



MACOM IMS 2026 Product Announcements for Aerospace and Defense

June 4, 2026

LOWELL, Mass., June 04, 2026 (GLOBE NEWSWIRE) -- [MACOM Technology Solutions Inc. \("MACOM"\)](#), a leading supplier of semiconductor products, today announced a new suite of high-performance RF solutions designed to meet the demanding requirements of aerospace and defense (A&D). Many of these solutions will be demonstrated in MACOM's Booth 17035 at the upcoming International Microwave Symposium (IMS 2026) on June 9 to 11, 2026, in Boston, MA.

S-Band (2 – 4 GHz):

1.5 kW Power Amplifier

MACOM will highlight a high-power pulsed amplifier designed to deliver up to 15 dB of gain with 55% efficiency. This solution is ideal for radar and high-power microwave systems requiring reliable performance across S-Band frequencies.

High Power Limiter Using Advanced Multi I-Region HMIC Technology

Built using MACOM's Multi I-Region HMIC technology, this compact solution provides high peak power handling capabilities, low loss and fast recovery, helping preserve signal integrity while safeguarding sensitive receive paths.

C-Band (4 – 8 GHz):

50 W Front End Module (FEM)

MACOM will showcase a versatile FEM integrating GaN-based transmit functionality with a low noise receive path and built-in limiter protection. The 50 W transmit path delivers 45% power added efficiency (PAE) with high power gain. Designed for radar frequency bands within the C-Band spectrum, the FEM can enable efficient transmit performance alongside low noise reception, supporting compact and high-performance system designs.

X-Band (8 – 12 GHz):

16 W GaN Front End Module (FEM)

An X-Band FEM will be featured, combining GaN-based transmit capabilities with low noise GaAs receive functionality and integrated receiver protection. The module can support efficient transmit performance alongside low noise, high linearity receive operation, enabling balanced system performance in compact radar architectures. This device is packaged in a 6 mm QFN.

125 W GaN MMIC Power Amplifier

MACOM will demonstrate a 125 W multi-stage GaN MMIC power amplifier designed to support 40% PAE and large signal gain, for use in X-Band pulse radar applications. Delivering high output power and efficiency with 27 dB gain all in a compact footprint, this solution supports demanding system requirements while enabling simplified integration.

1.5 kW Power Amplifier Solution

MACOM will showcase a compact, high-power pulsed power amplifier solution designed for X-Band radar applications. The solution integrates multiple GaN-based amplification stages with advanced power management, delivering strong output power, high gain and efficient operation in a space-efficient form factor. It is well-suited for high-power microwave and radar systems requiring reliable performance under pulsed conditions.

Wideband (100 MHz – 18 GHz):

10 W (2 – 20 GHz) Power Amplifier

This wideband GaN power amplifier, supporting 2 – 20 GHz, provides flat gain response with high efficiency across the whole band. It is ideal for applications such as radar, communications, electronic countermeasures and test instrumentation, where wideband capability and dependable performance are critical.

About MACOM

MACOM designs and manufactures semiconductor products for telecommunications, industrial and defense and data center applications. Headquartered in Lowell, Massachusetts, MACOM has design centers and sales offices throughout North America, Europe and Asia. MACOM is certified to the ISO9001 international quality standard and ISO14001 environmental management standard. To learn more, visit <https://www.macom.com/>.

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