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UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 13D UNDER THE SECURITIES EXCHANGE ACT OF 1934 (AMENDMENT NO.)*

ON Semiconductor Corporation

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

682189 10 5

(CUSIP Number)

James R. Modrall Cleary, Gottlieb, Steen and Hamilton 2000 Pennsylvania Ave., N.W. Washington, D.C. 20006 (202) 974-1500

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 7, 2001

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Sections 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. / /

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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 CONTROL NUMBER.

SEC 1746 (3-00)

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CUSIP NO. 682189 10 5 Page 2 of 13 1 NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

TPG ON Holdings LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

3	3 SEC USE ONLY					
4	SOURCE OF FUNDS*					
	00 - Contributions of Partners of Affiliates					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)					
6	CITIZENSHIP OR PLACE OF ORGANIZATION					
Delaware						
	DED 05	7	SOLE VOTING POWER			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		8	SHARED VOTING POWER 31,347,962 (See Items 4 and 5)			
		9	SOLE DISPOSITIVE POWER			
`	WITH	10	SHARED DISPOSITIVE POWER 35,460,993 (See Items 4 and 5)			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 35,460,993 (See Items 4 and 5)					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* //					
13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)						
	16.9% (See Items 4 and 5)					
14	TYPE OF REPORTING PERSON*					
	00 (Limited Liability Company)					

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ITEM 1. SECURITY AND ISSUER.

This statement relates to the shares of common stock (the "Common Stock") of ON Semiconductor Corporation (the "Company"). The address of the Company's principal executive offices is as follows: ON Semiconductor Corporation; 5005 E. McDowell Road; Phoenix, AZ 85008

ITEM 2. IDENTITY AND BACKGROUND.

This statement is filed by TPG ON Holdings LLC (the "Reporting Person"). Additionally, information is included herein with respect to TPG Partners II, L.P. ("Partners"), TPG Parallel II, L.P. ("Parallel"), TPG Investors II, L.P. ("Investors") TPG 1999 Equity Partners II, L.P. ("TPG 1999"), TPG GenPar II, L.P. ("GenPar") and TPG Advisors II, Inc. ("Advisors" and, together with Partners, Parallel, Investors, TPG 1999 and GenPar, the "Controlling Persons"). Because (i) GenPar is the sole general partner of each of Partners, Parallel and Investors, (ii) Advisors is the sole general partner of GenPar and TPG 1999, and (iii) Partners, Parallel, Investors and TPG 1999 are members of the Reporting Person, the Controlling Persons may be deemed, pursuant to Rule 13d-3 of the Act, to be the beneficial owners of all of the shares of Common Stock owned by the Reporting Person. The Reporting Person and the Controlling Persons are sometimes hereinafter collectively referred to as the "Filing Parties." The Filing Parties are making this single, joint filing because they may be deemed to constitute a "group" within the meaning of Section 13(d)(3) of the Act, although neither the fact of this filing nor anything contained herein shall be deemed to be an admission by the Filing Parties that such a group exists. A copy of the Joint Filing Agreement of the Filing Parties is attached hereto as Exhibit 1.

The address of the principal business offices of the Filing Parties is as follows: 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102.

The Reporting Person is a Delaware limited liability company (of which the members are Partners, Parallel, Investors and TPG 1999) which has been organized to effect the proposed transactions described under Item 4 below and has not engaged in any activities other than those incident

to its formation and such proposed transactions. Partners is a Delaware limited partnership engaged in making investments in securities of public and private corporations. Parallel, Investors and TPG 1999 are Delaware limited partnerships engaged in making investments in entities in which Partners invests. GenPar is a Delaware Limited Partnership whose principal business is to serve as the general partner of Partners, Parallel, Investors and other related entities engaged in making investments in securities of public and private corporations. Advisors is a Delaware corporation whose principal business is to serve as the General Partner of GenPar and TPG 1999. The executive officers and directors of Advisors are David Bonderman (director and President), James Coulter (director and Executive Vice President), William Price (director and Executive Vice President), Richard Schifter (Vice President), James O'Brien (Vice President and Treasurer) and Richard A. Ekleberry (Vice President and Secretary), each of whom is a natural person. No other persons control the Filing Parties.

David Bonderman has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. Bonderman's principal occupation is as a director and President of Advisors.

James Coulter has his business address at 345 California Street, Suite 3300, San Francisco,

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California 94104. Mr. Coulter's principal occupation is as a director and Executive Vice President of Advisors.

William Price has his business address at 345 California Street, Suite 3300, San Francisco, California 94104. Mr. Price's principal occupation is as a director and Executive Vice President of Advisors.

Richard Schifter has his business address at 1133 Connecticut Avenue, N.W., Washington, D.C. 20036. Mr. Schifter's principal occupation is as a Vice President of Advisors.

James O'Brien has his business address at 301 Commerce Street, Suite 3300, Forth Worth, Texas 76102. Mr. O'Brien's principal occupation is as a Vice President and Treasurer of Advisors.

Richard A. Ekleberry has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. Ekleberry's principal occupation is as a Vice President and Secretary of Advisors.

During the last five years, none of the Filing Parties and, to the best knowledge of the Filing Parties, none of the executive officers or directors of Advisors has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

During the last five years, none of the Filing Parties and, to the best knowledge of the Filing Parties, none of the executive officers or directors of Advisors has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

All natural persons listed in item 2 are citizens of the United States $% \left(1\right) =\left(1\right) \left(1\right) \left($

ITEM 3. SOURCE AND AMOUNT OF FUNDS OF OTHER CONSIDERATION.

As more fully described under Item 4 below, the Reporting Person and the Company have entered into the Investment Agreement (as defined below), pursuant to which the Reporting Person has purchased the Series A Preferred Stock (as defined below) for aggregate consideration of \$100,000,000 in cash. The funds required for the purchase of Series A Preferred Stock by the Reporting Person were obtained from general funds available to the Filing Parties and their affiliates.

ITEM 4. PURPOSE OF TRANSACTION.

On September 7, 2001, the Reporting Person and the Company entered into an Investment Agreement (the "Investment

Agreement") providing for, among other things, the purchase by the Reporting Person from the Company of 10,000 shares of the Company's Series A Cumulative Convertible Preferred Stock, \$0.01 par value (the "Series A Preferred Stock"). The purchase price paid for the Series A Preferred Stock by the Reporting Person pursuant to the Investment Agreement was \$100,000,000 in cash.

SERIES A PREFERRED STOCK. The Series A Preferred Stock has a stated value of \$10,000 per share. The Series A Preferred Stock has a cumulative dividend, payable quarterly in cash, at

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the rate of 8.0% per annum (or, if greater during the relevant quarterly period, in an amount equal to the value of the dividends that would be paid on the common stock then issuable upon conversion of the Series A Preferred Stock). In the event dividends are not declared or paid, the dividends will accumulate on a compounded basis. The Series A Preferred Stock has a liquidation preference equal to the greater of (i) the stated value of the Series A Preferred Stock plus all accrued and unpaid dividends thereon or (ii) the amount that would be payable to holders of the Series A Preferred Stock if their shares had been converted into Common Stock immediately prior to the liquidation event.

The Series A Preferred Stock ranks prior to the Common Stock and any other junior securities with respect to the payment of dividends and liquidating distributions. However, the right of a holder to receive dividend payments or other distributions in respect of Series A Preferred Stock is subject to and subordinated in right of payment to the payment in full and discharge of all amounts of principal, interest and fees then outstanding under the Company's principal credit agreement, its senior subordinated notes, and certain other existing and future indebtedness of the Company. In addition, the Reporting Person and the Company have executed a Subordination Agreement dated as of September 7, 2001 for the benefit of the senior creditors under the Company's principal credit agreement. The Company is prohibited from issuing any capital stock that ranks senior to the Series A Preferred Stock or is redeemable prior to the Series A Preferred Stock without the consent of the holders of a majority of the outstanding shares of Series A Preferred Stock.

The Series A Preferred Stock is convertible at the option of the holder at any time into shares of Common Stock at a conversion price of \$2.82 per share of Common Stock, subject to customary anti-dilution adjustments. Shareholder approval (or waiver by the Nasdaq thereof) will be required prior to the issuance of any shares of Common Stock upon conversion of Series A Preferred Stock in excess of 19.9% of the number of shares of Common Stock outstanding on September 7, 2001. At any time on or after the eighth anniversary of the issuance of the Series A Preferred Stock, the holders of Series A Preferred Stock may require the Company to redeem their shares at a redemption price equal to the greater of (i) the stated value of the Series A Preferred Stock plus accrued and unpaid dividends or (ii) 50% of the then current market price of the Common Stock (based upon the average closing price of the Common Stock over the preceding 30 trading days) and other assets and property, if any, into which shares of Series A Preferred Stock is then convertible. Upon a Change of Control (as defined in the Investment Agreement), the holders of the Series A Preferred Stock may "put" their shares to the Company at 101% of the stated value plus accumulated and unpaid dividends.

The Series A Preferred Stock will entitle the holders thereof to vote together with holders of Common Stock as a single class. In the aggregate, the holders of Series A Preferred Stock will have 31,347,962 votes (representing the number of shares of Common Stock into which the Series A Preferred Stock is convertible at \$3.19 per share, which conversion price is fixed for voting rights purposes only), subject to certain adjustments for accumulated dividends and those made in accordance with the anti-dilution provisions.

GOVERNANCE. For so long as the Reporting Person is entitled to designate Investor Nominees (as defined below), the Investment Agreement provides that the Company will cause its Board of Directors (the "Board") to consist of between 6 and 13 members, and to cause two individuals designated by the Reporting Person (the "Investor Nominees") to be elected as directors of the Company. At each annual meeting of the Company's shareholders following the issuance of the Series A

Preferred Stock, the Company is required to use its best efforts,

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subject to the fiduciary duties of the Board, to cause the election of Investor Nominees then up for election. The Reporting Person shall not be entitled to designate Investor Nominees if it and its affiliates beneficially own, in the aggregate, less than 50% of their original investment.

The Certificate of Designations of the Series A Preferred Stock also contains provisions which restrict the ability of the Company to take certain significant actions without the consent of a majority of holders of Series A Preferred Stock, including certain issuances of equity securities.

REGISTRATION RIGHTS AGREEMENT. Concurrently with entering into the Investment Agreement, the Company and the Reporting Person entered into a Registration Rights Agreement dated as of September 7, 2001 (the "Registration Rights Agreement"), pursuant to which the Company has agreed to establish a shelf registration for the resale by the Reporting Person of the Common Stock underlying the Series A Preferred Stock. In addition, the Company has granted to the Reporting Person certain "demand" and "piggyback" registration rights with respect to the underlying Common Stock. These registration rights are subject to certain customary blackout and cutback provisions, and are accompanied by customary indemnification provisions.

GENERAL. The provisions of the Investment Agreement (including the form of Certificate of Designations with respect to the Series A Preferred Stock attached as an exhibit thereto) and the Registration Rights Agreement are set forth in those documents which are filed as Exhibits 2, 3 and 5 to this Schedule, and which are incorporated herein in their entirety by this reference in response to this Item. The foregoing description of the terms and provisions of these documents is a summary only, and is qualified in its entirety by reference to such documents.

Subject to the restrictions described above, the Filing Parties may, from time to time, subject to developments with respect to the Company and market conditions, consider and explore the purchase or sale of Common Stock or other securities of the Company.

Except as set forth herein, the Filing Parties do not have any plans or proposals which would relate to or result in any of the actions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. In addition, the Investor Nominees, in their capacity as members of the Board, may, from time to time, propose that the Board consider one or more of such actions.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

(a) The Reporting Person may be deemed beneficially to own up to 35,460,993 shares of Common Stock, representing in the aggregate approximately 16.9% of the outstanding shares of Common Stock, and the Filing Parties other than the Reporting Person may be deemed beneficially to own up to 160,460,426 shares of Common Stock, representing in the aggregate approximately 76.6% of the outstanding shares of Common Stock (in each case, based on the number of shares of Common Stock represented by the Company in the Investment Agreement to be outstanding as of the date thereof).

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- (b) Reporting Person
 - (i) sole power to vote or to direct the vote: -0-
 - (ii) shared power to vote or to direct the vote: 31,347,962
 - (iii) sole power to dispose or to direct the disposition of : -0-
 - (iv) shared power to dispose or to direct the disposition
 of: 35,460,993

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote or to direct the vote: 156,347,395
- (iii) sole power to dispose or to direct the disposition of: -0-
- (iv) shared power to dispose or to direct the disposition
 of: 160,460,426

Parallel

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote or to direct the vote: 156,347,395
- (iii) sole power to dispose or to direct the disposition of: -0- $\,$
- (iv) shared power to dispose or to direct the disposition
 of: 160,460,426

Investors

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote to direct the vote: 156,347,395
- (iii) sole power to dispose or to direct the disposition of: -0-
- (iv) shared power to dispose or to direct the disposition
 of: 160,460,426

TPG 1999

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote or to direct the vote: 156,347,395
- (iii) sole power to dispose or to direct the disposition of: -0-
- (iv) shared power to dispose or to direct the disposition of: 160,460,426

GenPar

(i) sole power to vote or to direct the vote: -0-

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- (ii) shared power to vote or to direct the vote: 156,347,395
- (iii) sole power to dispose or to direct the disposition
 of: -0-
- (iv) shared power to dispose or to direct the disposition of: 160,460,426

Advisors

- (i) sole power to vote or to direct the vote: 156,347,395
- (ii) shared power to vote or to direct the vote: -0-
- (iii) sole power to dispose or to direct the disposition
 of: 160,460,426
- (iv) shared power to dispose or to direct the disposition of: -0-

The identity and background of the Filing Parties is set forth in Item 2.

- (c) Except as described herein, no transactions in shares of Common Stock were effected during the past 60 days by any of the Filing Parties or to the best of their knowledge, any of the individuals identified in Item 2.
- (d) Not applicable.
- (e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO THE SECURITIES OF THE ISSUER.

Except as set forth in this statement, to the best knowledge of the Filing Parties, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Company, including but not limited to, transfer or voting of any of the securities of the Company, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, or a pledge or contingency the occurrence of which would give another person voting power over the securities of the Company.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Exhibit 1 Joint Filing Agreement, dated as of September 17, 2001 among TPG ON Holdings LLC, TPG Partners II, L.P., TPG Parallel II, L.P., TPG Investors II, L.P., TPG 1999 Equity Partners II, L.P., TPG GenPar II, L.P. and TPG Advisors II, Inc.

Investment Agreement, dated as of September 7, 2001, by and between TPG ON Holdings LLC and ON Semiconductor Corporation (incorporated by reference to Exhibit 4.2 to the ON

Semiconductor Corporation Form 8-K filed on September 7, 2001)

Certificate of Designations of Series A Cumulative Convertible Preferred Stock of ON Semiconductor Corporation (incorporated by reference to Exhibit 3.1 to the ON Semiconductor Corporation Form 8-K filed on September 7, 2001)

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Exhibit 4 Specimen of Share Certificate of Series A Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the ON Semiconductor Corporation Form 8-K filed on September 7, 2001)

Registration Rights Agreement, dated as of September 7, 2001, between ON Semiconductor Corporation and TPG ON Holdings LLC (incorporated by reference to Exhibit 4.3 to the ON Semiconductor Corporation Form 8-K filed on September 7, 2001)

Subordination Agreement, dated as of September 7, 2001, by and between TPG ON Holdings LLC and ON Semiconductor Corporation for the benefit of the senior creditors described therein (incorporated by reference to Exhibit 4.4 to the ON Semiconductor Corporation Form 8-K filed on September 7, 2001)

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 17, 2001

Exhibit 2

Exhibit 3

Exhibit 5

Exhibit 6

TPG ON Holdings LLC

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

EXHIBIT 1

JOINT FILING AGREEMENT

JOINT FILING AGREEMENT (this "Agreement"), dated as of September 17, 2001 among TPG ON Holdings LLC, a Delaware limited liability company ("TPG ON Holdings"), TPG Partners II, L.P., a Delaware limited partnership ("Partners"), TPG Parallel II, L.P., a Delaware limited partnership ("Parallel"), TPG Investors II, L.P., a Delaware limited partnership ("Investors"), TPG 1999 Equity Partners II, L.P., a Delaware limited partnership ("TPG 1999"), TPG GenPar II, L.P., a Delaware limited partnership ("GenPar") and TPG Advisors II, Inc., a Delaware corporation, ("Advisors").

WITNESSETH

WHEREAS, as of the date hereof, each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors is filing a Schedule 13D under the Securities Exchange Act of 1934 (the "Exchange Act") with respect to securities of ON Semiconductor Corporation (the "Schedule 13D");

WHEREAS, each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors is individually eligible to file the Schedule 13D;

WHEREAS, each of TPG On Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors wishes to file the Schedule 13D and any amendments thereto jointly and on behalf of each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors, pursuant to Rule 13d-1(k)(1) under the Exchange Act;

NOW, THEREFORE, in consideration of these premises and other good and valuable consideration, the parties hereto agree as follows:

- 1. TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby agree that the Schedule 13D is, and any amendments thereto will be, filed on behalf of each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors pursuant to Rule 13d-1(k)(1)(iii) under the Exchange Act.
- 2. Each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby acknowledges that, pursuant to Rule 13d-1(k)(1)(i) under the Exchange Act, it is responsible for the timely filing of the Schedule 13D and any amendments thereto, and for the completeness and accuracy of the information concerning it contained therein, and is not responsible for the completeness and accuracy of the information concerning any of the other parties contained therein, unless it knows or has reason to know that such information is inaccurate.
- 3. Each of TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby agrees that this Agreement shall be filed as an exhibit to the Schedule 13D, pursuant to Rule 13d-1(k)(1)(iii) under the Exchange Act.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed individually or by their respective directors hereunto duly authorized as of the day and year first above written.

TPG ON Holdings LLC

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry

Title: Vice President

TPG Partners II, L.P. By: TPG GenPar II, L.P. By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry

Title: Vice President

TPG Parallel II, L.P. By: TPG GenPar II, L.P. By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

TPG Investors II, L.P. By: TPG GenPar II, L.P. By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

TPG 1999 Equity Partners II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

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TPG GenPar II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

Name: Richard A. Ekleberry Title: Vice President

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