UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Year End Filing)*

INPHI CORPORATION

(Name of Issuer)

COMMON SHARES

(Title of Class of Securities)

45772F107

(CUSIP Number)

December 31, 2016

(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)

[**X**] 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 the disclosures provided in a prior cover page.

The information required in 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).

Page 1 of 5 pages

CUSIP No. 45772F107

- Names of Reporting Persons.
 I.R.S. Identification Nos. of above persons (entities only).
 1832 Asset Management L.P., One Adelaide Street East, 29th Floor, Toronto, Ontario, Canada, M5C 2V9
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 (a) N/A
 (b)
- 3. SEC Use Only
- 4. Citizenship or Place of Organization: Toronto, Ontario, Canada

Number of 5. Sole Voting Power **2,339,000 common shares** Shares Beneficially6. Shared Voting Power **Nil** Owned by Each 7. Sole Dispositive Power **2,339,000 common shares** Reporting Person With8. Shared Dispositive Power **Nil**

- 9. Aggregate Amount Beneficially Owned by Each Reporting Person 2,339,000 common shares are held within mutual funds or other client accounts managed by 1832 Asset Management L.P. acting as Investment Counsel and Portfolio Manager.
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) N/A
- 11. Percent of Class Represented by Amount in Row (9) 5.67% undiluted
- 12. Type of Reporting Person (See Instructions) IA

Page 2 of 5 pages

Item 1. (a) Name of Issuer Inphi Corporation

Item 1. (b) Address of Issuer's Principal Executive Offices 2953 Bunker Hill Lane, Suite 300, Santa Clara, CA 95054 USA

Item 2. (a) Name of Person Filing 1832 Asset Management L.P.

Item 2. (b) Address of Principal Business Office or, if none, Residence One Adelaide Street East, 29th Floor, Toronto, Ontario, Canada, M5C 2V9

Item 2. (c) Citizenship Canadian

Item 2. (d) Title of Class of Securities Common Shares

Item 2. (e) CUSIP Number Not applicable

Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 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. 780).
- (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 Rule 13d-1(b)(1)(ii)(E);
- (f) [] An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) [] A parent holding company or control person in accordance with Rule 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 Rule 13d-1(b)(1)(ii)(J).

CANADIAN INVESTMENT COUNSELLING FIRM

Page 3 of 5 pages

Item 4. Ownership.

- (a) Amount beneficially owned: **2,339,000 common shares**
- (b) Percent of class: 5.67% undiluted
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote 2,339,000 common shares
 - (ii) Shared power to vote or to direct the vote Nil
 - (iii) Sole power to dispose or to direct the disposition of 2,339,000 common shares
 - (iv) Shared power to dispose or to direct the disposition of Nil

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

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

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.

Page 4 of 4 pages

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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.

January 5, 2017 Date

Noah Blackstein Signature

Noah Blackstein, Vice President and Portfolio Manager Name/Title

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Page 5 of 5 pages