

LIGHTWAVE LOGIC, INC.

THIS PROXY IS BEING SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned hereby appoint(s) James S. Marcelli and Philips W. Smith with the power of substitution and resubstitution to vote any and all shares of capital stock of Lightwave Logic, Inc. (the "Company") which the undersigned would be entitled to vote as fully as the undersigned could do if personally present at the Annual Meeting of the Company, to be held on Thursday, July 8, 2010, at 2:00 p.m. local time, and at any adjournments thereof, hereby revoking any prior proxies to vote said stock, upon the following items more fully described in the notice of any Proxy Statement for the Annual Meeting (receipt of which is hereby acknowledged):

1. ELECTION OF DIRECTORS

VOTE

- FOR ALL nominees listed below EXCEPT as marked to the contrary below
- WITHHOLD AUTHORITY to vote for ALL nominees listed below

(**Instruction:** To withhold authority to vote for any individual nominee strike a line through the nominee's name below.)

- 01. James S. Marcelli 02. Frederick J. Goetz, Jr. 03. Andrew J. Ashton 04. Philips W. Smith
- 05. Ross Fasick 06. William C. Pickett, III 07. Thomas E. Zelibor

2. APPROVAL OF THE AMENDMENT TO THE COMPANY'S 2007 EMPLOYEE STOCK PLAN.

- FOR the approval of the amendment to the Employee Stock Plan
- AGAINST
- ABSTAIN

3. RATIFICATION OF THE APPOINTMENT OF MORISON COGEN LLP TO SERVE AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR 2010.

- FOR the ratification of the appointment of Morison Cogen LLP
- AGAINST
- ABSTAIN

THIS PROXY WILL BE VOTED AS SPECIFIED ABOVE. UNLESS OTHERWISE INDICATED, THIS PROXY WILL BE VOTED FOR ELECTION OF THE SEVEN NOMINEES NAMED IN ITEM 1, THE APPROVAL OF THE AMENDMENT TO THE COMPANY'S 2007 EMPLOYEE STOCK PLAN IN ITEM 2, AND THE RATIFICATION OF THE APPOINTMENT OF MORISON COGEN LLP TO SERVE AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR 2010 IN ITEM 3.

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the meeting.

This proxy is solicited on behalf of the board of directors of Lightwave Logic, Inc.

Dated: _____

Signature

Signature if jointly owned:

Please sign exactly as the name appears on your stock certificate. When shares of capital stock are held by joint tenants, both should sign. When signing as attorney, executor, administrator, trustee, guardian, or corporate officer, please include full title as such. If the shares of capital stock are owned by a corporation, sign in the full corporate name by an authorized officer. If the shares of capital stock are owned by a partnership, sign in the name of the partnership by an authorized officer.

**PLEASE MARK, DATE, SIGN AND RETURN THIS PROXY PROMPTLY
IN THE ENCLOSED ENVELOPE**



LIGHTWAVELOGIC™

YOUR PROXY CONTROL NUMBER



VOTE BY INTERNET:

Log-on to www.votestock.com

Enter your control number printed to the left

Vote your proxy by checking the appropriate boxes

Click on "Accept Vote"



VOTE BY TELEPHONE:

After you call the phone number below, you will be asked to enter the control number at the left of the page. You will need to respond to only a few simple prompts. Your vote will be confirmed and cast as directed.

Call toll-free in the U.S. or Canada at

1-866-578-5350 on a touch-tone telephone



VOTE BY MAIL:

If you do not wish to vote over the Internet or by telephone, please complete, sign, date and return the accompanying proxy card in the pre-paid envelope provided.

You may vote by Internet or telephone 24 hours a day, 7 days a week. Internet and telephone voting is available through 11:59 p.m., prevailing time, on **July 7, 2010.**

Your Internet or telephone vote authorizes the named proxies to vote in the same manner as if you marked, signed and returned your proxy card.