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SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-Q

(Mark One)

/ X / Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

For the quarterly period ended 10/31/98 or

/ / Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

For the transition period from to

Commission file number 1-8266

DATARAM CORPORATION

\_\_\_\_\_  
(Exact name of registrant as specified in its charter)

New Jersey 22-1831409

\_\_\_\_\_  
(State or other jurisdiction of (I.R.S. Employer Identification No.)  
incorporation or organization)

P.O. Box 7528, Princeton, NJ 08543

\_\_\_\_\_  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (609) 799-0071

\_\_\_\_\_  
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  X No

APPLICABLE ONLY TO CORPORATE ISSUERS:

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the last practicable date. Common Stock (\$1.00 par value): As of December 4, 1998, there were 5,562,810 shares outstanding.

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PART 1. FINANCIAL INFORMATION

<TABLE>

ITEM 1. FINANCIAL STATEMENTS

Dataram Corporation And Subsidiary  
Consolidated Balance Sheets  
October 31, 1998 and April 30, 1998

	(Unaudited) October 31, 1998	(Audited) April 30, 1998
<S>	<C>	<C>
Assets		
Current Assets:		
Cash and cash equivalents	\$ 9,231,343	\$ 7,529,906
Trade receivables, less allowance for doubtful accounts and sales returns of \$450,000 at October 31, 1998 and at April 30, 1998	8,200,482	10,075,838
Inventories	3,748,130	2,923,165
Other current assets	626,941	493,013
Total current assets	<u>21,806,896</u>	<u>21,021,922</u>
Property and equipment, at cost:		
Land	875,000	875,000
Machinery and equipment	9,447,266	8,805,875
	<u>10,322,266</u>	<u>9,680,875</u>
Less: accumulated depreciation and amortization	6,869,979	6,245,979
Net property and equipment	<u>3,452,287</u>	<u>3,434,896</u>
Other assets	10,380	7,380
	<u>\$ 25,269,563</u>	<u>\$ 24,464,198</u>

Liabilities and Stockholders' Equity

Current liabilities:

Accounts payable	\$ 3,203,791	\$ 4,698,786
Accrued liabilities	1,665,480	1,548,315
Income taxes payable	134,693	236,116
Total current liabilities	<u>5,003,964</u>	<u>6,483,217</u>

Deferred income taxes	1,013,000	1,013,000
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Stockholders' Equity:

Common stock, par value \$1.00 per share.		
Authorized 18,000,000 shares; issued		
5,562,810 at October 31, 1998 and issued and outstanding	2,781,405 at April 30, 1998	2,781,405
Additional paid in capital	0	2,125,871
Retained earnings	14,112,530	12,060,705
Treasury stock, at cost (69,400 shares)	(422,741)	0
Total stockholders' equity	<u>19,252,599</u>	<u>16,967,981</u>
	<u>\$ 25,005,146</u>	<u>\$ 24,464,198</u>

See accompanying notes to consolidated financial statements.

</TABLE>

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<TABLE>

Dataram Corporation and Subsidiary  
Consolidated Statements of Earnings  
Three and Six Months Ended October 31, 1998 and 1997  
(Unaudited)

	2nd Quarter	Six Months	2nd Quarter	Six Months
<S>	<C>	<C>	<C>	<C>
Revenues	\$ 16,261,859	\$ 34,012,021	\$ 20,067,735	\$ 38,215,027
Costs and expenses:				
Cost of sales	11,095,422	23,365,271	15,402,781	30,037,758
Engineering and development	371,824	703,434	301,389	524,967
Selling, general and administrative	2,810,081	5,747,042	2,908,762	5,188,921
	<u>14,277,327</u>	<u>29,815,747</u>	<u>18,612,932</u>	<u>35,751,646</u>
Earnings from operations	1,984,532	4,196,274	1,454,803	2,463,381
Other income (expense), net				
Other income, net	0	0	0	2,000
Interest income, net	135,588	252,085	75,053	139,747
	<u>135,588</u>	<u>252,085</u>	<u>75,053</u>	<u>141,747</u>
Earnings before income taxes	2,120,120	4,448,359	1,529,856	2,605,128
Income tax provision	830,000	1,741,000	585,000	991,000
Net earnings	<u>\$ 1,290,120</u>	<u>\$ 2,707,359</u>	<u>\$ 944,856</u>	<u>\$ 1,614,128</u>
Net earnings per share of common stock				
Basic	\$ .23	\$ .49	\$ .16	\$ .27
Diluted	\$ .21	\$ .44	\$ .15	\$ .26
Weighted average number of common shares outstanding				
Basic	<u>5,543,094</u>	<u>5,552,952</u>	<u>6,004,726</u>	<u>6,055,966</u>
Diluted	<u>6,145,418</u>	<u>6,143,006</u>	<u>6,268,256</u>	<u>6,323,826</u>

See accompanying notes to consolidated financial statements.

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Dataram Corporation and Subsidiary  
Consolidated Statements of Cash Flows  
Six Months Ended October 31, 1998 and 1997  
(Unaudited)

	1998	1997
Cash flows from operating activities:		
Net earnings	\$ 2,707,359	\$ 1,614,128
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	624,000	250,200
Bad debt expense	113,189	172,992
Changes in assets and liabilities:		
(Increase) decrease in trade receivables	1,762,167	(1,524,040)
(Increase) decrease in inventories	(824,965)	1,152,905
(Increase) decrease in other current assets	(133,928)	6,825
Increase in other assets	(3,000)	(1,650)
Increase (decrease) in accounts payable	(1,494,995)	1,456,588
Increase (decrease) in accrued liabilities	117,165	(517,743)
(Decrease) in income taxes payable	(101,423)	0

Net cash provided by operating activities	2,765,569	2,610,205
Cash flows from investing activities:		
Purchase of property and equipment	(641,391)	(1,005,581)
Net cash used in investing activities	(641,391)	(1,005,581)
Cash flows from financing activities:		
Proceeds from sale of common shares under stock option plan	0	57,000
Purchase and cancellation of common stock	0	(1,101,651)
Purchase of common stock held in treasury	(422,741)	0
Net cash used in financing activities	(422,741)	(1,044,651)
Net increase in cash and cash equivalents	1,701,437	559,973
Cash and cash equivalents at beginning of year	7,529,906	6,835,671
Cash and cash equivalents at end of period	\$ 9,231,343	\$ 7,395,644

Supplemental disclosures of cash flow information:

Cash paid during the period for:

Interest	\$ 38,751	\$ 37,453
Income taxes	\$ 1,855,200	\$ 923,058

See accompanying notes to consolidated financial statements.

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Notes to Consolidated Financial Statements  
October 31, 1998 and 1997  
(Unaudited)

Basis of Presentation

The information at October 31, 1998 and for the three and six months ended October 31, 1998 and 1997, is unaudited but includes all adjustments (consisting only of normal recurring adjustments) which, in the opinion of management, are necessary to state fairly the financial information set forth therein in accordance with generally accepted accounting principles. The interim results are not necessarily indicative of results to be expected for the full fiscal year. These financial statements should be read in conjunction with the audited financial statements for the year ended April 30, 1998 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission.

Stock Split

On November 11, 1998 the Company's Board of Directors announced a two-for-one stock split effected in the form of a dividend for shareholders of record at the close of business on November 23, 1998 and payable December 3, 1998. The accompanying per share amounts in the financial statements have been restated to give retroactive effect to this stock split. The stock split has been charged to additional paid in capital in the amount of \$2,125,871 and retained earnings in the amount of \$655,534.

Significant Accounting Policies

## Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Dataram International Sales Corporation (a Domestic International Sales Corporation (DISC)). All significant intercompany transactions and balances have been eliminated.

## Cash and cash equivalents

Cash and cash equivalents consist of unrestricted cash, money market preferred stock and commercial paper with original maturities of three months or less.

## Inventory valuation

Inventories are valued at the lower of cost or market, with costs determined by the first-in, first-out method. Inventories at October 31, 1998 and April 30, 1998 consist of the following categories:

	October 31, 1998	April 30, 1998
Raw material	\$ 2,150,000	\$ 1,759,000
Work in process	105,000	61,000
Finished goods	1,493,000	1,103,000
	<u>\$ 3,748,000</u>	<u>\$ 2,923,000</u>

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## Property and equipment

Property and equipment is recorded at cost. Depreciation is generally computed on the straight-line basis. Depreciation rates are based on the estimated useful lives which range from three to five years for machinery and equipment. When property or equipment is retired or otherwise disposed of, related costs and accumulated depreciation are removed from the accounts. Repair and maintenance costs are charged to operations as incurred.

## Revenue recognition

Revenue from product sales is recognized when the related goods are shipped to the customer and all significant obligations of the Company have been satisfied. Estimated warranty costs are accrued.

## Product development and related engineering

The Company expenses product development and related engineering costs as incurred. Engineering effort is directed to development of new or improved products as well as ongoing support for existing products.

## Income taxes

The Company follows the asset and liability method of accounting for income taxes in accordance with the provisions of Statement of Financial Accounting Standards SFAS No. 109, "Accounting for Income Taxes". Under the asset and liability method of SFAS No. 109, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. Under SFAS No. 109, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that the tax rate changes.

## Concentration of credit risk

Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents. The Company maintains its cash and cash equivalents in financial institutions and brokerage accounts. To the extent that such deposits exceed the maximum

insurance levels, they are uninsured. The Company performs ongoing evaluations of its customers' financial condition, as well as general economic conditions and, generally, requires no collateral from its customers.

#### Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

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#### Long-term debt

During the second quarter of fiscal 1999, the Company amended and restated its credit facility with its bank. Under the amended agreement, the Company modified certain financial covenants and increased the revolving credit facility to \$12,000,000 until October 31, 1999, at which point it will decrease to \$6,000,000 until October 31, 2000. The agreement provides for Eurodollar rate loans, CD rate loans and base rate loans at an interest rate no higher than the bank's base commercial lending rate less 1/2%. The Company is required to pay a commitment fee equal to 1/16 of one percent per annum on the unused commitment. The agreement contains certain restrictive financial covenants including a minimum current ratio, minimum tangible net worth requirement, minimum interest coverage ratio, maximum debt to equity ratio and certain other covenants, as defined by the agreement. There were no borrowings during fiscal 1999 and 1998. As of October 31, 1998, the amount available for borrowing under the revolving credit facility was \$12,000,000.

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## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Liquidity and Capital Resources

As of October 31, 1998, working capital amounted to \$16.8 million reflecting a current ratio of 4.4 compared to working capital of \$14.5 million and a current ratio of 3.2 as of April 30, 1998.

During fiscal 1999, the Company amended and restated its \$12 million unsecured revolving credit line with its bank. The credit facility was unused during fiscal 1999. Annually, \$6 million of the facility is scheduled to expire. The Company intends to renew any expiring portion of the facility by the expiration date and maintain a \$12 million total facility.

Management believes that its working capital together with internally generated funds and its bank line of credit are adequate to finance the Company's operating needs and future capital requirements.

### Year 2000

The Company's products are all year 2000 compliant. The Company has completed its upgrade of its manufacturing, accounting, production and inventory control systems and software and these systems and software are now year 2000 compliant. The Company has numerous personal computers and peripheral devices used in information technology and non-information technology applications which are currently being tested for year 2000 compliance. The Company intends to upgrade or replace any non year 2000 compliant devices by the end of the current fiscal year. Management estimates that the financial impact of the upgrade will not have a material effect on the Company's consolidated financial condition, results of operations and liquidity.

As part of the Company's Year 2000 readiness program, the Company has identified its key vendors and suppliers and is attempting to ascertain their stage of year 2000 readiness primarily through questionnaires and interviews. The Company has a diverse and ever changing customer base, with no single

customer typically accounting for 10% or more of its revenue. At this time, the Company has no plans to ascertain the stage of year 2000 readiness of its current customers.

The possible consequences of the Company, its key vendors, certain customers, governments or government agencies, financial institutions, utilities, etc. of not being year 2000 compliant by January 1, 2000 include but are not limited to, among other things, a temporary plant closing, delays in the delivery of products, delays in collection of receivables, and inventory and supply obsolescence. Because of the widespread nature of this problem, no assurances can be made that the Company will not be materially adversely affected by a temporary inability of the Company to conduct its business in the ordinary course for a period of time after January 1, 2000. However, management believes that the actions it has taken should significantly reduce the adverse effect any such disruptions may have.

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## Results of Operations

Revenues for the three month period ending October 31, 1998 were \$16,262,000 compared to revenues of \$20,068,000 for the comparable prior year period. Fiscal 1999 six month revenues totaled \$34,012,000 versus six month revenues of \$38,215,000 for the prior fiscal year. The decrease in revenues was the result of declining average selling prices for the Company's products reflecting a decrease in the price of dynamic random access memory chips (DRAMs) which are the primary raw material in memory boards, offset by increased unit volume.

Cost of sales for the second quarter and six months of fiscal 1998 were 68% and 69%, respectively of revenues versus 77% and 79% for the same prior year periods. The decrease in cost of sales as a percentage of revenues is attributable to favorable product mix as users continue to shift from 16 megabit based product to higher capacity 64 megabit product which command more favorable margins.

Engineering and development costs in fiscal 1999's second quarter and six months were \$372,000 and \$703,000, respectively versus \$301,000 and \$525,000 for the same prior year periods. The Company intends to maintain its commitment to the timely introduction of new memory products as new workstations and computers are introduced.

Selling, general and administrative costs in this year's second quarter and six months increased to 17% of revenues from 14% for the same prior year periods. Three month total expenditures decreased by \$99,000 from the comparable prior year period. Six month selling, general and administrative costs increased by \$558,000 in fiscal 1999 versus fiscal 1998. Fiscal 1998 S,G&A costs included legal expenses incurred related to a Complaint filed by Sun Microsystems, Inc., which has since been resolved. The increase in six month costs is primarily attributable to an expansion of the Company's sales force initiated in the beginning of fiscal 1998 as well as an increase in certain marketing and promotional programs, offset by the reduction in legal expense.

Other income (expense), net for the second quarter and six months of fiscal 1999 and 1998 consisted primarily of interest income on short term investments.

## Safe Harbor Statement

The information provided in this interim report may include forward-looking statements relating to future events, such as the development of new products, the commencement of production or the future financial performance of the Company. Actual results may differ from such projections and are subject to certain risks including, without limitation, risks arising from: changes in the price of memory chips, changes in the demand for memory systems for workstations and servers, increased competition in the memory systems industry, delays in developing and commercializing new products and other factors described in the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission which can be reviewed at

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PART II: OTHER INFORMATION

ITEM 5. EXHIBITS AND REPORTS ON FORM 8-K

A. Exhibits

27 (a). Financial Data Schedule

28 (a). Press Release reporting results of Second Quarter, Fiscal Year 1999 (Attached).

28 (b). Amendment to revolving line of credit agreement (Attached).

B. Reports on Form 8-K

No reports on Form 8-K have been filed during the current quarter.

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Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

DATARAM CORPORATION

Date:

By: MARK E. MADDOCKS

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Mark E. Maddocks  
Vice President, Finance  
(Principal Financial Officer)

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FOR IMMEDIATE RELEASE                      CONTACT: Mark Maddocks  
Vice-President, Finance  
Telephone: (609) 799-0071

DATARAM INCREASES EARNINGS  
SPLITS STOCK TWO FOR ONE

PRINCETON, NJ, November 11, 1998 - Dataram Corporation (AMEX: DTM) achieved substantially higher earnings for the second quarter and six months of fiscal 1999, Robert V. Tarantino, chairman and chief executive officer, announced today.

For the second quarter ended October 31, 1998, net earnings rose 37 percent to \$1,290,000 or \$.42 cents per share, versus \$945,000, or \$.30 cents per share for last year's comparable quarter. Revenues totaled \$16.3 million versus \$20.1 million in the prior year's second quarter.

For the six months ended October 31, 1998, net earnings increased 68 percent to \$2,707,000 or \$.88 cents per share, compared to \$1,614,000, or \$.51 cents per share, reported in the previous year. Revenues totaled \$34.0 million versus \$38.2 million and gigabytes shipped have more than doubled this year compared to the prior six-month period.

Continued....

Dataram Earnings Release - Page 2

"A favorable product mix producing higher gross margins, combined with cost-effective operations, largely contributed to the Company's strong second quarter and six-month financial results," Tarantino stated. "Average selling prices continued to decline in the second quarter as the purchase price of DRAMs declined. As we enter our third quarter, DRAM prices have begun to increase and we have adjusted our selling prices accordingly."

"Our sales force is increasing our customer base in the U.S. and Europe. Demand remains strong for our high-capacity gigabyte memory products for workstation and network server applications," he continued. "Our broad knowledge of the memory market -- derived from over thirty years of experience -- and engineering expertise enable us to consistently be the first independent supplier to introduce high-capacity products to the marketplace."

"In the second quarter, Dataram introduced several high-end products for the Intel(R) network server environment," Tarantino stated. "The Company is aggressively marketing these products to channel assemblers and original equipment manufacturers. We are very excited about the growth potential at the upper end of the Intel network server marketplace and we expect this business to contribute significantly to our financial growth."

Continued....

Dataram Earnings Release - Page 3

Additionally, Tarantino announced that the Company's Board of Directors has approved a two-for-one split of its common stock for shareholders of record at the close of business on November 23, 1998. The stock split will be in the form of a one share dividend for each share owned. The distribution of the additional shares will occur on December 3, 1998. The Company's previously announced share repurchase program of up to 500,000 shares of its common stock will remain in place. As of November 10, 1998, the Company has purchased 64,700 of the 500,000 share authorization.

"The Company's strong financial performance makes today's actions possible," Tarantino said. "The stock split will provide additional liquidity for our shares and, coupled with the repurchase program, return value to our shareholders."

Dataram Corporation is a leading provider of gigabyte memory upgrades for workstations and network servers and specializes in the manufacture of large-capacity memory boards for Compaq, Digital, Hewlett-Packard, IBM, Intel, Silicon Graphics and Sun Microsystems computers.

Continued....

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Safe Harbor Statement

The information provided in this press release may include forward-looking statements relating to future events, such as the development of new products, the commencement of production or the future financial performance of the Company. Actual results may differ from such projections and are subject to certain risks including, without limitation, risks arising from: changes in the price of memory chips, changes in the demand for memory systems for workstations and servers, increased competition in the memory systems industry, delays in developing and commercializing new products and other factors described in the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission which can be reviewed at <http://www.sec.gov>.

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Dataram Corporation and Subsidiary  
Consolidated Summary Information  
(In thousands except per share amounts)

	Quarter Ended		Six Months Ended	
	October 31		October 31	
	1998	1997	1998	1997
Revenues	\$16,262	\$20,068	\$34,012	\$38,215

Net Earnings	\$1,290	\$945	\$2,707	\$1,614
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Earnings Per Share

- -Basic	\$.47	\$.31	\$.98	\$.53
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- -Diluted	\$.42	\$.30	\$.88	\$.51
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Average Shares Outstanding

- -Basic	2,772	3,002	2,776	3,028
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- -Diluted	3,073	3,134	3,072	3,162
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## AMENDMENT NUMBER TWO TO LOAN AGREEMENT

This Amendment Number Two to Loan Agreement (the "Amendment") is made this 26th day of October, 1998 by and between DATARAM CORPORATION, a New Jersey corporation, having an address at Route 571, Princeton Road, West Windsor Township, New Jersey (the "Borrower") and FIRST UNION NATIONAL BANK, successor by merger to CORESTATES BANK, N.A., having an address at 370 Scotch Road, West Trenton, NJ 08628 (the "Bank").

### BACKGROUND

WHEREAS, the Borrower and the Bank entered into a certain Loan Agreement dated October 27, 1994 (the "Agreement"), as amended by Amendment Number One to Loan Agreement dated November 1, 1996, and by the Letter Agreement dated October 22, 1997;

WHEREAS, the Borrower and the Bank have agreed to amend the Agreement to maintain the amount of the Revolver Credit Advance Limit at \$12,000,000 until October 31, 1999, then decrease the Revolver Credit Advance Limit to \$6,000,000 on November 1, 1999, extend the Revolving Credit Maturity Date to October 31, 2000 and correct the Agreement as hereinafter set forth.

WHEREAS, all capitalized terms used herein and not otherwise defined herein shall have the meaning assigned to them in the Agreement.

NOW, THEREFORE, the parties hereto, intending to be legally bound, hereby agree as follows:

1 The Revolving Credit Maturity Date is hereby extended to October 31, 2000. To that end, the definition of Revolving Credit Maturity Date contained in Section 1.02 of the Agreement is hereby amended to read in its entirety as follows:

"Revolving Credit Maturity Date" means October 31, 2000.

2. The amount of the Revolver Credit Advance Limit is maintained at \$12,000,000 until October 31, 1999, then decreased to \$6,000,000 on November 1, 1999 until the Revolver Credit Maturity Date. To that end, the definition of Revolving Credit Advance Limit contained in Section 1.02 of the Agreement is hereby amended to read in its entirety as follows:

"Revolving Credit Advance Limit" means the sum of Twelve Million Dollars (\$12,000,000) through October 31, 1999 and the sum of Six Million Dollars (\$6,000,000) from November 1, 1999 until the Revolving Credit Maturity Date.

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3. The Borrower shall execute and deliver to the Bank a replacement revolver note of the Borrower in substantially the form attached as Exhibit A-1 (the "Second Replacement Revolver Note") to evidence the indebtedness of the Borrower for the Revolving Credit Advances by the Bank. The Second Replacement Revolver Note shall replace and supersede the Revolver Note and the Replacement Revolver Note, but shall not extinguish the Borrower's unconditional obligation to repay the indebtedness evidenced by the Revolver Note of the Borrower to the Bank dated October 27, 1994 and the Replacement Revolver Note of the Borrower to the Bank dated November 1, 1996. All references in the Agreement to the Revolver Note shall henceforth be deemed to refer to the Second Replacement Revolver Note.

4. The effectiveness of this Amendment is conditioned

upon the Bank's receipt of the following documents:

- (A) This Amendment Number Two to Loan Agreement;
- (B) Second Replacement Revolver Note;
- (C) Certified Resolutions of the Board of Directors of the Borrowers authorizing the execution of this Amendment; and

5. Representations and Warranties. The Borrower has taken all corporate action necessary to authorize the execution, delivery and performance of this Amendment and the Second Replacement Revolver Note. This Amendment and the Second Replacement Revolver Note is, or when executed by the Borrower and delivered to the Bank will be, duly executed and constitute the valid and legally binding obligations of the Borrower, enforceable against the Borrower in accordance with their respective terms. The Borrower hereby ratifies and confirms the representations and warranties of the Borrower set forth in Article V of the Agreement (as updated to reflect Borrower's most recent financial statements) as being true and correct on the date hereof.

6. Borrower Remains Liable. Nothing contained herein shall release, satisfy or extinguish any existing obligations of Borrower to Bank. Borrower hereby confirms that each of the existing loan documents and all collateral, liens, mortgages, security interests and pledges created by Borrower and described therein continue unimpaired and in full force and effect.

7. Indemnity. Borrower agrees to indemnify Bank from and against any and all claims, losses and liabilities growing out of or resulting from this Amendment.

8. Waivers. The Bank waives any default or Event of Default existing on or prior to the date hereof which is cured or which would not have occurred or arisen if the amendments set forth herein had taken retroactive effect on the date of the Agreement.

9. Incorporation of Amendment. The parties hereto acknowledge and agree that this

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Amendment is incorporated into and made a part of the Agreement and the other existing loan documents, the terms and provisions of which, unless expressly modified herein, or unless no longer applicable by their terms, continue unchanged and in full force and effect. To the extent that any term or provision of this Amendment is or may be deemed expressly inconsistent with any term or provision in the Agreement and the other existing loan documents, the terms and provisions hereof shall control.

10. Year 2000 Compatibility. Borrower shall take all action necessary to assure that Borrower's computer based systems are able to operate and effectively process data including dates on and after January 1, 2000. At the request of Bank, Borrower shall provide Bank assurance acceptable to Bank of Borrower's Year 2000 compatibility.

11. Miscellaneous.

(a) Headings. The section headings contained in this Amendment are included for convenience of reference only and shall not be used to interpret any provision of this Amendment.

(b) Governing Law. The laws of the State of New Jersey shall govern the construction of this Amendment and the rights and remedies of the parties thereto. The provisions hereof are severable and the validity or unenforceability of any provision shall not effect or impair the remaining provisions which shall

continue in full force and effect. This Amendment shall bind the parties hereto and their respective successors and assigns.

(c) Modifications. No modification hereof or any agreement referred to herein shall be binding or enforceable unless in writing and signed on behalf of the party against whom enforcement is sought.

(d) Third Parties. No rights are intended to be created hereunder for the benefit of any third party, creditor or incidental beneficiary.

IN WITNESS WHEREOF, the parties have caused the Amendment to be executed as of the date first above written.

ATTEST: DATARAM CORPORATION,  
a New Jersey corporation

By: \_\_\_\_\_ By: \_\_\_\_\_

Print Name and Title Print Name and Title

[Signatures Continued on Next Page]

ATTEST: FIRST UNION NATIONAL BANK

<PAGE 4>

By: \_\_\_\_\_ By: \_\_\_\_\_

Print Name and Title Print Name and Title

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EXHIBIT A-1  
SECOND  
REPLACEMENT  
REVOLVER NOTE

\$12,000,000.00 Princeton, New Jersey  
October 26, 1996

FOR VALUE RECEIVED, DATARAM CORPORATION, a New Jersey corporation, having an address at Route 571, Princeton Road, West Windsor Township, New Jersey 08543 ("Borrower"), promises to pay to the order of FIRST UNION NATIONAL BANK, successor by merger to NEW JERSEY NATIONAL BANK, a national banking association, having its principal office at 360 Scotch Road, West Trenton, NJ 08628 ("Bank"), at its offices or at such other address as may hereafter be specified by Bank, in lawful money of the United States of America, the principal sum of TWELVE MILLION DOLLARS (\$12,000,000.00) (the "Loan"), together with interest thereon at the rate or rates and in the installments and at the times hereinafter provided.

1. Definitions. Whenever used in this Second Replacement Revolver Note, the following words and phrases shall have the respective meanings ascribed to them below.

(A) "Adjusted LIBO Rate" - means the LIBO Rate plus the Applicable Margin.

(B) "Adjusted Prime Rate" - means the Prime Rate minus the Applicable Margin.

(C) "Applicable Margin" - means, for Prime Rate Tranches 0.75% per annum and for LIBOR Tranches 1.00% per annum.

(D) "Applicable Treasury Bond Obligation(s)" - means the debt obligation(s) of the United States Treasury having a maturity date(s) nearest in time to the maturity date(s) of the principal being prepaid and the maturity date(s) and yield(s) to maturity of such Applicable Treasury Bond Obligation(s) shall be determined by Bank in its sole discretion on the basis of quotations published in the Wall Street Journal (or comparable source) on the date of prepayment.

(E) "Assessment Rate" - means, for any elected LIBOR Interest Period for any LIBOR Tranche, the actual rate (rounded upwards, if necessary, to the nearest 1/100 of 1%) at which premiums for Federal deposit insurance (if any) are then charged during such LIBOR Interest Period to First Union National Bank for Dollar time deposits with the First Union National Bank at its foreign branch.

(F) "Bank" as defined in the introductory paragraph hereof.

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(G) "Borrower" - as defined in the introductory paragraph hereof.

(H) "Business Day" - means any day other than a Saturday, Sunday, or other day on which commercial banks in New Jersey are authorized or required to close under the laws of the State of New Jersey.

(I) "Contract Right" - as defined in Section 7 hereof.

(J) "Default" - means and refers to any event, act or occurrence, which with the passing of time or the giving of notice or both, would constitute an Event of Default as defined in the Loan Agreement.

(K) "Default Rate" - as defined in Section 7 hereof.

(L) "Dollars" and "\$" - mean lawful money of the United States of America.

(M) "Effective Date" - means, for the Prime Rate Tranche, the date on which a Prime Rate Interest Period commences, pursuant to Section 3 hereof, for the LIBOR Tranche, the date Borrower designates as the date on which a LIBOR Interest Period is to commence pursuant to Section 3 hereof.

(N) "Eurocurrency Reserve Requirement" - means, for any LIBOR Tranche for any LIBOR Interest Period relating thereto, the daily average of the stated maximum rate (expressed as a decimal) at which reserves (including any marginal, supplemental, or emergency reserves) are required to be maintained during such LIBOR Interest Period under Regulation D by a member bank of the Federal Reserve System against "Eurocurrency liabilities" (as such term is used in Regulation D) but without benefit of or credit for proration, exemptions, or offsets that might otherwise be available to such member bank from time to time under Regulation D. Without limiting the effect of the foregoing, the Eurocurrency Reserve Requirement shall reflect any other reserves required to be maintained by such member bank against (1) any category of liabilities which includes deposits by reference to which the LIBOR Interest Rate for LIBOR Tranches is to be determined or (2) any category of extension of credit or other assets that include LIBOR Tranches.

(O) "Event of Default" - shall mean an Event of Default as defined in the Loan Agreement.

(P) "Interest Period" - means any period during which

the Interest Rate is the Adjusted Prime Rate, or any Adjusted LIBO Rate, as appropriate.

(Q) "Interest Rate" - means the Adjusted LIBO Rate and the Adjusted Prime Rate, or the Default Rate, as appropriate.

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(R) "LIBOR Interest Period" - for a LIBOR Tranche means a period of time, beginning on an Effective Date, of 30, 60 or 90 days in length, selected by Borrower - by telephone or in writing (and if by telephone, confirmed by Borrower the same day by facsimile), during which the Interest Rate for such LIBOR Tranche is the Adjusted LIBO Rate. If a LIBOR Interest Period would otherwise end on a day that is not a Business Day, such LIBOR Interest Period shall be extended to the next Business Day, unless such Business Day would fall in the next calendar month, in which event such LIBOR Interest Period shall end on the immediately preceding Business Day.

(S) "LIBO Rate" - means, for each LIBOR Tranche, the rate per annum (rounded upwards, if necessary, to the nearest 1/16th of 1%) determined by Bank according to the following formula:

$$R = \frac{X + Z}{1 - Y}$$

where R = LIBO Rate

X = London Interbank Offered Rate for such LIBOR Tranche for the applicable LIBOR Interest Period

Y = Eurocurrency Reserve Requirement for such LIBOR Tranche for the applicable LIBOR Interest Period

Z - the Assessment Rate (if applicable).

(AA) "LIBOR Tranche" - means each portion of the Loan to which an Adjusted LIBO Rate applies.

(AB) "Loan" - as defined in the introductory paragraph hereof.

(AC) "Loan Documents" - means this Second Replacement Revolver Note in the principal amount of Twelve Million Dollars (\$12,000,000.00), that certain Amendment Number Two to Loan Agreement dated of even date herewith between Borrower and Bank and any and all other documents executed by Borrower in connection with the Loan.

(AD) "London Business Day" - means any Business Day on which commercial banks, are open for international business (including dealing in Dollar deposits) in London, England and New Jersey.

(AE) "London Interbank Offered Rate" - applicable to any elected LIBOR Interest Period for a LIBOR Tranche means the rate per annum (rounded upwards, if necessary, to the nearest 1/16th of 1%) quoted by the principal London branch of First Union National Bank, two London Business Days prior to the first day of such LIBOR Interest Period for the offering to leading banks in the London interbank market of Dollar deposits in immediately available funds for a period, and in an amount, comparable to the LIBOR Interest Period and principal amount of the LIBOR Tranche which shall be made by Bank and/or be outstanding during such LIBOR Interest Period.

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(AF) "Material Adverse Effect" - has the meaning given

such term in the Loan Agreement.

(AG) "Maturity Date" - as defined in Section 3 hereof.

(AH) "Operating Account" - has the meaning given to such term in Section 3 hereof.

(AI) "Person" - has the meaning given such term in the Loan Agreement.

(AJ) "Prime Rate" - means for each day, the lending rate set and announced by Bank from time to time for purposes of fixing interest rates on various categories of loans which Bank determines are to be tied to such Prime Rate. The Prime Rate is not necessarily the lowest rate of interest which Bank charges any of its customers.

(AK) "Prime Rate Interest Period" - for a Prime Rate Tranche, means a period of time beginning with an Effective Date, of 365 days in length, selected by Borrower by telephone or in writing (and if by telephone, confirmed by Borrower the same day by facsimile) during which the Interest Rate for such Prime Rate Tranche is the Adjusted Prime Rate. If the Prime Rate Interest Period would otherwise end on a day that is not a Business Day, such Prime Rate Interest Period shall be extended to the next Business Day, unless such Business Day would fall into the next calendar month, in which event such Prime Rate Interest Period shall end on the immediately preceding day.

(AL) "Prime Rate Tranche" - means each portion of the Loan to which the Adjusted Prime Rate applies.

(AM) "Regulation D" - means Regulation D of the Board of Governors of the Federal Reserve System as amended or supplemented from time to time.

## 2. Interest Rate.

(A) The principal sum outstanding from time to time hereunder shall bear interest from the date or dates advanced until the date repaid at a rate equal to the Adjusted Prime Rate. The Adjusted Prime Rate shall change simultaneously with each change in the Prime Rate.

(B) Notwithstanding the foregoing, at any time up to that date which is 90 days prior to the Maturity Date, provided no Event of Default or Default has occurred, Borrower shall have the option to fix the interest rate on portions of the Loan of TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) or more, in a minimum of TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) at the Adjusted LIBO Rate, subject to Bank's ability to secure such funds for such periods.

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(C) Borrower may exercise the option to have portions of the Loan from time to time bear interest at the Adjusted LIBO Rate by giving Bank written notice (which shall be irrevocable), by telephone or in writing, by 10:00 A.M. at least two London Business Days before each proposed LIBOR Tranche, specifying the date and the amount of the proposed LIBOR Tranche and the length of the proposed LIBOR Interest Period. Borrower will confirm any telephonic notice of a proposed LIBOR Tranche the same day by facsimile copy.

(D) The interest due on the Loan shall be payable as provided in Section 3 below.

## 3. Interest and Principal Payments; Maturity Date.

(A) Prime Rate Loans. Borrower shall pay interest in arrears on the unpaid principal amount of the Prime Rate Tranche,

from the date on which the Prime Rate Tranche is created until such principal amount has been repaid in full, or converted to a LIBOR Tranche, as the case may be, (1) every thirty (30) days after the Effective Date of such Prime Rate Tranche and (2) on the Maturity Date, at the Adjusted Prime Rate.

(B) Conversions to LIBOR Tranches. By notifying Bank at least two (2) London Business Days prior to an Effective Date, Borrower may convert into a LIBOR Tranche all or any part of any Prime Rate Tranche at any time in a minimum principal amount of \$200,000.00. At the end of the applicable LIBOR Interest Period, the LIBOR Tranche will convert to a Prime Rate Tranche unless Borrower notifies Bank at least two (2) London Business Days before the end of the existing LIBOR Interest Period that Borrower is electing to continue all or any part of the tranche as a LIBOR Tranche and is selecting a new LIBOR Interest Period.

(C) Libor Tranches. Borrower shall pay interest in arrears on the unpaid principal amount of each LIBOR Tranche at the Adjusted LIBO Rate for such LIBOR Tranche from the date on which such LIBOR Tranche is created until such principal amount has been paid in full, or converted to a Prime Rate Tranche, as the case may be, (1) every 30 days after the Effective Date of such LIBOR Tranche, and (2) on the Maturity Date at the adjusted LIBO Rate.

(D) Principal Repayment. Borrower shall repay the outstanding principal balance of the Loan, all accrued and unpaid interest thereon and any other sums then outstanding hereunder or under the Loan Documents on October 31, 2000 (the "Maturity Date"). Notwithstanding the foregoing, any principal amount outstanding hereunder in excess of \$6,000,000 on October 31, 1999 shall be repaid on that date.

(E) Operating Account. Borrower covenants and agrees to maintain an operating account with Bank at all times during which any portion of the Loan remains outstanding (the "Operating Account"). Borrower hereby authorizes Bank to charge the Operating Account for all payments hereunder as they become due. Borrower agrees to keep in the Operating Account sufficient amount to make such payments as and when they come due. Bank's failure to so charge the Operating Account in order to satisfy Borrower's payment obligations hereunder shall not relieve Borrower's obligations to make all such payments. In the event that Borrower shall

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fail to maintain a sufficient balance in the Operating Account to satisfy a payment obligation on the date such payment becomes due, Borrower shall continue to be obligated to make such payment and, if such payment is not made by Borrower in some other manner on or before the date such payment becomes due, such failure shall constitute an Event of Default hereunder. All payments received by Bank from Borrower shall be applied in the following order: (a) to the payment of fees and other costs and expenses then due and owing from Borrower, (b) to the payment of accrued and unpaid interest then due, (c) to the payment of any outstanding principal hereunder.

(F) Interest Calculation. Both before and after any default, interest shall be calculated on the basis of a 360 day year but charged on the basis of the actual number of days elapsed in any calendar year or part thereof.

#### 4. Prepayments.

(A) Borrower may prepay the Prime Rate Tranches in whole or in part at any time and from time to time in a minimum amount of Two Hundred Thousand Dollars (\$200,000.00).

(B) Borrower may, at any time, prepay the principal

balance of a LIBO Rate Tranche in whole or in part, provided that Borrower simultaneously therewith pays to Bank a prepayment premium equal to the amount, if any, by which (a) the principal being prepaid plus the installments of interest which would have been payable thereon when discounted to a present value at a rate per annum equal to the yield to maturity of the Applicable Treasury Bond Obligation(s) exceed(s) (b) the principal amount being prepaid. Borrower agrees to pay prepayment premium as calculated in the foregoing sentence upon any prepayment of the LIBOR Tranche, whether voluntary, required by Bank in connection with any acceleration of the indebtedness hereunder upon the occurrence of an Event of Default, or as otherwise required under this Second Replacement Revolver Note. A determination of Bank as to the amounts payable pursuant to this Section 4(B) shall be conclusive absent manifest error.

5. Late Charges. If any installment of principal or interest or both hereunder or other payment required to be made by Borrower under the other Loan Documents is not paid within ten (10) days after becoming due, Borrower shall pay to Bank on demand a late charge of five percent (5%) of such overdue amount to reimburse Bank for the additional expenses to be incurred as a result of such delinquency, but such late payment fee shall not obligate Bank to accept any overdue payment hereunder nor limit the rights and remedies available to Bank as a result of Borrower's default, as hereinafter provided. The amount of any such late charge not paid promptly following demand shall be deemed outstanding and payable pursuant to this Replacement Revolver Note.

6. Event of Default. An Event of Default shall mean an Event of Default as defined in the Loan Agreement .

7. Default Rate. Upon the occurrence of an Event of Default hereunder, the interest rate

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otherwise payable hereunder (the "Contract Rate") shall increase immediately and without notice and thereafter shall be payable at a rate of three percent (3%) per annum in excess of the Contract Rate (said higher rate is hereinafter called the "Default Rate"), until the Event of Default has been cured, or in the event the principal of this Second Replacement Revolver Note has been accelerated, until this Second Replacement Revolver Note is paid in full, including the period following entry of any judgment on or relating to this Second Replacement Revolver Note or the other Loan Documents. Interest on any such judgment shall accrue and be payable at the Default Rate, and not at the statutory rate of interest, after judgment, any execution thereon, and until actual receipt by the holder of payment in full of this Second Replacement Revolver Note and said judgment. Interest at the Default Rate shall be collectible as part of any judgment hereunder and shall be secured by the other Loan Documents.

8. Remedies. Upon the occurrence of an Event of Default, the Bank shall be entitled to exercise all remedies available to it under the terms of the Loan Agreement.

9. Accounts. Borrower hereby covenants and agrees that while the Loan is outstanding it will maintain all of its bank accounts with Bank.

10. Waivers by Borrower, Cumulative Remedies.

(A) Borrower hereby waives presentment for payment, demand, notice of non-payment, notice of protest and protest of this Second Replacement Revolver Note. The Borrower hereby consents to any and all extensions of time, renewals, waivers or modifications that may be granted by the Bank with respect to the payment or other provisions of this Second Replacement Revolver Note, and agrees that additional obligors may become parties

hereto without notice to the Borrower without affecting the Borrower's liability hereunder.

(B) Borrower hereby waives the benefit of any laws which now or hereinafter might otherwise authorize the stay of any execution to be issued on any judgment covered on this Second Replacement Revolver Note. Borrower hereby waives its right to trial by jury in connection with a portion of this Second Replacement Revolver Note or under the loan agreement or any other document executed in connection with this Loan and any legal proceeding arising hereunder or thereunder.

(C) No failure or delay on the part of the Bank in exercising any right, power or privilege under this Second Replacement Revolver Note and no course of dealing between the Borrower and the Bank shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise of any right, power or privilege that the Bank would otherwise have. No notice to, or demand on, the Borrower in any case shall entitle the Borrower to any other or further notice or demand in similar or other circumstances would constitute a waiver of the right of the Bank to any other or further action and any circumstances without notice or demand.

11. Costs and Expenses. The Borrower agrees, in accordance with the terms of the Loan

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Agreement, to pay all costs and expenses of the Bank incurred in order to enforce any remedy available to the Bank under this Second Replacement Revolver Note, the Loan Agreement or any Loan Document.

12. Reimbursement to Bank for Increased Costs Due to Capital Adequacy Requirements. If after the date hereof any change in law or regulation or the interpretation thereof by any court or administrative or governmental authority charged with the administration thereof, or compliance by Bank with any request or directive (whether or not having the force of law) of any such authority, applicable from time to time now or after the date hereof to banks in general, shall (A) impose, modify, deem applicable or result in the application of any capital maintenance, capital ratio or similar requirements against loan commitments or other facilities made by Bank and the result thereof shall be to impose upon Bank a fee or a requirement to increase any capital requirement applicable as a result of the making or maintenance of the Loan (which imposition or increase in capital requirements may be determined by Bank's reasonable allocation of the aggregate of such capital impositions or increases), or (B) subject Bank to any tax, duty or other charge with respect to the Loan, the Second Replacement Revolver Note, or change the basis of taxation of payments to Bank of the principal of or interest on the Loan or any other amounts due under this Agreement, in respect of the Loan (except for changes in the rate of tax on the overall net income of Bank imposed by any jurisdiction in which Bank is obligated to pay taxes), then, upon demand by Bank, Borrower shall immediately pay to Bank from time to time as specified by Bank, such additional amounts or fees which shall be sufficient to compensate Bank for such impositions of or increases in capital requirements or taxes from the date of such change, together with interest on each such amount from the date demanded until payment in full thereof at the Default Rate with respect to amounts or fees not paid when due. Upon the occurrence of any event referred to above, a certificate setting forth in reasonable detail the amounts necessary to compensate Bank as a result of an imposition of or increase in capital requirements or taxes submitted by Bank to Borrower shall be conclusive, absent manifest error or bad faith, as to the amount thereof.

13. Special Provisions of LIBOR Tranches.

(A) Unavailability of Funds and Indeterminate Interest Rates. If on or before the date Bank is to make any LIBOR Tranche or on or before any Effective Date (1) Bank determines in good faith that it is unable to obtain funds at the LIBO Rate for the elected Interest Period for any reason, including, but not limited to the unavailability of funds at such rate, any change in existing law, any new law, the length of such Interest Period, or otherwise or (2) Bank determines in good faith that no adequate means exists to determine the LIBO Rate for such Interest Period, then, at Bank's option, Borrower shall be deemed to have requested a Prime Rate Tranche or shall be required to elect an Interest Period of a length for which Bank may obtain funds at the rate the adjustment of which determines the LIBO Rate.

(B) Changes Affecting Ability to Maintain Funds. If, during any Interest Period, any change in existing law, any new law, or any other factor beyond the control of Bank prevents Bank in its good faith determination from maintaining funds at the rate the adjustment of which

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determines the LIBO Rate for such Interest Period and requires Bank to cease so maintaining funds actually so maintained prior to termination of such Interest Period, then on the date of such required cessation, Borrower shall be required to specify a different Interest Rate for such Interest Period or, in the alternative, to elect an Interest Period of a length for which Bank may maintain funds at the rate the adjustment of which determines the LIBO Rate. In addition, within five days after Bank notifies Borrower of such required conversion, Borrower shall reimburse Bank for any loss or expense Bank has certified in writing to Borrower that Bank has incurred as a result of any such required cessation.

#### 14. Interest Limitation; Severability.

(A) Nothing herein contained nor any transaction related hereto shall be construed or shall operate either presently or prospectively to require Borrower to pay interest at a rate greater than is now lawful in such case to contract for, but shall require payment of interest only to the extent of such lawful rate. Any interest paid in excess of the lawful rate shall be refunded to Borrower. Such refund shall be made by application of the excessive amount of interest paid against any sums outstanding hereunder, in which event any applicable prepayment premium shall be waived with respect to the amount so prepaid, and shall be applied in such order as Bank may determine. If the excessive amount of interest paid exceeds the sums outstanding hereunder, the portion exceeding the said sums outstanding hereunder shall be refunded in cash by Bank. Any such crediting or refund shall not cure or waive any default by Borrower hereunder or under the other Loan Documents. Borrower agrees, however, that in determining whether or not any interest payable hereunder exceeds the highest rate permitted by law, any non-principal amount (except payments specifically stated herein to be "interest"), including, without limitation, late charges, shall be deemed, to the extent permitted by law, to be an expense, fee, premium or penalty rather than interest.

(B) In the event that for any reason one or more of the provisions of this Second Replacement Revolver Note or their application to any person or circumstance shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall, to such extent, be held for naught as though not herein contained but shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Second Replacement Revolver Note, but

this Second Replacement Revolver Note shall be construed as if such invalid, illegal or unenforceable provisions had never been contained herein.

15. Notices. All notices, requests, demands or other communications to or upon the Borrower or the Bank shall be deemed to have been given or made when hand delivered or deposited in the mail by certified mail, return receipt requested, postage prepaid, addressed to the Borrower or the Bank, as the case may be, at their respective addresses indicated herein or at such other addresses as the Borrower or the Bank may hereafter specify in writing to the other, except that any communication with respect to a change of address shall be deemed to be given or made when received by the Borrower or the Bank to whom such communication was sent.

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16. Successors and Assigns. This Second Replacement Revolver Note is binding upon the Borrower and its successors and assigns except that Borrower shall not have the right to assign its rights or obligations hereunder or any interest herein.

17. Amendment. This Second Replacement Revolver Note may not be changed orally, but only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification or discharge is sought.

18. Governing Law. This Second Replacement Revolver Note has been executed and delivered in the State of New Jersey and shall be construed and enforced in accordance with the laws of the State of New Jersey.

19. Captions. The captions or headings of the sections in this Second Replacement Revolver Note are for convenience only and shall not control or effect the meaning or construction of any term or provision of this Second Replacement Revolver Note.

IN WITNESS WHEREOF, the Borrower has executed this Second Replacement Revolver Note as of the date and year first above written.

ATTEST: DATARAM CORPORATION,  
a New Jersey corporation

By: \_\_\_\_\_ By: \_\_\_\_\_

Print Name and Title                  Print Name and Title

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SCHEDULE TO SECOND REPLACEMENT REVOLVER NOTE

Date	Loan	Unpaid		Name of Person Making Notation
		Principal	Balance of	
	Amount of	Principal	Revolving	
	Prepaid	Credit Note		



Interest Period for any LIBOR Tranche, the actual rate (rounded upwards, if necessary, to the nearest 1/100 of 1%) at which premiums for Federal deposit insurance (if any) are then charged during such LIBOR Interest Period to First Union National Bank for Dollar time deposits with the First Union National Bank at its foreign branch.

(F) "Bank" as defined in the introductory paragraph hereof.

(G) "Borrower" - as defined in the introductory paragraph hereof.

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(H) "Business Day" - means any day other than a Saturday, Sunday, or other day on which commercial banks in New Jersey are authorized or required to close under the laws of the State of New Jersey.

(I) "Contract Right" - as defined in Section 7 hereof.

(J) "Default" - means and refers to any event, act or occurrence, which with the passing of time or the giving of notice or both, would constitute an Event of Default as defined in the Loan Agreement.

(K) "Default Rate" - as defined in Section 7 hereof.

(L) "Dollars" and "\$" - mean lawful money of the United States of America.

(M) "Effective Date" - means, for the Prime Rate Tranche, the date on which a Prime Rate Interest Period commences, pursuant to Section 3 hereof, for the LIBOR Tranche, the date Borrower designates as the date on which a LIBOR Interest Period is to commence pursuant to Section 3 hereof.

(N) "Eurocurrency Reserve Requirement" - means, for any LIBOR Tranche for any LIBOR Interest Period relating thereto, the daily average of the stated maximum rate (expressed as a decimal) at which reserves (including any marginal, supplemental, or emergency reserves) are required to be maintained during such LIBOR Interest Period under Regulation D by a member bank of the Federal Reserve System against "Eurocurrency liabilities" (as such term is used in Regulation D) but without benefit of or credit for proration, exemptions, or offsets that might otherwise be available to such member bank from time to time under Regulation D. Without limiting the effect of the foregoing, the Eurocurrency Reserve Requirement shall reflect any other reserves required to be maintained by such member bank against (1) any category of liabilities which includes deposits by reference to which the LIBOR Interest Rate for LIBOR Tranches is to be determined or (2) any category of extension of credit or other assets that include LIBOR Tranches.

(O) "Event of Default" - shall mean an Event of Default as defined in the Loan Agreement.

(P) "Interest Period" - means any period during which the Interest Rate is the Adjusted Prime Rate, or any Adjusted LIBO Rate, as appropriate.

(Q) "Interest Rate" - means the Adjusted LIBO Rate and the Adjusted Prime Rate, or the Default Rate, as appropriate.

(R) "LIBOR Interest Period" - for a LIBOR Tranche means a period of time, beginning on an Effective Date, of 30, 60 or 90 days in length, selected by Borrower - by

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telephone or in writing (and if by telephone, confirmed by Borrower the same day by facsimile), during which the Interest Rate for such LIBOR Tranche is the Adjusted LIBO Rate. If a LIBOR Interest Period would otherwise end on a day that is not a Business Day, such LIBOR Interest Period shall be extended to the next Business Day, unless such Business Day would fall in the next calendar month, in which event such LIBOR Interest Period shall end on the immediately preceding Business Day.

(S) "LIBO Rate" - means, for each LIBOR Tranche, the rate per annum (rounded upwards, if necessary, to the nearest 1/16th of 1%) determined by Bank according to the following formula:

$$R = \frac{X + Z}{1 - Y}$$

where R = LIBO Rate

X = London Interbank Offered Rate for such LIBOR Tranche for the applicable LIBOR Interest Period

Y = Eurocurrency Reserve Requirement for such LIBOR Tranche for the applicable LIBOR Interest Period

Z - the Assessment Rate (if applicable).

(AA) "LIBOR Tranche" - means each portion of the Loan to which an Adjusted LIBO Rate applies.

(AB) "Loan" - as defined in the introductory paragraph hereof.

(AC) "Loan Documents" - means this Second Replacement Revolver Note in the principal amount of Twelve Million Dollars (\$12,000,000.00), that certain Amendment Number Two to Loan Agreement dated of even date herewith between Borrower and Bank and any and all other documents executed by Borrower in connection with the Loan.

(AD) "London Business Day" - means any Business Day on which commercial banks, are open for international business (including dealing in Dollar deposits) in London, England and New Jersey.

(AE) "London Interbank Offered Rate" - applicable to any elected LIBOR Interest Period for a LIBOR Tranche means the rate per annum (rounded upwards, if necessary, to the nearest 1/16th of 1%) quoted by the principal London branch of First Union National Bank, two London Business Days prior to the first day of such LIBOR Interest Period for the offering to leading banks in the London interbank market of Dollar deposits in immediately available funds for a period, and in an amount, comparable to the LIBOR Interest Period and principal amount of the LIBOR Tranche which shall be made by Bank and/or be outstanding during such LIBOR Interest Period.

(AF) "Material Adverse Effect" - has the meaning given such term in the Loan Agreement.

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(AG) "Maturity Date" - as defined in Section 3 hereof.

(AH) "Operating Account" - has the meaning given to such term in Section 3 hereof.

(AI) "Person" - has the meaning given such term in the Loan Agreement.

(AJ) "Prime Rate" - means for each day, the lending rate

set and announced by Bank from time to time for purposes of fixing interest rates on various categories of loans which Bank determines are to be tied to such Prime Rate. The Prime Rate is not necessarily the lowest rate of interest which Bank charges any of its customers.

(AK) "Prime Rate Interest Period" - for a Prime Rate Tranche, means a period of time beginning with an Effective Date, of 365 days in length, selected by Borrower by telephone or in writing (and if by telephone, confirmed by Borrower the same day by facsimile) during which the Interest Rate for such Prime Rate Tranche is the Adjusted Prime Rate. If the Prime Rate Interest Period would otherwise end on a day that is not a Business Day, such Prime Rate Interest Period shall be extended to the next Business Day, unless such Business Day would fall into the next calendar month, in which event such Prime Rate Interest Period shall end on the immediately preceding day.

(AL) "Prime Rate Tranche" - means each portion of the Loan to which the Adjusted Prime Rate applies.

(AM) "Regulation D" - means Regulation D of the Board of Governors of the Federal Reserve System as amended or supplemented from time to time.

## 2. Interest Rate.

(A) The principal sum outstanding from time to time hereunder shall bear interest from the date or dates advanced until the date repaid at a rate equal to the Adjusted Prime Rate. The Adjusted Prime Rate shall change simultaneously with each change in the Prime Rate.

(B) Notwithstanding the foregoing, at any time up to that date which is 90 days prior to the Maturity Date, provided no Event of Default or Default has occurred, Borrower shall have the option to fix the interest rate on portions of the Loan of TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) or more, in a minimum of TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) at the Adjusted LIBO Rate, subject to Bank's ability to secure such funds for such periods.

(C) Borrower may exercise the option to have portions of the Loan from time to time bear interest at the Adjusted LIBO Rate by giving Bank written notice (which shall be irrevocable), by telephone or in writing, by 10:00 A.M. at least two London Business Days before each proposed LIBOR Tranche, specifying the date and the amount of the proposed

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LIBOR Tranche and the length of the proposed LIBOR Interest Period. Borrower will confirm any telephonic notice of a proposed LIBOR Tranche the same day by facsimile copy.

(D) The interest due on the Loan shall be payable as provided in Section 3 below.

## 3. Interest and Principal Payments; Maturity Date.

(A) Prime Rate Loans. Borrower shall pay interest in arrears on the unpaid principal amount of the Prime Rate Tranche, from the date on which the Prime Rate Tranche is created until such principal amount has been repaid in full, or converted to a LIBOR Tranche, as the case may be, (1) every thirty (30) days after the Effective Date of such Prime Rate Tranche and (2) on the Maturity Date, at the Adjusted Prime Rate.

(B) Conversions to LIBOR Tranches. By notifying Bank at least two (2) London Business Days prior to an Effective Date, Borrower may convert into a LIBOR Tranche all or any part of any Prime Rate Tranche at any time in a minimum principal amount of

\$200,000.00. At the end of the applicable LIBOR Interest Period, the LIBOR Tranche will convert to a Prime Rate Tranche unless Borrower notifies Bank at least two (2) London Business Days before the end of the existing LIBOR Interest Period that Borrower is electing to continue all or any part of the tranche as a LIBOR Tranche and is selecting a new LIBOR Interest Period.

(C) Libor Tranches. Borrower shall pay interest in arrears on the unpaid principal amount of each LIBOR Tranche at the Adjusted LIBO Rate for such LIBOR Tranche from the date on which such LIBOR Tranche is created until such principal amount has been paid in full, or converted to a Prime Rate Tranche, as the case may be, (1) every 30 days after the Effective Date of such LIBOR Tranche, and (2) on the Maturity Date at the adjusted LIBO Rate.

(D) Principal Repayment. Borrower shall repay the outstanding principal balance of the Loan, all accrued and unpaid interest thereon and any other sums then outstanding hereunder or under the Loan Documents on October 31, 2000 (the "Maturity Date"). Notwithstanding the foregoing, any principal amount outstanding hereunder in excess of \$6,000,000 on October 31, 1999 shall be repaid on that date.

(E) Operating Account. Borrower covenants and agrees to maintain an operating account with Bank at all times during which any portion of the Loan remains outstanding (the "Operating Account"). Borrower hereby authorizes Bank to charge the Operating Account for all payments hereunder as they become due. Borrower agrees to keep in the Operating Account sufficient amount to make such payments as and when they come due. Bank's failure to so charge the Operating Account in order to satisfy Borrower's payment obligations hereunder shall not relieve Borrower's obligations to make all such payments. In the event that Borrower shall fail to maintain a sufficient balance in the Operating Account to satisfy a payment obligation on the date such payment becomes due, Borrower shall continue to be obligated to make such payment and, if such payment is not made by Borrower in some other manner on or before the date such payment becomes due, such failure shall constitute an Event of Default hereunder.  
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payments received by Bank from Borrower shall be applied in the following order: (a) to the payment of fees and other costs and expenses then due and owing from Borrower, (b) to the payment of accrued and unpaid interest then due, (c) to the payment of any outstanding principal hereunder.

(F) Interest Calculation. Both before and after any default, interest shall be calculated on the basis of a 360 day year but charged on the basis of the actual number of days elapsed in any calendar year or part thereof.

#### 4. Prepayments.

(A) Borrower may prepay the Prime Rate Tranches in whole or in part at any time and from time to time in a minimum amount of Two Hundred Thousand Dollars (\$200,000.00).

(B) Borrower may, at any time, prepay the principal balance of a LIBO Rate Tranche in whole or in part, provided that Borrower simultaneously therewith pays to Bank a prepayment premium equal to the amount, if any, by which (a) the principal being prepaid plus the installments of interest which would have been payable thereon when discounted to a present value at a rate per annum equal to the yield to maturity of the Applicable Treasury Bond Obligation(s) exceed(s) (b) the principal amount being prepaid. Borrower agrees to pay prepayment premium as calculated in the foregoing sentence upon any prepayment of the LIBOR Tranche, whether voluntary, required by Bank in connection

with any acceleration of the indebtedness hereunder upon the occurrence of an Event of Default, or as otherwise required under this Second Replacement Revolver Note. A determination of Bank as to the amounts payable pursuant to this Section 4(B) shall be conclusive absent manifest error.

5. Late Charges. If any installment of principal or interest or both hereunder or other payment required to be made by Borrower under the other Loan Documents is not paid within ten (10) days after becoming due, Borrower shall pay to Bank on demand a late charge of five percent (5%) of such overdue amount to reimburse Bank for the additional expenses to be incurred as a result of such delinquency, but such late payment fee shall not obligate Bank to accept any overdue payment hereunder nor limit the rights and remedies available to Bank as a result of Borrower's default, as hereinafter provided. The amount of any such late charge not paid promptly following demand shall be deemed outstanding and payable pursuant to this Replacement Revolver Note.

6. Event of Default. An Event of Default shall mean an Event of Default as defined in the Loan Agreement .

7. Default Rate. Upon the occurrence of an Event of Default hereunder, the interest rate otherwise payable hereunder (the "Contract Rate") shall increase immediately and without notice and thereafter shall be payable at a rate of three percent (3%) per annum in excess of the Contract Rate (said higher rate is hereinafter called the "Default Rate"), until the Event of Default has been cured, or in the event the principal of this Second Replacement Revolver Note has been

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accelerated, until this Second Replacement Revolver Note is paid in full, including the period following entry of any judgment on or relating to this Second Replacement Revolver Note or the other Loan Documents. Interest on any such judgment shall accrue and be payable at the Default Rate, and not at the statutory rate of interest, after judgment, any execution thereon, and until actual receipt by the holder of payment in full of this Second Replacement Revolver Note and said judgment. Interest at the Default Rate shall be collectible as part of any judgment hereunder and shall be secured by the other Loan Documents.

8. Remedies. Upon the occurrence of an Event of Default, the Bank shall be entitled to exercise all remedies available to it under the terms of the Loan Agreement.

9. Accounts. Borrower hereby covenants and agrees that while the Loan is outstanding it will maintain all of its bank accounts with Bank.

10. Waivers by Borrower, Cumulative Remedies.

(A) Borrower hereby waives presentment for payment, demand, notice of non-payment, notice of protest and protest of this Second Replacement Revolver Note. The Borrower hereby consents to any and all extensions of time, renewals, waivers or modifications that may be granted by the Bank with respect to the payment or other provisions of this Second Replacement Revolver Note, and agrees that additional obligors may become parties hereto without notice to the Borrower without affecting the Borrower's liability hereunder.

(B) Borrower hereby waives-the benefit of any laws which now or hereinafter might otherwise authorize the stay of any execution to be issued on any judgment covered on this Second Replacement Revolver Note. Borrower hereby waives its right to trial by jury in connection with a portion of this Second Replacement Revolver Note or under the loan agreement or any other document executed in connection with this Loan and any

legal proceeding arising hereunder or thereunder.

(C) No failure or delay on the part of the Bank in exercising any right, power or privilege under this Second Replacement Revolver Note and no course of dealing between the Borrower and the Bank shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise of any right, power or privilege that the Bank would otherwise have. No notice to, or demand on, the Borrower in any case shall entitle the Borrower to any other or further notice or demand in similar or other circumstances would constitute a waiver of the right of the Bank to any other or further action and any circumstances without notice or demand.

11. Costs and Expenses. The Borrower agrees, in accordance with the terms of the Loan Agreement, to pay all costs and expenses of the Bank incurred in order to enforce any remedy available to the Bank under this Second Replacement Revolver Note, the Loan Agreement or any Loan Document.

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12. Reimbursement to Bank for Increased Costs Due to Capital Adequacy Requirements. If after the date hereof any change in law or regulation or the interpretation thereof by any court or administrative or governmental authority charged with the administration thereof, or compliance by Bank with any request or directive (whether or not having the force of law) of any such authority, applicable from time to time now or after the date hereof to banks in general, shall (A) impose, modify, deem applicable or result in the application of any capital maintenance, capital ratio or similar requirements against loan commitments or other facilities made by Bank and the result thereof shall be to impose upon Bank a fee or a requirement to increase any capital requirement applicable as a result of the making or maintenance of the Loan (which imposition of or increase in capital requirements may be determined by Bank's reasonable allocation of the aggregate of such capital impositions or increases), or (B) subject Bank to any tax, duty or other charge with respect to the Loan, the Second Replacement Revolver Note, or change the basis of taxation of payments to Bank of the principal of or interest on the Loan or any other amounts due under this Agreement, in respect of the Loan (except for changes in the rate of tax on the overall net income of Bank imposed by any jurisdiction in which Bank is obligated to pay taxes), then, upon demand by Bank, Borrower shall immediately pay to Bank from time to time as specified by Bank, such additional amounts or fees which shall be sufficient to compensate Bank for such impositions of or increases in capital requirements or taxes from the date of such change, together with interest on each such amount from the date demanded until payment in full thereof at the Default Rate with respect to amounts or fees not paid when due. Upon the occurrence of any event referred to above, a certificate setting forth- in reasonable detail the amounts necessary to compensate Bank as a result of an imposition of or increase in capital requirements or taxes submitted by Bank to Borrower shall be conclusive, absent manifest error or bad faith, as to the amount thereof.

13. Special Provisions of LIBOR Tranches.

(A) Unavailability of Funds and Indeterminate Interest Rates. If on or before the date Bank is to make any LIBOR Tranche or on or before any Effective Date (1) Bank determines in good faith that it is unable to obtain funds at the LIBO Rate for the elected Interest Period for any reason, including, but not limited to the unavailability of funds at such rate, any change in existing law, any new law, the length of such Interest Period, or otherwise or (2) Bank determines in good faith that no adequate means exists to determine the LIBO Rate for such Interest Period, then, at Bank's option, Borrower shall be deemed

to have requested a Prime Rate Tranche or shall be required to elect an Interest Period of a length for which Bank may obtain funds at the rate the adjustment of which determines the LIBO Rate.

(B) Changes Affecting Ability to Maintain Funds. If, during any Interest Period, any change in existing law, any new law, or any other factor beyond the control of Bank prevents Bank in its good faith determination from maintaining funds at the rate the adjustment of which determines the LIBO Rate for such Interest Period and requires Bank to cease so maintaining funds actually so maintained prior to termination of such Interest Period, then on the date of such required cessation, Borrower shall be required to specify a different Interest Rate for such Interest Period or, in the alternative, to elect an Interest Period of a length for which Bank may

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maintain funds at the rate the adjustment of which determines the LIBO Rate. In addition, within five days after Bank notifies Borrower of such required conversion, Borrower shall reimburse Bank for any loss or expense Bank has certified in writing to Borrower that Bank has incurred as a result of any such required cessation.

#### 14. Interest Limitation; Severability.

(A) Nothing herein contained nor any transaction related hereto shall be construed or shall operate either presently or prospectively to require Borrower to pay interest at a rate greater than is now lawful in such case to contract for, but shall require payment of interest only to the extent of such lawful rate. Any interest paid in excess of the lawful rate shall be refunded to Borrower. Such refund shall be made by application of the excessive amount of interest paid against any sums outstanding hereunder, in which event any applicable prepayment premium shall be waived with respect to the amount so prepaid, and shall be applied in such order as Bank may determine. If the excessive amount of interest paid exceeds the sums outstanding hereunder, the portion exceeding the said sums outstanding hereunder shall be refunded in cash by Bank. Any such crediting or refund shall not cure or waive any default by Borrower hereunder or under the other Loan Documents. Borrower agrees, however, that in determining whether or not any interest payable hereunder exceeds the highest rate permitted by law, any non-principal amount (except payments specifically stated herein to be "interest"), including, without limitation, late charges, shall be deemed, to the extent permitted by law, to be an expense, fee, premium or penalty rather than interest.

(B) In the event that for any reason one or more of the provisions of this Second Replacement Revolver Note or their application to any person or circumstance shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall, to such extent, be held for naught as though not herein contained but shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Second Replacement Revolver Note, but this Second Replacement Revolver Note shall be construed as if such invalid, illegal or unenforceable provisions had never been contained herein.

15. Notices. All notices, requests, demands or other communications to or upon the Borrower or the Bank shall be deemed to have been given or made when hand delivered or deposited in the mail by certified mail, return receipt requested, postage prepaid, addressed to the Borrower or the Bank, as the case may be, at their respective addresses indicated herein or at such other addresses as the Borrower or the Bank may



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