

FIFTH LOAN MODIFICATION AGREEMENT

This Fifth Loan Modification Agreement (this "Loan Modification Agreement") is entered into as of September 24, 2010, by and among (a) **SILICON VALLEY BANK**, a California corporation, with its principal place of business as 3003 Tasman Drive, Santa Clara, California 95054 ("SVB"), as agent ("Agent"), and the other Lenders that are now or hereafter become a "Lender" under the Loan Agreement (as hereinafter defined), including without limitation, SVB and **GOLD HILL VENTURE LENDING 03, L.P.** ("Gold Hill") and (b) **A123 SYSTEMS, INC.**, a Delaware corporation with its chief executive office located at 321 Arsenal Street, Watertown, MA 02472 ("Borrower").

1. **DESCRIPTION OF EXISTING INDEBTEDNESS AND OBLIGATIONS.** Among other indebtedness and obligations which may be owing by Borrower to the Lenders, Borrower is indebted to the Lenders pursuant to a loan arrangement dated as of August 2, 2006, evidenced by, among other documents, a certain Term Loan and Security Agreement dated as of August 2, 2006, between Borrower and the Lenders, as amended by a certain First Loan Modification Agreement dated as of July 10, 2007, between Borrower and the Lenders, as further amended by a certain Section Loan Modification dated as of September 24, 2008, between Borrower and the Lenders (the "Second Amendment"), as amended by a certain Third Loan Modification dated as of March 16, 2009, between Borrower and the Lenders (the "Third Amendment"), and as further amended by a certain Fourth Loan Modification Agreement dated as of March 31, 2009 (as amended, the "Loan Agreement"). Capitalized terms used but not otherwise defined herein shall have the same meaning as in the Loan Agreement.

2. **DESCRIPTION OF COLLATERAL.** Repayment of the Obligations is secured by the Collateral as described in the Loan Agreement (together with any other collateral security granted to Agent, for the ratable benefit of the Lenders, the "Security Documents"). Hereinafter, the Security Documents, together with all other documents evidencing or securing the Obligations shall be referred to as the "Existing Loan Documents".

3. **DESCRIPTION OF CHANGE IN TERMS.**

A. Modifications to Loan Agreement.

1. The Loan Agreement shall be amended by deleting the following provision appearing as Section 2.6 thereof:

"2.6 Overadvances. If, at any time, the sum of (a) the outstanding principal amount of any Revolving Advances (including any amounts used for Cash Management Services), plus (b) the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letters of Credit Reserve), plus (c) the FX Reduction Amount exceeds the lesser of either the Revolving Line of the Borrowing Base, Borrower shall immediately pay to SVB in cash such excess."

and inserting in lieu thereof the following:

"2.6 Overadvances. If, at any time, the sum of (a) the outstanding principal amount of any Revolving Advances (including any amounts used for Cash Management Services), plus (b) the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of

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Credit Reserve), plus (c) the FX Reduction Amount exceeds the lesser of either (i) the Revolving Line or (ii) the aggregate of (x) the Borrowing Base, plus (y) the Permitted Overadvance, Borrower shall immediately pay to SVB in cash such excess."

2. The Loan Agreement shall be amended by deleting the following definition, appearing in Section 13.1 thereof:

"Availability Amount" is (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit) plus an amount equal to any Letter of Credit Reserve, minus (c) any FX Reduction Amount, minus (d) any unreimbursed amounts used for Cash Management Services, and minus (e) the outstanding principal balances of any Revolving Advances

"Revolving Line Maturity Date" is September 24, 2010."

and inserting in lieu thereof the following:

"Availability Amount" is (a) the lesser of (i) the Revolving Line or (ii) the aggregate amount of (x) the amount available under the Borrowing Base, plus (y) the Permitted Overadvance, minus (b) the amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit) plus an amount equal to any Letter of Credit Reserve, minus (c) any FX Reduction Amount, minus (d) any unreimbursed amounts used for Cash Management Services, and minus (e) the outstanding principal balance of any Revolving Advances

"Revolving Line Maturity Date" is December 23, 2010."

3. The Loan Agreement shall be amended by inserting the following new definitions to appear alphabetically in Section 13.1 thereof:

"2010 Effective Date" is September 24, 2010."

"Permitted Overadvance" is an Advance of Advances under the Revolving Line up to (i) Four Million Dollars (\$4,000,000.00) from the 2010 Effective Date through and including the Revolving Line Maturity Date."

4. **FEES.** Borrower shall pay to SVB a modification fee equal to Five Thousand Dollars (\$5,000.00), which fee shall be due and payable on the date hereof and shall be deemed fully earned as of the date hereof. Borrower shall also reimburse SVB and Lenders for all legal fees and expenses incurred in connection with this amendment to the Existing Loan Documents.

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5. **CONSISTENT CHANGES.** The Existing Loan Documents are hereby amended wherever necessary to reflect the changes described above.

6. **RATIFICATION OF LOAN DOCUMENTS.** Borrower hereby ratifies, confirms, and reaffirms all terms and conditions of all security or other collateral granted to the Agent, for the ratable benefit of the Lenders, and confirms that the indebtedness secured thereby includes, without limitation, the Obligations.

7. NO DEFENSES OF BORROWER. Borrower hereby acknowledges and agrees that, as of the Effective Date, Borrower has no offsets, defenses, claims, or counterclaims against Agent or Lenders with respect to the Obligations, or otherwise, and that if Borrower now has, or ever did have, any offsets, defenses, claims or counterclaims against Agent or Lenders, whether known or unknown, at law or in equity, all of them are hereby expressly WAIVED and Borrower hereby RELEASES Agent and Lenders from any liability thereunder.
8. CONTINUING VALIDITY. Borrower understands and agrees that in modifying the existing Obligations, Agent and Lenders are relying upon Borrower's representations, warranties, and agreements, as set forth in the Existing Loan Documents. Except as expressly modified pursuant to this Loan Modification Agreement, the terms of the Existing Loan Documents remain unchanged and in full force and effect. Lenders' agreement to modifications to the existing Obligations pursuant to this Loan Modification Agreement in no way shall obligate any Lender to make any future modification to the Obligations. Nothing in this Loan Modification Agreement shall constitute a satisfaction of the Obligations. It is the intention of Lenders and Borrower to retain as liable parties all makers of Existing Loan Documents, unless the party is expressly released by Agent in writing. No maker will be released by virtue of this Loan Modification Agreement.
9. COUNTERSIGNATURE. This Loan Modification Agreement shall become effective only when it shall have been executed by Borrower, Agent and Lenders.

This Loan Modification Agreement is executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of the date first written above.

BORROWER:

A123 SYSTEMS, INC.

By: /s/ Michael Rubino

Name: Michael Rubino

Title: CFO

LENDERS:

SILICON VALLEY BANK, as Agent and Lender

By: /s/ Robin Gil

Name: Robin Gill

Title: VP

GOLD HILL VENTURE LENDING 03, L.P., as Lender

By: /s/ David Fischer

Name: David Fischer

Title: Manager