

Prospectus Supplement No. 2
To Prospectus Dated August 31, 2001

\$175,000,000

EMCORE Corporation
5% Convertible Subordinated Notes Due 2006
and the Common Stock Issuable Upon Conversion of the Notes

This prospectus supplement relates to the resale by the selling securityholders of 5% convertible subordinated notes due 2006 of EMCORE Corporation and the shares of common stock, no par value, of EMCORE Corporation issuable upon the conversion of the notes.

This prospectus supplement should be read in conjunction with the prospectus dated August 31, 2001, and the prospectus supplement dated September 18, 2001, which are to be delivered with the prospectus supplement. All capitalized terms used but not defined in this prospectus supplement shall have the meanings given them in the prospectus.

The table below sets forth information as of the date hereof concerning beneficial ownership of the notes of the selling securityholders as listed below. All information concerning beneficial ownership has been furnished by the selling securityholders.

| Name | Principal Amount of Maturity of Notes Beneficially Owned that May be Sold | Percentage of Notes Outstanding | Number of Shares of Common Stock That May Be Sold(1) | Percentage of Common Stock Outstanding(2) |
|---|--|---------------------------------------|--|---|
| UBS AG London Branch 100 Liverpool Street London EC2M 2RH UK | \$14,800,000 | 8.5% | 303,509 | * |
| Lipper Convertibles, L.P.(3)(4) 101 Park Avenue, 6th Floor New York, NY 10178 | 5,000,000 | 2.9% | 102,536 | * |

* Less than 1%.

(1) Assumes conversion of all the holder's notes at a conversion price of \$48.7629 per share of common stock. However, this conversion price will be subject to adjustment as described in the accompanying prospectus under "Description of Notes-Right of Conversion." As a result, the amount of common stock issuable upon conversion of the notes may increase or decrease in the future.

(2) Calculated based on Rule 13d-3(d)(i) of the Exchange Act using 35,408,474 shares of common stock outstanding as of August 24, 2001. In calculating this amount, we treated as outstanding the number of shares of common stock issuable upon conversion of all of that particular holder's notes. However, we did not assume the conversion of any other holder's notes.

(3) Includes \$4,500,000 aggregate principal amount of notes of this selling securityholder that were previously described in the prospectus, dated August 31, 2001, delivered with this prospectus supplement.

(4) The amounts presented herein are in addition to those reported by the selling securityholders in the accompanying prospectus dated August 31, 2001 and the accompanying prospectus supplement dated September 18, 2001.

INVESTING IN THE SECURITIES OFFERED HEREBY INVOLVES A HIGH DEGREE OF RISK. SEE RISK FACTORS" BEGINNING ON PAGE 10 OF THE ACCOMPANYING PROSPECTUS.

THE SECURITIES AND EXCHANGE COMMISSION AND STATE SECURITIES REGULATORS HAVE NOT APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS SUPPLEMENT OR THE ACCOMPANYING PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus Supplement is October 10, 2001.