

SECURITIES AND EXCHANGE COMMISSION

FORM S-8

Initial registration statement for securities to be offered to employees pursuant to employee benefit plans

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FILER

REDBACK NETWORKS INC

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SIC: **7389** Business services, nec

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

FORM S-8
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933

REDBACK NETWORKS
 (Exact name of registrant as specified in its charter)

<TABLE>			
<S>	DELAWARE	<C>	<C>
	(State or other jurisdiction of incorporation or organization)	3576	77-0438443
		(Primary Standard Industrial Classification Code Number)	(IRS Employer Identification No.)
</TABLE>			

1389 MOFFETT PARK DRIVE
 SUNNYVALE, CA 94089
 (Address of principal executive offices) (Zip Code)

REDBACK NETWORKS
 1997 STOCK PLAN
 SHARES ACQUIRED UNDER WRITTEN COMPENSATION AGREEMENTS WITH
 CERTAIN DESIGNATED INDIVIDUALS AND CERTAIN UNNAMED INDIVIDUALS
 (Full title of the Plans)

DENNIS L. BARSEMA
 PRESIDENT AND CHIEF EXECUTIVE OFFICER
 REDBACK NETWORKS
 1389 MOFFETT PARK DRIVE
 SUNNYVALE, CA 94089
 (Name and address of agent for service)

408-548-3500
 (Telephone number, including area code, of agent for service)

<TABLE>
 <CAPTION>

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
<S>	<C>	<C>	<C>	<C>

</TABLE>

<TABLE>	<S>	<C>	<C>	<C>	<C>
Shares Acquired Under Written Compensation Agreements With Certain Designated Individuals and Certain Unnamed Individuals					
Common Stock (par value \$0.0001)					
	426,322 shares	\$153	\$72,675,000	\$20,205	

- (1) This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the Written Compensation Agreements with Certain Designated Individuals and Certain Unnamed Individuals because of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the outstanding shares of Common Stock of Redback Networks.
- (2) Calculated only for purposes of this offering under Rule 457(h) of the Securities Act of 1933, as amended, on the basis of the average of the high and low prices per share of Common Stock of Redback Networks on July 22, 1999.

EXPLANATORY NOTE

Redback Networks has prepared this Registration Statement in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the "1933 Act"), to register shares of its common stock, \$0.0001 par value per share. Under cover of this Form S-8 is a Reoffer Prospectus Redback Networks prepared in accordance with Part I of Form S-3 under the 1933 Act. The Reoffer Prospectus may be utilized for reofferings and resales of up to 475,000 shares of common stock acquired by selling stockholders under the Redback Networks 1997 Stock Plan.

REDBACK NETWORKS

FORM S-8 CROSS REFERENCE SHEET SHOWING LOCATION OF INFORMATION
REQUIRED BY PART I OF FORM S-3

<TABLE>	<CAPTION>	<S>	<C>
Form S-3 Item Number	Location/Heading in Prospectus		
1.	Forepart of Registration Statement and Outside Front Cover page of Prospectus		Cover page
2.	Inside Front and Outside Back Cover Page of Prospectus		Available Information; Incorporation of Certain Information by Reference
3.	Summary Information, Risk Factors and Ratio of Earnings to Fixed Charges		Risk Factors
4.	Use of Proceeds		Not applicable
5.	Determination of Offering Price		Not applicable
6.	Dilution		Not applicable
7.	Selling Security Holder		Selling Security Holder
8.	Plan of Distribution		Plan of Distribution
9.	Description of Securities to be Registered		Not Applicable

10. Interests of Named Experts and Counsel	Not Applicable
11. Material Changes	Not Applicable
12. Incorporation of Certain Information	Documents Incorporated by Reference
13. Disclosure of Commission Position on Indemnification for Securities Act Liabilities	Indemnification

</TABLE>

4

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

Redback Networks ("Redback") hereby incorporates by reference into this Registration Statement the following documents previously filed with the Securities and Exchange Commission (the "SEC"):

(a) Redback's prospectus filed with the SEC under Rule 424(b) under the Securities Act of 1933, as amended (the "1933 Act"), in connection with Registration Statement No. 333-744479 on Form S-1 filed with the SEC on March 16, 1999, the amendment filed on April 22, 1999, the amendment filed on May 4, 1999, the amendment filed on May 12, 1999 and the amendment filed on May 14, 1999, which contains the audited financial statements for the period August 30, 1996 (inception) through December 31, 1996 and for Redback's fiscal years ended December 31, 1997 and 1998.

(b) The description of Redback's outstanding Common Stock contained in Redback's Registration Statement No. 0-25853 on Form 8-A filed with the SEC on April 22, 1999, under Section 12 of the 1934 Act, including any amendment or report filed to update the description.

All reports and definitive proxy or information statements filed under Section 13(a), 13(c), 14 or 15(d) of the 1934 Act after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold shall also be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities

Not Applicable.

Item 5. Interests of Named Experts and Counsel

Not Applicable.

Item 6. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award or a corporation's Board of Directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the 1933 Act. Redback's Bylaws provide for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent permitted by the Delaware General Corporation Law. Redback's Certificate of Incorporation provides that, under Delaware law, its directors shall not be liable for monetary damages for breach of their fiduciary duty as directors to Redback and its stockholders. This provision in the Certificate of Incorporation does not eliminate the fiduciary duty of the directors, and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each

director will continue to be subject to liability for breach of the director's duty of loyalty to Redback for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. Redback has entered into Indemnification Agreements with its officers and directors. The Indemnification Agreements provide Redback's officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law.

II-2

5

Item 7. Exemption from Registration Claimed

Not Applicable.

Item 8. Exhibits

<TABLE>

<CAPTION>

Exhibit Number	Exhibit
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<S> <C>

4	Instrument Defining Rights of Stockholders. Reference is made to Redback's Registration Statement No. 0-25853 on Form 8-A, which is incorporated herein by reference under Item 3(b) of this Registration Statement.
5	Opinion and consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP.
23.1	Consent of PricewaterhouseCoopers, LLP, Independent Accountants.
23.2	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP is contained in Exhibit 5.
24	Power of Attorney. Reference is made to page II-4 of this Registration Statement.
99.1	Form of Written Compensation Agreement.

</TABLE>

Item 9. Undertakings

A. Redback hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement

- (i) to include any prospectus required by Section 10(a)(3) of the 1933 Act,
- (ii) to reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement and
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any

material change to such information in this Registration Statement; provided, however, that clauses (1)(i) and (1)(ii) shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by Redback under Section 13 or Section 15(d) of the 1934 Act that are incorporated by reference in this Registration Statement;

(2) that for the purpose of determining any liability under the 1933 Act each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof and

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of Written Compensation Agreements with Certain Designated Individuals and Certain Unnamed Individuals.

B. Redback hereby undertakes that, for purposes of determining any liability under the 1933 Act, each filing of Redback's annual report under Section 13(a) or Section 15(d) of the 1934 Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities

II-3

6

offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. Insofar as indemnification for liabilities arising under the 1933 Act may be permitted to directors, officers or controlling persons of Redback under the indemnification provisions summarized in Item 6 or otherwise, Redback has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the 1933 Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by Redback of expenses incurred or paid by a director, officer or controlling person of Redback in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, Redback will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the 1933 Act and will be governed by the final adjudication of such issue.

II-4

7

REOFFER PROSPECTUS

SIGNATURES

The Securities Act of 1933, as amended, requires that Redback certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has had this Registration Statement signed on its behalf by the undersigned, who is duly authorized, in the City of Sunnyvale, State of California on this 26th day of July, 1999.

REDBACK NETWORKS

By: /s/Dennis L. Barsema

Dennis L. Barsema
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS:

That the undersigned officers and directors of Redback Networks, a Delaware corporation, do hereby constitute and appoint Dennis L. Barsema and Geoffrey C. Darby, and either of them, the lawful attorneys-in-fact and agents with full power and authority to do any and all acts and things and to execute any and all instruments which said attorneys and agents, and either one of them, determine may be necessary or advisable or required to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules or regulations or requirements of the Securities and Exchange Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement, and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereof, and each of the undersigned hereby ratifies and confirms all that said attorneys and agents, or either one of them, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney on the date indicated.

Under the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<TABLE> <CAPTION> Signature -----	Title -----	Date ----
<S> /s/Dennis L. Barsema ----- Dennis L. Barsema	<C> President, Chief Executive Officer and Director (Principal Executive Officer)	<C> July 26, 1999
/s/Geoffrey C. Darby ----- Geoffrey C. Darby	Chief Financial Officer, Treasurer and Secretary (Principal Financial and Accounting Officer)	July 26, 1999

</TABLE>

8
REOFFER PROSPECTUS

<TABLE> <S> ----- James R. Flach	<C> Director	<C>
---	-----------------	-----

/s/Pierre R. Lamond Director

July 26, 1999

Pierre R. Lamond

/s/Daniel J. Warmenhoven Director

July 26, 1999

Daniel J. Warmenhoven

</TABLE>

9

REOFFER PROSPECTUS

Shares of Common Stock
Redback Networks

This Reoffer Prospectus relates to 426,322 shares of the Common Stock, par value \$0.0001 (the "Common Stock"), of Redback Networks (the "Company"), which may be offered from time to time by certain key employees named herein and certain employees who are not named herein who are not affiliates and may sell up to 1,000 shares each pursuant to this Registration Statement (the "Registered Stockholders"). It is anticipated that the Registered Stockholders will offer shares for sale at prevailing prices on the Nasdaq National Market System on the date of sale. The Company will receive no part of the proceeds of sale made hereunder. All expenses of registration incurred in connection with this offering are being borne by the Company, but all selling and other expenses incurred by each of the Registered Stockholders will be borne by each such Registered Stockholder.

The Common Stock is traded on the Nasdaq National Market System.

The Registered Stockholders and any broker executing selling orders on behalf of the Registered Stockholders may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), in which event commissions received by such broker may be deemed to be underwriting commissions under the Securities Act.

THESE SECURITIES INVOLVE A HIGH DEGREE OF RISK AND SHOULD BE
CONSIDERED ONLY BY PERSONS WHO CAN AFFORD THE LOSS OF THEIR
ENTIRE INVESTMENT.

SEE "RISK FACTORS" BEGINNING ON PAGE 3.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES
AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE
ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION
TO THE CONTRARY IS A CRIMINAL OFFENSE.

No person is authorized to give any information or to make any representations, other than those contained in this Prospectus, in connection with the offering described herein, and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or any Registered Stockholder. This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, nor shall there be any sale of these securities by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. Neither the delivery of this Prospectus nor any sale made hereunder shall under any circumstances create an implication that the information contained herein is correct as of any time subsequent to the date hereof.

The date of this Prospectus is July 26, 1999.

10

AVAILABLE INFORMATION

The Company will be subject to the informational reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange

Act") upon the first date on which its Common Stock is registered under Section 12(g) of the Exchange Act and in accordance therewith will file reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information can be inspected and copied at the Public Reference Room of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the Commission's regional offices at 219 South Dearborn Street, Chicago, IL 60604; 26 Federal Plaza, New York, NY 10007; and 5757 Wilshire Boulevard, Los Angeles, CA 90036, at prescribed rates. The Common Stock is quoted on the Nasdaq National Market System. Reports, proxy statements, informational statements and other information concerning the Company can be inspected at the offices of the National Association of Securities Dealers, Inc. at 1735 K Street, N.W., Washington, D.C. 20006.

The Company intends to furnish its stockholders with annual reports containing additional financial statements and a report thereon by independent certified public accountants.

A copy of any document incorporated by reference in the Registration Statement (not including exhibits to the information that is incorporated by reference unless such exhibits are specifically incorporated by reference into the information that the Registration Statement incorporates) of which this Reoffer Prospectus forms a part but which is not delivered with this Reoffer Prospectus will be provided by the Company without charge to any person (including any beneficial owner) to whom this Reoffer Prospectus has been delivered upon the oral or written request of such person. Such requests should be directed to Carrie Perzow, Redback Networks, 1389 Moffett Park Drive, Sunnyvale, CA 94089. The Company's telephone number at that location is (408) 548 3500.

TABLE OF CONTENTS

<TABLE>	
<CAPTION>	
	Page
<S>	<C>
THE COMPANY.....	3
RISK FACTORS.....	4
REGISTERED STOCKHOLDERS.....	15
PLAN OF DISTRIBUTION.....	16
DOCUMENTS INCORPORATED BY REFERENCE.....	17
INDEMNIFICATION.....	17
</TABLE>	

THE COMPANY

Redback Networks (the "Company") is a leading provider of advanced networking systems that enable carriers, cable operators and service providers to rapidly deploy high-speed access to the Internet and corporate networks. Our products, consisting of the Subscriber Management System, or SMS 500 and SMS 1000, combine networking hardware with sophisticated software. Our products connect and manage large numbers of subscribers using any of the major high-speed access technologies, including digital subscriber line, which is a technology that brings high-speed access over standard copper telephone lines, cable and wireless. We sell our products through our direct sales force, resellers and distribution partners.

Bridging the gap between high-speed access concentrators and routers connecting to the Internet backbone, our flagship product, the SMS 1000, is currently being used by many of the largest carriers and service providers. UUNET, a subsidiary of MCI Worldcom, SBC, Southwestern Bell Information Systems and Pacific Bell Internet, subsidiaries of SBC and GTE have been, since

inception, our largest customers in terms of revenues. Other representative customers include Ameritech, Bell Canada, Bell South, Concentric, Earthlink, Flashcom, Korea Telecom, Verio and @Work, a division of @Home. They are representative in terms of, among other things, the type of provider, the mixture of broadband services offered and the mixture of regional versus national deployment.

In recent years, there has been a significant increase in demand by businesses and consumers for broadband, or high-speed, access to the Internet and to corporate networks. While carriers, cable operators and service providers are attempting to provide inexpensive and comprehensive broadband access, there are several major challenges associated with scaling and configuring existing network architectures to accommodate large numbers of new high-speed subscribers. We believe widespread deployment of broadband services requires a new model for subscriber management that efficiently terminates subscriber connections, manages broadband subscribers, provides flexibility for connections, and supports multiple broadband access technologies simultaneously.

Our products meet the above requirements. Whether deployed at subscriber aggregation points by carriers, by cable operators or by service providers, our products accept a large concentration of high-speed data traffic from such devices as digital subscriber line concentrators, cable modem termination systems and wireless termination systems. Our products reduce the processing requirements placed on routers connecting to the Internet backbone in broadband networks. Our SMS 1000 today supports up to 4,000 simultaneous subscribers. The key benefits of our solution include:

- Enhances Broadband Operations. Our products bridge the operational gap between "last mile" access networks that serve businesses and homes and the routers connecting to the Internet backbone and corporate networks.
- Supports All Major Access Technologies. Our products support all major access technologies, including digital subscriber line, cable, wireless and dial.
- Facilitates Rapid and Scalable Deployment. Our products allow service providers to use existing access, accounting and management control systems, enabling them to quickly deploy high-speed access and achieve rapid time-to-market for significant revenue-generating services.
- Provides Platform for the Delivery of Value-Added Services. Our products enable carriers, cable operators and service providers to create and market new service offerings that extend broadband connectivity and capabilities.
- Simplifies End-User Administration and Support. Our products allow easy configuration and administration of end-user broadband modems, further reducing the cost of providing service.

We are focused on delivering subscriber management solutions to carriers and service providers and intend to use our position in the digital subscriber line market to penetrate the cable and wireless broadband markets. We believe our software differentiates our solution and provides a competitive advantage by delivering advanced subscriber management services and functionality. We will continue to develop features and functionalities and expand our product family to further enhance the ability of carriers, cable operators and service providers to deliver profitable services.

The Company's executive offices are located at 1389 Moffett Park Drive, Sunnyvale, CA 94089. The Company's telephone number is (408) 548 3500.

RISK FACTORS

An investment in our common stock involve a high degree of risk. You should

carefully consider the following risk factors and the other information in this prospectus before investing in our common stock. Our business, results of operations and financial condition could be seriously harmed by any of the following risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of any investment you make in our common stock.

RISKS RELATED TO OUR BUSINESS

OUR BUSINESS IS DIFFICULT TO EVALUATE BECAUSE WE HAVE A LIMITED OPERATING HISTORY

We were founded in August 1996 and only began shipping products in material quantities in the second quarter of 1998. You should consider the risks and difficulties frequently encountered by companies like ourselves in a new and rapidly evolving market. From February 28, 1998 to March 31, 1999, we have experienced significant growth -- from 39 employees to 127 employees. Our ability to sell products and services, and the level of success, if any, we achieve, depends, among other things, on the level of demand for broadband access services, which is a new and rapidly evolving market. See "Risk Factors -- We are dependent on the widespread adoption of broadband access services." Our business strategy may be unsuccessful and we may not successfully address the risks we face.

WE HAVE A HISTORY OF LOSSES AND WE EXPECT TO INCUR FUTURE LOSSES

We incurred net losses of \$142,000 from our inception in August 1996 through December 31, 1996, \$4.4 million for the year ended December 31, 1997, \$9.9 million for the year ended December 31, 1998 and \$3.8 million for the three months ended March 31, 1999. As of March 31, 1999, we had an accumulated deficit of approximately \$18.2 million. We have not achieved profitability and we expect to continue to incur net losses in the future.

To date, we have funded our operations from the sale of equity securities, from bank borrowings and by means of equipment lease financing. We expect to continue to incur significant product development, sales and marketing, and general and administrative expense. As a result, we must generate significant revenues to achieve profitability. We may not sustain recent growth rates in our revenues, and we may never achieve sufficient revenue levels to achieve profitability. If we do achieve profitability in some future period, we cannot be certain that we would sustain profitability on a quarterly or annual basis in the future.

OUR OPERATING RESULTS ARE LIKELY TO FLUCTUATE SIGNIFICANTLY

Factors likely to cause quarterly fluctuations in revenues and operating results include:

- Fluctuations in demand for broadband access services;
- The timing and size of sales of our products and services;
- The lack of any significant backlog;
- Announcements of new products and product enhancements by competitors;
- The entry of new competitors into our market, including by acquisition;
- Unexpected delays in introducing new or enhanced products, including manufacturing delays;
- Our ability to control expenses;
- Our ability to ship products on a timely basis and at a reasonable cost; and
- The mix of our products sold and the mix of distribution channels through which our products are sold.

A high percentage of our expenses, including those related to engineering, sales and marketing, research and development, and general administrative functions, are essentially fixed in the short term. As a result, if we experience delays in generating or recognizing revenue, our quarterly operating results are likely to be materially adversely affected. In addition, we plan to increase our operating expenses to expand our engineering and sales and marketing operations, broaden our customer support capabilities, develop new distribution channels, fund increased levels of research and development and build our operational infrastructure. If growth in our revenues does not outpace the increase in these expenses, our business, results of operations and financial condition could be materially adversely affected.

We rely on a single third-party manufacturer to build our products. Any interruption in the operations of this manufacturer would adversely affect our ability to meet our scheduled product deliveries to our customers. This would cause significant variations in our quarterly operating results and our business, results of operations and financial condition would be materially adversely affected.

Due to these and other factors, we believe that quarter-to-quarter comparisons of our operating results may not be meaningful. You should not rely on our results for one quarter as any indication of our future performance. It is likely that in some future quarter our operating results may be below the expectations of public market analysts or investors. If this occurs, the price of our common stock would likely decrease.

OUR LENGTHY AND VARIABLE SALES CYCLE MAKES IT DIFFICULT FOR US TO PREDICT IF OR WHEN A SALE WILL BE MADE

The timing of our sales revenue is difficult to predict because of the length and variability of the sales cycle for our products. Customers often view the purchase of our products as a significant and strategic decision. As a result, customers typically undertake significant procedures relating to the evaluation, testing, implementation and acceptance of our products. This evaluation process frequently results in a lengthy sales cycle, typically ranging from three months to over one year. While our customers are evaluating our products and before they place an order with us, we may incur substantial sales and marketing expenses and expend significant management efforts. In addition, product purchases are frequently subject to unplanned administrative, processing and other delays. This is particularly true for larger customers for whom our products represent a very small percentage of their overall purchase activities. These customers are often engaged in multiple simultaneous purchasing decisions, some of which may pertain to more immediate needs and absorb the immediate attention of the customer. If sales forecasted from a specific customer for a particular quarter are not realized in that quarter or at all, our business, results of operations and financial condition could be materially adversely affected.

IN ANY QUARTER, A SMALL NUMBER OF CUSTOMERS ARE LIKELY TO ACCOUNT FOR A SUBSTANTIAL MAJORITY OF OUR REVENUE

In each of the last five quarters in the period ended March 31, 1999, we had at least one customer that accounted for 15% or more of our total revenue in the quarter. In the fourth quarter of 1998, UUNET, Nortel Networks and GTE and its affiliated entities accounted for 28%, 13% and 12%, respectively, of our total revenue. In the first quarter of 1999, UUNET, Southwestern Bell Information Systems and GTE and its affiliated entities accounted for 43%, 10% and 7%, respectively, of our total revenue. We anticipate that a small number of customers with large orders will continue to account for a majority of our quarterly revenue. However, we do not have any contracts or other agreements that guarantee continued sales to these or any other customers. If our customers alter their purchasing habits, or reevaluate their need for our products, or if we fail to receive a large order in any future period, our business, results of operations and financial condition would be materially adversely affected.

WE ARE ENTIRELY DEPENDENT ON OUR SMS PRODUCT FAMILY.

The SMS 1000 and SMS 500 are the only products that we currently sell. We intend to introduce new products and enhancements to existing products in the future. Our inability to timely and successfully introduce new products and product enhancements, or the failure of these new products or enhancements to achieve market acceptance, could materially adversely affect our business, results of operations and financial condition.

THERE IS A LIMITED NUMBER OF POTENTIAL CUSTOMERS FOR OUR SMS 1000

To date, substantially all of our revenues have been derived from sales and service related to the SMS 1000 product. The SMS 1000 and any other new high-end product that we may develop and introduce in the future are marketed primarily to large customers. There are only a limited number of large existing and potential customers and this number is not expected to increase significantly in the future.

WE FACE NEW RISKS WITH THE INTRODUCTION OF OUR SMS 500 PRODUCT

We recently introduced the SMS 500, which is designed for use by customers that intend to provide services to a smaller number of subscribers than those using the SMS 1000. Given this targeted market, sales of the SMS 500 may involve sales to smaller customers. Sales to smaller customers entail some additional risks, including increased credit risks, the need for additional sales and support personnel to support an increased volume of customers and the need to develop a leasing program to facilitate market acceptance. Our business, results of operations and financial condition could be materially adversely affected if any of these risks materialize. To date, we have sold a limited number of our SMS 500, and revenues from these sales were immaterial. The SMS 500 may not achieve a significant degree of market acceptance. If the SMS 500 is not successful, our ability to generate revenues will be limited to sales of the SMS 1000 to our customers with a large number of subscribers, which will have a material adverse effect on our business, results of operations and financial condition.

OUR PRODUCTS MUST ANTICIPATE AND MEET SPECIFIC CUSTOMER REQUIREMENTS AND DEMANDS

Many of our customers require product features and capabilities that our SMS products may not have. The requirement that we add features to our products in order to achieve a sale may result in a longer sales cycle, increased research and development expenses and reduced margins on our products. To achieve market acceptance for our products, we must effectively and timely anticipate and adapt to customer requirements and offer products and services that meet customer demands. Our failure to develop products or offer services that satisfy customer requirements would materially adversely affect our business, results of operations and financial condition.

We intend to continue to invest in product and technology development. The development of new or enhanced products is a complex and uncertain process that requires the accurate anticipation of technological and market trends. We may experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or marketing of new products and enhancements. The introduction of new or enhanced products also requires that we manage the transition from older products in order to minimize disruption in customer ordering patterns and ensure that adequate supplies of new products can be delivered to meet anticipated customer demand. Our inability to effectively manage this transition would materially adversely affect our business, results of operations and financial condition.

WE NEED TO GAIN ACCEPTANCE IN OTHER BROADBAND ACCESS MARKETS

To date, we have derived substantially all of our revenues from sales of the SMS 1000 for use in the digital subscriber line market for broadband access. We intend to expend a substantial amount of time and resources to achieve market

acceptance of our products in other markets, including the cable and wireless markets. We may be unable to simultaneously or effectively address evolving demands in these markets, and customers in these markets may choose to implement competing technologies or products. In addition, if we are not first in these markets, competitors may gain market acceptance first, thereby

6

15

making it difficult, if not impossible, for us to gain subsequent market acceptance. If we are unable to achieve acceptance of our products in these markets, our ability to generate revenues will be limited, and our business, results of operations and financial condition would be materially adversely affected.

WE EXPECT INCREASED COMPETITION

We may be unable to compete successfully with current or future competitors. If we do not compete successfully against current or future competitors, our business, results of operations and financial condition will be materially adversely affected. Currently, competition in our market is intense. The broadband access markets we are targeting, including digital subscriber line, cable and wireless, are new and rapidly evolving and we expect these markets to become highly competitive in the future. In addition, we expect new competitors to emerge in the broadband access market as that market evolves due to technological innovation and regulatory changes. We face actual and potential competition from public and private companies providing routers connecting to the Internet backbone, access concentrators and subscriber aggregation systems.

Cisco, the leading provider of routers connecting to the Internet backbone, offers products that compete directly with our products, and also provides a comprehensive range of broadband access systems. We expect companies that offer access concentrators and routers to incorporate some subscriber management functionality into their products. These companies include Nortel Networks which recently agreed to acquire Shasta, a private company providing subscriber management services, and Ascend, which has announced its pending acquisition by Lucent. In addition, there are several other private companies that provide subscriber management features in access concentrators or routing platforms.

Many of our principal competitors, including Cisco, Alcatel, Nortel Networks/Shasta, Lucent/Ascend, and some companies that may compete with us in the future, are large public companies that have longer operating histories and significantly greater financial, technical, marketing and other resources than we have. As a result, these competitors are able to devote greater resources to the development, promotion, sale and support of their products. In addition, our competitors that have large market capitalizations or cash reserves are much better positioned than we are to acquire other companies, including our competitors, and thereby acquire new technologies or products that may displace our product lines. Any of these acquisitions could give our competitors a strategic advantage that would materially adversely affect our business, results of operations and financial condition.

Many of our competitors have significantly more established customer support and professional services organizations than we do. In addition, many of our competitors have much greater name recognition and have a more extensive customer base, broader customer relationships and broader product offerings than our company. These companies can leverage their customer bases and broader product offerings and adopt aggressive pricing policies to gain market share. We have encountered, and expect to continue to encounter, potential customers that, due to existing relationships with our competitors, are committed to the product offerings of these competitors. As a result, these potential customers may not consider purchasing our products. We expect to face competition in the following areas:

- Product pricing;
- Breadth of product lines;

- Sales and distribution capability;
- Product features and enhancements, including product performance, reliability, size, compatibility and scalability;
- Product ease of deployment;
- Conformance to industry standards; and
- Technical support and service.

7

16

We expect that competitive pressures may result in price reductions, reduced margins and loss of market share, which would materially adversely affect our business, results of operations and financial condition.

WE ARE DEPENDENT ON A SINGLE CONTRACT MANUFACTURER

We rely on a single third-party manufacturer, Electromax, to build our products. We may not be able to effectively manage our relationship with Electromax and Electromax may not meet our future requirements for timely delivery. We have no written agreement with Electromax. We have relationships with two other third-party manufacturers, one of which currently builds our prototypes. Although both of these other third-party manufacturers are capable of building our products, any interruption in the operations of Electromax would adversely affect our ability to meet our scheduled product deliveries to our customers, which could cause the loss of existing or potential customers and could materially adversely affect our business, results of operations and financial condition.

In addition, the products that Electromax or any other manufacturer builds for us may be insufficient in quality or in quantity to meet our needs. Electromax or any other manufacturer may not meet the technological or delivery requirements of our current products or any future products that we may develop and introduce. The inability of Electromax or any other of our contract manufacturers in the future to provide us with adequate supplies of high-quality products, or the loss of Electromax or any other of our contract manufacturers in the future, would cause a delay in our ability to fulfill customer orders while another of our third-party manufacturers begins production and would have a material adverse effect on our business, results of operations and financial condition.

SOME OF THE KEY COMPONENTS IN OUR PRODUCTS COME FROM SINGLE OR LIMITED SOURCES OF SUPPLY

We currently purchase several key components used in the manufacture of our SMS 500 and our SMS 1000 products from single or limited sources of supply. These manufacturers include Altera, Brooktree, Connector Technologies, Foresight, Intel, Level One, Powerspec, Siemens and Ziatech. We have no guaranteed supply arrangement with these suppliers, and we or our manufacturers may fail to obtain these supplies in a timely manner in the future. Financial or other difficulties faced by these suppliers or significant changes in demand for these components could limit the availability to us of these components. Any interruption or delay in the supply of any of these components, or the inability to obtain these components from alternate sources at acceptable prices and within a reasonable amount of time, would adversely affect our ability to meet scheduled product deliveries to our customers and would materially adversely affect our business, results of operations and financial condition. In addition, qualifying additional suppliers is time-consuming and expensive.

WE MAY BE UNABLE TO MATCH PRODUCTION WITH PRODUCT DEMAND

We currently use a rolling six-month forecast based on anticipated product orders, product order history and backlog to determine our materials requirements. Lead times for the materials and components that we order vary

significantly and depend on numerous factors, including the specific supplier, contract terms and demand for a component at a given time. If actual orders do not match our forecasts, we may have excess or inadequate inventory of materials and components, which could materially adversely affect our business, results of operations and financial condition.

WE MAY BE UNABLE TO PROPERLY MANAGE GROWTH

We have expanded our operations rapidly since our inception. The number of our employees increased from 39 in February 1998 to 127 in March 1999. We intend to continue to expand in order to pursue existing and potential market opportunities and are in the process of hiring additional engineering and sales personnel. We intend to hire a significant number of engineers in 1999. Our ability to continue to attract and retain highly skilled personnel is a critical factor in determining whether we will be successful in the future. Competition for highly skilled personnel is intense, especially in the San Francisco Bay Area. We may fail to attract, assimilate or retain qualified personnel to fulfill our current

8

17

or future needs. If we so fail, our business, results of operations and financial condition could be materially adversely affected. Our planned rapid growth places a significant demand on management and financial and operational resources. In order to grow and achieve future success, we must:

- Retain existing personnel;
- Hire, train, manage and retain additional qualified personnel; and
- Effectively manage multiple relationships with our customers, suppliers and other third parties.

We are currently seeking to lease additional office space to accommodate our growing operations. We may be unable to locate necessary office space on commercially reasonable terms or in a timely manner. Failure to do so would have a material adverse effect on our business, results of operations and financial condition. Our current office lease expires in September 1999. Any required relocation may be disruptive to our business.

OUR PLANNED EXPANSION TO INTERNATIONAL MARKETS WILL INVOLVE NEW RISKS

In 1998, we derived approximately 15% of our revenues from sales to customers outside of the United States. Our ability to achieve future success will depend in part on the expansion of our international sales and operations. International operations are generally subject to a number of risks, including:

- Expenses associated with customizing products for foreign countries;
- Protectionist laws and business practices that favor local competition;
- Dependence on local vendors;
- Multiple, conflicting and changing governmental laws and regulations;
- Longer sales cycles;
- Longer accounts receivable cycles;
- Increased difficulties in collecting accounts receivable;
- Difficulties in managing operations across disparate geographic areas;
- Difficulties associated with enforcing agreements through foreign legal systems;

- Reduced or limited protection of our intellectual property rights in some countries;
- Foreign currency exchange rate fluctuations; and
- Political and economic instability.

In addition, if we grow internationally, we will need to expand our worldwide operations and enhance our communications infrastructure. If we fail to implement and improve these systems, our ability to accurately forecast sales demand, manage our supply chain and record and report financial and management information would be adversely affected. This could materially adversely affect our business, results of operations and financial condition.

UNDETECTED SOFTWARE OR HARDWARE ERRORS COULD HAVE A MATERIAL ADVERSE EFFECT ON US

Networking products frequently contain undetected software or hardware errors when first introduced or as new versions are released. We have experienced minor errors in the past in connection with new products. We expect that errors will be found from time to time in new or enhanced products after we begin commercial shipments. These problems may cause us to incur significant warranty and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer relations problems. The occurrence of these problems could result in the delay or loss of market acceptance of our products and would likely have a material adverse effect on our business, results of operations and financial condition.

9

18

Our customers use our products to provide broadband access to their customers. Defects, integration issues or other performance problems in our products could result in financial or other damages to our customers or could damage market acceptance for our products. Our customers could also seek damages for losses from us, which, if they were successful, could have a material adverse effect on our business, results of operations and financial condition. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly.

OUR FAILURE AND THE FAILURE OF OUR KEY SUPPLIERS AND CUSTOMERS TO BE YEAR 2000 COMPLIANT COULD NEGATIVELY IMPACT OUR BUSINESS

The Year 2000 computer issue creates a variety of risks for us. If systems do not correctly recognize date information when the year changes to 2000, our business, results of operations and financial condition could be materially adversely affected. The risks involve:

- Potential warranty or other claims by our customers;
- Errors in systems we use to run our business;
- Errors in systems used by our suppliers;
- Errors in systems used by our customers; and
- Potential reduced spending by other companies on broadband Internet access products as a result of significant information systems spending on Year 2000 remediation.

Our internal systems include both our information technology, and non-information technology systems. We have conducted an initial audit of our material internal information technology systems, including both our own software products and third-party software and hardware technology. We have not yet initiated an assessment of our non-information technology systems. To the extent that we are unable to test the technology provided by third-party vendors, we are seeking assurances from these vendors that their systems are

Year 2000 compliant. We may experience material unanticipated problems and costs caused by undetected errors or defects in the technology used in our internal information technology and non-information technology systems. These unanticipated problems and costs could have a material adverse effect on our business, results of operations and financial condition.

We intend to contact our critical suppliers to determine if the suppliers' operations and the products and services provided to us are Year 2000 compliant. Where practicable, we will attempt to mitigate our risks with respect to the failure of our suppliers to be Year 2000 compliant by locating Year 2000 compliant replacement suppliers. However, our failure to mitigate our Year 2000 risks remains a possibility and could have a material adverse impact on our business, results of operations and financial condition.

We have been informed by Electromax, our contract manufacturer, that its manufacturing systems are Year 2000 compliant. However, Electromax may experience material unanticipated problems and costs caused by undetected errors or defects in the technology used in their internal information technology and non-information technology systems. These unanticipated problems and costs could cause manufacturing delays or difficulties for our products and harm Electromax's operations. Additionally, Electromax has not yet ascertained whether any of its suppliers is Year 2000 compliant. The failure of a supplier of Electromax to be Year 2000 compliant could also adversely affect Electromax's operations. Any of these events could materially adversely affect our business, results of operations and financial condition.

We believe that the SMS 1000 is Year 2000 compliant. However, despite testing by us and by current and potential customers, and despite assurances from developers of products incorporated into the SMS 1000, the SMS 1000 may contain undetected errors or defects associated with Year 2000 date functions. We believe that, based solely on internal testing, the recently introduced SMS 500 is

10

19

Year 2000 compliant. We have made assurances to our customers that the SMS 1000 and the SMS 500 are Year 2000 compliant. The failure of our products to be Year 2000 compliant would result in numerous customer claims, which could have a material adverse impact on our business, results of operations and financial condition.

We do not currently have any information concerning the Year 2000 compliance status of our customers. Our current or potential customers may incur significant expenses to achieve Year 2000 compliance. If our customers are not Year 2000 compliant, they may experience material costs to remedy problems, or they may face litigation costs. In either case, spending on Year 2000 issues could reduce or eliminate the budgets that our current or potential customers could have for purchases of our products. As a result, our business, results of operations and financial condition could be materially adversely affected.

To date, our Year 2000 related costs have not been material. We have funded these costs from available cash without separately accounting for these costs. Although our future Year 2000 compliance costs are not expected to be significant, we may experience unanticipated material problems and costs associated with Year 2000 compliance that could adversely affect our business, results of operations and financial condition. We have not yet developed any contingency plan to address situations that may result if we are unable to achieve Year 2000 readiness of our critical operations. The cost of developing and implementing a Year 2000 contingency plan may be material.

If our internal systems, our products or the internal systems at our manufacturers are not Year 2000 compliant, our business, results of operation and financial condition would be materially adversely affected.

WE MAY BE UNABLE TO PROTECT OUR PROPRIETARY TECHNOLOGY

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We have filed one U.S. patent application. There can be no assurance that this application will be approved, that any issued patents will protect our intellectual property or that any issued patents will not be challenged by third parties. Furthermore, other parties may independently develop similar or competing technology or design around any patents that may be issued to us. Although we attempt to protect our intellectual property rights, we may be unable to prevent the misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

Others may allege that our products infringe upon their proprietary rights. Any parties asserting that our products infringe upon their proprietary rights would force us to defend ourselves or our customers, manufacturers or suppliers against alleged infringement of intellectual property rights. We could incur substantial costs to prosecute or defend this litigation. In addition, intellectual property litigation could force us to do one or more of the following:

- Cease selling, incorporating or using products or services that incorporate the challenged intellectual property;
- Obtain from the holder of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on acceptable terms, if at all; or
- Redesign those products or services that incorporate the disputed technology.

In the event of a successful claim of infringement against us and our failure or inability to develop non-infringing technology or license the infringed technology on acceptable terms and on a timely basis, our business, results of operations and financial condition would be materially adversely affected. We may be subject to these claims in the future.

We may in the future initiate claims or litigation against third parties for infringement of our proprietary rights in order to determine the scope and validity of our proprietary rights or the proprietary

rights of competitors. These claims could result in costly litigation and the diversion of our technical and management personnel. As a result, our business, results of operations and financial condition could be materially adversely affected.

WE MAY NEED ADDITIONAL CAPITAL, WHICH MAY NOT BE AVAILABLE

At March 31, 1999, we had approximately \$5.3 million in cash, cash equivalents and short-term investments. In April 1999, we used approximately \$2.5 million of these amounts to repay outstanding debt obligations. In April 1999, we also secured a commitment for a \$2.0 million asset-based borrowing facility. We believe that these amounts, combined with proceeds from our initial public offering and cash anticipated to be available from future operations, will enable us to meet our working capital requirements for at least the next 12 months. However, if cash from available sources is insufficient, or if cash is used for acquisitions or other unanticipated uses, we may need additional capital.

The development and marketing of new products and the expansion of reseller channels and associated support personnel will require a significant commitment of resources. In addition, if the market for broadband access develops at a slower pace than anticipated or if we fail to establish significant market share and achieve a meaningful level of revenue, we may continue to incur significant operating losses and utilize significant amounts of capital. As a result, we

could be required to raise substantial additional capital. Additional capital may not be available to us at all, or if available, may be available only on unfavorable terms. Any inability to raise additional capital when we require it would materially adversely affect our business, results of operations and financial condition. Any additional issuance of equity or equity-related securities will be dilutive to our stockholders.

RISKS RELATED TO THE BROADBAND ACCESS INDUSTRY

WE ARE DEPENDENT ON THE WIDESPREAD ADOPTION OF BROADBAND ACCESS SERVICES

Sales of our products depend on the increased use and widespread adoption of broadband access services, and the ability of our customers to market and sell broadband access services. Our business, results of operations and financial condition would be materially adversely affected if the use of broadband access services does not increase as anticipated or if our customers' broadband access services are not received well by the marketplace. Critical issues concerning use of broadband access services are unresolved and will likely affect use of broadband access services. These issues include:

- Security;
- Reliability;
- Bandwidth;
- Congestion;
- Cost;
- Ease of access; and
- Quality of service.

Even if these issues are resolved, if the market for products that provide broadband access to the Internet and to corporate networks fails to develop, or develops at a slower pace than anticipated, our business, results of operations and financial condition would be materially adversely affected.

THE BROADBAND ACCESS SERVICES MARKET IS SUBJECT TO RAPID CHANGE

The broadband access services market is new and is characterized by rapid technological change, frequent enhancements to existing products and new product introductions, changes in customer requirements and evolving industry standards. We may be unable to respond quickly or effectively to these developments. The introduction of new products by competitors, market acceptance of products based on

new or alternative technologies, or the emergence of new industry standards, could render our existing or future products obsolete, which would materially adversely affect our business, results of operations and financial condition.

The emergence of new industry standards might require us to redesign our products. If our products fail to comply with widely adopted industry standards, our customers and potential customers may not purchase our products. This would have a material adverse effect on our business, results of operations and financial condition.

OUR BUSINESS MAY BE ADVERSELY AFFECTED BY GOVERNMENT REGULATION OF THE COMMUNICATIONS INDUSTRY

The jurisdiction of the Federal Communications Commission, or FCC, extends to the communications industry, to our customers and to the products and services that our customers sell. Future FCC regulations, or regulations set

forth by other regulatory bodies, may adversely affect the broadband access services industry. Regulation of our customers may have a material adverse effect on our business, results of operations and financial condition. For example, FCC regulatory policies that affect the availability of data and Internet services may impede our customers' penetration into broadband access markets. In addition, international regulatory bodies are beginning to adopt standards for the communications industry. The delays that these governmental processes entail may cause order cancellations or postponements of product purchases by our customers, which would materially adversely affect our business, results of operations and financial condition.

RISKS RELATED TO THE SECURITIES MARKETS

OUR STOCK PRICE MAY BE VOLATILE

An active public market for our common stock may not be sustained. The market for technology stocks has been extremely volatile. The following factors could cause the market price of our common stock to fluctuate significantly:

- Our loss of a major customer;
- Our addition or the departure of key Redback Networks personnel;
- Variations in our quarterly operating results;
- Announcements by us or our competitors of significant contracts, new products or product enhancements, acquisitions, distribution partnerships, joint ventures or capital commitments;
- Changes in financial estimates by securities analysts;
- Our sales of common stock or other securities in the future;
- Changes in market valuations of broadband access technology companies;
- Changes in market valuations of networking and telecommunications companies; and
- Fluctuations in stock market prices and volumes.

OUR BUSINESS MAY BE ADVERSELY AFFECTED BY CLASS ACTION LITIGATION DUE TO STOCK PRICE VOLATILITY

Securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. If our stock price is volatile, we may be the target of similar litigation. Our management's attention and resources may be diverted by any securities litigation, and we may incur substantial related costs, possibly resulting in a material adverse effect to our business, results of operations and financial condition.

13

22

CONTROL BY EXISTING STOCKHOLDERS MAY LIMIT YOUR ABILITY TO INFLUENCE THE OUTCOME OF DIRECTOR ELECTIONS AND CERTAIN TRANSACTIONS

Our executive officers, directors and principal stockholders and their affiliates beneficially own approximately 48.17% of our outstanding common stock. These stockholders, if acting together, would be able to significantly influence all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions.

SUBSTANTIAL SALES OF OUR COMMON STOCK COULD ADVERSELY AFFECT OUR STOCK PRICE

Sales of a substantial number of shares of our common stock could adversely affect the market price of our common stock by potentially introducing a large number of sellers of our common stock into a market in which our common stock

price is already volatile, thus driving our common stock price down. In addition, the sale of these shares could impair our ability to raise capital through the sale of additional equity securities. Based on shares outstanding as of March 31, 1999, upon completion of our initial public offering, we had 21,409,119 shares of common stock outstanding. Our directors, executive officers and current stockholders have executed lock-up agreements that limit their ability to sell shares of our common stock. These stockholders have agreed, subject to limited exceptions, not to sell or otherwise dispose of any shares of our common stock for a period of at least 180 days after the date of our initial public offering without the prior written approval of Morgan Stanley & Co. Incorporated. When these lock-up agreements expire, these shares and the shares of common stock underlying any options held by these individuals will become eligible for sale, in some cases pursuant only to the volume, manner of sale and notice requirements of Rule 144.

ANTI-TAKEOVER PROVISIONS IN OUR CHARTER DOCUMENTS AND DELAWARE LAW COULD PREVENT OR DELAY A CHANGE IN CONTROL OF OUR COMPANY

Provisions in our bylaws and in our certificate of incorporation, may have the effect of delaying or preventing a change of control or changes in management of our company. These provisions include:

- The stipulation that a special meeting of stockholders may only be called by stockholders owning at least 50% of our outstanding shares;
- The ability of our board of directors to issue preferred stock without stockholder approval; and

- The right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors.

Furthermore, we are subject to the provisions of section 203 of the Delaware General Corporation Law. These provisions prohibit a stockholder owning 15% or more of our outstanding voting stock from consummating a merger or combination with us unless this stockholder receives board approval for the transaction or unless 66 2/3% of the outstanding shares of our voting stock not owned by this stockholder approve the merger or combination.

REGISTERED STOCKHOLDERS

The Reoffer Prospectus relates to shares of Common Stock which have been acquired by certain key employees (the "Registered Stockholders") of the Company. Registered Stockholders acquired shares of Common Stock to be offered hereunder pursuant to the exercise of options granted under the 1997 Stock Plan.

The following table sets forth certain information with respect to the Registered Stockholders as of July 26, 1999:

<TABLE>
<CAPTION>

Registered Stockholder -----	Number of Shares to be Offered Hereby -----
<S>	<C>
Christine Barsema(2)	13,000
Dennis Barsema	100,000
Larry D. Blair	40,000
Joseph Borgonia	2,275
David Coleman	5,265
Ryan T. and Janet R. Cook, as community property	3,900
Kenneth Crepea	3,900

Ken Crocker	2,000
Geoffrey C. Darby	25,000
John DuBois	2,660
Terry F. Eger	14,121
Joyce Gandolfi	8,418
Patrick and Shauna Hogan	11,310
Gilbert S. and Robin Hunt	3,000
Joanne C. Knight	1,824
Wing Ko	3,500
Randall Kruep	41,250
Wing Lai	1,950
Sean Laskey	18,574
David Lawrence	15,763
William E. Miskovetz	30,000
Suhail Nanji	6,000
Timothy L. Patrick	1,000
Sam Pigg	13,065
Ray Provan	4,550
Donald D. Scherbarth	3,933
Alan H. Schneider	1,463
Jeffrey L. Schults	4,875
Lee Schweichler	1,950
Marshall A. Smith	2,497
James D. Solomon	6,500
Louanna Sullivan	2,633
Nicholas M. and Darcie Lynn Thille, as JT w/ROS	14,300
Albert Wang	2,000
John H. and Susan L. Windham as co-trustees of the Windham Living Trust dated May 18, 1998	10,725
Certain unnamed non-affiliates of the Company(1)	3,121

</TABLE>

(1) Each unnamed non-affiliate may use this reoffer prospectus to sell up to 1,000 shares of Common Stock.

(2) Former spouse acquired shares under QDRO.

PLAN OF DISTRIBUTION

The shares of Common Stock covered by this Reoffer Prospectus are being registered by the Company for the account of the Registered Stockholders. The Company understands that none of such shares will be offered through underwriters.

Shares of Common Stock covered by this Reoffer Prospectus may be offered and sold from time to time by the Registered Stockholders through brokers through the Nasdaq National Market System or otherwise, at the prices prevailing at the time of such sales. To the Company's knowledge, no specific brokers or dealers have been designated by the Registered Stockholders nor has any agreement been entered into in respect of brokerage commissions or for the exclusive or coordinated sale of any securities which may be offered pursuant to this Reoffer Prospectus. The Company will pay all expenses of preparing and reproducing this Reoffer Prospectus, but will not receive the proceeds from sales by the Registered Stockholders. Sales will be made at prices prevailing at the times of such sales.

The Company will not receive any of the proceeds from the offering hereunder. All expenses of registration incurred in connection with this offering are being borne by the Company, but all selling and other expenses incurred by the individual Registered Stockholders will be borne by such Registered Stockholders.

DOCUMENTS INCORPORATED BY REFERENCE

Redback hereby incorporates by reference into this Registration Statement the following documents previously filed with the Commission:

- (a) Redback's prospectus filed with the SEC under Rule 424(b) under the Securities Act of 1933, as amended (the "1933 Act"), in connection with Registration Statement No. 333-744479 on Form S-1 filed with the SEC on March 16, 1999, the amendment filed on April 22, 1999, the amendment filed on May 4, 1999 and the amendment filed on May 12, 1999 and the amendment filed on May 14, 1999, which contains the audited financial statements for the period August 30, 1996 (inception) through December 31, 1996 and for Redback's fiscal years ended December 31, 1997 and 1998.
- (b) Redback's Registration Statement No. 0-25853 on Form 8-A filed with the Commission on April 28, 1999 together with amendments thereto, pursuant to Section 12 of the Exchange Act, in which there is described the terms, rights and provisions applicable to the Company's outstanding Common Stock.

All of such documents are on file with the Commission. All documents subsequently filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities to be offered pursuant hereto have been sold or which deregisters all such securities then remaining unsold shall be deemed to be incorporated by reference in this Prospectus and to be a part hereof from the date of the filing of such documents.

INDEMNIFICATION

Section 145 of the Delaware General Corporation Law authorizes a court to award or a corporation's Board of Directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the 1933 Act. Redback's Bylaws provide for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent permitted by the Delaware General Corporation Law. Redback's Certificate of Incorporation provides that, under Delaware law, its directors shall not be liable for monetary damages for breach of their fiduciary duty as directors to Redback and its stockholders. This provision in the Certificate of Incorporation does not eliminate the fiduciary duty of the directors, and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Redback for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. Redback has entered into Indemnification Agreements with its officers and directors. The Indemnification Agreements provide Redback's officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law.

EXHIBIT INDEX

<TABLE>
<CAPTION>

Exhibit Number -----	Exhibit -----	Sequentially Numbered Page -----
<S>	<C>	<C>
4	Instrument Defining Rights of Stockholders. Reference is made to Redback's Registration Statement No. 0-25853 on Form 8-A, which is incorporated herein by reference under Item 3(b) of this Registration Statement.	
5	Opinion and consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP.	
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.	
23.2	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP is contained in Exhibit 5.	
24	Power of Attorney. Reference is made to page II-4 of this Registration Statement.	
99.1	Form of Written Compensation Agreement.	

</TABLE>

July 26, 1999

Redback Networks
1389 Moffett Park Drive
Sunnyvale, CA 94089

Re: Redback Networks ("Redback") Registration Statement
for Offering of 426,322 Shares of Common Stock

Ladies and Gentlemen:

We refer to your registration on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended, of 426,322 Shares Acquired Under Written Compensation Agreements with certain individuals designated in the Registration Statement and certain unnamed non-affiliates. We advise you that, in our opinion, when such shares have been issued and sold under the applicable provisions of the Written Compensation Agreements with certain individuals designated in the Registration Statement and certain unnamed non-affiliates and in accordance with the Registration Statement, such shares will be validly issued, fully paid and nonassessable shares of Redback's Common Stock.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ Gunderson Dettmer Stough Villeneuve
Franklin & Hachigian, LLP

Gunderson Dettmer Stough Villeneuve
Franklin & Hachigian, LLP

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this reoffer prospectus constituting part of the Registration Statement on Form S-8 of our report dated March 5, 1999 relating to the financial statements of Redback Networks Inc., which appears on page F-2 of the Prospectus constituting part of the Registration Statement on Form S-1 (No. 333-74479).

/s/ PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP
San Jose, California
July 26, 1999

FORM OF WRITTEN COMPENSATION AGREEMENT

REDBACK NETWORKS INC. 1997 STOCK PLAN

NOTICE OF STOCK OPTION GRANT

You have been granted the following option to purchase Common Stock of Redback Networks Inc. (the "Company"):

<TABLE>	
<S>	<C>
Name of Optionee:	
Total Number of Shares Granted:	
Type of Option:	Incentive Stock Option
	Nonstatutory Stock Option
Exercise Price Per Share:	\$
Date of Grant:	
Date Exercisable:	This option may be exercised, in whole or in part, for 100% of the Shares subject to this option at any time after the Date of Grant.
Vesting Commencement Date:	
Vesting Schedule:	The Right of Repurchase shall lapse with respect to the first 25% of the Shares subject to this option upon the Optionee's completion of 12 months of Service from the Vesting Commencement Date and an additional 1/48th of the Shares on the (VestDay) day of each month thereafter.
Expiration Date:	
</TABLE>	

By your signature and the signature of the Company's representative below, you and the Company agree that this option is granted under and governed by the terms and conditions of the 1997 Stock Plan and the Stock Option Agreement, both of which are attached to and made a part of this document.

OPTIONEE: REDBACK NETWORKS INC.