Filed by Lam Research Corporation
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: KLA-Tencor Corporation
Commission File Number: 000-09992

As indicated below, the following communications were made available by posts on Lam Research Corporation's corporate Twitter account, Linkedin page and Facebook page on October 21, 2015 and October 22, 2015.

Forward Looking Statements

All statements included or incorporated by reference in this document, other than statements or characterizations of historical fact, are forward-looking statements within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are based on Lam Research Corporation's ("Lam") and KLA-Tencor Corporation's ("KLA-Tencor") current expectations, estimates and projections about its respective business and industry, management's beliefs, and certain assumptions made by Lam and KLA-Tencor, all of which are subject to change. Forward-looking statements can often be identified by words such as "anticipates," "expects," "intends," "plans," "predicts," "believes," "seeks," "estimates," "may," "will," "should," "could," "potential," "continue," "ongoing," similar expressions, and variations or negatives of these words. Examples of such forward-looking statements include, but are not limited to: (1) references to the anticipated benefits of the proposed transaction; (2) the expected industry leadership, future technical capabilities and served markets of the individual and/or combined companies; (3) projections of pro forma revenue, cost synergies, revenue synergies, cash flow, market share and other metrics, whether by specific market segment, or as a whole, and whether for each individual company or the combined company; (4) market expansion opportunities and systems and products that may benefit from sales growth as a result of changes in market share or existing markets; (5) technological achievements that may be realized by the combined company, (6) the allocation of merger consideration in the transactions; (7) the financing components of the proposed transaction; (8) potential financing opportunities, together with sources and uses of cash; (9) potential dividend growth rates; and (10) the companies' ability to achieve the closing conditions and the expected date of c

These forward-looking statements are not guarantees of future results and are subject to risks, uncertainties and assumptions that could cause actual results to differ materially and adversely from those expressed in any forward-looking statement. Important risk factors that may cause such a difference in connection with the proposed transaction include, but are not limited to, the following factors: (1) the risk that the conditions to the closing of the transaction are not satisfied, including the risk that required approvals for the transaction from governmental authorities or the stockholders of KLA-Tencor or Lam are not obtained; (2) litigation relating to the transaction; (3) uncertainties as to the timing of the consummation of the transaction and the ability of each party to consummate the transaction; (4) risks that the proposed transaction disrupts the current plans

and operations of KLA-Tencor or Lam; (5) the ability of KLA-Tencor and Lam to retain and hire key personnel; (6) competitive responses to the proposed transaction and the impact of competitive products; (7) unexpected costs, charges or expenses resulting from the transaction; (8) potential adverse reactions or changes to business relationships resulting from the announcement or completion of the transaction; (9) the combined companies' ability to achieve the growth prospects and synergies expected from the transaction, as well as delays, challenges and expenses associated with integrating the combined companies' existing businesses; (10) the terms and availability of the indebtedness planned to be incurred in connection with the transaction; and (11) legislative, regulatory and economic developments, including changing business conditions in the semiconductor industry and overall economy as well as the financial performance and expectations of Lam's and KLA-Tencor's existing and prospective customers. These risks, as well as other risks associated with the proposed transaction, will be more fully discussed in the joint proxy statement/prospectus that will be included in the Registration Statement on Form S-4 that Lam will file with the Securities and Exchange Commission ("SEC") in connection with the proposed transaction. Investors and potential investors are urged not to place undue reliance on forward-looking statements in this document, which speak only as of this date. Neither Lam nor KLA-Tencor undertakes any obligation to revise or update publicly any forward-looking statement to reflect future events or circumstances. Nothing contained herein constitutes or will be deemed to constitute a forecast, projection or estimate of the future financial performance of Lam, KLA-Tencor, or the merged company, whether following the implementation of the proposed transaction or otherwise.

In addition, actual results are subject to other risks and uncertainties that relate more broadly to Lam's overall business, including those more fully described in Lam's filings with the SEC including its annual report on Form 10-K for the fiscal year ended June 28, 2015, and KLA-Tencor's overall business and financial condition, including those more fully described in KLA-Tencor's filings with the SEC including its annual report on Form 10-K for the fiscal year ended June 30, 2015.

Additional Information and Where to Find It

This document does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. The proposed transaction will be submitted to the stockholders of each of Lam and KLA-Tencor for their consideration. Lam intends to file with the SEC a Registration Statement on Form S-4 that will include a joint proxy statement/prospectus of Lam and KLA-Tencor. Each of Lam and KLA-Tencor will provide the joint proxy statement/prospectus to their respective stockholders. Lam and KLA-Tencor also plan to file other documents with the SEC regarding the proposed transaction. This document is not a substitute for any prospectus, proxy statement or any other document that Lam or KLA-Tencor may file with the SEC in connection with the proposed transaction. Investors and security holders of Lam and KLA-Tencor are urged to read the joint proxy statement/prospectus and any other relevant documents that will be filed with the SEC carefully and in their entirety when they become available because they will contain important information about the proposed transaction. You may obtain copies of all

documents filed with the SEC regarding this transaction, free of charge, at the SEC's website (www.sec.gov). In addition, investors and stockholders will be able to obtain free copies of the joint proxy statement/prospectus and other documents filed with the SEC by Lam on Lam's Investor Relations website (investor.lamresearch.com) or by writing to Lam Research Corporation, Investor Relations, 4650 Cushing Parkway, Fremont, CA 94538-6401 (for documents filed with the SEC by Lam), or by KLA-Tencor on KLA-Tencor's Investor Relations website (ir.kla-tencor.com) or by writing to KLA-Tencor Corporation, Investor Relations, One Technology Drive, Milpitas, California 95035 (for documents filed with the SEC by KLA-Tencor).

Participants in the Solicitation

Lam, KLA-Tencor, their respective directors, and certain of their respective executive officers, other members of management and employees, may, under SEC rules, be deemed to be participants in the solicitation of proxies from Lam and KLA-Tencor stockholders in connection with the proposed transaction. Information regarding the persons who, under SEC rules, are or may be deemed to be participants in the solicitation of Lam and KLA-Tencor stockholders in connection with the proposed transaction will be set forth in the joint proxy statement/prospectus when it is filed with the SEC. You can find more detailed information about Lam's executive officers and directors in its definitive proxy statement filed with the SEC on September 21, 2015. You can find more detailed information about KLA-Tencor's executive officers and directors in its definitive proxy statement filed with the SEC on September 24, 2015. Additional information about Lam's executive officers and directors and KLA-Tencor's executive officers and directors will be provided in the above-referenced Registration Statement on Form S-4 when it becomes available.

Retweet:

AP Business News @APBusiness Oct 21

A new \$19 billion player in the semiconductor market ... Lam Research buys KLA @LamResearch: [link to http://bigstory.ap.org/article/15dedc3423384ffdaca1070bda258ec1/lam-research-bids-106b-kla-tencor-creating-chip-giant].

(The following article written by a third party was made available via a link provided in the above communication:)

Lam Research bids \$10.6B for KLA-Tencor, creating chip giant

Oct. 21, 2015 7:25 AM EDT

NEW YORK (AP) — Lam Research Corp. is buying KLA-Tencor Corp. for about \$10.6 billion, creating a huge player in the semiconductor sector that will rival Applied Materials Inc.

The combined company, to be called Lam Research Corp., will have a market capitalization of around \$19 billion, about equal to that of Applied Materials, and says it will serve 42 percent of the wafer fabrication equipment market when the deal closes in the middle of next year.

The offer, for \$67.02 per share, marks a 24 percent premium to the closing price for KLA-Tencor Corp. on Tuesday. Lam says it will book \$250 million in annualized savings within two years.

The buyout was announced during a round of heightened acquisition activity in the semiconductor sector. Western Digital Corp. is reportedly in talks to buy SanDisk Corp. Similar media reports have said SanDisk was in talks with Micron Technology Inc.

Last week, Dell said it is buying data storage company EMC Corp. for \$67 billion, marking the largest deal ever between two technology companies, eclipsing Avago Technologies' proposed \$37 billion acquisition of rival chipmaker Broadcom announced five months ago.

Shares of KLA-Tencor jumped \$9.99, or 18.6 percent, to \$63.85 in premarket trading while Lam Research shares slipped \$1.01, or 1.4 percent, to \$69.02. Both companies are based in California.

Retweet:

Cromwell Schubarth @SVBizCrom Oct 21 Fremont, CA

\$10.6B Lam/KLA-Tencor deal brings total in chip M&A to \$130B this year, triple last year's [link to: http://www.bizjournals.com/sanjose/news/2015/10/21/two-silicon-valley-chip-equipment-companies-tying.html?ana=twt]

(The following article written by a third party was made available via a link provided in the above communication:)

Two Silicon Valley chip-equipment companies tying the knot in \$10.6 billion deal

Oct. 21, 2015 6:14am PDT

Lam Research Corp. has agreed to buy KLA-Tencor Corp. for \$10.6 billion in the latest of a frenzy of deals reshaping Silicon Valley's semiconductor industry.

The amount Fremont-based Lam (NASDAQ:LRCX) is paying values Milpitas-based KLA-Tencor (NASDAQ:KLAC) stock around 24 percent above its Tuesday closing price of \$53.86.

[Photo of Martin Anstice]

[Photo Caption: Lam Research, led by CEO Martin Anstice, has agreed to buy KLA-Tencor for \$10.6 billion. The Silicon Valley semiconductor equipment deal is expected to close in the middle of next year with Anstice as CEO of the merged company.]

The deal comes in a year when semiconductor companies have announced more than \$130 billion in mergers and acquisitions, as the industry tries to cut costs through consolidation. This year's total has more than tripled the \$37.7 billion in chip-sector deals for all of last year.

Lam, led by Chief Executive Martin Anstice, agreed to pay \$67.02 a share in cash and stock for KLA-Tencor, which is led by CEO Rick Wallace.

KLA-Tencor shareholders are expected to own 32 percent of the combined company.

The merged company, to be led by Anstice, is expected to have a 42 percent market share in the wafer fabrication equipment market and have \$8.7 billion in annual revenue.

The companies said they expect to find \$250 million in annualized cost savings within 18 to 24 months of the deal closing.

Lam Chairman Steve Newberry will continue in that role. Two KLA-Tencor board members are expected to join the new board once the deal is completed, which is expected around the middle of next year.

KLA-Tencor employs 5,880. Lam employs 7,300.

Cromwell Schubarth is TechFlash Editor at the Silicon Valley Business Journal.

Tweet:
LamResearch @LamResearch Oct 21
Heard the big news? #LamResearch is combining w @KLATencor_Info for new capability paradigm! [link to: http://investor.lamresearch.com/releasedetail.cfm?
ReleaseID=937569]

Tweet:
LamResearch @LamResearch Oct 21
You won't want to miss this! Lam CEO Martin Anstice on @SquawkCNBC tmrw morning, 10/22 at ~ 5:15am PT! pic.twitter.com/QvBFlniu2h

Tweet:

LamResearch @LamResearch Oct 22
Check it out! Lam CEO on @SquawkCNBC talks industry changes & @KLATencor_Info acquisition: [link to: http://video.cnbc.com/gallery/?video=3000436872]

[Caption at link reads:

Lam Research CEO on buying KLA-Tencor

Thursday, 22 Oct 2015 | 8:33 AM ET

Lam Research President & CEO Martin Anstice, discusses Lam's deal to buy chip equipment maker KLA-Tencor for nearly \$10.6 billion, as consolidation in the industry continues.]

The following communication was made available by a post on Lam Research Corporation's Linkedin page and Facebook Page:

Post:

Lam Research Check it out! The replay video is available for Lam CEO Martin Anstice's appearance on CNBC Squawk Box. He discusses industry changes and Lam's recent acquisition of KLA-Tencor; watch the video here: [Link to: http://video.cnbc.com/gallery/?video=3000436872] [Caption at link reads:

Lam Research CEO on buying KLA-Tencor

Thursday, 22 Oct 2015 | 8:33 AM ET

Lam Research President & CEO Martin Anstice, discusses Lam's deal to buy chip equipment maker KLA-Tencor for nearly \$10.6 billion, as consolidation in the industry continues.]

The following communication was made available by a post on Lam Research Corporation's Linkedin page and Facebook page:

Post:
Lam Research Tune in tomorrow morning, 10/22 at approximately 5:15am PST to catch Lam CEO Martin Anstice on CNBC's Squawk Box—you won't want to miss this one! Replay video to come.