

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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(Amendment No.____)*

ENTEGRIS, INC.

(Name of Issuer)

COMMON STOCK, \$0.01 Par Value

(Title of Class of Securities)

29362U104

(CUSIP Number)

September 9, 2010

(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 (THE "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).

Page 1 of 10 Pages

CUSIP NO. 29362U104

1 NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Bay Resource Partners, L.P.

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

Delaware

		5	SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH			NONE
		6	SHARED VOTING POWER
			701,800
		7	SOLE DISPOSITIVE POWER
			NONE
		8	SHARED DISPOSITIVE POWER
			701,800
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
	701,800		
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES [] (SEE INSTRUCTIONS)		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 0.5%		
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN		

1 NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Bay II Resource Partners, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)
(a) ☒ [X]

(b) ☐ []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
NONE

6 SHARED VOTING POWER
2,453,000

7 SOLE DISPOSITIVE POWER
NONE

8 SHARED DISPOSITIVE POWER
2,453,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,453,000

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
[] (SEE INSTRUCTIONS)

11 PERCENTAGE OF CLASS REPRESENTED BY AMOUNT IN ROW 9 1.9%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
PN

1 NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Bay Resource Partners Offshore Fund, Ltd.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)
(a) ☒ [X]
(b) ☐ []

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

5 SOLE VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

NONE

6 SHARED VOTING POWER

3,105,000

7 SOLE DISPOSITIVE POWER

NONE

8 SHARED DISPOSITIVE POWER

3,105,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,105,000

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
[] (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 2.4%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
CO

CUSIP NO. 29362U104

1 NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

GMT Capital Corp.

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

State of Georgia

5 SOLE VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

NONE

6 SHARED VOTING POWER

6,505,400

7 SOLE DISPOSITIVE POWER

NONE

8 SHARED DISPOSITIVE POWER

6,505,400

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,505,400

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
[] (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 4.9%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
CO

CUSIP NO. 29362U104

1 NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Thomas E. Claugus

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

5 SOLE VOTING POWER

NUMBER OF
SHARES 217,400

BENEFICIALLY

OWNED BY

EACH

REPORTING

PERSON

WITH

6 SHARED VOTING POWER

6,505,400

7 SOLE DISPOSITIVE POWER

217,400

8 SHARED DISPOSITIVE POWER

6,505,400

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,722,800

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
[] (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 5.1%

12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

ITEM 1(A) NAME OF ISSUER:

ENTEGRIS, INC.

ITEM 1(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

129 Concord Road
Billerica, Massachusetts 01821

ITEM 2(a) NAME OF PERSON FILING:

- (i) Bay Resource Partners, L.P. (Bay), with respect to shares of Common Stock directly owned by it.
- (ii) Bay II Resource Partners, L.P. (Bay II), with respect to shares of Common Stock directly owned by it.
- (iii) Bay Resource Partners Offshore Fund, Ltd. (Offshore Fund) with respect to shares of Common Stock directly owned by it.
- (iv) GMT Capital Corp. (GMT Capital) with respect to shares of Common Stock beneficially owned by it.
- (v) Thomas E. Claugus, (Mr. Claugus), with respect to the shares of Common Stock directly owned by him and directly owned by each of Bay, Bay II, and the Offshore Fund and GMT Capital separate account clients.

The foregoing persons are hereinafter sometimes collectively referred to as the Reporting Persons. Any disclosures herein with respect to persons other than the Reporting Persons are made on information and believe after making inquiry to the appropriate party.

ITEM 2(b) ADDRESS OF PRINCIPAL BUSINESS OFFICE, OR IF NONE, RESIDENCE:

The address of the business office of each of the Reporting Persons is 2100 RiverEdge Parkway, Ste. 840, Atlanta, GA 30328

ITEM 2(c) CITIZENSHIP:

Bay and Bay II are limited partnerships organized under the laws of the State of Delaware. The Offshore Fund is an exempted company organized under the laws of the Cayman Islands. GMT Capital is a Georgia corporation. Mr. Claugus is a United States citizen.

ITEM 2(d) TITLE OF CLASS OF SECURITIES:

Common Stock, \$0.01 par value

ITEM 2(e) CUSIP NUMBER:

29362U104

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO SS.240.13D-1(B) OR SS. 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 ss.240.13d-1(b)(1)(ii)(E);
- (f) ☐ An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F);
- (g) ☐ A parent holding company or control person in accordance with ss.240.13d-1(b)(1)(ii)(G);
- (h) ☐ A savings associations 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) ☐ Group, in accordance with ss.240.13d-1(b)(1)(ii)(J).

ITEM 4. OWNERSHIP:

This Statement is being filed with respect to an aggregate of 6,722,800 shares of Common Stock, resulting in beneficial ownership of Common Stock as follows:

- 1. Bay Resource Partners, L.P.,
 - (a) Amount Beneficially owned: 701,800
 - (b) Percent of Class: 0.5%
- The percentages used herein and in the rest of Item 4 are calculated based on 131,893,829 shares of Common Stock outstanding as of July 23, 2010, as disclosed in the Issuer's Quarterly Report (10-Q) for the quarterly period ended July 3, 2010 filed with the Securities and Exchange Commission ("SEC") on July 28, 2010.

- (c) (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 701,800
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 701,800

2. Bay II Resource Partners, L.P.

- (a) Amount Beneficially owned: 2,453,000
- (b) Percent of Class: 1.9%
- (c) (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 2,453,000
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 2,453,000

3. Bay Resource Partners Offshore Fund, Ltd.

- (a) Amount Beneficially owned: 3,105,000
- (b) Percent of Class: 2.4%
- (c) (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 3,105,000
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 3,105,000

4. GMT Capital Corp.

- (a) Amount Beneficially owned: 6,505,400
- (b) Percent of Class: 4.9%
- (c) (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 6,505,400
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 6,505,400

5. Thomas E. Claugus

- (a) Amount Beneficially owned: 6,722,800
- (b) Percent of Class: 5.1%
- (c) (i) Sole power to vote or direct the vote: 217,400
- (ii) Shared power to vote or direct the vote: 6,505,400
- (iii) Sole power to dispose or direct the disposition: 217,400
- (iv) Shared power to dispose or direct the disposition: 6,505,400

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

N/A

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

GMT Capital, the general partner of Bay and Bay II, has the power to direct the affairs of Bay and Bay II, including the voting and disposition of shares. As the discretionary investment manager of the Offshore Fund and certain other

accounts, GMT Capital has power to direct the voting and disposition of shares held by the Offshore Fund and such accounts. Mr. Clausus is the President of GMT Capital and in that capacity directs the operations of each of Bay and Bay II and the voting and disposition of shares held by the Offshore Fund and separate client accounts managed by GMT Capital.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON.

N/A

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

See Item 2.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

N/A

ITEM 10. CERTIFICATION.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

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

September 16, 2010

/s/ Thomas E. Clausus

Thomas E. Clausus, for himself
and as President of GMT Capital
Corp., for itself and as the
general partner of (i) Bay
Bay Resource Partners, L.P. and
(ii) Bay II Resource Partners,
L.P. and for the investment
manager of (iii) Bay Resource
Partners Offshore Fund, Ltd.

