

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
<b>CONVEYING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Cheng Kuo Huang</td> <td>07/14/2010</td> </tr> <tr> <td>Siu-Hung Fred Au</td> <td>07/14/2010</td> </tr> <tr> <td>Lau Nguyen</td> <td>07/20/2010</td> </tr> <tr> <td>Perry Neos</td> <td>07/19/2010</td> </tr> </tbody> </table>		Name	Execution Date	Cheng Kuo Huang	07/14/2010	Siu-Hung Fred Au	07/14/2010	Lau Nguyen	07/20/2010	Perry Neos	07/19/2010
Name	Execution Date										
Cheng Kuo Huang	07/14/2010										
Siu-Hung Fred Au	07/14/2010										
Lau Nguyen	07/20/2010										
Perry Neos	07/19/2010										
<b>RECEIVING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Marvell Semiconductor, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>5488 Marvell Lane</td> </tr> <tr> <td>City:</td> <td>Santa Clara</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>95054</td> </tr> </table>		Name:	Marvell Semiconductor, Inc.	Street Address:	5488 Marvell Lane	City:	Santa Clara	State/Country:	CALIFORNIA	Postal Code:	95054
Name:	Marvell Semiconductor, Inc.										
Street Address:	5488 Marvell Lane										
City:	Santa Clara										
State/Country:	CALIFORNIA										
Postal Code:	95054										
<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 style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12842714</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12842714						
Property Type	Number										
Application Number:	12842714										
<b>CORRESPONDENCE DATA</b>											
<p>Fax Number: (408)222-2755</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 408-222-0966</p> <p>Email: hng@marvell.com</p> <p>Correspondent Name: Horace Ng</p> <p>Address Line 1: 5488 Marvell Lane</p> <p>Address Line 4: Santa Clara, CALIFORNIA 95054</p>											
ATTORNEY DOCKET NUMBER:	MP3331										
NAME OF SUBMITTER:	Horace Ng										
<p>Total Attachments: 6</p> <p>source=MP3331_Assignment INV - MSI (executed)#page1.tif</p>											

OP \$40.00 12842714

**501242409**

**PATENT**  
**REEL: 024735 FRAME: 0569**

source=MP3331\_Assignment INV - MSI (executed)#page2.tif  
source=MP3331\_Assignment INV - MSI (executed)#page3.tif  
source=MP3331\_Assignment INV - MSI (executed)#page4.tif  
source=MP3331\_Assignment INV - MSI (executed)#page5.tif  
source=MP3331\_Assignment INV - MSI (executed)#page6.tif

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

**CHENG KUO HUANG; SIU-HUNG FRED AU; LAU NGUYEN; AND PERRY NEOS**

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

**CONTROLLER FOR READING DATA FROM NON-VOLATILE MEMORY**

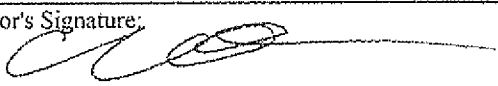
Do hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;


Do hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Application Nos. 61/256,502, filed 10/30/2009 and 61/233,118, filed 8/11/2009, and to any and all inventions described in said provisional patent application(s) for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set MY signature on the date indicated below.

Full Name of First Inventor:	
Cheng Kuo Huang	
Inventor's Signature:	Date: Month/Day/Year
	Jul 14 / 2010

Full Name of Second Inventor:	
Siu-Hung Fred Au	
Inventor's Signature:	Date: Month/Day/Year
	07/14/2010

Full Name of Third Inventor:	
Lau Nguyen	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Fourth Inventor:	
Perry Neos	
Inventor's Signature:	Date: Month/Day/Year

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

**CHENG KUO HUANG; SIU-HUNG FRED AU; LAU NGUYEN; AND PERRY NEOS**

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

**CONTROLLER FOR READING DATA FROM NON-VOLATILE MEMORY**

Do hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Do hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Application Nos. 61/256,502, filed 10/30/2009 and 61/233,118, filed 8/11/2009, and to any and all inventions described in said provisional patent application(s) for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set MY signature on the date indicated below.


Full Name of First Inventor:

Cheng Kuo Huang

Inventor's Signature:

Date: Month/Day/Year

Full Name of Second Inventor: Siu-Ilung Fred Au	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Third Inventor: Lau Nguyen	
Inventor's Signature: 	Date: Month/Day/Year 07/20/2010

Full Name of Fourth Inventor: Perry Neos	
Inventor's Signature:	Date: Month/Day/Year

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

**CHENG KUO HUANG; SIU-HUNG FRED AU; LAU NGUYEN; AND PERRY NEOS**

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

**CONTROLLER FOR READING DATA FROM NON-VOLATILE MEMORY**

Do hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Do hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Application Nos. 61/256,502, filed 10/30/2009 and 61/233,118, filed 8/11/2009, and to any and all inventions described in said provisional patent application(s) for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set MY signature on the date indicated below.

Full Name of First Inventor:

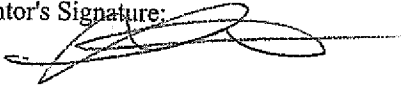
Cheng Kuo Huang

Inventor's Signature:

Date: Month/Day/Year

Full Name of Second Inventor: Siu-Hung Fred Au	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Third Inventor: Lau Nguyen	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Fourth Inventor: Perry Neos	
Inventor's Signature: 	Date: Month/Day/Year 7/19/2010