## 505133281 10/09/2018 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5180044

NATURE OF CONVEYANCE: ASSIGNMENT				
	ASSIGNMENT			
CONVEYING PARTY DATA				
Name	Execution Date			
FREDERICK A. WARE	06/01/2006			
ELY K. TSERN	06/01/2006			
IAN P. SHAEFFER	06/01/2006			
RECEIVING PARTY DATA				
Name: RAMBUS INC				
Street Address: 1050 ENTERPRISE WAY #700	1050 ENTERPRISE WAY #700			
City: SUNNYVALE	SUNNYVALE			
State/Country: CALIFORNIA				
Postal Code: 94089				
Application Number:15824762				
Application Number:15824762				
CORRESPONDENCE DATA				
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Fax Number:Correspondence will be sent to the e-mail address first; if that is unsuccessful using a fax number, if provided; if that is unsuccessful, it will be sent via USPhone:408-462-8000Email:tfriedman@rambus.comCorrespondent Name:TAMMY FRIEDMAN				
Fax Number:Correspondence will be sent to the e-mail address first; if that is unsuccessful using a fax number, if provided; if that is unsuccessful, it will be sent via USPhone:408-462-8000Email:tfriedman@rambus.comCorrespondent Name:TAMMY FRIEDMANAddress Line 1:1050 ENTERPRISE WAY #700				
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JOINT

## ASSIGNMENT

WHEREAS, WE, FREDERICK A. WARE, citizen of the United States of America, residing in Los Altos Hills, California; ELY K. TSERN, citizen of the United States of America, residing in Los Altos, California; IAN P. SHAEFFER, citizen of the United States of America, residing in San Jose, California; ASSIGNORS, are the inventors of the invention in POINT-TO-POINT CONNECTION TOPOLOGY FOR STACKED DEVICES and for which an application for a Patent of the United States

□ was executed on

I even date herewith or

- Is identified by Morgan, Lewis & Bockius LLP Docket No. 060809-5076-US
- 🗵 was filed on April 11, 2006, Application No. 11/402,393
- I hereby authorize and request my attorney, Gary S. Williams, of Morgan, Lewis & Bockius LLP, to insert here in parentheses (Application No., \_\_\_\_\_\_\_\_\_ filed \_\_\_\_\_\_) the filing date and application number of said application when known.

and WHEREAS, RAMBUS, INC., ASSIGNEE, having a place of business at 4440 El Camino Real, Los Altos, California 94022, is desirous of obtaining my entire right, title, and interest in, to, and under said invention and said application:

NOW, THEREFORE, in good and valuable consideration, the receipt of which is hereby acknowledged, we, said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer, and set over, unto said ASSIGNORE, its successors, legal representatives, and assigns, our entire right, title, and interest in, to, and under said invention, and said United States application and all divisions, renewals, and continuations thereof, and all Patents of the United States that may be granted thereon, and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs that may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application and all forms of the Context in the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates, and designs that may be granted for said invention in any country or countries foreign to the United States application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates, and designs that may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals, and reissues thereof;

AND 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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to said ASSIGNEE, its successors, legal representatives, and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said ASSIGNEE, its successors, legal representatives, and assigns, any facts known to us respecting said invention; testify in any legal proceeding; sign all lawful papers; execute all divisional, continuing, reissue, and foreign applications; make all rightful oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives, and assigns to obtain and enforce proper protection for said invention in all contries.

IN TESTIMONY WHEREOF, We hereining set our hands and seals the day and year set opposite our respective signatures.

Date		, 2006
	 <pre>{</pre>	

L.S. FREDERICK A. WARE

State of California ; County of Sarta Claq

On <u>Surve</u> <u>1</u>, 2006, before me. <u>Aver</u> <u>()</u>. <u>William</u> <u>S</u> Notary Public, personally appeared personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalt of which the person(s) acted, executed the instrument.

VITNESS my hand and official seal



PATENT REEL: 047208 FRAME: 0267

4-PA/3583405.1

MORGAN, LEWIS & BOCKHUS ILP DOCKET NO. 060809-5076-US

	Date, 2006LS.
	State of Carlifornia SS.:
	On <u>Since 4</u> , 2006, before me, <u>Arrow</u> <u>C. Williams</u> Notary Public, personally appeared <u>Elig Test (n</u> ), personally known to me an the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that be/she/they executed the same in his/bas/their authorized capacity(ies) and that by his/bas/their signature(s) on the instrument the person(s), or the entity apon behalf of which the person(s) acted, executed the instrument.
	WITTNESS my band and official seal WITTNESS my band and official seal Miles - Collocate My Commission # 1419400 Notary Public - Collocate Santo Close County My Commission Based Andrews 21 2007
Contraction	Date 6/1 2006 L.S. HAN P. SHAEFFER
	State of California 355. County of Santa (2019)
	$\underbrace{\sum_{k \in \mathcal{N}} (1 - \frac{1}{2})}_{\text{whose name(s)}} = \underbrace{\sum_{k \in \mathcal{N}} (1 - \frac{1}{2})}_{\text{whose name(s)}} \underbrace{\sum_{k \in \mathcal{N}} (1 - \frac{1}{2})}_{\text{whose name(s)}} \underbrace{\sum_{k \in \mathcal{N}} (1 - \frac{1}{2})}_{\text{whose name(s)}}_{\text{whose name(s)}} = \underbrace{\sum_{k \in \mathcal{N}} (1 - \frac{1}{2})}_{\text{whose name(s)}}_{\text{and the within instrument and acknowledged to me that he/she/they executed the same in his/ker/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.}$
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**RECORDED: 10/09/2018**