

Welch David F
 Form 4
 November 17, 2010

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL

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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 *
 Welch David F

(Last) (First) (Middle)

C/O INFINERA CORPORATION, 169 JAVA DRIVE

(Street)

SUNNYVALE, CA 94089

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 INFINERA CORP [INFN]

3. Date of Earliest Transaction (Month/Day/Year)
 11/15/2010

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)
 Chief Mktg & Strategy Officer

6. Individual or Joint/Group Filing(Check Applicable Line)

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) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|---|
| | | | | (A) or (D) | Price | | |
| | | | | Code | V | Amount | |
| Common Stock | 11/15/2010 | | S(1) | 10,000 | D | \$ 8.3651 (2) | 949,493 I See footnote (3) |
| Common Stock | 11/16/2010 | | S(1) | 10,000 | D | \$ 8.1862 (4) | 64,660 I See footnote (5) |
| Common Stock | | | | | | | 11,177 D |
| Common Stock | | | | | | | 553,750 I See footnote |

| | | | |
|--------------|---------|---|-------------------------|
| Common Stock | 500,000 | I | (6) See footnote (7) |
| Common Stock | 2,500 | I | See footnote (8) |

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) | 9. Number of Derivative Securities Beneficially Owned (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 |
| Welch David F C/O INFINERA CORPORATION 169 JAVA DRIVE SUNNYVALE, CA 94089 | X | | Chief Mktg & Strategy Officer | |

Signatures

/s/ Michael O. McCarthy, by power of attorney
11/17/2010

**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) The sales reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on August 7, 2009.

(2) The sale price reported in column 4 of Table I represents the weighted average sale price of the shares sold ranging from \$8.24 to \$8.43 per share. Upon request by the Commission staff, the Issuer, or a security holder of the Issuer, the Reporting Person will provide full information regarding the number of shares sold at each separate price within the ranges set forth in footnotes (2) and (4) to this Form 4.

(3) Shares held directly by LRFA, LLC of which the Reporting Person is the sole managing member.

(4) The sale price reported in column 4 of Table I represents the weighted average price of the shares sold ranging from \$8.11 to \$8.31 per share.

(5) Shares held directly by the Welch Family Trust dated 4/3/96 for which the Reporting Person serves as trustee.

(6) Shares held directly by SEI Private Trust Company, Trustee of the Welch Family Heritage Trust I u/I dated 9/24/01.

(7) Shares held directly by Welch Group, L.P. of which the Reporting Person is the general partner.

(8) Shares held directly by the Reporting Person as a trustee for his minor children. The Reporting Person disclaims beneficial ownership of the shares held in trust for his minor children, and this report shall not be deemed an admission that the Reporting Person is the beneficial owner of the shares held in trust for his minor children for purposes of Section 16 or for any other purpose.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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