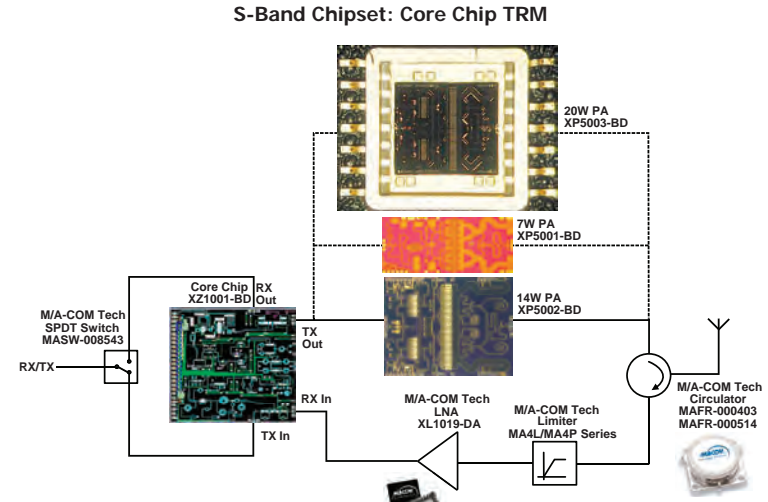
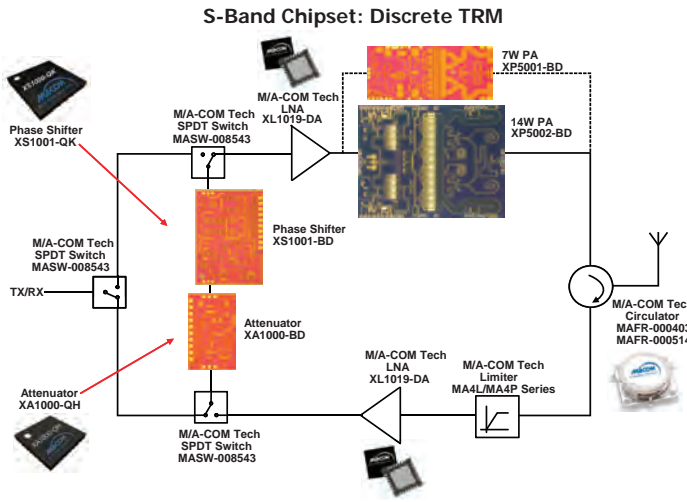
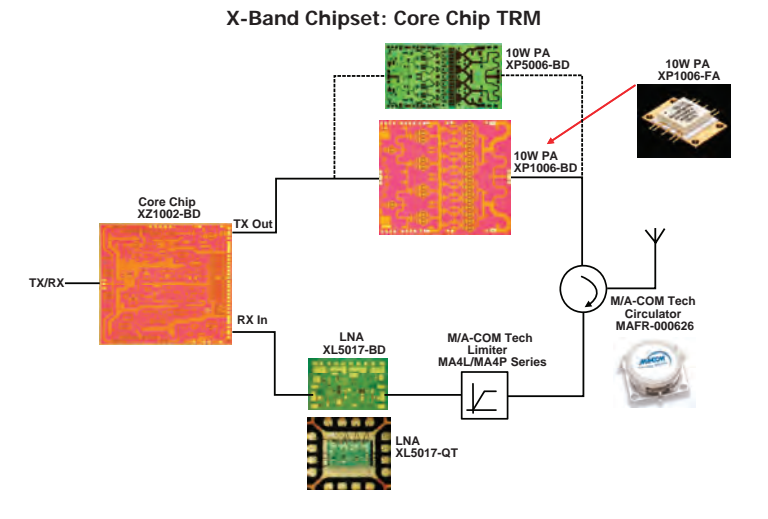
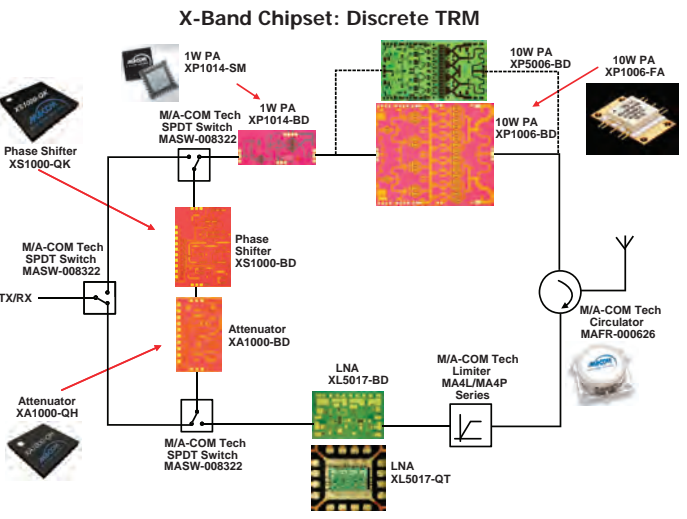
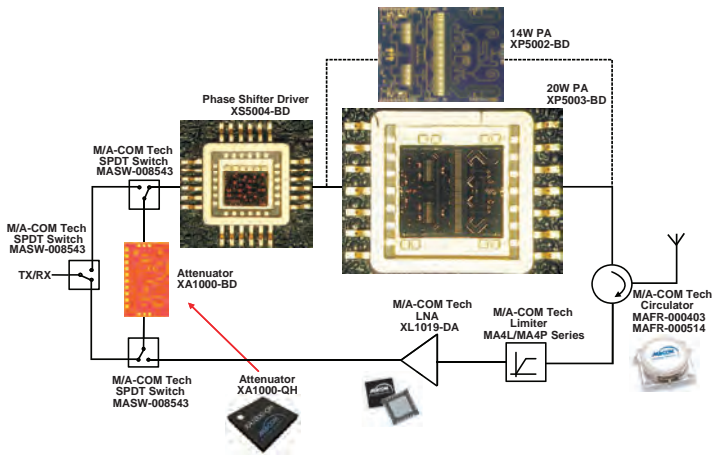


Chipset Solutions: Transmit/Receive Modules (TRM)



S-Band Chipset: Phase Shifter Driver Based TRM



Power



Control



Integration

Innovative
MMICs &
Chipset Solutions
for Microwave &
Millimeter-wave
Applications

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M/A-COM Tech Asia, formerly Mimix Asia, is an affiliate of M/A-COM Technology Solutions. Both are members of the M/A-COM Tech family of companies, controlled by global parent M/A-COM Technology Solutions Holdings, Inc.

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Company Overview

M/A-COM Tech Asia, formerly Mimix Asia, is an affiliate of M/A-COM Technology Solutions. Both are members of the M/A-COM Tech family of companies, controlled by global parent M/A-COM Technology Solutions Holdings, Inc.

M/A-COM Tech Asia designs and develops monolithic microwave integrated circuits (MMICs) for microwave and millimeter-wave applications. Our products include multifunction chips, high power amplifiers, low noise amplifiers (LNAs), attenuators and phase shifters, as well as complete transceiver chipset solutions for military and weather radar, satellite communications, communications array, air traffic control and active electronic scanned array (AESA).

Facility & Capabilities

The M/A-COM Tech Asia facility includes a Class 10,000 clean room for die picking and visual inspection with 8,000 square feet of production floor space in the Hsinchu Science-Based Industrial Park, which is in close proximity to some of M/A-COM Tech Asia's wafer fabrication and other production partners. This strategic location reduces production cycle time and expedites delivery to M/A-COM Tech Asia customers. We also have an ISO 9001-registered design center in Belfast, Northern Ireland for product development and qualification with comprehensive assembly and test facilities for designing industry-leading devices.

Company Highlights

- Established - April 1999
- Acquired by Mimix Broadband - February 2005
- Achieved ISO 9001 registration - April 2005
- Name changed to Mimix Asia - January 2006
- Began module assembly - April 2006
- Began on-wafer RF testing - October 2006
- Mimix merged with M/A-COM Technology Solutions - May 2010
- Name changed to M/A-COM Tech Asia - September 2010

Quality Assurance

M/A-COM Tech Asia integrates quality into all business processes. Beginning with our ISO 9001-registered quality management system, which includes our comprehensive design and manufacturing processes, and extending throughout the company, each employee is empowered to continually identify and implement improvements that enhance product quality and customer satisfaction. We extend this same philosophy to our subcontractors and suppliers, including our ISO 9001-registered foundries and our packaging providers.

Our Markets

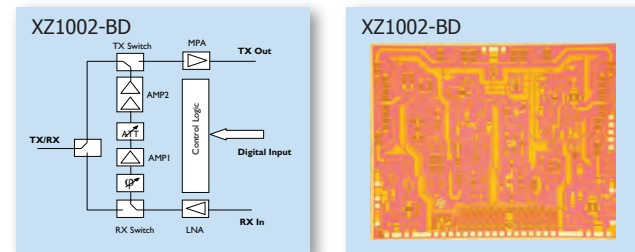
M/A-COM Tech Asia targets aeronautics, defense and space applications, such as military and weather radar, satellite communications, communications array, air traffic control and active electronic scanned array (AESA). Our product offering serves worldwide markets from Europe and Asia to North and South America.

Our Unique Product Offering

We design, develop and supply innovative MMICs and chipset solutions for microwave and millimeter-wave applications. We offer high power and highly integrated devices with superior performance and efficiency. As a member of the M/A-COM Tech family of companies, we can provide complete block diagram solutions that are unmatched by our competitors.

Core Chip Technology - The Next Generation of Integration

M/A-COM Tech Asia's highly integrated, unique core chips provide a high degree of functionality and greatly simplify the design task for T/R modules. The core chip integrates a phase shifter, attenuator, transmit/receive switches, LNA, medium power amplifier, digital logic control and on-chip bias circuitry all onto a single GaAs MMIC. The major benefits of this technology include a simpler design, fewer components, smaller board space, lower cost, higher reliability and better control performance. The core chip is available at S-Band (XZ1001-BD) and X-Band (XZ1002-BD) and is ideally suited for phased array radar applications.



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Products

To obtain a complete datasheet of any product, please visit macomtechasia.com, or to request a copy, contact us via email at mtatechnicalhelp@macomtech.com.

Core Chips

Description	Part Number	Frequency (GHz)	Gain (RX/TX) (dB)	Input/Output (RX/TX) P1dB (dBm)	IIP3 (dBm)	RX NF (dB)	Attn Step / Range (dB)	6-Bit Phase Step Size (deg)	Bias (mA @ V)	Package
S-Band Core (Receive / Transmit)	XZ1001-BD	2.5-4.0	33.0/33.0	+10.0/+20.0	-	2.5	0.45/28.35	5.625	350 @ 5 35 @ -10	DIE
X-Band Core (Receive / Transmit)	XZ1002-BD	8.5-11.0	21.0/19.0	-4.0/+23.5	+8.0 (RX)	5.2	0.9/28.0	5.625	280 @ 4 35 @ -5	DIE

Power Amplifiers

Description	Part Number	Frequency (GHz)	Gain (dB)	Gain Flatness (dB)	Output P1dB (dBm)	Bias (mA @ V)	Package
Power Amplifier	XP5001-BD	2.7-3.8	20.0	+/-0.5	+35.5	1.2 A @ 7.0	DIE
Power Amplifier	XP5002-BD	2.7-3.8	32.0	+/-1.5	+41.5 (Psat)	4.5 A @ 8.0	DIE
Power Amplifier	XP5003-BD	2.8-3.5	15.0	+/-0.5	+43.0 (Psat)	12 A @ 7.0	DIE
Power Amplifier (SMT)	XP5003-FB	2.8-3.5	15.0	+/-0.5	+43.0 (Psat)	12 A @ 7.0	-FB (SMT)
Power Amplifier	XP1006-BD	8.5-11.0	21.0	+/-0.5	+40.0 (Psat)	4.2 A @ 8.0	DIE
Power Amplifier (Flange)	XP1006-FA	8.5-11.0	21.0	+/-0.5	+40.0 (Psat)	4.2 A @ 8.0	-FA (Flange)
Power Amplifier	XP5006-BD	8.5-11.0	19.0	+/-0.5	+40.0 (Psat)	3 A @ 8.0	DIE
Power Amplifier	XP1014-BD	8.5-11.0	18.0	+/-1.0	+31.0 (Psat)	450 @ 8.0	DIE
Power Amplifier (SMT)	XP1014-SM	8.5-11.0	18.0	+/-1.0	+30.0 (Psat)	450 @ 8.0	-SM (6x6 mm)
Power Amplifier	XP5015-BD	34.0-37.0	22.0	+/-2.0	+35.0 (Psat)	2.4 A @ 5.5	DIE
Power Amplifier	XP5016-BD	34.0-37.0	22.0	+/-2.0	+37.0 (Psat)	4.8 A @ 5.5	DIE

Low Noise Amplifiers

Description	Part Number	Frequency (GHz)	Gain (dB)	Gain Flatness (dB)	Noise Figure (dB)	Output P1dB (dBm)	Bias (mA @ V)	Package
Low Noise Amplifier	XL5017-BD	8.5-11.5	20.0	+/-0.5	1.5	+10.0	60 @ 5.0	DIE
Low Noise Amplifier (QFN)	XL5017-QT	8.5-11.5	20.0	+/-0.5	1.6	+10.0	60 @ 5.0	-QT (3x3 mm)

Attenuators

Description	Part Number	Frequency (GHz)	Attn Range (dB)	Step Size (dB)	Insertion Loss (dB)	RMS Attenuation Error (dB)	Bias (mA @ V)	Package
5-Bit Digital Attenuator	XA1000-BD	DC-18.0	28.0	0.9	3.0-7.0	0.5	9 @ -7.5	DIE
5-Bit Digital Attenuator (QFN)	XA1000-QH	DC-18.0	28.0	0.9	4.0-8.0	0.5	9 @ -7.5	-QH (4x4 mm)

Phase Shifters

Description	Part Number	Frequency (GHz)	Step Size (dB)	Insertion Loss (dB)	RMS Phase Error (deg)	Input P1dB (dBm)	Bias (mA @ V)	Package
6-Bit Digital Phase Shifter	XS1001-BD	2.5-4.0	5.625	6.0	2.5	+26.0	9 @ -10.0	DIE
6-Bit Digital Phase Shifter (SMT)	XS1001-QK	2.5-4.0	5.625	6.0	2.5	+26.0	9 @ -10.0	-QK (7x7 mm)
S-Band PAD	XS5004-BD	2.8-3.5	22.5	19.5 (Gain)	-	+14.0	1 A @ 7.0	DIE
S-Band PAD (SMT)	XS5004-FC	2.8-3.5	22.5	19.5 (Gain)	-	+14.0	1 A @ 7.0	-FC (SMT)
6-Bit Digital Phase Shifter	XS1000-BD	7.0-13.0	5.625	6.5	2.5	+25.0	10 @ -7.5	DIE
6-Bit Digital Phase Shifter (SMT)	XS1000-QK	7.0-13.0	5.625	8.0	3.0	+25.0	10 @ -7.5	-QK (7x7 mm)

- Final: Devices in full production
- Preliminary (Pre-Production): Full device characterization completed and transitioning to production
- Advanced: Devices in development
- Concept: Designs at feasibility stage

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