

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

June 3, 2011

John C. Heinmiller Executive Vice President and Chief Financial Officer St. Jude Medical, Inc. One St. Jude Medical Drive St. Paul, Minnesota 55117

Re: St. Jude Medical, Inc.

Form 10-K for the fiscal year ended January 1, 2011

Filed March 2, 2011

File No. 1-12441

Dear Mr. Heinmiller:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief