PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAI-SHIN CHENG	12/29/2015
CHE-CHENG CHANG	12/26/2015

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.		
Street Address:	NO. 8, LI-HSIN RD. 6		
Internal Address:	SCIENCE-BASED INDUSTRIAL PARK		
City:	HSIN-CHU		
State/Country:	TAIWAN		
Postal Code:	300-77		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14815419

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 0941-3216PUS1	
NAME OF SUBMITTER:	BRIAN OLIVE
SIGNATURE:	/brian olive/
DATE SIGNED:	01/05/2016

Total Attachments: 1

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PATENT REEL: 037412 FRAME: 0173

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ASSIGNMENT

WHEREAS.	Tai-Shin	CHENG and	Che-Cheng	CHANG

hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

Title: SEMICONDUCTOR DEVICE STRUCTURE AND METHOD FOR FORMING THE SAME

Filed: July 31, 2015 Serial No. 14/815,419 Executed on: December 29, 2015

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd, of No.8, Li-Hsin Road. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, R.O.C. hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.

Name: Tai-Shin Cheng (Last name: CHENG)

Name: Che-Cheng CHANG (Kast name: CHANG)

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RECORDED: 01/05/2016