

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3004216

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
GORDON RAYMOND CHIU	08/13/2014
SEAN SHAU-TU LU	08/19/2014
WARREN NORDYKE	08/14/2014
BONNIE I. WANG	08/28/2014
WEIZHONG XU	08/16/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Altera Corporation
<b>Street Address:</b>	101 Innovation Drive
<b>City:</b>	San Jose
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95134
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14473987
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(415)837-0651
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	4158370650
<b>Email:</b>	vavalos@treyzlawgroup.com
<b>Correspondent Name:</b>	G. VICTOR TREYZ
<b>Address Line 1:</b>	870 MARKET STREET
<b>Address Line 2:</b>	SUITE 984
<b>Address Line 4:</b>	SAN FRANCISCO, CALIFORNIA 94102
<b>ATTORNEY DOCKET NUMBER:</b>	A04120
<b>NAME OF SUBMITTER:</b>	VICTORIA AVALOS
<b>SIGNATURE:</b>	/Victoria Avalos/
<b>DATE SIGNED:</b>	08/29/2014
<b>Total Attachments: 6</b>	
source=A04120_Assignment#page1.tif	

PATENT

source=A04120\_Assignment#page2.tif  
source=A04120\_Assignment#page3.tif  
source=A04120\_Assignment#page4.tif  
source=A04120\_Assignment#page5.tif  
source=A04120\_Assignment#page6.tif

A S S I G N M E N T

WHEREAS, We, Gordon Raymond Chiu, Sean Shau-Tu Lu, Warren Nordyke, Bonnie I. Wang, and Weizhong Xu, residing respectively in North York, Ontario, San Jose, California, Cupertino, California, Cupertino, California, and Cupertino, California, have made an invention entitled:

INTEGRATED CIRCUITS HAVING INPUT-OUTPUT CIRCUITS WITH  
DEDICATED MEMORY CONTROLLER CIRCUITRY

and

(1) are about to make an application for United States Letters Patent therefor, the same having been executed by us on even date herewith

OR

(2) have made an application for United States Letters Patent therefor, the same having been filed on (\_\_\_\_\_) under Application No. (\_\_\_\_\_), in connection with which we hereby authorize and request the assignee's attorneys associated with Customer Number 45851 to insert within the foregoing parentheses the filing date and Application No. of said application when known; and

WHEREAS, ALTERA CORPORATION, a corporation organized and existing under the laws of the State of California and having an address of 101 Innovation Drive, San Jose, California 95134, is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;


NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we do hereby sell, assign and transfer unto the said ALTERA CORPORATION, its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said United States patent application, including any continuations, continuations-in-part and divisions thereof, and any substitute applications therefor, and including the right to claim priority under the International Convention based on said patent application, and any patent which may issue thereon, and any reissues of the same; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same;

and we hereby authorize and request competent authorities to grant and issue any and all patents on said invention to the said ALTERA CORPORATION as the assignee of the entire interest therein; and we further agree to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

**A04120**

IN TESTIMONY WHEREOF, we have hereunto signed our names on the dates indicated hereinafter.

Aug 19, 2014  
Date

  
Gordon Raymond Chiu

Date \_\_\_\_\_

Sean Shau-Tu Lu

Date \_\_\_\_\_

Warren Nordyke

Date \_\_\_\_\_

Bonnie I. Wang

Date \_\_\_\_\_

Weizhong Xu

A04120

IN TESTIMONY WHEREOF, we have hereunto signed our names on the dates indicated hereinafter.

\_\_\_\_\_  
Date

8/19/2014

\_\_\_\_\_  
Date

8-14-2014

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gordon Raymond Chiu

Sean Shau-Tu Lu

\_\_\_\_\_  
Sean Shau-Tu Lu

Warren Nordyke

\_\_\_\_\_  
Warren Nordyke

\_\_\_\_\_  
Bonnie I. Wang

\_\_\_\_\_  
Weizhong Xu

A04120

IN TESTIMONY WHEREOF, we have hereunto signed our names on the dates indicated hereinafter.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gordon Raymond Chiu

\_\_\_\_\_  
Date

\_\_\_\_\_  
Sean Shau-Tu Lu

\_\_\_\_\_  
Date

\_\_\_\_\_  
Warren Nordyke

8/28/2014  
\_\_\_\_\_  
Date

Bonnie I. Wang  
\_\_\_\_\_  
Bonnie I. Wang

\_\_\_\_\_  
Date

\_\_\_\_\_  
Weizhong Xu

A04120

IN TESTIMONY WHEREOF, we have hereunto signed our names on the dates indicated hereinafter.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gordon Raymond Chiu

\_\_\_\_\_  
Date

\_\_\_\_\_  
Sean Shau-Tu Lu

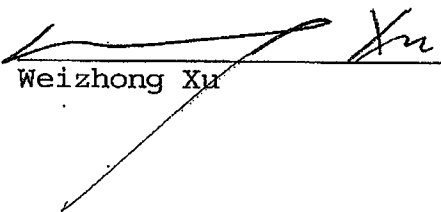
\_\_\_\_\_  
Date

\_\_\_\_\_  
Warren Nordyke

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bonnie I. Wang

8/16/2014  
Date

  
\_\_\_\_\_  
Weizhong Xu