DIGI INTERNATIONAL INC. 11001 Bren Road East Minnetonka, MN 55343

July 28, 2006 Via EDGAR and Federal Express

Securities and Exchange Commission Attention: Marc D. Thomas Division of Corporation Finance 100 F Street, NE Washington, D.C. 20549-5553

Re: Digi International

Form 10-K for Fiscal Year Ended September 30, 2005 Form 10-Q for Fiscal Quarter Ended March 31, 2006

Form 8-K filed dated April 17, 2006

File No. 0-17972

Ladies and Gentlemen:

On behalf of Digi International Inc. (the "Company"), I am responding to the letter dated June 13, 2006 of Marc D. Thomas of the Division of Corporation Finance to Joseph T. Dunsmore, Chief Executive Officer of the Company, with respect to comments on the above-referenced filings.

For ease of reference I have included the SEC staff's comments, followed by the Company's response.

Accounting Comments

Form 10-K for the Fiscal Year Ended September 30, 2005

Management's Discussion and Analysis, page 20

Operating Expenses, page 29

1. We note your disclosure within MD&A that identifiable intangible amortization expense is included within operating expenses. Advise us as to what consideration you have given to FASB 86 Interpretation 17.

We provide device networking solutions for our customers by offering an extensive range of connectivity solutions, primarily resulting in hardware product sales. Our past acquisitions were principally made to extend our portfolio of device networking hardware solutions. Accordingly, none of these acquisitions has resulted in the acquisition of software and no software has been capitalized by us in connection with these acquisitions. In addition, software development costs incurred by us have been expensed as incurred because they have been very insignificant.

Non-GAAP Financial Measures, page 22

2. Your presentation of non-GAAP information identifies both the tax settlement and the valuation allowance adjustment as unusual items. Explain to us your basis for concluding that these items are unusual for purposes of non-GAAP disclosure. As part of your response, explain your basis for concluding that it is not reasonably likely that similar items will recur within two years. See Item 10(e)(ii)(B) of Regulation S. K

We considered the following items to be unusual items, and we excluded the impact of these items from certain GAAP financial measures in our Form 10-K filing:

- In February 2005, the Congressional Joint Committee on Taxation approved a settlement with the Internal Revenue Service on an audit of certain of our prior fiscal years income tax returns. We had previously established tax reserves that ultimately exceeded the settled amount. As a result of the favorable settlement, we reversed \$5.7 million of excess income tax reserves during the second quarter of fiscal 2005. We accounted for the reversal of the income tax reserves as a discrete event for purposes of our effective income tax rate computation, and recorded an income tax benefit during the second fiscal quarter of 2005 of \$5.7 million.
- In March 2003, we reversed the valuation allowance associated with our German net operating loss carryforwards. The valuation allowance was reversed based upon current and anticipated future taxable income generated by our German operations. The portion of the valuation allowance related to the German net operating loss carryforwards that we expected to utilize during the year ended September 30, 2003 was accounted for by reducing the effective income tax rate for the current year. The portion of the valuation allowance related to the German net operating loss carryforwards that we expected to utilize in periods subsequent to September 30, 2003 was accounted for as a discrete event and resulted in an income tax benefit of \$1.4 million being recorded during fiscal 2003 as part of deferred tax expense.

We concluded that these items were unusual for purposes of non-GAAP disclosure since neither type of event had taken place in at least the previous two fiscal years and we do not anticipate that they will recur within the following two fiscal years. We do not anticipate another Internal Revenue Service audit within the next two years that would result in a material charge or gain. We did not, in fact, have any valuation allowances on our balance sheet during the two-year period following the reversal in March 2003, nor do we anticipate that we will need to record a valuation allowance in the next two years based on the criteria for evaluating and establishing valuation allowances. As we stated on page 22 of the Form 10-K, management believes that, with respect to the measures that exclude the favorable tax settlement, excluding this item provides useful information to investors regarding the Company's consolidated results of operations and financial condition and permits a more meaningful comparison and understanding of the Company's operating performance, allowing investors to comparably evaluate our income tax provision and effective income tax rate.

3. We note that you have reconciled EBITDA to net income. Explain to us how you have considered the answers to questions 8 and 15 from the Frequently Asked Questions Regarding the use of Non-GAAP Financial Measures. In this regard explain to us, in detail, how you have considered the disclosures identified in the answer to question 8.

We monitor EBTDA (earnings before taxes, depreciation, and amortization) internally as it is an element of the annual incentive plan for all employees, including executive management. The EBTDA performance is posted quarterly on the Company's intranet to allow employees to keep abreast of the company's progress toward this incentive plan component.

We also monitor EBTDA as a percentage of our net sales as an indicator of our trended financial performance and as a measure of our progress over time in achieving our financial goals. During the past several years our strategy has been to acquire complementary technologies to grow our device networking business. We have had five acquisitions in the last six years with purchase prices ranging in size from less than \$5 million to greater than \$50 million. We believe that presenting this non-GAAP measure provides a better understanding of our underlying financial performance excluding the impact of identifiable intangibles amortization.

Additionally, the Company is endeavoring to reduce our operating expenses to net sales ratio and to increase our operating income to net sales ratio. In order to measure our progress toward achievement of these goals, identifiable intangibles amortization is excluded from the calculations since identifiable intangibles amortization is determined at the time that acquisitions are completed and cannot be impacted through tactical management efforts to control expenses.

Finally, we compute EBTDA each quarter as this is a statistic that is used by our analysts for their quarterly research reports. Our analysts use this information as a tool in assessing our operational performance each quarter.

We have considered the disclosures identified in the answer to Question 8 as follows:

- The manner in which management uses the non-GAAP measure to conduct or evaluate its business As disclosed on page 22 of the Form 10-K, we believe that EBTDA allows for a more meaningful comparison of operating results and corporate performance exclusive of the impact of our capital structure and the method by which assets were acquired. As a result, our incentive compensation plans include EBTDA to measure operating performance without regard to decisions that may be made about the means of financing the Company.
- The economic substance behind management's decision to use such a measure As described above, management uses EBTDA to focus on
 operating performance and to incent employees.
- The material limitations associated with use of the non-GAAP financial measure as compared to the use of the most directly comparable GAAP financial measure As disclosed on page 22 of the Form 10-K, we caution readers that EBTDA is not a substitute for complete GAAP measures of the Company's financial performance and we refer readers to review the GAAP measures.
- The manner in which management compensates for these limitations when using the non-GAAP financial measure When using EBTDA as a measure of operating performance, management keeps in mind that depreciation and amortization also affect the Company's earnings, and management also reviews and monitors trends in GAAP net income to identify the significance of the impact of depreciation and amortization on the Company's earnings.
- The substantive reasons why management believes the non-GAAP financial measure provides useful information to investors —We believe EBTDA provides useful information to investors because they tell us that it does. This is evidenced by the fact that our analysts use EBTDA as a measure of our operating performance in their research reports to investors.

As the SEC suggests in FAQ 15, we reconcile EBTDA to net income, and not to operating income.

4. We note similar non-GAAP disclosures in the press release in the Form 8-K dated April 17, 2006. Management should review these disclosures in light of the preceding comments on the Form 10-K.

We have reviewed the non-GAAP disclosures in the press release contained in the Form 8-K. We reported (i) earnings per diluted share excluding the impact of stock-based compensation expense, and also guidance related to earnings per diluted share excluding the impact of stock-based compensation expense, (ii) earnings per diluted share excluding the impact of the favorable tax settlement, and (iii) earnings before taxes, depreciation and amortization. With respect to the measures that exclude stock-based compensation expense, we believe that these disclosures allow investors to compare results with the results of prior periods that did not include stock-based compensation expense. With

Page 5

respect to the exclusion of the impact of stock-based compensation, we currently intend to discontinue the presentation of such non-GAAP financial measures once all comparable periods include stock-based compensation expense. We also refer you to our answer to your Comment 6.

With respect to the non-GAAP disclosure for earnings per diluted share excluding the impact of the favorable tax settlement, we believe that this is a nonrecurring event that should be excluded from the earnings per diluted share calculations in order to provide comparability to investors in making decisions about the profitability of the company, and that it is appropriate to include a presentation of earnings per diluted share excluding the impact of the favorable tax settlement. Additional information related to this matter is included in our response to Comment 2.

Earnings before taxes, depreciation and amortization have been presented as a non-GAAP disclosure as explained in our response to Comment 3. We have provided information on the manner in which we use this non-GAAP measure to evaluate our business. We have also explained why we believe this non-GAAP measure provides useful information to our investors and analysts following the Company.

Financial Statements

Notes to Consolidated Financial Statements

Note 6. Segment Information and Major Customers, page 59

5. We note the discussion, beginning on page 7 of your 10-K, of various product families and categories. In view of these differing product offerings, explain to us how you have considered the requirements of SFAS 131, par. 37.

SFAS 131, paragraph 37, requires reporting of revenues from external customers for each product or each group of similar products. In fiscal year 2005 we had two reportable segments, Connectivity Solutions and Device Networking. The Connectivity Solutions products were external "board and box" products, while the Device Networking products were generally embedded products that employed silicon, an operating system, and networking software. We concluded that we did not need to disclose any additional information with respect to our products as a result of the similarities of the products in each of the respective reportable segments described above, since the products in each reportable segment were essentially similar in that the products had similar production processes, classes of customers, economic characteristics, and similar degrees of risk.

Form 8-K dated April 17, 2006

6. We note the non-GAAP disclosures relating to the impact of share-based compensation on operating results for the three and six month periods ending March 31, 2006 which have been included in the press release. Explain to us how you have considered the guidance of

SAB Topic 14.G and the answer to question 8 from Frequently Asked Questions Regarding the use of Non-GAAP Financial Measures. Please note that each measure you have presented that excludes stock-based compensation expense, e.g. gross profit, operating expenses, represents a separate non-GAAP measure that should be specifically addressed.

Effective October 1, 2005, we adopted Statement of Financial Accounting Standard No. 123 (revised 2004), "Share-Based Payment" (FAS No. 123R), as amended by FASB Staff Position No. FAS 123(R) -4 (FSP FAS 123 (R) -4), using the modified prospective method of application. We anticipate that the adoption of FAS No. 123R will incrementally increase pre-tax compensation expense by approximately \$2.3 million during fiscal 2006, or approximately \$0.07 per diluted share, and that our annual earnings per diluted share for fiscal 2006, including the impact of stock-based compensation expense, will be in a range of \$0.43 to \$0.50, based on the most recent estimates included in our press release dated July 17, 2006. We believe that the impact of stock-based compensation is significant in relation to our earnings per diluted share for the year, and that it is important for our investors to understand the impact of stock-based compensation expense on each of the financial statement line items. As discussed in Question 2 of SAB Topic 14.G, a measure used by management that excludes share-based payments internally to evaluate performance may be relevant disclosure for investors. We have concluded that these non-GAAP financial measures related to the impact of share-based compensation do not violate any of the prohibitions from inclusion in filings as outlined in Regulation G and Item 10(e) of Regulation S-K, and that we have appropriately disclosed in the Form 8-K filing the reasons why we believe that presentation of the non-GAAP financial measures provides useful information to investors regarding the Company's results of operations.

We currently intend to discontinue the presentation of non-GAAP financial measures that exclude stock-based compensation expense once all comparable periods include stock-based compensation expense. Once all comparable periods include stock-based compensation expense, we believe that it is probable that the financial statement impact of this item will be generally consistent with the prior year's comparable periods and will not materially impact year-to-year comparisons and that period-to-period differences can be adequately addressed in MD&A.

Form 10-Q for the Quarterly Period Ended March 31, 2006

Financial Statements

Notes to the Financial Statements

Note 10 Segment Information, page 13

7. We note your disclosure that during the first quarter of fiscal 2006, you changed your organizational structure and the manner in which certain intellectual property is used. As a result, your chief operating decision maker (CODM) now reviews and assesses financial information for your company in the aggregate. Accordingly, you have concluded that you have a single operating and reporting segment as of October 1, 2005.

Describe to us in greater detail the nature of the changes in your organizational structure and operations which resulted in the change in your reporting structure. Provide us with copies of the financial information reviewed by your CODM for the quarterly periods immediately before and after the change in your reportable segments.

Prior to fiscal 2002, Digi operated in one reportable segment, Connectivity Solutions. At that time, the nature of the products was similar, as each product provided a means of connecting devices in various retail or commercial application environments. These products were all external box products with differing port counts and other features that allowed us to provide customers with a solution for their specific application. In fiscal 2002, we acquired NetSilicon, and expanded our product lines to include network-enabled microprocessors (specialized computer chips), an operating system, networking software, development tools, and technical support. As a result of the differing products (silicon and software), differing customers and differing methods of distribution that were in place at the time of the acquisition, we created a second reportable segment, Device Networking Solutions. The products in this category included primarily embedded networking products, such as embedded device servers, core modules and single board computers and integrated microprocessors. A segment manager was responsible for the Device Networking segment through the end of fiscal 2005. Revenue was summarized and reported at that segment level to management.

In fiscal 2006, we implemented a change in strategy and organization structure to accelerate our focus on embedded networking products for the commercial and industrial markets that will drive revenue growth and near-term profitability. This involved increasing our focus on networking modules and accelerating development of a family of modules that will use our current operating system platform and microprocessor chips that have already been developed.

In addition to the module strategy discussed above, we have also integrated the technology acquired through our NetSilicon acquisition throughout most of our other product lines. Our microprocessor chips and the operating system platform (Net + OS) are now integrated in several of our other product lines and provide added functionality. As a result of this integration of technology, NetSilicon is no longer a separate business unit but rather an integral part of our other operations. The previous two reporting segments no longer reflect the reality of our overall business, which has effectively converged.

In response to the change in strategy and the technology integration described above, there were several organizational changes that were made effective October 1, 2005, including the dissolution of the Device Networking group and the departure of the General Manager for Device Networking. The engineering teams around the world all report directly to the Vice President of Research and Development, located at our headquarters in Minnesota. The reporting relationships for all sales teams worldwide were transitioned to our Senior Vice President of Sales and Marketing, also located at our headquarters in Minnesota. The product management function is centralized at our headquarters location as well. Each member of the senior executive staff provides leadership for the particular function that he/she has responsibility for, across all locations and regions. We believe that eliminating redundancy in management and infrastructure will generate operational efficiencies.

As a result of the changes in our product strategy, technology integration, and organizational structure, our internal financial reporting was changed during our first quarter of fiscal year 2006. We have discontinued the financial reporting previously furnished to our CODM that provided operating performance information for the Connectivity Solutions and Device Networking segments. Effective with our first quarter of fiscal year 2006, our CODM reviews and assesses the operating performance for Digi International in the aggregate and uses this information to allocate resources. For the information of the SEC staff only, we are delivering to the staff under separate cover copies of the financial information reviewed by our CODM for the quarterly periods preceding and after the change to a single segment. We are providing these materials to the staff on a confidential and supplemental basis pursuant to Rule 12b-4 under the Securities Exchange Act of 1934, as amended. In accordance with such rule, we hereby request that the staff return the materials referred to above promptly following completion of the staff's review of those materials. For your convenience we have enclosed a self-addressed Federal Express envelope to return the materials. By separate letter, we have requested confidential treatment of such materials pursuant to the provisions of 17 C.F.R. 200.83.

Management's Discussion & Analysis, pages 15-19

Gross Profit, page 18

8. We note your discussion of the factors that led to a decrease in your gross profit margin for the three and six months ended March 31, 2006. Tell us whether you believe the decrease in gross profit margin represents a trend that will continue in future periods. Also, tell us what actions or steps, if any, you have taken or plan to take to improve your gross profit margin. Finally, explain how you have considered providing disclosure addressing these matters in your MD&A.

We believe that our gross profit margin will be approximately 55-60% for the foreseeable future, as we have consistently stated in our quarterly conference calls. There may be period to period fluctuations within that band based primarily on product mix and the stage of our products in their respective product life cycles. At this time, we do not anticipate that our gross profit margins will continue to decline below that range. As we have discussed in various SEC filings, we have certain mature products with higher gross profit margins that are declining in sales volume, and certain new products that currently carry lower gross profit margins and are increasing in sales volume.

We analyze and monitor our overall gross profit margins and trends and are taking actions to maintain or possibly to improve our gross profit margin by closely managing our production expenses, improving manufacturing efficiencies through outsourcing more of our production through offshore manufacturing facilities, as well as implementing other cost reduction initiatives for our products.

We provided the reasons for the fluctuation in the gross profit margin for the three and six months ended March 31, 2006 compared to the same periods in the prior year in MD&A. Sales of Rabbit's embedded modules, an acquisition in May 2005, had a significant impact on the decline in gross profit margin and the impact was disclosed in the MD&A discussion. In the future, if there is a material deviation from our anticipated

Page 9

long-term gross profit margin of 55 - 60%, we will provide disclosure of the reasons and any actions that we intend to take to improve our gross profit margin as well as express management's view as to whether such change represents a trend.

Operating Expenses, pages 18-19

9. In your discussion of operating expenses, you sometimes refer to two or more sources as factors that contributed to a material change without quantifying the amount contributed by each factor. For example, you indicate that the increase in sales and marketing is due to increased ongoing expenses as a result of acquisitions and stock-based compensation, partially offset by decreased variable expenses related to your mature business. However, these factors are not quantified. Tell us how you considered Section IIII.D of SEC Release 33-6835 in identifying and quantifying the extent of contribution of each of two or more factors underlying material increases or decreases.

As indicated in our operating expense discussion in MD&A, there were three primary factors contributing to the changes in expenses between the three and six months ended March 31, 2005. Those factors included (1) an incremental increase in ongoing expenses resulting from acquisitions, (2) decreased variable operating expenses related to our mature products, and (3) an incremental increase in expenses as a result of the adoption of SFAS No. 123 on October 1, 2005. Of the \$2.5 million and \$4.8 million increases in operating expenses for the three and six months ended March 31, 2006 compared to the three and six months ended March 31, 2005, the increased ongoing operating expenses resulting from acquisitions were the most material factor for the three and six months ended March 31, 2006 and were \$3.4 million and \$6.8 million, respectively. We did not quantify the decline in variable operating expenses related to the mature products or the increase in stock-based compensation expenses since we considered the increase in operating expenses associated with the acquisitions to be the primary reason for the total operating expense variances for the three and six month periods.

In future filings when appropriate, we will conform our MD&A disclosures as indicated in Section III.D of SEC Release 33-6835 by identifying and quantifying the extent of contribution of two or more factors underlying material increases or decreases.

Income Taxes, pages 19-20

10. Management should consider the staff's comments on the presentation of non-GAAP disclosures as it may potentially relate to the disclosures within the discussion of income taxes in MD&A.

With respect to the non-GAAP disclosure related to the effective income tax rate and earnings per diluted share excluding the impact of the favorable tax settlement included in our MD&A, we believe that this is a nonrecurring event as explained above in Question 2 that should be

Page 10

excluded from the calculation of the effective income tax rate and the earnings per diluted share calculations in order to provide comparability to investors in drawing conclusions about current and future tax provisions and the current and future profitability of the Company, and that it represents better disclosure to include these non-GAAP presentations with respect to the impact of the favorable tax settlement. This is evident from the distortion caused by the tax settlement on our effective income tax rate and earnings per diluted share.

In responding to the staff's comments, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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 Untied States.

Please feel free to contact the undersigned at 952-912-3125 if the SEC staff has any questions or concerns regarding this response.

DIGI INTERNATIONAL INC.

By: /s/ Subramanian Krishnan Subramanian Krishnan Senior Vice President and Chief Financial Officer

cc: **Brad Skinner** Accounting Branch Chief Digi International Inc. Audit Committee Joseph T. Dunsmore Terrence J. Ward PricewaterhouseCoopers LLP James E. Nicholson

Faegre & Benson LLP