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

SCHEDULE TO
AMENDMENT NO. 1
(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)

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with copies to:

Clay Simpson **Vice President, General Counsel & Secretary** **MACOM Technology Solutions Holdings, Inc.** **100 Chelmsford Street** **Lowell, Massachusetts 01851** **(978) 656-2500**	**Marko Zatylny** **Ropes & Gray LLP** **800 Boylston Street** **Boston, Massachusetts 02199** **(617) 951-7000**	**L. William Caraccio** **Vice President, General Counsel & Secretary** **Applied Micro Circuits Corporation** **4555 Great America Parkway, 6th Floor** **Santa Clara, California 95054** **(408) 542-8600**	**Jorge del Calvo** **Pillsbury Winthrop Shaw Pittman LLP** **2550 Hanover Street** **Palo Alto, California 94304** **(650) 233-4500**

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. 1 to Schedule TO (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO (as amended from time to time, the "Schedule TO") filed 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, with the Securities and Exchange Commission (the "SEC") on December 21, 2016. 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, 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 "Registration Statement"). The terms and conditions of the Offer are set forth in the Prospectus/Offer, which is a part of the Registration Statement and filed as Exhibit (a)(4) to the Schedule TO (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.

Item 11. Additional Information.

Item 11 is hereby amended and supplemented by adding the following text thereto:

"Certain Legal Proceedings

On December 29, 2016, Kevin Nygren, who alleges that he owns 100 shares of AppliedMicro's common stock, filed a complaint in the United States District Court for the Northern District of California against AppliedMicro and its board of directors. The complaint alleges that AppliedMicro's Solicitation/Recommendation Statement on Schedule 14D-9 filed with the SEC on December 21, 2016 misstates or omits material facts regarding the process that led to the Agreement and Plan of Merger and Reorganization, dated November 21, 2016, among MACOM, the Purchaser, MACOM Connectivity Solutions, LLC (f/k/a Montana Merger Sub II, LLC), a direct wholly owned subsidiary of MACOM, and AppliedMicro; the opinions and analyses of AppliedMicro's financial advisors; the transaction consideration; the intrinsic value of AppliedMicro; and unspecified potential conflicts of interest faced by certain individual defendants. Based on these allegations, the complaint asserts putative class claims under sections 14(e) of the Securities Exchange Act of 1934 (the "Act") (Count I), section 14(d)(9) of the Act and SEC Rule 14d-9 (Count II), and section 20(a) of the Act (Count III). The complaint, which has not yet been served, seeks certification of a class; preliminary and permanent injunctions barring the proposed transaction with MACOM; declaratory relief; and an accounting for damages allegedly caused by and profits and special benefits allegedly obtained as a result of the defendants' actions."

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 4, 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