MACOM Extends Industry Leading GaN Portfolio with S-Band High Power Pallet and Hybrid Amplifiers

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350 Wpk GaN Power Pallet, MAPG-002729-350L00, provides rugged, high power solution in small size
85 Wpk GaN Hybrid Amplifier, MAMG-002735-085L0L, offers integrated, fully matched SMT solution
30 Wpk GaN Hybrid Amplifier, MAMG-002735-030L0L, boasts high gain & efficiency in 7x7mm PQFN

LOWELL, Mass.--(BUSINESS WIRE)--- M/A-COM Technology Solutions Inc. ("MACOM"), a leading supplier of high performance RF, microwave, and millimeter wave products, today announced a new portfolio of surface mount S-Band GaN power products optimized for commercial air traffic control, weather radar and military radar applications. The new products are available in a range of packaging options and power levels.



These new S-Band GaN power products provide integrated solutions which enable customers to accelerate time to market by leveraging commercial best practices for high-volume manufacturing, ensuring a host of additional benefits including improved assembly yield, lower component count, and reduced touch labor. (Photo: Business Wire)

The 30 Wpk and 85 Wpk Hybrid GaN Amplifiers are complemented by a 350 Wpk aluminum-based pallet option, all of which deliver GaN high power performance while enabling significant design and manufacturing efficiencies for customers. These new S-Band GaN power products provide integrated solutions which enable customers to accelerate time to market by leveraging commercial best practices for high-volume manufacturing, ensuring a host of additional benefits including improved assembly yield, lower component count, and reduced touch labor.

MACOM's GaN on SiC S-Band power products are ideally suited for applications with exacting size, weight and power (SWaP) requirements. The 30 Wpk and 85 Wpk hybrid amplifiers measure 7x7mm and 14x24 mm, respectively, and the 350 Wpk pallet measures a mere 51x23mm. These components support wide bandwidths to enable multifunction system capabilities and broad, dynamic frequency operation for complex waveforms, while maximizing power and cooling efficiency and providing robust performance over a wide range of

input voltages. Flexible voltage operation equips system operators to meet targeted power requirements and dynamically manage their total system power budget while still maintaining high levels of efficiency and RF performance.

"MACOM's portfolio of surface mount GaN power products affords system designers a common platform that they can leverage across a growing range of frequency bands, while the pallet offers an even higher power rugged, balanced solution," said Paul Beasly, Product Manager, MACOM. "Our Avionics, L-Band and new S-Band GaN power products deliver breakthrough power performance while minimizing design and manufacturing complexity to help customers accelerate time to market. We believe that these new products, complemented by our portfolio of GaN on Si components, position MACOM to shatter the barriers to mainstream GaN adoption."

The GaN power products are designed to ensure high reliability operation under a wide range of environmental conditions - the calculated mean-timeto-failure (MTTF) at 200°C is approximately 600 years. MACOM manufactures its GaN power products via tightly controlled processes in strict accordance with IPC standards to ensure the highest levels of product integrity, reliability and consistency.

The table below outlines key characteristics and typical performance:

		MAPG-002729-	MAMG-002735-	MAMG-002735-
Parameters	Units	350L00	085L0L	030L0L
Output Power (typical)	Wpk	400	95	45
Gain	dB	11.5	25	25.5
Efficiency	%	50	50	55
Droop	dB	0.2	0.2	0.2
Load Mismatch Stability	dBc	5:1	3:1	5:1
Load Mismatch Tolerance	dBc	10:1	5:1	6:1

MACOM's new 85 Wpk GaN S-Band power module (MAMG-002735-085L0L), 30 Wpk module (MAMG-002735-030L0L), and 350 Wpk pallet offering (MAPG-002729-350L00) are sampling to customers today. For datasheets and additional product information, visit <u>www.macom.com/gan</u>.

ABOUT MACOM:

M/A-COM Technology Solutions Holdings, Inc. (<u>www.macom.com</u>) is a leading supplier of high performance analog RF, microwave, and millimeter wave products that enable next-generation Internet and modern battlefield applications. Recognized for its broad catalog portfolio of technologies and products, MACOM serves diverse markets, including high speed optical, satellite, radar, wired & wireless networks, CATV, automotive, industrial, medical, and mobile devices. A pillar of the semiconductor industry, we thrive on more than 60 years of solving our customers' most complex problems, serving as a true partner for applications ranging from RF to Light.

Headquartered in Lowell, Massachusetts, M/A-COM Tech is certified to the ISO9001 international quality standard and ISO14001 environmental management standard. M/A-COM Tech has design centers and sales offices throughout North America, Europe, Asia and Australia.

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For more information about MACOM, please visit <u>www.macom.com</u> follow <u>@MACOMtweets</u> on Twitter; join MACOM on <u>LinkedIn</u>, or visit the MACOM <u>YouTube Channel</u>.

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Photos/Multimedia Gallery Available: http://www.businesswire.com/multimedia/home/20140930005146/en/

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