

THERMA WAVE INC  
Form 3  
January 17, 2007

**FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

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**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
30(h) of the Investment Company Act of 1940

(Print or Type Responses)

<p>1. Name and Address of Reporting Person *</p> <p>Â KLA TENCOR CORP</p> <p>(Last) (First) (Middle)</p> <p>ONE TECHNOLOGY DRIVE</p> <p>(Street)</p> <p>MILPITAS, CA 95035</p> <p>(City) (State) (Zip)</p>	<p>2. Date of Event Requiring Statement</p> <p>(Month/Day/Year)</p> <p>01/07/2007</p>	<p>3. Issuer Name and Ticker or Trading Symbol</p> <p>THERMA WAVE INC [TWAV]</p>	<p>4. Relationship of Reporting Person(s) to Issuer</p> <p>(Check all applicable)</p> <p><input type="checkbox"/> Director <input type="checkbox"/> 10% Owner</p> <p><input type="checkbox"/> Officer <input checked="" type="checkbox"/> Other</p> <p>(give title below) (specify below)</p> <p>See footnotes 1 and 2 below</p>	<p>5. If Amendment, Date Original Filed(Month/Day/Year)</p>	<p>6. Individual or Joint/Group Filing(Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p><input type="checkbox"/> Form filed by More than One Reporting Person</p>
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**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
No securities owned	\$ 0	I	See footnotes 1 and 2 below <sup>(1)</sup> <sup>(2)</sup>

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly. SEC 1473 (7-02)

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of	

Shares (I)  
(Instr. 5)

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
KLA TENCOR CORP ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	Â	Â	Â	See footnotes 1 and 2 below

## Signatures

/s/ Jeffrey L. Hall, Chief Financial Officer  
01/17/2007

\*\*Signature of Reporting Person Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

- KLA-Tencor Corporation ("KLA"), Therma-Wave, Inc. ("Therma-Wave") and a wholly-owned subsidiary of KLA ("Merger Corp.") entered into an Agreement and Plan of Merger, dated as of January 7, 2007 (the "Merger Agreement"), pursuant to which Merger Corp.
- (1) will commence a tender offer (the "Offer") to acquire the outstanding common stock (the "Common Shares") and Series B Convertible Preferred Stock (the "Preferred Shares") of Therma-Wave. Upon consummation of the Offer, Therma-Wave will merge with Merger Corp. (the "Merger").
  - (2) Certain officers and directors and the holders of the Preferred Shares (the "Shareholders") entered into a tender and support agreement (the "Tender and Support Agreement"), pursuant to which the Shareholders agreed to tender their Common Shares and Preferred Shares within three business days of the commencement of the Offer. KLA has no pecuniary interest in the shares held by the Shareholders. KLA expressly disclaims beneficial ownership of any shares covered by the Tender and Support Agreement.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.