

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Rice Acquisition Corp. II

(Exact name of registrant as specified in its charter)

Cayman Islands

(State or other jurisdiction of
incorporation or organization)

6770

(Primary Standard Industrial
Classification Code Number)

98-1580612

(I.R.S. Employer
Identification No.)

**102 East Main Street, Second Story
Carnegie, Pennsylvania 15106
(713) 446-6259**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Daniel Joseph Rice, IV
Chief Executive Officer
102 East Main Street, Second Story
Carnegie, Pennsylvania 15106
(713) 446-6259**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

**Matthew Pacey, P.C.
Lanchi Huynh
Kirkland & Ellis LLP
609 Main Street
Houston, Texas 77002
(713) 836-3600**

**David P. Oelman
E. Ramey Layne
Sarah K. Morgan
Vinson & Elkins L.L.P.
1001 Fannin Street, Suite 2500
Houston, Texas 77002
(713) 758-2222**

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this Registration Statement

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. File No. 333-254080

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit⁽¹⁾	Proposed Maximum Aggregate Offering Price⁽¹⁾	Amount of Registration Fee
Units, each consisting of one Class A ordinary share, \$0.0001 par value, and one-fourth of one redeemable warrant ⁽²⁾	5,750,000 units	\$ 10.00	\$ 57,500,000.00	\$ 6,273.25

Class A ordinary shares included as part of the units ⁽³⁾	5,750,000 shares	—	—	— ⁽⁴⁾
Redeemable warrants included as part of the units ⁽³⁾	1,437,500 warrants	—	—	— ⁽⁴⁾
Class A ordinary shares underlying redeemable warrants	1,437,500 shares	\$ 11.50	\$ 16,531,250.00	\$ 1,803.56
Total			\$ 74,031,250.00	\$ 8,076.81 ⁽⁵⁾

- (1) Estimated solely for the purpose of calculating the registration fee.
- (2) Represents only the additional number of securities being registered and includes 750,000 units, consisting of 750,000 Class A ordinary shares and 187,500 warrants, which may be issued upon exercise of the 45-day option granted to the underwriters to cover over-allotments, if any. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1 (File No. 333-254080).
- (3) Pursuant to Rule 416(a), there are also being registered an indeterminable number of additional securities as may be offered or issued to prevent dilution resulting from share splits, share capitalizations, reorganizations, recapitalizations or similar transactions.
- (4) No fee pursuant to Rule 457(g).
- (5) The Registrant previously registered securities having a proposed maximum aggregate offering price of \$370,156,250.00 on its Registration Statement on Form S-1, as amended (File No. 333-254080), which was declared effective by the Securities and Exchange Commission on June 15, 2021. In accordance with Rule 462(b) under the Securities Act of 1933, as amended, an additional number of securities having a proposed maximum offering price of \$74,031,250.00 is hereby registered, which includes securities issuable upon the exercise of the underwriters' over-allotment option.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE

This Registration Statement on Form S-1 is being filed with respect to the registration of 5,750,000 additional units of Rice Acquisition Corp. II, a Cayman Islands exempted company (the "Registrant"), each consisting of one Class A ordinary share, par value \$0.0001 ("Class A Ordinary Shares"), and one-fourth of one redeemable warrant, pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and General Instruction V to Form S-1, including 750,000 units that may be purchased by the underwriters to cover over-allotments, if any. Each whole warrant entitles the holder thereof to purchase one Class A Ordinary Share at a price of \$11.50 per share, subject to adjustment, and only whole warrants are exercisable. No fractional warrants will be issued upon separation of the units and only whole warrants will trade. This Registration Statement relates to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-254080) (the "Prior Registration Statement"), initially filed by the Registrant on March 10, 2021 and declared effective by the Securities and Exchange Commission (the "Commission") on June 15, 2021. The required opinions of counsels and related consents and accountant's consent are attached hereto and filed herewith. Pursuant to Rule 462(b), the contents of the Prior Registration Statement, including the exhibits thereto, are incorporated by reference into this Registration Statement.

CERTIFICATION

The Registrant hereby certifies to the Commission that (1) it has instructed its bank to pay the filing fee set forth on the cover page of this Registration Statement by a wire transfer of such amount to the Commission's account at U.S. Bank as soon as practicable (but no later than the close of business as of June 16, 2021), (2) it will not revoke such instructions, (3) it has sufficient funds in the relevant account to cover the amount of such filing fee and (4) it will confirm receipt of such instructions by its bank during regular business hours no later than June 16, 2021.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits. All exhibits filed with or incorporated by reference in the Prior Registration Statement are incorporated by reference into, and shall be deemed a part of, this Registration Statement, and the following additional exhibits are filed herewith, as part of this Registration Statement:

Exhibit No.	Description
5.1	Opinion of Kirkland & Ellis LLP.
5.2	Opinion of Maples and Calder (Cayman), LLP, Cayman Islands Counsel to the Registrant.
23.1	Consent of WithumSmith+Brown, PC.
23.2	Consent of Kirkland & Ellis LLP (included on Exhibit 5.1).
23.3	Consent of Maples and Calder (Cayman), LLP (included on Exhibit 5.2).

II-1

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Carnegie, Pennsylvania, on the 15th day of June 2021.

RICE ACQUISITION CORP. II

By: /s/ Daniel Joseph Rice, IV

Name: Daniel Joseph Rice, IV

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Name	Position	Date
<u>/s/ Daniel Joseph Rice, IV</u> Daniel Joseph Rice, IV	Chief Executive Officer and Director (Principal Executive Officer)	June 15, 2021
<u>/s/ J. Kyle Derham</u> J. Kyle Derham	President, Chief Financial Officer and Director (Principal Financial Officer)	June 15, 2021
<u>/s/ James Wilmot Rogers</u> James Wilmot Rogers	Chief Accounting Officer (Principal Accounting Officer)	June 15, 2021
<u>/s/ Jide Famuagun</u> Jide Famuagun	Director	June 15, 2021
<u>/s/ Carrie Fox</u> Carrie Fox	Director	June 15, 2021
<u>/s/ James Lytal</u> James Lytal	Director	June 15, 2021

KIRKLAND & ELLIS LLP

AND AFFILIATED PARTNERSHIPS

609 Main Street
Houston, Texas 77002
United States
+1 713 836 3600
www.kirkland.com

Facsimile:
+1 713 836 3601

Rice Acquisition Corp. II
102 East Main Street
Second Story
Carnegie, PA 15106

Re: Rice Acquisition Corp. II Registration Statement on Form S-1

Ladies and Gentlemen:

We are issuing this opinion in our capacity as special United States counsel to Rice Acquisition Corp. II, a Cayman Islands exempted company (the "**Company**"), in connection with the preparation and filing of a Registration Statement on Form S-1 (the "**462(b) Registration Statement**") pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "**Act**"), relating to the registration of the offer and sale by the Company of an additional 5,750,000 units of the Company (the "**Units**"), with each Unit consisting of one Class A ordinary share, par value \$0.0001 per share (the "**Class A Ordinary Shares**"), of the Company and one-fourth of one redeemable warrant of the Company to purchase one Class A Ordinary Share (the "**Warrants**"). The Units are being offered and sold pursuant to a prospectus forming a part of the Company's Registration Statement on Form S-1, as amended (File No. 333-254080) (the "**Registration Statement**"), initially filed by the Company on March 10, 2021 and declared effective by the Securities and Exchange Commission (the "**Commission**") on June 15, 2021.

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Act.

In rendering the opinions stated herein, we have examined and relied upon the following:

- (a) the Registration Statement;
- (b) the 462(b) Registration Statement;
- (c) the form of Underwriting Agreement (the "**Underwriting Agreement**") proposed to be entered into by and among the Company, Rice Acquisition Holdings II LLC, a Cayman Islands limited liability company ("**Holdings**"), and Citigroup Global Markets Inc. and Barclays Capital Inc., as representatives of the several underwriters named therein (the "**Underwriters**"), relating to the sale by the Company to the Underwriters of the Units, filed as Exhibit 1.1 to the Registration Statement;
- (d) the form of Unit Certificate, filed as Exhibit 4.1 to the Registration Statement;

Austin Bay Area Beijing Boston Brussels Chicago Dallas Hong Kong London Los Angeles Munich New York Paris Shanghai Washington, D.C.

KIRKLAND & ELLIS LLP

June 15, 2021
Page 2

- (e) the form of Warrant Certificate, filed as Exhibit 4.3 to the Registration Statement; and
- (f) the form of Warrant Agreement proposed to be entered into by and between the Company, Holdings and Continental Stock Transfer & Trust Company, as warrant agent (the "**Warrant Agreement**"), filed as Exhibit 4.4 to the Registration Statement.

For purposes of this letter, we have examined such other documents, records, certificates, resolutions and other instruments deemed necessary as a basis for this opinion, and we have assumed the authenticity of all documents submitted to us as originals, the conformity to the originals of all documents submitted to us as copies and the authenticity of the originals of all documents submitted to us as copies. As to any facts material to the opinions expressed herein which we have not independently established or verified, we have relied upon statements and representations of officers and other representatives of the Company and others.

We do not express any opinion with respect to the laws of any jurisdiction other than the laws of the State of New York. Based upon the foregoing and subject to the qualifications and assumptions stated herein, we are of the opinion that:

1. When the Units are delivered in accordance with the Underwriting Agreement upon payment of the agreed upon consideration therefor, the Units will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms under the laws of the State of New York.
2. When the Units are delivered in accordance with the Underwriting Agreement upon payment of the agreed upon consideration therefor, the Warrants included in such Units will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms under the laws of the State of New York.

In addition, in rendering the foregoing opinions we have assumed that:

(a) the Company (i) is duly incorporated and is validly existing and in good standing, (ii) has requisite legal status and legal capacity under the laws of the jurisdiction of its organization and (iii) has complied and will comply with all aspects of the laws of the jurisdiction of its organization in connection with the transactions contemplated by, and the performance of its obligations under, the Warrant Agreement;

(b) the Company has the corporate power and authority to execute, deliver and perform all its obligations under the Warrant Agreement and the Units;

KIRKLAND & ELLIS LLP

June 15, 2021

Page 3

(c) neither the execution and delivery by the Company of the Warrant Agreement nor the performance by the Company of its obligations thereunder, including the issuance and sale of the Units: (i) conflicts or will conflict with the Amended and Restated Memorandum and Articles of Association of the Company, (ii) constitutes or will constitute a violation of, or a default under, any lease, indenture, instrument or other agreement to which the Company or its property is subject, (iii) contravenes or will contravene any order or decree of any governmental authority to which the Company or its property is subject or (iv) violates or will violate any law, rule or regulation to which the Company or its property is subject (except that we do not make the assumption set forth in this clause (iv) with respect to the laws of the State of New York); and

(d) neither the execution and delivery by the Company of the Warrant Agreement nor the performance by the Company of its obligations thereunder, including the issuance and sale of the Units, requires or will require the consent, approval, licensing or authorization of, or any filing, recording or registration with, any governmental authority under any law, rule or regulation of any jurisdiction.

Our opinions expressed above are subject to the qualifications that we express no opinion as to the applicability of, compliance with, or effect of (i) any bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance, moratorium or other similar law or judicially developed doctrine in this area (such as substantive consolidation or equitable subordination) affecting the enforcement of creditors' rights generally, (ii) general principles of equity (regardless of whether enforcement is considered in a proceeding in equity or at law), (iii) an implied covenant of good faith and fair dealing, (iv) public policy considerations which may limit the rights of parties to obtain certain remedies, (v) any requirement that a claim with respect to any security denominated in other than U.S. dollars (or a judgment denominated in other than U.S. dollars in respect of such claim) be converted into U.S. dollars at a rate of exchange prevailing on a date determined in accordance with applicable law, (vi) governmental authority to limit, delay or prohibit the making of payments outside of the United States or in a foreign currency or currency unit and (vii) any laws except the laws of the State of New York. We advise you that issues addressed by this letter may be governed in whole or in part by other laws, but we express no opinion as to whether any relevant difference exists between the laws upon which our opinions are based and any other laws which may actually govern.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the 462(b) Registration Statement. We also consent to the reference to our firm under the heading "Legal Matters" in the 462(b) Registration Statement. In giving this consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

KIRKLAND & ELLIS LLP

June 15, 2021

Page 4

We do not find it necessary for the purposes of this opinion, and accordingly we do not purport to cover herein, the application of the securities or "Blue Sky" laws of the various states to the offering of the Units.

This opinion is limited to the specific issues addressed herein, and no opinion may be inferred or implied beyond that expressly stated herein. We assume no obligation to revise or supplement this opinion should the present laws of the State of New York be changed by legislative action, judicial decision or otherwise.

This opinion is furnished to you in connection with the filing of the 462(b) Registration Statement and is not to be used, circulated, quoted or otherwise relied upon for any other purposes.

Very truly yours,

/s/ KIRKLAND & ELLIS LLP



Our ref SMC/783638-000001/66937948v1

Rice Acquisition Corp. II
 PO Box 309, Ugland House
 Grand Cayman, KY1-1104
 Cayman Islands

15 June 2021

Rice Acquisition Corp. II

We have acted as counsel as to Cayman Islands law to Rice Acquisition Corp. II (the "**Company**") in connection with the Company's registration statement on Form S-1, including all amendments or supplements thereto, filed with the United States Securities and Exchange Commission (the "**Commission**") under the United States Securities Act of 1933, as amended (the "**Act**") (including its exhibits, the "**Registration Statement**") for the purposes of, registering with the Commission under the Act, the offering and sale to the public of:

- (a) up to 34,500,000 units (including 4,500,000 units, which the several underwriters, for whom Citigroup Global Markets Inc. and Barclays Capital Inc. are acting as representatives ("**Representatives**"), will have a 45-day option to purchase from the Company to cover over-allotments, if any) ("**Units**") at an offering price of US\$10 per Unit, each Unit consisting of:
 - (i) one Class A ordinary share of a par value of US\$0.0001 of the Company ("**Ordinary Shares**"); and
 - (ii) one-fourth of one redeemable warrant, each whole warrant exercisable to purchase one Ordinary Share at a price of US\$11.50 per Ordinary Share ("**Warrants**"); and
- (b) all Ordinary Shares and Warrants issued as part of the Units.

This opinion letter is given in accordance with the terms of the Legal Matters section of the Registration Statement.

1 Documents Reviewed

We have reviewed originals, copies, drafts or conformed copies of the following documents:

- 1.1 The certificate of incorporation dated 2 February 2021, and the memorandum and articles of association of the Company as registered or adopted on 2 February 2021 (the "**Memorandum and Articles**").

Maples and Calder (Cayman) LLP

PO Box 309 Ugland House Grand Cayman KY1-1104 Cayman Islands
 Tel +1 345 949 8066 Fax +1 345 949 8080 maples.com

Maples and Calder (Cayman) LLP has been registered, and operating, as a Cayman Islands limited liability partnership since 1 March 2021 following the conversion of the Cayman Islands firm of Maples and Calder to a limited liability partnership on that date.

- 1.2 The written resolutions of the board of directors of the Company dated 10 February 2021 and 9 March 2021 (together, the "**Resolutions**"), the written resolutions of the pricing committee of the board of directors of the Company (the "**Committee**") dated 15 June 2021 (the "**Committee Resolutions**") and the corporate records of the Company maintained at its registered office in the Cayman Islands.
- 1.3 A certificate of good standing with respect to the Company issued by the Registrar of Companies (the "**Certificate of Good Standing**").
- 1.4 A certificate from a director of the Company a copy of which is attached to this opinion letter (the "**Director's Certificate**").
- 1.5 The Registration Statement.
- 1.6 A draft of the form of the unit certificate representing the Units (the "**Unit Certificate**").
- 1.7 A draft of the form of the warrant agreement and the warrant certificate constituting the Warrants (the "**Warrant Documents**").
- 1.8 A draft of the underwriting agreement between the Company, Rice Acquisition Holdings II LLC and the Representatives (the "**Underwriting Agreement**").

The documents listed in paragraphs 1.6 to 1.8 inclusive above shall be referred to collectively herein as the "**Documents**".

2 Assumptions

The following opinions are given only as to, and based on, circumstances and matters of fact existing and known to us on the date of this opinion letter. These opinions only relate to the laws of the Cayman Islands which are in force on the date of this opinion letter. In giving the following opinions, we have relied (without further verification) upon the completeness and accuracy, as at the date of this opinion letter, of the Director's Certificate and the Certificate of Good Standing. We have also relied upon the following assumptions, which we have not independently verified:

- 2.1 The Documents have been or will be authorised and duly executed and unconditionally delivered by or on behalf of all relevant parties in accordance with all relevant laws (other than, with respect to the Company, the laws of the Cayman Islands).

- 2.2 The Documents are, or will be, legal, valid, binding and enforceable against all relevant parties in accordance with their terms under the laws of the State of New York (the "**Relevant Law**") and all other relevant laws (other than, with respect to the Company, the laws of the Cayman Islands).
- 2.3 The choice of the Relevant Law as the governing law of the Documents has been made in good faith and would be regarded as a valid and binding selection which will be upheld by the courts of the State of New York and any other relevant jurisdiction (other than the Cayman Islands) as a matter of the Relevant Law and all other relevant laws (other than the laws of the Cayman Islands).
- 2.4 Copies of documents, conformed copies or drafts of documents provided to us are true and complete copies of, or in the final forms of, the originals.
- 2.5 All signatures, initials and seals are genuine.

2

- 2.6 The capacity, power, authority and legal right of all parties under all relevant laws and regulations (other than, with respect to the Company, the laws and regulations of the Cayman Islands) to enter into, execute, unconditionally deliver and perform their respective obligations under the Documents.
- 2.7 No invitation has been or will be made by or on behalf of the Company to the public in the Cayman Islands to subscribe for any of the Units, the Warrants or the Ordinary Shares.
- 2.8 There is no contractual or other prohibition or restriction (other than as arising under Cayman Islands law) binding on the Company prohibiting or restricting it from entering into and performing its obligations under the Documents.
- 2.9 No monies paid to or for the account of any party under the Documents or any property received or disposed of by any party to the Documents in each case in connection with the Documents or the consummation of the transactions contemplated thereby represent or will represent proceeds of criminal conduct or criminal property or terrorist property (as defined in the Proceeds of Crime Act (As Revised) and the Terrorism Act (As Revised), respectively).
- 2.10 There is nothing under any law (other than the laws of the Cayman Islands) which would or might affect the opinions set out below. Specifically, we have made no independent investigation of the Relevant Law.
- 2.11 The Company will receive money or money's worth in consideration for the issue of the Ordinary Shares and none of the Ordinary Shares were or will be issued for less than par value.

Save as aforesaid we have not been instructed to undertake and have not undertaken any further enquiry or due diligence in relation to the transaction the subject of this opinion letter.

3 Opinions

Based upon, and subject to, the foregoing assumptions and the qualifications set out below, and having regard to such legal considerations as we deem relevant, we are of the opinion that:

- 3.1 The Company has been duly incorporated as an exempted company with limited liability and is validly existing and in good standing with the Registrar of Companies under the laws of the Cayman Islands.
- 3.2 The Ordinary Shares to be offered and issued by the Company as contemplated by the Registration Statement (including the issuance of Ordinary Shares upon the exercise of the Warrants in accordance with the Warrant Documents) have been duly authorised for issue, and when issued by the Company against payment in full of the consideration as set out in the Registration Statement and in accordance with the terms set out in the Registration Statement (including the issuance of Ordinary Shares upon the exercise of the Warrants in accordance with the Warrant Documents), such Ordinary Shares will be validly issued, fully paid and non-assessable. As a matter of Cayman Islands law, a share is only issued when it has been entered in the register of members (shareholders).
- 3.3 The execution, delivery and performance of the Unit Certificate and the Warrant Documents have been authorised by and on behalf of the Company and, once the Unit Certificate and the Warrant Documents have been executed and delivered by any director or officer of the Company, the Unit Certificate and the Warrant Documents will be duly executed and delivered on behalf of the Company and will constitute the legal, valid and binding obligations of the Company enforceable in accordance with their terms.

3

4 Qualifications

The opinions expressed above are subject to the following qualifications:

- 4.1 The term "**enforceable**" as used above means that the obligations assumed by the Company under the Documents are of a type which the courts of the Cayman Islands will enforce. It does not mean that those obligations will necessarily be enforced in all circumstances in accordance with their terms. In particular:
- (a) enforcement may be limited by bankruptcy, insolvency, liquidation, reorganisation, readjustment of debts or moratorium or other laws of general application relating to or affecting the rights of creditors;
 - (b) enforcement may be limited by general principles of equity. For example, equitable remedies such as specific performance may not be available, *inter alia*, where damages are considered to be an adequate remedy;
 - (c) where obligations are to be performed in a jurisdiction outside the Cayman Islands, they may not be enforceable in the Cayman Islands to the extent that performance would be illegal under the laws of that jurisdiction; and
 - (d) some claims may become barred under relevant statutes of limitation or may be or become subject to defences of set off, counterclaim, estoppel and similar defences.

- 4.2 To maintain the Company in good standing with the Registrar of Companies under the laws of the Cayman Islands, annual filing fees must be paid and returns made to the Registrar of Companies within the time frame prescribed by law.
- 4.3 Under Cayman Islands law, the register of members (shareholders) is *prima facie* evidence of title to shares and this register would not record a third party interest in such shares. However, there are certain limited circumstances where an application may be made to a Cayman Islands court for a determination on whether the register of members reflects the correct legal position. Further, the Cayman Islands court has the power to order that the register of members maintained by a company should be rectified where it considers that the register of members does not reflect the correct legal position. As far as we are aware, such applications are rarely made in the Cayman Islands and for the purposes of the opinion given in paragraph 3.2, there are no circumstances or matters of fact known to us on the date of this opinion letter which would properly form the basis for an application for an order for rectification of the register of members of the Company, but if such an application were made in respect of the Ordinary Shares, then the validity of such shares may be subject to re-examination by a Cayman Islands court.
- 4.4 Except as specifically stated herein, we make no comment with respect to any representations and warranties which may be made by or with respect to the Company in any of the documents or instruments cited in this opinion letter or otherwise with respect to the commercial terms of the transactions the subject of this opinion letter.
- 4.5 In this opinion letter, the phrase "non-assessable" means, with respect to shares in the Company, that a shareholder shall not, solely by virtue of its status as a shareholder, be liable for additional assessments or calls on the shares by the Company or its creditors (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the references to our firm under the heading "Legal Matters" in the prospectus included in the Registration Statement. In providing our consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the Rules and Regulations of the Commission thereunder.

This opinion letter is addressed to you and may be relied upon by you, your counsel and purchasers of Units pursuant to the Registration Statement. This opinion letter is limited to the matters detailed herein and is not to be read as an opinion with respect to any other matter.

Yours faithfully

/s/ Maples and Calder (Cayman) LLP

4

Rice Acquisition Corp II
PO Box 309, Umland House
Grand Cayman
KY1-1104
Cayman Islands

15 June 2021

To: Maples and Calder (Cayman) LLP
PO Box 309, Umland House
Grand Cayman
KY1-1104
Cayman Islands

Rice Acquisition Corp II (the "Company")

I, the undersigned, being a director of the Company, am aware that you are being asked to provide an opinion letter (the "**Opinion**") in relation to certain aspects of Cayman Islands law. Unless otherwise defined herein, capitalised terms used in this certificate have the respective meanings given to them in the Opinion. I hereby certify that:

- 1 The Memorandum and Articles remain in full force and effect and are unamended.
- 2 The Company has not entered into any mortgages or charges over its property or assets other than those entered in the register of mortgages and charges of the Company.
- 3 Each of the Resolutions were duly passed in the manner prescribed in the Memorandum and Articles (including, without limitation, with respect to the disclosure of interests (if any) by the director of the Company) and have not been amended, varied or revoked in any respect.
- 4 The Committee Resolutions were duly passed in the manner prescribed in the Memorandum and Articles (including, without limitation, with respect to the disclosure of interests (if any) by directors of the Company), and have not been amended, varied or revoked in any respect.
- 5 The authorised share capital of the Company is US\$33,100 divided into 300,000,000 Class A ordinary shares of a par value of US\$0.0001 each, 30,000,000 Class B ordinary shares of a par value of US\$0.0001 each and 1,000,000 preference shares of a par value of US\$0.0001 each. The issued share capital of the Company is 8,625,000 Class B ordinary shares and 2,500 Class A ordinary shares, which have been duly authorised and are validly issued as fully-paid and non-assessable.
- 6 The shareholders of the Company (the "**Shareholders**") have not restricted the powers of the directors of the Company in any way.
- 7 The sole director of the Company at the date of each of the Resolutions and at the date of this certificate was and is as follows: Daniel Joseph Rice, IV.
- 8 The members of the Committee at the date of the Committee Resolutions and at the date of this certificate were and are as follows: Daniel Joseph Rice, IV and J. Kyle Derham.

5

- 9 The minute book and corporate records of the Company as maintained at its registered office in the Cayman Islands and made available to you are complete and accurate in all material respects, and all minutes and resolutions filed therein represent a complete and accurate record of all meetings of the Shareholders and the director (or any committee thereof) of the Company (duly convened in accordance with the Memorandum and Articles) and all resolutions passed at the meetings or passed by written resolution or consent, as the case may be.
- 10 Prior to, at the time of, and immediately following the approval of the transactions contemplated by the Registration Statement, the Company was, or will be, able to pay its debts as they fell, or fall, due and has entered, or will enter, into the transactions contemplated by the Registration Statement for proper value and not with an intention to defraud or wilfully defeat an obligation owed to any creditor or with a view to giving a creditor a preference.
- 11 The director of the Company considers the transactions contemplated by the Registration Statement to be of commercial benefit to the Company and has acted in good faith in the best interests of the Company, and for a proper purpose of the Company, in relation to the transactions which are the subject of the Opinion.
- 12 To the best of my knowledge and belief, having made due inquiry, the Company is not the subject of legal, arbitral, administrative or other proceedings in any jurisdiction. Nor have the directors or Shareholders taken any steps to have the Company struck off or placed in liquidation, nor have any steps been taken to wind up the Company. Nor has any receiver been appointed over any of the Company's property or assets.
- 13 To the best of my knowledge and belief, having made due inquiry, there are no circumstances or matters of fact existing which may properly form the basis for an application for an order for rectification of the register of members of the Company.
- 14 The Registration Statement has been, or will be, authorised and duly executed and delivered by or on behalf of all relevant parties in accordance with all relevant laws.
- 15 No invitation has been made or will be made by or on behalf of the Company to the public in the Cayman Islands to subscribe for any of the Ordinary Shares.
- 16 The Ordinary Shares to be issued pursuant to the Registration Statement have been, or will be, duly registered, and will continue to be registered, in the Company's register of members (shareholders).
- 17 The Company is not a central bank, monetary authority or other sovereign entity of any state and is not a subsidiary, direct or indirect, of any sovereign entity or state.
- 18 There is no contractual or other prohibition or restriction (other than as arising under Cayman Islands law) binding on the Company prohibiting or restricting it from entering into and performing its obligations under the Documents.

(Signature Page follows)

I confirm that you may continue to rely on this certificate as being true and correct on the day that you issue the Opinion unless I shall have previously notified you in writing personally to the contrary.

Signature: /s/ Daniel Joseph Rice, IV
Name: Daniel Joseph Rice, IV
Title: Director

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-1, pursuant to Rule 462(b) under the Securities Act of 1933, as amended, of our report dated May 6, 2021, relating to the financial statements of Rice Acquisition Corp. II, appearing in Amendment No. 4 to the Registration Statement on Form S-1, File No. 333-254080.

/s/ WithumSmith+Brown, PC

New York, New York
June 15, 2021