

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ta-Pen GUO</td> <td>03/08/2011</td> </tr> <tr> <td>Li-Chun TIEN</td> <td>03/03/2011</td> </tr> <tr> <td>Shyue-Shyh LIN</td> <td>03/03/2011</td> </tr> <tr> <td>Mei-Hui HUANG</td> <td>03/03/2011</td> </tr> </tbody> </table>		Name	Execution Date	Ta-Pen GUO	03/08/2011	Li-Chun TIEN	03/03/2011	Shyue-Shyh LIN	03/03/2011	Mei-Hui HUANG	03/03/2011
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CORRESPONDENCE DATA											
<p>Fax Number: (703)518-5499</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 7036841111</p> <p>Email: sramunto@ipfirm.com</p> <p>Correspondent Name: Lowe Hauptman Ham & Berner, LLP (TSMC)</p> <p>Address Line 1: 1700 Diagonal Road, Suite 300</p> <p>Address Line 4: Alexandria, VIRGINIA 22314</p>											
ATTORNEY DOCKET NUMBER:	T5057-R428										
NAME OF SUBMITTER:	Randy A. Noranbrock										
Total Attachments: 1 source=efiledassgn#page1.tif											

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PATENT
 REEL: 025949 FRAME: 0800

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- | | |
|-------------------|------------------|
| 1) Ta-Pen GUO | 4) Mei-Hui HUANG |
| 2) Li-Chun TIEN | |
| 3) Shyue-Shyh LIN | |

who has made a certain new and useful invention, hereby sells, assigns and transfers unto

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD. having a place of business at
No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

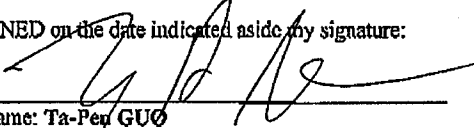
SYSTEMS AND METHODS OF DESIGNING INTEGRATED CIRCUITS

- (a) for which an application for United States Letters Patent was filed on 3-14-2011, and identified by United States Patent Application No. 13/047,419; or
- (b) for which an application for United States Letters Patent was executed on _____,


and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated beside my signature:

1) 
 Name: Ta-Pen GUO

Date: 3/8, 2011

2) 
 Name: Li-Chun TIEN

Date: 3/3, 2011

3) 
 Name: Shyue-Shyh LIN

Date: 3/3, 2011

4) 
 Name: Mei-Hui HUANG

Date: 3/3/2011