AXCELIS TECHNOLOGIES INC Form SC 13G/A February 09, 2007

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. _)*

AXCELIS TECHNOLOGIES INC

(Name of Issuer)

Common Stock

(Title of Class of Securities)

054540109

(CUSIP Number)

December 31, 2006

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:
x 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

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).

CUSIP No. 054540109

1. Names of Reporting Persons.

	I.R.S. Identification Nos. of above persons (entities only).
	Dimensional Fund Advisors LP (Tax ID: 22-2370029) Check the Appropriate Box if a Member of a Group (See Instructions)
	(b) x SEC Use Only
4.	Citizenship or Place of Organization
	Delaware Limited Partnership 5. Sole Voting Power
Num Shar	ber of
	ficially 8203296 **see Note 1** 6. Shared Voting Power
Own	ed by
Each	
Repo Perso	orting 0 7. Sole Dispositive Power
With	
	8203296 **see Note 1** 8. Shared Dispositive Power

9. Aggregate Amount Beneficially Owned by Each Reporting Person

8203296 **see Note 1**

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)

8.1%

12. Type of Reporting Person (See Instructions)

IA

Item 1. (a) Name of Issuer AXCELIS TECHNOLOGIES INC Address of Issuer s Principal Executive Offices 108 Cherry Hill Dr, Beverly, MA 01915-1068, United States Item 2. Name of Person Filing (a) Dimensional Fund Advisors LP Address of Principal Business Office or, if none, Residence (b) 1299 Ocean Avenue, Santa Monica, CA 90401 Citizenship (c) Delaware Limited Partnership Title of Class of Securities Common Stock **CUSIP** Number 054540109 Item 3. If this statement is filed pursuant to §\$240.13d-1(b) or 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 §240.13d-1(b)(1)(ii)(E); X An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); (f) (g) A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G); A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); (h) (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);

Group, in accordance with §240.13d-1(b)(1)(ii)(J).

(j)

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

8203296 **see Note 1**

(b) Percent of class:

8.1%

(c) Number of shares			ber of shares as to which the person has:		
		(i)	Sole power to vote or to direct the vote:		
			8203296 **see Note 1**		
		(ii)	Shared power to vote or to direct the vote:		
			0		
		(iii)	Sole power to dispose or to direct the disposition of:		
		(111)	Sole perior to dispose of to disposition of		
			8203296 **see Note 1**		
		(iv)	Shared power to dispose or to direct the disposition of:		
		` /			
			0		
Investmen investmen voting pow owner of t disclaims l reporting p	t Company t companie ver over the he shares coeneficial of person or a	Act es, trues, true second the owner of	nvestment Advisors Act of 1940, furnishes investment advice to four investment companies registered under the of 1940, and serves as investment manager to certain other commingled group trusts and separate accounts. These sts and accounts are the Funds. In its role as investment advisor or manager, Dimensional possesses investment and/or urities of the Issuer described in this schedule that are owned by the Funds, and may be deemed to be the beneficial Issuer held by the Funds. However, all securities reported in this schedule are owned by the Funds. Dimensional riship of such securities. In addition, the filing of this Schedule 13G shall not be construed as an admission that the its affiliates is the beneficial owner of any securities covered by this Schedule 13G for any other purposes than ities Exchange Act of 1934.		
Item 5.	Ownershi	ip of l	Five Percent or Less of a Class		
			iled to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than securities, check the following [].		
Item 6.	Ownersh	ip of I	More than Five Percent on Behalf of Another Person.		
	from the	sale c	cribed in Note 1 above have the right to receive or the power to direct the receipt of dividends from, or the proceeds of, the securities held in their respective accounts. To the knowledge of Dimensional, the interest of any one such Fund d 5% of the class of securities. Dimensional disclaims beneficial ownership of all such securities.		
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.	Identifica	ition a	and Classification of Members of the Group		
	N/A				
Item 9.	Notice of	Diss	olution of Group		

Item 10.

N/A

Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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.

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.

DIMENSIONAL FUND ADVISORS LP	
February 1, 2007	
Date	
By: Dimensional Holdings Inc., General F	artner
/s/ Christopher Crossan	
Signature	
Global Chief Compliance Officer	
Title	