Filed by Entegris, Inc. pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 14a-12 under the Securities Exchange Act of 1934

> Subject Company: Versum Materials, Inc. Commission File No.: 1-37664 Date: February 22, 2019

The following article was made available in connection with the transaction.

How to Get Two Valuable Chip Stocks in One

By Al Root, Barron's, February 20, 2019



Courtesy of Entegris

Barron's Picks are weekday stock ideas from our experienced stockpickers. We'll publish a new one every Wednesday morning, and we'll track their performance over time.

Semiconductors are cyclical.

If you look at the Philadelphia Stock Exchange Semiconductor Index over the past two decades, the index has risen 10 years and fallen 10 years. The S&P 500 has produced negative returns in only five years over that span.

The index (ticker: SOX) was trying to shrug off some of that cyclical history and rise for the third straight year in 2018. All was well until the fourth quarter when the index dropped 15%, its worst quarterly result since 2011. The index traded all the way down to 12 times estimated earnings—near the bottom of its historical range and a 25% discount to its historical average.

That led Barron's to look for some high quality semi stocks trading at big discounts to our view of intrinsic value. Entegris (ENTG) was one stock we found that fit the bill, but a funny thing happened

while we were evaluating corporate fundamentals. The company announced plans to merge with Versum Materials (VSM) in a \$4 billion stock swap. We liked Entegris shares before the deal was announced and now we like them a lot better. The combination creates a more powerful semiconductor supplier that benefits from the ever-increasing demand for computing power.

ENTG BUY Stock Picked Feb. 20, 2019	Entegris Inc. III NASDAO Composite Index
+3.6% Price change	12% Pick made
Al Root Barron's Senior Writer	the house
The combination of Entegris and Versum creates a powerful materials technology company supplying the semiconductor industry.	www
	Sept.'10 Nov. Jan.'10
	As of Feb. 21 Source: StX

Entegris supplies equipment to the semiconductor industry, but its business is more razorblade than razor. Technology investor Sidarth Kapoor of Avasar Partners tells Barron's that roughly two-thirds of Entegris products are tied to semiconductor-wafer starts—its wares are consumable and used in the manufacturing of chips. Entegris makes microcontamination-control products and specialty chemicals used in all stages of the semi-manufacturing process.

Entegris calls itself a "node" company. For laypeople, think of a node as a dot on a chip—like a little transistor. And while more silicon ships every year, there are also more nodes on every square inch of silicon. Today's state of the art is 7 nanometer product—a nanometer is one-billionth of a meter. Apple's (AAPL) A12X Bionic chip in the iPad pro is a 7 nanometer design that has about 10 billion transistors on it. That's a lot and gives new meaning to poet William Blake's line, "to see the world in a grain of sand." (Don't forget, silicon comes from sand.)

Semiconductors Grow

500 MM Sq In		
000		2
500		. ~
000	~1/	\sim
500	~ 1	
$\infty' \setminus \mathcal{N}$	Ý	
500		

200001 200104 200303 200502 200701 200804 201003 201202 201401 201504 201703 Source: www.semi.org What smaller nodes mean for Entegris is more complex manufacturing requirements. That leads to more opportunity to sell its products and services.

Versum, which was spun out of Air Products (APD) in 2016, also supplies consumable products to the global semiconductor industry. Like Entegris, it benefits from the overall growth of semiconductors and from increasing semiconductor complexity. It specializes in advanced material deposition and specialty gases.

Both companies also invest heavily in R&D. Versum has over 1,700 patents world-wide and Entegris says it holds 2,284. The two product portfolios mesh nicely. "The companies are very complementary in terms of products and markets," writes KeyBanc analyst Weston Twigg. "The merger should allow the combined company to expand scale and gain market share."

Patrick Ho of Stifel is also positive on the deal. Like Twigg, he thinks the combination will bring the two companies, "the scale and critical mass on the materials front [that] will accelerate the growth for both companies."

Ho's price target for Entegris is \$43 per share, 26% higher than today's price. Twigg values the shares at \$39, or 14% higher than Wednesday. While the analysts like the deal, both are valuing Entegris shares on existing earnings estimates. But using stand-alone valuation multiples and margins belies the value of the proposed transaction.

Barron's could see shares of the new entity approaching \$50 per share over the next few months after the deal closes and numbers are reset. Down the road, with margin expansion from the deal, we think Entegris shares could double.

We are comfortable with that call because Entegris has integrated a large deal and expanded margins successfully in the past. It bought ATMI is 2014. That was another transaction that broadened the company's offerings and added more consumable products to the portfolio. Back then management guided for only \$30 million in cost synergies, but Entegris margins actually expanded by about six percentage points in the three years after closing the ATMI deal.

Shareholders benefited. Entegris shares returned 27% a year on average since the ATMI acquisition closed. That's nearly 13 percentage points better than the tech-heavy Nasdaq Composite Index over that time.

ATMI was a large deal for Entegris, but Versum is a little larger—relatively speaking—and integrating a big deal is a risk for any stock. Still the ATMI experience gives us comfort.

The other risk Entegris investors face is the state of the economy. If economic growth falters and semiconductor growth slows shares could fall back toward \$30 on a combined basis. That's higher than December levels, but is consistent with where both companies have traded on a price-to-sales basis in recent downturns.

However, Entegris management doesn't currently see a severe downturn around the corner. Management currently guides sales to rise about 5% in 2019 and for wafer starts to be up in the low single-digit percentages.

One of the last times Barron's recommended Entegris was all the way back in 2013, when Jack Willoughby pointed out that buying semiconductors suppliers was a good strategy for investing in tech. That article was published shortly after CEO Bertrand Loy, who engineered the ATMI deal, took over at the company.

Since that article published Entegris stock actually returned over 30% a year on average. Today, the Versum deal represents another reset, like the ATMI deal was, and we see no reason to give up on Jack's original idea soon.

Finally, we should point out that investors could also purchase shares in Versum and wait for the deal to close, but the arbitrage spread isn't significant. Only about 1%. Versum shareholders will receive 1.12 shares of Entegris for each share of Versum they hold. At today's prices, Versum investors will get \$38.37 worth of Entegris stock for their Versum shares, which currently trade for \$37.95. The deal is expected to close in the summer.

Write to Al Root at <u>allen.root@dowjones.com</u>

Forward Looking Statements

This communication contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties and are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1993, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Where a forward-looking statement expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. The words "believe," "continue," "could," "expect," "anticipate," "intends," "estimate," "forecast," "project," "should," "may," "will," "would" or the negative thereof and similar expressions are intended to identify such forward-looking statements. These forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond Entegris' and Versum Materials' control. Statements in this communication regarding Entegris, Versum Materials and the combined company that are forward-looking, including projections as to the anticipated benefits of the proposed transaction, the impact of the proposed transaction on Entegris' and Versum Materials' business and future financial and operating results, the amount and timing of synergies from the proposed transaction, and the closing date for the proposed transaction, are based on management's estimates, assumptions and projections, and are subject to significant uncertainties and other factors, many of which are beyond Entegris' and Versum Materials' control. These factors and risks include, but are not limited to. (i) weakening of global and/or regional economic conditions, generally or specifically in the semiconductor industry, which could decrease the demand for Entegris' and Versum Materials' products and solutions; (ii) the ability to meet rapid demand shifts; (iii) the ability to continue technological innovation and introduce new products to meet customers' rapidly changing requirements; (iv) the concentrated customer base; (v) the ability to identify, effect and integrate acquisitions, joint ventures or other transactions; (vi) the ability to protect and enforce intellectual property rights; (vii) operational, political and legal risks of Entegris' and Versum Materials' international operations; (viii) Entegris' dependence on sole source and limited source suppliers; (ix) the increasing complexity of certain manufacturing processes; (x) raw material shortages and price increases; (xi) changes in government regulations of the countries in which Entegris and Versum Materials operate; (xii) the fluctuation of currency exchange rates; (xiii) fluctuations in the market price of Entegris' stock; (xiv) the level of, and obligations associated with, Entegris' and Versum Materials' indebtedness; and (xv) other risk factors and additional information. In addition, material risks that could cause actual results to differ from forward-looking statements include: the inherent uncertainty associated with financial or other projections; the prompt and effective integration of Entegris' businesses and the ability to achieve the anticipated synergies and value-creation contemplated by the proposed transaction; the risk associated with Entegris' and Versum Materials' ability to obtain the approval of the proposed transaction by their shareholders required to consummate the proposed transaction and the timing of the closing of the proposed transaction, including the risk that the conditions to the transaction are not satisfied on a timely basis or at all and the failure of the transaction to close for any other reason; the risk that a consent or authorization that may be required for the proposed transaction is not obtained or is obtained subject to conditions that are not anticipated; unanticipated difficulties or expenditures relating to the transaction, the response of business partners and retention as a result of the announcement and pendency of the transaction; and the diversion of management time on transaction-related issues. For a more detailed discussion of such risks and other factors, see Entegris' and Versum Materials' filings with the Securities and Exchange Commission, including under the heading "Risks Factors" in Item 1A of Entegris' Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed on February 15, 2018, and Versum Materials' Annual Report on Form 10-K for the fiscal year ended September 30, 2018, filed on November 21, 2018 and in other periodic filings, available on the SEC website or www.entegris.com or www.versummaterials.com. Entegris and Versum Materials' assume no obligation to update any forward-looking statements or information, which speak as of their respective dates, to reflect events or circumstances after the date of this communication, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Investors should not assume that any lack of update to a previously issued "forward-looking statement" constitutes a reaffirmation of that statement.

Additional Information about the Merger and Where to Find It

This communication does not constitute an offer to buy or sell or the solicitation of an offer to buy or sell any securities or a solicitation of any vote or approval. This communication relates to a proposed business combination between Entegris and Versum Materials. In connection with the proposed transaction, Entegris intends to file with the Securities and Exchange Commission (the "SEC") a registration statement on Form S-4 that will include a joint proxy statement of Entegris and Versum Materials that also constitutes a prospectus of Entegris. Each of Entegris and Versum Materials also plan to file other relevant documents with the SEC regarding the proposed transaction. No offering of securities shall be made, except by means of a prospectus meeting the requirements of Section 10 of the U.S. Securities Act of 1933, as amended. Any definitive joint proxy statement/prospectus (if and when available) will be mailed to stockholders of Entegris and Versum Materials. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE REGISTRATION STATEMENT, JOINT PROXY STATEMENT/PROSPECTUS AND OTHER DOCUMENTS THAT MAY BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY IF AND WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. Investors and security holders will be able to obtain free copies of these documents (if and when available) and other documents containing important information about Entegris and Versum Materials, once such documents are filed with the SEC through the website maintained by the SEC at http://www.sec.gov. Copies of the documents filed with the SEC by Entegris will be available free of charge on Entegris' website at http://www.entegris.com or by contacting Entegris' Investor Relations Department by email at irelations@entegris.com or by phone at 978-436-6500. Copies of the documents filed with the SEC by Versum Materials will be available free of charge on Versum Materials.com or by phone at 484-275-5907.

Participants in the Solicitation

Entegris, Versum Materials and certain of their respective directors and executive officers may be deemed to be participants in the solicitation of proxies in respect of the proposed transaction. Information about the directors and executive officers of Entegris is set forth in Entegris' proxy statement for its 2018 annual meeting of shareholders, which was filed with the SEC on March 28, 2018, and Entegris' Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which was filed with the SEC on February 15, 2018. Information about the directors and executive officers of Versum Materials is set forth in its proxy statement for its 2019 annual meeting of shareholders, which was filed with the SEC on December 20, 2018, and Versum Materials' Annual Report on Form 10-K for the fiscal year ended September 30, 2018, which was filed with the SEC on November 21, 2018. Other information regarding the participants in the proxy solicitations and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the joint proxy statement/prospectus and other relevant materials to be filed with the SEC regarding the proposed transaction when such materials become available. Investors should read the joint proxy statement/prospectus carefully when it becomes available before making any voting or investment decisions. You may obtain free copies of these documents from Entegris or Versum Materials using the sources indicated above.