UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 144

NOTICE OF PROPOSED SALE OF SECURITIES PURSUANT TO RULE 144 UNDER THE SECURITIES ACT OF 1933

OMB 3235-0101 Number: Expires: February 28, 2014 Estimated average burden hours per 1.00 response

OMB APPROVAL

SEC USE ONLY
DOCUMENT
SEQUENCE NO.

CUSIP NUMBER

ATTENTION: Transmit for filing 3 copies of this form concurrently with either placing an order with a broker to execute sale or executing a sale directly with a market maker.

| 1 (a) NAME OF ISSUER (Please type or print) | | (b) IRS IDENT. NO. | (c) S.E.C. FILE | NO | WORK L | OCATION |
|--|----------------------------------|-----------------------|-----------------|----------|-----------|----------|
| MICROCHIP TECHNOLOGY INC | | 86-0629024 | 0-21184 | | | |
| 1 (d) ADDRESS OF ISSUER STREET | | CITY | STATE | ZIP CODE | (e) TELEI | PHONE NO |
| 2355 We | st Chandler Blvd | Chandler | AZ | 85224 | 480-792 | -7200 |
| | | | | | | |
| 2 (a) NAME OF PERSON FOR WHOSE ACCOUNT THE SECURITIES ARE TO BE SOLD | (b) RELATIONSHIP TO ISSUER | (c) ADDRESS STREET | | CITY | STATE | ZIP CODE |
| Ganesh and Hema Moorthy Rev Lvg Trst dtd 3/30/00 | Officer | 2355 West Chandler Bl | vd | Chandler | AZ | 85224 |

INSTRUCTION: The person filing this notice should contact the issuer to obtain the I.R.S. Identification Number and the S.E.C. File Number.

| 3 (a) | <i>(b)</i> | SEC USE ONLY | (c) | (d) | (e) | \mathcal{O} | (g) |
|--------------------------|--|---------------|---------------------------------------|---------------------|---------------------------------------|--------------------------|----------------------------|
| Title of the Class of | Name and Address of Each Broker Through Whom the | Broker-Dealer | Number of Shares or Other Units | Aggregate Market | Number of Shares or Other Units | Approximate Date of Sale | Name of Each Securities |
| Securities To Be Sold | Securities are to be Offered or Each Market Maker | File Number | To Be Sold | Value | Outstanding | (See instr. 3(f)) | Exchange |
| Solu | who is Acquiring the Securities | | (See instr. 3(c)) | (See instr. 3(d)) | (See instr. 3(e)) | (MO. DAY YR.) | (See instr. 3(g)) |
| Common | Deutsche Asset & Wealth Mgmt 2000 Avenue of the Stars Suite 910-N Los Angeles, CA 90067 | | 20,000 | 895,200 | 199.1M | 2/11/2014 | ОТС |

INSTRUCTIONS:

- 1. (a) Name of issuer
 - (b) Issuer's I.R.S. Identification Number
 - (c) Issuer's S.E.C. file number, if any
 - (d) Issuer's address, including zip code
 - (e) Issuer's telephone number, including area code
- 2. (a) Name of person for whose account the securities are to be sold
 - (b) Such person's relationship to the issuer (e.g., officer, director, 10% stockholder, or member of immediate family of any of the foregoing)
 - (c) Such person's address, including zip code

- 3. (a) Title of the class of securities to be sold
 - (b) Name and address of each broker through whom the securities are intended to be sold
 - (c) Number of shares or other units to be sold (if debt securities, give the aggregate face amount)
 - (d) Aggregate market value of the securities to be sold as of a specified date within 10 days prior to filing of this notice
 - (e) Number of shares or other units of the class outstanding, or if debt securities the face amount thereof outstanding, as shown by the most recent report or statement published by the issuer
 - (f) Approximate date on which the securities are to be sold
 - (g) Name of each securities exchange, if any, on which the securities are intended to be sold

TABLE I — SECURITIES TO BE SOLD

Furnish the following information with respect to the acquisition of the securities to be sold and with respect to the payment of all or any part of the purchase price or other consideration therefor:

| Title of | Date you | Natura SA aminisia Taman sina | Name of Person from Whom Acquired (If gift, also give date donor | Amount of | Date of | Network of Deciment |
|-----------|-----------|-----------------------------------|--|---------------------|-----------|---------------------|
| the Class | Acquired | Nature of Acquisition Transaction | acquired) | Securities Acquired | Payment | Nature of Payment |
| Common | 2/11/2014 | Stock Option Exercise | Microchip Technology Inc | 20,000 | 2/11/2014 | Cash |

INSTRUCTIONS:

If the securities were purchased and full payment therefor was not made in cash at the time of purchase, explain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if payment was made in installments describe the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

TABLE II — SECURITIES SOLD DURING THE PAST 3 MONTHS

Furnish the following information as to all securities of the issuer sold during the past 3 months by the person for whose account the securities are to be sold.

| | | | Amount of | |
|----------------------------|--------------------------|--------------|-----------------|----------------|
| Name and Address of Seller | Title of Securities Sold | Date of Sale | Securities Sold | Gross Proceeds |

EXPLANATION OF RESPONSES:

REMARKS:

INSTRUCTIONS:

See the definition of "person" in paragraph (a) of Rule 144. Information is to be given not only as to the person for whose account the securities are to be sold but also as to all other persons included in that definition. In addition, information shall be given as to sales by all persons whose sales are required by paragraph (e) of Rule 144 to be aggregated with sales for the account of the person filing this notice.

ATTENTION:

The person for whose account the securities to which this notice relates are to be sold hereby represents by signing this notice that he does not know any material adverse information in regard to the current and prospective operations of the Issuer of the securities to be sold which has not been publicly disclosed. If such person has adopted a written trading plan or given trading instructions to satisfy Rule 10b5-1 under the Exchange Act, by signing the form and indicating the date that the plan was adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date.

| February 11, 2014 |
|--|
| DATE OF NOTICE |
| |
| DATE OF PLAN ADOPTION OR GIVING OF INSTRUCTION, IF |
| RELYING ON RULE 10B5-1 |
| |
| February 11, 2014 |
| DATE OF NOTICE |
| |
| DATE OF PLAN ADOPTION OR GIVING OF INSTRUCTION, IF |
| RELYING ON RULE 10B5-1 |

/s/ Ganesh Moorthy (SIGNATURE)

The notice shall be signed by the person for whose account the securities are to be sold.

At least one

copy of the notice shall be manually signed. Any copies not manually signed shall bear typed or printed signatures.

/s/ Hema Moorthy

(SIGNATURE)

The notice shall be signed by the person for whose account the securities are to be sold.

At least one

copy of the notice shall be manually signed. Any copies not manually signed shall bear typed or printed signatures.

ATTENTION: Intentional misstatements or omission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)

SEC 1147 (02-08)