

\$300,000,000
ARVINMERITOR, INC.

4.625% CONVERTIBLE SENIOR NOTES DUE 2026

SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTES

This prospectus supplement no. 6 supplements and amends the prospectus dated May 23, 2006, as previously supplemented and amended by prospectus supplements no. 1, dated May 31, 2006, no. 2, dated June 6, 2006, no. 3, dated June 13, 2006, no. 4, dated June 19, 2006, and no. 5 dated June 26, 2006 (as so supplemented and amended, the "prospectus"), relating to the resale from time to time by certain selling securityholders of our 4.625% Convertible Senior Notes Due 2026 and shares of our common stock issuable upon conversion of the notes.

This prospectus supplement should be read in conjunction with and accompanied by the prospectus and is qualified by reference to the prospectus, except to the extent that the information in this prospectus supplement supersedes the information contained in the prospectus.

The information appearing in the table below, which is based on information provided by or on behalf of the named selling securityholders, supplements and amends the information in the table appearing under the heading "Selling Securityholders" in the prospectus. The percentage of notes outstanding beneficially owned by each selling securityholder is based on \$300,000,000 aggregate initial principal amount of notes outstanding. The number of shares of common stock owned prior to the offering excludes shares of common stock issuable upon conversion of the notes. The number of shares of common stock offered hereby is based on the initial conversion rate equivalent to 47.6667 shares of common stock per \$1,000 initial principal amount of notes and a cash payment in lieu of any fractional share.

Selling Securityholder	Principal Amount of Notes Beneficially Owned and Offered Hereby (1)	Percentage of Notes Outstanding	Common Stock Owned Prior to the Offering	Common Stock Offered Hereby
Advent Convertible Master	\$ 3,218,000	1.07%	—	153,391
Agamas Continuum Master Fund, Ltd.	3,000,000	1.00%	—	143,000
HFR CA Opportunity Master	366,000	*	—	17,446
Jefferies Umbrella Fund - Global Convertible Bonds	4,000,000	1.33%	—	190,666
Lyxor Convertible Master	140,000	*	—	6,673
Sandelman Partners Multi-Strategy Master Fund, Ltd. (2)	2,500,000	*	968,700(3)	119,166
Universal Investment Gesellschaft MBH, ref. Aventis	4,000,000	1.33%	—	190,666

*Less than one percent of the notes outstanding.

(1) We believe any excess of the total amount of registered sales by selling securityholders is the result of (i) sales by selling securityholders who previously registered their securities in unregistered exempt transactions and the subsequent registration by the purchasers thereof, or (ii) registration by selling securityholders who had acquired their securities in a previously registered transaction.

(2) Jonathan Sandelman is the natural person who may exercise voting power and investment control over this selling securityholder's notes and shares of common stock issuable upon conversion of the notes. Jonathan Sandelman is the managing member of Sandelman Partners, GP LLC, which is a general partner of Sandelman Partners, LP, the controlling entity of this selling securityholder.

(3) Represents approximately 1.4 percent of the Company's outstanding common stock based on approximately 70.5 million shares outstanding as of May 31, 2006.

Investing in the notes and the underlying shares of common stock involves significant risks. See "Risk Factors" beginning on page 6 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement or the prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is July 5, 2006.