

M/A-COM Technology Solutions Introduces Low Noise Amplifiers for RF and Microwave Applications

New series of MAAL-0107X LNAs Deliver Low Noise and High Linearity Performance for Cellular Infrastructure Receivers



Lowell, MA, June 30, 2011 - M/A-COM Technology Solutions (M/A-COM Tech), a leading supplier of high performance analog semiconductors, introduced today a new family of Low Noise Amplifiers (LNAs) for Cellular Infrastructure applications. The LNAs facilitate easy implementation in multiple RF and microwave front-end circuits including GSM, CDMA, WCDMA and LTE base stations and repeaters. The GaAs-based amplifiers meet the high performance requirements of telecommunications equipment manufacturers optimizing for minimum system noise figure and increased receiver sensitivity.

"We are pleased to expand our cellular infrastructure product portfolio with the introduction of this family of low noise amplifiers. The low noise figure coupled with high gain and OIP3 make these LNAs ideal for first and second stage 3G and 4G receivers," said David Richardson, Market Director, of M/A-COM Tech Infrastructure Products.

The MAAL-010705 and MAAL-010706 are highly linear LNAs with low noise figure, high gain and excellent input and output return loss designed for operation from 0.5 to 1.6GHz and 1.4 to 4.0 GHz respectively. These two amplifiers share the same pin out and are packaged in an RoHS compliant leadless 2x2mm DFN package. The bias current and gain can be set with external resistors allowing the user to customize the current consumption and gain value to fit the application. The MAAL-010704 is a versatile broadband LNA which operates in the frequency range 0.1 to 3.5GHz and is packaged in SOT-363. Its bias current can also be set externally via the use of a resistor. The LNAs all feature an integrated active bias circuit allowing direct connection to 3V voltage supply while minimizing variation over temperature and process.

The table below outlines specific part number performance:

		MAAL-010704	MAAL-010705	MAAL-010706
Parameters	Units	Тур	Тур	Тур
Frequency	MHz	100 - 3500	500 - 1600	1400 - 4000
Gain	dB	14.0	21.0	17.5
Noise Figure	dB	0.8	0.5	0.6
Input Return Loss	dB	12	19	20
Output Return Loss	dB	20	18	16
P1dB	dBm	18.5	18.5	19.0
Output IP3	dBm	34	32	34.5
Vd	V	3	4	4
Current	mA	60	60	60
Package		SOT-363	2x2 PDFN	2x2 PDFN

Production quantities and samples of MAAL-010705 and MAAL-010706 are available from stock. The MAAL-010704 will be available for sampling and production later this summer. Final datasheets and additional product information can be obtained from the M/A-COM Tech website at macomtech.com

ABOUT M/A-COM TECHNOLOGY SOLUTIONS INC.

M/A-COM Technology Solutions (www.macomtech.com) is a leading supplier of high performance semiconductors, active and passive components, and subassemblies for use in radio frequency (RF), microwave, and millimeter-wave applications. Recognized for its broad portfolio of products, M/A-COM Tech serves diverse markets including CATV, wireless infrastructure,

optical communications, aerospace and defense, automotive, industrial, medical, and mobile devices. M/A-COM Tech builds on 60 years of experience designing and manufacturing innovative product solutions for customers worldwide.

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.

FOR 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

MEDIA CONTACT:

Patricia A. Isabelle 978.656.2546 Patricia.Isabelle@macomtech.com