

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

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>Lei Xu</td> <td>11/17/2012</td> </tr> </tbody> </table>		Name	Execution Date	Lei Xu	11/17/2012
Name	Execution Date				
Lei Xu	11/17/2012				
RECEIVING PARTY DATA					
Name:	Altera Corporation				
Street Address:	101 Innovation Drive				
City:	San Jose				
State/Country:	CALIFORNIA				
Postal Code:	95134-1941				
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>13648443</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13648443
Property Type	Number				
Application Number:	13648443				
CORRESPONDENCE DATA					
Fax Number:	6172359492				
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>					
Phone:	2125969000				
Email:	joy.chapman@ropesgray.com				
Correspondent Name:	Ropes & Gray LLP				
Address Line 1:	1211 Ave. of the Americas				
Address Line 2:	Docketing Dept.				
Address Line 4:	New York, NEW YORK 10036				
ATTORNEY DOCKET NUMBER:	000174-0754-101				
NAME OF SUBMITTER:	Joy Chapman				
Total Attachments: 2 source=000174-0754-101_Assignment#page1.tif source=000174-0754-101_Assignment#page2.tif					

CH \$40.00 13648443

A S S I G N M E N T

Whereas I, Lei Xu, residing at Sunnyvale, California, have made an invention in:

3D MEMORY BASED ADDRESS GENERATOR

and have made application for United States Letters Patent therefor, the same having been executed by me on even date herewith and having been filed on October 10, 2012 as United States Application No. 13/648,443; and

WHEREAS, ALTERA CORPORATION, a corporation organized and existing under the laws of Delaware and having an office and place of business at 101 Innovation Drive, San Jose, California 95134-1941 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) to me paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I 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 and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; 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 I 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 I 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.

IN TESTIMONY WHEREOF, I have hereunto signed my name and affixed my seal on the date indicated hereinafter.

11/17/2012

Date



Lei Xu