Saifun Semiconductors Ltd. Form 6-K July 02, 2007

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER

Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

For the month of: June

Commission File No.: 000-51581

Saifun Semiconductors Ltd.

(Exact name of registrant as specified in charter)

6 Arie Regev Street Sappir Industrial Park Netanya, 42504 Israel (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F x Form 40-F 0

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes O No X

If Yes is marked, indicate below the File Number assigned to the registrant in connection with Rule 12g3-2(b): ____

EXPLANATORY NOTE

On July 2, 2007, Saifun Semiconductors Ltd. issued a press release with SMIC announcing that the two companies have signed an agreement whereby Saifun will acquire the IP and know-how of 90nm process technology.

A copy of the document is attached to this Form 6-K as Exhibit 99.1.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SAIFUN SEMICONDUCTORS LTD.

Date: July 2, 2007

By: /s/ Igal Shany

Igal Shany Chief Financial Officer

EXHIBIT INDEX

The following exhibit is filed as part of this Form 6-K:

Exhibit Description

99.1 Press release, dated July 2, 2007 titled "Saifun Acquires 90nm Process Know-How from SMIC"

2