Pyenson Eric J.
Form 4
February 10, 2012

FORM 4

OMB APPROVAL

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

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
Pyenson Eric J.
(Last) (First) (Middle)
C/O A123 SYSTEMS, INC., 200 WEST STREET
(Street)
WALTHAM, MA 02451
(City) (State) (Zip)

2. Issuer Name **and** Ticker or Trading Symbol
A123 SYSTEMS, INC. [AONE]

3. Date of Earliest Transaction (Month/Day/Year)
02/08/2012

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer
(Check all applicable)
_____ Director _____ 10% Owner
__X__ Officer (give title below) _____ Other (specify below)
VicePresident, General Counsel

6. Individual or Joint/Group Filing(Check Applicable Line)
_X_ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	02/08/2012		A		60,000 (1) (2)	A	$ 0	159,149 (3)	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(*e.g.*, puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Pyenson Eric J. C/O A123 SYSTEMS INC., 200 WEST STREET WALTHAM, MA 02451			VicePresident, General Counsel	

Signatures

/s/ Eric J. Pyenson	02/10/2012
**Signature of Reporting Person	Date

Explanation of Responses:

*	If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
**	Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
(1)	Restricted stock units ("RSUs"). Upon vesting thereof, the Reporting Person is entitled to receive one (1) share of common stock for each one (1) RSU.
(2)	25% of the RSUs will vest on February 8, 2013, and 6.25% of the total number of RSUs will vest at the end of each three-month period thereafter, so that 100% of the RSUs will be fully vested on February 8, 2016.
(3)	Includes 159,149 RSUs.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.