

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

SCHEDULE TO

**AMENDMENT NO. 2
(RULE 14D-100)**

**Tender Offer Statement Pursuant to Section 14(d)(1) or 13(e)(1)
of the Securities Exchange Act of 1934**

APPLIED MICRO CIRCUITS CORPORATION

(Names of Subject Company)

MONTANA MERGER SUB I, INC.

(Purchaser)

MACOM TECHNOLOGY SOLUTIONS HOLDINGS, INC.

(Parent of Purchaser)

(Names of Filing Persons)

COMMON STOCK, \$0.01 PAR VALUE
(Title of Class of Securities)

03822W406
(CUSIP Number of Class of Securities)

John Croteau
President and Chief Executive Officer
MACOM Technology Solutions Holdings, Inc.
100 Chelmsford Street
Lowell, MA 01851
(978) 656-2500

(Name, address and telephone number of person authorized to receive notices and communications on behalf of filing persons)

with copies to:

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CALCULATION OF FILING FEE

Transaction Valuation*	Amount of Filing Fee**
\$789,182,975.75	\$91,466.31***

* Estimated solely for the purpose of calculating the registration fee pursuant to Rule 0-11 of the Securities Exchange Act of 1934, as amended, based on the product of (i) \$8.45, the average of the high and low sales prices per share of Applied Micro Circuits Corporation ("AppliedMicro") common stock on December 14, 2016, as reported by Nasdaq, and (ii) 93,394,435, the estimated number of shares of AppliedMicro common stock to be exchanged in the transaction.

** The amount of the filing fee, calculated in accordance with Rule 0-11 under the Securities Exchange Act of 1934, as amended, equals 0.0001159 multiplied by the estimated transaction valuation.

*** Previously paid

Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: \$57,847.46
Form or Registration No.: Form S-4

Filing Party: MACOM Technology Solutions Holdings, Inc.
Date Filed: December 21, 2016

Amount Previously Paid: \$33,618.85
Form or Registration No.: Schedule TO-T

Filing Party: MACOM Technology Solutions Holdings, Inc.
Date Filed: December 21, 2016

Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- third-party tender offer subject to Rule 14d-1.
- issuer tender offer subject to Rule 13e-4.
- going-private transaction subject to Rule 13e-3.
- amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer:

This Amendment No. 2 to Schedule TO (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO, originally filed with the Securities and Exchange Commission (the "SEC") on December 21, 2016 (together with any subsequent amendments and supplements thereto, the "Schedule TO") by MACOM Technology Solutions Holdings, Inc. ("MACOM"), a Delaware corporation, and Montana Merger Sub I, Inc. (the "Purchaser"), a Delaware corporation and a wholly owned subsidiary of MACOM. The Schedule TO relates to the offer by the Purchaser to exchange for each outstanding share of common stock, \$0.01 par value per share, of Applied Micro Circuits Corporation ("AppliedMicro"), a Delaware corporation, (a) \$3.25 in cash and (b) 0.1089 shares of MACOM common stock, par value \$0.001 per share, plus cash in lieu of any fractional shares of MACOM common stock, in each case without interest (together, the "transaction consideration") (collectively, subject to the terms and conditions set forth in the Prospectus/Offer and the related Letter of Transmittal, and together with any amendments or supplements thereto, the "Offer").

MACOM filed with the SEC a Registration Statement on Form S-4 on December 21, 2016 and Amendment No. 1 to the Registration Statement on Form S-4 on January 18, 2017 (as amended, the "Registration Statement"), relating to the offer and sale of shares of MACOM common stock to be issued to holders of shares of AppliedMicro common stock validly tendered in the Offer and not properly withdrawn. The terms and conditions of the Offer are set forth in the Prospectus/Offer, which is a part of Amendment No. 1 to the Registration Statement and filed as Exhibit (a)(4) to the Schedule TO (as it may be amended from time to time, the "Prospectus/Offer"), and the related Letter of Transmittal, which is filed as Exhibit (a)(1)(A) to the Schedule TO (the "Letter of Transmittal"). Pursuant to General Instruction F to Schedule TO, the information contained in the Prospectus/Offer and the Letter of Transmittal, including any prospectus supplement or other supplement thereto related to the Offer hereafter filed with the SEC by MACOM or the Purchaser, is expressly incorporated into the Schedule TO by reference in response to items 1 through 11 of the Schedule TO and is supplemented by the information specifically provided for in the Schedule TO.

All information regarding the Offer as set forth in the Schedule TO, including all exhibits and annexes thereto that were previously filed with the Schedule TO, is hereby expressly incorporated by reference into this Amendment, except that such information is hereby amended and supplemented to the extent specifically provided for herein and to the extent amended and supplemented by the exhibits filed herewith. Capitalized terms used but not defined in this Amendment have the meanings ascribed to them in the Schedule TO.

Items 1 through 11.

Items 1 through 11 are hereby amended and supplemented as set forth in the Prospectus/Offer, which is filed as Exhibit (a)(4) hereto.

Item 12. Exhibits.

Item 12 is hereby amended and supplemented by the restatement of Exhibit (a)(4) as set forth below:

<u>Exhibit No.</u>	<u>Description</u>
(a)(4)	Prospectus/Offer (incorporated by reference to Amendment No. 1 to MACOM Technology Solutions Holdings, Inc.'s Registration Statement on Form S-4 filed on January 18, 2017)

SIGNATURES

After due inquiry and to the best of the undersigned's knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: January 18, 2017

MONTANA MERGER SUB I, INC.

By: /s/ John Croteau
Name: John Croteau
Title: President and Chief Executive Officer

**MACOM TECHNOLOGY SOLUTIONS HOLDINGS,
INC.**

By: /s/ John Croteau
Name: John Croteau
Title: President and Chief Executive Officer