SUNPOWER

July 29, 2010

VIA FACSIMILE AND U.S. MAIL

Mr. Kevin L. Vaughn Accounting Branch Chief Securities and Exchange Commission 100 First Street, N.E. Mail Stop 6010 Washington, D.C. 20549

Re: Response to your letter dated July 19, 2010,

SunPower Corporation - File No. 1-34166

Dear Mr. Vaughn:

As requested in your letter to me dated July 19, 2010, this letter summarizes SunPower Corporation's (the "Company" or "we") response to each of your four additional comments that relate to our response on July 2, 2010 to your letter dated May 28, 2010. As you requested, the Company acknowledges the following:

- The Company is responsible for the adequacy and accuracy of its disclosure in the filing;
- Staff comments or changes to disclosure in response to staff comments do not foreclose the Securities and Exchange Commission (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 United States.

The following are your comments and our responses to each:

Form 10-K for the fiscal year ended January 3, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 41

-Critical Accounting Policies and Estimates, page 44

Valuation of Inventories, page 46

1. We note your response to prior comments 2. With a view towards enhanced disclosure, please revise future filings to quantify the effects of the inventory charges on your cost of sales. Additionally, when material, please quantify the impact that sales of inventory previously written-down had on your margins.

Response: In future filings, we will revise the disclosure in our Management's Discussion and Analysis of Financial Condition and Results of Operations to quantify the effects of the inventory charges on our cost of revenue and, when material, quantify the impact that sales of inventory previously written-down had on our gross margin.

Note 2. Restatement of Previously Issued Consolidated Financial Statements, page 98

2. We note your response to prior comment 7. Please reconcile the totals presented in this response for prepaids and other current assets, other long-term assets, accrued liabilities and other long-term liabilities to the amounts presented in the restatement adjustments columns in Note 2 of your December 31, 2009 Form 10-K (relating to the December 31, 2008 balance sheet) and Note 2 of your September 27, 2009 Form 10-Q/A.

Response: The amounts presented in our January 3, 2010 Form 10-K (relating to the December 28, 2008 balance sheet) and our September 27, 2009 Form 10-Q/A represent the change in the balance sheet amount for each of the captions listed below. The comparable amounts presented in our initial response letter are those changes to the particular balance sheet caption exclusive of income tax effects. The income tax effects of the adjustments represent changes to income tax accounts including deferred taxes, uncertain tax positions and income taxes payable contained in these captions. The first table below reconciles the totals presented in our response on July 2, 2010 for prepaid expenses and other current assets, other long-term assets, accrued liabilities and other long-term liabilities to the amount s presented in the restatement adjustments column in Note 2 of our January 3, 2010 Form 10-K (relating to the December 28, 2008 balance sheet). The second table below reconciles the totals presented in our response on July 2, 2010 for prepaid expenses and other current assets, other long-term assets, accrued liabilities and other long-term liabilities to the amounts presented in the restatement adjustments column in Note 2 of our September 27, 2009 Form 10-Q/A.

	Amounts				
	Presented in	Response to Prior Comment 7			
			Errors		
	Form 10-K for the		Identified		
	Year Ended	Investigation	During Course		Income Tax
	December 28,	Related	Of	Out-of-Period	Effect of
	2008	Adjustments	Investigation	Adjustments	Adjustments
Prepaid expenses and other current assets	3,481	(1,843)	2,274	(1,592)	4,642
Other long-term assets	(7,635)	(1,344)	-	-	(6,291)
Accrued liabilities	(677)	-	3,760	(680)	(3,757)
Other long-term liabilities	(1,984)	-	-	(3,169)	1,185
	Amounts				
	Presented in	Response to Prior Comment 7			
	Form 10-Q/A for				
	the	Errors			
	Nine Months	Identified			
	Ended	Investigation	During Course		Income Tax
	September 27,	Related	Of	Out-of-Period	Effect of
	2009	Adjustments	Investigation	Adjustments	Adjustments
Prepaid expenses and other current assets	1,456	(6,097)	2,911	-	4,642
Other long-term assets	(6,935)	(644)	-	-	(6,291)
Accrued liabilities	(3,771)		5,761	-	(9,532)
Other long-term liabilities	(1,741)	-	-	(1,281)	(460)

3. We note from your September 27, 2009 Form 10-Q/A that you recorded \$8.5 million adjustment to your additional paid-in capital. However, we do not see where you have described the nature of this adjustment. Please provide us with an explanation of this adjustment.

Response: The cumulative adjustment of \$8.5 million to additional paid-in capital represents the windfall tax benefits received from stock option deductions that provide a benefit to our taxes payable. As previously reported, we were able to record a tax benefit for disqualifying dispositions of stock to the extent such tax benefit reduced taxes payable. In connection with the restatement, we lowered our reported pre-tax income and therefore our computed taxes payable decreased. This decrease reduced the amount of tax benefit we could reflect for disqualifying dispositions.

Form 10-Q for the Quarter Ended April 4, 2010

Note 12. Debt and Credit Sources, page 26

4. We note your disclosure in response to prior comment 13. Please revise your future filings to also disclose the valuation model utilized in the determination of the fair value of these derivatives and how you determined the underlying assumptions utilized within each model.

Response: In future filings, we will revise the disclosure in our Notes to the Financial Statements to disclose the valuation model utilized in the determination of the fair value of these derivatives and how we determined the underlying assumptions utilized within each model.

Regards,

/s/ Dennis V. Arriola Dennis V. Arriola Executive Vice President and Chief Financial Officer

cc: Mr. Thomas H. Werner Mr. Bruce Ledesma Esq. SunPower Corporation