UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

AVIAT NETWORKS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

20-5961564 (I.R.S. Employer Identification Number)

5200 Great America Parkway, Santa Clara, CA 95054 (Address of Principal Executive Offices)

Aviat Networks, Inc. 2007 Stock Equity Plan (As Amended and Restated Effective November 17, 2011) (Full Title of the Plan)

> Michael A. Pangia President and Chief Executive Officer Aviat Networks, Inc. 5200 Great America Parkway Santa Clara, California 95054 (Name and Address of Agent for Service)

(408) 567-7000 (Telephone Number, Including Area Code for Agent for Service)

Large accelerated filer

Non-accelerated filer

□ (Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (2)	Proposed Maximum Offering Price Per Share (3)	Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee (3)
Common Stock, par value \$0.01 per share, issuable under the Aviat	6,000,000	\$1.75	\$10,500,000.00	\$1,203.30
Networks, Inc. 2007 Stock Equity Plan (As Amended and Restated				
Effective November 17, 2011) (1)				

(1) Represents additional shares authorized under the Registrant's 2007 Stock Equity Plan (As Amended and Restated Effective November 17, 2011) (as amended to date, the "2007 Plan"). Shares issuable pursuant to the 2007 Plan were previously registered on the Registration Statements on Form S-8 filed by the Registrant with the Securities and Exchange Commission on February 5, 2007 (File No. 333-140442) and December 7, 2009 (File No. 333-163542). Pursuant to General Instruction E of Form S-8, this Registration Statement is being filed to register an additional 6,000,000 shares authorized under the 2007 Plan. The contents of the prior Registration Statements are incorporated herein by reference.

(2) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of additional shares of common stock that may be offered or issued by reason of stock splits, stock dividends or similar transactions.

(3) Estimated solely for purposes of calculating the registration fee. The estimate is made pursuant to Rules 457(c) and (h) under the Securities Act, and based upon the average high and low prices of a share of Registrant's Common Stock, as reported on the NASDAQ Global Market on December 9, 2011 (\$1.75).

Accelerated filer

Smaller reporting company

EXPLANATORY NOTE

On February 5, 2007, the Registrant filed a Registration Statement on Form S-8 (File No. 333-140442) with the Securities and Exchange Commission (the "SEC") covering the registration of 5,000,000 shares of common stock, par value \$0.01 per share, of the Registrant ("Common Stock") issuable under the Registrant's 2007 Stock Equity Plan (as amended and restated to date, the "2007 Plan"). On December 7, 2009, the Registrant filed a Registration Statement on Form S-8 (File No. 333-163542) to register an additional 5,400,000 shares of Common Stock issuable under the 2007 Plan. At the annual meeting of the Registrant's stockholders on November 17, 2011, the Registrant's stockholders approved an amendment to the 2007 Plan to increase the authorized shares under the 2007 Plan by 6,000,000 shares from 10,400,000 to 16,400,000. Pursuant to General Instruction E of Form S-8, this Registration Statement is being filed to register an additional 6,000,000 shares authorized under the 2007 Plan. The contents of the prior Registration Statements are incorporated herein by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the SEC by the Registrant pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference in, and shall be deemed to be a part of, this registration statement:

- 1. The Registrant's annual report on Form 10-K for the fiscal year ended July 1, 2011 filed with the SEC on September 12, 2011;
- 2. The Registrant's quarterly report on Form 10-Q for the fiscal quarter ended September 30, 2011 filed with the SEC on November 9, 2011;

3. The Registrant's current reports on Form 8-K filed with the SEC on August 25, 2011, September 9, 2011, September 26, 2011, October 31, 2011, November 4, 2011 and November 18, 2011; and

4. The description of Registrant's common stock set forth in our registration statement on Form 8-A filed with the SEC on January 26, 2007, the description of the terms of the Registrant's Amended and Restated Certificate of Incorporation applicable to the Registrant's common stock set forth in the Registrant's definitive proxy statement on Schedule 14A filed with the SEC on October 7, 2009 and the description of the terms of the Registrant's Amended and Restated Bylaws applicable to the Registrant's common stock set forth in the current report on Form 8-K filed with the SEC on November 23, 2009, including any amendment or report filed for the purpose of updating such information.

In addition, all documents filed by the Registrant with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date of this registration statement and prior to the filing of a post-effective amendment, which indicates that all securities offered have been sold or which deregisters all of such securities then remaining unsold, are deemed to be incorporated by reference in this registration statement and to be a part hereof from the respective dates of filing of such documents. Any statement contained in this registration statement or in a document incorporated by reference shall be deemed modified or superseded to the extent that a statement contained in any subsequently filed document which also is or is deemed to be incorporated by reference herein or therein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed to constitute a part hereof, except as so modified or superseded.

Item 8. Exhibits.

See the Exhibit Index which is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8, and has duly caused this registration statement on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Santa Clara, State of California, on December 13, 2011.

AVIAT NETWORKS, INC.

By: /S/ MICHAEL A. PANGIA

Name: Michael A. Pangia Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Michael A. Pangia, Edward J. Hayes, Jr. and John Madigan with full power to act alone, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any subsequent registration statement filed by the Registrant pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

This Power of Attorney may be executed in multiple counterparts, each of which shall be deemed an original, but which taken together, shall constitute one instrument.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael A. Pangia Michael A. Pangia	President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	December 13, 2011
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/s/ Edward J. Hayes, Jr.	Senior Vice President and Chief Financial Officer	December 13, 2011
Edward J. Hayes, Jr.	(Principal Financial Officer)	
/s/ John Madigan	Vice President and Corporate Controller	December 13, 2011
John Madigan	(Principal Accounting Officer)	
/s/ William A. Hasler	Director	December 13, 2011
William A. Hasler		
/s/ Clifford H. Higgerson	Director	December 13, 2011
Clifford H. Higgerson		

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Signature	<u>Title</u>	Date
/s/ Charles D. Kissner Charles D. Kissner	Chairman of the Board	December 13, 2011
/s/ Raghavendra Rau Raghavendra Rau	Director	December 13, 2011
/s/ Dr. Mohsen Sohi Dr. Mohsen Sohi	Director	December 13, 2011
/s/ Dr. James C. Stoffel James C. Stoffel	Director	December 13, 2011
/s/ Edward F. Thompson Edward F. Thompson	Director	December 13, 2011

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EXHIBIT INDEX

- 4.1 Amended and Restated Certificate of Incorporation of the Registrant as filed with the Secretary of State of the State of Delaware on November 19, 2009. Incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-33278) filed on November 23, 2009.
- 4.2 Amended and Restated Bylaws of the Registrant. Incorporated by reference to Exhibit 3.2 to the Registrant's 8-K (File No. 001-33278) filed on November 23, 2009.
- 4.3 Certificate of Ownership and Merger Merging Aviat Networks, Inc. into Harris Stratex Networks, Inc., effective January 27, 2010, as filed with the Secretary of State of the State of Delaware on January 27, 2010. Incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K (File No. 001-33278) filed on January 28, 2010.
- 4.4 Specimen common stock certificate of Registrant, adopted as of January 29, 2010. Incorporated by reference to Exhibit 4.1.1 to the Registrant's Form 10-K for fiscal year end July 2, 2010 (File No. 001-33278) filed on September 9, 2010.
- 4.5 Aviat Networks, Inc. 2007 Stock Equity Plan (As Amended and Restated Effective November 17, 2011). Incorporated by reference to Appendix A to the Registrant's Proxy Statement on Schedule 14A (File No. 001-33278) filed on October 3, 2011.
- 4.6 Form of Stock Option Awards Specific Terms and Conditions and General Terms and Conditions under the 2007 Stock Equity Plan. Incorporated by reference to Exhibit 10.1 to the Registrant's Form S-8 (Registration No. 333-163542) filed on December 7, 2009.
- 4.7 Form of Restricted Stock Awards Specific Terms and Conditions and General Terms and Conditions under the 2007 Stock Equity Plan. Incorporated by reference to Exhibit 10.2 to the Registrant's Form S-8 (Registration No. 333-163542) filed on December 7, 2009.
- 4.8 Form of Performance Share Awards Specific Terms and Conditions and General Terms and Conditions under the 2007 Stock Equity Plan. Incorporated by reference to Exhibit 10.3 to the Registrant's Form S-8 (Registration No. 333-163542) filed on December 7, 2009.
- 5.1 Opinion of Bingham McCutchen LLP.
- 23.1 Consent of Independent Registered Public Accounting Firm.
- 23.2 Consent of Bingham McCutchen LLP (contained in the opinion filed as Exhibit 5.1 to this Registration Statement).
- 24.1 Power of Attorney (included on the signature pages to this Registration Statement).

Aviat Networks, Inc. 5200 Great America Parkway Santa Clara, CA 95054

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel for Aviat Networks, Inc., a Delaware corporation (the "Company"), in connection with the preparation of the Company's Registration Statement on Form S-8 proposed to be filed with the United States Securities and Exchange Commission on or about December 13, 2011 (the "Registration Statement").

The Registration Statement covers the registration of 6,000,000 shares of common stock, par value \$0.01 per share, of the Company (the "Shares"), which are issuable by the Company as awards under, or pursuant to the exercise of options and other purchase rights under, the Company's 2007 Stock Equity Plan (As Amended and Restated Effective November 17, 2011) (the "Plan").

We have reviewed the corporate proceedings of the Company with respect to the authorization of the Plan. We have reviewed copies of the Plan as currently in effect. We have also examined and relied upon such agreements, instruments, corporate records, certificates, and other documents as we have deemed necessary or appropriate as a basis for the opinions hereinafter expressed. In our examination, we have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form, and the legal competence of each individual executing any document.

We further assume, without investigation, that all Shares issued pursuant to the Plan will be issued in accordance with the terms of the Plan and that the purchase price of each of the Shares will be at least equal to the par value of such Shares.

This opinion is limited solely to the Delaware General Corporation Law as applied by courts located in Delaware, the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting those laws.

Aviat Networks, Inc. December 13, 2011 Page 2

Based upon and subject to the foregoing, we are of the opinion that the Shares, when issued and delivered upon the exercise of options or awards granted pursuant to and in accordance with the Plan and against the consideration therefor, as specified in the Plan or such documents governing such awards, will be validly issued, fully paid and nonassessable, provided, however, that the value of such consideration, whether consisting of cash, any tangible or intangible property or any benefit to the corporation, or any combination thereof, as determined by the board of directors of the Company from time to time, is at least equal to the par value of the Shares.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, however, we do not thereby admit that we are an "expert" within the meaning of the Securities Act of 1933, as amended.

Very truly yours,

/s/ BINGHAM McCUTCHEN LLP

BINGHAM McCUTCHEN LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the 2007 Stock Equity Plan (As Amended and Restated Effective November 17, 2011), of our reports dated September 12, 2011 with respect to the consolidated financial statements and schedule of Aviat Networks, Inc. and the effectiveness of internal control over financial reporting of Aviat Networks, Inc. included in its Annual Report (Form 10-K) for the year ended July 1, 2011, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California December 13, 2011