

**Future Technology Worldwide, LLC** represents cutting edge suppliers for aeronautics, alternative energy, industrial, medical, white goods, and vehicular applications. We possess over 40 years of experience in technical sales, account management, and business development and pride ourselves on offering a high level of practical experience, technical know-how, and a solid reputation for opening doors and building relationships. We have created a focused portfolio of suppliers to meet the needs of Electronic Product designers and manufacturers. We strive to maintain the highest level of sales representation for business, market development, and growth in our Great Lakes States, and Southwest territories including AZ, NM, NV. Note: Many of our suppliers afford FTW country wide coverage, so in many cases we will be able to support your needs regardless of your location. We encourage you to reach out to us, if we are not the proper sales channel to respond to you, we will find that person and pass your inquiry on

## COMPONENTS

### **CapXon** ([www.CapXonGroup.com](http://www.CapXonGroup.com))

#### **ELECTROLYTIC, POLYMER, HYBRID CAPACITORS**

CapXon is a global leader in Electrolytic Capacitors and is **IATF 16949 Certified**. They offer aluminum electrolytic, conductive polymer and hybrid electrolytic capacitors as well as etched and formed aluminum foil. The full Hybrid Polymer library of products and various series of electrolytic caps are **AEC-Q200 approved** with high temperature ratings of up to 150°C & high vibration capabilities of up to 30G. Product range starts at 4mm diameter cans in SMD up to large screw capacitors with 650V values. The 40 years of experience in electrolytic capacitors, patented technologies, and a monthly overall production capacity of one billion pieces gives our customers the needed technology and stable product supply for all of their needs. Whether it is an off the shelf capacitor from their 100 catalog series components, or as customized solution, which is tailored to your application, CapXon has the electrolytic capacitor solution for you.

### **Holy Stone Enterprise Co.** ([www.HolyStoneCaps.com](http://www.HolyStoneCaps.com))

#### **MLCC CAPACITORS**

Holy Stone is a high quality MLCC supplier with their headquarters and all their manufacturing based in Taiwan (no Chinese tariffs). They are a publicly traded company with revenues over \$550 million and have been in business for over 40 years. Holy Stone offers a complete array of chip caps, but they specialize in **X&Y Safety** caps, and **High Voltage** and/or **High Capacitance** Capacitors in larger package sizes. They have products that are **AEC-200** Certified, and their facility is **IATF16949** approved.

### **Polycharge America** ([www.Polycharge.com](http://www.Polycharge.com))

#### **Sold Under Richardson Electronics**

#### **NANOLAM**

#### **CAPACITORS**

Capacitors produced using Polycharge NanoLam Technology are hitting the market in force. Polycharge NanoLam capacitors, especially for DC link applications, are about 30% - 50% the size of polypropylene film caps, can handle environments up to 140C, can handle similar ripple currents, and can maintain capacitance at high frequencies.

### **Xiamen Faratronic** ([www.Faratronic.com.cn](http://www.Faratronic.com.cn))

#### **FILM CAPACITORS**

Faratronic is the leading film capacitor manufacturer in the world and can produce most all kinds of film capacitors, including PCB film, DC-Link, IGBT snubber, AC motor and AC filter capacitors. Faratronic has a very strong Research Department with a 10,000 square meter center. The testing center, one of the largest in the world, is ISO17025 certified. Faratronic is very flexible and can also produce customized film capacitors according to a customer's request.

### **Ideal Power** ([www.idealpower.com](http://www.idealpower.com))

#### **Bi-DIRECTIONAL Si SWITCH**

B-TRAN Technology is a Bidirectional switch that allows a user to reduce the number of switching components by a factor of 4 when compared to a circuit using an IGBT with diode topology. Ideal Power can achieve this amazing feat by using a patented architecture, and fabricating on both sides of the wafer. Losses are lower (by a factor of 5), component count is lower, therefore costs are lower.

## COMPONENTS (continued)

### NoMIS Power ([www.NoMISpower.com](http://www.NoMISpower.com))

#### SiC SWITCHES & MODULES

NoMIS uses advanced technology to offer state of the art SiC switches and modules. In addition to their standard product line, they also offer custom and semi-custom services. The benefits of using the NoMIS technology are too numerous to list. To name a few key technologies they have market leading Ron,sp (<2.5mΩ-cm<sup>2</sup>), extended Short Circuit times (>5uSec), thicker gate oxide for additional reliability (>50nm), and advanced screening for latent defects.

### Richardson Electronics, LTD. ([www.RELL.com](http://www.RELL.com))

#### NATIONAL ELECTRONICS

RELL is a power electronic product and component distributor, offering numerous brands including their own National Electronics brand. Other products offered are: power discretes and modules (**SCRs, Diodes, IGBTs**, Super Junction MOSFET, **IGBT Power Stacks, Si** and **SiC** devices, **GaN** power transistors), a full array of capacitors (**Polycharge, electrolytic, film**, RF power **ceramic**, Vacuum, Mica etc.), **ultra-capacitors** (aka. **supercapacitor** or electric **double layer capacitor**), Magnetics, Power resistors, and thermal management products (**heatsinks, fans, cooling plates**, etc.)

## PRODUCTS & SERVICES

### Made-Right Precision Manufacturing, LLC ([www.maderightonsize.com](http://www.maderightonsize.com))

#### CNC & MACHINE SHOP

Made-Right is a CNC job shop specializing in Milling work. The **experienced, highly trained** and **talented** Machinists are the corner stone to their success. Utilization of the latest technology is key to producing parts right the first time. Their high-speed machining centers are also capable of **3d mold work**. They work with a wide variety of materials including plastics and other non-typical materials.

### Typhoon HIL ([www.Typhoon-HIL.com](http://www.Typhoon-HIL.com))

#### EV SIMULATIONS

Typhoon HIL is a provider of HIL (Hardware-in-the-Loop) solutions for testing e-Drive/e-Axle, On-Board Charger, and HVAC control software as well as Battery Management Systems. The solutions are tailored to meet the most demanding application requirements along with Turn-Key delivery scope customized for every specific DUT. Typhoon proprietary solver and full in-house suite of hardware products ensure **straightforward integration, short delivery timelines** (weeks not months), and a **competitive commercial offering** thus reducing overall product development costs. Globally present, Typhoon HIL ensures outstanding workflows and alignment of large and distributed teams working on the next generation of e-Mobility Power Electronics.