

Notice of Guaranteed Delivery
(Not to be used for Signature Guarantee)
for
Tender of Shares of Common Stock
of
COHERENT, INC.

**THE OFFER PRORATION PERIOD AND WITHDRAWAL RIGHTS WILL EXPIRE
AT 5:00 P.M., NEW YORK CITY TIME, ON MARCH 11, 2011,
UNLESS THE OFFER IS EXTENDED.**

As set forth in Section 3 of the Offer to Purchase (as defined below) this form must be used to accept the Offer (as defined below) if (1) certificates for your shares of common stock, par value \$0.01 per share, of Coherent, Inc., a Delaware corporation, are not immediately available, (2) the procedures for book-entry transfer cannot be completed on a timely basis or (3) time will not permit all required documents to reach the Depository prior to the Expiration Time. This form may be delivered by hand or transmitted by facsimile transmission or mail to the Depository. See Section 3 of the Offer to Purchase. Unless the context otherwise requires, all references to the shares shall refer to the common stock of the Company.

The Depository for the Offer is:

American Stock Trust and Transfer Company

By Mail or Overnight Courier:
American Stock Transfer & Trust
Company
Operations Center
Attn: Reorganization Department
6201 15th Avenue
Brooklyn, NY 11219

By Facsimile Transmission:
For Eligible Institutions Only:
(718) 234-5001

For Confirmation Only
Telephone:(877) 248-6417

By Hand:
American Stock Transfer & Trust
Company
Attn: Reorganization Department
59 Maiden Lane
Concourse Level
New York, NY 10038

Delivery of this Notice of Guaranteed Delivery to an address other than as set forth above will not constitute a valid delivery.

This Notice of Guaranteed Delivery is not to be used to guarantee signatures. If a signature on a Letter of Transmittal is required to be guaranteed by an eligible institution under the instructions in the Letter of Transmittal, the signature guarantee must appear in the applicable space provided in the signature box on the Letter of Transmittal.

Ladies and Gentlemen:

The undersigned hereby tenders to Coherent, Inc., a Delaware corporation (the "Company"), at the price per share indicated in this Notice of Guaranteed Delivery, on the terms and subject to the conditions set forth in the Offer to Purchase dated February 10, 2011 (the "Offer to Purchase"), and the related Letter of Transmittal (which, together with any amendments or supplements thereto, collectively constitute the "Offer"), receipt of which is hereby acknowledged, the number of shares set forth below, all pursuant to the guaranteed delivery procedures set forth in Section 3 of the Offer to Purchase. Unless the context otherwise requires, all references to the shares shall refer to the common stock of the Company.

Number of Shares to be tendered: _____ **shares.**

THE UNDERSIGNED IS TENDERING SHARES AS FOLLOWS (CHECK ONLY ONE BOX):

(1) SHARES TENDERED AT PRICE DETERMINED BY STOCKHOLDER (SEE INSTRUCTION 5 OF THE LETTER OF TRANSMITTAL)

By checking ONE of the following boxes below INSTEAD OF THE BOX BELOW UNDER "(2) Shares Tendered at Price Determined Under the Offer," the undersigned hereby tenders shares at the price checked. This action could result in none of the shares being purchased if the purchase price determined by the Company for the shares is less than the price checked below. **A STOCKHOLDER WHO DESIRES TO TENDER SHARES AT MORE THAN ONE PRICE MUST COMPLETE A SEPARATE NOTICE OF GUARANTEED DELIVERY AND/OR LETTER OF TRANSMITTAL FOR EACH PRICE AT WHICH SHARES ARE TENDERED.** The same shares cannot be tendered, unless previously properly withdrawn as provided in Section 4 of the Offer to Purchase, at more than one price.

PRICE (IN DOLLARS) PER SHARE AT WHICH SHARES ARE BEING TENDERED

- | | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> \$53.00 | <input type="checkbox"/> \$54.00 | <input type="checkbox"/> \$55.00 | <input type="checkbox"/> \$56.00 | <input type="checkbox"/> \$57.00 | <input type="checkbox"/> \$58.00 |
| <input type="checkbox"/> \$53.25 | <input type="checkbox"/> \$54.25 | <input type="checkbox"/> \$55.25 | <input type="checkbox"/> \$56.25 | <input type="checkbox"/> \$57.25 | <input type="checkbox"/> \$58.25 |
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| <input type="checkbox"/> \$53.75 | <input type="checkbox"/> \$54.75 | <input type="checkbox"/> \$55.75 | <input type="checkbox"/> \$56.75 | <input type="checkbox"/> \$57.75 | <input type="checkbox"/> \$58.75 |
| | | | | | <input type="checkbox"/> \$59.00 |

OR

(2) SHARES TENDERED AT PRICE DETERMINED UNDER THE OFFER (SEE INSTRUCTION 5 OF THE LETTER OF TRANSMITTAL)

By checking the box below INSTEAD OF ONE OF THE BOXES ABOVE UNDER "(1) Shares Tendered at Price Determined by Stockholder," the undersigned hereby tenders shares at the purchase price, as the same shall be determined by the Company in accordance with the terms of the Offer. For purposes of determining the purchase price, those shares that are tendered by the undersigned agreeing to accept the purchase price determined in the Offer will be deemed to be tendered at the minimum price.

The undersigned wants to maximize the chance of having the Company purchase all of the shares the undersigned is tendering (subject to the possibility of proration). Accordingly, by checking this box instead of one of the price boxes above, the undersigned hereby tenders shares at, and is willing to accept, the purchase price determined by the Company in accordance with the terms of the Offer. **THIS ACTION COULD LOWER THE PURCHASE PRICE AND COULD RESULT IN RECEIVING THE MINIMUM PRICE OF \$53.00 PER SHARE.**

CHECK ONLY ONE BOX UNDER (1) OR (2) ABOVE. IF MORE THAN ONE BOX IS CHECKED ABOVE, OR IF NO BOX IS CHECKED, THERE IS NO VALID TENDER OF SHARES.

ODD LOTS
(See Instruction 14 of the Letter of Transmittal)

To be completed only if shares are being tendered by or on behalf of a person owning, beneficially or of record, an aggregate of fewer than 100 shares. The undersigned either (check one box):

is the beneficial or record owner of an aggregate of fewer than 100 shares, all of which are being tendered; or

is a broker, dealer, commercial bank, trust company, or other nominee that (a) is tendering for the beneficial owner(s), shares with respect to which it is the record holder, and (b) believes, based upon representations made to it by the beneficial owner(s), that each such person is the beneficial owner of an aggregate of fewer than 100 shares and is tendering all of the shares.

In addition, the undersigned is tendering shares either (check one box):

at the purchase price, as the same will be determined by the Company in accordance with the terms of the Offer (persons checking this box need not indicate the price per share above).

at the price per share indicated above in the section captioned "Price (In Dollars) per Share at Which Shares Are Being Tendered".

CONDITIONAL TENDER
(See Instruction 13 of the Letter of Transmittal)

A tendering stockholder may condition his or her tender of shares upon the Company purchasing a specified minimum number of the shares tendered, all as described in Section 6 of the Offer to Purchase. Unless at least the minimum number of shares you indicate below is purchased by the Company pursuant to the terms of the Offer, none of the shares tendered by you will be purchased. **It is the tendering stockholder's responsibility to calculate the minimum number of shares that must be purchased if any are purchased, and each stockholder is urged to consult his or her own tax advisor before completing this section.** Unless this box has been checked and a minimum specified, your tender will be deemed unconditional.

The minimum number of shares that must be purchased from me, if any are purchased from me, is: _____ shares.

If, because of proration, the minimum number of shares designated will not be purchased, the Company may accept conditional tenders by random lot, if necessary. However, to be eligible for purchase by random lot, the tendering stockholder must have tendered all of his or her shares and checked this box:

The tendered shares represent all shares held by the undersigned.

Certificate Nos. (if available): _____

Name(s) of Record Holder(s): _____

(Please Type or Print)

Address(es): _____

Zip Code: _____

Daytime Area Code and Telephone Number: _____

Signature(s): _____

Dated: _____, 2011

If shares will be tendered by book-entry transfer, check this box and provide the following information:

Name of Tendering Institution: _____

Account Number at Book-Entry Transfer Facility: _____

THE GUARANTEE SET FORTH BELOW MUST BE COMPLETED.

GUARANTEE
(Not To Be Used For Signature Guarantee)

The undersigned, a firm that is a member in good standing of a recognized Medallion Program approved by the Securities Transfer Association, Inc., including the Securities Transfer Agents Medallion Program, the New York Stock Exchange, Inc. Medallion Signature Program or the Stock Exchange Medallion Program, or is otherwise an "eligible guarantor institution," as that term is defined in Rule 17Ad-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), hereby guarantees (1) that the above named person(s) "own(s)" the shares tendered hereby within the meaning of Rule 14e-4 under the Exchange Act, (2) that such tender of shares complies with Rule 14e-4 under the Exchange Act and (3) to deliver to the Depository either the certificates representing the shares tendered hereby, in proper form for transfer, or a book-entry confirmation (as defined in the Offer to Purchase) with respect to such shares, in any such case together with a properly completed and duly executed Letter of Transmittal (or a facsimile thereof), with any required signature guarantees, or an agent's message (as defined in the Offer to Purchase) in the case of a book-entry delivery, and any other required documents, within three business days (as defined in the Offer to Purchase) after the date hereof.

The eligible institution that completes this form must communicate the guarantee to the Depository and must deliver the Letter of Transmittal and certificates for shares to the Depository within the time period shown herein. Failure to do so could result in financial loss to such eligible institution.

Name of Firm: _____

Authorized Signature: _____

Name: _____
(Please Type or Print)

Title: _____

Address: _____

Zip Code: _____

Area Code and Telephone Number: _____

Dated: _____, 2011

Note: Do not send certificates for shares with this Notice.
Certificates for Shares should be sent with your Letter of Transmittal.