



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3720

September 14, 2006

**Via U.S. Mail and Fax (561-805-8004)**

Mr. Evan McKeown  
Senior Vice President and Chief Financial Officer  
Applied Digital Solutions, Inc.  
1690 South Congress Avenue, Suite 200  
Delray Beach, FL 33445

RE: **Applied Digital Solutions, Inc.**  
**Form 10-K/A for Fiscal Year Ended December 31, 2005**  
**Filed April 6, 2006**

**Forms 10-Q for Fiscal Quarter Ended March 31, 2006 and June 30, 2006**  
**File No. 0-26020**

Dear Mr. McKeown:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Please address the following comments in future filings. If you disagree, we will consider your explanation as to why our comment is inapplicable or a future 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 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.

Form 10-K/A for the Year Ended December 31, 2005

Consolidated Financial Statements

Consolidated Statements of Operations, page F-4

1. If the captions “cost of sales” and “gross profit” exclude depreciation and amortization for property and equipment directly attributed to the generation of revenue, we believe that this presentation inappropriately reports a figure for income before depreciation and amortization. As required by SAB 11:B, revise your presentation to either reclassify the applicable depreciation to “cost of sales” or remove the caption “gross margin” and indicate the amount of applicable depreciation that is excluded from “cost of sales.”

Note 1. Organization and Summary of Significant Accounting Policies

Revenue Recognition

VeriChip Segment, page F-17

2. Tell us how you have determined that your revenue recognition policy is in accordance with paragraph 12 of EITF 00-20 and whether you have applied the reverse residual method to determine the value of an undelivered item.

Note 2. Financing Agreements, page F-25

3. Tell us how you computed the reduction in exercise price for 200,000 of the previously issued Series E warrants. Tell us how this transaction with SSFP and SSFA was related to the \$12 million note to Satellite Senior Income Fund, LLC.
4. Tell us in detail citing your authority under the accounting literature about your financial reporting for the 2005 financing arrangements with SSFA and SSFP. Show us how you determined the fair values of each component and then applied that data to determine the relative fair values. Tell us your consideration of EITF Issues 00-27 and 98-5 in computing the beneficial conversion feature.

Share Exchange Agreement, page F-28

5. Tell us your financial reporting for the share exchange and the accounting literature upon which you relied. Tell us your ownership percentages of Digital Angel before and after the exchange.

Securities Purchase Agreements with Satellite Strategic Finance Associates, LLC,

page F-29

6. Tell us your basis in the accounting literature for your financial reporting for these transactions, including but not limited to, your use of a purchase price using the weighted average price for a number of days only prior to the sale and the use of different periods to determine weighted averages. Tell us how you determined the fair value of the extension and the fair values of warrants. Tell us your consideration of EITF 96-18.

Laurus Master Fund Ltd. Securities Purchase and Related Security Agreements, page F-30

7. Please tell us in detail about your financial reporting for these transactions, including the accounting literature upon which you relied. Tell us how you determined the amount of goodwill disclosed in Note 6.
8. Please tell us how you have applied the guidance in FAS 150, FAS 133 and EITF Issue 00-19 in evaluating whether the debt conversion feature for the secured convertible term note issued to Laurus is an embedded derivative that you should separate from the debt host and account for at fair value under SFAS 133. Please also refer to EITF 05-4.

In addition, the warrants issued to Laurus may also be impacted depending on your view as to the appropriate accounting for the instrument. Please advise.

Note 3. Acquisitions

VeriChip, Inc., page F-31

9. Tell us how you applied the guidance in FAS 141 in determining your purchase price for VHI.
10. Tell us why the contribution of VHI was considered to be effective as of March 31, 2005 when the exchange agreement was dated June 9, 2005. Tell us the implications of using March 31, 2005 rather than June 9, 2005 on your financial reporting for this transaction.
11. Tell us your basis for the amortization periods of 4 to 12.3 years.

Instantel, Inc., page F-32

12. Tell us your basis for the amortization periods of 8.4 to 11.8 years.

DSD Holdings A/S, page F-33

13. Tell us how you applied the guidance in FAS 141 in determining your purchase price for DSD Holdings.

14. Tell us your basis for the amortization periods of 3 to 15 years.

OuterLink Corporation, page F-33

15. Tell us how you applied the guidance in FAS 141 in determining your purchase price for OuterLink Corporation, including the 30% discount.

16. Tell us your basis for the amortization periods of 4 to 8 years.

Share Exchange Agreements, page F-36

17. Tell us your financial reporting for these exchanges, including the accounting literature upon which you relied.

Note 10. Other Long-Term Liabilities, page F-44

18. Disclose in your next filing and in your response the number of warrants treated as liabilities, the reasons you have recorded them as liabilities and how you determined the amount of each liability related to the warrants. Tell us why the warrants decreased significantly in 2005.

Note 12. Stockholders' Equity

Warrants, page F-45

19. Tell us your accounting for the amendment of the exercise price related to the Series C warrants disclosed on page F-46.

20. Disclose in your next filing and in your response, the period(s) to which the assumptions for warrant valuation on page F-47 relate.

Note 14. Severance Agreements, page F-53

21. Disclose in your next filing and in your response, your accounting for the repricing of the stock options held by Richard J. Sullivan and the issuance of 5.6 million shares of your stock to him, including the dates and prices that were used and your rationale for those dates and prices. Provide the same information for Jerome C. Artigliere and Garrett Sullivan.

Note 15. Asset Impairment, page F-54

22. Please revise the disclosure to explain the theoretical models and assumptions used by you in determining the fair value of VeriChip's reporting units.
23. We note that you refer to third-party valuations. While you are not required to make reference to the third-party valuations, when you do you should disclose the name of the experts and include the consents of the experts in the filing. If you decide to delete your reference to the third-party valuations, please expand the disclosure to explain the theoretical models and assumptions used by you to determine the valuation.

Forms 10-Q for March 31, 2006 and June 30, 2006

24. Revise, as applicable, for comments issued regarding Form 10-K/A for the Year Ended December 31, 2005.

\* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Please furnish your response letter on EDGAR.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments 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

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information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Sharon Virga, Senior Staff Accountant, at (202) 551-3385, or Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel  
Assistant Director