



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Mail Stop 3030

August 4, 2016

Via E-mail

Sam Heidari  
Chairman and Chief Executive Officer  
Quantenna Communications, Inc.  
3450 W. Warren Avenue  
Fremont, CA 94538

**Re: Quantenna Communications, Inc.  
Draft Registration Statement on Form S-1  
Submitted July 13, 2016  
CIK No. 0001370702**

Dear Mr. Heidari:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus

1. Please revise your disclosure to present it from the perspective of an investor who may not be an expert in your industry. In this regard, it appears from your disclosure that you assume that readers already know the meanings of certain terms and their significance. For example, we note the disclosure on page 1 about Multiple Input, Multiple Output and transmit beamforming.

Overview, page 1

2. Please provide us support for your claims of market leadership in the first paragraph of this section. Also, we note that on page 3 you disclose that your products “have been designed to achieve and maintain market leadership.” Please revise this disclosure to indicate whether your solutions achieved the desired results and provide the bases for your resulting disclosure.
3. Please revise the first paragraph on page 2 to disclose your accumulated deficit.

Industry Challenges, page 2

4. Please revise your Summary and Business section, as appropriate, to more fully address the competitive landscape including competing technologies.

Service Providers, page 4

5. We note your disclosure that your enhanced Wi-Fi performance “enables greater revenue potential per subscriber.” Please clarify whether this is increased revenue to you or to your customers.
6. Please tell us the benchmarks used in describing the “high quality and reliability” of your solutions.

Emerging Growth Company, page 7

7. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Use of Proceeds, page 31

8. We note that proceeds from this offering may be used to acquire other businesses or assets and that you currently have no “agreements or commitments” regarding possible acquisitions. Please revise your disclosure to indicate the identity of any business, if known, or if not known, the nature of the businesses to be sought, the status of any negotiations with respect to the combination, and a brief description of such business. Please see Instruction 6 to Regulation S-K Item 504.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 40

Factors Affecting Our Performance, page 42

9. We note that you disclose several factors that affect your financial performance. To the extent that the occurrence of these factors represent a trend that has had, or that you reasonably expect will have, a material impact on your net sales or revenues, please disclose those trends and present sufficient information so that investors may understand your performance. For example, we note your discussion of design wins and entrance into new markets. Please refer to Regulation S-K Item 303(a)(3)(ii).

Consolidated Results of Operations, page 45

Comparison of the Years Ended December 28, 2014 and December 27, 2015, page 47

10. We note that your revenue increase in 2015 was primarily attributable to increased volume and prices. Please revise to quantify the impact each of these factors had on your increased revenues. Please refer to Regulation S-K Item 303(a)(3)(iii).

Liquidity and Capital Resources, page 50

11. We see that you only quantify the changes in the components of working capital without providing an explanation for any significant changes. Please revise to discuss the underlying reasons for any material changes and whether any known trends may affect future operations or liquidity. For example, we note that revenues increased 25% in 2015 while inventories decreased 31%. Refer to Item 303 of Regulation S-K and Release 33-8350.

Credit Facility, page 50

12. We note that you amended your loan agreement to "add a new senior term loan." If this means you currently have another term loan, please revise to provide disclosure concerning the original term loan. Your revised disclosure should indicate all of your sources of indebtedness, including amounts outstanding and your obligations regarding repayment. Also, in exhibit 10.15 we note that your loans appear to be secured in part by your equity interests in your subsidiaries. Please revise your disclosure concerning the collateralization of your indebtedness to include a discussion of your pledging of your equity interests in your subsidiaries or advise.

Critical Accounting Policies, Significant Judgments and Use of Estimates, page 54

Common Stock Valuations, page 56

13. The table on page 57 shows that you granted stock options on February 5, 2015, March 31, 2015, August 5, 2015, September 30, 2015, December 3, 2015, and February 3, 2016. On page 56 you disclose that you obtained independent third-party valuations as of October 31, 2014, March 31, 2015, June 30, 2015, December 27, 2015, and March 27, 2016. In light of the fact that only the March 31, 2015 valuation was as of the same date as a grant date, please explain to us how you used the other valuations to support the fair market value of your common stock at the other grant dates.
14. Please tell us why the additional stock grants of 35,745,000 shares of common stock after March 27, 2016 are not shown in the table. Disclose the dates of the grants, the exercise price, and the estimated fair market value of your common stock on the grant dates.
15. Please revise your disclosure to explain the methods used to value your common stock in the valuations.
16. Please summarize for us the significant assumptions you used to value your common stock underlying the common stock option grants in 2015 and 2016. Explain to us the underlying causes for significant changes in value between grant dates and how your valuations considered the issuance of your Series G preferred stock in 2015.
17. We note that you granted options subsequent to May 27, 2016 at a weighted-average exercise price of \$0.16 per share. We also note that the estimated fair value of your common stock as of February 3, 2016 was \$0.08. Please tell us the significant reasons for the increase in the fair market value of your common stock.

Business, page 60

Automated Network Management, page 64

18. We note that you offer a remote monitoring service which can be used to “fix network problems” remotely. If this service faces a substantial risk that access could be gained by unauthorized parties, please provide appropriate risk factor disclosure indicating the specific risks this could pose to your solutions.

Our Products and Technology, page 65

19. We note the table on page 67 describing your marketed products and end markets they address. Please tell us whether any class of similar products or services accounted for

more than 10 percent of your consolidated revenue in any of your last three fiscal years and revise to include the information called for by Regulation S-K Item 101(c)(1)(i), as appropriate.

Sales & Marketing, page 68

Manufacturing, page 69

20. We note your disclosure in the first full paragraph on page 69 that your sales are made “on the basis of purchase orders under your standard terms and conditions.” We also note your disclosure on page 15 regarding your current lack of long-term supply agreements. To the extent that you rely on standard terms and conditions for sales and manufacturing, please revise your disclosure to ensure that you have disclosed the material terms and conditions in the prospectus.

Agreement with RUSNANO, page 93

21. Please revise this section and other applicable sections of your prospectus to provide greater detail regarding the terms of your relationship with RUSNANO. In addition, please ensure that you have filed all relevant agreements.

Principal Stockholders, page 97

22. Please revise the table on page 98 to include the information required by Regulation S-K Item 403(b) regarding you Chief Financial Officer. Also, please disclose all natural persons who exercise the sole or shared voting and/or dispositive powers with respect to the shares held in the name of the entities identified in the table. We note, for example, the shares held by entities affiliated with Venrock Associates.

Financial Statements

Note 1. The Company and Summary of Significant Accounting Policies

Revenue Recognition, page F-10

23. With respect to your multiple-element arrangements, please provide the disclosures required by ASC 605-25-50-2.

Unaudited Pro Forma Net Loss per Share Attributable to Common Stockholders, page F-12

24. Please tell us whether you believe it is probable that the preferred stock will automatically convert into common stock. We note the terms of automatic conversion in Note 8. Refer to Article 11 of Regulation S-X.

Note 13. Segment Information and Operations by Geographic Area, page F-35

25. Please revise this note to present all of the information required by ASC 280-10-50-41(a).

Item 15. Recent Sales of Unregistered Securities, page II-2

26. Please revise this section to include all information required by Regulation S-K Item 701. For example, we note that not all disclosed securities issuances include disclosure regarding consideration received.

Exhibit 10.17

27. We note this exhibit's reference to sales of promissory notes. Please file those notes as exhibits and provide disclosure under Regulation S-K Items 303, 404, and 701, as appropriate. Also, please file the letter agreement that this exhibit amends.

You may contact Dennis Hult at (202) 551-3618 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Caleb French at (202) 551-6947 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: John T. Sheridan, Esq.  
Wilson Sonsini Goodrich & Rosati, P.C.