PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
INFINEON TECHNOLOGIES AMERICAS CORP.	10/11/2018

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 2

Property Type	Number
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Patent Number:	8368117

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DATE SIGNED:	01/04/2019

Total Attachments: 8
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EXHIBIT B

PATENT ASSIGNMENT

This Patent Assignment (this "Assignment") is made and entered into as of October 11, 2018, ("Effective Date") by and between Infineon Technologies Americas Corp., a Delaware corporation ("Assignor") and MACOM Technology Solutions Holdings, Inc., a Delaware corporation ("Assignee"). Assignee and Assignor are each a "Party" and collectively, the "Parties."

WHEREAS, the Parties have entered into a Settlement, Patent Assignment, and License Agreement dated October 11, 2018 (the "Patent Assignment Agreement"), pursuant to which, *inter alia*, Assignor has agreed to transfer to Assignee the Assigned Patents (defined below); and

WHEREAS, in accordance with, and subject to, the terms and conditions of the Patent Assignment Agreement, the Parties are required to execute this Assignment.

NOW, THEREFORE, in consideration of the foregoing and the licenses, representations, warranties, covenants, and agreements contained in the Patent Assignment Agreement, and of other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties hereby agree as follows:

1. Assignment. Effective as of the date hereof, and pursuant to the Patent Assignment Agreement, Assignor hereby sells, transfers, conveys, assigns and delivers to Assignee, and Assignee accepts all right, title, and interest of Assignor in and to the GaN Patents, as that term is defined in the Patent Assignment Agreement—*i.e.*, all patents and patent applications listed on Exhibit A to the Patent Assignment Agreement along with all continuations, divisionals, continuations-in-part, reissues, reviews, renewals, re-examinations, reexamination certificates, extensions, as well as foreign equivalents thereof. For clarity, the term "GaN Patents" includes all patents and patent applications that claim priority to those patents and patent applications listed in Exhibit A or that claim priority to any application that any of the patents or patent applications listed in Exhibit A to the Patent Assignment Agreement claim priority to, whether now existing or hereafter acquired. The term "GaN Patents" does not include any copyrights, trademarks, mask work rights, or trade secret rights, but is intended to include and encompass all patents and patent applications (and continuations, divisionals, continuations-in-part, reissues, reviews, renewals, re-examinations, reexamination certificates, extensions, and patents that have since issued from any of these, as well as foreign equivalents of all of these) assigned by Nitronex to International Rectifier Corporation in the 2010 IP Purchase Agreement (collectively, the "Assigned Patents"). For the avoidance of doubt, the list of GaN Patents found in Exhibit A to the Patent Assignment Agreement is also attached hereto as Exhibit 1 to this Assignment.

2. Successors. This Assignment will be binding upon, will inure to the benefit of, and will be enforceable by, the Parties hereto and their permitted successors and assigns.

3. Governing Law. This Assignment will in all respects be governed by, and construed in accordance with, the laws of the State of Delaware without regard for any choice of law or other rules or laws that would cause the laws of any other jurisdiction to apply.

4. Counterparts. This Assignment may be executed in one or more counterparts, each of which when executed will be deemed to be an original, but all of which taken together will constitute one and the same agreement.

IN WITNESS WHEREOF, the undersigned have caused this Assignment to be executed on the date first written above by their respective duly authorized officers.

ASSIGNOR:	**ASSIGNEE:**
Infineon Technologies America Corp.	**MACOM Technology Solutions Holdings, Inc.**
By:	By:
Name:	Name: John Croteau
Title:	Title: President and Chief Executive Officer

EXHIBIT 1 TO PATENT ASSIGNMENT

PATENTS AND PENDING APPLICATIONS

1. **Taiwanese Patent No. I257142**, granted Jun. 21, 2006, based on Taiwanese Application Serial No. 090130606, filed Dec. 11, 2001, entitled "Gallium Nitride Materials and Methods"

2. **U.S. Patent No. 6,649,287**, which issued Nov. 18, 2003 from U.S. Patent Application Serial No. 09/736,972, filed Dec. 14, 2000, entitled "Gallium Nitride Materials and Methods"

3. **U.S. Patent No. 6,617,060**, which issued Sep. 9, 2003 from U.S. Patent Application Serial No. 10/188,814, filed Jul. 02, 2002, entitled "Gallium Nitride Materials and Methods"

4. **U.S. Patent No. 8,105,921**, which issued Jan. 31, 2012 from U.S. Patent Application Serial No. 12/343,616, filed Dec. 24, 2008, entitled "Gallium Nitride Materials and Methods"

5. **U.S. Patent No. 8,344,417**, which issued Jan. 1, 2013 from U.S. Patent Application Serial No. 13/359,892, filed May 17, 2012, entitled "Gallium Nitride Semiconductor Structures with Compositionally-Graded Transition Layer"

6. **U.S. Patent No. 8,592,862**, which issued Nov. 26, 2013 from U.S. Patent Application Serial No. 13/728,956, filed Dec. 27, 2012 entitled "Gallium Nitride Semiconductor Structures with Compositionally-Graded Transition Layer"

7. **U.S. Patent No. 8,937,335**, which issued Jan. 20, 2015 from U.S. Patent Application Serial No. 14/083,923, filed Nov. 19, 2013, entitled "Gallium Nitride Devices with Aluminum Nitride Intermediate Layer"

8. **U.S. Patent No. 8,928,034**, which issued Jan. 6, 2015 from U.S. Patent Application Serial No. 14/084,251, filed Nov. 19, 2013, entitled "Gallium Nitride Devices with Aluminum Nitride Alloy Intermediate Layer"

9. **U.S. Patent No. 8,928,035**, which issued Jan. 6, 2015 from U.S. Patent Application Serial No. 14/084,429, filed Nov. 19, 2013, entitled "Gallium Nitride Devices with Gallium Nitride Alloy Intermediate Layer"

10. **U.S. Patent No. 9,064,775**, which issued Jun. 23, 2015 from U.S. Patent Application Serial No.14/452,203, filed Aug. 5, 2014, entitled "Gallium Nitride Semiconductor Structures with Compositionally-Graded Transition Layer"

11. **U.S. Patent No. 9,437,686**, which issued Sep. 6, 2016 from U.S. Patent Application Serial No. 14/579,738, filed Dec. 22, 2014, entitled "Gallium Nitride Devices with Discontinuously Graded Transition Layer"

12. **U.S. Patent No. 9,461,119**, which issued Oct. 4, 2016 from U.S. Patent Application Serial No. 14/580,064, filed Dec. 22, 2014, entitled "Semiconductor Structure with Compositionally-Graded Transition Layer"

13. **U.S. Patent No. 9,437,687**, which issued Sep. 6, 2016 from U.S. Patent Application Serial No. 14/743,218, filed Jun. 18, 2015, entitled "III-Nitride Based Semiconductor Structure"

14. **U.S. Patent Application Serial No. 14/926,279**, filed Oct. 29, 2015, entitled "III-Nitride Semiconductor Structure with Intermediate and Transition Layers"

15. **U.S. Patent Application Serial No. 15/240,789**, filed on Aug. 18, 2016, entitled "Semiconductor Material Having a Compositionally-Graded Transition Layer"

16. **European Patent No. 1343927**, granted Apr. 25, 2007 from European Patent Application Serial No. 01991120.5, filed Dec. 14, 2001, entitled "Gallium Nitride Materials and Methods", a national of PCT Application Serial No. PCT/US01/48426

17. **German Patent No. 60128134.9**, granted Apr. 25, 2007, based on European Patent No. 1343927, granted Apr. 25, 2007 from European Patent Application Serial No. 01991120.5, filed Dec. 14, 2001, entitled "Gallium Nitride Materials and Methods", a national of PCT Application Serial No. PCT/US01/48426

18. **French Patent No. 1343927**, granted Apr. 25, 2007, based on European Patent No. 1343927, granted Apr. 25, 2007 from European Patent Application Serial No. 01991120.5, filed Dec. 14, 2001, entitled "Gallium Nitride Materials and Methods", a national of PCT Application Serial No. PCT/US01/48426

19. **United Kingdom Patent No. 1343927**, granted Apr. 25, 2007, based on European Patent No. 1343927, granted Apr. 25, 2007 from European Patent Application Serial No. 01991120.5, filed Dec. 14, 2001, entitled "Gallium Nitride Materials and Methods", a national of PCT Application Serial No. PCT/US01/48426

20. **Taiwanese Patent No. 178213**, granted on May 1, 2003, based on Taiwanese Patent Application Serial No. 091103115, filed Feb. 22, 2002, "Gallium Nitride Material Devices and Methods Including Backside Vias"

21. **U.S. Patent No. 6,611,002**, issued Aug. 26, 2003 from U.S. Patent Application Serial No. 09/792,414, filed Feb. 23, 2001, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias"

22. **U.S. Patent No, 7,233,028**, which issued Jun. 19, 2007 from U.S. Patent Application Serial No. 10/650,122, filed Aug. 25, 2003, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias"

23. **European Patent No. 1378012**, granted Dec. 13, 2017, from European Patent Application Serial No. 02721099.6, filed Feb. 23, 2002, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias", a national of PCT Application Serial No. PCT/US02/05182

24. **European Patent Application Serial No. 15154907.8,** filed Feb. 12, 2015, entitled "Gallium Nitride Material Device and Methods Including Backside Vias"

25. **French Patent No. 1378012**, granted on Dec. 13, 2017, based on European Patent No. 1378012, granted Dec. 13, 2017, from European Patent Application Serial No. 02721099.6, filed Feb. 23, 2002, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias", a national of PCT Application Serial No. PCT/US02/05182

26. **United Kingdom Patent No. 1378012**, granted on Dec. 13, 2017, based on European Patent No. 1378012, granted Dec. 13, 2017, from European Patent Application Serial No. 02721099.6, filed

Feb. 23, 2002, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias", a national of PCT Application Serial No. PCT/US02/05182

27. **German Patent No. 60249206.8**, granted on Dec. 13, 2017, based on European Patent No. 1378012, granted Dec. 13, 2017, from European Patent Application Serial No. 02721099.6, filed Feb. 23, 2002, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias", a national of PCT Application Serial No. PCT/US02/05182

28. **Japanese Patent No. 4792558**, granted Aug. 5, 2011, from Japanese Patent Application Serial No. 2002-568431, filed Feb. 23, 2002, entitled "Gallium Nitride Material Devices and Methods Including Backside Vias", a national of PCT Application Serial No. PCT/US02/05182

29. **Taiwanese Patent No. 178128**, granted Apr. 21, 2003, based on Taiwanese Patent Application Serial No. 091103117, filed Feb. 22, 2002, entitled "Gallium Nitride Materials Including Thermally Conductive Regions"

30. **U.S. Patent No. 6,956,250**, which issued Oct. 18, 2005 from Application Serial No. 09/792,409, filed Feb. 23, 2001, entitled "Gallium Nitride Materials Including Thermally Conductive Regions"

31. **European Patent Application Serial No. 02790164.6**, filed Feb. 23, 2002, entitled "Gallium Nitride Materials Including Thermally Conductive Regions", a national of PCT Application Serial No. PCT/US02/05460

32. **Japanese Patent No. 4311939**, which issued May 22, 2009 from Japanese Patent Application Serial No. 2002-568402, filed Feb. 23, 2002, entitled "Gallium Nitride Materials Including Thermally Conductive Regions", a national of PCT Application Serial No. PCT/US02/05460

33. **U.S. Patent No. 7,071,498**, which issued Jul. 4, 2006 from U.S. Patent Application, Serial No. 10/740,376, filed Dec. 17, 2003, entitled "Gallium Nitride Material Devices Including an Electrode-Defining Layer and Methods of Forming The Same"

34. **U.S. Patent No. 7,135,720**, which issued on Nov. 14, 2006 from U.S. Patent Application Serial No. 10/913,297, filed Aug. 5, 2004, entitled "Gallium Nitride Material Transistors and Methods Associated With the Same"

35. **U.S. Patent No. 7,352,016**, which issued on Apr. 1, 2008 from U.S. Patent Application Serial No. 11/598,551, filed Nov. 13, 2006, entitled "Gallium Nitride Material Transistors and Methods Associated With the Same"

36. **U.S. Patent No. 7,569,871**, which issued on Aug. 4, 2009 from U.S. Patent Application Serial No. 12/059,182, filed March 31, 2008, entitled "Gallium Nitride Material Transistors and Methods Associated With the Same"

37. **U.S. Patent No. 7,994,540**, which issued Aug. 9, 2011 from U.S. Patent Application Serial No. 12/508,871, filed on Jul. 24, 2009 entitled "Gallium Nitride Material Transistors and Methods Associated with the Same"

38. **U.S. Patent No. 7,687,827**, which issued March 30, 2010 from U.S. Patent Application Serial No. 10/886,506, filed Jul. 7, 2004, entitled "III-Nitride Materials Including Low Dislocation Densities and Methods Associated With the Same"

39. **U.S. Patent No. 8,368,117**, which issued Feb. 5, 2013 from U.S. Patent Application Serial No. 12/748,778, filed March 29, 2010, entitled "III-Nitride Materials Including Low Dislocation Densities and Methods Associated with the Same"

40. **European Patent No. 1778897**, granted on Dec. 18, 2013 from European Patent Application Serial No. 05768527.3, filed Jul. 6, 2005, "III-Nitride Materials Including Low Dislocation Densities and Methods Associated with the Same", a national of International Patent Application Serial No. PCT/US2005/023934

41. **German Patent No. 602005042208.0**, granted on Dec. 18, 2014, based on European Patent No. 1778897, granted on Dec. 18, 2013 from European Patent Application Serial No. 05768527.3, filed Jul. 6, 2005, "III-Nitride Materials Including Low Dislocation Densities and Methods Associated with the Same", a national of International Patent Application Serial No. PCT/US2005/023934

42. **Japanese Patent No. 5705399**, which issued March 6, 2015 from Japanese Patent Application Serial No. 2007-520461, filed Jul. 6, 2005, "Ill-Nitride Materials Including Low Dislocation Densities and Methods Associated with the Same", a national of International Patent Application Serial No. PCT/US2005/023934

43. **U.S. Patent No. 7,247,889** which issued Jul. 24, 2007 from U.S. Patent Application Serial No. 11/004,628, filed Dec. 3, 2004, entitled "Ill-Nitride Material Structures Including Silicon Substrates"

44. **European Patent No. 1829111,** which issued Feb. 14, 2018 from European Patent Application Serial No. 05852894.4, filed Dec. 5, 2005, entitled: "III-Nitride Material Structures Including Silicon Substrates", a national of International Patent Application Serial No. PCT/US2005/043810

45. **German Patent No. 602005053503.9**, granted on Feb. 14, 2018 based on European Patent No. 1829111 which issued Feb. 14, 2018 from European Patent Application Serial No. 05852894.4, filed Dec. 5, 2005, entitled "III-Nitride Material Structures Including Silicon Substrates", a national of International Patent Application Serial No. PCT/US2005/043810

46. **U.S. Patent No. 7,361,946**, which issued on Apr. 22, 2008 from U.S. Patent Application Serial No. 10/879,704, filed Jun. 28, 2004, entitled "Semiconductor Device-Based Sensors and Methods Associated With the Same"

47. **U.S. Patent No. 7,339,205**, which issued March 4, 2008 from U.S. Patent Application Serial No. 10/879,703, filed Jun. 28, 2004, entitled "Gallium Nitride Materials and Methods Associated With the Same"

48. **U.S. Patent No. 7,352,015**, which issued March 1, 2008 from U.S. Patent Application Serial No. 11/096,505, filed Apr. 1, 2005, entitled "Gallium Nitride Materials and Methods Associated With the Same"

49. **U.S. Patent Application Serial No. 12/023,480**, filed Jan. 31, 2008, entitled "Gallium Nitride Materials and Methods Associated With the Same" ***Pending NOA mailed 6/5/2018**

50. **U.S. Patent No. 8,748,298**, which issued Jun. 10, 2014 from U.S. Patent Application Serial No. 12/023,451, filed Jan.' 31, 2008, entitled "Gallium Nitride Materials and Methods Associated with the Same"

51. **U.S. Patent No. 7,365,374**, which issued Apr. 29, 2008 from U.S. Patent Application Serial No. 11/121,793, filed May 3, 2005, entitled "Gallium Nitride Material Structures Including Substrates and Methods Associated With the Same"

52. **U.S. Patent No. 7,791,106,** which issued Sep. 7, 2010 from U.S. Patent Application Serial No. 12/024,313, filed Feb. 1, 2008, entitled "Gallium Nitride Material Structures Including Substrates and Methods Associated with the Same"

53. **European Patent Application Serial No. 06799911.0**, entitled "Gallium Nitride Material Structures Including Substrates and Methods Associated With the Same", a national of International Patent Application Serial No. PCT/US2006/017098

54. **U.S. Patent No. 7,566,913**, issued Jul. 28, 2009 from U.S. Patent Application Serial No. 11/634,332, filed Dec. 4, 2006, entitled "Gallium Nitride Material Structures Including Conductive Regions and Methods Associated with the Same"

55. **U.S. Patent No. 8,067,786**, which issued Nov. 29, 2011 from U.S. Patent Application Serial No. 12/508,891, filed Jul. 24, 2009, entitled "Gallium Nitride Material Structures Including Conductive Regions and Methods Associated with the Same"

56. **U.S. Patent No. 8,350,288**, which issued Jan. 8, 2013 from U.S. Patent Application Serial No. 13/303,109, filed Nov. 22, 2011, entitled "Gallium Nitride Devices with Electrically Conductive Regions"

57. **U.S. Patent No. 8,343,856**, which issued Jan. 1, 2013 from U.S. Patent Application Serial No. 13/303,075, filed Nov. 22, 2011, entitled "Method for Forming Gallium Nitride Devices with Conductive Regions"

58. **U.S. Patent No. 8,859,400**, which issued Oct. 14, 2014 from U.S. Patent Application Serial No. 13/729,394, filed Dec. 28, 2012, entitled "Gallium Nitride Devices with Conductive Regions"

59. **U.S. Patent No. 8,680,570**, which issued Mar. 25, 2014 from U.S. Patent Application Serial No. 13/734,802, filed Jan. 4, 2013, entitled "Gallium Nitride Devices with Vias"

60. **U.S. Patent No. 8,946,765**, which issued Feb. 3, 2015 from U.S. Patent Application Serial No. 14/221,587, filed Mar. 21, 2014, entitled "Gallium Nitride Devices"

61. **U.S. Patent No. 9,318,417**, which issued Apr. 19, 2016 from U.S. Patent Application Serial No. 14/609,784, filed Jan. 30, 2015, entitled "Gallium Nitride Devices"

62. **U.S. Patent No. 9,608,102**, which issued March 28, 2017 from U.S. Patent Application Serial No. 11/607,129, filed Nov. 30, 2006, entitled "Gallium Nitride Material Devices and Associated Methods"

63. **U.S. Patent No. 9,978,858**, which issued May 22, 2018 from U.S. Patent Application Serial No. 15/433,473, filed Feb. 15, 2017, entitled "Methods of Manufacturing Gallium Nitride Devices"

64. **European Patent No. 1969635**, which issued Jul. 19, 2017 from European Patent Application Serial No. 06838558.2, filed Nov. 30, 2006, entitled "Gallium Nitride Material Devices and

Associated Methods", a national of International Patent Application Serial No. PCT/US2006/045662

65. **German Patent No. 602006053083.8**, which issued on Jul. 19, 2017, based on European Patent No. 1969635 which issued Jul. 19, 2017 from European Patent Application Serial No. 06838558.2, filed Nov. 30, 2006, entitled "Gallium Nitride Material Devices and Associated Methods", a national of International Patent Application Serial No. PCT/US2006/045662

66. **U.S. Patent No. 8,026,596**, which issued Sep. 27, 2011 from U.S. Patent Application Serial No. 11/839,030, filed Aug. 15, 2007, entitled "Gallium Nitride Material Devices and Thermal Designs Thereof"

67. **U.S. Patent No. 7,745,848**, which issued on Jun. 29, 2010 from U.S. Patent Application Serial No. 11/839,040, filed Aug. 15, 2007, entitled "Gallium Nitride Material Devices and Thermal Designs Thereof"

68. **U.S. Patent No. 8,026,581**, which issued on Sep. 27, 2011 from U.S. Patent Application Serial No. 12/025,976, filed Feb. 5, 2008, entitled "Gallium Nitride Material Devices Including Diamond Regions and Methods Associated with the Same"

69. **U.S. Patent No. 8,358,005**, which issued on Jan. 22, 2013 from U.S. Patent Application Serial No. 12/132,985, filed Jun. 4, 2008, entitled "Packaged Gallium Nitride Material Transistors and Related Methods"

70. **U.S. Patent No. 8,629,453**, which issued Jan. 14, 2014 from U.S. Patent Application Serial No. 12/110,816, filed Apr. 28, 2008, entitled "Externally Configurable Integrated Circuits"

71. **U.S. Patent No. 8,343,824**, which issued on Jan. 1, 2013 from U.S. Patent Application Serial No. 12/143,727, filed Jun. 20, 2008, entitled "Gallium Nitride Material Processing and Related Device Structures"

72. **European Application Serial No. 09739211.2**, filed Apr. 29, 2008, entitled "Gallium Nitride Material Processing and Related Device Structures" which is a national of International Patent Application Serial No. PCT/US2009/002663

73. **Japanese Patent No. 5567553**, granted Jun. 27, 2014, based on Japanese Patent Application Serial No. 2011-507456, filed Jun. 30, 2011, entitled "Gallium Nitride Material Processing and Related Device Structures"