

Mail Stop 4561

April 27, 2007

Frank Sloodman  
President and Chief Executive Officer  
Data Domain, Inc.  
2300 Central Expressway  
Santa Clara, CA 95050

**RE: Data Domain, Inc.  
Registration Statement on Form S-1  
File No. 333-141716  
Date Filed: March 30, 2007**

Dear Mr. Sloodman:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. We will process this filing and your amendments without price ranges. Since the price range triggers a number of disclosure matters, we will need sufficient time to process the amendment when it is included. Please understand that its effect on

disclosure throughout the document may cause us to raise issues on areas not previously commented upon.

Prospectus Cover Page

2. Please identify the selling stockholder on the cover page.

Prospectus Summary, page 1

3. You state here and elsewhere in the prospectus that you are "a leading provider of capacity optimized storage appliances . . . ." Please provide support for the claims regarding your industry position. Tell us how you compare to your competitors in quantitative or qualitative terms and consider appropriate disclosure in this respect. Further, provide the basis for your assertion that your products are a "compelling alternative" to tape-based protection storage systems. Otherwise, revise to remove the promotional context to your disclosure.

Risk Factors, page 7

"Our independent registered public accounting firm identified a material weakness . . . .", page 12

4. We note your disclosure that your independent registered public accounting firm identified a material weakness in your financial statement close process as of December 31, 2006. Revise to provide a materially complete description of the material weakness in your internal controls that led to those errors. Additionally, based on your disclosure, it is not clear whether the material weakness impacted your financial statements or resulted in any adjustments to your financial statements. Tell us the impact, if any, the material weakness had on your financial statements. In this regard, tell us whether any post-closing adjustments were made, including the dollar amounts, to the Company's books and records and its financial statements as a result of the material weakness.
5. We note that you have taken measures to remediate the material weakness. Please disclose the cost of your remediation efforts to date, if material.

"Any shortages in component used in our appliances . . . .", page 14

6. Please identify the single vendor that supplies NVRAM cards.

Use of Proceeds, page 24

7. To the extent practicable, please provide more specific disclosure regarding the allocation of the use of proceeds. Please discuss how the proceeds are to be used as they pertain to capital expenditures relating to international expansion, sales and marketing efforts, and support for research and development.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 31

Critical Accounting Policies and Estimates

Stock-Based Compensation, pages 35 – 37

8. We note your disclosure that you engaged an unrelated third-party appraiser to assist management in the reassessment of the estimated fair value of your common stock in light of the expected completion of your initial public offering. Since you did not obtain contemporaneous valuations performed by an unrelated valuation specialist as defined by the AICPA Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, tell us and revise to disclose the following information related to issuances of equity instruments:
  - Discuss each significant factor contributing to the difference between the fair value as of the date of each grant and the estimated IPO price or the fair value as determined by a contemporaneous valuation by an unrelated valuation specialist obtained subsequent to the grants but prior to the IPO; and
  - Revise your disclosures to include the intrinsic value per share for each option grant date.
9. It appears that in December 2005 you engaged an independent third-party valuation firm and obtained a contemporaneous valuation as of December 31, 2005, which was updated quarterly during 2006. You appear to have then engaged a second independent third-party valuation firm, Duff & Phelps, LLC, to perform retrospective valuations for specific dates in 2006. Tell us and disclose the reasons management chose not to rely on the contemporaneous valuations previously performed by an unrelated valuation specialist.

Results of Operations, page 39

10. Your discussion of the results of operations frequently does not quantify sources of material changes. For example and without limitation, disclosure on page 39 indicates that the increase in product revenue for 2006 compared to 2005 was “due primarily to an increase in new customers, additional purchases by existing

customers, an increase in channel partners, and the introduction of new products with higher capacity and higher performance, which were sold at higher prices. You have not quantified the contributions of the sources of the change. Furthermore, prefacing the reference to these sources of changes with the word “primarily” obscures the ability of the reader to identify the material sources of the change. Please consult section III.D of Release No. 33-8350 and revise your disclosure as appropriate.

11. Your discussion of results of operations highlights the components that are classified within each line-item on your statements of operations but should also include a description of the reasons for any changes in those line-items. You should further indicate whether those changes represent an upward or downward trend. The discussion should not merely repeat numerical data contained in the financial statements. The causes for the changes shall be described to the extent necessary to an understanding of your business as a whole. We would expect to see a discussion of the factors that played a role in the increased revenue for the fourth quarter.

Quarterly Results of Operations, page 43

12. In order to provide a balanced presentation, include your quarterly operating results for the quarters ended in fiscal 2004 and 2005 or explain why this information is not meaningful.

Liquidity and Capital Resources, page 44

13. We note your disclosure regarding the cash flows from operating, investing, and financing activities. When preparing the discussion and analysis of operating cash flows, companies should address material changes in the underlying drivers rather than merely describe items identified on the face of the statement of cash flows, such as the reconciling items used in the indirect method of presenting cash flows. Please consider Item 303 of Regulation S-K and Section IV of the “Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations” (Release No. 33-8350) and revise your disclosure accordingly.

Business, page 45

Industry Background, page 46

14. Please specifically disclose the factual basis for, and the context of, all your beliefs, understandings, estimates and opinions. This particularly pertains to your disclosure of all projections and statistics. To the extent you rely on market

analyses, such as those generated by IDC, the Taneja Group, and Freeman Reports, please disclose the date of the cited report and tell us whether Data Domain commissioned any of the reports.

Customer Support, page 54

15. Please provide a materially complete description of the third-party subcontracting relationship you maintain with respect to onsite hardware repair and replacement services for your customers.

Customers, page 54

16. Please add the disclosure required by Item 101(d) of Regulation S-K or provide a cross-reference to such disclosure contained in your financial statement footnotes.
17. Please advise us of all the countries in which you operate and do business.

Compensation Discussion and Analysis, page 64

18. The compensation discussion and analysis should be sufficiently precise to identify material differences in compensation policies with respect to individual named executive officers. Refer to Section II.B.1. of Release No. 33-8732A. In this regard, we note some disparity between Mr. Schneider's compensation and that of the other named executive officers. Given this, we would expect to see a more detailed discussion of how and why Mr. Schneider's compensation, particularly his annual incentive compensation, differs from that of the other named executive officers. If policies or decisions relating to a named executive officer are materially different than the other officers, this should be discussed on an individualized basis. Further, please give appropriate consideration to an explanation of the reasons why the committee rescinded Mr. Schneider's December grant and replaced it with a February 2007 grant. You should also provide some individualized discussion of how you determined the amounts of stock options to be granted to the named executive officers. The elements of individual performance and/or contribution that are taken into account in granting these options should be described in materially complete detail.
19. To the extent your annual cash incentive bonuses are correlated with the achievement of certain annual individual objectives, please discuss the specific items of individual performance used to determine bonus payments, how your incentive bonuses are specifically structured around such individual objectives, whether any discretion can be or has been exercised with respect to meeting such goals and objectives and to whom such discretion is applicable. Please see Item 402(b)(2)(vi) of Regulation S-K. We note the disclosure relating to Mr.

Schneider's bonus and would expect to see comparable disclosure as it relates to the other named executive officers.

20. Please supplement your disclosure in the last sentence on page 64 to address whether or not amounts realizable from prior compensation were considered in determining the amount and mix of compensation elements for each named executive officer. Refer to Item 402(b)(2)(x) of Regulation S-K.

Executive Compensation, page 69

21. In footnote (6), we note reference to your "sales incentive plan." Please ensure that you include appropriate disclosure of this plan in compensation discussion and analysis. It appears that this plan is the variable compensation plan discussed on the top of page 66 and, if this is the case, you should use consistent terminology throughout.
22. Refer to the disclosure in the column reporting Estimated Future Payouts Under Non-Equity Incentive Plan Awards and clarify whether the amount reported as the target is the sole estimated payout under the relevant incentive plan. It is not clear from your disclosure in compensation discussion and analysis whether or not there is a range of estimated payouts that could be made upon satisfaction of certain conditions in question under the appropriate non-equity incentive plan.
23. Please avoid the use of a cross-reference in footnote (2). The methodology for determining the exercise or base price should be provided in the footnote or the accompanying narrative. Refer to Instruction 3 to Item 402(d) of Regulation S-K.

Outstanding Equity Awards at 2006 Fiscal Year-End

24. With respect to your disclosure regarding the feature of the option grants allowing for immediate exercise regardless of vesting, please clarify whether such feature is specific to these option grants or a general term of your 2002 plan. Please also discuss here or elsewhere as appropriate, such as page 66, the purpose of such feature.

2006 Option Exercises, page 73

25. Footnote (2) to the Outstanding Equity Awards at 2006 Fiscal Year Ended table indicates that Mr. Sloodman has exercised 250,000 shares of the option covering 1,743,536 shares. Yet, there is no corresponding disclosure in the 2006 Option Exercises table. Please clarify whether the exercise of the options took place in 2006.

26. Pursuant to your disclosure on page 72 regarding the vesting terms of the option grants, it does not appear that the amounts reported in the "Number of Shares Acquired on Exercise" column represent shares that have fully vested. Please provide disclosure here regarding the shares acquired on vesting or otherwise advise. For purposes of clarity please provide footnote disclosure to indicate that the stock acquired on exercise and vested stock disclosed here for named executive officers relate to the same award.

Potential Payments Upon Termination or Change in Control, page 74

27. Although we note some disclosure relating to post-termination compensation in compensation discussion and analysis, we also note the absence in this section of some of the information required by Item 402(j) of Regulation S-K. Please give appropriate consideration to the information required to be disclosed under 402(j)(4).

Estimated Benefits and Payments Upon Termination of Employment, page 75

28. Where applicable, please complete the "Total Value" information for each category of termination or change-in-control payments.

Transactions With Related Persons, Promoters, and Certain Control Persons, page 82

29. Pursuant to paragraph (b) of Item 404 of Regulation S-K, please include a statement addressing the location of the writings evidencing your policies and procedures relating to approval or ratification of related party transactions and where an investor may locate the policy.
30. It appears that there were related party transactions with Mr. Miller, a member of the compensation committee, during the most recently completed fiscal year. To the extent related party transactions requiring disclosure under Item 404 of Regulation S-K took place with members of the compensation committee during 2006, the discussion concerning those transactions should be provided under the caption "Compensation Committee Interlocks and Insider Participation" and should comply with the provisions of Item 407(e)(4) of Regulation S-K.

Principal And Selling Stockholders, page 85

31. Revise to provide a materially complete discussion of how Quantum acquired the shares that are being registered for resale on its behalf. See Item 507 of Regulation S-K.

Industry and Market Data, page 99

32. We note that the disclosure about your industry is based upon industry publications or other information compiled by third parties. We also note that you cannot guarantee the accuracy and completeness of the information nor have you independently verified it. Since potential investors should be able to rely upon data and statistics in your registration statement that are based upon reasonable and sound assumptions, your disclosure, as currently drafted, appears inappropriate. Please revise to remove any implication that you are not responsible for assessing the reasonableness and soundness of the market data and statistics presented.

Consolidated Statements of Operations, page F-4

33. Explain why you have allocated amounts to cost of product and cost of support and services in 2004 when all revenue in the period arose from ratable product and related support and services.
34. We note the stock-based compensation expense table included at the bottom of the consolidated statements of operations. Tell us why no stock-based compensation expense was included in the cost of ratable product and related support and services line item.

Note 1. Organization and Significant Accounting Policies

Revenue Recognition, page F-8

35. You state that you recognize revenue when customer payment is free of contingencies and significant uncertainties. Please describe the nature and the accounting for these contingencies and uncertainties. Cite the accounting literature that supports your accounting.
36. We note that prior to the first quarter of 2005, you could not establish VSOE for the fair value of support and services contracts provided to your direct and indirect channels. We further note that beginning the first quarter of 2005, you established VSOE of fair value of support for products sold in certain types of transactions and continued to establish VSOE of fair value throughout 2005 for the remaining types of transactions. Tell us about your various "types of transactions". In this regard, tell us why you now believe that you can establish VSOE of fair value of support for products sold in all types of transactions.
37. Expand your disclosures to explain whether, and how, your revenue recognition policies differ for revenue recognized through indirect, rather than direct



channels. For example and without limitation, explain how an indirect sale impacts the determination of events such as when a legally binding arrangement with a customer exists or when delivery occurs. Clarify whether you require evidence of sell-through to an end user for all indirect sales. That is, we note your disclosure on page F-18, that sales to your Japanese distributor where you do not have a known customer are deferred until sell-through is reported, however, it is unclear whether this policy applies throughout your indirect channel.

Stock Plan, pages F-20 and F-21

38. We note that you have disclosed information about stock option grants and other equity related transactions for the year ended December 31, 2006. Provide us the following information in chronological order for stock option grants and other equity related transactions from January 1, 2007 through the filing of the registration statement:

- The type of security
- The date of grant/issuance
- Description/name of option or equity holder
- The reason for the grant or equity related issuance
- The number of options or equity instruments granted or issued
- The exercise price or conversion price
- The fair value of underlying shares of common stock
- The total amount of compensation deferred, beneficial conversion feature and expense recognized and reconciled to your financial statement disclosures and the magnitude and timing of the amortization expense
- Reference the authoritative accounting guidance relied upon for each non-option grant or equity transaction (e.g., EITF 00-27).

Continue to provide us with updates to the requested information for all equity related transactions through the effective date of the registration statement.

39. Please provide us with objective evidence that supports your determination of the fair value of the underlying shares of common stock at each grant or issue date, commencing in 2006. This objective evidence could be based on valuation reports that rely on methodologies discussed in the Practice Aid or on current cash sales of the same or a similar company security to a willing unrelated party other than under terms and conditions arising from a previous transaction. Where you have obtained a third-party valuation, tell us what level of assurance the appraiser gave in the fair value assessment.

40. Reconcile and explain the differences between the fair values of the underlying common stock at each valuation date, including the difference between the most recent fair value and the midpoint of your IPO offering range. This reconciliation

should describe significant intervening events within the company and changes in assumptions as well as weighting and selection of valuation methodologies employed that explain the changes in the fair value of your common stock up to the filing of the registration statement.

Note 13. Segment Information, page F-25

41. We note that in 2006 you derived approximately 32% of your total revenue from international customers. To the extent that revenues attributable to an individual foreign country are material, revise to provide disclosure of those revenues separately pursuant to paragraph 38(a) of SFAS 131.

Part II – Information Not Required in Prospectus

Exhibits

42. Please file the voting agreement pursuant to which your directors were elected. Refer to disclosure on page 61.

Recent Sales of Unregistered Securities

43. For the sales referenced in paragraphs (2) and (4)-(7), please clarify the nature of the purchasers, *i.e.*, accredited or sophisticated.

Request for Confidential Treatment

44. Staff comments on your application for confidential treatment relating to certain portions of Exhibits 10.28 and 10.29 will be provided under separate cover. Please be advised that these comments will need to be resolved prior to effectiveness of the Form S-1.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its

management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Jason Niethamer at (202) 551-3855 or Tamara Tangen at (202) 551-3443 if you have questions regarding comments on the financial statements and

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related matters. Questions on other disclosure issues may be directed to Jay Ingram at (202) 551-3397. If you require further assistance, please contact me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs  
Assistant Director

cc. David Kling  
by facsimile at 650-321-2800

