



# Accelerating Technology: New GaN Chip for Department of War Delivers on Performance in Record Time

*Northrop Grumman's leadership in the Microelectronics Commons program led to production of a breakthrough GaN chip that sets the pace for defense and commercial markets*

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📅 JUNE 9, 2026

TAGS: Microelectronics, Advanced Manufacturing

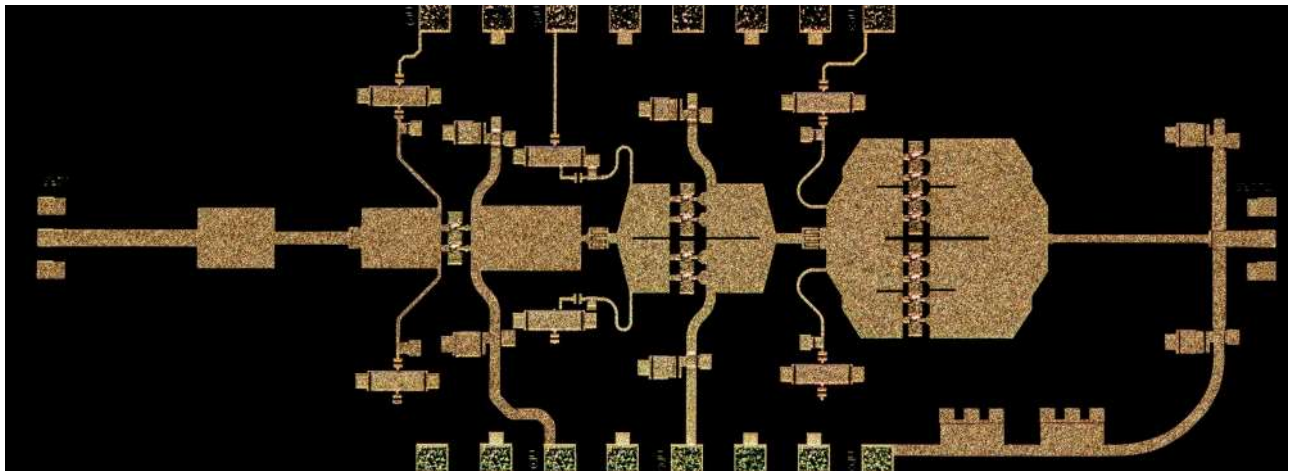


## Summary

Northrop Grumman developed a record-setting GaN chip at its Redondo Beach facility, delivering ultra-fast, secure W-band wireless links for military radars and next-gen 5G/6G connectivity in under six months.

## Key Takeaways

- Developed and market-ready in six months, Northrop Grumman's GaN chip delivers enhanced speed and bandwidth at high frequencies.
- Northrop Grumman manufactures American-made advanced semiconductor solutions for next-gen defense and commercial radio frequency applications.



*Microscope photo of Northrop Grumman's high-frequency GaN microwave chip. (Photo Credit: Northrop Grumman)*

REDONDO BEACH, Calif. – June 9, 2026 – (PHOTO RELEASE) – Northrop Grumman (NYSE: NOC) has built a new Gallium Nitride (GaN) chip that sets a new standard of performance for military and commercial use. The chip fully leverages the W-band spectrum, a range of very fast radio waves that help microchips send and receive more detailed information. Developed and market-ready in under six months, this breakthrough lets military radar systems send secure data wirelessly and quickly through satellites, while also supporting the next generation of 5G/6G connectivity.

The chip acts like a tiny, superefficient “brain” that strengthens wireless signals—making them clearer and faster—providing the military with secure communications and letting everyday devices enjoy quicker, more reliable connections. Its compact and low-cost design replaces bulky, power-hungry gear and helps keep the country ahead in next-generation wireless technology.

Manufactured at Northrop Grumman's semiconductor facility in California, this chip was developed quickly through a project with the [Microelectronics Commons](#) California DREAMS hub, where Northrop Grumman is a leading partner. This program is funded by the Office of the Under Secretary of War for Research and Engineering (OUSW(R&E)) as part of a unique industry-government-academic

partnership designed to keep the nation at the forefront of microchip innovation and deliver breakthrough technology to the field faster.

For more information about microelectronics, click [here](#).

This prototype (or technology) was primarily supported by the Microelectronics Commons Program, a DoW initiative led by the CA DREAMS HUB, under award number N00164-23-9-G056.

### Media Contact

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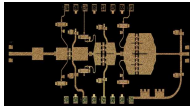
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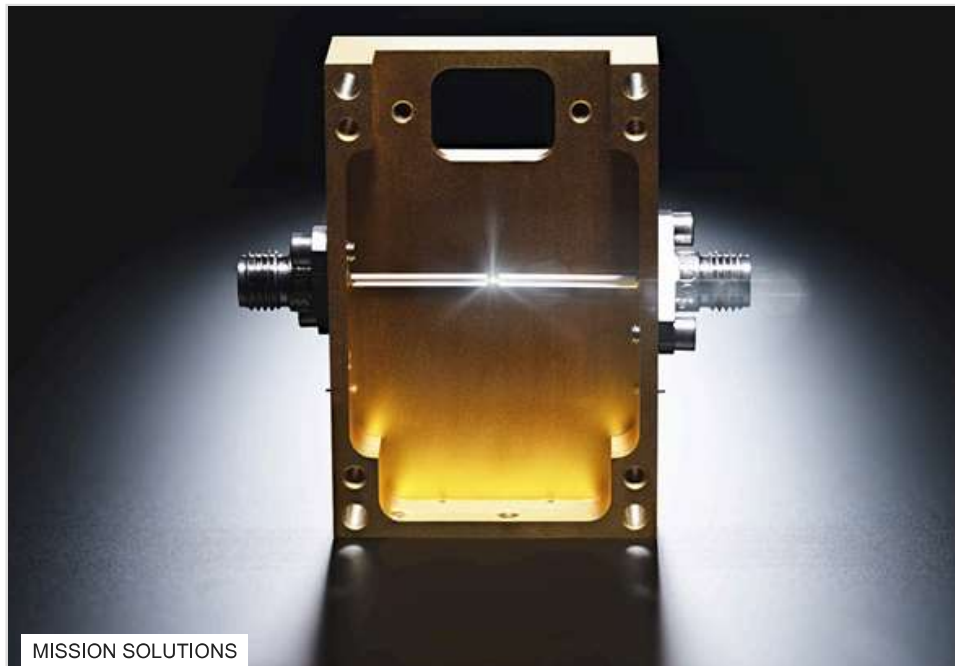
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