

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

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No. 2)***

GSI Technology, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

36241U106

(CUSIP Number)

December 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 36241U106

1. Names of Reporting Persons.
Ching-Ho Cheng

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization
United States

Number of Shares Beneficially Owned by Each Reporting Person With:

5. Sole Voting Power
2,009,618

6. Shared Voting Power
0

7. Sole Dispositive Power
2,009,618

8. Shared Dispositive Power
0

9. Aggregate Amount Beneficially Owned by Each Reporting Person
2,009,618

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).

11. Percent of Class Represented by Amount in Row (9)
7.38%

12. Type of Reporting Person (See Instructions):
IN

2

CUSIP No. 36241U106

Item 1.

- (a) Name of Issuer:
GSI Technology, Inc. (the "Company")
-
- (b) Address of Issuer's Principal Executive Offices:
2360 Owen Street, Santa Clara, CA 95054
-

Item 2.

- (a) Name of Person Filing:
Ching-Ho Cheng
-
- (b) Address of Principal Business Office or, if None, Residence:
4F, No. 130, Sec. 3, Nanjing E. Road, Taipei 104, Taiwan, R.O.C.
-
- (c) Citizenship:
United States
-
- (d) Title of Class of Securities:
Common Stock
-
- (e) CUSIP Number:
36241U106
-

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution: _____

CUSIP No. 36241U106

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned:

2,009,618

- (b) Percentage of class:

7.38%

- (c) Number of shares as to which such person has:
-

- (i) Sole power to vote or to direct the vote:

2,009,618

- (ii) Shared power to vote or to direct the vote:

0

- (iii) Sole power to dispose or to direct the disposition of:

2,009,618

- (iv) Shared power to dispose or to direct the disposition of:

0

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certification.

Not applicable.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

February 23, 2010

Date

/s/ Ching-Ho Cheng

Signature

Ching-Ho Cheng

Name/Title