June 11, 2018

MACOM Announces New Portfolio of High Linearity Power Amplifiers for Ka-Band SATCOM and VSAT Applications

- *New GaAs-based MAAP Series PAs support frequency range from 27 to 31.5 GHz, from 2 to 6W output power*
- *MACOM's portfolio of Ka-Band gain block amplifiers, drivers, mixers and PAs comprises complete chipset for high-performance wireless broadband data links*
- *New solutions will be showcased at IMS 2018 in booth #1125*

LOWELL, Mass.--(BUSINESS WIRE)-- MACOM Technology Solutions Inc. ("MACOM"), a leading supplier of high performance RF, microwave, millimeterwave and photonic solutions, today announced a comprehensive portfolio of Ka-Band power amplifiers (PAs) optimized for next-generation SATCOM and VSAT applications requiring uncompromising high-speed connectivity, efficiency and reliability. Available in 2, 2.3, 3, 4 and 6W power output options spanning frequency ranges from 27 to 31.5 GHz, these new GaAs-based Ka-Band PAs are expected to provide industry-leading linearity and IM3, and best-in-class performance across a range of key metrics.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20180611005356/en/

MACOM's Ka-Band MAAP Series PAs can deliver up to 24.5 dB of linear gain, 29% power added efficiency and saturated output power (PSAT) up to 38.5 dBm, with IM3 levels up to -25 @ 27 dBm. Assembled in lead-free 5mm, 32-lead QFN packaging (with available 6W bare die option - MAAP-011140-DIE), MACOM's Ka-Band MAAP Series PAs can provide customers with full SMT assembly flexibility, complemented by MACOM's portfolio of discrete mixers, drivers and gain block amplifiers.

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"The demand for high speed, broadband, data connectivity continues unabated. We are seeing revolutionary changes in fixed wired networks such as HFC and Fiber along with terrestrial wireless networks, 4G to 5G, in order to meet this demand. As such it was only a matter of time before we saw the same changes in satellite networks," said Graham Board, Senior Director of Product Marketing, MACOM. "We believe that MACOM is uniquely positioned to tackle the complex engineering challenges in all three of these domains. In order to address the move from Ku to Ka-band in SATCOM we are introducing this comprehensive portfolio of high performance, cost effective, Ka-Band PAs. These complement our existing families of mixers, doublers, drivers and VCOs for SATCOM."

For over 60 years, MACOM's design and applications experts have spearheaded innovation in the RF, microwave and millimeterwave domain, developing the industry's broadest portfolio of MMICs and components spanning the entire RF signal chain. Leveraging advanced, proprietary technologies, MACOM's heterogeneous semiconductor and packaging strategy ensures that each individual RF system function is fully optimized to deliver maximum performance at the appropriate cost. MACOM remains firmly committed to delivering true competitive advantage to our customers, providing superior technology, expertise, cost structures and supply chains - with no compromises.

The table below outlines typical Ka-Band MAAP Series PA performance:

Parameter	Units	MAAP-011246 2 Watt Power Amplifier	MAAP-011298 2.3 Watt Power Amplifier	MAAP-011289 3 Watt Power Amplifier	MAAP-011233 4 Watt Power Amplifier	MAAP-011140-DIE 6 Watt Power Amplifier
Frequency	GHz	27.5 - 31.5	27.0-31.5	28.0-30.0	28.5 - 31.0	27.5 - 30.0
High Gain	dB	24	24.5	24	25	24
P1dB	dBm	32	32.5	34	34.5	37.5
P_{SAT}	dBm	34	34	36	36	38.5
Power Added Efficiency	@ P_{SAT}	29%	26%	23%	27.5%	23%
Input Return Loss	dB	10	10	10	10	12
Output Return	dB					

Loss		14	10	14	10	12
IM3 Level	dBc	-25 @ 27 dBm	-17.5 @ 30 dBm	-18 @ 30 dBm	-27 @ 29 dBm	-24 @ 33 dBm

MACOM's Ka-Band MAAP Series PAs are available to customers today. For assistance identifying MACOM products optimized to substitute or replace offerings from other vendors, visit MACOM's Cross Reference tool.

MACOM will showcase its industry leading RF technology portfolio at IEEE's International Microwave Symposium (IMS) 2018, Booth #1125 in Philadelphia, Pennsylvania, June 12th - 14th. MACOM's booth will feature new product solutions optimized for 5G connectivity, basestations, SATCOM, Test and Measurement, ISM and Radio communications. To make an appointment, contact your local sales representative. For more information about MACOM's RF technology solutions visit www.macom.com.

ABOUT MACOM:

MACOM is a new breed of analog semiconductor company — one that delivers a unique combination of high growth, diversification and high profitability. We are enabling a better-connected and safer world by delivering breakthrough semiconductor technologies for optical, wireless and satellite networks that satisfy society's insatiable demand for information.

Today, MACOM powers the infrastructure that millions of lives and livelihoods depend on every minute to communicate, transact business, travel, stay informed and be entertained. Our technology increases the speed and coverage of the mobile Internet and enables fiber optic networks to carry previously unimaginable volumes of traffic to businesses, homes and data centers.

Keeping us all safe, MACOM technology enables next-generation radars for air traffic control and weather forecasting, as well as mission success on the modern networked battlefield.

MACOM is the partner of choice to the world's leading communications infrastructure and aerospace and defense companies, helping solve their most complex challenges in areas including network capacity, signal coverage, energy efficiency, and field reliability, through its best-in-class team and broad portfolio of RF, microwave, millimeterwave and lightwave semiconductor products.

MACOM is a pillar of the semiconductor industry, thriving for more than 60 years of daring to change the world for the better through bold technological strokes that deliver true competitive advantage to customers and superior value to investors.

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

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

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS:

This press release contains forward-looking statements based on MACOM's beliefs and assumptions and on information currently available to MACOM. These forward-looking statements reflect MACOM's current views about future events and are subject to risks, uncertainties, assumptions and changes in circumstances that may cause those events or our actual activities or results to differ materially from those expressed in any forward-looking statement. Although MACOM believes that the expectations reflected in the forward-looking statements are reasonable, it cannot and does not guarantee future events, results, actions, levels of activity, performance or achievements. Readers are cautioned not to place undue reliance on these forward-looking statements. A number of important factors could cause actual results to differ materially from those indicated by the forward-looking statements, including, but not limited to, those factors described in "Risk Factors" in MACOM's Annual Report on Form 10-K and Quarterly Report on Form 10-Q filings with the Securities and Exchange Commission. MACOM undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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MACOM SALES INFORMATION, PLEASE CONTACT:
North Americas -- Phone: 800.366.2266
Europe -- Phone: +353.21.244.6400
India -- Phone: +91.80.43537383
China - Phone: +86.21.2407.1588

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Media:
MACOM Technology Solutions Inc.
Ozzie Billimoria, 978-656-2896
ozzie.billimoria@macom.com
or
Rainier Communications
Colin Boroski, 508-475-0025 x142
cboroski@rainierco.com
or
embedded PR
Anja-Maria Hastenrath, +49 (0)89 64913634-11
ah@embedded-pr.de

Source: MACOM Technology Solutions Inc.