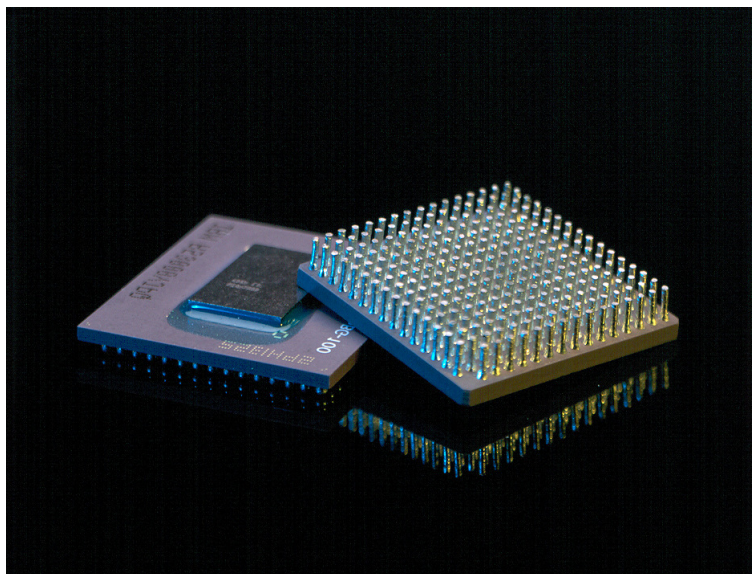




S·I·X S·I·G·M·A

COLUMN ATTACH SERVICES

for Ruggedizing COTS Components



The columns resolve solder joint reliability issues between Ceramic Ball Grid Array (CBGA) components and organic boards which are caused by Coefficient of Thermal Expansion (CTE) mismatch. SIX SIGMA uses unique columns composed of a copper ribbon wrapped around a high lead core. Each column is mounted to the component using a precisely controlled volume of eutectic solder. The columns serve as a compliant interconnect thus reducing solder joint fatigue in extreme thermal cycle environments. This allows a board assembly to withstand significantly more temperature cycles than a similar assembly using solder balls.