



Wireless Charging



800.348.5580
630.208.2200



rellpower@rell.com
rellpower.com

Richardson Electronics has partnered with top-tier suppliers to bring you high-quality power components that you can trust for your wireless charging solutions. We focus on Level III DC fast charging, wireless charging, and industrial battery charging applications. As a global operation, our company has grown to include a team of experts with diverse backgrounds that can guide you with your complete wireless charging solution. Serving our customers is a value infused in the company culture, and we stand behind every component we deliver.

What We Do Best



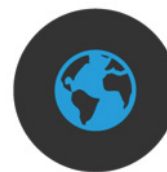
Identify & Design-in New,
Disruptive Technologies



Industry Leader in
Power & Microwave
Technologies



Provide Technical
Expertise & Engineered
Solutions



Provide Exceptional
Global Support

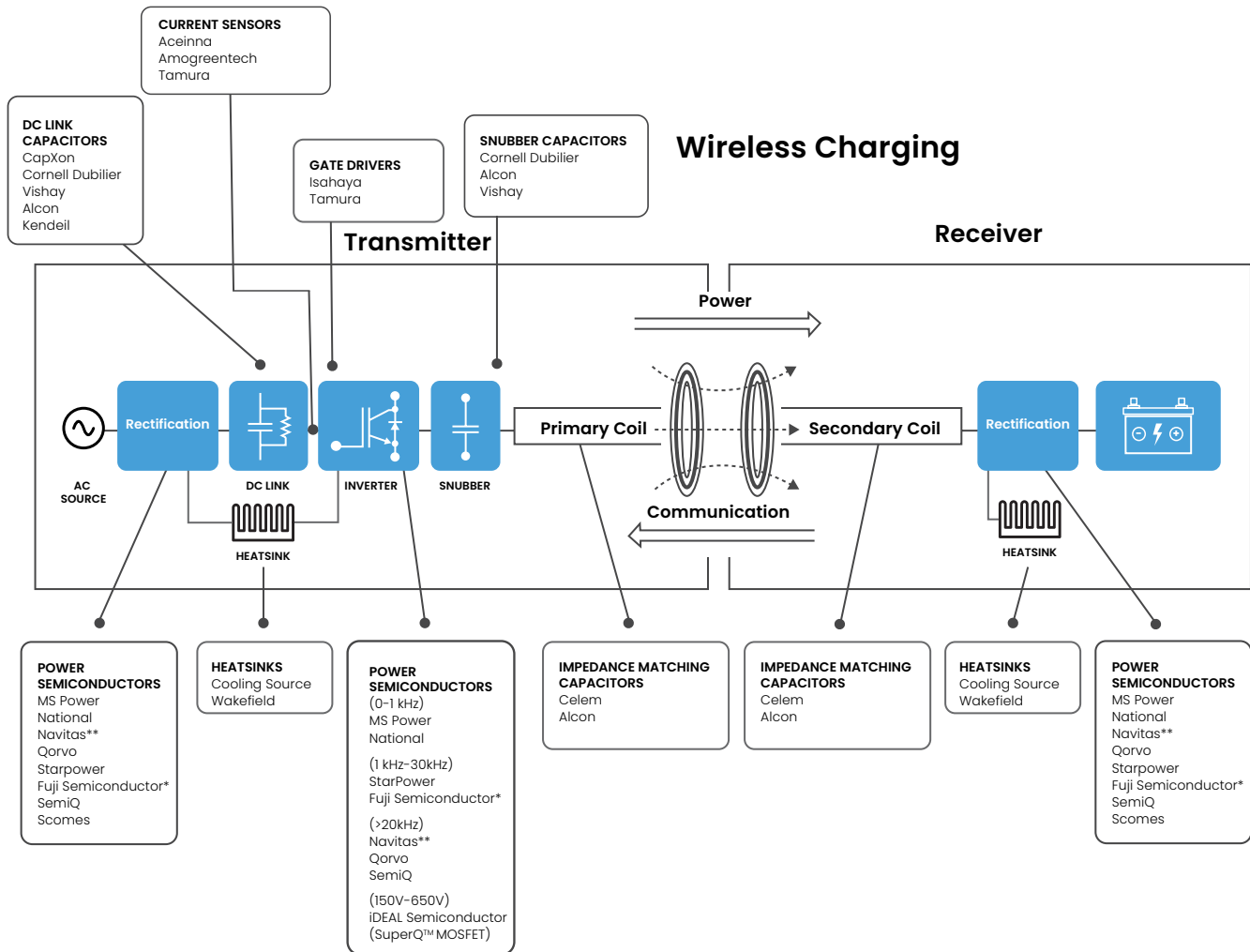


Provide High Quality
Products for Over 75 Years

Wireless Charging

POWER & ENERGY - BLOCK DIAGRAM

At Richardson Electronics, our team of experts have created comprehensive block diagrams to help provide a schematic of the components necessary for power management. These block diagrams provide a high-level overview of required components and important working relationships – making them valuable tools for design engineers to make the right choice for their component selection. In addition, we provide solutions and add value through design-in support, systems integration, prototype design, manufacturing, testing, and logistics. Contact us or find the products you need for your design at rellpower.com.



*Fuji Semiconductor is only available in the Americas at this time

**Navitas is only available in North America at this time

Power Semiconductor		
Product	Product Ranges	Suppliers
Diode Rectifier Discrete Module	12A-13,500A, 200V-6500V	Scoms MS Power National
SCR Thyristor Discrete Module	16A-6500A, 200V-8500V	MS Power National
IGBT IPM DIPIPM PIM	10A-3600A, 600V-1700V	Fuji Semiconductor Starpower
Superjunction MOSFET	8A-95A, 600V	Fuji Semiconductor
SuperQ™ MOSFET	150V-650V, RDS _{ON} : 3 - 160mohm	iDEAL Semiconductor
SiC Cascode SiC MOSFET Discrete	7-1000mohm, 650-6500V	Navitas Qorvo SemiQ
SiC Cascode SiC MOSFET Module	40A-400A, 1200V-1700V	Navitas Qorvo SemiQ
SiC JFET	25-1100mohm, 650V-1700V	Qorvo
SiC Diode Discrete Module	1-300A 650-3300V	Navitas Qorvo SemiQ
DC Link Capacitors (Aluminum Electrolytic & Power Film)		
Product	Product Ranges	Suppliers
Aluminum Electrolytic Solid Conductive Polymer Hybrid Conductive Polymer	.47uf-1.5F, 5V-600V	CapXon Cornell Dubilier Kendeil Alcon
Terminal Type: Axial Radial Flipchip Snap Screw SMD		
Power Film	1uf-100,000uf, 1uf-50,000uf	Cornell Dubilier Kendeil Alcon Vishay
Terminal Type: Box Screw Low Profile Module Custom		
Snubber Capacitors		
Product	Product Ranges	Suppliers
Polypropylene Film	1nf-45uf, 160V-3000V	Cornell Dubilier Alcon Vishay
Terminal Types: Axial Box Oil Filled Direct Mount		
Current Sensors		
Product	Product Ranges	Suppliers
Flux Gate	6A-150A	Amogreentech Tamura
Hall Effect Open	3A-1500A	
Hall Effect Closed	6A-2000A	
Split Type (Ferrite)	60A-400A	
High Accuracy & Low Ratio Error (Nanocrystalline)	5A-120A	
Excellent Linearity & Precision (Amorphous Nanocrystalline)	40A-120A	
Advanced AMR Current Sensors	±5A-65A	Aceinna
Gate Driver DC-DC Converters Hybrid IC's		
Product	Product Ranges	Suppliers
DC-DC Converter (for customers to design own gate drive) Gate Driver Module (need to add gate resistors) Gate Driver complete solution IGBT Mountable Type	15A-3600A Class IGBT & SiC Modules	Isahaya Tamura
Impedance Matching Capacitors (Maximum Power Transfer)		
Product	Product Ranges	Suppliers
Air-Cooled Film Capacitor	50-60Hz, 240V-7200V, 10kVAR-600kVAR	General Electric Cornell Dubilier National
Water-Cooled Film Capacitor	DC-50kHz, 150V-3300V, 75kVAR-7200kVAR	General Electric Cornell Dubilier National
Conduction & Water Cooled Film Capacitor	> 50kHz, 450V-1100V, 85kVAR-1500kVAR,	Celem Alcon

Wireless Charging

POWER & ENERGY - PRODUCT RANGE & SUPPLIERS

Thermal Management

Product	Suppliers
Board Level Extrusion Bonded Fin Folded Fin Skived Fin Swaged Fin Stamped Fin Heat Pipe Assembly CPU Coolers Liquid Cold Plates Die Casting Fabricated Complete Solution Thermal Analysis Capabilities Thermal Interface Material (TIM) Thermal Grease SCR & Diode Clamp Systems Custom Fabrication	Amogreentech Cooling Source National Wakefield

Richardson Electronics has been an industry-leader in providing high-quality products and outstanding engineering support for over 75 years. Our extensive global distribution network and world-class partners provide our customers with innovative technologies, products and services.

CORPORATE HEADQUARTERS

40W267 Keslinger Road
LaFox, IL 60147-0393
United States
Phone: (630) 208 2200
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

NORTH AMERICA

Arizona
Phone: (800) 348 5580
Fax: (818) 594 5550
Email: sales@rell.com

Arkansas
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

California
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

Colorado
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

Florida
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

Massachusetts
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

New Hampshire
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

New York
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

North Carolina
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

Texas
Phone: (800) 348 5580
Fax: (630) 208 2550
Email: sales@rell.com

CANADA

Phone: (630) 208 2200
Email: canada@rell.com

LATIN AMERICA

São Paulo, Brazil
Phone: +55 (11) 5186 9655
Fax: +55 (11) 5186 9678
Email: brazil@rell.com

Mexico City, Mexico
Phone: +(52) 55 5514 0503
Email: mexico@rell.com

EMEA

Paris, France
Phone: +33 (01) 78 95 87 90
Email: france@rell.com

Puchheim, Germany
Phone: +49 (89) 81 89 12 80
Fax: +49 (89) 81 89 12 81 0
Email: germany@rell.com

Florence, Italy
Phone: +39 (055) 420 83 1
Fax: +39 (055) 421 07 26
Email: italy@rell.com

Milan, Italy
Phone: +39 (039) 653 145
Fax: +39 (039) 653 835
Email: italy@rell.com

Madrid, Spain
Phone: +34 (91) 528 3700
Fax: +34 (91) 467 5468
Email: spain@rell.com

Lincoln, England
Phone: +44 (0) 1522 548598
Email: uk@rell.com

Stockholm, Sweden
Phone: +46767913333
Email: sweden@rell.com

Hoofddorp, Netherlands
Phone: +31 (0) 85 487 8287
Email: netherlands@rell.com

Ramat Gan, Israel
Phone: +972 54 3226306
Email: israel@rell.com

ASIA

Beijing, China
Phone: +86 138 1095 6824
Email: china@rell.com

Nanjing, China
Phone: +86 25 8315 8416
Fax: +86 25 8315 9416
Email: china@rell.com

Shanghai, China
Phone: +86 21 6209 0286
Fax: +86 21 6259 6972
Email: china@rell.com

Shenzhen, China
Phone: +86 1382 655 8535
Fax: +86 21 6259 6972
Email: china@rell.com

Mumbai, India
Phone: +91 77 7704 2682
Email: india@rell.com

Tokyo, Japan
Phone: +81 3 6380 8441
Fax: +81 3 6380 8438
Email: japan@rell.com

Seoul, Korea
Phone: +82 2 539 4737
Fax: +82 2 556 4734
Email: southkorea@rell.com

Singapore, Singapore
Phone: +65 6 846 9241
Fax: +65 6 846 1065
Email: singapore@rell.com

Taipei, Taiwan
Phone: +886 (2) 2698 1688
Fax: +886 (2) 2698 1652
Email: taiwan@rell.com

Bangkok, Thailand
Phone: +66 (2) 318 8937
Fax: +66 (2) 318 8939
Email: thailand@rell.com

Ho Chi Minh City, Vietnam
Phone: +60 123 223 096
Email: vietnam@rell.com

Oceania
Phone: +61 3 9874 8292
Fax: +61 3 9874 8248
Email: anz@rell.com

Melbourne, Australia
Phone: +61 3 9874 8292
Fax: +61 3 9874 8248
Email: anz@rell.com

New Zealand
Phone: +61 3 9874 8292
Fax: +61 3 9874 8248
Email: anz@rell.com