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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 13D**

Under the Securities Exchange Act of 1934

PIXELWORKS, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

72581M305

(CUSIP Number)

**Becker Drapkin Management, L.P.
Attn: Steven R. Becker
Attn: Matthew A. Drapkin
300 Crescent Court
Suite 1111
Dallas, Texas 75201
(214) 756-6016**

With a copy to:

**Richard J. Birns, Esq.
Boies, Schiller & Flexner LLP
575 Lexington Avenue, 7th Floor
New York, NY 10022
(212) 446-2300**

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

December 6, 2011

(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 §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box:

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 240.13d-7 for other parties to whom copies are to be sent.

* 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).

SCHEDULE 13D

CUSIP No. 72581M305	
1	NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Becker Drapkin Management, L.P.
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	SOURCE OF FUNDS (See Instructions) OO
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION Texas
	7 SOLE VOTING POWER 0
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	8 SHARED VOTING POWER 2,397,300
	9 SOLE DISPOSITIVE POWER 0
	10 SHARED DISPOSITIVE POWER 2,397,300
	11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,397,300
12	CHECK 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) 13.4%
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA, PN

CUSIP No. 72581M305

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Becker Drapkin Partners (QP), L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

WC

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

7 SOLE VOTING POWER

1,552,181

NUMBER OF SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

1,552,181

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,552,181

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

8.6%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP No. 72581M305

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON.

Becker Drapkin Partners, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

WC

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

7 SOLE VOTING POWER

230,719

NUMBER OF SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

230,719

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

230,719

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

1.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP No. 781182100

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON.

BD Partners IV, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

WC

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

7 SOLE VOTING POWER

614,400

NUMBER OF SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

614,400

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

614,400

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

3.4%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP No. 72581M305

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

BC Advisors, LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

OO

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

7 SOLE VOTING POWER

0

NUMBER OF SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8 SHARED VOTING POWER

2,397,300

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

2,397,300

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,397,300

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.4%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IA, OO

CUSIP No. 72581M305

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Steven R. Becker

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

OO

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

0

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

8 SHARED VOTING POWER

2,397,300

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

2,397,300

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,397,300

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.4%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP No. 72581M305

1 NAME OF REPORTING PERSON / I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Matthew A. Drapkin

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (See Instructions)

OO

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

0

NUMBER OF SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8 SHARED VOTING POWER

2,397,300

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

2,397,300

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,397,300

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13.4%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

Item 1. Security and the Issuer

This statement on Schedule 13D (this “Statement”) relates to the shares of Common Stock, \$0.001 par value (the “Common Stock”), of Pixelworks, Inc., an Oregon corporation (the “Issuer”). The principal executive offices of the Issuer are located at 224 Airport Parkway, Suite 400, San Jose, California 95110.

Item 2. Identity and Background

(a) This Statement is filed jointly on behalf of the following persons (collectively, the “Reporting Persons”): Becker Drapkin Management, L.P., a Texas limited partnership (“BD Management”); Becker Drapkin Partners (QP), L.P., a Texas limited partnership (“Becker Drapkin QP”); Becker Drapkin Partners, L.P., a Texas limited partnership (“Becker Drapkin, L.P.”); BD Partners IV, L.P., a Texas limited partnership (“BD Partners IV”); BC Advisors, LLC, a Texas limited liability company (“BCA”); Steven R. Becker (“Mr. Becker”); and Matthew A. Drapkin (“Mr. Drapkin”). The Reporting Persons are filing this Statement jointly, and the agreement among the Reporting Persons to file jointly is attached hereto as Exhibit 1 and incorporated herein by reference (the “Joint Filing Agreement”).

Becker Drapkin QP, Becker Drapkin, L.P. and BD Partners IV are collectively referred to herein as the “Becker Drapkin Funds”.

Mr. Becker and Mr. Drapkin are the sole members of BCA, and BCA is the general partner of BD Management. Mr. Becker and Mr. Drapkin are also limited partners of BD Management. BD Management is the general partner of, and investment manager for, the Becker Drapkin Funds.

(b) The business address of each Reporting Person is 300 Crescent Court, Suite 1111, Dallas, Texas 75201.

(c) The present principal occupation of each of Mr. Becker and Mr. Drapkin is serving as the co-managing member of BCA. The principal business of BCA is serving as the general partner of BD Management. The principal business of BD Management is serving as the general partner of, and investment manager for, the Becker Drapkin Funds. The principal business of each of the Becker Drapkin Funds is acquiring and holding securities for investment purposes.

(d) None of the Reporting Persons have, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) None of the Reporting Persons have, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such Reporting Person 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) Mr. Becker and Mr. Drapkin are citizens of the United States of America. The place of organization of all other Reporting Persons is listed in paragraph (a) of this Item 2.

Item 3. Source and Amount of Funds or other Consideration

The Reporting Persons expended an aggregate of approximately \$5,092,788.08 (including commissions) to purchase 2,397,300 shares of Common Stock. Funds used to purchase reported securities have come from working capital of the Becker Drapkin Funds, which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business.

Item 4. Purpose of Transaction

(a)-(j) The Reporting Persons originally purchased Common Stock based on the Reporting Persons’ belief that the shares of Common Stock, when purchased, were undervalued and represented an attractive investment opportunity.

The Reporting Persons intend to review their investment in the Issuer on a continuing basis and in connection therewith, intend to discuss with the Issuer ways in which such undervaluation can be rectified. The Reporting Persons also intend to engage the Issuer in discussions regarding the assets, business, strategy, capitalization, financial condition and/or operations of the Issuer. Subject to applicable law and regulations, and depending upon certain factors, including without limitation, general market and investment conditions, the financial performance and strategic direction of the Issuer, and the availability of shares of Common Stock at prices that would make the purchase of shares of Common Stock desirable, the Reporting Persons may, among other things, increase their position in the Issuer through the purchase of shares of Common Stock on the open market or in private transactions or otherwise, on such terms and at such times as the Reporting Persons deem advisable.

The Reporting Persons reserve the right in the future to take such actions with respect to their investments in the Issuer as they deem appropriate, including, without limitation, selling shares of Common Stock, engaging in short selling of or any hedging or similar transactions with respect to the Common Stock.

In addition, based on the above discussions with the Issuer and subject to the factors described above, the Reporting Persons may have discussions with other stockholders and potential nominees to the Board; make proposals to the Issuer concerning changes to the strategy, capitalization, ownership structure, operations, or Articles of Incorporation or Bylaws of the Issuer; or change their intention with respect to any and all matters referred to in this Item 4.

No Reporting Person has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a)–(j) of Item 4 of Schedule 13D except as set forth herein or such as would occur upon completion of any of the actions discussed herein.

Item 5. Interest in Securities of the Issuer

(a), (b) The Reporting Persons may be deemed to beneficially own in the aggregate 2,397,300 shares of Common Stock. Based upon a total of 17,950,420 outstanding shares of Common Stock, as reported in the Issuer's quarterly report on Form 10-Q for the period ending September 30, 2011, the Reporting Persons' shares represent approximately 13.355% of the outstanding shares of Common Stock.

Becker Drapkin QP owns 1,552,181 shares of Common Stock (the "Becker Drapkin QP Shares"), which represent approximately 8.647% of the outstanding shares of Common Stock.

Becker Drapkin, L.P. owns 230,719 shares of Common Stock (the "Becker Drapkin, L.P. Shares"), which represent approximately 1.285% of the outstanding shares of Common Stock.

BD Partners IV owns 614,400 shares of Common Stock (the "BD Partners IV Shares"), which represent approximately 3.423% of the outstanding shares of Common Stock.

The Becker Drapkin QP Shares, Becker Drapkin, L.P. Shares and BD Partners IV Shares are collectively referred to herein as the "Becker Drapkin Funds Shares".

Becker Drapkin QP has the power to vote or to direct the vote of (and the power to dispose or direct the disposition of) the Becker Drapkin QP Shares. Becker Drapkin QP disclaims beneficial ownership of the Becker Drapkin, L.P. Shares and BD Partners IV Shares.

Becker Drapkin, L.P. has the power to vote or to direct the vote of (and the power to dispose or direct the disposition of) the Becker Drapkin, L.P. Shares. Becker Drapkin, L.P. disclaims beneficial ownership of the Becker Drapkin QP Shares and BD Partners IV Shares.

BD Partners IV has the power to vote or to direct the vote of (and the power to dispose or direct the disposition of) the BD Partners IV Shares. BD Partners IV disclaims beneficial ownership of the Becker Drapkin QP Shares and Becker Drapkin, L.P. Shares.

As general partner of the Becker Drapkin Funds, BD Management may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the Becker Drapkin Funds Shares. BD Management disclaims beneficial ownership of the Becker Drapkin Funds Shares.

As general partner of BD Management, BCA may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) any shares of Common Stock beneficially owned by BD Management. BCA does not own any shares of Common Stock directly and disclaims beneficial ownership of any shares of Common Stock beneficially owned by BD Management.

As co-managing members of BCA, each of Mr. Becker and Mr. Drapkin may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) any shares of Common Stock beneficially owned by BCA. Mr. Becker and Mr. Drapkin each disclaim beneficial ownership of any shares of Common Stock beneficially owned by BCA.

As of the date hereof, no Reporting Person owns any shares of Common Stock other than those set forth in this Item 5.

(c) The trading dates, number of shares of Common Stock purchased or sold, and the price per share of Common Stock for all transactions by the Reporting Persons in shares of Common Stock within the last 60 days, all of which were brokered transactions, are set forth below.

Name of Reporting Person	Date	Number of Shares Purchased (Sold)	Average Price per Share
Becker Drapkin QP	12/5/2011	20,450	\$1.8646
Becker Drapkin QP	12/5/2011	28,717	\$1.8700
Becker Drapkin QP	12/6/2011	317,711	\$2.0436
Becker Drapkin QP	12/7/2011	478,610	\$2.0727
Becker Drapkin QP	12/7/2011	29,935	\$1.9911
Becker Drapkin, L.P.	12/5/2011	3,050	\$1.8646
Becker Drapkin, L.P.	12/5/2011	4,283	\$1.8700
Becker Drapkin, L.P.	12/6/2011	47,389	\$2.0436
Becker Drapkin, L.P.	12/7/2011	71,390	\$2.0727
Becker Drapkin, L.P.	12/7/2011	4,465	\$1.9911
BD Partners IV	12/12/2011	307,200	\$1.9000
BD Partners IV	12/12/2011	3,200	\$1.9647
BD Partners IV	12/13/2011	100,000	\$2.1000
BD Partners IV	12/13/2011	200	\$2.2000
BD Partners IV	12/13/2011	85,800	\$2.1931
BD Partners IV	12/14/2011	50,000	\$2.2650
BD Partners IV	12/14/2011	68,000	\$2.2763

(d) No person other than the Reporting Persons has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock set forth above.

(e) Not applicable.

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

On December 14, 2011, the Reporting Persons entered into the Joint Filing Agreement pursuant to which they agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to the securities of the Issuer. Such Joint Filing Agreement is attached hereto as Exhibit 1.

Except for the matters described herein, no Reporting Person has any contract, arrangement, understanding or relationship with any person with respect to any securities of the Issuer.

Item 7. Material to Be Filed as Exhibits

- Exhibit 1 Joint Filing Agreement, dated December 14, 2011, by and among Becker Drapkin Management, L.P.; Becker Drapkin Partners (QP), L.P., Becker Drapkin Partners, L.P.; BD Partners IV, L.P.; BC Advisors, LLC; Steven R. Becker; and Matthew A. Drapkin
- Exhibit 2 Power of Attorney dated July 19, 2010, signed by Steven R. Becker
- Exhibit 3 Power of Attorney dated March 16, 2010, signed by Matthew A. Drapkin

SIGNATURES

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned, severally and not jointly, certifies that the information set forth in this statement is true, complete and correct.

Dated: December 14, 2011

BECKER DRAPKIN MANAGEMENT, L.P.

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BECKER DRAPKIN PARTNERS (QP), L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BECKER DRAPKIN PARTNERS, L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BD PARTNERS IV, L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BC ADVISORS, LLC

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

STEVEN R. BECKER

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

MATTHEW A. DRAPKIN

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned hereby agrees to the joint filing on behalf of each of them of a statement on Schedule 13D (including amendments thereto) with respect to the Common Stock of Pixelworks, Inc., and that this Agreement be included as an Exhibit to such joint filing.

Each of the undersigned acknowledges that each shall be responsible for the timely filing of any statement (including amendments) on Schedule 13D, and for the completeness and accuracy of the information concerning him or it contained herein, but shall not be responsible for the completeness and accuracy of the information concerning the other persons making such filings, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: December 14, 2011

[Signature Page Follows]

BECKER DRAPKIN MANAGEMENT, L.P.

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BECKER DRAPKIN PARTNERS (QP), L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BECKER DRAPKIN PARTNERS, L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BD PARTNERS IV, L.P.

By: Becker Drapkin Management, L.P., its general partner

By: BC Advisors, LLC, its general partner

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

BC ADVISORS, LLC

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

STEVEN R. BECKER

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

MATTHEW A. DRAPKIN

By: /s/ Andrew S. McLelland
Name: Andrew S. McLelland
Title: Attorney-in-Fact

Power of Attorney

July 19, 2010

Securities and Exchange Commission
450 Fifth Street, NW
Washington, DC 20549

This letter confirms that each and any of Richard J. Bims, Andrew S. McLelland, and Michael S. Grisolia is authorized and designated to sign all securities related filings with the Securities and Exchange Commission, including Forms 3, 4 and 5, on my behalf and on behalf of each entity for which I may sign such filings. This authorization and designation shall be valid until either revoked in writing by the undersigned or until three years from the date of this letter.

Very truly yours,

/s/ Steven R. Becker
Steven R. Becker

Power of Attorney

March 16, 2010

Securities and Exchange Commission
450 Fifth Street, NW
Washington, DC 20549

This letter confirms that each and any of Richard J. Birns, Andrew S. McLelland, and Michael S. Grisolia is authorized and designated to sign all securities related filings with the Securities and Exchange Commission, including Forms 3, 4 and 5, on my behalf and on behalf of each entity for which I may sign such filings. This authorization and designation shall be valid until either revoked in writing by the undersigned or until three years from the date of this letter.

Very truly yours,

/s/ Matthew A. Drapkin
Matthew A. Drapkin