UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

July 2, 2009

Commission File Number: 333-142287

NXP B.V.

(Exact name of registrant as specified in charter)

The Netherlands

(Jurisdiction of incorporation or organization)

60 High Tech Campus, 5656 AG, Eindhoven, The Netherlands

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F x Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1).

Yes o No x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7).

Yes o No x

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes o No x

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission

Dr. Jean A.W. Schreurs 60 High Tech Campus 5656 AG Eindhoven—The Netherlands



NXP Announces Expiration and Final Results of its Cash Offer

Eindhoven, The Netherlands, July 2, 2009. NXP Semiconductors, the independent semiconductor company founded by Philips ("NXP"), announced today the expiration and final results of its previously announced offer to purchase for cash (the "Offer") the notes listed in the table below (collectively, the "Notes"), upon the terms and subject to the conditions set forth in the offer to purchase (the "Offer to Purchase"). The Offer expired and the early tender date for the Offer occurred on 12:00 Midnight, New York City time, on July 1, 2009. As of such date, the following aggregate principal amount of Notes had been properly tendered (and not validly withdrawn) and will be accepted upon the terms and subject to the conditions set forth in the Offer to Purchase:

CUSIP/ISIN Title of Notes to be Tenders Total Tender Offer
Tendered Received and Consideration(2) Consideration(2)

		Accepted(1)		
62947QAG3/ US62947QAG38 (Registered), 62947QAC2/ US62947QAC24 (144A) and N65965AC4/ USN65965AC42 (Reg S)	U.S. dollar-denominated 9½% senior notes due 2015 (the "U.S. Dollar Unsecured Notes")	\$57.5	\$375	\$350
XS0298437087 (Registered), XS0270228553	Euro-denominated 8 ⁵ / ₈ % senior notes due 2015 (the "Euro			
(144A) and XS0270227316 (Reg S)	Unsecured Notes")	€74.1	€375	€350
62947QAE8/ US62947QAE89 (Registered)62947QAA6/ US62947QAA67 (144A) and N65965AA8/ USN65965AA85 (Reg S)	U.S. dollar-denominated floating rate senior secured notes due 2013 (the "U.S. Dollar Floating Rate Notes")	\$121.6	\$425	\$400
XS0298436436 (Registered), XS0270226938 (144A) and XS0270226185 (Reg S)	Euro-denominated floating rate senior secured notes due 2013 (the "Euro Floating Rate Notes")	€92.6	€425	€400
62947QAF5/ U.S.62947QAF54 (Registered), 62947QAB4/ US62947QAB41 (144A) and N65965AB6/ USN65965AB68 (Reg S)	U.S. dollar-denominated 7 ⁷ / ₈ % senior secured notes due 2014 (the "Fixed Rate Secured Notes")	\$90.1	\$475	\$450
1.055 051 12 0/ 051.055 051 1500 (Reg 0)	i inca rate occured riotes)	40011	\$.75	\$.50

⁽¹⁾ In millions.

Upon the terms and subject to the conditions of the Offer to Purchase, NXP agreed to accept tenders (1) first, of the U.S. Dollar Unsecured Notes and Euro Unsecured Notes (together, the "First Priority Notes") up to \$300 million (the "Maximum Payment Amount"), (2) then (to the extent that the Maximum Payment Amount has not been reached), of the U.S. Dollar Floating Rate Notes and Euro Floating Rate Notes (together, the "Second Priority Notes") up to the lesser of the remaining Maximum Payment Amount or \$150 million (the "Maximum Secured Payment"), and (3) finally (to the extent that the Maximum Payment Amount has not been reached), of the Fixed Rate Secured Notes (the "Third Priority Notes") up to the lesser of the remaining Maximum Payment Amount or remaining Maximum Secured Payment. Accordingly, NXP has accepted for purchase all of the First Priority Notes and all of the Second Priority Notes properly tendered (and not validly withdrawn) in the Offer. The amount of Third Priority Notes properly tendered (and not validly withdrawn), however, exceeded the remaining Maximum Secured Payment of \$42.8 million. Therefore, NXP has accepted for purchase a pro rata portion of 45.7% of the Third Priority Notes



1

properly tendered (and not validly withdrawn) by each holder in the Offer.

All holders who properly tendered (and have not validly withdrawn) Notes in the Offer are eligible to receive the total consideration per \$1,000 or €1,000 principal amount of Notes accepted in the Offer (the "Total Consideration"), as listed in the table above. The Total Consideration consists for each series of Notes out of the respective tender offer consideration (the "Tender Offer Consideration"), as listed in the table above, and an early tender premium of \$25 or €25, respectively (the "Early Tender Premium"). The Tender Offer Consideration for the First Priority Notes has been determined in accordance with a modified Dutch auction procedure, upon the terms and subject to the conditions set forth in the Offer to Purchase. On the payment date, expected to be today, July 2, 2009 (the "Payment Date"), NXP will arrange to pay the Total Consideration to all holders of Notes that were properly tendered (and have not been validly withdrawn) and that were accepted in the Offer, together with accrued and unpaid interest up to, but not including, the Payment Date, as listed in the table above.

NXP will fund the payment of the Notes purchased in the Offer with available cash.

The purpose of the Offer was to reduce NXP's overall indebtedness and related interest expense. As a result of the Offer, NXP's overall indebtedness will be reduced by approximately \$504.2 million and the related interest expense by approximately \$31.8 million (calculated by using the interest rate for the current coupon of the U.S. Dollar Floating Rate Notes and Euro Floating Rate Notes of 3.8812% and 4.185%, respectively, and the representative exchange rate on July 1, 2009 for U.S. dollars per euro, as announced by the International Monetary Fund, of 1.4096).

Following the Payment Date, NXP may from time to time seek to retire or purchase its outstanding debt through cash purchases and/or exchanges, in open market purchases, privately negotiated transactions or otherwise. Such repurchases, exchanges or transactions, if any, will depend on prevailing market conditions, NXP's liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

NXP's obligation to accept any Notes tendered and to pay the applicable consideration for them is set forth solely in the Offer to Purchase. The Offer is made only by, and pursuant to, the terms set forth in the Offer to Purchase, and the information in this press release is qualified by reference to the Offer to Purchase.

Deutsche Bank Trust Company Americas (the "Dollar Tender Agent") and Deutsche Bank AG, London Branch (the "Euro Tender Agent," and together with the Dollar Tender Agent, the "Tender Agent"), are serving together as the Tender Agent in connection with the Offer. J.P. Morgan Securities Inc. (the "Dollar Dealer Manager") and J.P. Morgan Securities Ltd. (the "Euro Dealer Manager," and together with the Dollar Dealer Manager, the "Dealer Manager") are serving together as the Dealer Manager in connection with the Offer. Any questions or requests for assistance or additional copies of the Offer to Purchase

⁽²⁾ Per \$1,000 or €1,000 principal amount, as applicable.

may be directed to the Tender Agent. You may also contact your broker, dealer, commercial bank or trust company or other nominee for assistance concerning the Offer. Any questions regarding the terms of the Offer should be directed to the Dealer Manager.

This Offer is not available to any Italian resident and/or persons located in the Republic of Italy.

Forward-Looking Statements

This press release includes forward-looking statements. When used in this press release, the words "anticipate," "believe," "estimate," "forecast," "expect," "intend," "plan" and "project," and similar expressions, as they relate to NXP, its management or third parties, identify forward-looking statements. Forward-looking statements include statements regarding NXP's business strategy, financial condition, results of operations, and market data, as well as any other statements that are not historical facts. These statements reflect beliefs of NXP's management as well as assumptions made by its management and information currently available to NXP. Although NXP believes that these beliefs and assumptions are

2

reasonable, the statements are subject to numerous factors, risks and uncertainties that could cause actual outcomes and results to be materially different from those projected. These factors, risks and uncertainties expressly qualify all subsequent oral and written forward-looking statements attributable to NXP or persons acting on its behalf.

About NXP Semiconductors

NXP is a leading semiconductor company founded by Philips more than 50 years ago. Headquartered in Europe, the company has about 28,000 employees working in more than 30 countries and posted sales of USD 5.4 billion (including the Mobile & Personal business) in 2008. NXP creates semiconductors, system solutions and software that deliver better sensory experiences in TVs, set-top boxes, identification applications, mobile phones, cars and a wide range of other electronic devices. News from NXP is located at www.nxp.com

For further information, please contact:

Media:

Lieke de Jong-Tops Tel. +31 40 27 25202 lieke.de.jong-tops@nxp.com

Deutsche Bank Trust Company Americas (the Dollar Tender Agent):

Tel. +1 (800) 735-7777 DB.Reorg@db.com

Deutsche Bank AG, London Branch (the Euro Tender Agent):

Tel. +44 207 547 5000 xchange.offer@db.com

J.P. Morgan Securities Inc. (the Dollar Dealer Manager):

Tel. +1 (800) 245-8812

J.P. Morgan Securities Ltd. (the Euro Dealer Manager):

Tel. +44 207 777 1164

3

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized at Eindhoven, on the 2nd of July 2009.

NXP B.V.

/s/ KARL-HENRIK SUNDSTRÖM

Karl-Henrik Sundström (Chief Financial Officer)