

SCHEDULE 13G
(12/31/97)

GIGA TRONICS INC
Cusip # 375175106
Amendment

Cusip # 375175106

Item 1: REPORTING PERSONS
Dimensional Fund Advisors Inc. (Tax ID: 22-2370029)

Item 4: CITIZENSHIP
Delaware Corporation

Item 5: SOLE VOTING POWER
115,400 (See Note 1)*
* Persons who are officers of Dimensional Fund Advisors Inc. also serve as officers of DFA Investment Dimensions Group Inc., (the "Fund") and The DFA Investment Trust Company (the "Trust"), each an open-end management investment company registered under the Investment Company Act of 1940. In their capacities as officers of the Fund and the Trust, these persons vote 35,000 additional shares which are owned by the Fund and 21,500 shares which are owned by the Trust. (Included in Item 7 of this page of this Schedule)

Item 6: SHARED VOTING POWER --
None

Item 7: SOLE DISPOSITIVE POWER --
171,900 (See Note 1)

Item 8: SHARED DISPOSITIVE POWER --
0

Item 9: AGGREGATE AMOUNT BENEFICIALLY OWNED --
171,900 (See Note 1)

Item 11: PERCENT OF CLASS REPRESENTED BY LINE 9 --
4.52 (See Note 1)

Item 12: TYPE OF REPORTING PERSON --
IA

ITEM 1(A). NAME OF ISSUER

GIGA TRONICS INC

ITEM 1(B). ADDRESS OF ISSUER

4650 Norris Canyon Road
San Ramon, CA 94583

ITEM 2(A). NAME OF PERSON FILING

Dimensional Fund Advisors

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE

ITEM 2(C). CITIZENSHIP

A Delaware Corporation

ITEM 2(D). TITLE OF CLASS OF SECURITIES

Common Stock

ITEM 2(E). CUSIP NUMBER

375175106

ITEM 3. This statement is filed pursuant to Rule 13d-1 (b), or 13d-2 (b) and the person filing is an investment advisor registered under section 203 of the Investment Advisors Act of 1940.

Page 4 of 4

ITEM 4. OWNERSHIP

ITEM 4(a). AMOUNT BENEFICIALLY OWNED

See Page 2, Item No. 9

ITEM 4(b). PERCENT OF CLASS

See Page 2, Item No. 11

ITEM 4(c). NUMBER OF SHARE AS TO WHICH SUCH PERSON HAS:

(i). SOLE POWER TO VOTE OR DIRECT THE VOTE --

See Page 2, Item No. 5

(ii). SHARED POWER TO VOTE OR TO DIRECT THE VOTE --

None

(iii). SOLE POWER TO DISPOSE OR TO DIRECT DISPOSITION OF --

See Page 2, Item No. 9

(iv). SHARE POWER TO DISPOSE OR TO DIRECT DISPOSITION OF --

None

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

If this statement is being filed to report the fact that as of 12/31/97 the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON

All Securities reported in this schedule are owned by advisory clients of Dimensional Fund Advisors Inc., no one of which to the knowledge of Dimensional Fund Advisors Inc. owns more than 5% of the class. Dimensional Fund Advisors Inc 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:

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 acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

(Note 1): All securities reported on the schedule are owned by advisory clients of Dimensional Fund Advisors Inc. Dimensional Fund

Advisors Inc. disclaims beneficial ownership of all such securities.

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.

Signature

Monday, February 6, 1997
Date

Michael T. Scardina
Vice President and Chief Financial Officer
Name/Title