

AVNET<sup>®</sup> ABACUS



/ LINECARD NORWAY  
SUPPLIER PORTFOLIO

# / A VITAL COMPONENT OF YOUR SUCCESS

## A truly EMEA footprint

- Your dedicated technical IP&E (interconnect, passives and electromechanical) distributor
- Complementary offering of energy storage, power supplies, sensors and wireless
- 100+ pan-European franchises
- Selected local agreements
- 49 offices in 27 countries
- 50+ field application engineers based across Europe
- 125+ account managers


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# CONNECTORS

	Automotive	Lighting	Backplane, DIN 41612, 2mm and high speed	Board-to-board	Heavy duty	Industrial	Medical	Military and aerospace	Audio, signal and mobile	DSUB and accessories	DVI, HDMI and SCSI	Modular jacks, plugs and SDL	High speed: USB, firewire, infiniband and IEC	Multimedia and PC cards	Smart card and SIM	IEC connectors and entry modules	IEC distribution units	Heavy duty	Military and aerospace	DIL and SIL	PLCC, PGA and BGA	SIMM and DIMM	Battery and fuse	FFC and FPC	IDC 2.54, 2.00 and 1.27	Headers, receptacles and others	Terminal blocks	Wire-to-wire	RF inc. coax. and antennas	Fibre optics	Cable: FFC, ribbon flat and round	Cable assemblies	Terminal faston	Accessories, pins and contacts			
	Application specific	Board-to-board		Circular	I/O	Memory card	Power	Rectangular	Sockets	Wire-to-board	Terminal blocks	Wire-to-wire	High speed/ high frequency	Others																							
3M																																					
Alps Alpine																																					
Amphenol																																					
Aptiv																																					
Bourns																																					
Bulgin																																					
Cinch Connectivity																																					
CviLux																																					
Dinkle																																					
Eaton																																					
ept																																					
Glenair																																					
Greenconn																																					
Harwin																																					
Hirose																																					
ITT																																					
Kycon																																					
Kyocera AVX																																					
Lumberg																																					
Molex																																					
Omron																																					
PRECI-DIP																																					
Pulse																																					
Samtec																																					
Schaffner																																					
Schurter																																					
Stewart																																					
Switchcraft																																					
Taitek																																					
TE Connectivity																																					
Weidmüller																																					





# / SENSORS

	NTC	PTC	RTD	Digital IC	Thermal reed switch	IR thermopile	Thermocouple	Pressure	Force, load, torque and tension	Humidity	VOC and CO <sub>2</sub>	Dust	Flow	Water level	Accelerometer, vibration and shock	Inclinometer and gyro	Geomagnetic	GMR, AMR and TMR	Inductive transducer	Capacitive touch	Resistive potentiometers	Optical encoder	Magnetic encoder	Photo interruptor	Ultrasonic	Passive Infrared (PIR)	Light convergent reflective	Magnetic proximity (reed and hall)	Current	Sunlight, ambient light and colour	Pulse oximetry (SpO <sub>2</sub> )	Microphone	Human vision				
	Temperature							Pressure	Gas and liquid					Motion														Current	Optical	Sound	Image						
Abracon	•																																				
Alps Alpine								•	•	•							•	•				•	•								•						
Amphenol	•	•				•	•	•	•	•	•											•	•						•		•						
Bourns							•		•													•	•	•													
Bulgin																											•										
CTS	•		•	•								•	•	•				•					•		•			•		•							
Grayhill																							•	•					•								
Harvatek																								•							•						
Hirose																															•						
Innovative Sensor Technology			•	•						•			•																								
KEMET					•						•					•											•			•							
Kingstate																																			•		
Kyocera AVX	•		•				•	•												•									•								
Molex																								•			•										
Murata	•	•					•				•				•	•		•				•				•	•										
NIC	•																																				
Nidec Copal							•							•								•	•							•							
Omron						•	•	•	•	•	•	•	•	•	•	•		•		•				•			•		•		•	•	•	•	•	•	
Panasonic Industry	•					•	•				•				•	•						•															
Panasonic Electric Works																								•			•										
PUI Audio																									•										•		
Pulse																															•						
Qinlon																									•												
TDK	•	•					•		•						•	•	•	•													•				•	•	
TE Connectivity	•		•	•		•	•	•	•	•	•	•	•	•	•	•		•	•	•		•	•		•		•				•		•				
Vishay	•	•	•																			•	•														
Yageo	•	•																																			

## AC-DC power supplies

	AC-DC controller IC's, start-up, isolators, Tx, CMC	Enclosed case panel mount	Open frame and U-frame with case/fan	Modular	DIN rail mount	Adaptors and external desktop chargers (incl. medical)	Board or chassis mounted	Brick type board mount	Conduction/convection cooled and fanless	CRPS data centre front-end rectifier	Higher output voltage 100-400Vdc	High power industrial / telecom	Medical EN60601-1 certified	Household EN 60335-1 certified	Battery chargers VRLA / Li-Ion / LiPo / LiFePO4	Battery chargers USB Type A, Type C	Battery chargers, smart high power	Power over Ethernet	Standard LED drivers (CC, CV, CP, CV-CC)	LED Drivers with Bluetooth (KNX, DALI)	LED emergency drivers with integrated batteries	LED modules and accessories	UV-C LED drivers & UV-C lamp ballasts
ABB Embedded Power																							
Aimtec																							
Advanced Energy (Artesyn / Excelsys)																							
Bel Power (Melcher)																							
CUI																							
Delta Electronics																							
Pulse (Egston)																							
MEAN WELL																							
Murata																							

## DC-DC converters

	Low power miniature isolated	Industrial	Bricks 50 - 1800W	Bricks IBC 200 - 1800W	Gate-drive DC-DC converters	Off-board chassis mount	Enclosed case panel mount	Open frame and U-frame with case	DIN rail	CRPS data centre front-end rectifier	Higher input voltage 100-2000Vdc	Higher output voltage 300-1200Vdc	Medical (certified)	Isolation amplifiers and interfaces	Transceiver moddies (CAN-RS485/Z32/UART-SP)	Railway and transportation	LED DC-DC converters	Switching buck regulators	Switching buck-boost regulators	Non-isolated bricks 100 - 3000W	DC filters input / output	Micro Point of Load 0.5 - 25A	Digital Point of Load 2 - 180A	Analog Point of Load (DOSA/POLA)	Power block modules	Direct conversion isolated	Intermediate Bus converters	High power non-isolated buck-boost	Automotive Point of Load buck/buck-boost		
	DC-DC ISOLATED																NON-ISOLATED & POINT OF LOAD														
ABB Embedded																															
Aimtec																															
Advanced Energy (Artesyn)																															
Bel Power (Melcher)																															
Cyntec																															
Delta Electronics																															
Eaton																															
Flex Power Modules																															
MEAN WELL																															
Murata																															
TDK (Faraday)																															

# / BATTERIES

	Zinc carbon	Alkaline manganese	Silver oxide	Zinc air	Lithium manganese dioxide	Lithium iron disulfide	Lithium thionyl chloride	Lithium poly-carbon mono-fluoride	Sealed lead acid	Nickel metal hydride	Lithium ion	Lithium polymer	Lithium vanadium pentoxide	All-ceramic multilayer	Chargers and power adapters	
	Primary								Rechargeable							
Artesyn																•
Enersys									•							
GP Batteries	•	•	•	•	•	•				•	•					
MEAN WELL																•
Molex	•															
Murata		•	•		•						•					
Nichicon											•					
Panasonic Industry	•	•		•	•		•	•	•	•	•		•			
Procell (Duracell)		•			•						•					
RRC										•						•
Tadiran							•				•					
TDK														•		
Varta		•	•	•	•		•			•	•	•				
Wamtechnik										•	•					



# WIRELESS ANTENNA WIRELESS CHARGING

	RFID	NFC	ANT	Bluetooth	Zigbee	Thread	WiFi	LoRa	SigFox	LTE cat. M1	NB-IoT	GNSS	Chip	GSM and LTE	WLAN and WiFi	NFC	ISM, Zigbee and Bluetooth	GPS and data	Small cell	DAS	Tx coil units (WPC)	Rx coil units	Tx modules	Tx or Rx coils	
	Wireless												Antenna							Wireless charging					
Abracon													•	•	•	•	•	•	•		•	•		•	
Alps Alpine				•			•					•													
Amphenol														•	•	•	•	•	•	•	•	•	•		
Fujitsu				•																					
Kyocera AVX								•					•	•	•	•	•	•				•	•	•	
Molex													•	•	•	•	•	•				•	•		
Murata	•	•	•	•			•	•	•	•	•			•		•									
Panasonic Industry	•	•		•	•	•	•																		
Pulse													•	•	•	•	•	•	•	•	•	•	•	•	•
TDK													•			•	•					•	•	•	•
TE Connectivity													•	•	•	•	•	•	•	•	•				
Vishay													•		•		•	•				•	•		
Yageo													•	•	•		•	•							

Avnet Embedded builds embedded compute, display and software solutions that meet the demand for innovation and quality, with reduced time to market, utilising Avnet Embedded's platform technologies, design and manufacturing capabilities, and a world-class team of experts.

As a distributor of Avnet Embedded solutions, Avnet Abacus works closely with the Embedded engineering teams to support requirements with its innovation solutions across three key areas: Compute, Display and Software.

Find out more about Avnet Embedded's capabilities and solutions below, or if you would like to speak to an expert about how we can help with your Embedded requirements, visit [avnet-abacus.eu/ask-an-expert](https://avnet-abacus.eu/ask-an-expert)

## Core solutions

### Compute

From an award-winning range of standard compute-on-modules and system-on-modules to full custom computing hardware design, Avnet Embedded offers everything to get customers' products to market better, faster and stronger.

### Display

The Display Innovation team works with the world's leading display and touchscreen component manufacturers and innovators worldwide. In turn, Avnet Embedded handles display design and integration for some of the world's biggest technology companies.

### Software

As well as designing and manufacturing perfect hardware solutions, Avnet Embedded offers an unmatched capability when it comes to software. This experience means we can provide customers with access to cutting edge technology and vast knowledge.

## Services

### Design

Avnet Embedded works with customers every step of the journey to design the perfect embedded solution for their product. Avnet Embedded product and solution design teams are covering: compute, software, displays, systems and HMI.

### R&D

Avnet Embedded's skilled design engineers have many years of experience designing boards with high-end x86 and ARM CPUs as well as with fast memory technology and programmable devices (CPLD, FPGA).

### Manufacturing

The Avnet Embedded product engineering, test development and production engineers work hand in hand to achieve optimised product quality. Avnet Embedded's sophisticated SAP-integrated MES and quality system ensures full traceability of products.

### Assembly

Large, versatile assembly spaces can be engineered around the needs of your product, using efficient cell-based assembly processes and advanced robotics and production engineering to provide the highest possible quality at favourable costs.



# AVNET ABACUS IoT SOLUTIONS

## Go from IoT concept to value creation – with one partner to guide the way

New product features. New revenue streams. New service models. The IoT has the power to transform almost any business. But without the support of a partner with robust, end-to-end capabilities, it can be harder than it sounds to fully realise business outcomes.

That's because developing a solution and executing successfully at every stage of the process is complex.

You know Avnet Abacus as one of Europe's leading IP&E and connectivity specialists. And we know first-hand how these challenges can quickly derail an IoT implementation.

We're here to help with a complete set of end-to-end capabilities that includes:

- Avnet Abacus's IoTConnect solution. Based on the world-class Microsoft Azure IoT Suite, it's more than just a powerful PaaS platform. IoTConnect allows for device communication and management, data storage, app creation as well as enablement and robust security protocols
- A Business Analysis that will uncover and document your business needs and identify cloud applications to meet them
- Our team of software, hardware, and security engineers working to successfully deliver your IoT solution

## Avnet Abacus' end-to-end IoT capabilities

### Avnet Abacus IoT solutions

- Solution scoping
- Business case
- ROI

### Design

- Edge design
- Technology selection
- Logistics

### Cloud & digital

- IoT Cloud
- App Dev
- Data Insights

### Lifecycle

- IoT Security
- Upgrades
- Post-sales support

## Top challenges across IoT product development

### Concept

Creating a compelling business case with a strong return on investment.

### Design

Choosing the right IoT platform and edge devices with the right level of flexibility and design support.

### Cloud & digital

Identifying and developing cloud applications that meet performance requirements and business needs.

### Lifecycle

Ensuring end-to-end security to protect the data owned by you and your customers.

Wherever you are in your IoT journey, Avnet Abacus is ready to be your partner every step of the way to help you achieve success.

**Are you ready to get started now?** Please contact us at [avnet-abacus.eu/ask-an-expert](https://www.avnet-abacus.eu/ask-an-expert)



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