

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16

of the Securities Exchange Act of 1934

For the Month of April 2010

ELRON ELECTRONIC INDUSTRIES LTD.
(Translation of Registrant's Name into English)

3Azrieli Center, Triangle Building, 42nd Floor, Tel Aviv • ISRAEL
(Address of Principal Corporate 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

Form 40-F

English Translation of Registrant's Immediate Report issued to the Tel Aviv Stock Exchange, Israel, on April 13, 2010 relating to the execution of an agreement to sell Medingo Ltd..

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.

ELRON ELECTRONIC INDUSTRIES LTD.
(Registrant)

By: /s/ Yaron Elad
Yaron Elad
VP & CFO

Dated: April 13, 2010

- FOR IMMEDIATE RELEASE -

Tel Aviv, Israel – April 13, 2010- Elron Electronic Industries Ltd. ("Elron") (TASE: ELRN) today announced, further to its previous announcement on April 1, 2010 in relation to Medingo Ltd. ("Medingo") currently held mainly 92% by Elron, including 84% held by RDC – Rafael Development Corporation, Elron's 50.1% subsidiary, and approximately 7% by Radius Israel Investments LLC (which is not affiliated with Elron), that today, a definitive agreement was executed whereby all of Medingo's shares will be sold to F. Hoffman-La Roche Ltd. of Switzerland (SIX: RO, ROG: OTCQZ: RHHBY). The principal terms of this transaction and its currently estimated accounting effects were set forth in Elron's announcement dated April 1, 2010, and are incorporated herein by way of reference to such announcement.

There is no assurance as to the completion of this transaction and its timing.

Elron Electronic Industries Ltd. (TASE: ELRN), a member of the IDB Holding group, is a technology holding company listed on the Tel-Aviv Stock Exchange. Elron's group companies currently comprise public and privately held companies engaged in a diverse range of technological activities. These companies, at various levels of maturity and progress, are primarily in the fields of medical devices, information & communications technology and clean technology, and have the potential to be technology leaders, each in their respective fields. Elron focuses on identifying and developing unique technology companies. Current group companies include Given Imaging, Medingo, BrainsGate, NuLens, Aqwise and Starling, and in the past included Elbit Systems, NetVision and Partner Communications. For further information, please visit www.elron.com.

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Any statements in this press release that may be considered forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks are detailed from time to time in the Company's Annual Report on Form 20-F and other periodic reports filed by the Company with the Securities and Exchange Commission and the Israeli Securities Authority, which the Company urges investors to consider. Elron assumes no obligation to update the information in this press release and disclaims any obligation to publicly update or revise any such forward-looking statements to reflect any change in its expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Reference to Elron's website above does not constitute incorporation of any of the information thereon into this press release.

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