

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Khanh Tran</td> <td>12/14/2012</td> </tr> <tr> <td>Joseph P. Ellul</td> <td>12/14/2012</td> </tr> <tr> <td>Edward M. Godshalk</td> <td>12/14/2012</td> </tr> <tr> <td>Kiyoko Ikeuchi</td> <td>12/14/2012</td> </tr> <tr> <td>Anuranjan Srivastava</td> <td>12/14/2012</td> </tr> </tbody> </table>		Name	Execution Date	Khanh Tran	12/14/2012	Joseph P. Ellul	12/14/2012	Edward M. Godshalk	12/14/2012	Kiyoko Ikeuchi	12/14/2012	Anuranjan Srivastava	12/14/2012
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RECEIVING PARTY DATA													
Name:	Maxim Integrated Products, Inc.												
Street Address:	160 Rio Robles												
City:	San Jose												
State/Country:	CALIFORNIA												
Postal Code:	95134												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13716381</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13716381								
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CORRESPONDENCE DATA													
Fax Number:	4025041636												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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ATTORNEY DOCKET NUMBER:	MAXM-1153												
NAME OF SUBMITTER:	Kevin E. West												
Total Attachments: 7													

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### ASSIGNMENT

WHEREAS, we, Khanh Tran, residing at 2283 Skyline Drive, Milpitas, CA 95035, Joseph P. Ellul, residing at 1283 Quail Creek Circle, San Jose, CA 95120, Edward M. Godshalk, residing at 21325 SW Wildflower Drive, Newberg, OR 97132, Kiyoko Ikeuchi, residing at 230 South Shoreline Blvd, Mountain View, CA 94041, and Anuranjan Srivastava, residing at 3694 Branding Iron Place, Dublin, CA 94568, have made certain new and useful inventions and improvements to an application for Letters Patent of the United States which is entitled "SEMICONDUCTOR DEVICE HAVING TRENCH CAPACITOR STRUCTURE INTEGRATED THEREIN" will be filed. The undersigned hereby authorize and request Assignee's legal representatives of ADVENT IP, P.C., L.L.O., who are associated with Customer No. 99900, to insert herein in parenthesis (U.S. Application Serial No. 13/716,381, filed on December 17, 2012) the application's serial number and filing date when known.

AND WHEREAS, Maxim Integrated Products, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 160 Rio Robles, San Jose, CA 95134 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefore;

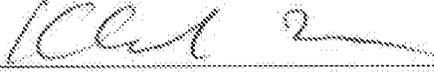
NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the

Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

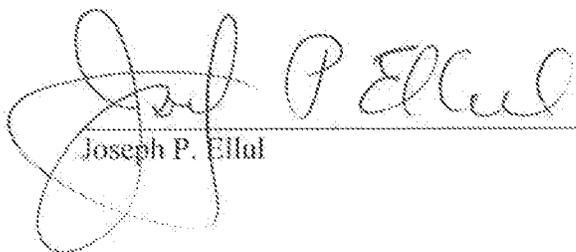
AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

Dated: 12/14/12

  
Khanh Tran

Dated: 12/14/2012

  
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Joseph P. Ellul

Dated: Dec. 14, 2012

Edward M. Godshalk  
Edward M. Godshalk

Dated: Dec 14, 2012

  
Kiyoko Ikeuchi

Dated: 12/14/2012

  
Anuranjan Srivastava