

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3308627

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
FREDERICK A. WARE	10/25/2012
AMIR AMIRKHANY	11/12/2012
SURESH RAJAN	10/26/2012
MOHAMMAD HEKMAT	11/01/2012
DINESH PATIL	10/25/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Rambus Inc.
<b>Street Address:</b>	1050 Enterprise Way, Suite 700
<b>City:</b>	Sunnyvale
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94089
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14023970
<b>Application Number:</b>	14683080
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	408-462-8000
<b>Email:</b>	twain@rambus.com
<b>Correspondent Name:</b>	TARISA WAIN
<b>Address Line 1:</b>	1050 ENTERPRISE WAY #700
<b>Address Line 4:</b>	SUNNYVALE, CALIFORNIA 94089
<b>ATTORNEY DOCKET NUMBER:</b>	RA1421.C1.US +1
<b>NAME OF SUBMITTER:</b>	TARISA WAIN
<b>SIGNATURE:</b>	/Tarisa Wain/
<b>DATE SIGNED:</b>	04/13/2015
<b>Total Attachments: 6</b>	

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source=RA1421.Prov1.US Assignment#page5.tif  
source=RA1421.Prov1.US Assignment#page6.tif

## ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to my obligation to Rambus Inc. and/or its affiliates to assign intellectual property, and pursuant to any other applicable agreements regarding the assignment of intellectual property among Rambus Inc. and its affiliates, I, as one of the person(s) named below

**Frederick A. Ware of Los Altos Hills, CA**  
**Amir Amirkhany of Sunnyvale, CA**  
**Suresh Rajan of Fremont, CA**  
**Mohammad Hekmat of Mountain View, CA**  
**Dinesh Patil of Sunnyvale, CA**

have sold, assigned, and transferred and/or I do hereby sell, assign, and transfer to **Rambus Inc., a Delaware corporation having a place of business at 1050 Enterprise Way, Suite 700, Sunnyvale CA 94089** ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. My entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the patent application ("APPLICATION") titled **"Semiconductor Memory Systems With On-Die Data Buffering"**, having:
  - X   United States Patent Application No. **61/714,666**, filed on **October 16, 2012**;
  - which claims priority to U.S. Patent Application No. [Enter APPLICATION NUMBER] filed on [Enter DATE] ; or
  - Application number ( \_\_\_\_\_ ), filed ( \_\_\_\_\_ ), inserted by ( \_\_\_\_\_ ) on ( \_\_\_\_\_ ), initials ( \_\_\_\_\_ )  
[Where I hereby authorize and request ASSIGNEE or its agents to insert here in each parentheses the application number and filing date when known, along with the printed name, date, and signed initials of the person completing this section].
2. The entire worldwide right, title, and interest in and to: (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, utility model, design, divisional, continuation, continued prosecution, continuation-in-part, substitute, renewal, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world related to the SUBJECT MATTER; (d) all patents (including reissues, re-examinations, and extensions) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

I agree that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

As part of this Assignment, I further agree to do the following, when requested, and without further consideration: (1) execute all oaths, declarations, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and

enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests conveyed. I further agree to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

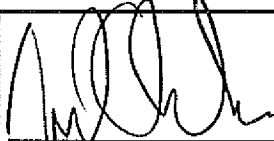
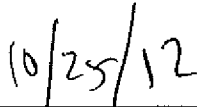

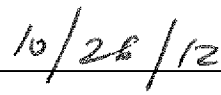

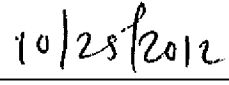
I represent that I had or still have the right, title, and interest to convey as set forth herein, and covenant with ASSIGNEE that I have not made and will not make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests conveyed.

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**Each Inventor: Please Sign and Date Below:**

	
Inventor Name: Frederick A. Ware	Date
Inventor Name: Amir Amirkhany	Date
	
Inventor Name: Suresh Rajan	Date
Inventor Name: Mohammad Hekmat	Date
	
Inventor Name: Dinesh Patil	Date

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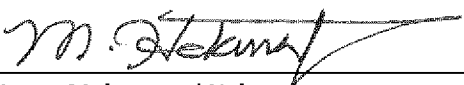
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Inventor Name: Suresh Rajan	Date
 Inventor Name: Mohammad Hekmat	<u>Nov. 1, 2012</u> Date
Inventor Name: Dinesh Patil	Date

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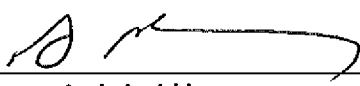
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