high accuracy, durability, absolute position measurement, and reduced system costs. Support both linear and rotary motion without magnets, minimizing electromagnetic interference (EMC). Ideal for stable, maintenance-free position sensing in harsh environments.



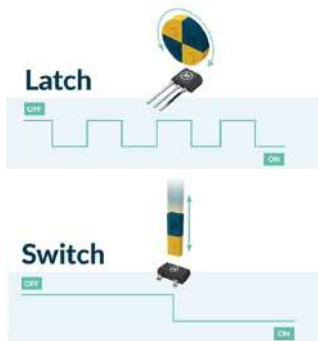
Pressure Sensor

MEMS PCB sensors offer high accuracy for 5-70 bar. PCB-less and TPMS solutions handle 0-5 bar. Bare Die sensors are flexible for custom designs within 5-70 bar. INTERFACES solutions cover over 70 bar. Available as absolute or relative sensors with analog and SENT outputs, ideal for automotive and industrial use.



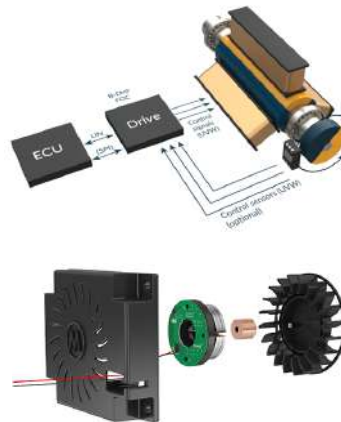
Optical Sensor

Advanced 3D imaging and distance measurement using infrared light for accurate distance and detailed 3D mapping. Features high resolution, fast response, and robust performance in various lighting. Melexis ToF sensors are easy to integrate, ideal for automotive, industrial, and consumer electronics. Perfect for gesture recognition, object detection, and occupancy sensing. Evaluation Kit available.



Latch & Switch Sensor

Reliable magnetic sensors for proximity and motor applications, available in 2-wire for low power, 3-wire for high-speed, and 4-wire for advanced diagnostics and accuracy. Melexis Latch & Switch ICs ensure durable, precise performance in tough environments.

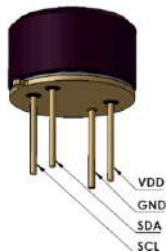


Microcontroller, Fun&Pump Driver & Transceiver

LIN Motor Drivers (<1A) and Pre-Drivers (>1A) offer full or dual half bridge control for small motors in compact SO8, QFN24, and QFN32 packages. Suitable for 12, 24, and 48V, they optimize automotive mechatronics. LIN-CAN-RFID transceivers provide flexible solutions for LIN or CAN in-vehicle networks and affordable RFID/NFC communications. PSI-5/SPC Sin/Cos), ideal for rotary, linear, and joystick applications. Automotive grade qualified for stable position measurements. 1-coil fan/pump driver: cost-effective, compact and silent for automotive and consumer use. Code-free design for 1-50 W (12V/24V) with EMC, ideal for stable, maintenance-free sensing in harsh environments.

Infra-red Temperature Sensor

Infra-red sensors in TO39 and QFN (3x3x1 mm) packages offer robust performance, multiple FOV options, and high accuracy, including $\pm 0.1^\circ\text{C}$ for medical use. They operate from -40°C to 380°C , ensuring stability and precision. With fast response times and low power consumption, they are ideal for engine management, climate control, and industrial monitoring. Available with analog and PWM outputs for wide compatibility.





where reliability belongs

dimacred.com



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