

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F/A
Amendment No. 1

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2004
Commission File No. 0-11456

ELRON ELECTRONIC INDUSTRIES LTD.

(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)

ISRAEL

(Jurisdiction of incorporation or organization)

3 Azrieli Center, 42nd Floor, Tel-Aviv, Israel 67023
(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Not Applicable

(Title of Class)

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Ordinary Shares, nominal value 0.003 New Israeli Shekels per share

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Ordinary Shares, nominal value 0.003 New Israeli Shekels per share

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the Annual Report: **29,414, 424**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days: **Yes ☒ No ☐**

Indicate by check mark which financial statements the registrant has elected to follow:

Item 17 ☐ Item 18 ☒

EXPLANATORY NOTE

This Form 20-F/A is being filed solely to amend the Annual Report on Form 20-F for the fiscal year ended December 31, 2004, filed by Elron Electronic Industries Ltd. (the “Registrant”) on July 13, 2005, (the “Form 20-F”), in the following ways:

- to include an additional Report of Independent Auditors relating to the consolidated financial statements of ChipX (Israel) Limited (former name: Chip Express (Israel) Ltd.) , a subsidiary of ChipX Corporation (former name: Chip Express Corporation), as of December 31, 2004, in this Form 20-F/A;
- to include an additional Report of Independent Auditors relating to the consolidated financial statements of Galil Medical Ltd., as of December 31, 2002, in this Form 20-F/A; and
- to include an additional Report of Independent Auditors relating to the consolidated financial statements of Sela Semiconductor Engineering Laboratories Ltd., as of December 31, 2002, in this Form 20-F/A.

Except for the above amendments, no changes have been made to the financial statements of the Registrant as contained in the Form 20-F, and the balance of Item 18 of the Form 20-F is hereby incorporated by reference.

This Form 20-F/A consists of a cover page, this explanatory note, Item 18 (as amended) of the Form 20-F, the Reports of Independent Auditors described herein, required Auditor consents, the signature page and the required certifications of the principal executive officer and principal financial officer of the Registrant.

Other than as expressly set forth above, this Form 20-F/A does not, and does not purport to, amend, update or restate the information in the Form 20-F or reflect any events that have occurred after the Form 20-F was filed.

PART III

ITEM 18. FINANCIAL STATEMENTS.

The Report of Independent Auditors relating to the consolidated financial statements of ChipX (Israel) Limited (former name: Chip Express (Israel) Ltd.) as of December 31, 2004 and the Reports of Independent Auditors relating to the consolidated financial statements of Galil Medical Ltd. and Sela Semiconductor Engineering Laboratories Ltd. as of December 31, 2002 follow the signature page of this Form 20-F/A.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F/A and that it has duly caused and authorized the undersigned to sign this amendment to Annual Report on its behalf.

Dated: March 16, 2006

ELRON ELECTRONIC INDUSTRIES LTD.

By: /s/ Doron Birger
Name: Doron Birger
Title: President & Chief Executive Officer

By: /s/ Rinat Remler
Name: Rinat Remler
Title: Vice President & Chief Financial
Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of
Chip X (Israel) Limited.

We have audited the accompanying balance sheets of ChipX (Israel) Limited. (former name: Chip Express (Israel) Ltd) (the "Company") as of December 31, 2004 and 2003, and the related statements of operations, changes in shareholders' equity and cash flows for the two years in the period ended December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits and the reports of other auditors provide a reasonable basis for our opinion.

In our opinion the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2004 and 2003, and the results of its operations and its cash flows for the two years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

Haifa, Israel
January 30, 2005

KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of
Galil Medical Ltd.

We have audited the accompanying consolidated statement of operations, changes in shareholders' equity and cash flows of Galil Medical Ltd. (the "Company") and its subsidiaries for the year ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion the consolidated financial statements referred to above present fairly, in all material respects, the consolidated results of the Company and its subsidiaries operations and their cash flows for the year ended December 31, 2002, in conformity with U.S. generally accepted accounting principles.

The Company has restated its financial statements for the year ended December 31, 2000, in order to reflect premature revenue recognition, regarding certain sales during the year, as indicated in Note 3, a change with which we concur.

The Company's ability to continue to operate is dependent upon its ability to raise additional capital until profitability is achieved, see also Note 1d.

Tel-Aviv, Israel
February 26, 2003

KOST FORER & GABBAY
A Member of Ernst & Young Global

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of
SELA SEMICONDUCTOR ENGINEERING LABORATORIES LTD.

We have audited the accompanying consolidated statement of operations, changes in shareholders' equity and cash flows of Sela Semiconductor Engineering Laboratories Ltd. (the "Company") and its subsidiary for the year ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion the consolidated financial statements referred to above present fairly, in all material respects, the consolidated results of the Company's operations and its cash flows for the year ended December 31, 2002, in conformity with U.S. generally accepted accounting principles.

Haifa, Israel
March 2, 2003

KOST FORER& GABBAY
A Member of Ernst & Young Global

Exhibit Index

- 12.1 Certification of Chief Executive Officer or Equivalent Person Pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
- 12.2 Certification of Chief Financial Officer or Equivalent Person Pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
- 14.1 Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, for ChipX (Israel) Limited (former name: Chip Express (Israel) Ltd).
- 14.2 Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, for Galil Medical Ltd.
- 14.3 Consent of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, for Sela Semiconductor Engineering Laboratories Ltd.

Exhibit 12.1

I, Doron Birger, certify that:

1. I have reviewed this amendment to annual report on Form 20-F of Elron Electronic Industries Ltd.; and
2. Based on my knowledge, this amendment to report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report.

Date: March 16, 2006

/s/ Doron Birger

Doron Birger

President and Chief Executive Officer

Exhibit 12.2

I, Rinat Remler, certify that:

1. I have reviewed this amendment to annual report on Form 20-F of Elron Electronic Industries Ltd.; and
2. Based on my knowledge, this amendment to report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report.

Date: March 16, 2006

/s/ Rinat Remler

Rinat Remler

Vice President and Chief Financial
Officer

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8, No.333-111310) of Elron Electronic Industries Ltd pertaining to the Employees' Stock Option Plans of Elron Electronic Industries Ltd. of our report dated January 30, 2005, with respect to the financial statements of ChipX (Israel) Limited (former name: Chip Express (Israel) Ltd.), is included in the Elron Electronic Industries Ltd. Annual Report on Form 20-F for the year ended December 31, 2004.

Haifa, Israel
March 12, 2006

KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

Exhibit 14.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8, No.333-111310) of Elron Electronic Industries Ltd pertaining to the Employees' Stock Option Plans of Elron Electronic Industries Ltd. of our report dated February 26, 2003, with respect to the consolidated financial statements of Galil Medical Ltd., included in the Elron Electronic Industries Ltd's Annual Report on Form 20-F for the year ended December 31,2004.

Tel-Aviv, Israel
March 12, 2006

KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

Exhibit 14.3

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8, No.333-111310) of Elron Electronic Industries Ltd pertaining to the Employees' Stock Option Plans of Elron Electronic Industries Ltd. of our report dated March 2, 2003, with respect to the consolidated financial statements of Sela Semiconductor Engineering Laboratories Ltd., included in Elron Electronic Industries Ltd.'s Annual Report on Form 20-F for the year ended December 31,2004.

Haifa, Israel
March 12, 2006

KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global