

FRANCHISED LINE CARD 2021

KARL KRUSE REMOVES COMPLEXITY AND INSPIRES
360° SMART DISTRIBUTION OF ELECTRONIC COMPONENTS
FOR LEADING ENTERPRISES.



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KARL KRUSE GMBH & CO. KG

Founded in 1951, Karl Kruse is a specialized distributor in the areas of active electronic components, multimedia, LEDs and display and system solutions. The headquarters in Duesseldorf / Germany is supplemented by sales branches in Europe and offices in China and India.

At Karl Kruse, we don't only specialize in the delivery of electronic components; we also provide logistic solutions for production and manufacturing enterprises. From global sourcing, to vendor and shipment consolidation, we offer tailor-made flexibility for your operation.

Karl Kruse global Procurement Network enables us to provide our services and products seamlessly worldwide. This network consists of a robust set of systems, skills, and tools that we use to efficiently manage production and services, regardless of geography, cost point, technology, or end-market demand.

Karl Kruse supports its network of global customers with turnkey value-added services designed to reduce response times, increase flexibility in the supply chain, reduce order delivery costs and inventory investment, and help customers to optimize their total cost of ownership.

With innovativeness, a clear commitment to quality assurance, supply chain management, and technology, Karl Kruse Electronics provides a competitive advantage to customers by improving time-to-market, scalability, and efficiency.



MEMORIES

MANUFACTURER

Adata	Alliance Memory	ATP	BiWIN	Cervoz	Etron Technology	FMD Fremont Micro	Holtek	NETSOL
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DRAM Modules / ICs

Automotive					X			
DDR2 / DDR3 / DDR4	X	X	X	X				
Mobile Low Power SDRAM, -DDR, -DDR2		X	X		X			
8-Bit Flash MCU							X	
32-Bit Flash MCU							X	
High Supply Voltage Flash MCU							X	
8-Bit OTP MCU							X	
Synchronous DRAM		X			X			
Wide Temperature Modul	X							

Cards / eMMC / USB-Modules (Flash)

CFast Cards	X	X	X	X				
eMMC, eMCP, ePOP, BGA SSD, UFS, DMMC		X	X					
CompactFlash Cards	X	X	X	X				
micro SD Cards	X	X		X				
SD Card	X	X		X				
SecurStor-enabled SD & microSD card		X						
SPI NAND			X					
USB Flash Drive	X	X		X				

EEPROM

I2C / SPI / 3-Wire						X		
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Solid State Drives and Modules (Flash)

1.8" u. 2.5" SATA- / PATA SSDs	X	X	X	X				
Half Slim SSDs	X			X				
M.2 SATA (2242, 2260, 2280)	X	X		X				
NVMe SSD		X						
mSata	X	X	X	X				
PCIe SSD	X		X					
Slim SATASSD		X	X	X				

Sram

DDR SRAM	X							X
Fast Asynchronous SRAM	X							X
Low Power Asynchronous SRAM	X							X
Parallel NOR Flash	X							
pSRAM Pseudo SRAM	X							
Quadruple SRAM								X

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BOARDS & SYSTEMS

MANUFACTURER

Aosong Electr. - ASAIR			
AI-Thinker Co., Ltd.			
Metz Connect			
Oriental System Technology Inc.			

Sensor

Flow	X		X
Gas	X		X
Humidity	X		X
Temperature	X		X

Systems and Switch Cabinets

Energy controlling		X	
Interface modules		X	
I/O components		X	
Measuring and monitoring relays		X	
Switches		X	
Telecommunication products		X	
Timer relays		X	

Wireless

Audio Development Framework (ADF)	X		
Development Kits (Audio, MESH)	X		
Dev. Kit mit Kamera	X		
ESP32-Azure IoT Kit	X		
WiFi & Bluetooth Module (802.11 b/g/n, BLE 4.2)	X		
WiFi Module (802.11 b/g/n)	X		

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ASAIR®



安信可科技
AI-Thinker



We realize ideas



POWER

MANUFACTURER

AYAA Technologies	EEMB	HTC Korea (TAEJIN)	HY Electronic	IK Semicon	Lauma Elettronika	MDI - Modular Devices Inc	MORNSUN	Pairui	POWRMOD	Semitronics	SMC	TOPPOWER	UTC Unisomic Tech.
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Battery

Custom Battery Pack (E-bike, Lighting, Med., ...)	X	X											
Li-Ion Battery Pac	X	X											
Primary Battery (LiSOCl ₂ , Li-MnO ₂)		X											
Rechargeable Single Cell (Li-Ion, Li-Po, LiFePO ₄)	X	X											
Mobile Power Supply	X	X											
Protection Circuit Module	X												X
Smart Battery Managment with fuel guage	X												

Power Disc.

High Power Bridge / -Rectifiers / SiC									X				
High Power- / Zener Diodes									X				
IGBTs									X				
Power Modules			X							X			
Thyristors / Triacs									X				
Triacs													
Voltage Regulators		X		X					X				X

Power Supplies

Aerospace					X			X					
Automotive						X		X					
AC/DC Converter				X		X	X					X	
DIN Rail								X					X
DC/DC Converter				X		X	X	X				X	
Enclosed / Open Frame						X	X					X	
FPGAs									X				
Medical						X	X		X				X
Marine / Railway						X	X		X				X
Military						X							X
Server							X		X				
Space						X							
Telecom						X	X		X				X

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DISPLAYS / OPTO

MANUFACTURER

Brückewell	EPISTAR	ISOCOM	Jinghua Displays - JHD	Lauma Electronica	LCD World	MIDAS	Semileds	StarChips	Tsingtek	WINSTAR
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Displays

Automotive			X							X
Character (8x2 - 40x4)			X			X			X	X
COB LCD (96x60 - 160x160)						X				X
COG LCD (1x8 - 4x40)						X			X	X
EPD - E-Paper (1.27" - 13.3")			X			X				X
Graphic LCD (80x64 - 320x240)			X			X			X	X
LCD			X			X			X	X
Low Temperature LCD (-30°C - 80°C)									X	
Low Temperature OLED (-30°C - 85°C)									X	
Medical			X							X
COB-/ COG-/ TAB OLED (0.49" - 5.85")			X			X			X	X
Semi/Full Custom			X		X	X				X
Touch Panel-CTP (3.22" - 10.4")			X			X				X
Touch Panel-RTP (3.5" - 10.4")			X			X				X
TFT (0.96" - 84.0")			X		X	X			X	X
Transparent TFT (22.0" - 84.0")					X					
Accessories			X			X				X

LED

Automotive	X									
Chips							X			
Flash LED	X									
Backlighting	X									
Display	X									
Lighting	X									
LED- / Display Driver	X			X				X		
Plant Lighting	X									

Interface

Optocoupler		X								
Optoswitches		X								

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SEMICONDUCTOR

MANUFACTURER

Aosong Electr. - ASAIR	Brückewell	Calogic	Chrontel	Comchip	Etron	Goodark	HTC Korea (TAEJIN)	HY ELECTRONIC	IK Semicon	Kingtronics	Lontium Semiconductor	Semitronics	SMC Diodes	Topdiode Group	UTC Unisomic Tech.	WAY-ON
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Analog Mixed Signal

Audio									X						X	
Automotive									X						X	
Buffer																
Comperator							X	X								
OpAmps (Dual, Quad, Prec., Prog., Rail-to-Rail)							X	X							X	
RTC (Real Time Clock)								X								
Timer															X	
Ultra Fast FET-Input Amplifier		X														

Discrete

Diodes (Gen.Purpose, Fast Switching, Zener)	X	X		X		X	X		X			X	X	X		
Military											X					
MOSFETs (Low-, Mid-, HV-MOSFETs, SiC)	X	X		X		X			X					X	X	
Rectifiers (Single, Bridge, Fast; Rec., UFast)	X			X		X	X	X	X			X	X			
Schottky	X			X		X	X	X	X				X			
Switches		X														
Thyristors / Triacs												X			X	
Transistors (Bipolar, RF)	X			X		X	X	X	X				X	X	X	
Voltage Regulators						X								X		

ICs

3D Depth-map Camera Controller					X											
Automotive									X						X	
Charger																
LCD Controller										X						
MOSFET Driver	X															
Logik (4x, 74HC/HCT, 74LS)							X	X								
Motor Controller								X							X	
Power Management		X						X								
Reset								X								

Interface ICs

Display Port			X							X						
DVO / SDVO (Transmitter, Encoder)			X													
HDMI / LVDS / MIPI / TTL			X							X						
Multi-Standard Display Interface Converter			X													
Isolator								X								
RS-232 / RS-485						X		X								
USB / Type C			X	X	X						X					

DMEMS / Sensors

Current Sensor								X								
Flow Sensor	X															
Gas Sensor	X															
Humidity Sensor	X															
Temperature and Humidity Sensor	X															
Three-Axis Accelerometer						X										
Three-Axis Magnetometer						X										
Six-Axis A+M						X										

Protection

ESD / EMI	X			X	X							X			X	
Fuses					X										X	
TVS	X			X	X	X	X	X	X			X	X	X	X	X

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ASAIR®

Brückewell

calogic

Chrontel

Comchip
SMD Diodes Specialist

Etron

TAEJIN Technology Co., Ltd.
Let us regulate it!

HY Electronic
(Cayman) Limited

IKSemicon

Kingtronics®
International Company

LONTIUM SEMICONDUCTOR

semitronics

SMC
DIODE SOLUTIONS

t+p

UTC

WAY-ON

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PASSIVE

MANUFACTURER

AEM	Allied Components	Cal Chip Electronics	Central Technologies	Chilisin	ECE	Fenghua	GTCAP	Kingtronics	Lauma Electronica	MAXTENA	Raltron	Topolode Group	Wayon	Xmultiple	Zeaset
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Antenna

BLUETOOTH (Chip / Stub)			X	X							X				
GNSS (GPS / GLONASS / GALILEO / BEIDOU)				X					X	X					
LORA (Chip / DIPOLE / STUB / Flex PCB)				X						X					
LTE (RPC PCB / RST STUB)				X					X	X					
NFC										X					
SIGFOX (CHIP / DIPOLE / STUB)				X						X					
ZIGBEE (CHIP / STUB)										X					
WiFi (CHIP / STUB)			X	X					X	X					

Capacitors

Aluminum Electrolytics Audio								X							
Al. Electrolytics (Axial, Snap-In, Screw)		X				X		X							X
Aluminum Electrolytics High Temp.		X				X		X							X
Aluminum Electrolytics Large Cap		X				X	X								X
Aluminum Electrolytics Ultra- / Long Life		X				X		X				X			X
Aluminum Electrolytics Low ESR		X				X	X	X				X			X
Aluminum Electrolytics Miniaturized		X				X		X							X
Aluminum Electrolytics Polymer		X				X		X							X
Aluminium Rapid Charge and Discharge															X
Aluminum Electrolytics SMD		X				X		X				X			
Aluminium Superkond. Module							X								
Ceramic Automotive															
Ceramic Leaded						X		X				X			
Ceramic MLCC						X		X				X			
Ceramic Network						X									
Ceramic RF								X							
Ceramic Single Layer						X		X				X			
Film Capacitor (Audio, Leaded, Axial, Screw)												X			
Tantalum Hybrid (high Cap.)							X								
Tantalum Leaded							X					X			
Tantalum Long Life / High Cap							X								
Tantalum Low ESR		X				X						X			
Tantalum Polymer		X										X			
Tantalum SMD		X				X						X			

Fuses / Protection

Automotive	X														
Fuses	X											X	X		
GDT/ NTC / PTC/ Varistors						X		X				X	X		

Frequency Components

CRYSTALS								X			X				
Microwave Filters											X				
OCXO, TCXO, VCXO, VCSO								X			X				
RF Ceramic Filters											X				
Real Time Clock											X				
SAW Filters											X				
SAW Resonators											X				

Magnetics and Inductors

Audio Transformers									X						X
EMI Beads, Ferrite, Filters and Chokes	X	X	X	X	X	X	X		X						X
LAN Transformers		X		X	X				X						X
Leaded Inductors	X	X		X		X									
Lighting									X						
Power Inductors		X	X	X	X	X	X								X
RF Signal Inductors		X	X	X	X	X	X								
Shielded Inductors		X	X	X											
SMD Inductors	X	X	X	X		X	X								
Transformers		X		X					X						X
Wireless Power					X										
Custom Toroids / -Magnetics	X														

Resistors / Protection

Automotive Resistors		X		X											
Power Resistors		X		X		X									
Resistor Networks & Arrays		X				X									
SMD Resistors		X		X		X									
Trimmer /Potentiometer								X							



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ELECTROMECHANICS

MANUFACTURER

Allied Components	Attend	Bix Electronics	Central Technologies	DB Products	Degson	ECE	EDAC	HASKO RELAY	Io Audio Technologies	Maxtena	Metz Connect	Morecrafts	Neltron	Raltron	Xmultiple
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Acoustic

Buzzer				X											
Microphone				X											
Piezo Element				X											
Receiver				X											
Speaker				X				X							
Transducer				X											
Ultrasonic				X											

Antennas

Dedicated Short-Range Communications (DSRC)									X						
GPS / GNSS / GLONASS / IRIDIUM / L-Band									X				X	X	
GSM														X	
LORA													X		
LTE									X				X		
Multilayer Chip Antennas (2.4 GHz)				X									X	X	
Multi-Frequency Active									X						
WiFi / Bluetooth / NFC / ZIGBEE									X				X		

Cable

Audio								X	X						
Cabling solutions for networks										X					
Cable Assemblies			X				X				X	X			
eSATA / SATA															X

Connectors

Audio						X	X			X	X				
Automotive	X														
Battery						X					X				
Board to Board (B2B)	X					X				X	X	X			
Board to Wire (B2W)						X				X		X			
Charging plugs		X			X										
Card Edge	X						X				X				
DVI											X				
FPC / FFC						X					X	X		X	
Fiber Optic															X
Headers							X				X	X			
I/O Connector	X	X			X		X				X	X		X	
Machine Pin Socket											X	X		X	
Magnetic Jacks	X	X				X	X								X
Memory Card Connector		X									X				
RF		X									X				X
Networking (Modular Jack)	X	X								X	X	X		X	
PCB Terminals										X					
Push Pull			X												
Pogo Pin	X											X			
Rack and Panel							X								
eSATA / SATA															X
Terminal Block					X	X				X	X				X
USB						X	X			X	X	X			X
Waterproof	X	X					X								



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		MANUFACTURER						
ELECTROMECHANICS		ECE	Goodsky	HASCO Relay	Kingtronics	Morecrafts	ORION Fans	Semitronics
Fans								WRG (Wang Rong Group)
	AC-/ DC-/ EC Fans						X	
	Blowers						X	
	Dual Voltage Fans						X	
	Fan Trays						X	
	Harsh Environment Fans						X	
	High Static Pressure Fans						X	
	IP68 Raed Fan						X	
	Motorized Impellers						X	
	Power Distribution Uni						X	
	Smart Cooling						X	
	Accessories (Filter, Guards, Monitors Contr.)						X	
Relay								
	Automotive	X	X					X
	Generail purpose relay	X						X
	Latching Relay			X				
	MOS Relay	X						
	New Energy			X				X
	Plug In Relay	X						
	Power Relay			X				X
	Reed Relay / -Sensor	X		X				
	Signal Relay	X	X					X
	Solid State Relay (SSR)	X					X	
	Socket	X	X					
Switches								
	DIP- / SMD Switches	X			X	X		
	Industrial Control Switch	X						
	Magnetic Contacts			X				
	Micro Switches	X						
	Push Switches	X			X	X		
	Slide Switches	X			X	X		
	Wireless Contacts			X				

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ARE YOU MISSING ALLOCATED OR DISCONTINUED COMPONENTS IN YOUR SERIES PRODUCTION?

Obsolescence is a major issue in any item of electronic equipment - it is quite common for some components to go obsolete before the final design for the equipment has been completed. Accordingly is the support and early cooperation with a longstanding successful and technical supplier a key element of any design.

The early Integration of Karl Kruse into your design process can protect your company from bottlenecks and production downtimes.

Karl Kruse has been successfully supporting industrial customers and EMS worldwide for decades with their new designs and special procurement of active, passive and electromechanical components and system components.

With the support of our branches in Europe, North America and Asia, we are able to present you fast and easy solutions if you have any delivery problems in your production.

We offer this support not only for the named manufacturers from our linecard, also to all other well-known manufacturers of electronic components.

CONTACT US AND CONVINCE YOURSELF!



EXP.

3M / AAEON Technology / ABB / ADAM TECH / Allegro MicroSys / ALPS / **ALTERA** / AMD / Amphenol / **Analog Devices** / Apem / Artesyn / Assmann / **AVX** / Bel Power / Belden / Belkin / Bosch / Bourns / Brady / Bridgelux / **Bridgetek** / **BROADCOM** / Central Semiconductor / **Comchip** / CONEC / Corsair / Cree / Crydom / CTS / CUI / **Cypress** / Delta Electronics / Dialight / Digi International / Diodes Incorporated / Diotec Semiconductor AG / ebm-papst / Ecliptek / EDT / Embedded Antenna Design / **EPCOS (TDK)** / Epson Electronics / ept / ERNI Electronics / **Espressif Systems** / Euroquartz / Everlight Electronics / Everspin Technologies / Eversion / Exar / Excelsys / Fagor / FASTRON / FCI / Ferroxcube / Finder / Finisar / Fischer Elektronik / Fox / FRIWO / **FTDI** / Fujitsu / HALO Electronics / HARTING / Harwin / Honeywell / HONGFA / **Infineon Technologies AG** / **Innodisk** / INNOLUX / Inolux / Inphi Corporation / Integrated Silicon Solution / Intel / Intersil / IQD Frequency Products / ISOCOM / ITT / Jamicon Electronics / **KEMET** / Keystone Electronics / Kingbright / Kingston / Knitter-Switch / KOA / Kontron / Kyocera / Laird / Lattice / LEMO / LG / **LINEAR TECHNOLOGY** / Lite-On / Littelfuse / Lumberg / **MAXIM** / Mean Well / Micro Crystal / **MICROCHIP** / MICRON / Microsemi / Mill-Max / **MPS** / Molex / **Murata** / Neutrik / New Japan Radio / NIC / NICHIA / Nichicon / NKK / NXP / ODU / OMRON / **ON SEMICONDUCTOR** / OSRAM / Panasonic / Panduit / POWER INTEGRATIONS / Powertip / PRECI-DIP / ProTek / Pulse / QUALCOMM / Quectel / Radiall / RAFI / RECOM / Redpine / **RENESAS** / RF Solutions / RIA CONNECT / **Richtek** / Ricoh / ROHM / Rubycon / **Samsung** / Samtec / SanDisk / SANYO / SCHURTER / Semikron / **Semtech** / Sensitron / **SG Micro** / **SHARP** / Silicon Labs / SiTime / **SK HYNIX** / **SONY** / SOURIAU / SparkFun / **Sparklan** / **STMicroelectronics** / Sumida / Switchcraft / Taiwan Semi: / **Taiyo Yuden** / **TAKAMISAWA** / **TDK** / TE / Tensility / Tianma / **TEXAS INSTRUMENTS** / TOKIN / Toshiba / Triad Magnetics / Optek / Semelab / Welwyn / **Vishay** / **Walsin** / Western Digital / Winbond / Wolfspeed / **Xilinx** / **YAGEO** / Yamaichi / ...

* **Bold** = strongest sourcing lines

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