

Surviving in the Electronic Warfare Market

By Frank Cavallaro

Between now and 2030, global spending on the electronic warfare market is poised to increase by 50%, continuing a trend of rapid investment in the defense and aerospace industry.

The military's growing reliance on electronic warfare systems increases pressure on chip manufacturers already taxed with meeting high-volume demands from consumer industries. This pressure is exacerbated by the global chip shortage that manufacturers are still working to solve.

While chip manufacturers endeavor to scale production, defense and aerospace OEMs must establish a sound component sourcing strategy to maintain a competitive edge.

Electronic warfare systems are complex. They must detect, analyze, and track potential threats while operating in a constrained environment that moves in the air, on land and at sea.

Today's most effective military instruments prioritize size, weight and power to increase efficiency and scale system footprints for field deployment. This is characteristic of an ongoing trend: the miniaturization of tools. End users want things that are smaller and more powerful. Miniaturization aids in the creation of more field-manageable tools, leading to more persistent and reliable connectivity; it also elevates the need for sophisticated components.

Procuring the components needed to manufacture new systems is only one factor driving demand. It is also essential to upgrade the platform electronics of tools currently deployed to support technology advancement. This means demand for specialized components will continue over the next decade as systems are upgraded and newly designed.

It is not only electronic warfare manufacturers that depend on cutting-edge technology, makers of medical devices and automotive and consumer electronics do, too. With an unprecedented volume of end products requiring sophisticated components and fluctuating economic conditions affecting the availability of raw materials, chip manufacturers are struggling to meet unpredicted demand across industries.

OEM buyers with a sound sourcing strategy are better equipped to weather this competitive climate and stay on course with their component requirements.

A truly effective sourcing strategy includes reliable com-

ponent availability and stringent quality control across the supply chain from procurement to testing and analysis. This strategy has three pillars: maintaining extended vendor networks, leveraging current and historic lead-time data and working with knowledgeable industry partners.

1 Secure, maintain and monitor an extended vendor network. This allows for greater access to quality components with competitive pricing, improved capacity and wider accessibility to hard-to-find parts—all while serving as protection from supply chain risks. It also allows buyers to understand the difference between their wants versus needs regarding the standards required for the components they source.

SENIOR AIRMAN SUJIN B. IKA/U.S. AIR FORCE



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2 Leverage current and historic lead-time data. This is key to understanding when and where to source. Lead times may change rapidly, and supply chain constraints make planning difficult. Using historical data with current insights to help forecast future lead times is an effective way for buyers to make quick decisions.

3 Work with knowledgeable and reliable industry partners. This is crucial to surviving periods of heightened demand. Reliable partners can help temper expectations, identify

the risks of a situation and provide informed recommendations on how to move forward with a sourcing strategy. This is especially critical in the context of electronic warfare systems for optimized performance and safety in potentially dangerous deployments.

The ongoing demand for electronic warfare equipment will foster competition and innovation in the defense and aerospace industry well into the next decade. As chip manufacturers work to meet demand, military OEMs must develop a sourcing strategy that satisfies current requirements while prepping for future system trends and upgrades.

With a strong global network of trusted industry partners and vendors that responsibly source components and reliably provide data-driven insight, military OEMs can maintain an edge in the market now and in the future for their most critical applications.

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