

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K/A
(Amendment No. 1)

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 30, 2018

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For transition period from _____ to _____
Commission File Number: 001-37927

QUANTENNA COMMUNICATIONS, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-1127317
(I.R.S. Employer
Identification Number)

1704 Automation Parkway
San Jose, California 95131
(Address of principal executive offices, including zip code)

(669) 209-5500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common Stock, par value \$0.0001

Name of each exchange on which registered
The NASDAQ Stock Market LLC
(NASDAQ Global Select Market)

Securities registered pursuant to section 12(g) of the Act:

None

Indicate by a check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant, based on the closing price of a share of the registrant's common stock on June 29, 2018 (the last business day of the registrant's most recently completed second fiscal quarter) as reported by the NASDAQ Global Select Market on such date was approximately \$506,823,969.

As of April 25, 2019, 38,547,504 shares of the registrant's common stock, \$0.0001 par value, were outstanding.

EXPLANATORY NOTE

Quantenna Communications, Inc. is filing this Amendment No. 1 to our Form 10-K for the fiscal year ended December 30, 2018, originally filed with the Securities and Exchange Commission on March 1, 2019, for the purpose of providing the information required by Part III, as we do not plan to file our definitive proxy statement for our Annual Meeting of Stockholders within 120 days of the end of our fiscal year ended December 30, 2018. This Amendment No. 1 speaks as of the original filing date of the Form 10-K and reflects only the changes to the cover page, Items 10, 11, 12, 13 and 14 of Part III and Item 15 of Part IV. No other information included in the Form 10-K, including the information set forth in Part I and Part II, has been modified or updated in any way.

We have also included as exhibits the certifications required under Section 302 of The Sarbanes-Oxley Act of 2002. Because no financial statements are contained within this Amendment, we are not including certifications pursuant to Section 906 of The Sarbanes-Oxley Act of 2002.

QUANTENNA COMMUNICATIONS, INC.
FORM 10-K/A
FOR THE YEAR ENDED DECEMBER 30, 2018

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As used in this report, the terms “Quantenna,” “the Company,” “we,” “us” and “our” refer to Quantenna Communications, Inc., unless the context indicates otherwise.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Our business affairs are managed under the direction of our Board of Directors, which is currently composed of seven members. Our Board of Directors has determined that six of our current directors are independent within the meaning of the listing standards of the NASDAQ Stock Market. Our Board of Directors is divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring.

The following table sets forth the names, ages as of March 31, 2019, and certain other information for each of the members of our Board of Directors:

	Age	Position	Director Since	Current Term Expires
Jack Lazar (1)(2)	53	Director	2016	2019
John Scull (3)	62	Director	2014	2019
Mark Stevens (2)(5)	59	Director	2016	2019
Sam Heidari	52	Chairman and Chief Executive Officer	2011	2020
Harold Hughes (4)(5)	73	Director	2014	2020
Glenda Dorchak (6)	64	Director	2018	2021
Edwin (Ned) B. Hooper III (7)	51	Director	2014	2021

(1) Chairperson of our Nominating and Corporate Governance Committee.

(2) Member of our Audit Committee.

(3) Member of our Nominating and Corporate Governance Committee.

(4) Chairperson of our Audit Committee.

(5) Member of our Compensation Committee.

(6) Chairperson of our Compensation Committee.

(7) Lead Independent Director.

Directors

Jack Lazar. Mr. Lazar has served on our Board of Directors since July 2016. Since March 2016, Mr. Lazar has been an independent business and financial consultant. From January 2014 to March 2016, Mr. Lazar served as the Chief Financial Officer at GoPro, Inc., a provider of wearable and mountable capture devices. From January 2013 to January 2014, he was an independent business and financial consultant. From May 2011 to January 2013, Mr. Lazar served as Senior Vice President, Corporate Development and General Manager of Qualcomm Atheros, Inc., a developer of communications semiconductor solutions. From September 2003 until it was acquired by Qualcomm in May 2011, Mr. Lazar served in various positions at Atheros Communications, Inc., a provider of communications semiconductor solutions, most recently as Senior Vice President of Corporate Development, Chief Financial Officer and Secretary. Mr. Lazar has served on the board of directors of Silicon Laboratories Inc., a semiconductor company, since April 2013, Mellanox Technologies, a semiconductor company, since June 2018, and Resideo Technologies, a leading global provider of home comfort and security solutions, since October 2018. Mr. Lazar also served on the board of directors of TubeMogul, Inc., an enterprise software company for digital branding, from October 2013 to December 2016 when it was acquired by Adobe Systems Incorporated. Mr. Lazar is a certified public accountant (inactive) and holds a B.S. in Commerce with an emphasis in Accounting from Santa Clara University.

Mr. Lazar was selected to serve on our Board of Directors because of his strong financial, technological and operational expertise gained from his experience as a technology company executive and consultant.

John Scull. Mr. Scull has served on our Board of Directors since November 2014. Mr. Scull has served as the co-founding managing director of Southern Cross Venture Partners, an Asia-Pac focused technology venture capital firm, since August 2006. Mr. Scull currently serves on the board of directors of Bigtincan Holdings Limited, an Australian public company that provides enterprise mobility software, and a number of privately held companies. Prior to becoming a venture capitalist, Mr. Scull was a marketing executive at Apple, Inc. and then served as the chief executive officer of three venture capital-backed software companies. Mr. Scull holds a B.B.A. in Economics from the University of Oklahoma, and an M.B.A. from Harvard University.

Mr. Scull was selected to serve on our Board of Directors because of his significant strategy and marketing expertise in the technology software markets and his venture capital experience.

Mark Stevens. Mr. Stevens has served on our Board of Directors since July 2016. Mr. Stevens has served as the managing partner of S-Cubed Capital, a private family office investment firm, and as a special limited partner of Sequoia Capital, a venture capital investment firm, in each case since April 2012. From March 1993 to April 2012, Mr. Stevens served as a managing partner of Sequoia Capital. Currently, Mr. Stevens serves as a director of NVIDIA Corporation, a graphics processor company. Mr. Stevens holds a B.S. in Electrical Engineering, a B.A. in Economics and an M.S. in Computer Engineering from the University of Southern California and an M.B.A. from Harvard Business School.

Mr. Stevens was selected to serve on our Board of Directors because of his extensive experience in the venture capital and semiconductor industries.

Sam Heidari. Dr. Heidari has served as our Chief Executive Officer since February 2011, a member of our Board of Directors since March 2011 and Chairman of our Board of Directors since June 2016. From July 2009 to February 2011, Dr. Heidari served as our Vice President of Research and Development. From August 2006 to July 2009, Dr. Heidari served as Chief Technology Officer and Vice President of Engineering at Ikanos Communications, Inc., an advanced semiconductor products and software company. Dr. Heidari currently serves as the chairman of the board of directors of SiTune Corporation, a privately held integrated circuits company, and a member of the board of directors of several other privately held companies. Dr. Heidari holds a B.S. in Electrical Engineering from Northeastern University and an M.S. and Ph.D. in Electrical Engineering from the University of Southern California.

Dr. Heidari was selected to serve on our Board of Directors because of the perspective and experience he provides as our Chief Executive Officer, as well as his extensive experience with technology companies.

Harold Hughes. Mr. Hughes has served on our Board of Directors since October 2014. From March 2014 to October 2015, Mr. Hughes has served as the Chief Executive Officer of Manutius IP, Inc., a patent solutions company. Mr. Hughes served as the Chief Executive Officer and President at Rambus Inc., a semiconductor and IP products company, from January 2005 to June 2012 and served on the board of directors from June 2003 to April 2013. Mr. Hughes served on the board of directors of Planar Systems Inc., a display and digital signage technology company, from February 2014 until it was acquired by Leyard American Corporation in November 2015. Mr. Hughes holds a B.A. in Liberal Arts from the University of Wisconsin and an M.B.A. from the University of Michigan.

Mr. Hughes was selected to serve on our Board of Directors because of his significant business leadership experience in the semiconductor industry.

Glenda Dorchak. Ms. Dorchak has served on our Board of Directors since June 2018. Ms. Dorchak also serves, since 2009, as a member of the board of directors at Mellanox Technologies, Ltd., a supplier of computer networking products, and, since July 2018, serves as a member of the board of directors of Ansys, a supplier of pervasive engineering solutions products. She is also an Operating Advisor to OMERS Private Equity, a private equity investment fund. Until February 2019 she served on the board of Energy Focus. From April 2012 to June 2013, Ms. Dorchak served as EVP and General Manager, Global Business at Spansion Inc., a semiconductor company subsequently acquired by Cypress Semiconductor Corp. From January 2009 to September 2010, when it was acquired by Red Bend Software, Ms. Dorchak was

the Chief Executive Officer and Vice Chairman of VirtualLogix, Inc., a private software company. Ms. Dorchak served as Chairman and Chief Executive Officer of Intrinsic Software International, Inc., a provider of software and engineering services, from July 2006 to November 2008. Ms. Dorchak was with Intel Corporation from 2001 to 2006 in several executive positions including Vice President and Chief Operating Officer for Intel Communications Group, and Vice President and GM of the Broadband Products Group. Her earlier professional experience includes executive roles at management and executive roles with IBM Corporation.

Ms. Dorchak was selected to serve on our Board of Directors because of her executive and director experience in the software and technology industries, including her deep knowledge, experience and understanding of global markets in the technology industry.

Edwin (Ned) B. Hooper III. Mr. Hooper has served on our Board of Directors since October 2014. Since August 2012, Mr. Hooper has served as a founder and managing partner of Centerview Capital Technology Fund (Delaware), L.P., a private investment firm. From February 1998 to July 2012, Mr. Hooper held multiple roles at Cisco Systems, Inc., a producer of networking equipment, including serving as Senior Vice President and Chief Strategy Officer. Mr. Hooper also currently serves on the boards of directors of a number of privately held companies. Mr. Hooper holds a B.A. in International Affairs from the University of Colorado Boulder and an M.B.A. from the University of Virginia Darden Graduate School of Business Administration.

Mr. Hooper was selected to serve on our Board of Directors because of his significant experience in the wireless and networking industry and because of his strategy and business expertise.

Board Meetings and Committees

During our fiscal year ended December 30, 2018, our Board of Directors held eight (8) meetings (including regularly scheduled and special meetings), and each director attended at least 75% of the aggregate of (i) the total number of meetings of our Board of Directors held during the period for which he or she has been a director and (ii) the total number of meetings held by all committees of our Board of Directors during the periods that he or she served.

Although our Corporate Governance Policy and Guidelines does not require each member of our Board of Directors to attend annual meetings of stockholders, we strongly encourage all of our directors to attend. All members of our Board of Directors attended our 2018 Annual Meeting of Stockholders.

Our Board of Directors has established a standing Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The composition and responsibilities of each of the committees of our Board of Directors is described below. Members serve on these committees until their resignation or until otherwise determined by our Board of Directors. Our Board of Directors also has the authority to establish other committees from time to time with the scope and responsibilities of such committee to be defined by the Board of Directors.

Audit Committee

Our Audit Committee is comprised of Messrs. Hughes, Lazar and Stevens, each of whom satisfies the requirements for independence and financial literacy under the applicable rules and regulations of the SEC and listing standards of the NASDAQ Stock Market. Mr. Hughes serves as the chair of our Audit Committee, qualifies as an "Audit Committee financial expert" as defined in the rules of the SEC and determined by our Board of Directors, and satisfies the financial sophistication requirements under the listing standards of the NASDAQ Stock Market. Our Audit Committee is responsible for, among other things:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure and evaluate the independence and performance of the independent registered public accounting firm;

- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent registered public accounting firm, our interim and year-end results of operations;
- developing procedures for employees to submit concerns confidentially and anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing the adequacy and effectiveness of our internal controls;
- reviewing related party transactions; and
- approving or, as required, pre-approving, all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our Audit Committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of the NASDAQ Stock Market. The charter is available on our website at <http://ir.quantenna.com/corporate-governance.cfm>. Our Audit Committee held seven (7) meetings during 2018.

Compensation Committee

Our Compensation Committee is currently comprised of Ms. Dorchak and Messrs. Hughes and Stevens. Ms. Dorchak currently serves as the chair of our Compensation Committee. Each member of our Compensation Committee satisfies the requirements for independence under the applicable rules and regulations of the SEC and listing standards of the NASDAQ Stock Market and is also a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code (the "Code"). Our Compensation Committee is responsible for, among other things:

- reviewing, approving and determining, or making recommendations to our Board of Directors regarding, the compensation of our executive officers;
- administering our equity compensation plans;
- reviewing, approving and making recommendations to our Board of Directors regarding incentive compensation and equity compensation plans; and
- establishing and reviewing general policies relating to compensation and benefits of our employees.

Our Compensation Committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing standards of the NASDAQ Stock Market. The charter is available on our website at <http://ir.quantenna.com/corporate-governance.cfm>. Our Compensation Committee held six (6) meetings during 2018.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee is comprised of Messrs. Lazar, Hooper and Scull, each of whom satisfies the requirements for independence under the applicable rules and regulations of the SEC and listing standards of the NASDAQ Stock Market. Mr. Lazar serves as the chair of our Nominating and Corporate Governance Committee. Our Nominating and Corporate Governance Committee is responsible for, among other things:

- identifying, evaluating and selecting, or making recommendations to our Board of Directors regarding, nominees for election to our Board of Directors and its committees;
- evaluating the performance of our Board of Directors and of individual directors;

- considering and making recommendations to our Board of Directors regarding the composition of our Board of Directors and its committees;
- reviewing developments in corporate governance practices;
- evaluating the adequacy of our corporate governance practices and reporting; and
- developing and making recommendations to our Board of Directors regarding corporate governance guidelines and matters.

Our Nominating and Corporate Governance Committee operates under a written charter that satisfies the applicable listing standards of the NASDAQ Stock Market. The charter is available on our website at <http://ir.quantenna.com/corporate-governance.cfm>. Our Nominating and Corporate Governance Committee held seven (7) meetings during 2018.

Considerations in Evaluating Director Nominees

Our Nominating and Corporate Governance Committee uses a variety of methods for identifying and evaluating director nominees. In its evaluation of director candidates, our Nominating and Corporate Governance Committee will consider the current size and composition of our Board of Directors and the needs of our Board of Directors and the respective committees of our Board of Directors. Some of the qualifications that our Nominating and Corporate Governance Committee considers include, without limitation, issues of character, integrity, judgment, diversity including gender, independence, area of expertise, corporate, industry and eco-system experience, length of service, potential conflicts of interest, availability and other commitments. Nominees must also have the highest personal and professional ethics and integrity, proven achievement and competence in their respective field and the ability to exercise sound business judgment, skills that are complementary to those of the existing Board of Directors, and the ability to assist and support management and make significant contributions to the Company's success. Members of our Board of Directors are expected to prepare for, attend, and participate in all Board of Directors and applicable committee meetings. Other than the foregoing, there are no stated minimum criteria for director nominees, although our Nominating and Corporate Governance Committee may also consider such other factors as it may deem, from time to time, are in our and our stockholders' best interests.

Our Board of Directors believes that our Board of Directors should be a diverse body, and our Nominating and Corporate Governance Committee considers a broad range of backgrounds and experiences. In particular, various forms of diversity, including gender diversity as well as different mixes of skills, experience and perspective, can add meaningful value to corporate boards. Our Nominating and Corporate Governance Committee considers these and other factors as it oversees the annual Board of Directors and committee evaluations. After completing its review and evaluation of director candidates, our Nominating and Corporate Governance Committee recommends to our full Board of Directors the director nominees for selection.

Stockholder Recommendations for Nominations to the Board of Directors

Our Nominating and Corporate Governance Committee will consider candidates for director recommended by stockholders holding at least five percent (5%) of the fully diluted capitalization of our company continuously for at least twelve (12) months prior to the date of the submission of the recommendation, so long as such recommendations comply with our amended and restated certificate of incorporation and amended and restated bylaws and applicable laws, rules and regulations, including those promulgated by the SEC. Our Nominating and Corporate Governance Committee will evaluate such recommendations in accordance with its charter, our amended and restated bylaws, our policies and procedures for director candidates, as well as the regular director nominee criteria described above. This process is designed to ensure that our Board of Directors includes members with diverse backgrounds, skills and experience, including appropriate financial and other expertise relevant to our business. Eligible stockholders wishing to recommend a candidate for nomination should contact our General Counsel or our Legal Department in writing. Such recommendations must include information about the candidate, including the candidate's name, home and business contact information, detailed biographical data and relevant qualifications, a statement of support by the recommending stockholder, evidence of the recommending stockholder's ownership of our common stock and a signed letter from the candidate confirming willingness to serve on our Board of

Directors. Our Nominating and Corporate Governance Committee has discretion to decide which individuals to recommend for nomination as directors.

Communications with the Board of Directors

Interested parties wishing to communicate with our Board of Directors or with an individual member or members of our Board of Directors may do so by writing to our Board of Directors or to the particular member or members of our Board of Directors, and mailing the correspondence to our General Counsel at Quantenna Communications, Inc., 1704 Automation Parkway, San Jose, California 95131. Our General Counsel, in consultation with appropriate members of our Board of Directors as necessary, will review all incoming communications and, if appropriate, all such communications will be forwarded to the appropriate member or members of our Board of Directors, or if none is specified, to the Chairman of our Board of Directors.

Corporate Governance Guidelines and Code of Business Conduct and Ethics

Our Board of Directors has adopted Corporate Governance Guidelines that address items such as the qualifications and responsibilities of our directors and director candidates and corporate governance policies and standards applicable to us in general. In addition, our Board of Directors has adopted a Code of Business Conduct and Ethics that applies to all of our employees, officers and directors. Our Board of Directors has also adopted a Code of Ethics for our Chief Executive Officer and Senior Financial Officers. The full text of our Corporate Governance Guidelines, Code of Business Conduct and Ethics and Code of Ethics for our Chief Executive Officer and Senior Financial Officers is posted on the Corporate Governance portion of our website at <http://ir.quantenna.com/corporate-governance.cfm>. We will post amendments to our Code of Business Conduct and Ethics, Code of Ethics for our Chief Executive Officer and Senior Financial Officers or waivers of the applicable codes for directors, executive officers and senior financial officers on the same website in accordance with applicable requirements.

EXECUTIVE OFFICERS

The following table identifies certain information about our executive officers as of March 31, 2019. Our executive officers are appointed by, and serve at the discretion of, our Board of Directors. There are no family relationships among any of our directors or executive officers.

Name	Age	Position
Sam Heidari	52	Chairman and Chief Executive Officer
Sean Sobers	49	Chief Financial Officer
David Carroll	57	Senior Vice President, Worldwide Sales

For Dr. Heidari's biography, see "Board of Directors and Corporate Governance—Directors."

Sean Sobers. Mr. Sobers has served as our Chief Financial Officer since July 2016. From July 2009 to June 2016, Mr. Sobers served as Corporate Vice President of Finance and Controller at Cadence Design Systems, Inc., an electronic design automation software and engineering services company. Mr. Sobers previously served as Vice President of Finance at Polycom, Inc., a unified communications and collaboration solutions company, Controller of the Software Group at EMC Corporation, a provider of information infrastructure and virtual infrastructure technologies, solutions and services, Controller at Documentum, Inc., an enterprise content management platform prior to its acquisition by EMC Corporation, and auditor at KPMG LLP, a global auditing firm. Mr. Sobers is a certified public accountant (inactive) and holds a B.S. in Accounting from the University of Southern California.

David Carroll. Mr. Carroll has served as our Senior Vice President, Worldwide Sales since January 2016. From January 2013 to January 2016, Mr. Carroll served as our Vice President, Worldwide Sales. From December 2010 to November 2012, Mr. Carroll served as Senior Director, Strategic Sales and Global Account Management at Broadcom

Corporation, a fabless semiconductor company. Mr. Carroll holds a B.S. in Mechanical Engineering from San Diego State University and an M.B.A. from the University of Southern California Marshall School of Business.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires that our executive officers and directors, and persons who own more than 10% of our common stock, file reports of ownership and changes of ownership with the SEC. Such directors, executive officers and 10% stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file.

SEC regulations require us to identify in this report on Form 10-K/A anyone who filed a required report late during the most recent fiscal year. Based on our review of forms we received, or written representations from reporting persons stating that they were not required to file these forms, we believe that during our fiscal year ended December 30, 2018, all Section 16(a) filing requirements were satisfied on a timely basis, with the exception noted below:

- The Company untimely filed a Form 4 on May 18, 2018 for each of Sam Heidari, Dave Carroll and Sean Sobers.

Item 11. EXECUTIVE COMPENSATION

The section below provides information regarding the fiscal 2018 and fiscal 2017 compensation for our named executive officers who consist of our principal executive officer and our two other most highly compensated executive officers who were serving as executive officers as of December 30, 2018.

Process and Procedures for Compensation Decisions

The decisions with respect to fiscal 2018 and fiscal 2017 executive officer compensation, including the compensation of our named executive officers were made by our Compensation Committee, with input from our Chief Executive Officer (except with respect to his own compensation) and Compensia, Inc. (“Compensia”), an independent compensation consultant within the meaning of the rules of the SEC and the NASDAQ Stock Market. Compensia was engaged by our Compensation Committee pursuant to the authority delegated under its charter, and serves at the discretion of the Compensation Committee.

Our Compensation Committee believes our Chief Executive Officer has valuable insight into the day-to-day contributions of our executive officers, and solicits the advice and input from him with respect to performance objectives under our annual bonus plan and target compensation levels for our executive officers, including our named executive officers. Our Chief Executive Officer does not provide input on his own compensation, which is determined by our Compensation Committee, in its discretion. At the request of our Compensation Committee, Compensia provides an assessment of the competitiveness of our executive compensation program as compared with an industry peer group, and our Compensation Committee uses this assessment as one of several factors in approving target levels of compensation for each executive officer. Other factors our Compensation Committee considers in setting executive compensation include one or more of the following: individual performance and skills, management input, internal relative alignment of compensation levels, current and anticipated future contributions to our Company, and the judgment and experience of the members of our Compensation Committee.

Our Compensation Committee makes the final decisions with respect to all executive officer compensation decisions.

Summary Compensation Table

The following table presents information concerning the total compensation of our named executive officers for services rendered to us in all capacities as of December 30, 2018.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation \$(3)	Total (\$)
<i>Sam Heidari,</i> <i>Chairman and Chief Executive Officer</i>	2018	450,000	—	1,175,400	1,236,600	484,014	—	5,500	3,351,514
	2017	330,000	—	1,523,766	1,573,524	101,875	—	43,477	3,572,642
<i>Sean Sobers,</i> <i>Chief Financial Officer</i>	2018	310,000	—	391,800	412,200	204,738	—	3,466	1,322,204
	2017	250,000	—	448,036	462,666	53,125	—	12,516	1,226,343
<i>David Carroll,</i> <i>Senior Vice President,</i> <i>Worldwide Sales</i>	2018	278,000	—	339,560	357,240	222,653	—	3,270	1,200,723
	2017	230,000	—	412,548	426,020	84,375	—	29,254	1,182,197

- (1) The amounts disclosed represent the grant date fair value of the restricted stock units under “Stock Awards” and stock options under “Option Awards” granted to the named executive officers during fiscal 2017 and 2018 as computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in this column are set forth in the notes to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017 and December 30, 2018, respectively.

- (2) The amounts included in this column represent cash incentives earned under our 2017 and 2018 bonus programs, respectively. See “Non-Equity Incentive Plan Compensation” section below for more details.
- (3) Consists of (i) for 2017 and 2018, a Company match of individual contributions to our 401(k) savings plan, subject to certain limitations and applicable vesting requirements, which is offered to all eligible Company employees for 2017, and (ii) for 2017, amounts for accrued paid time off (PTO) paid to employees in connection with a one-time change in the Company's PTO policy.

Named Executive Officer Employment Agreements

Sam Heidari

We entered into an employment letter with Sam Heidari, our Chairman and Chief Executive Officer, dated May 19, 2009, which letter was amended on June 2, 2010 and June 1, 2012. The employment letter has no specific term and provides that Dr. Heidari is an at-will employee. Dr. Heidari's annual base salary in 2017 was \$330,000, which was increased to \$450,000 effective as of January 1, 2018, and will remain unchanged in 2019. Dr. Heidari was also eligible to receive an annual target performance bonus of \$163,000 in 2017, which was increased to \$450,000 effective April 1, 2018 (on a pro-rata basis for 2018), based on achievement of certain performance goals, and will remain unchanged in 2019. Prior to 2017, the performance bonuses were paid on a quarterly basis based on quarterly performance goals. During 2017, the Company partially transitioned the payout of performance bonuses for Dr. Heidari from a quarterly cycle to an annual cycle. For 2018, the performance bonuses were paid on an annual basis. See also “Non-Equity Incentive Plan Compensation” below for more details regarding our bonus program.

Dr. Heidari's employment letter provides that if Dr. Heidari's employment is terminated by us without “cause” (as defined in the employment letter) or Dr. Heidari's employment terminates due to Dr. Heidari's resignation for “good reason” (as defined in the employment letter), then, subject to Dr. Heidari's timely execution and non-revocation of a release of claims in a form prescribed by us, Dr. Heidari will receive the following benefits:

- A lump sum severance payment equal to twelve months of his then-current base salary;
- The ability to exercise each of his then-outstanding and vested stock options until the earlier of (x) three years from his termination date, (y) the original term / expiration date of each option, or (z) the date required by the terms of the equity plan under which such stock option was granted; and
- If the termination is without cause in connection with Dr. Heidari's removal by us from the Chief Executive Officer position or is a resignation for good reason, 25% of the then-unvested shares subject to Dr. Heidari's outstanding equity awards will become fully vested.

Dr. Heidari has entered into a change of control severance agreement with us under which he is eligible to receive enhanced severance benefits in the event of an involuntary termination of his employment with us in connection with a change of control. Please see “Change of Control Severance Agreements and Transition Agreements” below for more details.

Sean Sobers

We entered into an employment letter with Sean Sobers, our Chief Financial Officer, dated July 8, 2016. The employment letter has no specific term and provides that Mr. Sobers is an at-will employee. Mr. Sobers' annual base salary in 2017 was \$250,000, which was increased to \$310,000 effective as of January 1, 2018, and will increase to \$325,000 effective June 1, 2019. Mr. Sobers was also eligible to receive an annual target performance bonus of \$85,000 in 2017, which was increased to \$185,000 effective April 1, 2018 and will increase to \$195,000 on June 1, 2019, (on a pro-rata basis for 2018 and 2019), based on achievement of certain performance goals. Prior to 2017, the performance bonuses were paid on a quarterly basis based on quarterly performance goals. During 2017, the Company partially transitioned the payout of performance bonuses for Mr. Sobers from a quarterly cycle to an annual cycle. For 2018, the performance bonuses were paid on an annual basis. See “Non-Equity Incentive Plan Compensation” below for more details regarding our bonus program.

The employment letter provides that if Mr. Sobers' employment is terminated by us without “cause” (as defined in the employment letter) or Mr. Sobers' employment terminated due to Mr. Sobers' resignation for “good reason” (as defined in

the employment letter), in each case that is not in connection with a change in control (meaning that such termination does not occur within the period 3 months prior to through twelve months following a change in control (as defined in the employment letter)), then, subject to Mr. Sobers' timely execution and non-revocation of a release of claims in a form prescribed by us, Mr. Sobers would receive the following benefits:

- A lump sum severance payment equal to four months of his then-current base salary (prior to any reduction of base salary constituting good reason);
- A lump sum severance payment equal to one-third (1/3) of his then-current annual bonus;
- If the termination occurs within the first twelve months of Mr. Sobers' start date, the option granted to him on July 27, 2016 (the "July 2016 Option") will no longer be subject to the one-year "cliff" vesting requirement described in the "Outstanding Equity Awards at Fiscal Year-End" table below, and instead will be deemed to have vested as to 1/48th of the shares subject to the July 2016 Option for each month from his employment start date; and
- Acceleration of vesting of each of Mr. Sobers' then-outstanding stock options other than the July 2016 Option as to the number of shares subject to each such option that would have otherwise vested in the four months after his termination of employment.

Mr. Sobers has entered into a change of control severance agreement with us under which he is eligible to receive enhanced severance benefits in the event of an involuntary termination of his employment with us in connection with a change of control and which supersedes the applicable provisions under his employment letter. Please see "Change of Control Severance Agreements and Transition Agreements" below for more details. His employment agreement also provided for severance benefits upon a termination without cause or resignation for good reason, in each case that occurred within the period 3 months prior to through twelve months following a change in control; however, the employment agreement specifies that these provisions are intended to be superseded and replaced by the terms of his change of control severance agreement.

David Carroll

We entered into an employment letter with David Carroll, our Senior Vice President, Worldwide Sales, dated December 20, 2012. The employment letter has no specific term and provides that Mr. Carroll is an at-will employee. Mr. Carroll's annual base salary in 2017 was \$230,000, which was increased to \$278,000 effective as of January 1, 2018 and will increase to \$290,000 effective June 1, 2019. Mr. Carroll was also eligible to receive an annual target performance bonus of \$135,000 in 2017, which was increased to \$187,000 effective April 1, 2018 and will increase to \$232,000 on June 1, 2019 (on a pro-rata basis for 2018 and 2019), based on achievement of certain performance goals. Prior to 2017, the performance bonuses were paid on a quarterly basis based on quarterly performance goals. During 2017, the Company partially transitioned the payout of performance bonuses for Mr. Carroll from a quarterly cycle to an annual cycle. For 2018, the performance bonuses were paid on an annual basis. See "Non-Equity Incentive Plan Compensation" below for more details regarding our bonus program.

The employment letter provides that if Mr. Carroll's employment is terminated by us without cause, then, Mr. Carroll will receive a lump sum severance payment equal to six months of his then-current base salary.

Mr. Carroll has entered into a change of control severance agreement with us under which he is eligible to receive enhanced severance benefits in the event of an involuntary termination of his employment with us in connection with a change of control and which supersedes the applicable provisions under his employment letter. Please see "Change of Control Severance Agreements and Transition Agreements" below for more details.

Non-Equity Incentive Plan Compensation

2018 Executive Bonus Plan

Each named executive officer was awarded cash bonus amounts pursuant to our 2018 Executive Bonus Plan under our Executive Incentive Compensation Plan (the "Umbrella Bonus Plan"), which was originally adopted by our Board of

Directors in October 2016. The 2018 Executive Bonus Plan was based on attainment of certain financial performance targets representing 100% of the overall cash bonus target that was established by our Compensation Committee at the beginning of the fiscal year, with input from our management team. The financial performance goals were based on achievement of certain revenue, non-GAAP gross margin and non-GAAP operating margin targets. Under the terms of the Umbrella Bonus Plan, our Compensation Committee also has the authority, in its sole discretion, to increase, reduce or eliminate any participant's actual award.

In 2018, the performance bonuses were paid on an annual basis based on actual performance.

Following the end of fiscal 2018, the Compensation Committee, with input from our management team, reviewed the achievement of the 2018 financial and corporate performance targets and determined the percentage of the annual bonus target amount to be paid out based on achievement against those performance goals. For 2018, the overall achievement of the financial performance targets was 128%.

The amounts in the Summary Compensation Table for 2018 under the column "Non-Equity Incentive Plan Compensation" are based on the achievements under the 2018 Executive Bonus Plan.

2017 Executive Bonus Plan

Each named executive officer was awarded cash bonus amounts pursuant to our 2017 Executive Bonus Plan under our Umbrella Bonus Plan. The 2017 Executive Bonus Plan was based on attainment of certain financial performance targets representing 70% of the overall cash bonus target, and corporate performance targets representing 30% of the overall cash bonus target, in each case that were established by our Compensation Committee at the beginning of the fiscal year, with input from our management team. The financial performance goals were based on achievement of certain revenue, non-GAAP gross margin and non-GAAP operating margin targets. The corporate goals were based on key strategic goals, including various sales and engineering performance milestones. The 2017 Executive Bonus Plan also included an overall individual performance multiplier equal to an increase or decrease of up to 20% at the discretion of the Compensation Committee on an individual basis. Under the terms of the Umbrella Bonus Plan, our Compensation Committee also has the authority, in its sole discretion, to increase, reduce or eliminate any participant's actual award.

During 2017, the Company partially transitioned the payout of performance bonuses for each of the named executive officers from a quarterly cycle to an annual cycle. For each of the first and second quarters of fiscal 2017, 20% of their respective annual bonus target amount was paid to each of the named executive officers.

Following the end of fiscal 2017, the Compensation Committee, with input from our management team, reviewed the achievement of the 2017 financial and corporate performance targets and determined the percentage of the annual bonus target amount to be paid out based on achievement against those performance goals. The Compensation Committee also considered whether to apply an individual performance multiplier or make other adjustments within its authority. For 2017, the overall achievement of the financial and corporate performance targets was 62.5% and no individual performance multiplier or other adjustment was applied to any named executive officer. The balance of the 2017 annual bonus target amounts (less the amounts already paid during the first and second quarters of fiscal 2017) was paid following the end of fiscal 2017 based on achievement of the financial and corporate performance targets as approved by the Compensation Committee.

The amounts in the Summary Compensation Table for 2017 under the column "Non-Equity Incentive Plan Compensation" are based on the achievements under the 2017 Executive Bonus Plan.

Change of Control Severance Agreements and Transition Agreements

Sam Heidari, David Carroll and Sean Sobers

Each of Dr. Heidari and Messrs. Carroll and Sobers has previously entered into a change of control severance agreement with us, as amended. These agreements have a five-year term from the agreement date and renew automatically for additional, one-year terms unless either party provides the other party with written notice of non-renewal at least six

months prior to the date of automatic renewal. However, the term will automatically extend in certain circumstances, including that if a change of control occurs when there are fewer than 12 months remaining during the applicable term, each agreement's term automatically will be extended through the 12-month anniversary of the change of control. Under these agreements, if, within the period beginning three months prior to and ending 12 months following a "change of control" (as such term is defined in the applicable agreement), the executive officer's employment with us is terminated by us for reasons other than "cause" or by him for "good reason" (as such terms are defined in the applicable executive's agreement), then, subject to the affected executive's timely execution and non-revocation of a release of claims in a form prescribed by us, such executive officer will receive the following benefits:

- a lump sum severance payment equal to 12 months of his then-current base salary;
- a lump sum severance payment equal to 100% of his target bonus for the year of termination;
- Company-reimbursed premiums for continued health care coverage under COBRA for up to 12 months for the executive officer and his eligible dependents or, if the Company determines that it cannot provide the COBRA premium benefits without potentially violating applicable laws, a lump sum payment equal to 12 months of COBRA premiums for the executive officer and his eligible dependents; and
- 100% of shares subject to all outstanding equity awards with time-based vesting will become fully vested, and, for any outstanding equity awards with performance-based vesting, the performance metrics will be deemed achieved at target levels.

The change of control severance agreements control with respect to terminations of employment occurring during the period beginning on a change of control and ending 12 months following a change of control. Prior to a change of control, the severance provisions of the applicable executive officer's employment agreement will apply in accordance with their terms. If an executive officer receives severance payment or benefits under his employment agreement or another agreement with us and a change of control occurs during the three-month period following his termination of employment entitling him to severance payments or benefits under this agreement, the executive officer will stop receiving any severance payments or benefits under his employment agreement and the payments and benefits previously paid under that agreement will offset the corresponding payments or benefits under the change of control severance agreement, unless otherwise expressly set forth in writing in the applicable employment agreement or other agreement with the applicable executive officer.

In the event any of the payments provided for under these agreements or otherwise payable to an executive officer would constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code (the "Code") and could be subject to the related excise tax under Section 4999 of the Code, such executive officer would be entitled to receive either full payment of benefits or such lesser amount which would result in no portion of the benefits being subject to the excise tax, whichever results in the greater amount of after-tax benefits to him.

2016 Omnibus Equity Incentive Plan, 2016 Equity Incentive Plan and 2006 Stock Plan

Our 2016 Plan and our 2016 Equity Incentive Plan (the "2016 EIP"), each provide that in the event of a merger or change in control, as defined under the applicable Plan, each outstanding award will be treated as the administrator determines, without a participant's consent. The administrator is not required to treat all awards, all awards held by a participant, or all awards of the same type, similarly.

In the event that a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse and all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels. In this event, each such award will become fully exercisable, if applicable, for a specified period prior to the transaction, unless specifically provided for otherwise under the applicable award agreement or other written agreement with the participant. The award will then terminate upon the expiration of the specified period of time. If an option or stock appreciation right is not assumed or substituted, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period.

Our 2006 Stock Plan (the “2006 Plan”), similarly provides that, in the event that we are a party to a merger or change in control, outstanding awards may be assumed or substituted by the successor corporation or a parent or subsidiary thereof. In the event the successor corporation refuses to assume or substitute for an award, then such award will become fully vested and exercisable, including shares as to which such award would not otherwise be vested or exercisable, and restrictions on restricted stock will lapse. If an award becomes fully vested and exercisable in lieu of assumption or substitution, the administrator will notify the participant in writing or electronically that the award will be fully vested and exercisable for a period of time as determined by the administrator and that the award will terminate upon the expiration of such period for no consideration, unless otherwise determined by the administrator.

Under our 2016 Plan, in the event of a change in control, each outstanding equity award granted under the plan that is held by a non-employee director will fully vest, all restrictions on the shares subject to such award will lapse, and with respect to awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels, and all of the shares subject to such awards will become fully exercisable, if applicable, unless specifically provided otherwise under the applicable award agreement or other written agreement with the director.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding stock options held by our named executive officers at December 30, 2018:

Name	Grant Date	Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable(#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares of Stock That Have Not Vested	Market Value of Shares of Stock That Have Not Vested (\$) (1)
Sam Heidari	07/28/2009	—	—	2.50	07/28/2019	—	—
	05/18/2010	—	—	1.00	05/18/2020	—	—
	02/01/2011	25,200	—	1.00	02/01/2021	—	—
	10/07/2011	74,991	—	1.00	10/07/2021	—	—
	06/27/2012	416,985	—	1.50	06/27/2022	—	—
	08/28/2013	130,000	—	1.50	08/28/2023	—	—
	12/10/2014	(2) 414,623	—	2.00	12/10/2024	—	—
	06/30/2016	(3) 112,501	67,499	8.50	06/30/2026	—	—
	02/15/2017	(4) 78,718	93,032	22.18	02/15/2027	—	—
	02/15/2017	(5) —	—	—	—	42,937	607,129
	1/10/2018	(11) —	225,000	13.06	1/10/2028	—	—
1/10/2018	(12) —	—	—	—	78,750	1,113,525	
Sean Sobers	07/27/2016	(6) 168,043	117,905	9.00	07/27/2026	—	—
	02/15/2017	(4) 23,145	27,355	22.18	02/15/2027	—	—
	02/15/2017	(5) —	—	—	—	12,625	178,517
	1/10/2018	(11) —	75,000	13.60	11 1/10/2028	—	—
	1/10/2018	(12) —	—	—	—	26,250	371,175
David Carroll	02/05/2013	(7) 20,929	—	1.50	02/05/2023	—	—
	12/10/2014	(8) 125	—	2.00	12/10/2024	—	—
	12/03/2015	(9) 272	1,872	3.00	12/03/2025	—	—
	06/30/2016	(3) 18,967	13,871	8.50	06/30/2026	—	—
	02/15/2017	(4) 21,312	25,188	22.18	02/15/2027	—	—
	02/15/2017	(5) —	—	—	—	11,625	164,377
	1/10/2018	(11) —	65,000	13.06	1/10/2028	—	—
	1/10/2018	(12) —	—	—	—	22,750	326,463

- (1) This column represents the market value of the shares underlying the restricted stock units, or RSUs, as of December 30, 2018, based on the closing price of our common stock, as reported on the NASDAQ Stock Market, of \$14.14 per share on December 28, 2018.
- (2) One-fourth (1/4) of the shares subject to the option vested on December 10, 2015, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (3) One-fourth (1/4) of the shares subject to the option vested on June 30, 2017, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (4) One-fourth(1/4) of the shares subject to the option will vest on February 20, 2018, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service on each such vesting date.
- (5) One-eighth (1/8) of the shares subject to the restricted stock units vested on August 20, 2017 and each six-month anniversary thereafter, subject to continued service on each such vesting date.
- (6) One fourth (1/4) of the shares subject to the option vested on July 25, 2017, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (7) One fourth (1/4) of the shares subject to the option vested on January 7, 2014, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (8) One fourth (1/4) of the shares subject to the option vested on December 10, 2015, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (9) One fourth (1/4) of the shares subject to the option shall vest on December 3, 2016, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service to us on each such vesting date.
- (10) One fourth (1/4) of the shares subject to the option vested on June 30, 2017, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service on each such vesting date.
- (11) One fourth (1/4) of the shares subject to the option shall on January 10, 2019, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service on each such vesting date.
- (12) One eighth (1/8) of the shares subject to the award vested on August 20, 2018, and one eighth (1/8) of the shares vest quarterly thereafter, subject to continued service on each such vesting date.

Pension Benefits and Non-qualified Deferred Compensation

We do not sponsor any pension plans for our employees, and none of our named executive officers participated in a non-qualified deferred compensation plan in fiscal 2018.

401(k) Plan

We offer eligible employees the opportunity to participate in a tax-qualified retirement plan, or the 401(k) plan, that provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. Eligible employees are able to participate in the 401(k) plan upon satisfying the 401(k) plan's eligibility requirements, and participants are able to defer up to 100% of their eligible compensation subject to applicable annual Code limits. All participants' interests in their deferrals are 100% vested when contributed. The 401(k) plan permits us to make profit sharing contributions to eligible participants, although we have not made any such contributions to date. Effective July 1, 2016, we implemented a matching contribution program pursuant to which we match 100% of contributions up to one percent (1%) of eligible compensation for each plan participant for 2016 and up to two percent (2%) of eligible compensation for each 401(k) plan participant beginning in 2017, in each case, subject to vesting over four years from each such participant's date of employment.

Compensation Committee Report

The Compensation Committee has reviewed and discussed the section titled "Executive Compensation" with management. Based on such review and discussion, the Compensation Committee has recommended to the Board of Directors that the section titled "Executive Compensation" be included in this report on Form 10-K/A.

Respectfully submitted by the members of the Compensation Committee of the Board of Directors:

Glenda Dorchak (Chair)
Harold Hughes
Mark Stevens

Non-Employee Director Compensation

Outside Director Compensation Policy

Members of our Board of Directors who are not employees are eligible for compensation under our Outside Director Compensation Policy, which became effective on October 27, 2016, the date of the effectiveness of the registration statement in connection with our initial public offering. Under our Outside Director Compensation Policy, each non-employee director is entitled to receive compensation for his or her service consisting of annual cash retainers and equity awards as described below. Our outside director compensation policy was crafted in consultation with Compensia, Inc. (“Compensia”), an independent consultant. Compensia provided us with competitive data, analysis and recommendations regarding non-employee director compensation. After careful consideration of this information and the scope of the duties and responsibilities of our non-employee directors, our Compensation Committee and our Board of Directors approved our outside director compensation policy, which we believe provides reasonable compensation to our non-employee directors that is commensurate with their contributions and appropriately aligned with our peers. Our Board of Directors and our Compensation Committee will have the discretion to revise non-employee director compensation as they deem necessary or appropriate.

Cash Compensation. Under our Outside Director Compensation Policy, all non-employee directors are entitled to receive the following cash compensation for their services:

- \$35,000 per year for service as a board member;
- \$20,000 per year additionally for service as lead independent director of the board;
- \$15,000 (\$20,000, effective as of April 1, 2019) per year additionally for service as chair of the Audit Committee;
- \$7,500 (\$10,000 effective as of April 1, 2019) per year additionally for service as an Audit Committee member other than chair;
- \$10,000 (\$11,000 effective as of April 1, 2019) per year additionally for service as chair of the Compensation Committee;
- \$5,000 (\$6,000 effective as of April 1, 2019) per year additionally for service as a Compensation Committee member other than chair;
- \$5,000 (\$8,000 effective as of April 1, 2019) per year additionally for service as chair of the Nominating and Corporate Governance Committee; and
- \$2,500 (\$5,000 effective as of April 1, 2019) per year additional for services as a Nominating and Corporate Governance Committee member other than chair.

All cash payments to non-employee directors are paid quarterly in arrears on a prorated basis to each non-employee director who served in the relevant capacity at any point during the immediately preceding fiscal quarter.

Each non-employee director is also entitled to reimbursement by the Company of reasonable, customary and properly documented travel expenses to attend meetings of the Board of Directors and committees thereof.

Equity Compensation. Under our Outside Director Compensation Policy, nondiscretionary, automatic grants of restricted stock units are made to our non-employee directors as described below.

Non-employee directors are eligible to receive all types of equity awards (except incentive stock options) under our 2016 Omnibus Equity Incentive Plan (the “2016 Plan”) (or the applicable equity plan in place at the time of grant) including discretionary awards not covered under our Outside Director Compensation Policy. All grants of awards under our Outside Director Compensation Policy will be automatic and nondiscretionary.

Initial Award. Each person who first becomes a non-employee director after October 27, 2016, the effective date of our Outside Director Compensation Policy, will be granted a restricted stock unit award having a grant date value equal to \$270,000 (the “Initial Award”). The Initial Award automatically will be granted on the date on which such person first becomes a non-employee director. A director who is an employee who ceases to be an employee director but who remains a director will not receive an Initial Award.

If the Initial Award is granted in connection with our annual stockholder meeting, then, subject to the non-employee director continuing to serve as a director through each applicable vesting date, one-third of the shares subject to the Initial Award shall vest on the one-year anniversary of the date of grant (and if there is no corresponding day, on the last day of the month), or, if earlier, on the day prior to the first annual meeting of stockholders following the date of grant, an additional one-third of the shares subject to such Initial Award will vest on the two-year anniversary of the date of grant (and if there is no corresponding day, on the last day of the month), or, if earlier, on the day prior to the second annual meeting of stockholders following the date of grant, and the final one-third of the shares subject to such Initial Award will vest on the three-year anniversary of the date of grant (and if there is no corresponding day, on the last day of the month), or, if earlier, the day prior to the third annual meeting of stockholders following the date of grant.

If the Initial Award is granted not in connection with an annual meeting of stockholders, then, subject to the non-employee director continuing to serve as a director through each applicable vesting date, one-third of the shares subject to such Initial Award will vest on each annual anniversary of the date of grant thereafter (and if there is no corresponding day, on the last day of the month).

Annual Awards. On the date of each annual meeting of stockholders beginning with the upcoming Annual Meeting following the effective date of our Outside Director Compensation Policy, each non-employee director, if he has served as a director since the previous annual meeting of stockholders, will automatically be granted a restricted stock unit award having a grant date value equal to \$135,000 (the “Annual Award”); provided that any non-employee director who is not continuing as a director following the applicable annual meeting will not receive an Annual Award with respect to such annual meeting. If, as of the date of an annual meeting of stockholders, a non-employee director had not been a non-employee director as of the previous annual meeting of stockholders, then he or she will not be granted a full Annual Award and instead will automatically be granted a prorated Annual Award, or Pro Rata Annual Award, with a total value equal to the result of (x) \$135,000 multiplied by (y) a fraction (i) the numerator of which is the number of months he or she has served as a non-employee director (which will not exceed 12) and (ii) the denominator of which is 12. Any non-employee director who is not continuing as a director following the applicable annual meeting of stockholders will not receive an Annual Award or Pro-Rata Annual Award with respect to such annual meeting of stockholders. Each Annual Award and Pro-Rata Annual Award will vest as to 100% of the shares subject thereto upon the earlier of the one-year anniversary of the grant date or the day prior to our next annual meeting occurring after the grant date, subject to the individual’s continued service as a director through the applicable vesting date. In the event that the Annual Meeting has been deferred until substantially later in the year, the Compensation Committee shall be entitled to grant each non-employee director an annual award consistent with the foregoing terms (and in lieu of such award when such Annual Meeting is ultimately held later in the year) on or about the same timeframe as the Company’s Annual Meeting would have typically occurred.

The value of all equity awards granted under our Outside Director Compensation Policy will be determined using the fair market value of the shares as of the date of grant (or such other methodology as our Board of Directors or our Compensation Committee may determine prior to the grant of the awards becoming effective, as applicable).

Our 2016 Plan provides that in the event of a change in control, as defined in our 2016 Plan, each outstanding equity award granted under our 2016 Plan to a non-employee director will fully vest, all restrictions on the shares subject to such award will lapse, and with respect to awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels, and all of the shares subject to such award will become fully exercisable, if applicable, unless specifically provided otherwise under the applicable award agreement or other written agreement with the director.

In order to provide a maximum limit on the awards that can be made to our outside directors, our Plan provides that in any given fiscal year, an outside director will not be granted awards having a grant-date fair value greater than \$810,000, but this limit is increased to \$1,350,000 in connection with his or her initial service. The grant-date fair values for this

purpose will be determined according to U.S. generally accepted accounting principles. The maximum limits do not reflect the intended size of any potential grants or a commitment to make grants to our outside directors under our Plan in the future.

Compensation for Fiscal Year 2018

The following table provides information regarding the total compensation that was granted to each of our non-employee directors in our fiscal year ended December 30, 2018.

Director	Fees Earned or Paid in Cash (\$)	Stock Awards(\$)⁽¹⁾	Total Compensation
Glenda Dorchak (2)	24,665	269,986	294,651
Edward Frank (3)	27,161	134,985	162,146
Edwin (Ned) B. Hooper III	56,541	134,985	191,526
Harold Hughes	51,808	134,985	186,793
Jack Lazar	46,727	134,985	181,712
John Scull	37,500	134,985	172,485
Mark Stevens	47,500	134,985	182,485
Lip-Bu Tan (4)	17,556	-	17,556

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- (1) The amounts reported represent the aggregate grant-date fair value of the restricted stock units awarded to the non-employee directors, calculated in accordance with the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718. The assumptions used in calculating the grant-date fair value of the restricted stock units reported in this column are set forth in Note 10 to our audited consolidated financial statements included in our Annual Report on Form 10-K, as filed with the SEC on March 1, 2019.
 - (2) Ms. Dorchak joined the Board of Directors on June 5, 2018.
 - (3) The stock awards granted to Mr. Frank in our fiscal year ended December 30, 2018 reflected in the above table (and prior unvested equity awards) were automatically cancelled in connection with his resignation.
 - (4) Mr. Tan resigned from the Board of Directors on June 5, 2018.

The following table provides information regarding aggregate number of shares subject to outstanding equity awards held by non-employee directors as of December 30, 2018.

Name	Option Awards						Stock Awards	
	Grant Date		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price \$(1)	Option Expiration Date	Number of Shares of Stock that Have Not Vested	Market Value of Shares of Stock that Have Not Vested \$(2)
Glenda Dorchak	6/5/2018	(3)	—	—	—	—	16,635	235,219
Edwin (Ned) B. Hooper III	6/5/2018	(4)	—	—	—	—	8,317	117,602
Harold Hughes	10/16/2014	(5)	64,000	—	\$2.00	10/16/2024	—	—
	6/30/2016	(6)	8,000	—	\$8.50	6/30/2026	—	—
	6/5/2018	(4)	—	—	—	—	8,317	117,602
Jack Lazar	7/13/2016	(7)	72,000	—	\$8.50	7/13/2026	—	—
	6/5/2018	(4)	—	—	—	—	8,317	117,602
	6/5/2018	(4)	—	—	—	—	8,317	117,602
Mark Stevens	7/13/2016	(7)	72,000	—	\$8.50	7/13/2026	—	—
	6/5/2018	(4)	—	—	—	—	8,317	117,602

- (1) The column represents the fair market value of our common stock on the date of grant as determined by our Board of Directors.
- (2) This column represents the market value of the shares underlying the RSUs or restricted stock as of December 30, 2018, based on the closing price of our common stock, as reported on the NASDAQ Stock Market, of \$14.14 per share on December 28, 2018.
- (3) One-third of the RSUs will vest on the one-year anniversary of the date of grant, or if earlier, on the day prior to the Company's next annual meeting of stockholders occurring after the grant date, subject to continued service as of the applicable vesting date. An additional one-third (1/3rd) of the shares shall vest on the two-year anniversary of the date of grant, or, if earlier, on the day prior to the second (2nd) Annual Meeting following the date of grant. The final one-third (1/3rd) of the shares shall vest on the three-year anniversary of the date of grant, or if earlier, on the day prior to the third (3rd) Annual Meeting.
- (4) 100% of the RSUs will vest upon the earlier of the one (1) year anniversary of the grant date or the day prior to the Company's next annual meeting of stockholders occurring after the grant date, in each case, subject to continued service as of the applicable vesting date.
- (5) One forty-eighth (1/48) of the shares subject to the option vested on October 16, 2014, and one forty-eighth (1/48) of the shares vest monthly thereafter, subject to continued service on each such vesting date.
- (6) This option is subject to an early exercise provision and is immediately exercisable. One thirty-sixth (1/36) of the shares subject to the option vest monthly commencing on June 30, 2016, and one thirty-sixth (1/36) of the shares vest monthly thereafter, subject to continued service on each such vesting date.
- (7) This option is subject to an early exercise provision and is immediately exercisable. One thirty-sixth (1/36) of the shares subject to the option vest monthly commencing on July 6, 2016, and one thirty-sixth (1/36) of the shares vest monthly thereafter, subject to continued service on each such vesting date.

Directors who are also our employees receive no additional compensation for their service as directors. During the fiscal year ended December 30, 2018, Dr. Heidari was our only employee director. See the section titled "Executive Compensation" for additional information about Dr. Heidari's compensation.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

EQUITY COMPENSATION PLAN INFORMATION

The following table summarizes our equity compensation plan information as of December 30, 2018. Information is included for equity compensation plans approved by our stockholders. We do not have any equity compensation plans not approved by our stockholders.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted Average Exercise Price of Outstanding Options, Warrants and Rights ⁽¹⁾	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by stockholders(1)	6,280,583	\$ 8.27	2,543,188
Equity compensation plans not approved by stockholders	—	—	—
Total	6,280,583	\$ 8.27	2,543,188

(1) Includes our 2006 Stock Plan, 2016 Equity Incentive Plan and the 2016 Omnibus Equity Incentive Plan. The 2016 Omnibus Equity Incentive Plan contains an “evergreen” provision, pursuant to which the number of shares of common stock reserved for issuance pursuant to awards under such plan shall be increased on the first day of each year beginning in 2018, equal to the least of (i) 3,400,000 shares, (ii) 5.0% of the shares of common stock outstanding on the last day of the immediately preceding fiscal year, or (iii) such number as determined by the plan administrator. As of January 1, 2018, the 2016 Omnibus Equity Incentive Plan was increased by 1,776,444 shares pursuant to such evergreen provision.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our capital stock as of March 31, 2019 for:

- each of our named executive officers,;
- each of our directors;
- all of our current directors and executive officers as a group; and
- each person known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

We have based our calculation of the percentage of beneficial ownership on 38,473,343 shares of our common stock outstanding as of March 31, 2019. In accordance with SEC rules, we have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of March 31, 2019 and shares of our common stock underlying RSUs that are currently releasable or releasable within 60 days of March 31, 2019 to be outstanding and to be beneficially owned by the person holding the common stock options or RSUs for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Quantenna Communications, Inc., 1704 Automation Parkway, San Jose, California 95131. The information provided in the table is based on our records, information filed with the SEC and information provided to us, except where otherwise noted.

<u>Name of Beneficial Owner</u>	<u>Shares Beneficially Owned</u>	
	<u>Number</u>	<u>Percent</u>
Named Executive Officers and Directors		
Sam Heidari ⁽¹⁾	1,380,844	3.47%
Sean Sobers ⁽²⁾	283,018	*
David Carroll ⁽³⁾	53,612	*
Glenda Dorchak	—	*
Edwin (Ned) B. Hooper III ⁽⁴⁾	56,693	*
Harold Hughes ⁽⁵⁾	79,127	*
Jack Lazar ⁽⁶⁾	93,616	*
John Scull ⁽⁷⁾	1,734,561	4.51%
Mark Stevens ⁽⁸⁾	145,908	*
All executive officers and directors as a group (9 persons) ⁽⁹⁾	3827,379	9.51%
5% Stockholders		
BlackRock, Inc. ⁽¹⁰⁾	2,252,719	5.86%
JPMorgan Chase & Co. ⁽¹¹⁾	2,089,649	5.43%
Entities affiliated with DAG Ventures ⁽¹²⁾	1,970,342	5.12%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of our common stock.

(1) Consists of (i) 103,176 shares held of record by Dr. Heidari and (ii) 1,277,668 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019.

(2) Consists of (i) 30,540 share held of record by Mr. Sobers and (ii) 252,478 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019.

(3) Consists of (i) 17,560 shares held of record by Mr. Carroll and (ii) 36,052 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019.

(4) Consists of (i) 23,100 shares held of record by Mr. Hooper and (ii) 33,593 shares held by Centerview Capital Technology Employee Fund, L.P., (“Centerview”). Mr. Hooper is a managing partner of Centerview and shares voting and investment power with respect to the shares held by Centerview. The address for Centerview is 64 Willow Place, Suite 101, Menlo Park, California 94025.

(5) Consists of (i) 7,127 shares held of record by Mr. Hughes and (ii) 72,000 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019, of which 222 shares are unvested and subject to a right of repurchase by us, if Mr. Lazar does not satisfy such option’s vesting requirements.

(6) Consists of (i) 21,616 shares held of record Mr. Lazar and (ii) 72,000 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019, of which 4,000 shares are unvested and subject to a right of repurchase by us, if Mr. Lazar does not satisfy such option’s vesting requirements.

(7) Consists of (i) 7,127 shares held of record by Mr. Scull and (ii) 1,727,434 shares held by Southern Cross Venture Partners Management Pty Ltd as trustee for Southern Cross Fund No 1 Trust (“Southern Cross”). Mr. Scull is a director of Southern Cross Venture Partners Pty Ltd and shares voting and investment power with respect to the shares held by Southern Cross Venture Partners Management Pty Ltd as trustee for Southern Cross Fund No 1 Trust. The address for Southern Cross is 80 Mount Street, Level 7, North Sydney, NSW, Australia, 2060.

(8) Consists of (i) 58,908 shares held of record by Mr. Stevens, (ii) 15,000 shares purchased in our directed share program at the closing of our initial public offering by S-Cubed Capital (“SCC”), of which Mr. Stevens is the managing partner and has voting and investment power with respect to the shares held by SCC and (iii) 72,000 shares subject to equity awards exercisable or releasable within 60 days of March 31, 2019, of which 4,000 shares are unvested and may be acquired upon early exercise, subject to a right of repurchase by us, if Mr. Stevens does not satisfy such option’s vesting requirements.

(9) Consists of (i) 2,045,181 shares held by our current directors and executive officers and (ii) 1,782,198 shares subject to equity awards held by our current directors and executive officers and exercisable or releasable within 60 days of March 31, 2019.

- (10) According to a Schedule 13G filed with the SEC on February 8, 2019, the shares consist of 2,252,719 shares held by BlackRock, Inc. (“BlackRock”). Of the shares of our common stock that BlackRock beneficially owned, BlackRock reported that it has sole voting power with respect to 2,185,854 shares of our common stock and sole dispositive power with respect to 2,252,719 shares of our common stock. The address of BlackRock is 55 East 52nd Street, New York, New York 10055.
- (11) According to a Schedule 13G filed with the SEC on January 14, 2019, the shares consist of 2,089,649 shares held by JPMorgan Chase & Co and its wholly-owned subsidiaries, J.P. Morgan Investment Management Inc. and JPMorgan Chase Bank, National Association (together, “JPMorgan”). Of the shares of our common stock that JPMorgan beneficially owned, JPMorgan reported that it has sole voting power with respect to 1,884,255 shares of our common stock and sole dispositive power with respect to 2,089,649 shares of our common stock. The address of JPMorgan is 270 Park mer Avenue, New York, New York 10017.
- (12) According to a Schedule 13G/A filed with the SEC on February 12, 2018, the shares consist of (i) 1,633,818 shares held by DAG Ventures IV-QP, L.P. (“DAG IV-QP”) (ii) 163,862 shares held by DAG Ventures IV-A, LLC (“DAG IV-A”) and (iii) 172,662 shares held by DAG Ventures IV, L.P. (“DAG IV”). DAG Ventures Management IV, LLC (“DAG IV LLC”) serves as the general partner of DAG IV-QP and DAG IV, and serves as the manager of DAG IV-A. As such, DAG IV LLC possesses power to direct the voting and disposition of the shares owned by DAG IV-QP, DAG IV and DAG IV-A and may be deemed to have indirect beneficial ownership of the shares held by DAG IV-QP, DAG IV and DAG IV-A. DAG IV LLC owns no shares directly. Messrs. R. Thomas Goodrich and John J. Cadeddu are Managing Directors of DAG IV LLC. As such, Messrs. R. Thomas Goodrich and John J. Cadeddu possess power to direct the voting and disposition of the shares owned by DAG IV-QP, DAG IV and DAG IV-A and may be deemed to have indirect beneficial ownership of the shares held by DAG IV-QP, DAG IV and DAG IV-A. Messrs. R. Thomas Goodrich and John J. Cadeddu own no shares directly. The address each of the entities identified in this footnote is 251 Lytton Avenue, Suite 200, Palo Alto, California 94301.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Policies and Procedures for Related Party Transactions

Our Audit Committee has adopted a formal written policy providing that our Audit Committee is responsible for reviewing “related party transactions,” which are transactions to which we are a party, in which the aggregate amount involved exceeds or may be expected to exceed \$120,000 and in which a related person has or will have a direct or indirect material interest. For purposes of this policy, a related person is defined as a director, executive officer, nominee for director or greater than 5% beneficial owner of our capital stock, in each case since the beginning of the most recently completed year, and any of their immediate family members. In determining whether to approve or ratify any such transaction, our Audit Committee will take into account, among other factors it deems appropriate, (i) whether the transaction is on terms no less favorable than terms generally available to unaffiliated third parties under the same or similar circumstances and (ii) the extent of the related party’s interest in the transaction. The policy will grant standing pre-approval of certain transactions, including (i) certain compensation arrangements of executive officers, (ii) certain director compensation arrangements, (iii) transactions with another company at which a related party’s only relationship is as a non-executive employee, director or beneficial owner of less than 10% of that company’s shares and the aggregate amount involved does not exceed the greater of \$200,000 or 2% of our total annual revenue, (iv) transactions where a related party’s interest arises solely from the ownership of our common stock and all holders of our common stock received the same benefit on a pro rata basis, and (v) transactions available to all U.S. employees generally.

Certain Relationships and Related Transactions

We describe below transactions and series of similar transactions, since the beginning of our last fiscal year, to which we were a party or will be a party, in which:

- we have been or are to be a participant;
- the amount involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

Executive Offer Letter Agreements

We have entered into at-will offer letters with certain of our executive officers, including our named executive officers. For more information regarding the offer letters with such the named executive officers, see the section titled “Executive Compensation-Named Executive Officer Employment Arrangements.”

Indemnification of Officers and Directors

We have entered into indemnification agreements with each of our directors and executive officers. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and executive officers to the fullest extent permitted by Delaware law. We intend to enter into indemnification agreements with any new directors and executive officers in the future.

We have purchased and intend to maintain insurance on behalf of each and any person who is or was one of our directors or officers against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

Other Transactions

Other than as described above, since the beginning of our last fiscal year, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, \$120,000, and in which any related person had or will have a direct or indirect material interest. We believe the terms of the transactions described above were comparable to terms we could have obtained in arm’s-length dealings with unrelated third parties.

Director Independence

Our Board of Directors has undertaken a review of the independence of each director and nominee. Based on information provided by each director and nominee concerning his or her background, employment and affiliations, our Board of Directors has determined that none of Ms. Dorchak, and Messrs. Hooper, Hughes, Lazar, Scull and Stevens has relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors and nominee are “independent” as that term is defined under the listing standards of the NASDAQ Stock Market. In making these determinations, our Board of Directors considered the current and prior relationships that each non-employee director has with our Company and all other facts and circumstances our Board of Directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and nominee, and the transactions involving them described in the section titled “Certain Relationships and Related Person Transactions.”

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Fees Paid to the Independent Registered Public Accounting Firm

The following table presents fees for professional audit services and other services rendered to our Company by PwC for our 2018 fiscal year ended December 30, 2018 and our 2017 fiscal year ended December 31, 2017.

	2018	2017
Audit Fees (1)	\$ 1,324,500	\$ 1,313,300
Audit-Related Fees	\$ —	\$ —
Tax Fees (2)	\$ 360,509	\$ 423,261
All Other Fees (3)	\$ 900	\$ 2,250
Total Fees	<u>\$ 1,685,909</u>	<u>\$ 1,738,811</u>

- (1) Audit Fees consist of professional services provided in connection with the audit of our annual consolidated financial statements, the review of our unaudited quarterly consolidated financial statements, and audit services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements for those fiscal years.
- (2) Tax Fees consist of fees for professional services for tax compliance, tax advice, tax planning, and employee benefit plan tax services. These services include assistance regarding federal, state and international tax compliance.
- (3) All Other Fees consist of fees for access to PwC's online accounting research tool and Global Best Practices database.

Auditor Independence

Pursuant to its charter and the policy described further below, our Audit Committee pre-approves audit and non-audit services rendered by our independent registered public accounting firm, PwC. Our Audit Committee has determined that the rendering of non-audit services for tax compliance services, tax consulting advice and equity plans by PwC is compatible with maintaining the independence of PwC.

In our 2018 fiscal year ended December 30, 2018, there were no other professional services provided by PwC that would have required our Audit Committee to consider their compatibility with maintaining the independence of PwC.

Audit Committee Policy on Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Our Audit Committee has established a policy governing our use of the services of our independent registered public accounting firm. Under this policy, our Audit Committee is required to pre-approve all audit and non-audit services performed by our independent registered public accounting firm in order to ensure that the provision of such services does not impair the public accountants' independence. All fees paid to PwC for our fiscal years ended December 30, 2018 and December 31, 2017 were pre-approved by our Audit Committee.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee is a committee of the Board of Directors comprised solely of independent directors as required by the listing standards of the NASDAQ Stock Market and rules and regulations of the SEC. The Audit Committee operates under a written charter approved by the Board of Directors, which is available on the Company's website at <http://ir.quantenna.com/corporate-governance.cfm>. The composition of the Audit Committee, the attributes of its members and the responsibilities of the Audit Committee, as reflected in its charter, are intended to be in accordance with applicable requirements for corporate Audit Committees. The Audit Committee reviews and assesses the adequacy of its charter and the Audit Committee's performance on an annual basis.

With respect to the Company's financial reporting process, the management of the Company is responsible for (1) establishing and maintaining internal controls and (2) preparing the Company's consolidated financial statements. The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP ("PwC"), is responsible for performing an independent audit of the Company's consolidated financial statements in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) and to issue a report thereon. It is the responsibility of the Audit Committee to oversee these activities. It is not the responsibility of the Audit Committee to prepare the Company's financial statements. These are the fundamental responsibilities of management. In the performance of its oversight function, the Audit Committee has:

- reviewed and discussed the audited financial statements with management and PwC;
- discussed with PwC the matters required to be discussed by the statement on Auditing Standards No. 1301, *Communications with Audit Committees*; and

- received the written disclosures and the letter from PwC required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with PwC its independence.

Based on the Audit Committee's review and discussions with management and PwC, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Annual Report on Form 10-K for the fiscal year ended December 30, 2018 for filing with the Securities and Exchange Commission.

Respectfully submitted by the members of the Audit Committee of the Board of Directors:

Harold Hughes (Chair)
Jack Lazar
Mark Stevens

This report of the Audit Committee is required by the Securities and Exchange Commission (the "SEC") and, in accordance with the SEC's rules, will not be deemed to be part of or incorporated by reference by any general statement incorporating by reference this report on Form 10-K/A into any filing under the Securities Act of 1933, as amended (the "Securities Act"), or under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), except to the extent that we specifically incorporate this information by reference, and will not otherwise be deemed "soliciting material" or "filed" under either the Securities Act or the Exchange Act.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Documents filed as part of this report are as follows:

1. Consolidated Financial Statements

No financial statements are filed with this report on Form 10-K/A.

2. Financial Statement Schedules

No schedules are filed with this report on Form 10-K/A.

3. Exhibits

The documents listed in the Exhibit Index immediately preceding the signature page of this report on Form 10-K/A are incorporated by reference or are filed or furnished with this report on Form 10-K/A, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	S-1	333-213871	3.2	September 29, 2016
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-37927	3.1	August 22, 2017
4.1	Form of common stock certificate of the Registrant.	S-1/A	333-213871	4.1	October 17, 2016
10.1+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	333-213871	10.1	September 29, 2016
10.2+	Quantenna Communications, Inc. 2016 Omnibus Equity Incentive Plan and related form agreements.	10-K	001-37927	10.2	March 1, 2017
10.3+	Quantenna Communications, Inc. 2016 Employee Stock Purchase Plan and related form agreements.	10-K	001-37927	10.3	March 1, 2017
10.4+	Quantenna Communications, Inc. 2016 Equity Incentive Plan and related form agreements.	S-1/A	333-213871	10.4	October 17, 2016
10.5+	Quantenna Communications, Inc. 2006 Stock Plan and related form agreements.	S-1/A	333-213871	10.5	October 17, 2016
10.6+	Quantenna Communications, Inc. Executive Incentive Compensation Plan.	S-1	333-213871	10.6	September 29, 2016
10.7	Amended and Restated Investors' Rights Agreement among the Registrant and certain holders of its capital stock, dated August 29, 2014, as amended from time to time.	S-1	333-213871	10.16	September 29, 2016
10.8	Agreement Regarding Investment in Series F Preferred Stock Financing, dated April 16, 2012, between the Registrant and Open Joint Stock Company "RUSNANO," as amended on July 9, 2014.	S-1/A	333-213871	10.17	October 17, 2016
10.9+	Executive Change of Control Agreement between the Registrant and Sam Heidari.	S-1/A	333-213871	10.18	October 27, 2016
10.10+	Offer Letter between the Registrant and Sam Heidari, dated May 19, 2009, and amendments thereto.	S-1	333-213871	10.23	September 29, 2016

10.11+	Offer Letter between the Registrant and David Carroll, dated December 20, 2012.	S-1	333-213871	10.26	September 29, 2016
10.12+	Offer Letter between the Registrant and Jack Lazar, dated June 9, 2016.	S-1	333-213871	10.28	September 29, 2016
10.13+	Offer Letter between the Registrant and Mark Stevens, dated June 24, 2016.	S-1	333-213871	10.30	September 29, 2016
10.14+	Offer Letter between the Registrant and Sean Sobers, dated July 8, 2016.	S-1	333-213871	10.31	September 29, 2016
10.15+	Quantenna Communications, Inc. Outside Director Compensation Policy.	S-1/A	333-213871	10.32	October 17, 2016
10.16+	Amended and Restated Change of Control and Severance Agreement between the Registrant and David Carroll.	10-K	001-37927	10.33	March 1, 2017
10.17+	Amended and Restated Change of Control and Severance Agreement between the Registrant and Sean Sobers.	10-K	001-37927	10.34	March 1, 2017
10.18	Office Lease, between the Registrant and Automation Parkway Owner, LLC, dated February 21, 2017	10-K	001-37927	10.35	March 1, 2017
10.19+	Transition Agreement and Release, between the Registrant and Lionel Bonnot, effective as of January 24, 2018.	10-Q	001-37927	10.36	May 1, 2018
10.20+	Consulting Agreement and Release, between the Registrant and Lionel Bonnot, effective as of December 31, 2017.	10-Q	001-37927	10.37	May 1, 2018
21.1*	List of subsidiaries of the Registrant.				
23.1*	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.				
31.1**	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2**	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1*	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	XBRL Instance Document.				
101.SCH*	XBRL Taxonomy Extension Schema Document.				
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.				

+ Indicates management contract or compensatory plan.

* Filed or furnished with the original Form 10-K filed with the Securities and Exchange Commission on March 1, 2019.

** Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 26, 2019

QUANTENNA COMMUNICATIONS, INC.

By: /s/ Sam Heidari
Sam Heidari
Chairman and Chief Executive Officer

By: /s/ Sean Sobers
Sean Sobers
Chief Financial Officer

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO
EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sam Heidari, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Quantenna Communications, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
-

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 26, 2019

By: /s/ Sam Heidari

Name: Sam Heidari

Title: Chief Executive Officer (Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO
EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sean Sobers, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Quantenna Communications, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
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(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 26, 2019

By: /s/ Sean Sobers

Name: Sean Sobers

Title: Chief Financial Officer (Principal Financial Officer)