

## 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>Mark A. Hinton</td> <td>07/10/2012</td> </tr> <tr> <td>Minh V. Quach</td> <td>07/11/2012</td> </tr> <tr> <td>Regee Petaja</td> <td>07/10/2012</td> </tr> </tbody> </table>		Name	Execution Date	Mark A. Hinton	07/10/2012	Minh V. Quach	07/11/2012	Regee Petaja	07/10/2012
Name	Execution Date								
Mark A. Hinton	07/10/2012								
Minh V. Quach	07/11/2012								
Regee Petaja	07/10/2012								
RECEIVING PARTY DATA									
Name:	Avago Technologies Enterprise IP (Singapore) Pte. Ltd.								
Street Address:	No. 1 Yishun Avenue 7								
City:	Singapore								
State/Country:	SINGAPORE								
Postal Code:	768923								
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>13548234</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13548234				
Property Type	Number								
Application Number:	13548234								
CORRESPONDENCE DATA									
Fax Number:	(770)804-0900								
Phone:	970-288-0731								
Email:	avagoip@system.foundationip.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Kathy Manke Avago Technologies Limited								
Address Line 1:	4380 Ziegler Road								
Address Line 4:	Fort Collins, COLORADO 80525								
ATTORNEY DOCKET NUMBER:	2011-140USORG								
NAME OF SUBMITTER:	Michael J. Tempel								
Total Attachments: 2 source=010150686U1AssignmentExecuted#page1.tif source=010150686U1AssignmentExecuted#page2.tif									

CH \$40.00 13548234

AVAGO TECHNOLOGIES, LTD.  
4380 Ziegler Road  
Fort Collins, CO 80525

ATTORNEY DOCKET NO. 2011-140USORG

ASSIGNMENT OF PATENT APPLICATION TO AVAGO TECHNOLOGIES  
ENTERPRISE IP (SINGAPORE) PTE. LTD.

I/We the undersigned (each) have agreed and hereby agree to assign to Avago Technologies Enterprise IP (Singapore) Pte. Ltd. (Company Registration No. 200512336N), a company incorporated under the laws of Singapore whose registered office is at No. 1 Yishun Avenue 7, Singapore 768923 (hereinafter AVAGO), in furtherance of my/our obligations to AVAGO, and do hereby assign and transfer to AVAGO, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

**Ball Grid Array (BGA) And Printed Circuit Board (PCB) Via Pattern To Reduce Differential Mode Crosstalk Between Transmit And Receive Differential Signal Pairs**

Filing date: 07-13-2012 Serial No.: 13/548,234

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor; and any reissues, or reexaminations, or extensions of said Letters Patents.

I/We additionally authorize AVAGO to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by AVAGO, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

AND I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to AVAGO, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to AVAGO, or to its nominee, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patents, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid AVAGO, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in tending such cooperation and assistance are paid by AVAGO;

AND I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to AVAGO, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

I/we further authorize and direct AVAGO attorneys to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Mark A. Hinton Date Assignment Signed: 7/10/2012  
Inventor's Signature (Seal)

Inventor's Typed Name: Mark A. Hinton Date Application Signed: 7/10/2012

When recorded please return to:

AVAGO TECHNOLOGIES, LTD.  
4380 Ziegler Road  
Fort Collins, CO 80525

PATENT APPLICATION

ATTORNEY DOCKET NO. . 2011-140USORG

ASSIGNMENT OF PATENT APPLICATION TO AVAGO TECHNOLOGIES  
ENTERPRISE IP (SINGAPORE) PTE. LTD.

  
\_\_\_\_\_  
Inventor's Signature (Seal)

Inventor's Typed Name: Minh V. Quach

Date Assignment Signed: 7/11/2012

Date Application Signed: 7/11/2012

  
\_\_\_\_\_  
Inventor's Signature (Seal)

Inventor's Typed Name: Regae Petaja

Date Assignment Signed: 7/10/2012

Date Application Signed: 7/10/2012