

MMA033AA Bonding Diagram

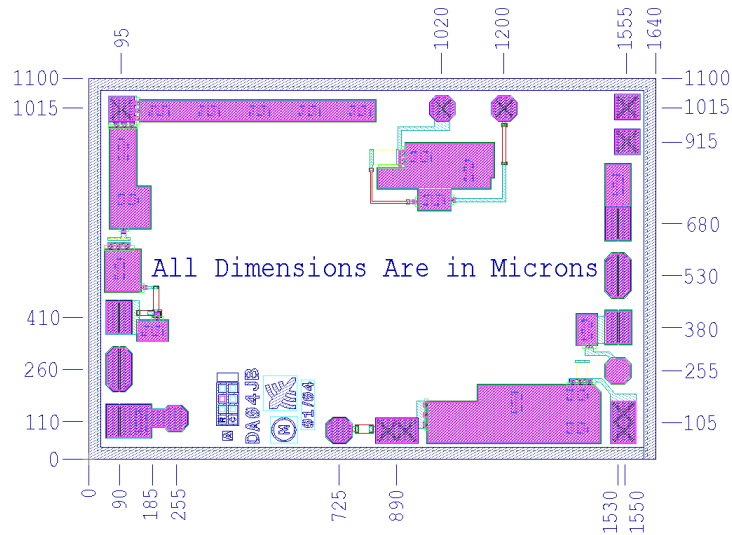


Figure 1. Die Size

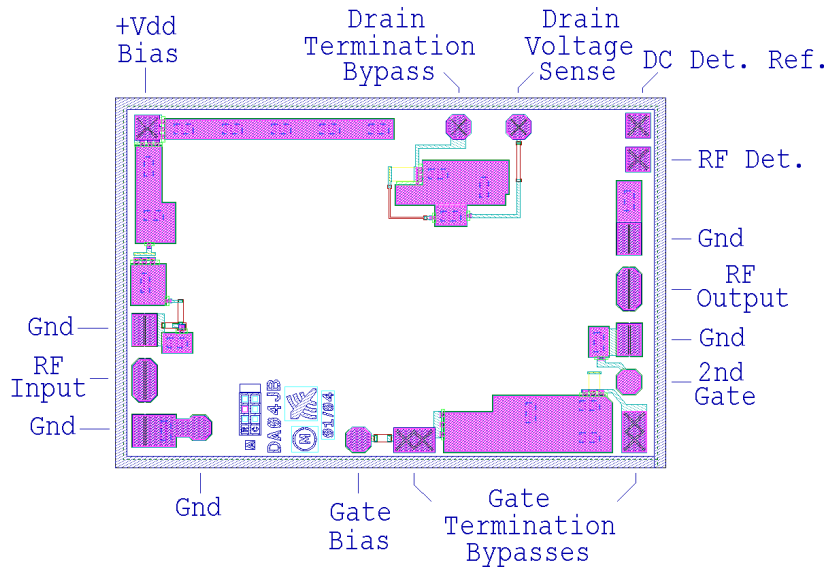


Figure 2. Pad Locations and Pad Descriptions

Chip size: 1640x1100 μ m (64.6x43.3mil)
 Chip size tolerance: \pm 5 μ m (0.2mil)
 Chip thickness: 100 \pm 10 μ m (4 \pm 0.4mil)
 Pad dimensions: 80x80 μ m (3.1x3.1mil)

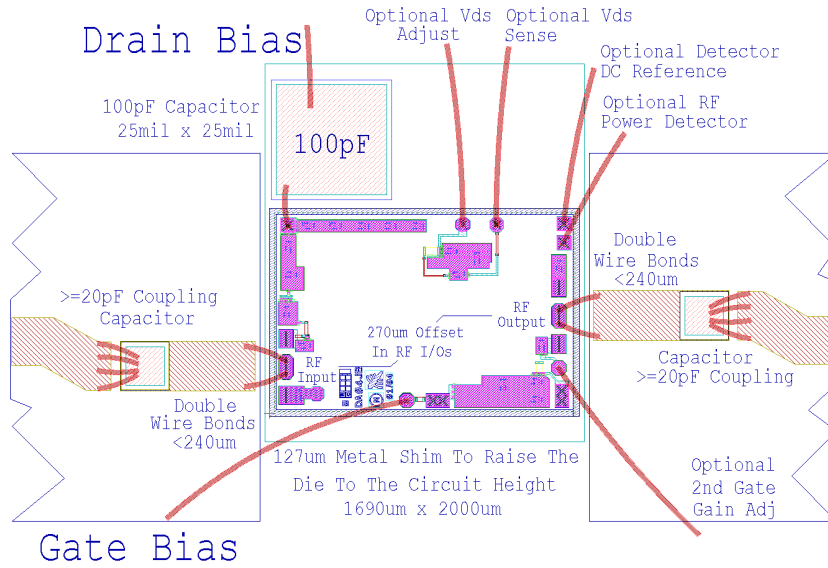


Figure 3.2 - 45GHz Bonding Diagram

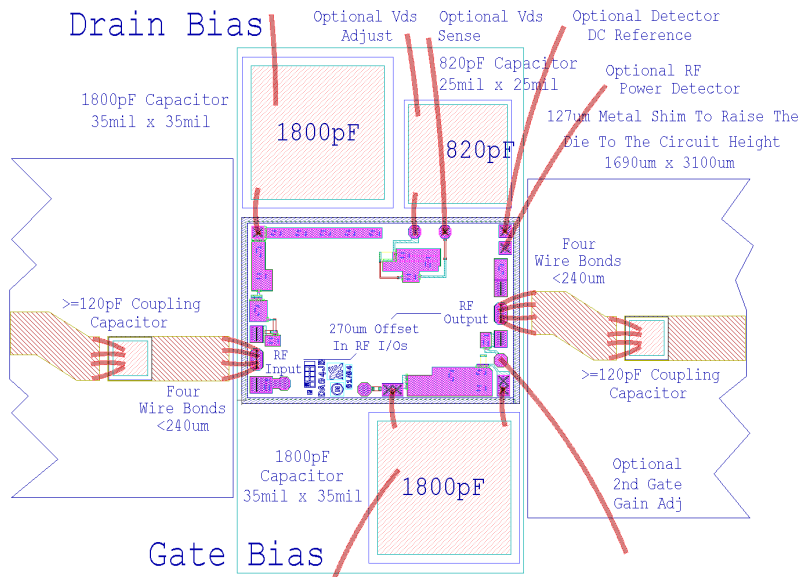


Figure 4. 40MHz - 45GHz Bonding Diagram



Pick-up and Chip Handling

This MMIC has exposed air bridges on the top surface. **Do not pick up chip with vacuum on the die center**; handle from edges or use a collet.

Thermal Heat Sinking

To avoid damage and for optimum performance, you must observe the maximum channel temperature and ensure adequate heat sinking.

ESD Handling and Bonding

This MMIC is ESD sensitive; preventive measures should be taken during handling, die attach, and bonding.

Epoxy die attach is recommended. Please review our application note [MM-APP-0001](#) GaAs MMIC handling and die attach recommendations, on our website for more handling, die attach and bonding information.



Microsemi Corporate Headquarters
One Enterprise, Aliso Viejo CA 92656 USA
Within the USA: +1 (800) 713-4113
Outside the USA: +1 (949) 380-6100
Sales: +1 (949) 380-6136
Fax: +1 (949) 215-4996
E-mail: sales.support@microsemi.com

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense and security, aerospace, and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs, and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif. and has approximately 3,400 employees globally. Learn more at www.microsemi.com.

© 2014 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.