INTRODUCTION

The Group is principally engaged in the manufacture and sale of a broad range of double-sided and multilayer printed circuit boards (PCBs). The Group has a global customer base comprising principally Electronics Manufacturing Services (EMS) companies and Original Equipment Manufacturers (OEMs) which are engaged in the production of a diverse range of products for personal computers (PC) and PC-related industries, as well as the telecommunications, office components, security, instrumentation equipment and consumer products industries.

The Group has manufactured PCBs of up to 14 layers and has developed prototypes of PCBs of up to 26 layers. The Group has also manufactured PCBs with circuit track spacing/line width from 0.003 inch to 0.006 inch. The Group is certified by Underwriters Laboratories Inc., an independent non-profit product safety testing and certification organisation, as capable of producing PCBs with circuit track width of 0.002 inch. In addition, the Group has manufactured, on a small scale, hybrid construction of PCBs using two different types of materials to fabricate high performance material PCBs (for example high frequency and high thermal resistance).

The Group intends to enhance its product mix by increasing the percentage of output of higher layer PCBs and further invest in plant and machinery and R&D. As higher layer PCBs generally command higher profit margins, the Directors believe that successful implementation of such strategy will have a significant positive impact on the profitability of the Group in the near future.

According to a survey conducted by an industrial magazine published by a publisher based in the US in 2001, the Group was ranked 15th amongst PCB companies in the Asia Pacific region (excluding Japan), and 52nd amongst the top 100 largest PCB companies in the world based on revenue generated in the year 2000. Among these top 100 largest PCB companies, 25 PCB companies were from the Asia Pacific region (excluding Japan).

SALES AND MARKETING

General

Currently, the Group supplies PCBs to customers located in Hong Kong, the PRC, Taiwan, other Asian countries, North America and Europe. With its administrative headquarters in Hong Kong, the Group has marketing offices in Singapore, Malaysia, Thailand, Taiwan, UK and the US for the marketing and promotion of PCB products. These marketing offices also serve as contact points where customer feedback and other industry information are relayed to the Group's headquarters in Hong Kong.

During each of the three years ended 31 December, 2001, the sales of the Group can be classified as follows:—

Breakdown of sales of the Group by type of PCBs for each of the three years ended 31 December, 2001

	For the year ended 31 December,					
Type of PCBs	**1999**		**2000**		**2001**	
	HK$'000	*%*	*HK$'000*	*%*	*HK$'000*	*%*
Double-sided	174,645	18.3	179,582	15.6	158,104	13.8
Four layers	645,625	67.7	829,869	72.3	799,920	69.6
Six to 14 layers	133,496	14.0	139,078	12.1	191,119	16.6
Total	953,766	100.0	1,148,529	100.0	1,149,143	100.0

Note: The income for producing PCB prototypes of more than 14 layers is not included in the above table, as the amount was insignificant in each of the three years ended 31 December, 2001.

Breakdown of sales of the Group by location of customers for each of the three years ended 31 December, 2001

Location of customers	For the year ended 31 December, 1999		2000		2001	
	HK$'000	*%*	*HK$'000*	*%*	*HK$'000*	*%*
Taiwan	46,261	4.9	41,458	3.6	130,857	11.4
North America	257,517	27.0	320,061	27.9	288,556	25.1
South East Asia	421,166	44.2	378,201	32.9	366,877	31.9
Europe	47,688	5.0	86,234	7.5	74,117	6.5
The PRC & Hong Kong	181,134	18.9	322,575	28.1	288,736	25.1
	953,766	100.0	1,148,529	100.0	1,149,143	100.0

Note: The location of the customer is determined by the location of the entity placing the orders for purchase of the Group's products, regardless of the location of the holding company of such customer.

The Group's customers are mainly EMS companies and OEMs engaging in the production of a diverse range of products for industries such as PC and PC-related, telecommunications, office components, security, instrumentation equipment and consumer products industries.

Based on the Group's understanding of the principal business of its customers and the sales revenue generated from them, it is estimated that not less than 73%, not less than 75% and not less than 73% of the Group's total turnover was attributable to PCBs manufactured for PC and PC-related products during each of the three years ended 31 December, 2001, respectively.

Most of the Group's sales are invoiced in US dollars. The standard payment terms are on an open accounts basis with credit periods of 30 days to 90 days.

Marketing and promotion

Orders to the Group are secured through its own marketing efforts and referrals from customers and business associates.

Marketing approach

The Group considers maintaining close relationships with its customers as an important factor to success. Over the years, the Group has established a marketing approach which includes appointing marketing officers in its major markets worldwide. To this end, the Group has held numerous meetings with EMS and OEM customers which use PCB products.

Marketing force

As at the Latest Practicable Date, the Group and its associated company employed a team of 40 marketing officers, who are located in Hong Kong, the PRC, Singapore, Malaysia, Thailand, Taiwan, the US and Europe. Of these marketing personnel, 20 of them have had an average of over 10 years of marketing experience. In addition to the marketing officers, the Group has contracted with 14 business representatives, being Independent Third Parties, located in the US and other European countries such as Italy and France to serve as its authorised sales agents. The business representatives are remunerated based on a percentage of revenue generated by them. No minimum fee is payable to any of the representatives by the Group.

Customer services

The Group strives to provide timely and quality services to its customers. As at the Latest Practicable Date, the Group had a customer service team consisting of five employees, whose primary function is to monitor customer requirements on quality control, timely delivery and product pricing as well as answer customers' queries. Furthermore, the customer service team conducts on-site training programmes on PCB production for customers. Depending on the average order size of the customer, the Group organises regular meetings with its customers, at least on a quarterly basis. Through regular visits and contacts by its marketing officers and sales agents, the Group is able to maintain close relationships with its existing customers and to keep abreast of the latest market demands.

In order to provide quick response to customers' requests for alterations of orders, the Group uses electronic-mails for faster and more efficient communication. Furthermore, the Group has installed a File Transfer Protocol or "FTP" server and its own website to facilitate communication with customers. Support services are also provided via 24-hour hot line of the Group.

The Group has participated in a quality control programme, the Six Sigma programme, with one of its major customers. This programme seeks to identify problems in processes, formulates solutions to address problems and allocates the necessary resources to solve these problems, in order to provide better services to customers.

Trade shows and exhibitions

The Group also participates in major trade shows and exhibitions such as the IPC Conference in the US, and SIEPE 2001 in Shenzhen.

Customers

Most of the Group's customers are companies in the PC and PC-related, telecommunications equipment, office equipment and disk drive industries. The Group's customers include well-known manufacturers of disk drives, PC and PC peripheral products, telecommunication equipment and other consumer electronic products.

Largest customers

During each of the three years ended 31 December, 2001, sales to the five largest customers of the Group accounted for approximately 59%, approximately 59% and approximately 58% of the turnover of the Group, respectively. During each of the three years ended 31 December, 2001, sales to the largest customer of the Group accounted for approximately 19%, approximately 26% and approximately 23% of the turnover of the Group, respectively. These customers are Independent Third Parties and have business relationships with the Group ranging from four to 16 years.

Credit policy and credit management

Sales to customers are usually on an open account basis. During the year ended 31 December, 2001, approximately 99% of the Group's sales was made on an open accounts basis with average credit periods ranging from 30 to 90 days, while the remaining 1% of the Group's sales was on a letter of credit basis with average credit periods also ranging from 30 to 90 days. As a substantial percentage of the Group's sales is on an open accounts basis, the Group has taken up credit insurance policies from Euler Trade Indemnity and Hong Kong Export Credit Insurance Corporation. As such, in the event of non-payment by its customers, the Group will be able to recover 90% of the amount outstanding from Euler Trade Indemnity and Hong Kong Export Credit Insurance Corporation. During the year ended 31 December, 1999, the Group experienced a non-payment of approximately HK$3.5 million, of which approximately HK$3.2 million was recovered from the credit insurance company. During the three years ended 31 December, 2001, the premium paid by the Group amounted to approximately HK$3.1 million, approximately HK$3.8 million and approximately HK$3.6 million, respectively. The premium is paid in advance based on the forecast turnover of the Group at the beginning of the period and the difference is adjusted after the period-end when the audited turnover is determined. The proceeds of the credit insurance policy have been assigned to a licensed bank in Hong Kong to secure certain short-term bank borrowings granted by them to the Group.

Prior to engaging in any business transactions with a potential customer, the Group will carry out a credit search procedure to determine the creditworthiness of such customer. The Group will review the credit rating report prepared by Dun & Bradstreet Hong Kong of every potential customer, which is used as a preliminary screening. Whether an order would be accepted depends on whether a new customer is accepted by the credit insurance company. In addition, the Group will also submit an application to its credit insurance underwriter on each potential customer before any order is accepted. Such insurance application is an important procedure in the Group's business operations because it ensures that all sales have the benefit of adequate insurance coverage to ensure collectivity.

If receivables become overdue, weekly statements and reminders will be issued to the relevant customers. The Group will also approach the relevant customers to negotiate on the settlement arrangements. Generally, the Group will not take new orders from customers whose payments remain outstanding beyond the due date.

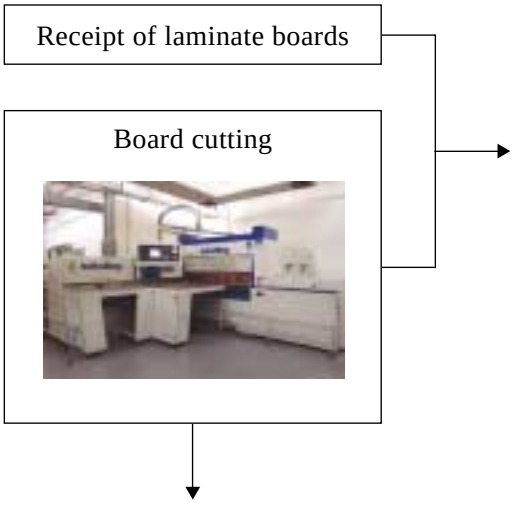
The Group does not make general provision on its account receivables. The Group had a specific provision for doubtful debts of approximately HK$1,561,000 as at 31 December, 1999 and approximately HK$161,000 as at 31 December, 2000. No specific provision was made for the year ended 31 December, 2001. Given the credit control policy adopted by the Group as mentioned above, it has not experienced any significant bad debts for the past three financial years. During each of two years ended 31 December, 2000, the Group's bad debts written off were approximately HK$353,000 and approximately HK$34,000, respectively. For the year ended 31 December, 2001, no bad debt was recorded by the Group. As at 31 December, 2001, the Group's accounts receivables amounted to approximately HK$245.1 million. Up to the Latest Practicable Date, approximately HK$239 million, representing approximately 98% of the accounts receivable as at 31 December, 2001, has been settled.

PRODUCTION

Production process

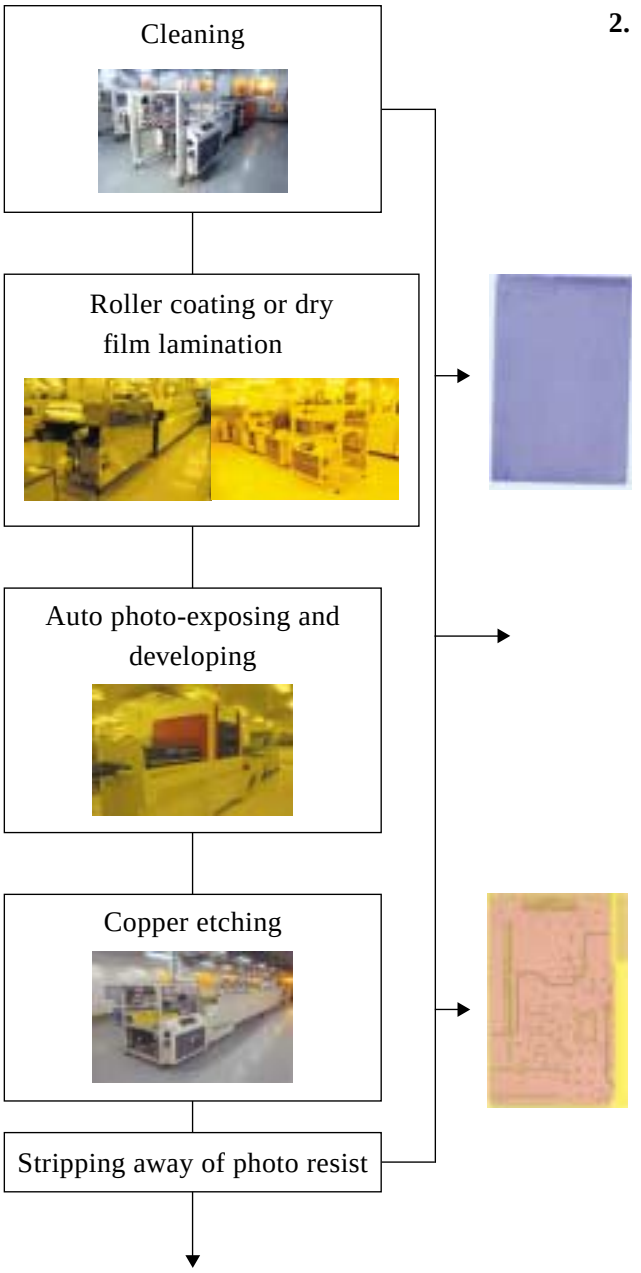
Generally, the complexity of the fabrication process of a PCB increases with its layer count. The multilayer construction or layer count of the PCB varies with the requirements and specifications of the customers. Typically, the Group will receive from its customers their specifications and design in the form of a computer data file. Upon receipt of this information, the pre-production department will verify the design parameters with the aid of computer workstations equipped with advanced and sophisticated software capabilities. Thereafter, the pre-production department will use a laser plotter to generate the PCB circuitry artwork according to the information from the verified computer data file.

For illustration purposes, the process flow of fabricating a PCB is outlined below:—



1. Preparation of laminate board

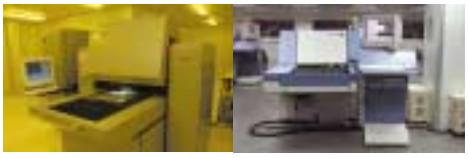
It is the very first step of the PCB manufacturing process. Laminate is the base material used for constructing the PCB. It contains a resin sheet laminated between two plies of thin copper metal foil. First, the laminate is cut into the optimum panel size to accommodate the size of the PCB and then, its surface is cleaned for the subsequent inner layer process.



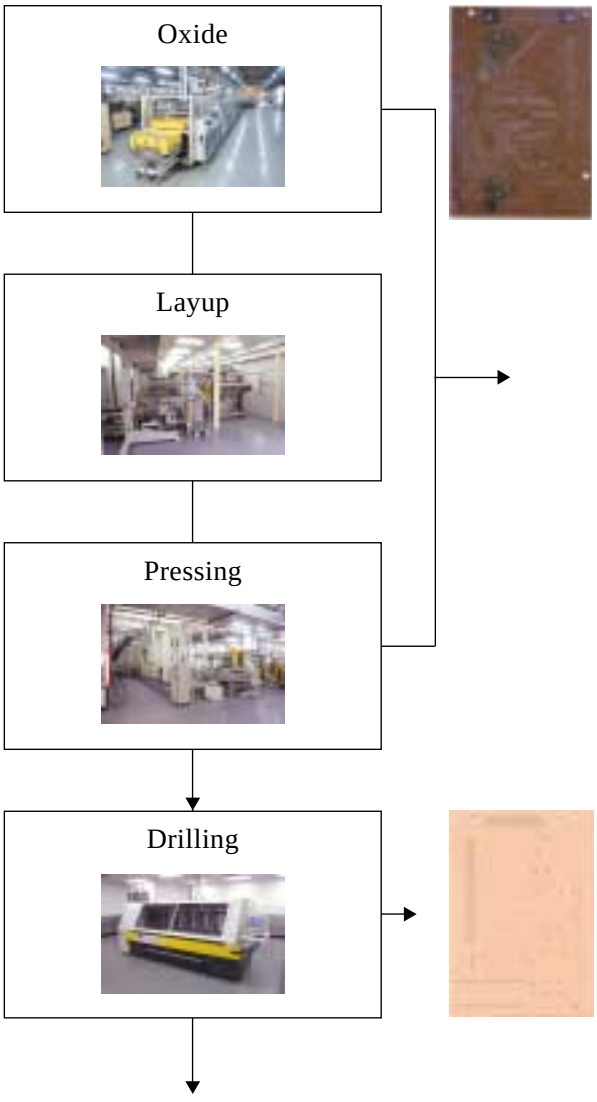
2. Inner layer process

Inner layer process is to form inner layer circuitry of PCBs. It involves a series of process steps including photo resist coating, photo-exposure, resist developing, etching unwanted copper, stripping photo resist, quality inspection and copper chemical treatment or oxide.

The pre-cleaned laminate panel is coated with photo resist made of either liquid type (roller coating) or sheet form type (dry film) for photo-exposure processing. This process produces the image of the circuitry pattern onto the photo resist. Developing is required to remove some part of the photo resist to allow the unwanted copper to be chemically etched. All the photo resist is finally stripped to form the inner layer circuitry of PCBs. In order to ensure the quality of the circuitry, Automatic Optical Inspection (AOI) is then carried out on the panels to assure the quality of the inner layers. The accepted inner layer that has undergone quality inspection then undergoes copper chemical treatment or oxide for purposes of enhancing the bonding strength of the surface for lamination.



Automatic Optical Inspection (AOI)



3. Lamination

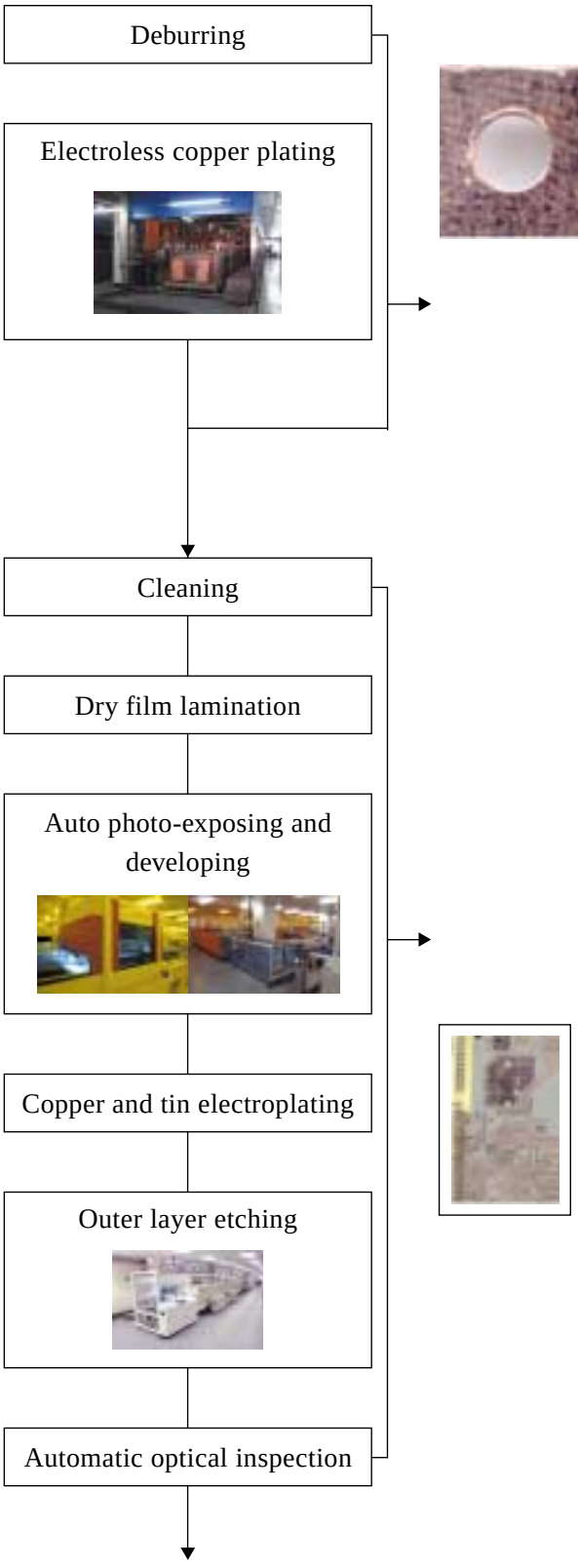
Lamination is an essential process in laminating inner layer(s) into multilayer PCBs. This process involves the inner layer layup step followed by pressing.

Layup step is to pile up the copper chemically treated or oxidised inner layer(s) according to the inner layer construction of PCB; and in between any two layers, prepreg material is required to serve as bonding as well as insulation material. Copper foil is usually used for constructing the outer layer.

Pressing operation is to laminate the pile of the layers together to form the multilayers of PCB under high temperature and pressure condition.

4. Drilling

Drilling is a process by which holes are made in the PCB panel so that electrical connection can be created by the following copper plating process among the specific layers of circuitry.



5. Chemical copper deposition process

Chemical copper deposit process is specifically used to initialise/pre-metallise a layer of thin copper deposit to the drilled through holes for electrical connection among the specific layers of circuitry as well as for further electrolytic copper deposit to plate up the required copper thickness involved in the outer layer process.

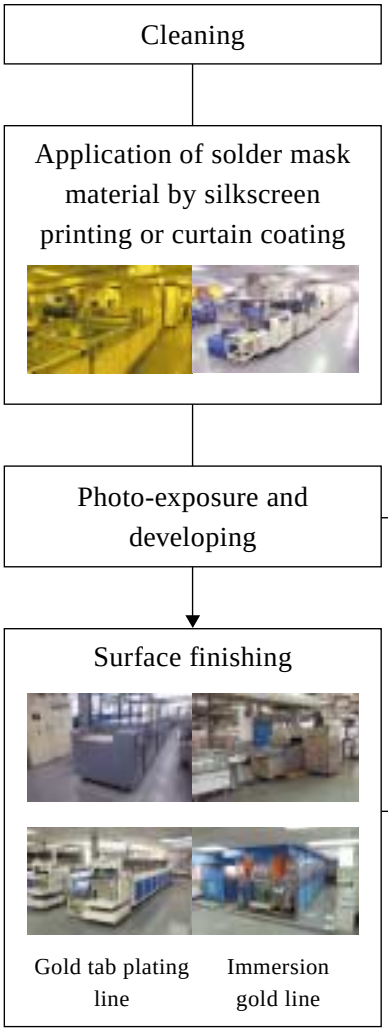
Firstly, the panels are put through the deburring unit to remove the burrs and debris of the drilled through holes. The panels then undergo a chemical copper deposition process named as electroless copper process.

6. Outer layer process

The purpose of the outer layer process is to form a layer of circuitry on the surface of the panel. It is similar to that of the inner layer process in that a series of steps, including dry film photo resist lamination, photo resist exposure, resist developing, electrolytic copper and tin, resist stripping, etching unwanted copper and tin stripping, is involved.

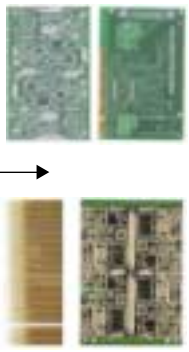
After the chemical copper deposition, the panel is cleaned for the outer layer photo process including the above series of operation steps. The electroplating copper is to achieve the copper thickness sufficiently to meet customer requirement. Once the tin is stripped, the outer layer circuitry is finally formed.

In order to ensure the quality of the circuitry, Automatic Optical Inspection (AOI) is then carried out to detect unacceptable defects prior to the protective coating process named as solder mask process.



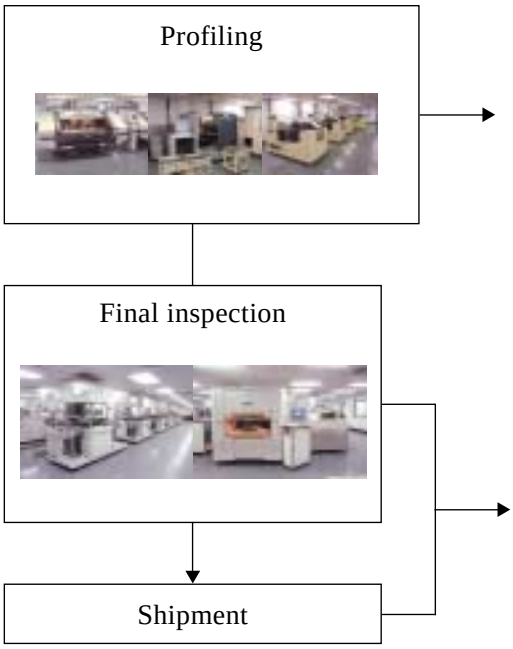
7. Solder mask coating

The solder mask process, which is similar to the outer layer process, forms a protective coat of insulation over the PCB panel against environmental attack and to facilitate subsequent assembly. After the cleaning process, layer of solder mask is first printed on the panel via curtain coating or silkscreen printing, and then the same is subject to exposure for developing to create the image of the circuitry pattern.



8. Surface finishing

The surface finishing process is to create a coating that is essential for bonding the electrical components or parts onto the PCB, over certain parts of the circuitry depending on the design. Some types of surface finishing could also serve as protective coating.



9. Profiling

The PCB panel is then cut into the desired size and geometry and the profile or shape of the PCB could be achieved by the following processes: punching with a die, routing with machine, V-cutting for the later breakage by hand and edge-beveling for smooth edges.

10. Final inspection

Before shipment, the PCB panels undergo a final inspection to ensure that they meet the quality and aesthetic standards of customers. This process includes an electrical test to ascertain the connectivity of specific points on the PCB and hence its functionality, followed by a visual inspection. Thereafter, the PCBs are packaged and shipped to customers.

PRODUCTION FACILITIES

The Group's existing production facilities are located in Shekou, Shenzhen, the PRC. The facilities have a gross floor area of approximately 55,989 sq.m. As at the Latest Practicable Date, the Group employed over 4,000 employees. With the addition and improvement of facilities, the production capacity of the Group has been enlarged gradually. During each of the three years ended 31 December, 2001, the average monthly production capacity of the facilities was approximately 0.9 million sq.ft., approximately 1.1 million sq.ft. and approximately 1.25 million sq.ft. of PCBs, respectively, which was equivalent to an annual production capacity of approximately 10.8 million sq.ft., approximately 13.2 million sq.ft. and approximately 15.0 million sq.ft., respectively, and has been utilised as to approximately 94%, approximately 93% and approximately 85% during the respective years.

During each of the three years ended 31 December, 2001, the capital investments for the improvement and addition to production facilities and equipment amounted to approximately HK$88.1 million, approximately HK$207.0 million and approximately HK$143.0 million, respectively. The increase in plant and machinery for the three years ended 31 December, 2001 was used, on average, as to approximately 66.6% in enlarging production process capacity, as to approximately 23.9% in enhancing quality controls and as to approximately 9.5% in equipping automation systems, respectively.

In the year 2000, the Group entered into an agreement for the acquisition of a piece of land of approximately 11,208 sq.m. in Shekou, Shenzhen, the PRC, which is adjacent to the existing facilities of the Group, for the construction of new production facilities. The construction of the new production facilities commenced in March 2001. It is expected that the construction of new facilities will be completed by the end of 2002 and production in it will commence in the first quarter of 2003. Total construction costs (including land costs) of the new production facilities are estimated to be approximately HK$221 million. Up to 31 December 2001, approximately HK$42 million have been paid by the Group as part of the construction costs. As at 31 December, 2001, construction costs (including land costs) of approximately HK$46 million have been committed but not yet paid by the Group. It is expected that the new facilities will be used for increasing the Group's production of PCBs of six layers and above. Based on the expected product mix, the new facilities will have a monthly production capacity of approximately 0.8 million sq.ft.. The existing production capacity of the Group is expected to increase from approximately 1.3 million sq.ft. to approximately 1.5 million sq.ft. by July 2002. Based on the current plan of installation of equipment and machinery in the new facilities, the monthly production capacity of the Group's new facilities will be approximately 1.8 million sq.ft. by early 2003 and will be approximately 2.3 million sq.ft. by 2004.

It is the plan of the Group that among the features of the new production facility are internal piping channels and an advanced wastewater treatment system which will be equipped with a deionisation system to ensure that wastewater is suitable for reuse after it has been treated by the system. This new wastewater treatment system, to be installed in the new production facilities, is in compliance with the laws and regulations imposed by the PRC authorities with respect to the treatment of waste and by-products. To facilitate access, a link bridge will be constructed to join the Group's existing facilities with the new one.

In its first year of operation, the new facilities will assist the Group in the production of PCBs of eight layers and above, and to a smaller extent, PCBs with more advanced technology such as, fine line products, blind/buried via and special materials products. Subsequently, the Group intends to increase its production of the above-mentioned advanced PCBs as it believes that the demand for such higher layer count and more advanced PCBs will increase in the near future. In line with the construction of the new production facilities, the Group will continue to invest in modern equipment and technology to keep pace with the more advanced PCBs that the Group targets to produce. These higher-end PCBs include (a) PCBs produced by microvia technology which are used in mobile phones, personal digital assistants, global positioning systems, infrastructure for the Internet and other telecommunications devices such as routes and switches; (b) fine line PCBs which are used for computer servers and camcorders; (c) Getek material PCBs which are used for instrument devices such as time domain reflectometers; and (d) Rogers material PCBs which are used for microwave transmission applications such as antenna.

PROCUREMENT OF RAW MATERIALS

Raw Materials

The main raw materials required by the Group in the production of PCBs include laminates, prepregs, solder masks, copper foils, wet film, dry film and a variety of chemicals. These raw materials are sourced from various suppliers based in Hong Kong, PRC, Taiwan and Thailand. During each of the three years ended 31 December, 2001, materials costs accounted for approximately 43%, approximately 43% and approximately 44% of the Group's turnover, respectively. Among the raw materials used by the Group, laminates and prepregs make up the largest portion and accounted for approximately 44%, approximately 45% and approximately 43% of the raw materials purchased by the Group during each of the three years ended 31 December, 2001, respectively.

Suppliers

It is the Group's policy to maintain at least two suppliers for each major raw material required in the production of PCBs to avoid having to rely on any single source of supply. The business relationships between the Group and its major suppliers range from approximately three to 13 years. As the Group maintains good relationships with its major suppliers, the suppliers granted the Group credit terms from 30 to 120 days during the year ended 31 December, 2001. For the two years ended 31 December, 2000, the average credit terms granted by suppliers to the Group were from 30 days to 90 days. To date, the Group has not entered into any purchase agreements with suppliers nor has it experienced any significant difficulties in obtaining raw materials from its major suppliers.

In the event of a major disruption in supply from its major suppliers, there are alternative suppliers whom the Group can turn to. As most of these alternative suppliers are located in Hong Kong and are able to supply the same materials of comparable quality, the Directors believe that the Group's operations will not be severely affected even if there is a drastic shortage of supply from its existing suppliers for raw materials.

During the year ended 31 December, 2001, over 99% of the Group's suppliers granted credit periods of 45 to 120 days, while less than 1% of the Group's purchases was on letter of credit at sight.

The purchases of the Group were denominated in the following currencies during each of the three years ended 31 December, 2001:—

Breakdown of purchase of raw materials of the Group in different currencies for each of the three years ended 31 December, 2001

	For the year ended 31 December,		
	1999	**2000**	**2001**
US dollars	63%	67%	51%
Hong Kong dollars	34%	29%	38%
Renminbi	3%	4%	11%
Total	100%	100%	100%

Largest Suppliers

During each of the three years ended 31 December, 2001, purchases from the five largest suppliers of the Group accounted for approximately 55%, approximately 50% and approximately 59% of the total purchases of the Group, respectively. During each of the three years ended 31 December, 2001, purchases from the largest supplier of the Group accounted for approximately 18%, approximately 16% and approximately 20% of the total purchases of the Group, respectively. These suppliers are Independent Third Parties and have business relationships with the Group ranging from approximately three to 13 years.

INVENTORY MANAGEMENT

It is the Group's practice to review its inventory position on a regular basis. The Group's accounts department reviews the consumption of raw materials on a monthly basis, while the movements of work-in-progress and finished products are reviewed on a weekly basis. The Group has a computerised system to monitor the consumption of raw materials, work-in-progress and finished products. After review of the consumption of raw materials, work-in-progress and finished products by the accounts department, a report on such will be submitted to the Group's management.

It is the Group's policy to keep raw materials for approximately four to six weeks' uses. As most materials for the production of PCBs are common for different designs of PCBs, there is no need for the Group to place an order only after receiving an order from a customer.

Raw materials have not been consumed before the expiry date but are applicable to certain raw materials issued to the production line. They will be reviewed by the management on a case-by-case basis. The raw materials considered by management to be obsolete will be fully provided for in the accounts. Work-in-progress and finished product items without orders for a period of three months from the date of the report issued by the accounts department, will be reviewed by the management on a case-by-case basis. Work-in-progress and finished products which are considered obsolete by the management will be fully provided for. With respect to raw materials and work-in progress, the production material control department conducts an item-by-item review and items outdated for current models will be provided in full. With respect to finished products, the marketing department conducts an item-by-item review and items will be provided in full when customers confirm that no orders will be placed. The Group does not make general provision for its inventory. It is the policy of the Group to make specific provision for its inventory, which is determined on a case-by-case basis. As at 31 December, 1999, 2000 and 2001, the accumulated provision of inventory amounted to approximately HK$9.7 million, approximately HK$12.8 million and approximately HK$8.8 million, respectively.

QUALITY CONTROL

The ability to maintain a consistent level of quality and to foster customer confidence is essential in the PCB industry. As such, great emphasis is placed on quality control and assurance in the Group's management system and manufacturing process.

The Group has implemented a quality management system ("QMS") that is based on the requirements of ISO 9002 and QS 9000. The Group was awarded ISO 9002 and QS 9000 certification in 1994 and 1999 respectively. The ISO 9002 certification is an internationally recognised standard for product quality assurance, while QS 9000 is an extension of ISO 9000 which conforms to the quality requirements laid down by the automotive industry in the US.

The Group's QMS can be summarised by the "4 Ms" - Man, Machine, Material and Method.

Man — It is the Group's belief that a well-trained work force is essential to the provision of quality products and services. As such, the Group has implemented systems to identify the training needs of all its employees.

Machine — The Group's Engineering Team provides updated information to the management on the modifications to be made to manufacturing processes and equipment, if required, so as to meet the specific requirements of the Group's customers.

Material — The Group's suppliers of raw materials and the quality of the products are evaluated regularly to ensure that the quality standards are not compromised. The Group's suppliers are evaluated on certain criteria such as, pricing, quality of the products, level of service, level of warranty provided and the ability to deliver on time.

Method — As part of its QMS, the Group adopts certain methods to (a) identify potential problems with its manufacturing process and (b) implement changes to improve its manufacturing process. These methods include the Statistical Process Control ("SPC") method and the Failure Mode and Effects Analysis ("FMEA").

Quality management in the Group's manufacturing process is characterised by the PDCA (Plan-Do-Check-Act) approach.

Plan — Before a particular product is produced, a cross-functional and comprehensive Advanced Product Quality Planning ("APQP") process is implemented to control and improve the quality of the product. As part of the APQP process, a Product Control Plan ("PCP") is drawn up by the Group's Process Engineering Department and approved by the Quality Assurance Department. The PCP also highlights the characteristics of the product to be produced, especially special characteristics that are required by the customers.

Do — The PCP is strictly adhered to at each stage of the manufacturing process to ensure the quality of the product. The PCP ensures, among other things, that (a) production procedures are documented, (b) appropriate approvals of processes and equipment are obtained, (c) job setups are verified, (d) process changes are controlled and (e) equipment required in the manufacturing process are maintained.

Check — In order to check that each product is manufactured according to the relevant PCP, the Group's Management Information System Department has installed the Topsearch Central Network System ("TCNS"). The TCNS is a computer software system which provides on-line data with respect to the quality of the products, the defect points, yield and other statistical data relating to the products.

Act — The Group's QMS is a prevention-based system. Once a defect is detected, root cause analysis will be carried out to identify the problem and necessary improvement action and/or preventive action are promptly taken to correct the defect in the manufacturing process. If required, further controls and/or follow-up action may also be taken to ensure that the problem will not resurface.

The Group's management reviews the QMS yearly to ensure that the manufacturing processes are in line with the requirements of its customers.

RESEARCH AND PRODUCT DEVELOPMENT

The Group's R&D team was formed in 1995 with two engineers. As at the Latest Practicable Date, the Group employed over 40 staff members including engineers and technicians in its R&D team that is located in its manufacturing facility in Shekou, Shenzhen in the PRC. The primary function of the R&D team is to develop new products and production processes. It is also responsible for implementing technology road maps, evaluating new equipment and materials prior to production, recommending investment budgets, designing the most efficient production floor layout for the production facilities and identifying the types of products to be manufactured by the Group.

Over the years, the Group's R&D team has successfully developed various process techniques to improve the production capabilities such as laser direct imaging technology to eliminate various intermediate imaging steps, micro size hole drilling development for high density circuitry PCB products, plating products such as PCBs used in main frame computers which contain small holes and high thickness, and achieving even copper plating distribution to improve overall uniform thickness of PCB panels. Furthermore, the Group's R&D team has developed its production techniques for producing higher layer count PCBs of up to 26 layers, PCBs with multiple drilling and lamination, as well as PCBs with chemical deposition gold and silver metal surface finishings. The Group's R&D expenses are mainly attributable to the salaries of the staff in the R&D department which accounted for less than 1% of the Group's turnover during each of the three years ended 31 December, 2001.

Collaboration with the Hong Kong Polytechnic University

In July 2000, the Group entered into a technology collaboration project with the Hong Kong Polytechnic University. The research project focuses on comparing and characterising the laser technology to drill microvia PCB with or without copper metal on pre-drill area surface, investigating the usage of different pre-treatment processes on the quality and reliability of laser drilling microvia with copper metal on the surface, and developing and establishing the most suitable technique to

enhance laser absorptivity of PCB materials for laser drilling on copper. The project will examine the application of dielectric in the manufacture of high-performance PCBs including the evaluation of its coating process and its surface levelling technology that affects planarity, interaction of this dielectric with laser ablation, and also the enhancement of plating quality of PCBs by optimising the design of industrial plating tanks. Pursuant to the agreement between the Group and the university, the Group is responsible for providing the necessary facilities and the university is responsible for providing guidance and supervision for purposes of the collaboration. For the year ended 31 December, 2000, the related expenses incurred by the Group was immaterial. For the year ended 31 December, 2001, the related expenses incurred by the Group amounted to approximately HK$329,000.

Topsearch Technology Board

The Topsearch Technology Board was established in June 2000. Comprising a team of seven senior managers drawn from two major departments in the Group, namely operations and engineering, the Topsearch Technology Board is tasked with formulating the strategic direction and application of technology in the Group. As such, the Group is able to adopt a purposive, deliberate and systematic approach in tackling the technological challenges that it faces.

Missions and Objectives

The missions and objectives of the Topsearch Technology Board are as follows:—

1. to identify, develop and implement new products and processes in accordance with market demand and trends; identify niche segments of the market and assist in the manufacturing technology implementation in the plant where higher margins can be attained;

2. to advise management in relation to the management of operational resources and provide the Group with a direction as to capital investment in process equipment and technology so as to assist the Group in responding to market demand; to continually improve the Group's productivity, yield and technical ability by analysing its manufacturing performance and feedback from the market; and

3. to develop the Group's "Technology Timeline", which defines technology and timing for new product and process introductions.

Composition of the Topsearch Technology Board

The Topsearch Technology Board is currently led by Mr. Ng, the Chief Operating Officer of the Group. More information on Mr. Ng is set forth in the section headed "Directors, audit committee and senior management and staff of the Group" in this prospectus. Members of the Topsearch Technology Board are chosen for their extensive experience in and in-depth knowledge of the PCB industry. Most of the members of the Topsearch Technology Board have more than 10 years experience in the PCB industry.

In addition to Mr. Ng, the Topsearch Technology Board comprises the following members:—

Mr. Greg Lucas, Technical Director of Topsearch Shenzhen, has over 38 years of experience in the PCB industry. Mr. Lucas began his career at Cinch Graphic in Southern California and received his Bachelor's Degree in Chemistry from Cal State Fullerton in 1971. Throughout his career, he has been involved in process engineering and research and development. Prior to joining the Group in August 2001, he held the top technical position at Diceon Corp, Zycon Corporation, Praegitizer Industries and Tyco Printed Circuit Group. Mr. Lucas has authored a number of technical papers and articles on a variety of subjects relating to the technical aspects of PCB manufacturing. Throughout his career, Mr. Lucas has been an active member in industry organisations such as IPC and Industrial Technology Research Institute.

Mr. Chow Shun Man, Bosco, Engineering Manager of Topsearch HK, has over 15 years of experience in the PCB industry and graduated from University of British Columbia with a Master's degree in Chemical Engineering in 1985. Mr. Chow specialises in PCB manufacturing technology and processes. Prior to joining the Group in 1996, Mr. Chow worked as a Chief Chemist and a wet process Engineer at PC World, a division of Circuit World Corporation in Toronto, Canada since 1985. Mr. Chow was also the Senior Engineering Manager in Kalex Printed Circuit Board Ltd. (currently known as Via Systems Inc.) in Hong Kong and the PRC in 1995.

Mr. David Braithwaite, Technical Manager in Topsearch UK, has over 15 years of experience in the PCB industry. Mr. Braithwaite works closely with OEMs in Europe to determine the market trend in the PCB industry. Prior to joining the Group in June 2000, Mr. Braithwaite was a Technical Sales Manager at Tru-Lon Printer Circuits Limited, where he was responsible for developing high end products which generated high profile margin accounts and identifying market trends in the PCB industry. Mr. Braithwaite was also an Account Manager and subsequently a Special Products Manager in Labtech Limited, which is a major producer of high performance laminates. Mr. Braithwaite was also the Operations Manager in Kamtonics Ltd.

Mr. Gregory N. Link, Engineering Manager of Topsearch Shenzhen, has over 8 years of experience in the PCB industry. Mr. Link graduated from Worcester Polytechnic Institute in the US with a Bachelor's degree in Chemical Engineering in 1993. Mr. Link commenced his career as a process engineer, when his engineering responsibilities included outerlayer develop and strip, tin strip, deep gold plate, panel plate, and innerlayer DES-DuraBOND, and impedance. Mr. Link subsequently became the project manager responsible for the specification, selection, manufacturing, and installation of a new DESD line with robotics, including new building design and subterranean tank farm. In 1998, he joined an established PCB company, as a corporate engineer, responsible for integrating new technologies from prototype shops to volume manufacturing as well as knowledge transfer in registration systems specifically, and shop floor engineering in general and managing a PCB manufacturer, where his responsibilities covered engineering from CAD through shipping and customer interaction. In 2001, he joined Circuit Solutions, a global PCB technology company, as a technology development engineer and consultant. In September 2001, Mr. Link joined the Group as an engineering consultant.

Mr. Eddy Chan, Senior Manufacturing Engineering Manager of Topsearch HK, has over 16 years of experience in the PCB industry. Mr. Chan graduated from the University of Hong Kong with a Bachelor's degree in 1984. Thereafter, Mr. Chan joined a PCB manufacturing company. Prior to joining the Group in December 2001, Mr. Chan served as the Process Engineering Manager of a US-based PCB company in the PRC. From 1991 to 2000, Mr. Chan acted as the Manufacturing Engineering Manager of a few Hong Kong-based PCB companies in the PRC.

Mr. Cheung Ping Lun, Tony, Special Product Manager of Topsearch HK, has over 10 years of experience in the PCB industry. Prior to joining the Group in May 2000, Mr. Cheung worked as a Process Engineering Manager in Astron Group Limited, China (now known as Multek Electronics Ltd (Doumen)), which is a major manufacturer of PCBs used in micro via mobile telephones. Mr. Cheung was also a Manufacturing Engineering Manager at Elec & Eltek (HK) Ltd, where he supervised the Manufacturing Engineering Department in the manufacture of PCBs.

To facilitate better communication, meetings of the Topsearch Technology Board are held every quarter. During these meetings, each member of the Technology Board is assigned to carry out various projects and tasks including solving process problems, overcoming product issues, improving existing products, developing new products, processing new materials and training technical staff. Some of the achievements of the Topsearch Technology Board include developing new products with high frequency material for radio and microwave applications, improving control of quality of the clean room, resolving warpage problem of PCBs (for example, bending of PCBs beyond specifications), and establishing a thorough statistical quality data analysis system.

ENVIRONMENTAL PROTECTION

The Directors believe that it is important to carry out the Group's operations in an environmentally-friendly manner. As such, the Group attempts to reduce the consumption of natural resources in its operations as much as possible. The Group also takes steps to ensure that waste and by-products produced as a result of its operations are properly disposed of and in accordance with applicable laws so as to minimise adverse effects to the environment.

In 1999, Topsearch HK and Topsearch Shenzhen were awarded the ISO 14001 certification for their environmental management system from SGS Yarsley International Certification Services AG and the Shenzhen Environmental Management System Certification Centre.

The Group has complied with the environmental protection laws and regulations promulgated and enacted by the State, provincial and local governments. The Directors confirm that the Group has complied with the relevant PRC environmental laws and regulations and that the Group has passed the environmental protection inspection conducted by the relevant PRC authorities. During each of the three years ended 31 December, 2001, no penalty was imposed on the Group for its failure to comply with the relevant PRC environmental laws and regulations.

Collaboration with Tsinghua University

In April 2001, the Group entered into a technology collaboration agreement with Tsinghua University (School of Mechanical Engineering) ("Tsinghua University"), whereby the parties cooperate in the research and development of environmentally friendly ways for manufacturing PCBs, including ways of recycling metal and non-metal waste materials produced during the production process of the PCBs. According to the agreement, Tsinghua University is responsible for the provision of relevant expertise and certain research facilities for the research and development of environmentally friendly ways for manufacturing PCBs. Also, according to the terms of the technology collaboration agreement, the Group has agreed to contribute up to RMB10 million over a period of three years (starting from the date of the agreement) as funding for such research. Up to the Latest Practicable Date, the Group has contributed approximately HK$2.4 million for the research.

INSURANCE

The Group maintains insurance policies covering losses due to fire and business interruption. These insurance policies cover the Group's buildings, machinery and equipment. In addition, the Group maintains credit insurance policies to insure against counter-party risk with its customers, details of which are set forth under the sub-paragraph headed "Credit policy and credit management" under "Sales and marketing" in this section. The Group also maintains business interruption insurance.

COMPETITION

The PCB industry is highly competitive and the level of technology involved in the manufacture of PCBs is relatively mature. Further, more and more PCB manufacturers have relocated their production facilities to developing countries such as the PRC to take advantage of the low costs of labour, production and land. As such, the Group faces intense price competition from other PCB manufacturers from time to time.

The Directors believe that the key factors in securing orders from customers include:—

— the Group's ability to produce products with complex specifications required by customers. The higher the layer counts the more effort and production time is required;
— the Group's ability to produce quality products and maintain prompt delivery;
— the Group's ability to build a sustainable competitive edge such as production efficiency and product quality in order to maintain its market share; and
— the Group's ability to expand its production capacity.

The Directors are of the view that in the PCB industry, experience, reliability, meeting customers' requirements and long established relationships are the key areas of competition and have a greater influence than price.

Currently, the Group produces mainly two to 14 layer PCBs, which are sold to customers in Hong Kong, Taiwan, North America, South East Asia and Europe. In this respect, the Group competes with other PCB manufacturers who have the capabilities to produce similar types of PCBs for those markets.

The Directors believe that the Group is able to maintain its competitive position by virtue of the following factors:—

Ability to provide a comprehensive range of products and services

The Group utilises both engineering and technical capabilities, as well as the ability to customise manufacturing solutions, to meet the varying needs of customers and to provide value-added services. One of these services is the offer of a high mix low volume (HMLV) programme, under which the Group produces different types of PCBs for its customers at a relatively low volume. It does not only provide the Group's customers with flexibility in production planning, but also enables them to maintain minimum inventory at all times, which has a direct and significant impact on their profitability. The Group also has the ability to provide its customers with a wide range of products with different surface finishings, such as gold tap plating, immersion silver, immersion gold, Entek (a type of surface finishing which contains anti-tarnish chemicals) and hot air levelling.

Ability to produce and deliver quality products

The ability to generate a consistent level of quality products and thereby foster customer confidence is essential in the PCB industry. As such, great emphasis is placed by the Group on quality control and assurance in the manufacturing process. In order to enhance efficiency in production and the Group's production capabilities of manufacturing high-end products, the Group has installed automation equipment for the production of high-end products and better materials handling. For example, the Group uses laser direct imaging to enhance its fine line photo processing so that image transfer operations are conducted by using laser techniques instead of the conventional photo exposure techniques. Sophisticated lamination tooling is also used to produce layer to layer registration with high degree precision for multilayer PCB products. Techniques for the production of high density interconnect (HDI) PCBs are also under development by the Group. In this regard, the Group has invested in laser drilling equipment for drilling microvia holes in HDI products.

The Group has implemented a quality management system that is based on the requirements of ISO 9002 and QS 9000. In 1994 and 1995, Topsearch Shenzhen and Topsearch HK were respectively awarded the ISO 9002 certifications. In 1999, the Group was awarded the QS 9000 certification. These accreditations demonstrate that the production facilities of the Group have reached internationally recognised quality standards. In addition, the Group adopts various quality control

measures at each of the principal stages of production, particulars of which are set forth under the paragraph headed "Production" in the section headed "Business" in this prospectus, so as to maintain the overall product quality of the Group. During each of the three years ended 31 December, 2001, sales returns of the Group represented only approximately 0.7%, approximately 0.4% and approximately 0.7% of the Group's turnover, respectively.

As at the Latest Practicable Date, the Group's quality assurance team comprised over 100 employees. The quality assurance team is responsible for ensuring quality at every stage of the production process. In addition, the team is in frequent contact with the Group's customers through activities such as site visits and factory audits in order to obtain feedback regarding the quality of the Group's products and services.

Strategically located production facilities in the PRC

The production facilities of the Group are located in Shekou, Shenzhen, the PRC. The relatively low labour costs in the PRC have not only strengthened the competitiveness of the Group in the global PCB market, but have also encouraged various customers of the Group to establish their own manufacturing facilities in the PRC. The Directors believe that the trend of EMS companies and OEMs shifting their production activities to the PRC is irreversible and that the strategic location of the Group's facilities will facilitate its liaison with new customers in the PRC. Goods sold to customers in the PRC are, where requested by the relevant customer, first exported out of the PRC and then re-imported into the PRC. The Directors expect that the percentage of sales to customers in the PRC will increase gradually. During each of the three years ended 31 December, 2001, sales to customers in Hong Kong and the PRC accounted for approximately 19.0%, approximately 28.1% and approximately 25.1% of the Group's total sales, respectively.

Strong customer relationships

The Group has established marketing offices in most of the countries in which its products are marketed, namely, Singapore, Malaysia, Thailand, Taiwan, UK and the US. By virtue of these marketing offices, the Group develops and maintains good customer relationships by providing responsive service and technical as well as after sales support to its customers.

As a commitment to providing total customer service, the Group provides quick turnaround production time (as short as 2 days), 24-hour customer support services and has assigned a dedicated team of personnel for customer account management.

With its continuous efforts, the Group has built good working relationships with many of its customers. The Group's good relationships with its customers are shown by the customer satisfaction certificates and awards received by the Group over the years, particulars of which are set forth under the paragraph headed "Awards and recognitions" in the section headed "Summary" in this prospectus.

Experienced and professional management team

The Group has an experienced and professional management team which contributes its expertise, experience, and industry knowledge and know-how. The Group's management team comprises management staff with, on average, over 10 years of experience in the PCB industry and expertise in various areas of responsibilities.

Established research and development department

The Directors believe that the advanced R&D capabilities of the Group are amongst the most critical competing factors which distinguish the Group from most of the other PCB manufacturers in Asia. The Group's R&D team has achieved significant developments during the past few years including improving its multilayer technology to support production of high-end 26 layer PCBs, achieving certification for fine line capability of producing circuit track spacing/line width down to 0.002 inch, manufacturing hybrid construction PCBs containing two different types of materials and fabricating high performance (high frequency and high thermal resistance) material PCBs. DFM (Design for Manufactureability) technique is also applied to ensure that the board design is within the Group's process capability.

The Group has formed the Topsearch Technology Board which is responsible for charting the Group's strategic direction and application of technology. Particulars of the Topsearch Technology Board are set forth under the paragraph headed "Research and product development" in the section headed "Business" in this prospectus.

In addition to the Topsearch Technology Board, the Group has an R&D team which is responsible for developing PCBs of 10 layers and above, back panel, microvia technology and other technical developments of the Group. In addition, the Group also cooperates with research institutes to research and develop technology relating to the production of PCBs. The Group is also engaged in R&D projects with Tsinghua University and Hong Kong Polytechnic University. Particulars of the joint research efforts with these institutions are set forth under the paragraph headed "Research and product development" and "Environmental protection" in the section headed "Business" in this prospectus.

INTELLECTUAL PROPERTY

Trademark/Service marks

The Group has obtained registration of certain trademark and service marks in Hong Kong and the PRC, and has also applied for registration for certain trademark and service marks in Hong Kong and Thailand, particulars of which are set forth under "Intellectual property rights" in Appendix IV to this prospectus.

Protection of proprietary rights

The Group seeks to protect its proprietary rights through confidentiality procedures and contractual protections such as non-disclosure agreements with its suppliers, customers, industry players and employment contracts with confidentiality terms with its employees.

Patents

The Group has not patented or applied for any patent registration for any of its solution and designs. The Directors consider that the confidentiality agreement between the Group and its customers should provide adequate protection to the Group's intellectual property rights. In the future, the Group may consider applying for patent registrations for certain PCB production technologies which could generate commercial benefit and could be licensed to other manufacturers.

INTEREST IN COMPETING BUSINESS

Neither of the Substantial Shareholders has any interests in a business that is competing or is likely to be compete with the Group.

CONNECTED TRANSACTIONS

The Group has transactions with connected persons as described below. These transactions have been, or will be, carried out in the ordinary and usual course of business of the Group and on normal commercial terms and are expected to continue in the foreseeable future.

A. The following connected transaction is expected to be subject to the disclosure requirements upon listing of the Company under Rule 14.25(1) of the Listing Rules.

Tenancy agreement with Keentop Investment Limited ("Keentop Investment")

On 22 May, 2002, Topsearch HK entered into a tenancy agreement with Keentop Investment in respect of an apartment situated at House 7 and the Garden appurtenant thereto and Car Parking Spaces Nos. 7A and 7B on Basement Floor, Las Pinadas, 33 Shouson Hill Road, Hong Kong for a lease term of three years from 22 May, 2002 to 21 May, 2005 at a monthly rent of HK$115,000, exclusive of rates, management fee and other outgoings. Topsearch HK has an option to renew the tenancy for a further period of three years thereafter with the rental to be then determined. The current rental has been reviewed by DTZ Debenham Tie Leung Limited, an independent property valuer, which considers such rental to be the prevailing market rental of such premises in similar locations as at the relevant dates entering into the tenancy agreements. Details of the tenancy agreement are set forth in the valuation report in Appendix II to this prospectus. The property is used by the Group as Director's quarters. Keentop Investment is beneficially owned as to 50% by Mr. Cheok and 50% by Mrs. Cheok.

The Directors and DBS Asia, based on the opinion of DTZ Debenham Tie Leung Limited, consider that the rental charged for the above-mentioned premise is comparable to market rates and the lease terms are fair and reasonable and on commercial terms which are fair and reasonable so far as the interests of independent shareholders of the Company are concerned. Upon listing of the Shares on the Main Board, the Directors expect that the aforementioned tenancy arrangement will continue on an on-going basis and will therefore constitute a connected transaction of the Company under the Listing Rules.

The Directors consider that the above transaction has been and will be, carried out on an arm's length basis and on normal commercial terms that are fair and reasonable, and will, upon listing of the Shares on the Stock Exchange, constitute a connected transaction under the Listing Rules. As the annual total consideration involved is less than the higher of HK$10 million or 3% of the book value of the net tangible assets of the Group as disclosed in its latest published audited consolidated accounts, it will fall within the *de minimus* provision under Rule 14.25(1) of the Listing Rules, and is exempt from shareholders' approval requirements applicable to connected transactions. Details of the above transaction will be disclosed in the Company's next published annual report and accounts in accordance with Rule 14.25(1)(A) to (D) of the Listing Rules after the listing of the Shares on the Main Board. In the event that the annual consideration involved in the above transaction exceeds the higher of HK$10 million or 3% of the book value of the net tangible assets of the Group in any relevant financial year, the Company will comply with the relevant provisions of the Listing Rules governing connected transactions. An announcement will be made by the Company upon renewal of the tenancy agreement.

B. The following connected transactions are included herein for information only and are exempted under Rule 14.24(5) of the Listing Rules from disclosure or shareholders' approval requirements.

Sales of PCB products to Topsearch Citilite Limited ("Topsearch Citilite")

During the three years ended 31 December, 2001, the Group sold PCB products to Topsearch Citilite, which is owned as to 50% by Mr. Cheok and as to 50% by Inni International. Inni International is owned as to 49% by Mr. Cheok and as to 51% jointly by Mr. Cheok and Mrs. Cheok. Topsearch Citilite is principally engaged in the assembly of electronic products. The aggregate consideration received from Topsearch Citilite by the Group amounted to approximately HK$494,000, approximately HK$68,000 and approximately HK$946,000 respectively during each of the three years ended 31 December, 2001. The sales to Topsearch Citilite represented less than 0.1% of the total revenue of the Group during each of the three years ended 31 December, 2001, and was less than HK$1 million or 0.03% of the book value of the net tangible assets of the Group as disclosed in its latest published audited consolidated accounts.

Trademark licence to Topsearch Citilite

Topsearch HK has granted a trademark licence to Topsearch Citilite on 4 June, 2002 at a quarterly licence fee calculated at 2.5% of the gross turnover of Topsearch Citilite. The Directors consider that such arrangement is made on normal commercial terms and is in its ordinary and usual course of business. The Directors expect that the annual licence fees payable by Topsearch Citilite will not be more than HK$1 million or 0.03% of the book value of the net tangible assets of the Group as disclosed in its latest published audited consolidated accounts, based on the amount of licence fees payable by Topsearch Citilite for each of the three years ended 31 December, 2001, as if such arrangement had existed throughout the periods.

Topsearch Citilite has been engaged in the business of assembly of electronic products, including power adjustment units (which function similarly to that of an adaptor), direct current assemblies and transformers, under the trade mark "Topsearch" and intends to continue to do so. Accordingly, it is the intention of the parties that there should be a trademark licensing agreement on normal terms to regulate such a relationship.

The Directors (including the independent non-executive Directors) and the Sponsor are of the view that the trademark licensing agreement has been entered into in the normal course of business of the Group and the terms of such agreement are on normal commercial terms determined on an arm's length basis and are fair and reasonable so far as the Shareholders are concerned.

Discontinued related party transactions

During each of the three years ended 31 December, 2001, the Group had entered into certain related party transactions which, with the exception of the abovementioned connected transactions, will not continue following the listing of the Shares on the Main Board. Particulars of these transactions are set forth in Section 3 of the accountants' report, the text of which is set forth in Appendix I to this prospectus.