

Exhibit 32.1

CERTIFICATE OF CHIEF EXECUTIVE OFFICER

In connection with the periodic report of Maxim Integrated Products, Inc. (the "Company") on Form 10-Q for the period ended December 26, 2009 as filed with the Securities and Exchange Commission (the "Report"), I, Tunc Doluca, Chief Executive Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to the best of my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

This Certification has not been, and shall not be deemed, "filed" with the Securities and Exchange Commission.

Date: February 4, 2010

By: /s/ Tunc Doluca
Tunc Doluca
President and Chief Executive Officer

This certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended or the Securities Exchange Act of 1934, as amended.