

THIS DOCUMENT HAS NOT BEEN REGISTERED BY BURSA MALAYSIA SECURITIES BERHAD (“BURSA SECURITIES”). THE INFORMATION IN THIS DOCUMENT MAY BE SUBJECT TO FURTHER AMENDMENTS BEFORE BEING REGISTERED BY BURSA SECURITIES. UNDER NO CIRCUMSTANCES SHALL THIS DOCUMENT CONSTITUTE AN OFFER FOR SUBSCRIPTION OR PURCHASE OF, OR AN INVITATION TO SUBSCRIBE FOR OR PURCHASE SECURITIES.

PROSPECTUS



CREST GROUP BERHAD

(Registration No.: 202301031031 (1524954-M))
(Incorporated in Malaysia under the Companies Act 2016)

INITIAL PUBLIC OFFERING (“IPO”) OF 234,595,300 ORDINARY SHARES IN CREST GROUP BERHAD (“CREST”) (“SHARES”) AT AN IPO PRICE OF RM[•] PER SHARE, PAYABLE IN FULL UPON APPLICATION COMPRISING:

- (I) **PUBLIC ISSUE OF 130,705,300 NEW SHARES IN THE FOLLOWING MANNER:**
- 43,280,000 NEW SHARES MADE AVAILABLE FOR APPLICATION BY THE MALAYSIAN PUBLIC;
 - 12,984,000 NEW SHARES MADE AVAILABLE FOR APPLICATION BY THE ELIGIBLE DIRECTORS AND EMPLOYEES; AND
 - 74,441,300 NEW SHARES MADE AVAILABLE BY WAY OF PRIVATE PLACEMENT TO IDENTIFIED BUMIPUTERA INVESTORS APPROVED BY THE MINISTRY OF INVESTMENT, TRADE AND INDUSTRY;

AND

- (II) **OFFER FOR SALE OF 103,890,000 EXISTING SHARES IN THE FOLLOWING MANNER:**
- 33,758,700 EXISTING SHARES MADE AVAILABLE BY WAY OF PRIVATE PLACEMENT TO IDENTIFIED BUMIPUTERA INVESTORS APPROVED BY THE MINISTRY OF INVESTMENT, TRADE AND INDUSTRY; AND
 - 70,131,300 EXISTING SHARES MADE AVAILABLE BY WAY OF PRIVATE PLACEMENT TO SELECTED INVESTORS.

SUBJECT TO THE CLAWBACK AND REALLOCATION PROVISIONS AS SET OUT IN THIS PROSPECTUS, IN CONJUNCTION WITH THE LISTING OF CREST ON THE ACE MARKET OF BURSA MALAYSIA SECURITIES BERHAD (“BURSA SECURITIES”).

Principal Adviser, Sponsor, Underwriter and Placement Agent



MIDF AMANAH INVESTMENT BANK BERHAD

(Registration No. 197501002077 (23878-X))
(A Participating Organisation of Bursa Malaysia Securities Berhad)

THE ACE MARKET OF BURSA SECURITIES IS AN ALTERNATIVE MARKET DESIGNED PRIMARILY FOR EMERGING CORPORATIONS THAT MAY CARRY HIGHER INVESTMENT RISK WHEN COMPARED WITH LARGER OR MORE ESTABLISHED CORPORATIONS LISTED ON THE MAIN MARKET OF BURSA SECURITIES. THERE IS ALSO NO ASSURANCE THAT THERE WILL BE A LIQUID MARKET IN THE SHARES OR UNITS OF SHARES TRADED ON THE ACE MARKET. YOU SHOULD BE AWARE OF THE RISKS OF INVESTING IN SUCH CORPORATIONS AND SHOULD MAKE THE DECISION TO INVEST ONLY AFTER CAREFUL CONSIDERATION.

THE ISSUE, OFFER OR INVITATION FOR THE OFFERING IS A PROPOSAL NOT REQUIRING APPROVAL, AUTHORISATION OR RECOGNITION OF THE SECURITIES COMMISSION MALAYSIA UNDER SECTION 212(8) OF THE CAPITAL MARKETS AND SERVICES ACT 2007.

INVESTORS ARE ADVISED TO READ AND UNDERSTAND THE CONTENTS OF THIS PROSPECTUS. IF IN DOUBT, PLEASE CONSULT A PROFESSIONAL ADVISER.

FOR INFORMATION CONCERNING THE RISK FACTORS WHICH SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS, SEE “RISK FACTORS” COMMENCING ON PAGE 153.

[Bursa Securities has approved the admission of our Company to the Official list of Bursa Securities and the listing of and quotation for our entire enlarged issued share capital on the ACE Market of Bursa Securities. This Prospectus has been registered by Bursa Securities. The approval of the listing and quotation for our entire enlarged issued share capital on the ACE Market of Bursa Securities and registration of this Prospectus, should not be taken to indicate that Bursa Securities recommends our IPO or assumes responsibility for the correctness of any statement made, opinion expressed, or report contained in this Prospectus. Bursa Securities has not, in any way, considered the merits of our shares being offered for investment.]

Bursa Securities is not liable for any non-disclosure on the part of Crest and takes no responsibility for the contents of this Prospectus, makes no representation as to its accuracy or completeness, and expressly disclaims any liability for any loss you may suffer arising from or in reliance upon the whole or any part of the contents of this Prospectus. No securities will be allotted or issued based on this Prospectus after 6 months from the date of this Prospectus.

THIS PROSPECTUS IS DATED [•]

All defined terms used in this Prospectus are defined under “Definitions” commencing on page xii, “Glossary of Technical Terms” commencing on page xx and “Presentation of Financial and Other Information” commencing on page viii of this Prospectus respectively.

RESPONSIBILITY STATEMENTS

Our Directors, Promoters and Selling Shareholders have seen and approved this Prospectus. They collectively and individually accept full responsibility for the accuracy of the information contained in this Prospectus. Having made all reasonable enquiries, and to the best of their knowledge and belief, they confirm that there is no false or misleading statement or other facts which if omitted, would make any statement in this Prospectus false or misleading.

MIDF Amanah Investment Bank Berhad, being our Principal Adviser, Sponsor, Underwriter and Placement Agent in relation to our IPO acknowledges that, based on all available information and to the best of its knowledge and belief, this Prospectus constitutes a full and true disclosure of all material facts concerning our IPO.

STATEMENTS OF DISCLAIMER

[Our Company has obtained the approval of Bursa Securities for the listing of and quotation for our Shares being offered.] Admission to the Official List of Bursa Securities is not to be taken as an indication of the merits of our IPO, our Company or our Shares.

Bursa Securities is not liable for any non-disclosure on the part of our Company and takes no responsibility for the contents of this Prospectus, makes no representation as to its accuracy or completeness, and expressly disclaims any liability for any loss you may suffer arising from or in reliance upon the whole or any part of the contents of this Prospectus.

This Prospectus, together with the Application Forms, have also been lodged with the Registrar of Companies, who takes no responsibility for their contents.

OTHER STATEMENTS

You should note that you may seek recourse under Sections 248, 249 and 357 of the CMSA for breaches of securities laws including any statement in this Prospectus that is false, misleading, or from which there is a material omission; or for any misleading or deceptive act in relation to this Prospectus or the conduct of any other person in relation to our Company.

Our Shares are offered to the public on the premise of full and accurate disclosure of all material information concerning our IPO, for which any person set out in Section 236 of the CMSA, is responsible.

[Our Shares are classified as Shariah compliant by the SAC. This classification remains valid from the date of issue of this Prospectus until the next Shariah compliance review undertaken by the SAC. The new status is released in the updated list of Shariah-compliant securities, on the last Friday of May and November.]

Our IPO and this Prospectus are subject to the laws of Malaysia. Our Shares are offered in Malaysia solely based on the contents of this Prospectus. This Prospectus has not been and will not be made to comply with the laws of any jurisdiction other than Malaysia, and has not been and will not be lodged, registered or approved pursuant to or under any applicable securities or equivalent legislation or with or by any regulatory authority or other relevant body of any jurisdiction other than Malaysia.

We will not, prior to acting on any acceptance in respect of our IPO, make or be bound to make any enquiry as to whether you have a registered address in Malaysia and will not accept any liability in relation thereto whether or not any enquiry or investigation is made in connection with it. It is your sole responsibility to ensure that your application for our IPO would be in compliance with the terms of this Prospectus and to consult your legal and/or other professional advisers as to whether your application for our IPO would result in the contravention of any law of such country or jurisdiction which you may be subject to.

Neither we nor our Directors, Promoters, Selling Shareholders, Principal Adviser, Sponsor, Underwriter and Placement Agent nor any other advisers in relation to our IPO will accept any responsibility or liability in the event that any application made by you shall become illegal, unenforceable, avoidable or void in any country or jurisdiction.

We will further assume that you have accepted our IPO in Malaysia and will at all applicable times be subjected only to the laws of Malaysia in connection therewith. However, we reserve the right, in our absolute discretion, to treat any acceptance as invalid if we believe that such acceptance may violate any law or applicable legal or regulatory requirements.

This Prospectus is prepared and published solely in connection with our IPO in Malaysia under the laws of Malaysia. Our Directors, Promoters, Selling Shareholder, Principal Adviser, Sponsor, Underwriter and Placement Agent have not authorised anyone to provide you with any information which is not contained in this Prospectus. Any information or representation not contained in this Prospectus must not be relied upon as having been authorised by our Directors, Promoters, Selling Shareholders, Principal Adviser, Sponsor, Underwriter and Placement Agent or any of their respective directors, or any other persons involved in our IPO.

This Prospectus will not be distributed outside Malaysia. Our Directors, Promoters, Selling Shareholders, Principal Adviser, Sponsor, Underwriter and Placement Agent have not authorised anyone and take no responsibility for the distribution of this Prospectus (in preliminary or final form) outside Malaysia. No action has been taken to permit any offering of our Shares based on this Prospectus in any jurisdiction other than Malaysia. Accordingly, this Prospectus may not be used for the purpose of and does not constitute an offer for subscription or purchase or invitation to subscribe for or purchase any of our Shares being offered in our IPO in any jurisdiction or in any circumstance in which such an offer is not authorised or is unlawful or to any person to whom it is unlawful to make such offer or invitation.

ELECTRONIC PROSPECTUS

This Prospectus can be viewed or downloaded from Bursa Securities' website at www.bursamalaysia.com. The contents of the Electronic Prospectus and the copy of this Prospectus registered with Bursa Securities are the same.

You are advised that the internet is not a fully secured medium. Your Internet Share Application may be subject to risks in data transmission, computer security threats including viruses, hackers and crackers, faults with computer software and other events beyond the control of the Internet Participating Financial Institutions. These risks cannot be borne by the Internet Participating Financial Institutions.

If you are in doubt about the validity or integrity of the Electronic Prospectus, you should immediately request a paper/printed copy of this Prospectus from us, our Principal Adviser or Issuing House. If there is any discrepancy between the contents of the Electronic Prospectus and the paper/printed copy of this Prospectus, the contents of the paper/printed copy of this Prospectus which are identical to the copy of the Prospectus registered with Bursa Securities, will prevail.

In relation to any reference in this Prospectus to third-party internet sites ("**Third-Party Internet Sites**"), whether by way of hyperlinks or by way of description of the Third-Party Internet Sites, you acknowledge and agree that:

- (i) we and our Principal Adviser do not endorse and are not affiliated in any way to the Third-Party Internet Sites. Accordingly, we are not responsible for the availability of or the content or any data, information, files or other material provided on the Third-Party Internet Sites. You shall bear all risks associated with the access to or use of the Third-Party Internet Sites;
- (ii) we and our Principal Adviser are not responsible for the quality of products or services in the Third-Party Internet Sites, particularly in fulfilling any of the terms of any of your agreements with the Third-Party Internet Sites. We and our Principal Adviser are also not responsible for any loss or damage or cost that you may suffer or incur in connection with or as a result of dealing with the Third-Party Internet Sites or the use of or reliance on any data, information, files or other material provided by such parties; and
- (iii) any data, information, files or other material downloaded from the Third-Party Internet Sites is done at your own discretion and risk. We and our Principal Adviser are not responsible, liable or under obligation for any damage to your computer system or loss of data resulting from the downloading of any such data, information, files or other material.

Where an Electronic Prospectus is hosted on the website of the Internet Participating Financial Institution, you are advised that:

- (i) the Internet Participating Financial Institutions are only liable in respect of the integrity of the contents of the Electronic Prospectus, to the extent of the contents of the Electronic Prospectus on the web server of the Internet Participating Financial Institutions which may be viewed via your web browser or other relevant software. The Internet Participating Financial Institutions are not responsible for the integrity of the contents of the Electronic Prospectus which has been obtained from the web server of the Internet Participating Financial Institutions and subsequently communicated or disseminated in any manner to you or other parties;
- (ii) while all reasonable measures have been taken to ensure the accuracy and reliability of the information provided in the Electronic Prospectus, the accuracy and reliability of the Electronic Prospectus cannot be guaranteed because the internet is not a fully secured medium; and
- (iii) the Internet Participating Financial Institutions shall not be liable (whether in tort or contract or otherwise) for any loss, damage or costs that you or any other person may suffer or incur due to, as a consequence of or in connection with any inaccuracies, changes, alterations, deletions or omissions in respect of the information provided in the Electronic Prospectus which may arise in connection with or as a result of any fault with web browsers or other relevant software, any fault on your or any third party's personal computer, operating system or other software, viruses or other security threats, unauthorised access to information or systems in relation to the website of the Internet Participating Financial Institutions, and/or problems occurring during data transmission which may result in inaccurate or incomplete copies of information being downloaded or displayed on your personal computer.

[The rest of this page has been intentionally left blank]

INDICATIVE TIMETABLE

The indicative timetable of our IPO is set out below:

Event	Tentative Date
Issuance of the Prospectus/Opening of application for our IPO Shares	10:00 a.m., [●]
Closing of application for our IPO Shares	5:00 p.m., [●]
Balloting of applications for our IPO Shares	[●]
Allotment/transfer of our IPO Shares to successful applicants	[●]
Listing	[●]

In the event there is any change to the indicative timetable above, we will advertise a notice of the change in a widely circulated English and Bahasa Malaysia daily newspaper in Malaysia.

[The rest of this page has been intentionally left blank]

TABLE OF CONTENTS

	PAGE
PRESENTATION OF FINANCIAL AND OTHER INFORMATION	viii
FORWARD-LOOKING STATEMENTS	x
DEFINITIONS	xii
GLOSSARY OF TECHNICAL TERMS	xx
1. CORPORATE DIRECTORY	1
2. APPROVALS AND CONDITIONS	5
2.1. BURSA SECURITIES	5
2.2. SC	5
2.3. MITI	6
2.4. SAC	6
2.5. MORATORIUM ON OUR SHARES	6
3. PROSPECTUS SUMMARY	8
3.1. PRINCIPAL DETAILS OF OUR IPO	8
3.2. BACKGROUND INFORMATION OF OUR GROUP AND BUSINESS OPERATIONS	8
3.3. COMPETITIVE STRENGTHS	10
3.4. BUSINESS STRATEGIES AND FUTURE PLANS	11
3.5. RISK FACTORS	12
3.6. IMPACT OF COVID-19	14
3.7. DIRECTORS AND KEY SENIOR MANAGEMENT	14
3.8. PROMOTERS AND SUBSTANTIAL SHAREHOLDERS	15
3.9. UTILISATION OF PROCEEDS	16
3.10. FINANCIAL AND OPERATIONAL HIGHLIGHTS	16
3.11. DIVIDEND POLICY	17
4. DETAILS OF OUR LISTING	18
4.1. OPENING AND CLOSING OF APPLICATIONS	18
4.2. INDICATIVE TIMETABLE	18
4.3. DETAILS OF OUR IPO	18
4.4. SHARE CAPITAL, CLASSES OF SHARES AND RANKING	26
4.5. BASIS OF ARRIVING AT THE PRICE OF OUR IPO SHARES	28
4.6. OBJECTIVES OF OUR IPO	29
4.7. DILUTION	30
4.8. UTILISATION OF PROCEEDS	31
4.9. UNDERWRITING COMMISSION, BROKERAGE AND PLACEMENT FEES	36
4.10. SALIENT TERMS OF THE UNDERWRITING AGREEMENT	36
5. INFORMATION ON OUR PROMOTERS, SUBSTANTIAL SHAREHOLDERS, DIRECTORS AND KEY SENIOR MANAGEMENT	37
5.1. OUR PROMOTERS AND SUBSTANTIAL SHAREHOLDERS	37
5.2. BOARD OF DIRECTORS	44
5.3. BOARD PRACTICES	57
5.4. KEY SENIOR MANAGEMENT	64
5.5. DECLARATION BY OUR PROMOTERS, DIRECTORS, AND KEY SENIOR MANAGEMENT	70
5.6. FAMILY RELATIONSHIPS AND ASSOCIATIONS	71
5.7. EXISTING OR PROPOSED SERVICE AGREEMENT	71

TABLE OF CONTENTS (Cont'd)

6.	INFORMATION ON OUR GROUP	72
6.1.	HISTORY AND BACKGROUND	72
6.2.	FORMATION OF OUR GROUP	72
6.3.	OUR SHAREHOLDERS AND GROUP STRUCTURE	79
6.4.	SHARE CAPITAL AND CHANGES IN SHARE CAPITAL	81
6.5.	OUR SUBSIDIARIES	82
6.6.	PUBLIC TAKE-OVER	89
6.7.	MATERIAL PROPERTIES OF OUR GROUP	89
7.	BUSINESS OVERVIEW	91
7.1.	HISTORY AND BUSINESS MILESTONES	91
7.2.	PRINCIPAL BUSINESS ACTIVITIES, PRODUCTS AND SERVICES	93
7.3.	REVENUE SEGMENTATION AND PRINCIPAL MARKETS	105
7.4.	SEASONALITY AND CYCLICALITY	106
7.5.	BUSINESS AND OPERATIONAL PROCESS	107
7.6.	OUR COMPETITIVE STRENGTHS	109
7.7.	TECHNOLOGY USED	111
7.8.	CERTIFICATIONS AND AWARDS	112
7.9.	OPERATING CAPACITIES AND OUTPUT	112
7.10.	TYPES, SOURCES AND AVAILABILITY OF SUPPLIES	113
7.11.	SALES AND MARKETING	114
7.12.	INTELLECTUAL PROPERTY RIGHTS AND TRADEMARKS REGISTERED	118
7.13.	MATERIAL INVESTMENTS AND MATERIAL DIVESTITURES	120
7.14.	MAJOR CUSTOMERS	120
7.15.	MAJOR SUPPLIERS	124
7.16.	DEPENDENCY ON CONTRACTS, LICENCES OR OTHER ARRANGEMENTS	128
7.17.	GOVERNING LAWS AND REGULATIONS	130
7.18.	RESEARCH AND DEVELOPMENT	134
7.19.	INTERRUPTIONS TO BUSINESS AND OPERATIONS	134
7.20.	BUSINESS STRATEGIES AND FUTURE PLANS	135
7.21.	EMPLOYEES	139
7.22.	ENVIRONMENTAL, SOCIAL AND GOVERNANCE PRACTICES AND INITIATIVES	140
8.	INDEPENDENT MARKET RESEARCH REPORT	141
9.	RISK FACTORS	153
9.1.	RISKS RELATING TO OUR BUSINESS AND OPERATIONS	153
9.2.	RISKS RELATING TO OUR INDUSTRY	155
9.3.	RISKS RELATING TO THE INVESTMENT IN OUR SHARES	157
9.4.	OTHER RISK	159
10.	RELATED PARTY TRANSACTIONS	160
10.1.	OUR GROUP'S RELATED PARTY TRANSACTIONS	160
10.2.	TRANSACTIONS THAT ARE UNUSUAL IN THEIR NATURE OR CONDITIONS	164
10.3.	LOANS AND/OR FINANCIAL ASSISTANCE MADE TO OR FOR THE BENEFIT OF RELATED PARTIES	164
10.4.	OUTSTANDING LOANS AND/OR FINANCIAL ASSISTANCE FROM RELATED PARTIES FOR THE BENEFIT OF OUR GROUP	164
10.5.	MONITORING AND OVERSIGHT OF RELATED PARTY TRANSACTIONS	165
11.	CONFLICT OF INTEREST	167
11.1.	INTEREST IN ENTITIES WHICH CARRY ON A SIMILAR TRADE AS THAT OF OUR GROUP OR WHICH ARE OUR CUSTOMERS AND/OR SUPPLIERS	167
11.2.	DECLARATION BY THE ADVISERS ON CONFLICT OF INTEREST	168

TABLE OF CONTENTS (Cont'd)

12. FINANCIAL INFORMATION	169
12.1. HISTORICAL FINANCIAL INFORMATION	169
12.2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION	173
12.3. LIQUIDITY AND CAPITAL RESOURCES	190
12.4. BORROWINGS	195
12.5. TYPES OF FINANCIAL INSTRUMENTS USED, TREASURY POLICIES AND OBJECTIVES	196
12.6. MATERIAL CAPITAL COMMITMENTS	196
12.7. MATERIAL LITIGATION AND CONTINGENT LIABILITIES	196
12.8. KEY FINANCIAL RATIOS	197
12.9. IMPACT OF GOVERNMENT, ECONOMIC, FISCAL OR MONETARY POLICIES	201
12.10. IMPACT OF INFLATION	201
12.11. IMPACT OF FOREIGN EXCHANGE RATES, INTEREST RATES AND/OR COMMODITY PRICES ON OUR OPERATIONS	202
12.12. ORDER BOOK	203
12.13. DIRECTORS' DECLARATION ON OUR FINANCIAL PERFORMANCE	203
12.14. TREND INFORMATION	204
12.15. DIVIDEND POLICY	204
12.16. CAPITALISATION AND INDEBTEDNESS	206
13. REPORTING ACCOUNTANTS' REPORT ON THE PRO FORMA COMBINED STATEMENTS OF FINANCIAL POSITION	207
14. ACCOUNTANTS' REPORT	227
15. ADDITIONAL INFORMATION	329
15.1. SHARE CAPITAL	329
15.2. EXTRACTS OF OUR CONSTITUTION	329
15.3. DEPOSITED SECURITIES AND RIGHTS OF DEPOSITORS	337
15.4. LIMITATION ON THE RIGHT TO HOLD SECURITIES AND/OR EXERCISE VOTING RIGHTS	337
15.5. REPATRIATION OF CAPITAL, REMITTANCE OF PROFIT AND TAXATION	338
15.6. MATERIAL CONTRACTS	341
15.7. MATERIAL LITIGATION	342
15.8. CONSENTS	342
15.9. DOCUMENTS AVAILABLE FOR INSPECTION	342
15.10. RESPONSIBILITY STATEMENTS	343
16. PROCEDURES FOR APPLICATION AND ACCEPTANCE	344
16.1. OPENING AND CLOSING OF APPLICATIONS	344
16.2. METHODS OF APPLICATIONS	344
16.3. ELIGIBILITY	345
16.4. PROCEDURES FOR APPLICATION BY WAY OF APPLICATION FORMS	346
16.5. APPLICATION BY WAY OF ELECTRONIC SHARE APPLICATIONS	347
16.6. APPLICATION BY WAY OF INTERNET SHARE APPLICATIONS	347
16.7. AUTHORITY OF OUR BOARD AND THE ISSUING HOUSE	347
16.8. OVER/UNDER-SUBSCRIPTION	348
16.9. UNSUCCESSFUL/PARTIALLY SUCCESSFUL APPLICANTS	348
16.10. SUCCESSFUL APPLICANTS	349
16.11. ENQUIRIES	350
ANNEXURE A OUR MAJOR LICENCES, PERMITS AND APPROVALS	351

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

All references to “our Company” or “Crest” in this Prospectus are to Crest Group Berhad. All references to “Crest Group”, “our Group”, “we”, “us”, “our” or “ourselves” in this Prospectus are to our Company and our subsidiaries taken as a whole, save for where the context otherwise requires. Unless the context otherwise requires, references to “Management” are to our Directors and Key Senior Management as at the date of this Prospectus, and statements as to our beliefs, expectations, estimates and opinions are those of our Directors and Key Senior Management.

All references to “you” are to our prospective investors.

In this Prospectus, all references to the “Government” are to the Government of Malaysia; and references to “RM” and “sen” are to the lawful currency of Malaysia. Any discrepancies in the tables between amounts listed and the totals in this Prospectus are due to rounding. Other abbreviations and acronyms used herein are defined in the “Definitions” section and technical terms used herein are defined in the “Glossary of Technical Terms” section appearing after that section. Words denoting the singular shall, where applicable, include the plural and vice versa and words importing the masculine gender shall, where applicable, include the feminine and neuter genders and vice versa. References to persons shall include natural persons, firms, companies, bodies corporate and corporations.

References to any provisions of the statutes, rules, regulations, enactments, guidelines or rules of stock exchange shall (where the context admits), be construed as reference to provisions of such statutes, rules, regulations, enactments, guidelines or rules of stock exchange (as the case may be) as modified by any written law or (if applicable) amendments or re-enactment to the statutes, rules, regulations, enactments, guidelines or rules of stock exchange for the time being in force.

Solely for your convenience, this Prospectus contains translation of certain RMB/SGD/THB/USD amount into RM at specified rates. No representation is made that the RMB/SGD/THB/USD amounts referred to in this Prospectus could have been or could actually be converted into RM amounts, at the rates indicated or at all. The exchange rates as set out below are applied in this Prospectus unless specified otherwise:

	FYE			FPE
	2020	2021	2022	2023
RMB to RM1				
Average rate ⁽¹⁾	0.6091	0.6428	0.6540	0.6431
Closing rate ⁽²⁾	0.6141	0.6547	0.6322	0.6301
SGD to RM1				
Average rate ⁽¹⁾	3.0462	3.0842	3.1913	3.3537
Closing rate ⁽²⁾	3.0396	3.0853	3.2740	3.3851
THB to RM1				
Average rate ⁽¹⁾	0.1343	0.1296	0.1256	0.1307
Closing rate ⁽²⁾	0.1341	0.1247	0.1272	0.1314
USD to RM1				
Average rate ⁽¹⁾	4.2011	4.1456	4.4005	4.4818
Closing rate ⁽²⁾	4.0170	4.1650	4.3900	4.5030

(Source: Bank Negara Malaysia website)

Notes:

- (1) The average rate is used for the translation of income and expense items in the combined statements of financial position of Crest.
- (2) The closing rate is used for the translation of assets and liabilities in the combined statements of profit or loss and other comprehensive income for Crest.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION (Cont'd)

Any reference to a date and time shall be a reference to a date and time in Malaysia, unless otherwise stated.

All references to the "LPD" in this Prospectus are to 1 January 2024, being the latest practicable date prior to the registration of this Prospectus with Bursa Securities.

This Prospectus includes statistical data provided by us and various third parties and cites third-party projections regarding growth and performance of the industry in which we operate. This data is taken or derived from information published by industry sources and from our internal data. In each such case, the source is stated in this Prospectus, provided that where no source is stated, it can be assumed that the information originated from us. We have appointed Smith Zander to provide an independent market and industry review of the industry in which we operate in. In compiling their data for the review, Smith Zander relied on its research methodology, industry sources, published materials, its private databanks and direct contacts within the industry.

Further, third-party projections cited in this Prospectus are subject to significant uncertainties that could cause actual data to differ materially from the projected figures. We cannot assure you that the projected figures will be achieved and you should not place undue reliance on the statistical data and third-party projections cited in this Prospectus.

If there are any discrepancies or inconsistencies between the English and Bahasa Malaysia versions of this Prospectus, the English version shall prevail.

The information on our website or any website directly or indirectly linked to our website does not form part of this Prospectus and you should not rely on those information for the purposes of your decision whether or not to invest in our Shares.

FORWARD-LOOKING STATEMENTS

This Prospectus contains forward-looking statements. All statements, other than statements of historical facts included in this Prospectus, including, without limitation, those regarding our financial position, business strategies and prospects are forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements, or industry results to be materially different from any future results, performance or achievements, or industry results expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. Such forward-looking statements reflect our current view with respect to future events and do not guarantee future performance.

Forward-looking statements can be identified by the use of forward-looking terminologies including the words “may”, “will”, “would”, “could”, “believe”, “expect”, “anticipate”, “intend”, “estimate”, “aim”, “plan”, “forecast” or similar expressions, and include all statements that are not historical facts. Such forward-looking statements include, without limitation, statements relating to:

- (i) demand and supply for our products and services and the general industry environment;
- (ii) our business strategies, trends and competitive position;
- (iii) our plans and objectives for future operations;
- (iv) our future financial position, earnings, cash flows and liquidity;
- (v) potential growth opportunities;
- (vi) our ability to pay dividends; and
- (vii) the regulatory environment and the effects of future regulation.

Our actual results may differ materially from information contained in such forward-looking statements as a result of a number of factors beyond our control, including, without limitation:

- (i) activities and financial position of our customers, suppliers and other business partners;
- (ii) finance costs, interest rates, tax rates and foreign exchange rates;
- (iii) future regulatory or government policy changes affecting us or countries where we conduct business;
- (iv) delays or problems with the execution of our expansion plans;
- (v) the competitive environment of the industry in which we operate;
- (vi) reliance on licences, permits and approvals;
- (vii) the general economic, business, social, political and investment environment in countries where we conduct business;
- (viii) continued availability of capital and financing;
- (ix) fixed or contingent obligations and commitments;
- (x) changes in accounting standards and policies; and
- (xi) other factors beyond our control.

FORWARD-LOOKING STATEMENTS (Cont'd)

Additional factors that could cause our actual results, performance or achievements to differ materially include, but are not limited to, those discussed in Section 9 of this Prospectus on “Risk Factors” and Section 12 of this Prospectus on “Management’s Discussion and Analysis of Financial Condition and Results of Operations”. We cannot give any assurance that the forward-looking statements made in this Prospectus will be realised. Such forward-looking statements are made only as at the date of this Prospectus.

Should we become aware of any subsequent material change or development affecting matters disclosed in this Prospectus arising from the date of registration of this Prospectus but before the date of allotment of our IPO Shares, we will issue a supplemental or replacement prospectus, as the case may be, in accordance with the provisions of Section 238(1) of the CMSA and Paragraph 1.02, Chapter 1 of Part II (Division 6 on Supplementary and Replacement Prospectus) of the Prospectus Guidelines.

[The rest of this page has been intentionally left blank]

DEFINITIONS

The following terms in this Prospectus bear the same meanings as set out below unless the term is defined otherwise or the context requires otherwise:

COMPANIES WITHIN OUR GROUP

Crest or Company	:	Crest Group Berhad (Registration No. 202301031031 (1524954-M))
Crest Analytic	:	Crest Analytic Sdn. Bhd. (Registration No. 201401030109 (1106195-A))
Crest Innovation	:	Crest Innovation (S) Pte. Ltd. (Registration No. 200812000W)
Crest Lab	:	Crest Lab Sdn. Bhd. (Registration No. 201501017532 (1142866-K))
Crest Nanosolutions	:	Crest Nanosolutions (M) Sdn. Bhd. (Registration No. 199601042657 (415010-D))
Crest Suzhou	:	Crest Systems (Suzhou) Co., Ltd (苏州科冠电子科技有限公司) (Registration No. 91320594774673540H)
Crest Systems	:	Crest Systems (M) Sdn. Bhd. (Registration No. 199901011854 (486754-U))
Crest Thailand	:	Crest Nanosolution (Thailand) Co., Ltd. (Registration No. 0135553004011)
Crest Upstar	:	Crest Upstar Pte. Ltd. (Registration No. 200808835G)
Matrix Biosciences	:	Matrix Biosciences (M) Sdn. Bhd. (Registration No. 200101016370 (552127-P))
Matrix Innovations	:	Matrix Innovations (M) Sdn. Bhd. (Registration No. 200201000611 (568274-V))
Matrix Optics	:	Matrix Optics (M) Sdn. Bhd. (Registration No. 199501034235 (363437-K))
Crest Group or the Group	:	Collectively, Crest and its Subsidiaries
Subsidiaries	:	Collectively, Crest Analytic, Crest Innovation, Crest Lab, Crest Nanosolutions, Crest Suzhou, Crest Systems, Crest Thailand, Crest Upstar, Matrix Biosciences, Matrix Innovations, and Matrix Optics

DEFINITIONS (Cont'd)**ACQUISITIONS**

- Acquisitions** : Collectively, Crest Group Acquisition, Crest Nanosolutions Acquisition, Crest Singapore Group Acquisition, Crest Suzhou Acquisition and Crest Thailand Acquisition
- Crest Analytic Acquisition** : The acquisition of 70.00% equity interest in Crest Analytic by our Company from the Crest Vendors, as further described in Section 6.2 of this Prospectus
- Crest Group Acquisition** : Collectively, Crest Lab Acquisition, Crest Systems Acquisition, Matrix Innovations Acquisition, Matrix Optics Acquisition, Crest Analytic Acquisition and Matrix Biosciences Acquisition pursuant to the Crest Group SSA and Matrix Biosciences SSA, as further described in Section 6.2 of this Prospectus
- Crest Group SSA** : Conditional share sale agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Crest Lab Acquisition, Crest Systems Acquisition, Matrix Innovations Acquisition, Matrix Optics Acquisition and Crest Analytic Acquisition
- Crest Innovation Acquisition** : The acquisition of 70.00% equity interest in Crest Innovation by our Company from the Crest Vendors pursuant to Crest Innovation SSA, as further described in Section 6.2 of this Prospectus
- Crest Innovation SSA** : Conditional sale and purchase agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Crest Innovation Acquisition
- Crest Lab Acquisition** : The acquisition of the entire share capital of Crest Lab by our Company from the Crest Vendors, as further described in Section 6.2 of this Prospectus
- Crest Nanosolutions Acquisition** : The acquisition of the entire share capital of Crest Nanosolutions by our Company from the Crest Vendors and KQY pursuant to the Crest Nanosolutions SSA, as further described in Section 6.2 of this Prospectus
- Crest Nanosolutions SSA** : Conditional share sale agreement dated 17 January 2024 entered into by our Company and the Crest Vendors and KQY for the Crest Nanosolutions Acquisition
- Crest Singapore Group Acquisition** : Collectively, Crest Innovation Acquisition and Crest Upstar Acquisition pursuant to the Crest Innovation SSA and Crest Upstar SSA, as further described in Section 6.2 of this Prospectus
- Crest Suzhou Acquisition** : The acquisition of 80.00% of the equity interest of Crest Suzhou by our Company from the Crest Vendors, pursuant to the Crest Suzhou SSA, as further described in Section 6.2 of this Prospectus
- Crest Suzhou SSA** : Conditional equity transfer agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Crest Suzhou Acquisition
- Crest Systems Acquisition** : The acquisition of the entire share capital of Crest Systems by our Company from the Crest Vendors, as further described in Section 6.2 of this Prospectus

DEFINITIONS (Cont'd)

Crest Thailand Acquisition	:	The acquisition of 49.00% equity interest in Crest Thailand by our Company from the Crest Vendors pursuant to the Crest Thailand SSA, as further described in Section 6.2 of this Prospectus
Crest Thailand SSA	:	Conditional share sale agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Crest Thailand Acquisition
Crest Upstar Acquisition	:	The acquisition of the entire share capital of Crest Upstar by our Company from the Crest Vendors pursuant to the Crest Upstar SSA, as further described in Section 6.2 of this Prospectus
Crest Upstar SSA	:	Conditional sale and purchase agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Crest Upstar Acquisition
Crest Vendors	:	Collectively, LSW, ACM and YKM
Matrix Biosciences Acquisition	:	The acquisition of the entire share capital of Matrix Biosciences by our Company from the Crest Vendors pursuant to the Matrix Biosciences SSA, as further described in Section 6.2 of this Prospectus
Matrix Biosciences SSA	:	Conditional share sale agreement dated 17 January 2024 entered into by our Company and the Crest Vendors for the Matrix Biosciences Acquisition
Matrix Innovations Acquisition	:	The acquisition of the entire share capital of Matrix Innovations by our Company from the Crest Vendors, as further described in Section 6.2 of this Prospectus
Matrix Optics Acquisition	:	The acquisition of the entire share capital of Matrix Optics by our Company from the Crest Vendors, as further described in Section 6.2 of this Prospectus

GENERAL

ACE Market	:	ACE Market of Bursa Securities
ACM	:	Au Chun Mun, our Promoter, specified shareholder, substantial shareholder and Non-Independent Executive Director
Act	:	Companies Act 2016
ADA	:	Authorised Depository Agent
Admission	:	Admission of our Shares to the Official List of the ACE Market
AGM	:	Annual general meeting
ALY	:	ALY Venture Sdn. Bhd. (formerly known as Crest Precision Sdn Bhd) (Registration No. 200601002655 (722403-V))
Application	:	Application for our IPO Shares by way of Application Forms, Electronic Share Application or Internet Share Application
Application Forms	:	Printed application forms for the application of our IPO Shares accompanying this Prospectus including the Pink Application Form
ATM	:	Automated teller machine

DEFINITIONS (Cont'd)

Auditors or Reporting Accountants	: Baker Tilly Monteiro Heng PLT (Registration No. 201906000600 (LLP0019411-LCA Chartered Accountants (AF 0117)))
Authorised Financial Institution	: Authorised financial institution participating in the Internet Share Application in respect of the payment for our IPO Shares
BNM	: Bank Negara Malaysia
Board	: Board of directors of our Company
Bursa Depository	: Bursa Malaysia Depository Sdn Bhd (Registration No. 198701006854 (165570-W))
Bursa Securities	: Bursa Malaysia Securities Berhad (Registration No. 200301033577 (635998-W))
CAGR	: Compound annual growth rate
CCC or CF	: Certificate of completion and compliance or certificate of fitness or such certificate by any other name issued by the relevant authority under the SDBA and any by-laws made under it or such relevant legislation applicable at the material time
CCM	: Companies Commission of Malaysia
CDS	: Central Depository System
CDS Account	: An account established by Bursa Depository for a Depositor for the recording of deposits or withdrawals of securities and for dealing in such securities by the Depositor
Climan	: Climan Sdn. Bhd. (Registration No. 202301044617 (1538533-H)), being our specified shareholder
CMSA	: Capital Markets and Services Act, 2007
Constitution	: Constitution of our Company
COVID-19	: Novel coronavirus disease 2019, an infectious respiratory disease which first broke out in 2019
Depositor	: A holder of a CDS Account
Directors	: Directors of our Company and within the meaning given in Section 2 of the CMSA
E&E	: Electrical and electronic
EBITDA	: Earnings before interest, tax, depreciation and amortisation
Electronic mail (“e-mail”)	: A method of exchanging messages between people using electronic devices
Electronic Prospectus	: Copy of this Prospectus that is issued, circulated or disseminated via the internet and/or an electronic storage medium including, but not limited to CD-ROMs (<i>compact disc read-only memory</i>)
Electronic Share Application	: Application for our IPO Shares through a Participating Financial Institution’s ATM

DEFINITIONS (Cont'd)

Eligible Persons	: Collectively, our Directors and employees of our Group who are eligible to participate in the Public Issue
EPF	: Employees' Provident Fund
EPS	: Earnings per Share
Executive Directors	: Collectively, LSW, ACM and YKM
Financial Period Under Review	: FYE 2020, FYE 2021, FYE 2022 and FPE 2023, collectively.
Financial Years Under Review	: FYE 2020, FYE 2021 and FYE 2022, collectively
FPE	: Financial period ended 31 July
FYE	: Financial year ended or where the context otherwise requires, financial year ending 31 December
GP	: Gross profit
IFRS	: International Financial Reporting Standards as issued by the International Accounting Standards Board
IMR Report	: Independent market research report dated 17 January 2024 prepared by Smith Zander
Initial Public Offering or IPO	: Initial public offering comprising the Public Issue and Offer for Sale, collectively
Internet Participating Financial Institutions	: Participating financial institutions for the Internet Share Application
Internet Share Application	: Application for our IPO Shares under the Public Issue through an Internet Participating Financial Institution
IPO Price	: IPO price of RM[●] per IPO Share
IPO Shares	: Collectively, Issue Shares and Offer Shares
Issue Shares	: New Shares to be issued by our Company pursuant to the Public Issue
Issuing House	: Malaysian Issuing House Sdn Bhd (Registration No. 199301003606 (258345-X))
IT	: Information technology
Key Senior Management	: Key senior management personnel of our Group as set out in Section 5.4 of this Prospectus
KWY	: Kwong Wing Yew, our Vice President of Sales
Listing	: Admission to the Official List and the listing of and quotation for our entire enlarged issued Shares on the ACE Market
Listing Requirements	: ACE Market Listing Requirements of Bursa Securities
LPD	: 1 January 2024, being the latest practicable date prior to the registration of this Prospectus with Bursa Securities

DEFINITIONS (Cont'd)

LSW	:	Lim Siong Wai, our Promoter, specified shareholder, substantial shareholder, Non-Independent Executive Director and Group Managing Director
MAICSA	:	The Malaysian Institute of Chartered Secretaries and Administrators
Malaysian Public	:	Malaysian citizens, companies, co-operatives, societies and institutions incorporated or organised under the laws of Malaysia
Market Day	:	Any day between Mondays and Fridays (both days inclusive) which is not a public holiday and a day on which Bursa Securities is open for trading in securities
MCO	:	Movement control order issued under the Prevention and Control of Infectious Disease Act 1988 and the Police Act 1967
MFRS	:	Malaysian Financial Reporting Standards
MIA	:	Malaysian Institute of Accountants
MIDF Investment or Principal Adviser or Sponsor or Underwriter or Placement Agent	:	MIDF Amanah Investment Bank Berhad (Registration No. 197501002077 (23878-X))
MITI	:	Ministry of Investment, Trade and Industry, Malaysia
MyIPO	:	Intellectual Property Corporation of Malaysia
N/A	:	Not applicable
NA	:	Net assets
NBV	:	Net book value
NRIC	:	Malaysian National Registration Identity Card
Offer for Sale	:	Offer for sale by the Selling Shareholders of 103,890,000 Offer Shares at our IPO Price, representing 12.00% of our enlarged issued Shares by way of private placement to identified Bumiputera investors approved by the MITI and Selected Investors
Offer Shares	:	The existing Shares to be offered by the Selling Shareholders pursuant to the Offer for Sale
Official List	:	A list specifying all securities listed on Bursa Securities
Participating Financial Institution	:	Participating financial institution for the Electronic Share Application
PAT	:	Profit after taxation
PBR	:	Price-to-book ratio
PBT	:	Profit before taxation
Pink Application Form	:	Application forms for the application of IPO Shares by Eligible Persons accompanying this Prospectus

DEFINITIONS (Cont'd)

Pink Form Shares	:	The allocation of 12,984,000 Issue Shares to the Eligible Persons pursuant to the Public Issue
PRC	:	People's Republic of China
Promoters	:	Collectively, LSW, ACM and YKM
Prospectus	:	This Prospectus dated [●] issued by our Company
Prospectus Guidelines	:	Prospectus Guidelines issued by the SC
Public Issue	:	The public issue of 130,705,300 Issue Shares at our IPO Price, representing 15.10% of our entire enlarged issued Shares in the following manner: <ul style="list-style-type: none"> (i) 43,280,000 Issue Shares made available for application by the Malaysian Public; (ii) 12,984,000 Issue Shares made available for application by the Eligible Persons; and (iii) 74,441,300 Issue Shares made available by way of private placement to identified Bumiputera investors approved by the MITI.
QA/QC	:	Quality Assurance/Quality Control
R&D	:	Research and development
Record of Depositors	:	A record of securities holders established by Bursa Depository under the Rules of Bursa Depository
Rules of Bursa Depository	:	The rules of Bursa Depository as issued under the SICDA
SAC	:	Shariah Advisory Council of the SC
SC	:	Securities Commission Malaysia
SDBA	:	Street, Drainage and Building Act 1974
Selected Investors	:	Being investors that meet the requirements of Schedule 6 or 7 of the CMSA and subscribing for our IPO Shares through private placement
Selling Shareholders	:	Collectively, LSW, ACM and YKM
Share Registrar	:	Boardroom Share Registrars Sdn Bhd (Registration No. 199601006647 (378993-D))
Share Transfer	:	Transfer of a total of 476,078,900 Shares held by LSW, ACM and YKM to Climan during the prescription period (one day after the launching date of this Prospectus up to a period of 30 days)
Shares	:	Ordinary shares in our Company
SICDA	:	Securities Industry (Central Depositories) Act, 1991
Smith Zander or IMR	:	Smith Zander International Sdn Bhd (Registration No. 201301028298 (1058128-V)), the independent market researcher

DEFINITIONS (Cont'd)

SOCISO	:	Social Security Organisation, Malaysia, also known as PERKESO (Pertubuhan Keselamatan Sosial)
specified shareholders	:	means a controlling shareholder, a person connected to a controlling shareholder, and an executive director who is a substantial shareholder, of Crest, or any other person as specified by Bursa Securities. In the context of this IPO, the specified shareholders are collectively LSW, ACM, YKM and Climan
SST	:	Sales and services tax
Underwriting Agreement	:	Underwriting agreement dated [●] entered into between our Company and MIDF Investment pursuant to the IPO
UK	:	United Kingdom
USA	:	United States of America
White Application Form	:	Application forms for the application of IPO Shares by the Malaysian Public accompanying this Prospectus
YKM	:	Yap Kian Meng, our Promoter, specified shareholder, substantial shareholder and Non-Independent Executive Director

CURRENCIES

RM and sen	:	Ringgit Malaysia and sen, the lawful currency of Malaysia
RMB	:	Renminbi, the lawful currency of PRC
SGD	:	Singapore Dollar, the lawful currency of Singapore
THB	:	Thai Baht, the lawful currency of Thailand
USD	:	United States Dollar, the lawful currency of United States

GLOSSARY OF TECHNICAL TERMS

This glossary contains the explanation of certain terms used throughout this Prospectus in connection with our Group and business. The terminologies and their meanings may not correspond to the standard industry meanings of these term.

3D measuring microscope	:	A microscope that can perform non-contact 3D measurement of a sample.
Automation solution provider	:	A service provider that provides solutions which automates production and/or lab test operational processes through the supply and integration of a series of equipment, software and technology.
Carbon hydrogen nitrogen sulphur analyser	:	An equipment used to detect the carbon, hydrogen, sulphur and nitrogen content in a sample through analysing the gases produced during combustion process.
Curve tracer	:	An equipment used to test and analyse the E&E properties (relationship between electric current and electric voltage) of semiconductor components.
Destructive testing	:	A series of testing methods whereby the samples is being destroyed/damaged during the testing process.
Die	:	A block of semiconductor material that is imprinted with functional circuit.
Die attach	:	A semiconductor manufacturing process whereby a die is attached onto an individual die pad (i.e. a metallic device used to connect the IC to a circuit board).
Die attach curing	:	A semiconductor manufacturing process whereby a die is secured onto a substrate, such as a PCB. The purpose of this process is to create a strong bond between the die and substrate to ensure proper electrical and thermal conduction.
Digital microscope	:	A microscope integrated with a digital interface that allows users to capture and display digital images of samples under observation.
Dimensional wafer metrology system	:	A specialised measurement system used to measure and characterise the dimensions, shapes and features of semiconductor wafers.
Flip chip bonding	:	A semiconductor manufacturing process whereby the active side of the die is attached onto a substrate, such as a PCB. The purpose of this process is to enable the die to directly contact the PCB, thus creating an electrical interconnection within the plastic packaging material (also known as IC package).
Glass slides	:	A piece of thin and flat glass that is generally used to hold a specimen when the specimen is being observed through a microscope.
Hands-free Indexer system	:	An automated system for loading, unloading and transferring objects without human intervention during the testing process.

GLOSSARY OF TECHNICAL TERMS (Cont'd)

High speed camera	:	A camera that performs high-speed image capturing and recording on fast-moving objects.
Infrared / convection cure oven	:	An equipment that utilises heat to cure a finishing, adhesive and/or coating layer onto E&E components.
Integrated circuit ("IC")	:	An assembly and integration of active semiconductor components such as transistors and diodes, and passive semiconductor components such as resistors and capacitors, on a single thin semiconductor material known as wafer.
Low power microscope	:	A microscope used to examine specimens at a lower-level magnification.
Manufacturing Execution System ("MES")	:	A software system used to monitor, track, record and/or control the manufacturing of products from raw materials to finished products.
Measuring microscope	:	A microscope that can view and obtain precise measurements of an object (e.g. E&E components). This microscope is commonly used for quality control purposes.
Micro focus X-ray inspection equipment	:	An X-ray inspection equipment that utilises tightly focused X-ray beams to detect flaws and defects in objects.
Nano indenter	:	An equipment used to test and measure the mechanical properties and behaviour (e.g. hardness, elasticity, strength) of a sample at a nano scale.
Optical microscope	:	A microscope that utilises a combination of lenses to project magnified images of samples for quality inspection and analysis.
Osmometer	:	An equipment used in clinical laboratories for measuring the concentration of particles in a solution.
Particle size analyser	:	An equipment used to determine and measure the size of particles and/or particle distribution/dispersion in a sample through laser diffraction.
Plasma treatment / processing system	:	An equipment used to remove impurities and contaminants from the surface of a sample through the use of plasma.
Plating	:	A semiconductor manufacturing process whereby a thin layer of metal is deposited onto the surface of the ICs.
Preventive maintenance	:	Regular and routine maintenance of equipment and assets to keep them in optimal condition and as a preventive measure to avert any unexpected equipment failure.
Printed circuit board ("PCB")	:	A flat base of insulating materials with tracks made of conductive material (such as copper) which mechanically supports and electrically connects E&E components that have been mounted onto the material.
Radio frequency ("RF") probes	:	A device to connect an electronic sample to the testing equipment, for the testing and measurement of RF signal.
Raman spectrometer	:	An equipment commonly used to perform chemical analysis of materials.

GLOSSARY OF TECHNICAL TERMS (Cont'd)

SECS / GEM	:	Refers to Semiconductor Equipment Communications Standard / Generic Equipment Model, which is an interface protocol used in semiconductor equipment to host data communications.
Semi-automatic / fully-automated inspection equipment	:	An equipment used to perform quality inspection tests on components for quality defects (e.g. missing component, skewed size, shape and/or component). This equipment is primarily used in the semiconductor and E&E industries. This equipment can be semi-automated or fully automated.
Semiconductor wafer inspection microscope	:	A large stage microscope that is used for wafer inspection.
Single crystal X-ray diffraction equipment	:	An equipment used to analyse the structure of single crystals, including the locations and position of atoms through X-ray diffraction.
Singulation	:	A semiconductor manufacturing process that separates individual IC chips from the substrate.
Solderability tester	:	An equipment used to perform destructive solderability testing as well as to determine the degree of wetting necessary for a solid solder connection.
Solvents	:	A liquid with the ability to dissolve other substances to form solutions.
Time of flight secondary ion mass spectrometer	:	An equipment used to analyse the composition of a sample's surface elemental composition and chemical bonding state by sputtering the surface of the sample with ion beams.
Transmission electron microscope	:	An electron microscope that utilises beams of electrons as a source of illumination to magnify and observe objects on a nano scale, and produces higher resolution images as compared to scanning electron microscope. Other advanced features include the ability to obtain the thickness, density, composition and crystallinity of a sample.
Ultraviolet cure oven	:	An equipment that utilises ultraviolet light to cure a finishing, adhesive and/or coating later onto E&E components.
Underfill / coating	:	A semiconductor manufacturing process of filling the gap between dies and IC packages with an adhesive material during IC packaging process.
Valve	:	A device used to control the movement of liquids, gases and powders, amongst others, through pipes or tubes, or from tanks or other containers.
Vibrating sample magnetometer	:	An equipment used to measure the magnetic properties of a sample.
Video contact angle ("VCA") system	:	An equipment that utilises motorised syringe, camera and software to capture the image of water droplet and determine the tangent lines of the liquid surface contact to the solid surface, in order to study the cleanliness of the surface.
Wafer	:	A thin round slice of semiconductor material, typically silicon or germanium, used in the fabrication of ICs.
Wafer back grinding	:	A semiconductor manufacturing process whereby the back-side (non-active side) of a semiconductor wafer is grinded to the desired thickness level.

GLOSSARY OF TECHNICAL TERMS (Cont'd)

Wafer handling system	:	A robotics system used to automate and facilitate the handling of wafers during semiconductor manufacturing process.
Wafer metrology system	:	A system that comprises various equipment to measure the characteristics of semiconductor wafers (e.g. thickness and roughness) for quality inspection and R&D purposes.
Wafer mounting	:	A semiconductor manufacturing process whereby a semiconductor wafer is mounted or securely attached onto a holder of an equipment.
Wafer mounting system	:	An equipment used to mount tapes onto wafer during the semiconductor manufacturing process.
Wafer sawing	:	A semiconductor manufacturing process whereby a semiconductor wafer is sawn into individual dies.
Warpage and deformation measurement system	:	An equipment that performs measurement on the warpage and deformation of a board's and/or component's surface. The measurements are taken when the board and/or component is subjected to heating or cooling. Additionally, the surface of the board may be flat or attached with components.
Wave-length dispersive X-ray fluorescence equipment ("WDXRF")	:	An X-ray fluorescence equipment that performs elemental analysis on samples through X-ray fluorescence. This equipment has higher resolution performance and better ability to detect lower intensity signals compared to the energy dispersive XRF analyser.
Wire bonding	:	A semiconductor manufacturing process of creating electrical interconnections between semiconductors (or other integrated circuits) and silicon chips using bonding wires, which are fine wires made of materials such as gold and aluminium.
X-ray computed tomography	:	An equipment that utilises X-rays to generate 3D reconstruction images of samples.
Zeta potential analyser	:	An equipment used to measure the size of particles and molecules as well as the charge and concentration of the particles in a sample.