Products. Partnership
Alpha Assembly Solutions, a MacDermid Performance Solutions Business, is the global leader in the development, manufacturing and sales of innovative electronics assembly materials such as Solder Pastes, Exactalloy® Solder Preforms, Cored Solder Wire, Wave Soldering Fluxes, Bar Solder Alloys and Stencils. With a global presence in over 30 locations throughout the Asia Pacific, Americas and Europe regions and the largest R&D manufacturing capacity in the industry, Alpha is able to bring customised and proactive solutions directly to electronics manufacturers in a wide range of industry segments, including power electronics, die attach, LED lighting, semiconductor packaging and automotive electronics.

Powering Solutions
In response to the power semiconductor market’s drive to improve reliability and device performance for automotive, alternative energy, transportation, consumer electronics, telecommunications, industrial and LED applications, Alpha Assembly Solutions has developed its Argomax® and Fortibond™ range of products. ALPHA® Argomax® Sinter Technology products were developed in response to the industry’s demand for increased die attach reliability and cost effective high volume manufacturing. The technology uses a low pressure sintering die attachment based on highly engineered particles, developed by Alpha’s expert team of engineers. Argomax® creates extremely high thermal and electrical conductivity silver bonds with a high reliability and flexible bondline thickness for even the most challenging technologies.

The technology is available in paste, film and Argomax® 9000 preforms, a first for the Power Semiconductor Industry, and is suitable for a wide variety of applications, including power modules, power discretes, bipolar devices, cavity packages and wafer level processing.

Alpha’s Fortibond™ technology was specially designed for LED manufacturers that require pressureless sintering in their die attach process. The technology is based on Alpha’s proprietary pressureless silver sintering technology consisting of highly engineered silver particles and provides high thermal and electrical conductivity silver bonds, high reliability and flexible yet controlled bond line thickness.