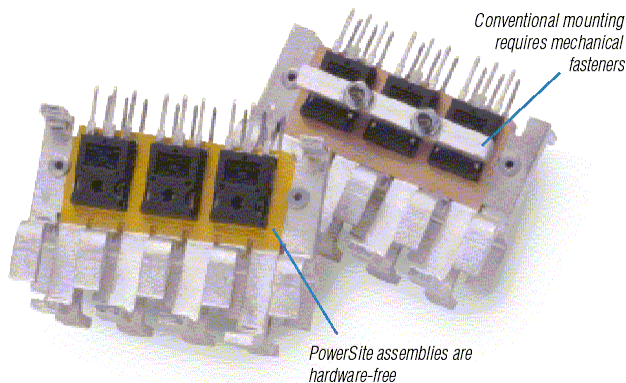


POWERSITE™ TECHNOLOGY

Packaging densities are getting tighter. Electronics are getting hotter. Reliability and cost pressures are greater than ever. PowerSite technology is the next-generation of packaging solutions for demanding electronics applications in power supplies, automotive control, motor and motion control, and CPU chip-sets.

PowerSite™ solderable pads enable the solder attachment of discrete power devices, such as a TO-220s or TO-247s, directly to an aluminum heat sink. PowerSites replace pressure-dependent insulation pad + hardware constructions.



The improvement in thermal transfer with PowerSites is most beneficial in power electronics application with high thermal demands. Reduction in device operating temperature is as high as 2°C/W of dissipated heat for a TO-220 and 1°C/W for a TO-247. With the elimination of attachment hardware, PowerSites have no pressure dependency, reduce SKUs, and allow the placement of other PCB components closer to the heat sink subassembly (UL clearance to 'ground').

PowerSite technology provides improved performance and design advantages in other thermal management formats:

- **PowerFlex™** technology bonds complex power circuits directly to aluminum heat sinks. PowerFlex replaces Insulated Metal Substrate (IMS) and ceramic wafer constructions, along with their required attachment hardware (and added thermal resistance).
- **PowerVia™** thermal columns provide an all-metal thermal connection of PCB SMT-mounted power devices, such as a D2-Paks, to an aluminum heat sink. PowerVias replace plated-thru PCB holes + insulator pads (pressure-dependent).

PowerSite technology can be provided to OEMs with:

1. Complete subassemblies – including power devices and heat sinks
 2. Toll conversion – OEM-supplied devices and heat sinks
 3. Raw materials only – processing by OEM
- (In addition, entire OEM units, such as power supplies, can be contract-manufactured in China.)



Fraivillig Technologies (Boston, MA) developed the patented PowerSite technologies, and has licensed EIS Fabrico to distribute materials and manufacture subassemblies. Union Bridge manufactures PowerSite subassemblies and complete subcontracted power supplies in Asia. PowerSite licensee background and capabilities:

EIS – headquartered in Atlanta, GA

- Division of Genuine Parts (GPC), a \$6B Fortune 500 company
- Leading U.S. distributor of electronic and electrical materials and value-added products
- Fabrico's Kennesaw facility (*phone: 800-351-8273*) provides PowerSite design and manufacturing capability
- 38 sales offices in the U.S.

Union Bridge -- headquartered in Hong Kong

- Leading manufacturer of high-reliability power supplies and Electronic Manufacturing Services (EMS).
- Manufacturing facilities in Dongguan, Guangdong province, China.
- Sales offices and design centers in the U.S. (Boston), Europe (U.K., Sweden), the Middle East (Israel), Hong Kong and China.

