

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT														
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT														
<b>CONVEYING PARTY DATA</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Andrew Bellis</td> <td>11/01/2007</td> </tr> <tr> <td>Philip Clarke</td> <td>11/01/2007</td> </tr> <tr> <td>Joseph Huang</td> <td>11/01/2007</td> </tr> <tr> <td>Yan Chong</td> <td>11/01/2007</td> </tr> <tr> <td>Michael H.M. Chu</td> <td>11/01/2007</td> </tr> <tr> <td>Manoj B. Roge</td> <td>11/05/2007</td> </tr> </tbody> </table>		Name	Execution Date	Andrew Bellis	11/01/2007	Philip Clarke	11/01/2007	Joseph Huang	11/01/2007	Yan Chong	11/01/2007	Michael H.M. Chu	11/01/2007	Manoj B. Roge	11/05/2007
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Manoj B. Roge	11/05/2007														
<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>															
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>11935347</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	11935347										
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Application Number:	11935347														
<b>CORRESPONDENCE DATA</b>															
<b>Fax Number:</b>	(415)576-0300														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
<b>Phone:</b>	415 576 0200														
<b>Email:</b>	docket@townsend.com														
<b>Correspondent Name:</b>	Townsend and Townsend and Crew LLP														
<b>Address Line 1:</b>	Two Embarcadero Center														
<b>Address Line 4:</b>	San Francisco, CALIFORNIA 94111														
<b>ATTORNEY DOCKET NUMBER:</b>	015114-085010US														
<b>NAME OF SUBMITTER:</b>	David B. Raczkowski														

**CH \$40.00 11935347**

Total Attachments: 3

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ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Andrew Bellis of 22 Queens Rd., Guildford, Surrey, GU1 4JJ United Kingdom; Philip Clarke of Cumbrae, Oakwood Close, East Horsely, Leatherhead, Surrey, KT24 6QG United Kingdom; Joseph Huang of 18665 Arguello Ave., Morgan Hill, CA 95037; Yan Chong of 3342 La Costa Way, San Jose, CA 95135; Michael H.M. Chu of 40919 Durrillo Drive, Fremont, CA 94539; and Manoj B. Roge of 1233 Hazlett Ct., San Jose, CA 95131, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: I/O BLOCK FOR HIGH PERFORMANCE  
MEMORY INTERFACES

Date(s) of execution of Declaration:

Filing Date:

Application No.: ; and

WHEREAS, Altera Corporation, a corporation of the state of Delaware, located at 101 Innovation Drive, San Jose, CA 95134, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

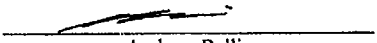
For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 1 Nov 2007

  
Andrew Bellis

Assignment  
Attorney Docket No.: 015114-085010US  
Page 2

Dated: 1 Nov 2007

  
Philip Clarke

Dated: \_\_\_\_\_

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Joseph Huang

Dated: \_\_\_\_\_

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Yan Chong

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Michael H.M. Chu

Dated: \_\_\_\_\_

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Manoj B. Roge

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Attorney Docket No.: 015114-085010US  
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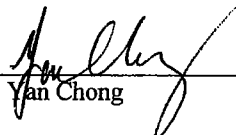
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