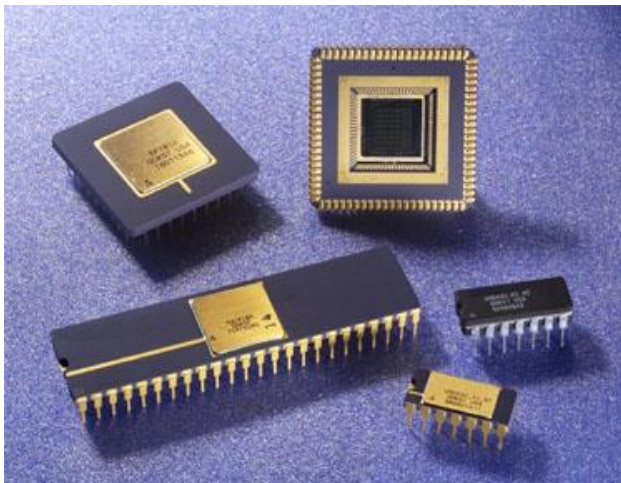


DEFENSE LOGISTICS AGENCY

ManTech Reduces Cost of Maintaining Weapon Systems' Electronics

The Challenge:

Hundreds of Weapon Systems across the Department of Defense employ microcircuit technologies which Industry has long since ceased to produce. Over time, the traditional means of supporting microcircuit spare parts requirements are eventually exhausted. This leaves the Military Services with no means to repair the electronic systems and subsystem which are essential to meeting mission requirements.



ManTech Response:

- DLA Man Tech has developed the capability to emulate dozens of microcircuit part types which were originally produced using Dielectrically Isolated Transistor-to-Transistor Logic (DI-TTL).
- Developed design and manufacturing processes to ensure 100% form, fit and function interchangeable microcircuits can be manufactured.
- Demonstrated small-quantity, on-demand production of fully qualified microcircuits and transitioned to full-scale production in a U.S.-based, Trusted, MIL-PRF-38535 qualified facility (SRI International, Princeton, NJ).
- DLA ManTech investment of \$12.5M.

Impact:

- Re-establishing a source of supply for DI-TTL microcircuits provides the Services with a cost effective way to maintain existing configurations without an impact to Readiness.
- The life-cycle costs of implementing alternate means for achieving mission requirements (redesign, replacement) are avoided.
- Cost avoidance of approximately \$1M per weapon systems application.
- Demonstration part type delivered to DLA stock to support 23 weapon systems.
- Potential to emulate dozens of additional part types (NSNs) and weapon systems.

23 Weapon Systems Supported

Participants

Defense Logistics Agency (DLA) ManTech, Navy SPAWAR Space and Naval Warfare Command, SRI International