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

Post-Effective Amendment No. 2

to

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Analog Devices, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Massachusetts

(State or other jurisdiction of incorporation or organization)

One Technology Way, Norwood, MA (Address of principal executive offices)

04-2348234

(I.R.S. Employer Identification No.)

02062-9106

(Zip Code)

Analog Devices, Inc.
2001 Broad-Based Stock Option Plan

(Full Title of the Plan)

Margaret K. Seif One Technology Way Norwood, MA 02062

(Name and Address of Agent For Service)

(781) 329-4700

(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer $\ensuremath{\square}$

Accelerated filer o

Non-accelerated filer o (Do not check if a smaller reporting company)

Smaller reporting company o

EXPLANATORY NOTE

This Post-Effective Amendment No. 2 to Registration Statement on Form S-8 (File No. 333-75170) (the "2001 Registration Statement") of Analog Devices, Inc. (the "Company" or the "Registrant") filed in connection with the Registrant's 2001 Broad-Based Stock Option Plan (the "2001 Plan") is being filed to deregister 13,661,403 shares from the 2001 Registration Statement (the "Exchanged Shares"). 11,738,094 of the Exchanged Shares were previously subject to options granted under the 2001 Plan which options were surrendered under the Company's shareholder-approved option exchange program (the "Option Exchange") and which, under the terms of the Company's 2006 Stock Incentive Plan (the "2006 Plan"), were added to the 2006 Plan only for use as new option grants under the Option Exchange. 1,923,309 of the Exchanged Shares were previously subject to awards granted under the 2001 Plan, which awards have otherwise cancelled or expired. Under the terms of the 2006 Plan, such shares became available for issuance under the 2006 Plan. The Exchanged Shares are being transferred to a new registration statement on Form S-8 registering additional shares of the Registrant's common stock under that plan.

SIGNATURES

Pursuant to Rule 478 under the Securities Act, the registrant has duly caused this post-effective amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Norwood, Massachusetts, on this 11th day of December 2009.

ANALOG DEVICES, INC.

By: /s/ Jerald G. Fishman

Jerald G. Fishman President and Chief Executive Officer (Principal Executive Officer)