#### 503907175 07/08/2016

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3953827

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CARLTON STUEBING	04/10/2007
GUILLAUME BOUCHE	04/10/2007

#### **RECEIVING PARTY DATA**

Name:	QORVO US, INC.
Street Address:	7628 THORNDIKE ROAD
City:	GREENSBORO
State/Country:	NORTH CAROLINA
Postal Code:	27409

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Patent Number:	8525620

#### **CORRESPONDENCE DATA**

**Fax Number:** (877)812-1249

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.

Phone: 9192382300
Email: jalkove@wt-ip.com

Correspondent Name: WITHROW & TERRANOVA, P.L.L.C.

Address Line 1: 106 PINEDALE SPRINGS WAY

Address Line 4: CARY, NORTH CAROLINA 27511

ATTORNEY DOCKET NUMBER:	2867-1816C
NAME OF SUBMITTER:	JENNIFER ALKOVE
SIGNATURE:	/Jennifer Alkove/
DATE SIGNED:	07/08/2016

#### **Total Attachments: 11**

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> PATENT REEL: 039110 FRAME: 0283

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Title:

Improved BAW Resonator Filter Bandwidth and Out-of-Band Frequency

Rejection

Inventors:

Carlton Stuebing and Guillaume Bouche

Filed: Serial Number: April 11, 2007

Client Docket No.:

Unassigned MAXM-464

Attorney Docket No.:

20033-1195

#### ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the individual(s) named below (hereinafter "INVENTOR" whether singular or plural) has sold, assigned, transferred, and set over, and hereby sells, assigns, transfers and sets over, to Maxim Integrated Products, Inc., a corporation of the State of Delaware, having a place of business at 120 San Gabriel Drive, Sunnyvale, CA 94086 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The full and exclusive worldwide right, title, and interest in and to all inventions and improvements ("SUBJECT MATTER") that are disclosed in the U.S. patent application, entitled "IMPROVED RESONATOR FILTER BANDWIDTH AND OUT-OF-BAND FREQUENCY REJECTION" ("APPLICATION"),

☐ which is a provisional application ☐ bearing Application No. ☐ to be filed herewith; or	, and filed on;
·	
which is a non-provisional application	
bearing Application No. <u>₩ / 734</u> ,	100, and filed on 4/11/01;
⊠ to be filed herewith;	
	uted on the same date as this Assignment;
□ having an oath or declaration execu	uted on a different date than this Assignment.

2. The entire worldwide right, title, and interest in and to the APPLICATION and all applications claiming priority to the APPLICATION or having related SUBJECT MATTER to the APPLICATION, including all such utility, divisional, continuation, substitute, renewal, reissue or other related application and all rights of priority in the APPLICATION, together with all rights to recover damages for infringement of provisional rights.

INVENTOR hereby authorizes and requests the Commissioner of the U.S. Patent and Trademark Office, and Patent Office Officials in all foreign countries, to issue to the ASSIGNEE any and all patents which may be granted from the APPLICATION.

INVENTOR will, without further consideration, communicate to the ASSIGNEE any facts know to the INVENTOR regarding the SUBJECT MATTER, testify in any legal proceeding, sign all lawful papers, execute all oaths, assignments, powers of attorney, applications and any other

(20033/1195/00003824.DC)C v13

1 of 4

PATENT **REEL: 019149 FRAME: 0073** 

PATENT

Title:

Improved BAW Resonator Filter Bandwidth and Out-of-Band Frequency

Rejection

Inventors:

Carlton Stuebing and Guillaume Bouche

Filed:

April 11, 2007

Serial Number:

Unassigned MAXM-464

Client Docket No.: Attorney Docket No.:

20033-1195

paper desired by ASSIGNEE to obtain, perfect, or secure to ASSIGNEE any and all of the rights, titles and interests herein conveyed, and to maintain, enforce, and defend these rights, titles and interests in the United States and all foreign countries. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE herein.

INVENTOR represents that the INVENTOR, at the time of the execution of this Assignment, is the sole and lawful owner of the entire rights, titles and interests in and to the SUBJECT MATTER as set forth in the APPLICATION, and that the SUBJECT MATTER is unencumbered, and that the INVENTOR has good and full right and lawful authority to sell and convey the SUBJECT MATTER in the manner herein set forth.

INVENTOR covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR agrees to, and hereby acknowledges, that the ASSIGNEE may apply for and receive patents related to the APPLICATION or SUBJECT MATTER.

INVENTOR grants the attorney of record for the APPLICATION the power to insert on this Assignment any further identification, including the application number and filing date, which may be necessary or desirable to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment. Two inventor/assignor signature blocks are located on the following pages.

(20033/1195/00003824.DQC v1)

2 of 4

PATENT REEL: 019149 FRAME: 0074

**PATENT** 

**REEL: 039110 FRAME: 0286** 

Page 3

Title: Inventors: Filed: Serial Number: Client Decket No.: Attorney Decket No.:	Improved BAW Resonator Filter Bandwidth and Out-of-Band Frequency Rejection Carlton Stuebing and Guillaume Bouche April 11, 2067 Unassigned MAXM-464 20033-1195
•	
INVENTOR Name:	Carlton Stuebing
INVENTOR Address:	13874 NW Greenwood Dr
	Portland, OR 97229
Date of Signature:	4/10/07
	Con Con Street
	[INVENTOR Signature]
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Witnessed By:	List (Ripro)
•	[Print Name]
	Doll
	[WITNESS Signature]
•	
On 4/10/2007 1	personally appeared
[Date]	[Notary Public]
Carlton Streeting	personally known to me or proved to me on the basis of
[INVENTOR] satisfactory evidence to	be the person whose name is subscribed to the within instrument and
acknowledging to me th	at [he/she] executed the same in [his/her] authorized capacity, and that
acted, executed the instr	the instrument the person, or the entity upon behalf of which the person ument
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PATENT **REEL: 019149 FRAME: 0075** 

**PATENT** 

**REEL: 039110 FRAME: 0287** 

Title:

Improved BAW Resonator Filter Bandwidth and Out-of-Band Frequency Rejection

Inventors: Filed: Serial Number: Client Docket No.: Attorney Docket No.:	Carlton Stuebing and Guillaume Bouche Ryrit 11, 2607 Unassigned MAXM-464 20033-1195
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INVENTOR Name: INVENTOR Address:	Guillaume Bouche
MAGNION Address:	2960 SW 122 <sup>nd</sup> Ave
Date of Signature:	Beaverton, OR 97005 0 6 100 7
Sate of Signature,	60 1 5B
	[INVENTOR Signature]
Witnessed By:	[Print Name]  [WITNESS Signature]
On 4 10 2007, be [Date]  Guillower Bouche	efore me
[INVENTOR] satisfactory evidence to i acknowledging to me tha	be the person whose name is subscribed to the within instrument and it [he/she] executed the same in [his/her] authorized capacity, and that the instrument the person, or the entity upon behalf of which the person
NOTAR COMM MY COMMISS	OFFICIAL SEAL ADLEY MCCREARY Y PUBLIC - OREGON MISSION NO. 412943 ON EXPIRES DEC. 27, 2010
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20033/1195/000038Z4.DGC v1}	4 of 4

**PATENT REEL: 019149 FRAME: 0076 RECORDED: 04/11/2007** 

**PATENT** 

**REEL: 039110 FRAME: 0288** 

#### EXHIBIT B

#### PATENT ASSIGNMENT AGREEMENT

WHEREAS. MAXIM INTEGRATED PRODUCTS, INC., having a place of business at 120 San Gabriel Drive, Sunnyvale, CA 94086 (hereinafter "Seller") is the sole and exclusive owner of certain United States and/or foreign patents and/or patent applications listed in Schedule A annexed hereto (collectively referred to as the "Patents"); and

WHEREAS TRIQUINT SEMICONDUCTOR, INC., having a place of business at 2300 NE Brookwood Parkway, Hillsboro, OR, 97124 (hereinafter "Purchaser") is desirous of acquiring the right, title and interest in, to and under the said Patents (and all foreign counterparts and related foreign patents).

Now, Therefore.

For good and valuable consideration, the receipt of which is hereby acknowledged, Seller does hereby sell, assign, transfer and set over to Purchaser, subject to existing encumbrances, the Patents aforesaid, and any inventions claimed in said Patent, any reissue or reissues of said Patents already granted and which may be granted, any certificates of reexamination already granted and which may be granted the same to be held and enjoyed by Purchaser for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, to the end of the term or terms for which said Patents are or may be granted, reissued or extended as fully and entirely as the same would have been held and enjoyed by Seller, if this assignment and sale had not been made; together with all claims for damages by reason of past, current, and future infringement and/or provisional rights under said Patents, with the right to sue for, and collect the same for its own use and behalf, and for the use and behalf of its successors, assigns or other legal representatives.

And, Seller, hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Leners Patents of the United States on said inventions to Purchaser as assignee of the entire interest.

In Witness Whereof, Seller has executed this Assignment by its duly authorized representative.

By: MAXIM INTEGRATED PRODUCTS, INC.

Name: Mary A. Fuller

Title: Executive Director and

Associate General Counsel, IP

Date: October 26, 2010

11

PATENT **REEL: 033828 FRAME: 0236** 

**PATENT** 

#### TRIQUINT - MAXIM CONFIDENTIAL

State of California	V	
County of Santa Clara	anning the state of the state o	
On this 1th day of appeared May f. Fuller.	October	, 2010 before me personall
executed the foregoing instrument willingly and for the purposes the	it, and acknowledged tha	erson described herein and who it he executed the same knowingly and

Witness my hand and Notarial scal the day and year immediately above written.

My Commission Expires: September 22, 2012



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**PATENT REEL: 033828 FRAME: 0237** 

**PATENT** 

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RECORDED: 09/26/2014

PATENT REEL: 033828 FRAME: 0239

Page 1

### Delaware The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"RF MICRO DEVICES, INC.", A NORTH CAROLINA CORPORATION, WITH AND INTO "TRIQUINT SEMICONDUCTOR, INC." UNDER THE NAME OF "QORVO US, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE ON THE FIFTH DAY OF APRIL, A.D. 2016, AT 2:05 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE SECOND DAY OF MAY, A.D. 2016 AT 12:01 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

Authentication: 202097223

Date: 04-05-16

2667283 8100M SR# 20162085825

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware
Secretary of State
Division of Corporations
Delivered 02:05 PM 04/05/2016
FILED 02:05 PM 04/05/2016
SR 20162085825 - File Number 2667283

## CERTIFICATE OF MERGER OF RF MICRO DEVICES, INC. INTO TRIQUINT SEMICONDUCTOR, INC.

Under Sections 55-11-05(a) and 55-11-07(a) of the North Carolina General Statutes and Section 252 of the General Corporation Law of the State of Delaware

TriQuint Semiconductor, Inc. hereby certifies that:

- 1. The name and state of incorporation of each of the constituent corporations are:
  - (a) TriQuint Semiconductor, Inc., a Delaware corporation; and
  - (b) RF Micro Devices, Inc., a North Carolina corporation.
- 2. An Agreement and Plan of Merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the provisions of Sections 55-11-01, 55-11-03, 55-11-05(a) and 55-11-07(a) of the North Carolina General Statutes and Section 252(c)(2) of the General Corporation Law of the State of Delaware.
- 3. The name of the surviving corporation is TriQuint Semiconductor, Inc.
- 4. The certificate of incorporation of the surviving corporation shall be amended by deleting Article I thereof and replacing such Article I with the following:

"The name of this Corporation is: Qorvo US, Inc."

Other than the above-described amendment, the Certificate of Incorporation of the surviving entity shall be that of the surviving entity immediately following the merger in all respects.

- 5. The executed Agreement and Plan of Merger is on file at the surviving corporation's offices located at 2300 N.E. Brookwood Parkway, Hillsboro, Oregon 97124.
- 6. A copy of the Agreement and Plan of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.
- 7. RF Micro Devices, Inc. is authorized to issue 1,000 shares of common stock, no par value per share.
- 8. This Certificate of Merger shall be effective at 12:01 a.m., Eastern Time, on May 2, 2016.

PATENT REEL: 039110 FRAME: 0294

WCSR 34594795v6

IN WITNESS WHEREOF,	TriQuint Se	miconductor, inc.	. has caused	this certificate to be
signed by an authorized officer on	March 30	, 2016.		
		~**		
	TRIGITM	TREMERONINA	CONTRACT INSTA	

Robert A. Bruggeworth, President

[Signature Page to Certificate of Merger (TriQuint Semiconductor, Inc./RF Micro Devices, Inc.)]

PATENT REEL: 039110 FRAME: 0295

**RECORDED: 07/08/2016**