DESTINATION
IOT

((•)) Sensors

📶 Connectivity

🔒 Safety

Intelligent solutions for the design of the future

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RS

INTELLIGENT SOLUTIONS FOR THE DESIGN OF THE FUTURE

SENSORS, CONNECTIVITY, SAFETY

When it comes to shaping our future, then you as a developer are at the forefront. As you are optimally involved in these important development projects, we want to make sure that you have all the important tools, technologies and information at place.

Are you looking for new products in the market? We've got you covered.

Every year we introduce over 10,000 new products and ensure that you have access to the latest products.

In this context, it is important to stress the importance of the role of the social partners in the development of new technologies who are one step ahead.

Do you need technical data?

Consider it done. On our product pages you will find you can download data sheets and, if necessary, a dedicated team is available to advise you.

You can also visit our online community, RS Design Spark.

You only need small quantities? No problem.

We have no minimum order quantities.

We support quantities for production, research purposes as well as large projects.

Even with the important future topic of IoT, you can count on us. When it comes to the Internet of Things, this is how sensors, connectivity play a role in development and, above all, safety.

We have created a special page with a selection of products as well as further information about the IoT. Discover, for example, interesting specialist articles on topics such as "Capturing bio signals in medicine", "Sensors in building automation" or "Smart Farming" and read what our experts on IoT security. Scan the QR code and start reading!

CONTENT

Temperature & Humidity Sensor, Digital Output

- Battery powered, long range sensor platform leveraging the benefits of LoRaWAN and Bluetooth low energy (BLE) Connectivity's.
- Small, rugged form factor contains superior RF performance and multiple sensor capabilities including open-closed detection alongside temperature and humidity, making it a perfect fit for cold chain applications.
- Mounting style screw mount

Laird TECHNOLOGIES

212-0327	868MHz 455-00041
212-0326	915MHz 455-00040

TE Connectivity Pressure Sensors

- Small ceramic-based pressure transmitter for PCB mounting
- TE Connectivity Pressure Sensor IC is a small, ceramic based, PCB mounted pressure transducer from TE Connectivity.
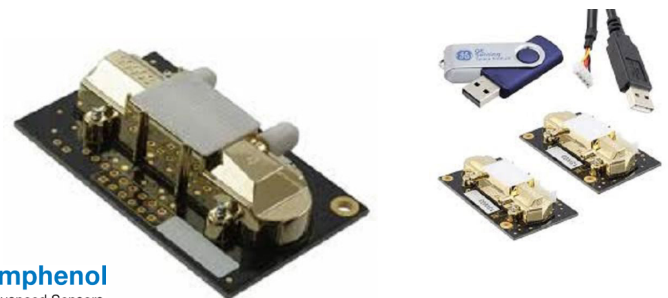- PCB Mountable

TE connectivity
AUTHORIZED DISTRIBUTOR

239-1733	4525-SS5A015VP 15 psi
239-1734	4525-SS5A100GP 100 psi

HPMA Particle Sensors

- Laser-based, fully calibrated sensor that can be detected by light scattering.
- Detects and counts particles
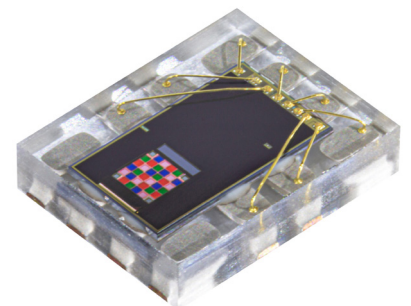- EMC: Heavy industry level according to IEC61000

Honeywell

214-1433	HPMA115C0-004
214-1432	HPMA115C0-003

SHT4xI Digital Humidity Sensor

- Digital sensor platform for measuring relative humidity and temperature with different accuracy classes.
- The sensors can be interfaced via several preconfigured I2C addresses with I2C fast mode plus and CRC checksum.
- Temperature accuracy of up to ±0.2 °C

SENSIRION THE SENSOR COMPANY

236-5204	Entwicklungskit SEK-SHT41I
236-5208	SHT4xI Temperatur- und Feuchtigkeitssensor

TELAIRE T6615 2-Channel CO2 Sensor Module

- Designed to integrate into existing controls and equipment for use in instrumentation and applications up to 50,000 ppm.
- Quick, easy and efficient monitoring.
- Enhanced stability, accuracy and reliability

Amphenol
Advanced Sensors

210-5102	T6615-5K Diffusion 0 ⎯ 5.000 ppm
210-5104	T6615-EVAL Entwicklungstool

ALS Farbsensor

- Features ambient light and colour sensing, proximity and flicker detection with five concurrent ambient light sensing channels as red, green, blue, clear, and wideband.
- Ultra-high ALS and colour sensitivity
- 50/60 Hz ambient light flicker detection channel

ams **OSRAM**

232-9723	TCS37013 0x39 1.8V I²C
232-9727	TCS37073 0x39 1.8V I²C

Hirschmann Ethernet Switches

- Quick tool-free installation for easy set-up
- Integrated LED indicators for clear status information
- Maximum power consumption of 1.5W for energy-efficient network connections

HIRSCHMANN
A BELDEN BRAND

245-6948	SPIDER Ethernet-Switch, 8 x RJ45, 100 Mbit/s
245-6859	BOBCAT Ethernet-Switch, 6 x RJ45, 1 → 2,5 Gbit/s

RIoT Sensors from RF Solutions

- Each time a switch is pressed, an RF signal is sent
- In conjunction with the RIOT minihub, the switch status via Internet to smartphone or
- Transfer user's PC
- LoRa range: up to 5 km visibility,
- or 1 km in buildings

218-8380	RIoT-SENW SWT-8T4
218-8383	RIoT-SENW TMP-8T1

IQRF Transceiver

- License-free ISM bands 868/916/433 MHz
- No external components required
- Microcontroller with OS operating system, the
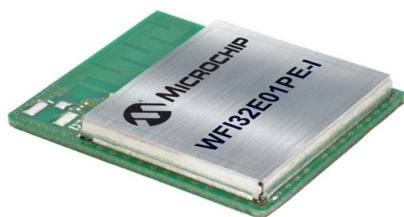- mesh as well as DPA approaches supported

IQRF®
Smarter Wireless. Simply.

230-7766	TR-72DAT, 6-Pin I/O
230-7770	TR-76D, 12-Pin I/O

Microchip 1MB Flash

- On board FEM/PA to Meet the TX Power Requirements
- Integrated Trust & GO
- Integrated 40 MHz POSC
- Has a total of 12 Analog Channels

MICROCHIP

215-7991	WFI32E01UE-I mit externer Antenne
215-7988	WFI32E01PE-I mit PCB-Antenne

IoT gateways from Siemens

- Whether for new or existing systems – SIMATIC IOT2050 enables a simple and cost-effective first step into digital dimensions.
- The intelligent and easily retrofittable IoT gateway detects, processes,
- harmonizes and stores machine and production data. Various data sources directly on site, in production.

SIEMENS

201-7731	Siemens IOT2050 Basic
201-7732	Siemens IOT2050 Advanced

WE Evaluation Kits for GNSS Modules

- Advanced EV kit with Thyone-I radio interface for GNSS modules, with integrated or external antenna
- Messages from the GNSS module are transmitted via UART interface via the integrated passive GNSS antenna to the Thyone-I module on the EV board sent
- Erinome-I: EV board with GNSS module

WE WÜRTH ELEKTRONIK
MORE THAN YOU EXPECT

222-0864	Extended EV-Kit Erinome-I
222-0865	Extended EV-Kit Erinome-II

Linx Antenna Solutions

- Wireless antenna solutions for various applications, frequencies and operating conditions
- Excellent performance in the 2.4 GHz, 5 GHz and 6 GHz bands, both WiFi 6 and WiFi 6E
- Embedded dipole antenna variants independent of the footprint, comparable in performance to external antennas 0

Linx TECHNOLOGIES

231-8578	Puck-Antenne ANT-W63-SPS1-1 S
216-9818	Flexible Antenne ANT-W63-FPC-UFL-100

Phoenix Contact FL MGUARD 1100, 2 Ports

- Degree of protection IP20
- Inexpensive entry into network security
- High data throughput

PHŒNIX CONTACT

801-7312	2200515 FL MGUARD RS4000 TX/TX VPN
224-2971	1153079 FL MGUARD 1102

Turck TX700 HMI/PLC Intelligent Gateway

- Comes with ARM Cortex A9 Dual-core 800 MHz processor.
- Has one RJ45 Ethernet port with 10/100/1000 Mbit speed and two RJ45 Ethernet ports with 10/100 Mbit speed.
- It has 4 GB flash, 1024 MB RAM memory, and real time clock (battery-backed).

TURCK

230-9792

Integral Memory Crypto Envoy Dual 128 GB USB 3.0 USB Flash Drive
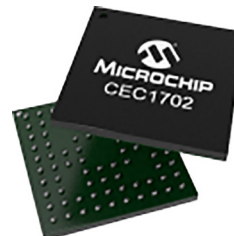
- 128GB crypto dual USB 3.0 flash drive provides a highly secure and easy-to-use solution.
- No software installation is required before use
- Works on Windows XP, Vista, 7, 8.1, 10 and Mac OS X without administrator privileges

integral™

180-5848   INFD128GENVDL3.0-197

CEC1702 Clicker & Microchip CEC1702Q-B2-I

- MikroElektronika has designed a range of boards to add new functions and enhance the development of your applications using the mikroBUS™ pinout standard socket. All in one click!
- Click™ boards can add a range of sensing, Bluetooth, Wi-Fi, extra memory, UART communications, audio and much more functionality to your designs.
- Easy-to-use, seamless authentication and encryption capabilities for connected applications
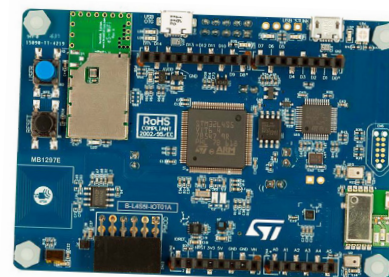
MICROCHIP

136-0789	Dev-Kit MIKROE-2066
177-4117	Krypto-Controller CEC1702Q-B2-I/SX

STMicroelectronics B-L4S5I-IOT01A 32 bit Microcontroller Board B-L4S5I-IOT01A
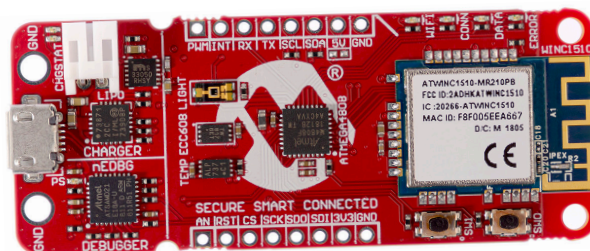
- STMicroelectronics Discovery kit for IoT node, users develop applications with direct connection to cloud servers.
- Discovery kit enables a wide diversity of applications by exploiting low-power communication, multiway sensing and Arm Cortex-M4 core-based STM32L4+ Series features.
- 64-Mbit Quad-SPI Flash memory from Macronix

ST life.augmented

204-4106   B-L4S5I-IOT01A

Microchip AVR-IoT WG MCU Development Board AC164160

- Drag and drop programmer
- Light and temperature sensors
- MikroBUS footprint supports over 500 ad-on-boards

MICROCHIP

179-7560   AC164160

4D Systems IoD-O9TH TFT LCD Display Module, 0.9in, 80 x 160pixels

- 12 pin/pad interface
- 4Mbit (512kb) flash memory
- Built-in WiFi 802.11 support
- On-board microSD memory card connector

164-7079   0.9" LCD-Anzeigemodul

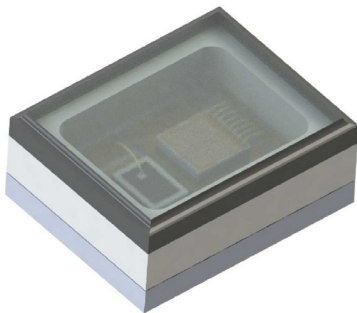## Displaytech 128240D-FC-BW-3 Graphic LCD Display, Black on White, Transflective

- LCD Driver IC is Sitronix ST7529
- Viewing angle is 6/12 O'clock
- Operating temperature ranges between -20°C and 70°C

Displaytech Ltd.

712-6049   LCD Modul, 240 x 128Pixel

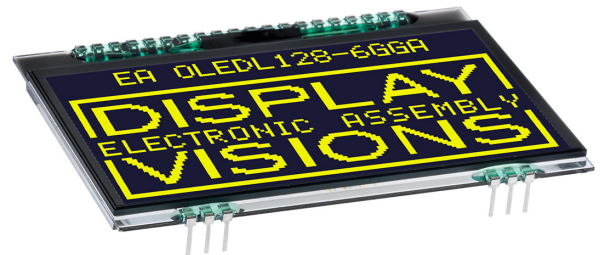## OSRAM V102C121A-850 Laser Diode 850nm

- 850 nm IR laser wavelength
- 2 W pulsed optical power class
- 60° x 45° rectangular emission profile
- uses GaAs VCSEL power array chip technology
- used in virtual reality, 3D sensing, industrial automation, access control (iris/vein scan, face recognition), augmented reality, mixed reality, flash and autofocus, gesture recognition.

OSRAM

224-9994   VCSEL SMD Laserdiode

Display Visions 2.9in Yellow OLED Display 128 x 64pixels I2C, SPI Interface

- Pins with pitch 2.54mm provide a much faster and easier design, just put the display directly on a breadboard and application.
- No need for any mechanical construction simply solders the display into a pcb or plug with sockets.
- From ice cold to brooding heat extreme wide viewing angle of more than 170° contrast > 1:1000

DISPLAY VISIONS

163-6877   EA OLEDL128-6

Midas Graphic OLED Displays, TAB

- Viewing angle: > 160° horizontal and vertical
- Contrast ratio: > 2000:1
- Operating temperature range: -30 to 70°C

MIDAS Displays

823-5920   MCOT128064BY-WM

OSRAM Opto Semiconductors DURIS® E 2835

- Provide excellent colour rendering and supreme efficacy in cost effective industry standard LED.
- Never fails to impress with its performance on system level.
- Packages consist of white SMT package, colored diffused silicone resin.

OSRAM

210-4165   GF JTLPS1.24-KXK5-1-1 90 → 130 mW

Siemens FastConnect

- Male Cat5 RJ45 connector, female RJ45 Connector
- USB port, 22 mm, plastic, black
- Integrated strain relief for additional strength and durability to prevent breakage and signal loss

SIEMENS

758-9193	Cat.5 RJ45, 6GK1901-1BB10-2AA0
173-6866	USB, 3SU1900-0GA10-0AA0

Phoenix Contact Connector

- Polymer housing is hardy and chemical-resistant to effectively shield internal components
- Gold-plated copper contacts provide strong conductivity to ensure optimal signal transmissions
- Operating temperature range of -25°C to +85°C for reliable use in harsh industrial conditions

SIEMENS

802-5489	SACC-E-M 8FS-3CON-M8/0.5 - 1500350
802-5577	SACC-E-M 8FS-6CON-M8/0.5 - 1542677

Steel Gripping pliers

- Ergonomic Flat & Round Nose Pliers
- Professional range of flat and round nose pliers.
- Smooth and Serrated jaw shape.

ideal-tek

787-0424	Rundzange 140 mm / Backen 10mm
847-3002	Flachzange 135 mm / Backen 20mm

MPRONTO-12

- Non shielded and made of PVC
- Mate with all M12*1.0 per IEC standard
- Meets IP67, IP68 and IP69K ingress protection
- Durability 500 cycles

Amphenol Industrial

219-7434	M12D-04BMMM-PL8D02
219-7422	M12B-05BMMM-PL8D01

Harting Ha-VIS preLink Series

- Swappable mating profiles for versatile and sustainable ethernet cabling.
- Easy, quick installation in cramped spaces
- Suitable for automation, railway, industrial and energy applications

HARTING

875-5600	RJ45 Buchse HIFF Set 20820010001
875-5644	HanPP V14 preLink RJ45 20822040001

Bulgin USB

- Fully over moulded Pre-Wired IP-sealed 'C' type to Standard 'C' type USB that comes with 1 m cable length and supports USB 3.2.
- Plug variant mates with PXP4043/C.
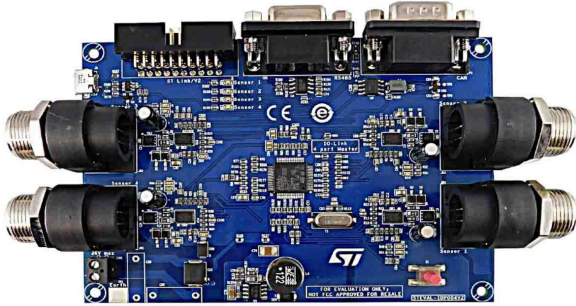- IP66, IP68 and IP69K rated

bulgin

234-3245	PXP4041/C/C/1M00, C-Typ zu Standard-C
234-3243	PXP4040/C/A/5M00, C-Typ zu Standard-A

STMicroelectronics IO-Link

- STMicroelectronics IO-Link master multi-port evaluation board is based on L6360.
- Creates a multi-port master based on serial asynchronous communication to support the IO-Link protocol.
- On-board reverse polarity protection

201-4437   STEVAI-IDP004V2

STMicroelectronics STEVAL-MKSBOX1V1

- Baby crying detection with Cloud AI learning
- Barometer / environmental monitoring
- Vehicle / goods tracking
- Vibration monitoring

190-8453   STEVAL-MKSBOX1V1

Renesas Expansion Board RYZ012A100FZ00

- PMOD expansion board can be controlled through an SPI or UART interface.
- Easy connection to Renessa MCU kits via PMOD
- High speed UART interface
- Driver for RX MCUs available

240-4010   RTKYZ012A1B00000BE

PSoC 64 Standard Secure - AWS Wi-Fi BT Pioneer Kit

- The board features a PSoC 64 MCU, and a CYW4343W Wi-Fi/Bluetooth combo module.
- Provides a fast, expandable memory for data and code
- 4-Mbit Quad SPI ferroelectric random-access memory (F-RAM)

241-4256   CY8CKIT-064S0S2-4343W
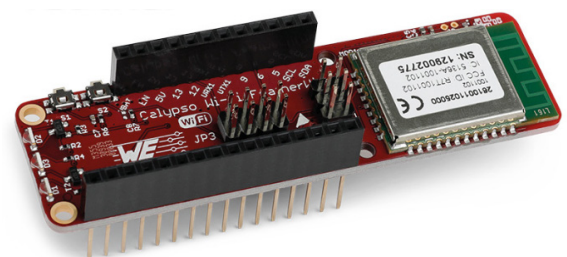
Siretta RS232 GSM

- Provides an intelligent serial gateway, moving away from the traditional approach of setup and management using AT commands which require a high skill level to implement correctly.
- Power Saving Mode (PSM)
- 3GPP Rel. 13 Discontinuous Reception
- 3GPP Rel. 13 Extended coverage

219-8155   SL500-LTEM GL Starter-Kit

Calypso WiFi Feather Wing

- Featured with 2.4 GHz Wi-Fi connection
- Mainly used in rapid development of IoT applications and prototyping cloud connectivity applications.
- Direct communication with cloud

222-0851   2610039025001

APEM AO2ES-I Series Red Emergency Stop Push Button

- Easy to mount and operate. Illuminated version available.
- High security: no risk of accident in the assembly and maintenance phases
- Push to lock, pull or twist to release
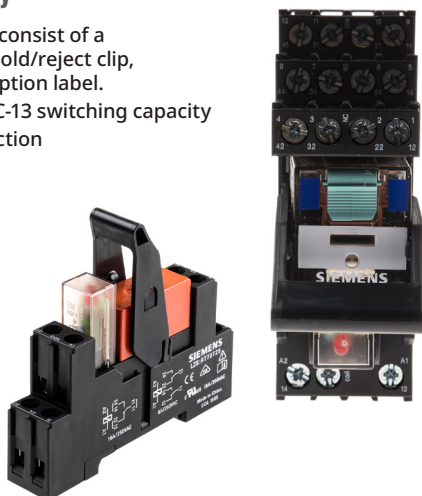
137-0021   DPST-NC, Drehentriegelung

Tactile Switch

- TE Connectivity's tactile switches are on/off actuator components which work as basic electronic switches that must be physically touched or pressed down to close a circuit and deliver a signal.
- Typically, only register an input while manually pressed by the user and return to a default 'off' position on release.
- These simple and common switch types are often used as components in PCB-based (printed circuit board) systems, computer keyboards, keypads or number pads, instrument panels, and many other interfaces control applications.

239-5694   USLPT3026BL2TR

239-5679   MSLPT5252CL1BTR

LED Component Tester

- A specialised solution for testing and verifying SMD and through-hole LEDs.
- Convenient one-hand operation
- Automatic LED polarity detection and display

121-7794   Bauteilprüfgerät ST-LED

Force Guided Relay

- The TE - Industrial relays are used for Emergency shut-off, press control, machine control, elevator and escalator control, safety relays
- 6 pole relay with force guided
- Reinforced insulation between all contact

230-9919

Plug In Interface Relay

- Complete LZS devices consist of a socket, plug-in relay, hold/reject clip, LED module and inscription label.
- Tested to AC-15 and DC-13 switching capacity
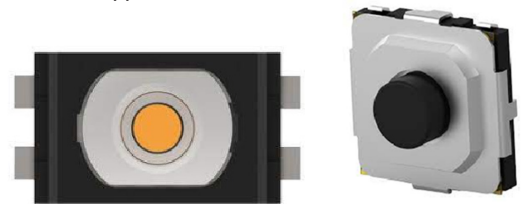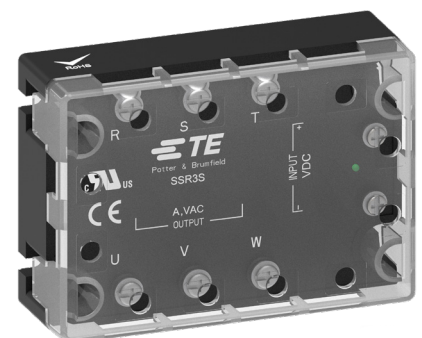- Vibration proof connection

758-6839   LZS:PT5B5L24 Komplettgerät 4 W, 24 Vdc

758-6876   LZS:RT4A4L24 Komplettgerät 2 W, 24 Vdc

3-phase SSR relay

- Provides a compact, space saving solution in the panel
- Removes the wiring complexities within a panel
- Ability to switch various load options

223-1998   1-2345984-4 Serie-TRI, 40 A

EA-PS3080 Laboratory Power Supply

• Offers the user compact desktop power supply devices for a manifold of applications where it requires small voltages, currents and powers.
• These devices offer some additional functions to simplify handling and to save time.
• The user can also quickly configure several protection thresholds and call user profiles.
• Wide input voltage range 90...264 V with active PFC

184-3998   EA-PS 3080-20 Labornetzgerät, 80 V / 20 A

Pico Technology PicoScope 4824A

• 8 channels
• 20 MHz bandwidth
• 12-bit resolution
• 256 MS capture memory

201-1830   Pico 6824E, 8-Kanal PC-Oszilloskop, 500 MHz

R&S Desktop Oscilloscope, RTM3004

• Outputs sharper waveform with more signal details
• Touchscreen display with gesture support like smartphone
• Low noise frontend gives accurate measurements

174-2865   RTM3004, 4-Kanal Oszilloskop, 1 GHz

FLIR ETS320 Thermal Imaging Camera

• A professional, affordable solution designed for hands-free laboratory testing.
• Ideal for reducing test times and improving product design for electronic board and device evaluation
• Wide temperature range, from -20⁰C to 250⁰C, for quantifying heat generation and thermal dissipation

135-6220   ETS320 Wärmebildkamera -20 → 250 °C

Power Quality Analyzer, SICAM Q100

• Used for acquisition, visualization, evaluation and transmission of electrical measured variables such as alternating current, alternating voltage, frequency, power, harmonics etc.
• PQ reporting according to EN 50160 direct in web server
• IP40 front protection class

236-3546   SICAM Q100 Netzqualitätsanalysator, 690V / 10 A

Tektronix Oscilloscope, MDO34

• 11.6-inch HD colour display, pinch, tap, swipe capacitive touchscreen
• Low-level signal measurement accuracy improved by as much as 40%
• Up to 5 GS/s sample rate on each analog channel

187-5455   MDO34 Mixed-Domain Oszilloskop, 200 MHz