

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Iridex Corporation
(Name of Issuer)

Common Stock
(Title of Class of Securities)

462684101
(CUSIP Number)

Scott A. Shuda
BlueLine Partners, LLC
4115 Blackhawk Plaza Circle, Suite 100
Danville, California 94506

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

December 29, 2006
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1 (e), Rule 13d-1(f) or Rule 13d-1(g), check the following box .

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CUSIP No. 462684101

1. Name of Reporting Person
I.R.S. Identification No. of Above Person (Entities Only).

BlueLine Capital Partners, L.P.

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

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check Box If Disclosure of Legal Proceedings is Required Pursuant to
Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power
0

Number
of Shares
Beneficially
Owned By

8. Shared Voting Power
454,746

Each
Reporting
Person With

9. Sole Dispositive Power
0

10. Shared Dispositive Power
454,746

11. Aggregate Amount Beneficially Owned by Each Reporting Person

631,433

12. Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

8.1%

14. Type of Reporting Person (See Instructions)

PN

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CUSIP No. 462684101

1. Name of Reporting Person
I.R.S. Identification No. of Above Person (Entities Only).

BlueLine Capital Partners II, L.P.

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

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check Box If Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware

7. Sole Voting Power
0

Number
of Shares
Beneficially
Owned By
Each
Reporting
Person With

8. Shared Voting Power
24,827

9. Sole Dispositive Power
0

10. Shared Dispositive Power
24,827

11. Aggregate Amount Beneficially Owned by Each Reporting Person

631,433

12. Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

8.1%

14. Type of Reporting Person (See Instructions)

PN

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1. Name of Reporting Person I.R.S. Identification No. of Above Person (Entities Only).		
BlueLine Catalyst Fund VIII, LP		
2. Check the Appropriate Box If a Member of Group (See Instructions)		(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3. SEC Use Only		
4. Source of Funds (See Instructions)		
WC		
5. Check Box If Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)		<input type="checkbox"/>
6. Citizenship or Place of Organization		
Delaware		
Number of Shares Beneficially Owned By Each Reporting Person With	7. Sole Voting Power	
	0	
	8. Shared Voting Power	
	151,860	
	9. Sole Dispositive Power	
	0	
	10. Shared Dispositive Power	
	151,860	
11. Aggregate Amount Beneficially Owned by Each Reporting Person		
631,433		
12. Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)		<input type="checkbox"/>
13. Percent of Class Represented by Amount in Row (11)		
8.1%		
14. Type of Reporting Person (See Instructions)		
PN		

1. Name of Reporting Person I.R.S. Identification No. of Above Person (Entities Only).		
BlueLine Partners, LLC		
2. Check the Appropriate Box If a Member of Group (See Instructions)		(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3. SEC Use Only		
4. Source of Funds (See Instructions)		
WC		
5. Check Box If Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e)		<input type="checkbox"/>

6. Citizenship or Place of Organization

California

Number of Shares Beneficially Owned By Each Reporting Person With	7. Sole Voting Power 0
	8. Shared Voting Power 631,433
	9. Sole Dispositive Power 0
	10. Shared Dispositive Power 631,433

11. Aggregate Amount Beneficially Owned by Each Reporting Person

631,433

12. Check Box If the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

8.1%

14. Type of Reporting Person (See Instructions)

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Item 1. Security and Issuer

This Amendment No. 2 to Schedule 13D relates to Common Stock (the “Common Stock”) of Iridex Corporation (“Iridex” or the “Company”) with its principal executive offices located at 1212 Terra Bella Avenue, Mountain View, CA 94043.

Item 2. Identity and Background

- (a)-(b) This statement is filed on behalf of BlueLine Capital Partners, LP (“BCP I”), BlueLine Capital Partners II, LP (“BCP II”), BlueLine Catalyst Fund VIII, L.P. (“BlueLine Catalyst VIII”) and BlueLine Partners, L.L.C. (“BlueLine Partners” and, together with BCP I, BCP II and BlueLine Catalyst VIII, “BlueLine” or the “Reporting Entities”). BlueLine Partners is the sole general partner of BCP I, BCP II and BlueLine Catalyst VIII and has an interest in the profits of BCP I, BCP II and BlueLine Catalyst VIII. Timothy Bacci and Scott Shuda are each Managing Directors of BlueLine Partners, L.L.C. Messrs. Bacci and Shuda each disclaims beneficial ownership for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the “Act”). The address of the principal business office of each of the Reporting Entities and Messrs. Bacci and Shuda is 4115 Blackhawk Plaza Circle, Suite 100, Danville, California 94506.
- (c) Each of BCP I, BCP II and BlueLine Catalyst VIII is a private investment limited partnership. The principal business of BlueLine Partners is to serve as investment manager to a variety of private investment funds, including BCP I, BCP II and BlueLine Catalyst VIII, and to control the investing and trading in securities of these private investment funds. The principal business of Messrs. Bacci and Shuda is to act as Managing Directors of BlueLine Partners.
- (d) None of the Reporting Entities nor Messrs. Bacci and Shuda has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) None of the Reporting Entities nor Messrs. Bacci and Shuda has, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) Each of BCP I, BCP II and BlueLine Catalyst VIII is a Delaware limited partnership. BlueLine Partners is a Delaware limited liability company. Messrs. Bacci and Shuda are each U.S. citizens.

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Item 3. Source and Amount of Funds

As of the date hereof, the Reporting Entities may, in the aggregate, be deemed to beneficially own 631,433 shares of the Common Stock (the "Shares"). The Shares were purchased in the open market by BCP I, BCP II and BlueLine Catalyst VIII with their investment capital.

Item 4. Purpose of the Transaction

BlueLine invests in companies it believes are undervalued relative to their potential. In its original September 19, 2005 Schedule 13D filing, BlueLine stated its belief that the Company's new Chief Executive Officer, Mr. Barry Caldwell, would (i) transition Iridex away from its traditional technology-centric orientation and toward a greater customer and market orientation and (ii) use the Company's large cash position to expand the Company's business while better articulating the Company's potential beyond that as a technology pioneer.

BlueLine believes Mr. Caldwell has proven successful in these areas. Of particular note is (i) the Company's new emphasis on recurring sales of disposable probes and (ii) the agreement to acquire LaserScope's aesthetics business for approximately \$21 million net of \$7 million of accounts receivable to be assumed by Iridex. This transaction will double Iridex's revenue base and, BlueLine believes, substantially benefit gross margins due to significant operating synergies. BlueLine does not think Iridex's management will seek to use the Laserscope business as a launching point for a broader expansion into the aesthetics market.

As part of its investment strategy, BlueLine seeks to discuss and work with management on various initiatives designed to improve the Company's prospects and performance. Areas of focus will include investor relations, strategic transactions and integration issues.

Depending on market conditions, general economic conditions and other factors, the Reporting Entities may purchase additional shares of Common Stock in the open market or in private transactions, or may dispose of all or a portion of the shares of Common Stock that they or any of them presently own or may hereafter acquire.

Item 5. Interest in Securities of the Issuer

- (a) As of the date of this Schedule 13D, each of the Reporting Entities may be deemed to own 631,433 shares of Common Stock. These shares represent approximately 8.1% of the shares of Common Stock outstanding based on 7,829,948 shares of the Company's Common Stock outstanding as reported in the Company's Form 10-Q for the Company's fiscal quarter ended September 30, 2006 as filed with the Securities and Exchange Commission on December 22, 2006.

The Reporting Entities are making this single, joint filing because they may be deemed to constitute a "group" within the meaning of Section 13(d)(3) of the Act. Each Reporting Entity expressly disclaims beneficial ownership of any of the shares of Common Stock other than those reported herein as being owned by it.

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- (b) As of the date of this Schedule 13D: (i) BCP I beneficially owns 454,746 shares of Common Stock with which BCP I has shared voting power and shared dispositive power with BlueLine Partners; (ii) BCP II beneficially owns 24,827 shares of Common Stock with which BCP II has shared voting power and shared dispositive power with BlueLine Partners; (iii) BlueLine Catalyst VIII beneficially owns 151,860 shares of Common Stock with which BlueLine Catalyst VIII has shared voting power and shared dispositive power with BlueLine Partners; and (iv) BlueLine Partners beneficially owns 631,433 shares of Common Stock with which BlueLine Partners has shared voting power and shared dispositive power with the other Reporting Entities.
- (c) Information concerning transactions in the Common Stock effected by the Reporting Entities during the past sixty days is set forth in Exhibit B hereto and is incorporated by this reference. All of the transactions set forth in Exhibit B were open market transactions for cash.
- (d) No person (other than the Reporting Entities) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Pursuant to Rule 13d-1(k) promulgated under the Act, the Reporting Entities have entered into an agreement with respect to the joint filing of this statement, and any amendment or amendments hereto, which is attached hereto as Exhibit A.

Item 7. Materials to be Filed as Exhibits

1. Exhibit A – Joint Filing Agreement dated January 8, 2007, signed by each of the Reporting Entities in order to confirm that this Schedule 13D is being filed on behalf of each of the Reporting Entities.*
2. Exhibit B – Transactions in the Common Stock by the Reporting Entities during the past 60 days.

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SIGNATURES

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.

Date: January 8, 2007

BlueLine Capital Partners, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Capital Partners II, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Catalyst Fund VIII, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Partners, L.L.C.

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

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EXHIBIT A

Joint Filing Agreement

The undersigned acknowledge and agree that the foregoing statement on Schedule 13D is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13D shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent it knows or has reason to believe that such information is inaccurate. This Joint Filing Agreement may be executed in any number of counterparts and all of such counterparts taken together shall constitute one and the same instrument.

Date: January 8, 2007

BlueLine Capital Partners, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Capital Partners II, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Catalyst Fund VIII, L.P.

By: BlueLine Partners, L.L.C.
Its: General Partner

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

BlueLine Partners, L.L.C.

By: /s/ Scott Shuda
Name: Scott Shuda
Title: Managing Director

Transactions in the Common Stock effected by the Reporting Entities during the past sixty days.

Date	BCP I		BCP II	
	No. of Shares	Price per Share	No. of Shares	Price per Share
11/15/2006			602	\$10.45
11/21/2006	1,000	\$10.35		
11/22/2006	2,000	\$10.05		
11/28/2006			1000	\$11.05
12/1/2006	2,580	\$10.96	1000	\$10.95
12/4/2006	2,000	\$10.80	2,000	\$10.83
12/6/2006	1,000	\$10.50		
12/7/2006	1,000	\$10.40		
12/11/2006	2,000	\$10.27	2,000	\$10.27
12/12/2006	1,000	\$10.15		
12/14/2006	4,500	\$ 9.85	1000	\$ 9.88
12/15/2006	3,000	\$ 9.57		
12/18/2006	2,000	\$ 9.17	2000	\$ 9.17
12/27/2006	2,500	\$ 9.27		
12/28/2006	4,600	\$ 8.94	3000	\$ 9.05
12/29/2006	5,500	\$ 8.84	1,145	\$ 8.91
1/3/2007	2,200	\$ 8.98	2,000	\$ 8.99
1/4/2007	6,500	\$ 8.93	1000	\$ 8.90
1/5/2007	1,100	\$ 8.86		