5. INFORMATION ON THE FOTRONICS GROUP

5.1 HISTORY AND BUSINESS

Fotronics was incorporated in Malaysia under the Act on 20 January 2004 as a public limited company under the name of Fotronics Corporation Berhad.

Fotronics is principally an investment holding company with six (6) other subsidiary companies in Malaysia, Singapore, China and Hong Kong as set out below:

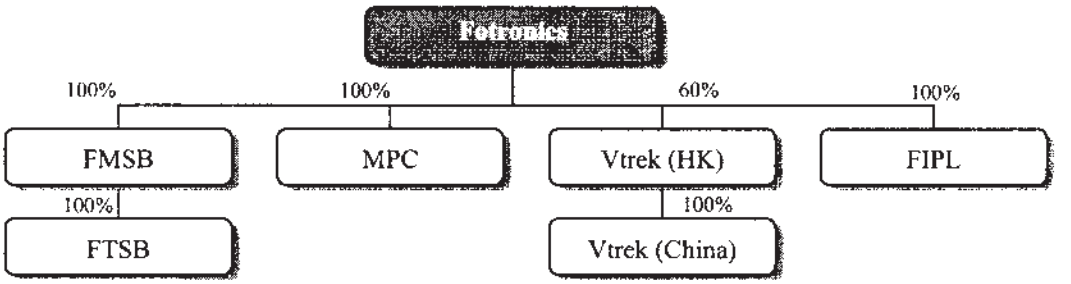
Company	Date/country of incorporation	Effective equity interest (%)	Issued and paid-up capital	Principal activities
Subsidiary companies of Fotronics				
FMSB	27 June 1988 Malaysia	100	RM6,000,000	Precision assembly of magnetic recording heads and drums and assembly of AV equipment
MPC	4 December 2000 Singapore	100	SGD5,000,000	Precision manufacture and assembly of parts and components for the AV, computer and aerospace industries
Vtrek (HK)	21 May 1992 Hong Kong	60	HKD5,510,000	Investment holding
FIPL	8 April 2003 Singapore	100	SGD2	Precision assembly of parts and components for the telecommunications and digital imaging industries
Subsidiary company of FMSB				
FTSB	2 March 1987 Malaysia	100	RM500,000	Marketing and distribution of AV equipment and parts
Subsidiary company of Vtrek (HK)				
Vtrek (China)	20 August 2001 China	60	USD1,914,823*	Precision assembly of micro-optic components for the digital imaging and optical data storage industries

Note:

* *The issued and paid-up registered capital of Vtrek (China) of USD1,914,823 in cash is as per the Capital Verification Report issued by Guangzhou Decent Certified Public Accountants Co., Ltd dated 25 April 2002, 9 April 2003 and 24 December 2003 respectively.*

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

The corporate structure of the Group is set out below:



The Fotronics Group is a technology design house with precision manufacture and assembly expertise. It presently has operations in Malaysia, Singapore, Hong Kong and China.

The Group's current principal activities are:

- R&D in process technology;
- precision assembly of magnetic recording heads and drums and assembly of AV equipment;
- precision manufacture and/or assembly of parts and components for the AV, computer, telecommunications, digital imaging, optical data storage and aerospace industries; and
- marketing and distribution of AV equipment and parts.

The Group's history can be traced back to FInc, which was established in 1978 to manufacture VCR magnetic recording heads and to provide engineering design services. On 27 June 1988, FMSB was incorporated to undertake the manufacturing of VCR magnetic recording heads. Subsequently, it expanded downstream to include the assembling of VCR drumheads.

On 4 December 2000, MPC was incorporated and subsequently, it acquired a fully automated precision engineering plant in Singapore which combines robotics with CNC machines for its manufacturing operations of drums.

Recognising the introduction of digital technology and the convergence of electronics, optics and telecommunications technologies in the mid-1990s as the driving force in the second ICT revolution, the Group further expanded into the precision micro assembly of OPU and AIS lenses through the establishment of Vtrek (China) on 20 August 2001. The OPU and AIS lenses are assembled at the Group's manufacturing facility in Guangzhou, China under industrial clean room environment.

In R&D terms, the Fotronics Group has been undertaking R&D in product and process developments and improvements throughout the years. Due to continuous efforts in innovation and development, the Group has expanded from manufacturing magnetic recording technology products to other high technology areas in the last three (3) to four (4) years. These include areas in photonics, optoelectronics, telecommunications and aerospace which are made possible due to the Group's ability to apply its precision engineering expertise to product and process innovation and development. In addition, Fotronics has also entered into the Technical Assistance and Know-How Agreement with FInc to enhance Fotronics' R&D expertise. Pursuant to the Technical Assistance and Know-How Agreement, FInc shall provide amongst others, support for the R&D requirements of the Fotronics Group and to transfer certain technical knowledge and know-how to the Group on an exclusive basis. Further information on the Technical Assistance and Know-How Agreement is set out in Section 5.4.11 of this Prospectus.

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

By complementing Japanese engineering capabilities with cost effective production platforms in South-East Asia and China, the Fotronics Group today supports major multinational corporations. These include Sony Corporation, JVC Corporation, TEAC Corporation, Mitsumi Electric Co. Ltd, Alps Electric Co Ltd, Enplas Corporation and Honeywell International Inc..

5.2 SHARE CAPITAL

The authorised share capital of Fotronics is RM100,000,000 comprising 1,000,000,000 Shares, of which 152,233,600 Shares have been issued and fully paid-up.

Details of the changes in the issued and paid-up share capital of Fotronics since its incorporation are as follows:

Date of allotment	No. of Shares	Par value RM	Consideration	Total RM
20.01.2004	20	0.10	Subscribers' shares	2
09.09.2004	152,233,580	0.10	Acquisitions	15,223,360

5.3 LISTING SCHEME

In conjunction with, and as an integral part of the Listing, the Company undertook the Listing Scheme, which was approved by the SC and FIC on 16 July 2004, the Bursa Securities on 20 July 2004, MITI on 1 April 2004 and BNM on 8 July 2004 and 9 August 2004, as set out below:

(i) Increase in Authorised Share Capital

Fotronics increased its authorised share capital from RM100,000 comprising 1,000,000 Shares to RM100,000,000 comprising 1,000,000,000 Shares.

(ii) Acquisitions

(a) Acquisition of FMSB

On 28 February 2004, Fotronics entered into a conditional share purchase agreement with FInc to acquire 6,000,000 ordinary shares of RM1.00 each in FMSB, representing the entire issued and paid-up share capital therein, for a purchase consideration of RM1,285,663 satisfied by the issuance of 12,856,630 new Fotronics Shares at an issue price of RM0.10 per Share.

The purchase consideration of RM1,285,663 was derived at on a willing-buyer willing-seller basis after taking into consideration the consolidated audited NTA of FMSB as at 30 September 2003 of RM1,285,663. The Acquisition of FMSB was completed on 20 August 2004.

Avenue, as the Adviser is of the opinion that the Acquisition of FMSB which is based on the consolidated NTA of FMSB as at 30 September 2003 of RM1,285,663 is fair and reasonable.

(b) Acquisition of MPC

On 28 February 2004, Fotronics entered into a conditional share purchase agreement with the Vendors of MPC to acquire 5,000,000 ordinary shares of SGD1.00 each in MPC, representing the entire issued and paid-up share capital therein, for a purchase consideration of RM13,937,695 satisfied by the issuance of 139,376,950 new Fotronics Shares at an issue price of RM0.10 per Share.

The purchase consideration of RM13,937,695 was derived at on a willing-buyer willing-seller basis after taking into consideration the consolidated audited NTA of MPC as at 30 September 2003 of SGD6,341,515 (equivalent to RM13,937,699 based on the exchange rate of approximately SGD1.00: RM2.198). The Acquisition of MPC was completed on 20 August 2004.

Avenue, as the Adviser is of the opinion that the Acquisition of MPC which is based on the consolidated NTA of MPC as at 30 September 2003 of SGD6,341,515 is fair and reasonable.

The legal opinion on the enforceability of the conditional share purchase agreement in relation to the Acquisition of MPC is set out in Section 17.1 of this Prospectus.

(c) Acquisition of Vtrek (HK)

On 28 February 2004, Fotronics entered into a conditional share purchase agreement with MPC to acquire 3,306,000 ordinary shares of HKD1.00 each in Vtrek (HK), representing 60.0% of the issued and paid-up share capital therein, for a purchase consideration of RM157,039 satisfied by cash upon completion of the Acquisition of MPC.

The purchase consideration of RM157,039 was derived at on a willing-buyer willing-seller basis after taking into consideration MPC's cost of investment in Vtrek (HK) as at 30 September 2003 of SGD71,451 (equivalent to RM157,039 based on the exchange rate of approximately SGD1.00: RM2.198). The Acquisition of Vtrek (HK) was completed on 20 August 2004.

Avenue, as the Adviser is of the opinion that the Acquisition of Vtrek (HK) which is based on MPC's cost of investment in Vtrek (HK) as at 30 September 2003 of SGD71,451 is fair and reasonable.

The legal opinion on the enforceability of the conditional share purchase agreement in relation to the Acquisition of Vtrek (HK) is set out in Section 17.2 of this Prospectus.

(iii) Shareholders' Arrangements

(a) Shareholders' Arrangement-I

On 28 February 2004, Seah Bak Seng entered into three (3) conditional share sale agreements with Vital Lux Ventures Sdn Bhd, Danau Dimensi Sdn Bhd and Perfect Debut Sdn Bhd respectively for the disposal by Seah Bak Seng of 24,332,331 Shares issued pursuant to the Acquisition of MPC to Vital Lux Ventures Sdn Bhd, Danau Dimensi Sdn Bhd and Perfect Debut Sdn Bhd for a total cash consideration of RM24,332,331.

The Shareholders' Arrangement-I was completed on 9 September 2004.

(b) Shareholders' Arrangement-II

On 28 February 2004, the Vendors of MPC entered into a conditional share sale agreement with Memcorp for the disposal by the Vendors of MPC of an aggregate of 91,980,755 Shares issued pursuant to the Acquisition of MPC to Memcorp for a total cash consideration of RM91,980,755.

The Shareholders' Arrangement-II was completed on 9 September 2004.

Upon completion of the Shareholders' Arrangements, the shareholdings effects will be as follows:

	After the Acquisitions No. of Shares	Acquired/ (disposed) pursuant to the Shareholders' Arrangement-I No. of Shares	Acquired/ (disposed) pursuant to the Shareholders' Arrangement-II No. of Shares	After the Shareholders' Arrangements No. of Shares
Memcorp	-	-	91,980,755	91,980,755
Seah Bak Seng	38,328,661	(24,332,331)	(9,396,330)	4,600,000
Ng Kwok Leung, George	24,390,966	-	(11,407,397)	12,983,569
YEPL	10,453,271	-	(4,972,976)	5,480,295
Seah Wee Kiat, Willie	66,204,052	-	(66,204,052)	-
Vital Lux Ventures Sdn Bhd	-	7,916,165	-	7,916,165
Perfect Debut Sdn Bhd	-	7,916,165	-	7,916,165
Danau Dimensi Sdn Bhd	-	8,500,001	-	8,500,001
Total	**139,376,950**	-	-	**139,376,950**

(iv) Public Issue

To facilitate the Listing, Fotronics will undertake a public issue of 50,745,000 new Fotronics Shares at an issue price of RM1.00 per Share to the following:

(a) Malaysian Public

2,500,000 of the Public Issue Shares will be made available for application by Malaysian citizens, companies, societies, co-operatives and institutions.

(b) Eligible Directors, Employees, Customers and Suppliers of the Fotronics Group

2,500,000 of the Public Issue Shares will be made available for application by the eligible Directors, employees, customers and suppliers of the Fotronics Group.

(c) Identified Investors

45,745,000 of the Public Issue Shares will be made available via Private Placement to identified investors.

(v) Establishment of ESOS

In conjunction with the Listing, the Company has established the ESOS of up to ten percent (10%) of the enlarged issued and paid-up share capital of Fotronics for a duration of five (5) years for the benefit of all the eligible Directors and employees of the Fotronics Group.

(vi) Listing

Fotronics will seek the admission and listing of and quotation for its entire issued and paid-up share capital of RM20,297,860 comprising 202,978,600 Fotronics Shares on the MESDAQ Market and up to ten percent (10%) of the enlarged issued and paid-up share capital of Fotronics to be issued pursuant to the exercise of Options under the ESOS.

5.4 BUSINESS OVERVIEW OF THE FOTRONICS GROUP

5.4.1 Principal Activities

The Fotronics Group is a technology design house with precision manufacturing and assembling expertise. It presently has operations in Malaysia, Singapore, Hong Kong and China.

The Group's current principal activities are:

- R&D in process technology;
- precision assembly of magnetic recording heads and drums and assembly of AV equipment;
- precision manufacture and/or assembly of parts and components for the AV, computer, telecommunications, digital imaging, optical data storage and aerospace industries; and
- marketing and distribution of AV equipment and parts.

5.4.2 Principal Products

The current products manufactured and assembled by the Group are summarised as follows:

Components	End User Products	Application
Drums	• Computer/computer peripherals	• Component parts for computer/computer peripherals, e.g. DDS drums series and DAT drums
	• AV	• Critical components for the VCR
Magnetic recording heads	• AV, digital video cameras, VCR players and aviation recorders	• Critical components for digital video cameras, AV equipment (e.g. voice tape recorders), VCRs and aviation recorders
Micro-optic components	• Digital imaging devices	• Micro-optic components (AIS) for handphone cameras and digital cameras
	• Optical data storage devices	• Component parts (OPU) for DVD and compact disc drives
Drumheads	• AV, digital video cameras, VCR players and aviation recorders	• Component parts for digital video camera recorders, aviation recorders, AV equipment (e.g. voice tape recorders) and VCR players

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

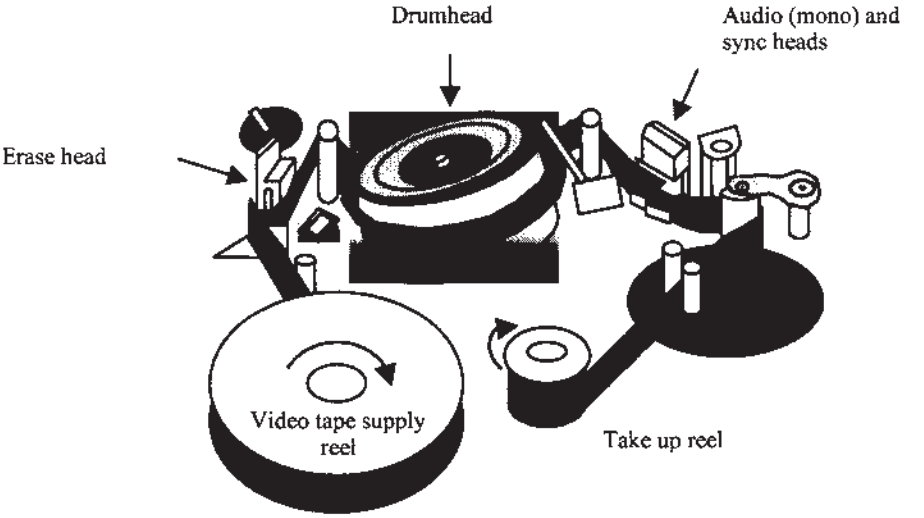
Components	End User Products	Application
	• Computer/computer peripherals	• Component parts for computer/computer peripherals, e.g. DDS drums series and DAT drums

Final Products	Industry
AV equipment e.g. plasma television, HDTV, home theatre system, VCD and DVD players	• AV

Further descriptions of some of the abovementioned products are as follows:

(i) Magnetic recording heads and drums for VCR

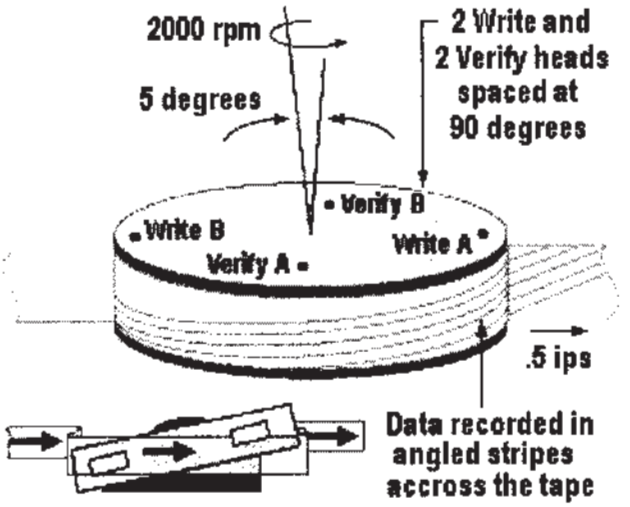
The magnetic recording heads and drums are the critically enabling technological components for VCR. The magnetic recording head is mounted onto a drum and the drumheads are used to read and/or write tracks of information onto a magnetic tape. The diagram below illustrates a typical VCR recording mechanism:



Source: Sketch from Electronics Reference as cited in the Independent Industry Research Report by BER dated 21 July 2004

(ii) Drumheads for computer/computer peripherals (e.g. DDS)

Drumheads are the critically enabling components in a computer data storage device such as DDS. The magnetic recording head for a computer data storage device is mounted onto a drum and the drumheads are used to read and/or write tracks of information onto a magnetic tape. DDS is based on helical scanning technology and in helical scanning, the cylindrical drum contains two (2) 'read' heads and two (2) 'write' heads. The 'read' head verifies the data whilst the 'write' head records data. The diagram below illustrates the helical scanning recording process.



Source: Data storage devices in PC Technology Guide (www.pctechguide.com) as cited in the Independent Industry Research Report by BER dated 21 July 2004

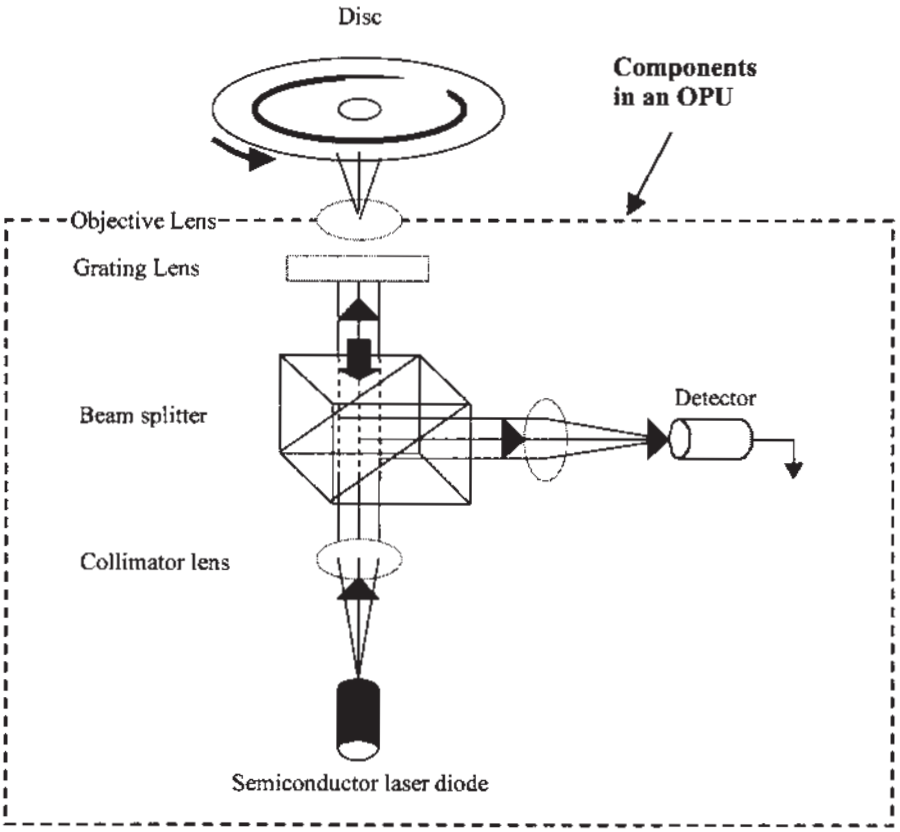
(iii) Micro-optic components

Micro-optic components are lenses which are between 0.5 millimetres and three (3) millimetres in dimension. They are used to collimate and/or couple light from one device to another, specifically the OPU and AIS.

OPU lenses

An OPU is used to inscribe information onto the optical disc media such as compact disc and DVD by focusing ultraviolet light from the semiconductor laser diode onto the optical disc. The basic components in an optical data storage system, specifically an OPU consists of a semiconductor laser diode, collimator lens, beam splitter, objective lens, grating lens and a detector. The OPU is then fitted into CR-ROM drives as well as DVD and VCD players. Vtrek (China) assembles the grating lens to the other components in the OPU.

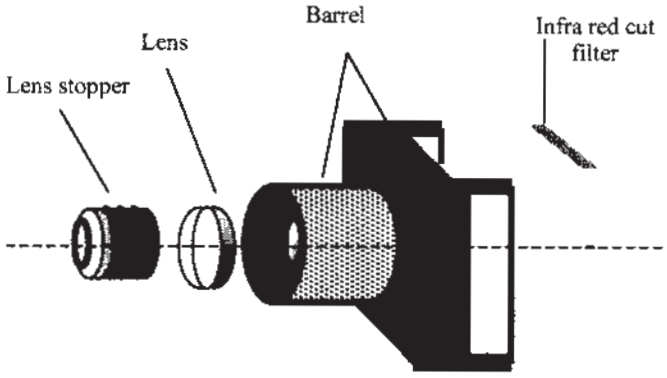
The diagram below is a simplified sketch of the basic configuration of an optical disc storage system.



Source: Independent Industry Research Report by BER dated 21 July 2004

AIS lenses

The AIS lens module assembled by the Fotronics Group consists of the lens stopper, micro optic lens, barrel and an infra red cut filter. The AIS lens module is then attached to an image sensor to process light information. Imaging sensor equipment, such as digital cameras, handphone cameras and scanners use the AIS lens to focus light beams onto the image sensor. The basic components of an AIS lens module are shown below:



Source: Sketch from Electronics Reference as cited in the Independent Industry Research Report by BER dated 21 July 2004

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

5.4.3 Proposed Products

The proposed products to be manufactured and assembled by the Group are summarised as follows:

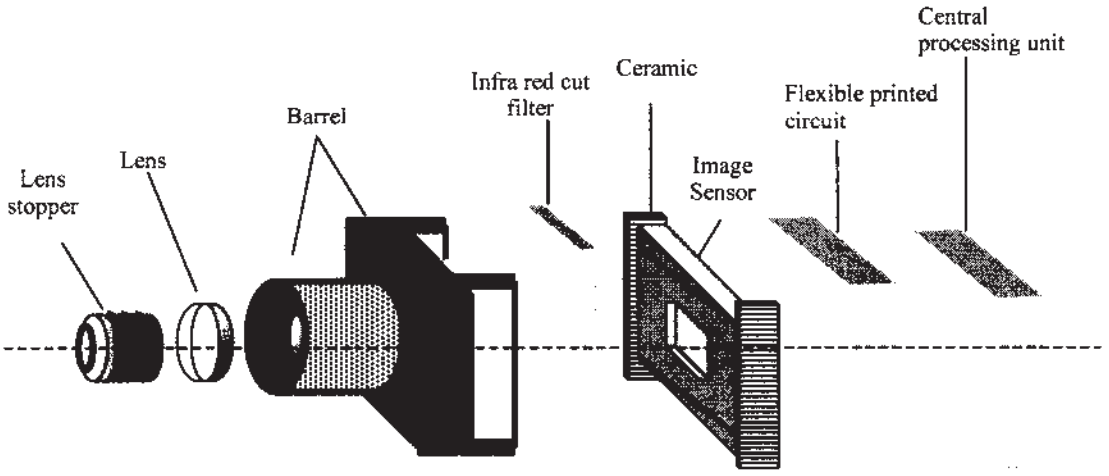
Components	End User Products	Application
Camera modules	• Digital imaging devices	• Component parts for digital cameras, handphone cameras and personal computer cameras.
Aerospace components	• AES and ALS	• Component parts for AES and ALS

Final Products	Industry
Computer tape drives	• Computer/computer peripherals
PHS handphone sets	• Telecommunications

Further descriptions of some of the abovementioned products are as follows:

(i) Camera modules

A camera module typically consists of the AIS lens module, image sensor, a flexible printed circuit board and a central processing unit. A camera module is one of the components within the digital camera, handphone camera and personal computer camera. With the know-how in the assembly of the AIS lens module, the Group plans to venture into the assembly of the camera module comprising the AIS lens module, CMOS or CCD image sensor, a flexible printed circuit board and a central processing unit. The module is illustrated below:



Source: Sketch from the Five(5)-Year Business Development Plan by the management of MPC dated 21 July 2004

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

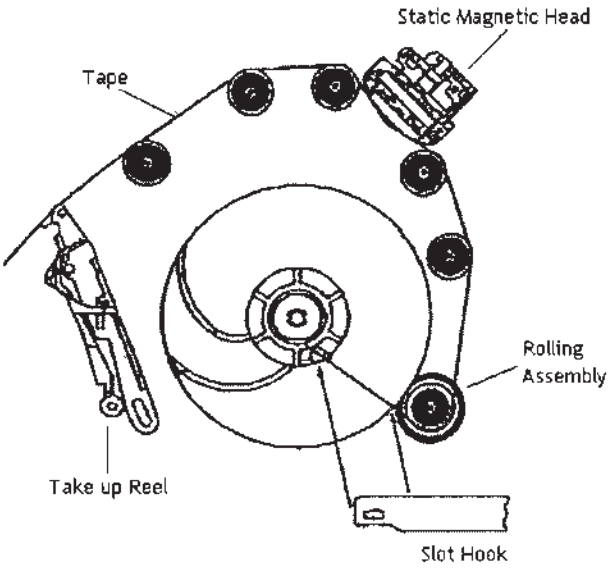
(ii) Aerospace components

Aerospace components are parts and components of the navigation and landing systems of the aircraft. On 9 October 2003, MPC entered into a long term contract with Honeywell International Inc. for MPC to supply certain aerospace components produced by MPC for a period of three (3) years commencing 15 October 2003. The Fotronics Group's precision machines are capable of manufacturing precision metal components for the aerospace industry such as the landing gear, bushing parts, spacer, joystick rotary control, cover receivers and transmitters and other aerospace components.

(iii) Computer tape drives

The high capacity data storage drives and systems to be manufactured by the Fotronics Group for a large Japanese multinational corporation functions as high-end computer data storage, backup and protection equipment, which can store terabytes of information. They are super tape drive devices and tape libraries with native capacity greater than 100 gigabytes. The high capacity data storage drives and systems utilise linear scanning technology and are suited towards medium and large multi-users. Amongst others, the components to be manufactured and assembled include cartridge bins, main printed circuit boards, gears, casings and frames.

The diagram below shows the linear scanning technology mechanism:

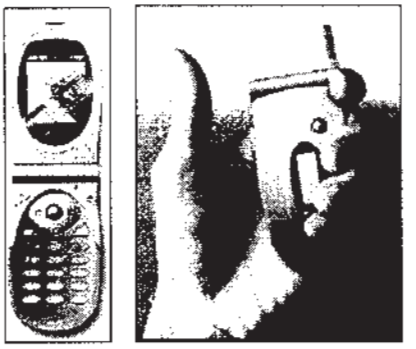


Source: Management of Fotronics

(iv) PHS handphone sets

PHS is an open standard formulated for personal communications services whilst a PHS handphone is a lightweight portable wireless telephone that functions as a cordless phone at home and as a handphone elsewhere. A PHS handphone can handle voice, data and video signals. The popularity of PHS is largely due to the combination of high quality voice communications and high-speed data that PHS can provide at economical rates. The PHS was originally developed in response to a need for a digital cordless telephone system and a compatible public mobile system. In comparison with conventional cellular telephone services, PHS offers larger transmission capacity, superior voice and data transmission, longer talking time and stand-by time and lower call charges.

The Fotronics Group has secured a contract from a major telecommunications company in China, a company licensed to supply and distribute wireless telecommunication devices to end-users in China for the design, development and assembly of the entire PHS handphone set (including both hardware and software applications). The manufacturing of the PHS handphones is expected to commence in the first quarter of 2005.



Source: Management of Fotronics

5.4.4 Marketing and Distribution

The Group supplies the manufactured and assembled critical components directly to its customers, i.e. multinational corporations. With the exception of the assembly of AV equipment and parts, the Group does not carry out any retail business. For the marketing of AV equipment and parts, the Group uses its in-house marketing team to promote the products. Conversely, for the marketing of the Group's critical component products, such as micro-optic lenses, lens modules and drumheads, the Group leverages on its good reputation for quality products and timely delivery, recognised expertise and technical knowledge in process technology as well as established reputation with its customers or multinational corporations.

Also, given the delicate nature of the Group's products, most of the Group's products are distributed/delivered to customers using the Group's in-house delivery services or selected forwarding agents. This arrangement of distribution operated by the Group minimises mishandling of the Group's critical components, products as well as ensures timely delivery of products to its customers.

The Group acknowledges that the establishment and maintenance of good rapport with customers and its commitment to stringent quality standards and requirements are essential criteria in the successful marketing of the Group's production capabilities. In this respect, the Group will continue its tradition of leveraging on the long term relationships with its existing customers, technology expertise and facilities to market its products.

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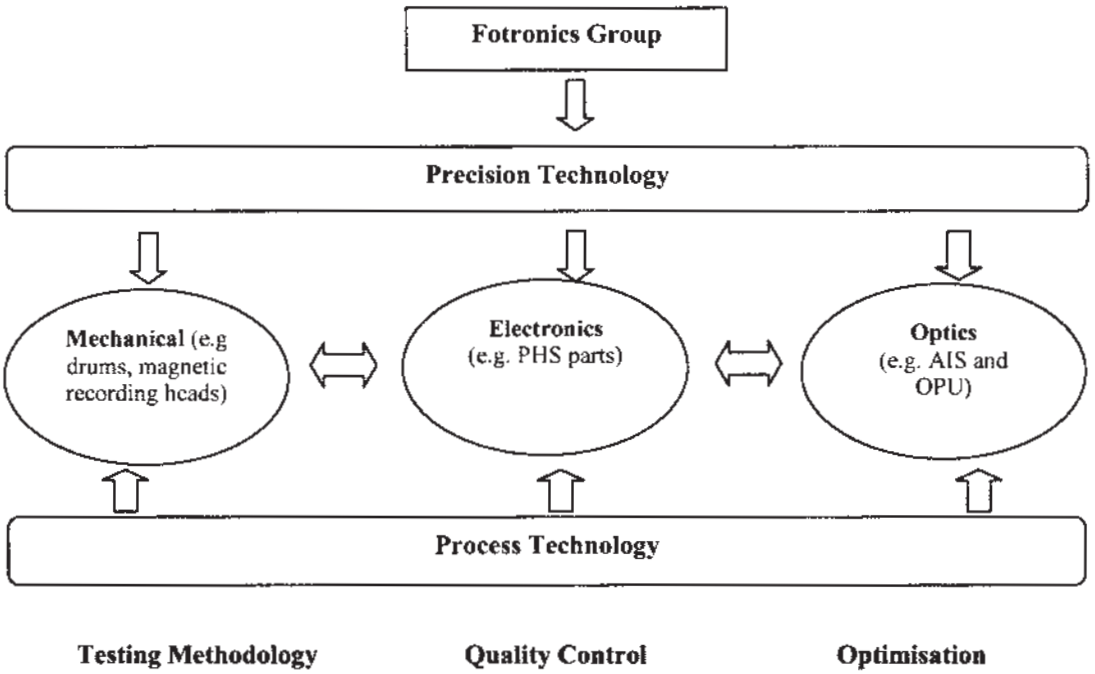
5.4.5 Technology Application



The Fotronics Group's core competencies are in precision and process technologies. The Group applies precision and process technologies in conjunction with technical know-how on magnetic recording, mechanical, electrical and electronics, optoelectronics and computer programming technologies to develop many of its products. As a consequence, the Group's precision technology enables them to manufacture and assemble various products at the micron (drums and magnetic heads), sub-micron (PHS parts) and nanometre levels (OPU and AIS). Meanwhile, the Group's knowledge in process technology is applied to testing methodologies, quality control and the optimisation of manufacturing processes. Process technology is used to ensure enhancement in quality, cost control, competitiveness, stage processing effectiveness, wastage reduction, accuracy and precision in the production processes of all the products manufactured.

The strong engineering capabilities possessed by the Fotronics Group above have enabled the Group to specialise in the manufacture and assembly of magnetic recording and photonic products. The Fotronics Group is one of the pioneers in magnetic recording technology and through its expertise, has developed highly specialised products for the AV, computer data storage, aviation and aerospace industries. The Group's expertise in photonics technology has enabled them to assemble micro-optic lens penetrating the optics industry.

As a technology design house, the Fotronics Group is committed to provide continuing R&D efforts to keep abreast with market developments as well as to enable it to tap into new markets. As part of the Group's efforts in undertaking R&D, the Fotronics Group utilises modern machines such as CNC machines, advance and high technology test measurement machines and instruments and CAD/CAM software. The Group's engineers require a high level of knowledge and expertise to design new products using the CAD/CAM software, configure CNC machines, conduct analyses on test measurement machines as well as interpret results from these machines. As a technology design house, the technology used by the Group is not only limited to high technology machines, systems and software but also includes the expertise and skill in designing and enhancing the manufacture and assembly processes.

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

Further details of the Group's expertise and technology/systems are as follows:

Automated Machining Lines

The Group's investment in precision machines and quality control measurement equipment is tabled below.

	Machine Type and Description	No. of Machines
1	Automated CNC Lathe (Tsugami)	30
2	Automated CNC Lathe (Miyano)	16
3	Automated Drilling & Tapping (Washino)	32
4	Washing Machines	5
5	Deburring Machines	4
6	Tool Grinding Machines	3
	Quality Control Measurement Equipment	
1	CNC Coordinate Measurement (Contact CMM) (Mitutoyo)	2
2	Smart Scope (Non Contact CMM)	1
3	Roundcom	4
4	Surfcom	3
5	Formcorder (Contour record)	2
6	Lead Measurement Machine	4
7	Air Micro Meter	12

The Fotronics Group is one of few companies in Singapore with a fully robotic processing line which is controlled by CNC machines. The CNC machining capability is a form of machining in which a computer processor is linked to a machine tool. The most common is the CNC lathe and the CNC machining centre. A CNC machine allows programming to be done at the machine, which is then stored in memory. The program can then be edited, read, interpreted by the machine or executed. Recent developments in CNC machining can even enable a simulation of cutting to be shown on the screen. This graphically displays the work piece shape, the tools, and the tool path.

Precision Machining Capabilities

(a) Machining Operations

The machining operations such as turning, drilling, tapping, milling and superfinishing flow are carried out under constant supervision as shown below:

(i) Turning

Turning is a machining process typically used to produce parts which are round in shape. External cylindrical and conical surfaces are produced between a rotating work piece and a longitudinally fed single-point cutting tool. Automatic lathes are used for the turning process. The Group's turning capabilities are derived from its full range of high precision machining equipment, which are able to turn at sub micron levels. They are therefore able to carry out complex machining operations, high volume production and product prototyping to meet customers' needs.

(ii) ***Drilling***

Drilling involves the drilling of precision holes in metal components and parts.

(iii) ***Tapping***

Tapping involves high-speed cutting or forming of screw threads onto the holes drilled as mentioned above.

(iv) ***Milling***

Milling is a cutting process where a multi-tooth cutter rotates on various axes on the work piece to produce parts which have a variety of configurations.

(v) ***Grinding***

Grinding is an abrasive machining process to remove fine chips formed by small abrasive particles by way of cutting away the abrasive edges of surfaces. As each cutting edge is small, the grinding process is able to produce close-tolerance parts and excellent surface finishes on hard materials such as hardened ceramics and steel.

(vi) ***Superfinishing***

Superfinishing is achieved by using an industrial natural diamond cutter designed by the Group's engineers. This process involves a work piece being turned and cut at sub micron tolerance levels specified by customers.

(b) ***Sub-Assembly***

As part of the Group's aim to offer integrated services to its customers, the Group also undertakes assembly work, combining components that it manufactures with parts purchased from other manufacturers. The Group designs In-house Industrial Machines to automate certain manual and repetitive assembling and machining operations so that they can be carried out more efficiently.

(c) ***Aqueous Cleaning Process***

Traditionally, chlorinated solvent is used by the engineering and electronics industries to degrease and clean. However, the threat of ozone layer depletion by these chemicals has led to a cessation of production of these cleaning solvents. As replacement, aqueous cleaning processes, which include alkaline cleaning and ultrasonic cleaning are used. In an alkaline cleaning process, alkaline base chemicals are used. For ultrasonic cleaning, ultrasonic wave is used to produce vacuum micro bubbles, which cleanses the surface of the work piece.

Design Applications

The engineers of the Fotronics Group are able to interpret, design and retool the machines for complicated manufacturing processes. The accuracy of the components manufactured is achieved through the use of high precision measuring instruments and by maintaining the components at a room temperature of 22°C. The CNC machines are modified and retooled to suit any type of precision metal components such as AV drums for eight (8) millimetres video cameras, digital video cameras and re-writable DVD Drives and other recording drums.

High Precision Alignment Machines

The Group currently has high precision alignment machines for the assembly of AV heads and drums. Principally, these machines can be used for height measurements to check the precision of heights with a tolerance of ± 1 micron and the alignment scope to check for 180° accuracy.

Wire Winding Machine

In addition, the Group is also using automated wire winding machines for its magnetic recording head assembly process. This sophisticated machine incorporates a programme logic control memory which can be set to automatically wire wind fine copper wires onto the magnetic recording head tips.

Industrial Clean Room Environment

The assembly process lines at the Vtrek (China)'s industrial clean room (Class 5000 and achieving up to Class 100 by clean booth) comprise mainly measurement and test machines as well as tools and equipments. Class 'X' denotes the permitted number of particles not more than X particles per cubic feet, for e.g. Class 5000 denotes the permitted number of particles not more than 5,000 particles per cubic feet. These machines allow the assembling team to perform assembly work at a fine precision level, where measurements and specifications are in sub-microns.

Below is a list of micro-optic lens assembly equipment acquired by the Group:

No.	List of Equipment	Quantity
1	Electronic Scale	2
2	Light Axis Meter	2
3	Interferometer Zygo	1
4	Reverse Projector	1
5	Stereo Micro Scope	80
6	Sophisticated Hard Press	14
7	Fitting Jig	28
8	Dispenser	35
9	Ultraviolet Irradiator	10
10	Height Gauge	10
11	Push and Pull meter equipment	1
12	Sophisticated MTF Measurement Equipment	3
13	Module Measurement Equipment	1
14	Photo Meter	2
15	Semi Automatic Grating Lens Bonder	2
16	Clean Booth	10
17	Ionizing Blower	82
18	Ion-exchange Resin Water Purifier	1
19	Clean Dryer	3
20	Lens Package Tape Sealer	1
21	Seal Intensity Tester	1

In addition, the Group also uses a computerised modules assembly control system, an enhanced system which allows the Group to save on material wastage, reduce human error as well as improve productivity and quality.

5.4.6 Production Capacity and Output

For the financial year ended 31 March 2004, the production capacities and output by product types are as follows:

Product	Maximum machine capacity (pieces per year)	Actual annual output (pieces per year)	Current operating capacity (%)
VCR drumheads	528,000	224,649	43
AV drums	7,200,000	4,320,000	60
DDS drums	720,000	648,000	90
AIS	36,000,000	28,034,301*	79
OPU	120,000,000	139,073,449*	115

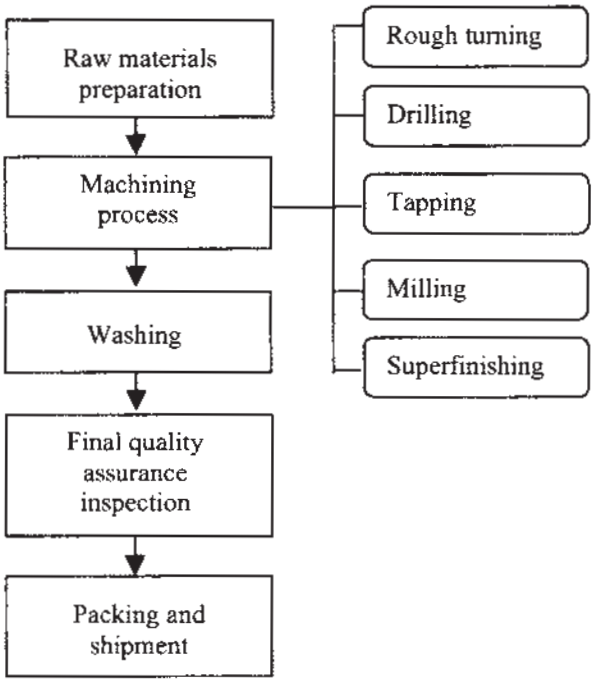
Note:

* *AIS and OPU are assembled in Vtrek (China). In view of the overcapacity in OPU production, AIS machineries were used for the OPU grating lens assembly to maximise production.*

5.4.7 Process Flow of Key Products

5.4.7.1 Manufacturing Process of Drums

The typical precision manufacturing process of drums can be illustrated as follows. However, depending on specifications and requirements, additional steps to the manufacturing process may be added.



The descriptions of the major processes are as follows:

(i) Raw Materials Preparation

The raw materials used are aluminium (in cylindrical form).

(ii) Machining Process

The raw materials are firstly rough turned to ensure the aluminium is cylindrically shaped. They are then drilled, tapped and milled with a multi-tooth cutter to produce parts with a variety of configurations. Subsequently, the raw materials are superfinished, a process involving the raw materials to be turned and cut at a sub-micron tolerance level.

(iii) Washing

After the machining process, the drums will then be washed to remove impurities and contaminants.

(iv) Final Quality Assurance Inspection

Quality of the Group's products is essential in retaining existing customers and attracting new customers as well as maintaining its reputation as a high quality precision engineering services provider. In addition to applying quality assurance checks at every stage of the machining process cycle to facilitate corrective actions for any deviation at their sources, the drums are subject to a final and thorough inspection to ensure that the design and specification of the products are in compliance with the customers' specifications and requirements.

Advance and high technology inspection and test measurement instruments are used to ensure product quality and consistency such as the use of the contact CNC co-ordinate measuring machine.

(v) Packing and Shipment

Once the drums have passed the final quality assurance inspection, the drums are routed to the warehouse for packing. The drums are then delivered to FMSB for the assembly of the magnetic recording heads onto the drums.

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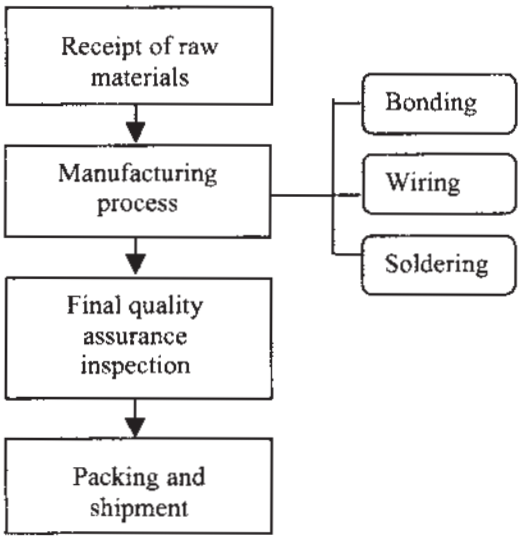
5.4.7.2 Manufacturing Process of Magnetic Recording Heads

The typical precision manufacturing process of magnetic recording heads can be illustrated as follows:



The descriptions of the major processes are as follows:

(i) Receipt of Raw Materials

Two (2) components are used to make up the magnetic recording head. They are the magnetic recording head tip base and the magnetic recording head tip. Upon receipt of the magnetic recording head tips, the magnetic recording head tips are inspected to ensure that they are of usable quality.

(ii) Manufacturing Process

A printed circuit board is firstly bonded onto the magnetic recording head tip base. Subsequently, the magnetic recording head tip is mounted onto the magnetic recording head tip base and bonded. A fine copper wire is wound around the magnetic recording head tip and wired to the printed circuit board. The wire is then soldered to the printed circuit board.

(iii) Final Quality Assurance Inspection

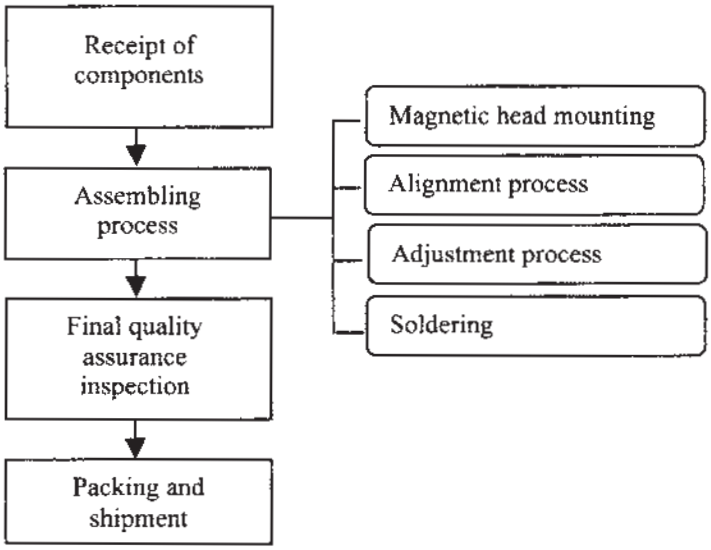
The magnetic recording head is subject to a final and thorough height and appearance inspection to ensure that the magnetic recording heads are fully compliant with the design specifications.

(iv) Packing and Shipment

Once the magnetic recording heads have passed the final quality assurance inspection, the magnetic recording heads are routed to the warehouse for packing and shipment to customers.

5.4.7.3 Assembly Process of Drumheads

The typical precision assembly process of drumheads can be illustrated as follows:



The descriptions of the major processes are as follows:

(i) Receipt of Components

The manufactured drums are received from MPC whilst the manufactured drums are assembled in FMSB.

(ii) Assembling Processes

The magnetic recording heads are mounted onto the drum, of which, the number of magnetic recording heads to be mounted depends on product specifications. Typically two (2) magnetic recording heads are mounted onto a drum. An alignment process is then performed to ensure that the two (2) magnetic recording heads are mounted exactly directly opposite each other. Subsequently, an adjustment process check is performed. Lastly, a printed circuit board is glued to the drums and its wires which connect the printed circuit board to the magnetic recording heads are then soldered.

(iii) Final Quality Assurance Inspection

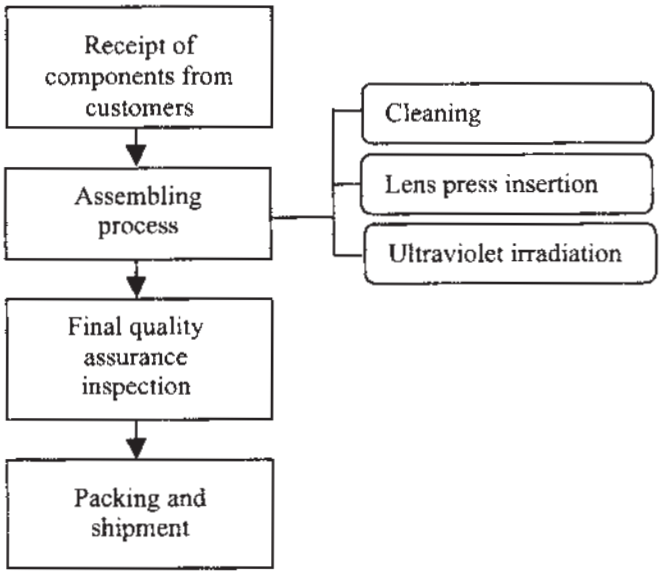
The drumheads are subject to a final and thorough inspection to ensure that the specifications of the drumheads are in compliance with the customers' specifications and requirements.

(vi) Packing and Shipment

Once the drumheads have passed the final quality assurance inspection, the drumheads are packed and sealed. The drumheads are then delivered to customers based on just-in-time practices.

5.4.7.4 Assembly Process of Micro-Optic Components

The precision assembly process of micro-optic components in degrees of nanometres is undertaken under industrial clean room environment. The typical precision assembly process of micro-optic components can be illustrated as follows:



The descriptions of the major processes are as follows:

(i) Receipt of Components from Customers

The micro-optic lenses are received from the lens manufacturer, i.e. Enplas Corporation.

(ii) Assembling Process

The lenses are then cleaned and inspected to ensure that they are of usable quality. After the lenses have been cleaned and inspected,

OPU lenses:
The grating and objective lenses are placed onto a lens holder, which precedingly had been applied with glue. The glue is subsequently hardened under ultraviolet light.

AIS lenses:
The lenses are individually placed into a barrel. The lenses are then pressed fitted into the barrel and bonded. Ultraviolet irradiation is applied to harden the bonding between the barrel and the lenses. Subsequently, the barrel is screwed onto a lens holder. After that, an inspection is undertaken on the lenses to ensure the resolution of the lenses complies with the customers' requirements. An air blowing procedure is subsequently undertaken to remove any loose dust particles from the lenses.

(iii) Final Quality Assurance Inspection

The assembled lenses are subject to a final and thorough appearance inspection to ensure that the specifications of the lenses are in compliance with the customers' specifications and requirements.

(iv) Packing and Shipment

Once the assembled lenses have passed the final quality assurance inspection, the lenses are packed and heat sealed under clean room environment to ensure impurities and contaminants are not re-introduced into the lenses. The lenses are then delivered to customers based on just-in-time practices.

5.4.8 Principal Markets for Products

The Fotronics Group's precision manufacturing and assembling of critical components cover various end user products such as digital imaging, AV, computer/computer peripherals, aerospace and optical data storage. With the exception of the assembly of the final products of AV equipment, of which the principal market is Malaysia, the Group's critical components are sold mainly to multinational corporations, which then export their final products worldwide.

5.4.9 Quality Assurance

The Fotronics Group is committed to achieving a high level of quality for all its products to ensure that its products supplied meet the stringent quality standards and requirements of their customers. The Directors consider the high quality products of the Fotronics Group an essential attribute in retaining its existing customers and maintaining its status as a high precision engineering services provider and technology design house. The quality objectives of the Group are achieved through the implementation of quality system procedures. The Group adopts Japanese technology and plant management hypothesis which have advantages over other companies. Any detection of non-compliance is documented, the causes of defects are studied and discussed and corrective measures, implemented. The adoption of the Japanese method of productivity improvements, "Kaizen" has resulted in the Group being able to maintain high levels of productivity and efficiency, hence contributing positively to the sustenance of the Group's competitiveness vis-à-vis its competitors.

Besides conducting its own internal quality audit, the Fotronics Group's quality management system and operation methods are also subject to the reviews and audits by its customers.

The Group's commitment to quality is evidenced by the international accreditation received by MPC from the British Standards Institutions in 2001 certifying that the quality system of MPC meets the requirements of ISO 9001:2000. The scope of registration covers the manufacturing of DDS drums and VCR drums. This endorsement signifies the standard of quality system adopted by MPC and reflects the Group's continuous efforts in delivering high quality products to its customers.

In addition to the Group's commitment to the quality of its products and processes, the Fotronics Group via MPC has received an accreditation from the Procurement Global Head Office, Sony Corporation certifying that MPC had successfully established an environmental management system which has met the requirements of the Sony Green Partner Program.

5.4.10 R&D

As a technology design house, the Fotronics Group is committed to provide continuing R&D efforts to keep abreast with market developments, market trends and to enable it to tap into new markets as well as to ensure the long-term sustainability of its business. The Group has an impressive track record in process technology and emerging new technologies and was in fact responsible for the development of the single crystal ferrite, a process of forming a single crystal element from the millions of individual crystals. The development of the single crystal ferrite growing technique allowed the Group to embark on magnetic recording heads manufacturing on a large scale.

In addition, the Fotronics Group has the capability to provide one stop design and development services to fulfil customers' unique and specific needs. In order to compete in a constantly evolving ICT sector, the Group employs extensive R&D and market intelligence to maintain and increase their competitiveness and position in the market. The R&D team builds on the existing precision engineering skills and technology available within the Group to develop products and processes with solid conceptual foundation to support the development requirements and specifications of the ICT sector. In recognising the importance of R&D, Fotronics had entered into a Technical Assistance and Know-How Agreement with FInc in order to allow the Fotronics Group to gain access to Japanese R&D expertise and precision engineering skills, thus establishing Malaysia as its R&D technology conduit for the Asia Pacific region in the near future.

5.4.10.1 R&D Achievements

The Group's R&D achievements are as follows:

Date	Description of Events
1978	The development of the single crystal ferrite growing technique in the magnetic material discipline.
1979	The development of the smallest coloured camera VCR for the consumer industry.
1982	The development of special helical scanning heads for industrial application.
1986	The development of (open reel) industrial VCR for duplication purposes on VHS formatted tape.
1987	The development of industrial ferrite fixed heads for high-speed audio cassette duplication purposes.
1998	The production of the DDS drums series for the replacement market.
1999	The production of the eight (8) millimetres storage drive drums for the replacement market.
2000	The development of the eight (8) millimetres VCR drums for the replacement market of the aviation industry.
2001	The designing and setting-up of an industrial clean room production line for OPU lenses.
2002	The designing and setting-up of an industrial clean room production line for AIS lenses.

Date	Description of Events
2004	The design and development of the entire manufacturing process of high capacity data storage drives and systems.
2004	The design and development of PHS handphones for the China market.

5.4.10.2 R&D Activities

The R&D activities undertaken by the Group amongst others, include the following:

- Design planning;
- Product and process design, measurement and testing;
- Study and analysis on customer requirements;
- Product and process evaluation and enhancement; and
- Feasibility and market studies.

(a) R&D Objectives

The Fotronics Group's R&D objectives are as follows:

Continuous enhancement of product design and features	To compete in an ever evolving ICT sector, the Group conducts extensive R&D and market intelligence to maintain and increase their competitiveness and position in the market. In addition to building on the Group's existing technologies, the R&D team in collaboration with FInc utilises a wide variety of its resources such as technical journals and ideas to achieve the best possible engineering designs and manufacturing processes.
Upgrading of R&D capabilities through technical alliances	The Group will continuously upgrade its R&D capabilities by tapping on external expertise through technical alliances. FInc via the Technical Assistance and Know-How Agreement will provide technical knowledge and assistance to the Group. The Group has also embarked on R&D alliance initiatives with several renowned ICT companies and universities in the Asia Pacific region.

(b) R&D Strategies

To ensure the successful achievement of the R&D objectives, the following R&D strategies will be implemented:

Increase R&D manpower	The Group is expected to increase R&D personnel to fifteen (15) by year 2009.
Keeping abreast with new technologies	Funds are to be allocated for training, product launches, workshops, purchase of new tool kits and other R&D related activities. In addition, R&D personnel will also be made aware and trained in the latest methodologies and technical know-how.
Meeting customers' requirements	The R&D team is to work closely with the marketing and production teams in order to meet customers' requirements. The marketing team will be the intermediary between the technical team and the customers.

Establishing a testing and commissioning division	The Group is to establish a testing and commissioning division to undertake testing and measuring of all its products, including performing quality assurance.

(c) ***R&D Policies***

The following R&D policies guide the process, manufacture and assembly of the Group's products.

Management policy	• The Head of R&D is to report to the Executive Committee and the Board in all R&D matters, including regular updates of all R&D activities.
Product development policy	• Product Reliability – All products and processes are to undergo a vigorous endurance test to ensure end products are functional. • Product User Acceptance and Recognition - All products are to go through rigorous testing procedures to ensure 100% user acceptance. • Product Maintainability – All products are to be designed with easily available replacement parts and components and upgradeable linkages. • Product Uniqueness – All products are to be unique in its design, functionalities and features.
Product quality policy	• Quality strategy is to be integrated at all levels within the management structure. Any detection of non-conforming processes is documented, the causes of defects if any, are studied and corrective measures implemented immediately.

(d) ***R&D Team***

Currently, the R&D team comprises eight (8) engineers. All the engineers have an average of ten (10) years experience in technology design process. The Group plans to increase the R&D workforce to approximately fifteen (15) R&D personnel within the next five (5) years. An R&D committee has been established whose major functions are outlined as follows:

- To design and develop new products and processes;
- To reduce process and manufacturing lead-time and manpower resources by designing and revising processes;
- To study the cost-saving measures and to improve the value of finished products; and
- To explore various technical aspects of processes that may produce better quality products and enhance project efficiency.

(e) ***R&D Expenditure***

The amount spent by the Group on R&D over the last three (3) years is as follows:

Financial year ending 31 March	**2002**	**2003**	**2004**
Amount spent on R&D (RM'000)	4,474	1,736	1,974
Amount spent as a percentage of revenue (%)	13%	3%	5%

5.4.10.3 Present R&D Undertaken

The Company is currently undergoing R&D in the following areas:

(i) **Computer Tape Drives**
The R&D team has jointly with its customer, designed and developed the high capacity data storage tape drive for a large USA multinational corporation. The product is currently in its manufacturing phase.

(ii) **PHS**
The R&D team has designed and developed the PHS handphone prototype. The R&D team is currently in the midst of finalising the process designs for production under industrial clean room environment.

5.4.11 Brand Names/Patents/Trademarks/Licences/Franchise/Technical Assistance Agreement/Other Intellectual Property Rights

The Fotronics Group does not presently own or is licensed to use any registered brand names, patents, trademarks, licenses, franchises or similar intellectual property rights. The Group though, has entered into the Technical Assistance and Know-How Agreement with FInc to enhance Fotronics' R&D expertise. Pursuant to the Technical Assistance and Know-How Agreement, FInc shall provide amongst others, support for the R&D requirements of the Fotronics Group and to transfer certain technical knowledge and know-how to the Group on an exclusive basis. However, the Group's dependency on FInc as a technology provider is minimised as the Group plans to develop its R&D activities within the Group. Some of the salient terms of the Technical Assistance and Know-How Agreement are as follows:

(i) Pursuant to the Technical Assistance and Know-How Agreement, FInc has agreed to grant the Fotronics Group for a period of five (5) years or such further period to be agreed between the parties, the exclusive right and licence to manufacture, sell and distribute worldwide the products of the Fotronics Group in accordance with the methods and processes developed by FInc using FInc's technical knowledge and know-how for a fee of USD250,000 to be paid in five (5) annual instalments.

(ii) In providing the technical knowledge and know-how, FInc undertakes to inter-alia provide the necessary training to the employees of the Fotronics Group, process information deemed necessary for efficient and continuous production of the products of the Fotronics Group, assist and advise on establishing R&D activities for carrying out such R&D work with a view to the Fotronics Group developing its new products and own R&D centre.

(iii) FInc further undertakes that it shall not provide any technical assistance or knowledge and know-how to any other third party without the prior written consent of Fotronics. The Fotronics Group shall be entitled to continue to use the technical knowledge and know-how after the expiry of the five (5) year period or termination of the Technical Assistance and Know-How Agreement.

Principal licences required by the Group are set out in Section 10.1 of this Prospectus.

5.4.12 Interruption to Operations of the Fotronics Group

The Fotronics Group has not experienced any disruptions in business which has a significant effect on its operations during the 12 months period prior to the date of this Prospectus.

5.4.13 Management of the Fotronics Group

The brief profiles of the Directors and key management or key technical personnel of the Fotronics Group are set out in Section 6 of this Prospectus.

5.4.14 Employees

As at 23 December 2004, the Group has a total of 942 full-time employees, none of whom are members of any unions. A breakdown of the employee structure is illustrated as follows:

Employee categories	No of employees	Average length of service (years)
Managerial & Professional	16	5.8
Engineers & Technicians	27	5.3
Clerical, general and factory workers	899	2.7
Total	**942**	

The employees and the management of the Group enjoy a cordial working relationship. In addition, there have not been any industrial disputes between the employees and the management of the Fotronics Group.

As part of the staff training and development programme, structured training programmes are employed to ensure employees are kept abreast with the latest updates and methodologies. In addition, engineers in FInc are constantly rotating their presence within the Group by visiting other facilities within the Group. Local engineers in their respective locations are updated by their counterparts from FInc on new process techniques and methodologies.

5.4.15 Key Achievements/Milestones/Awards of the Fotronics Group

Summarised below are the key achievements/milestones/awards of the Fotronics Group:

Year	Events
2001	Award of approved vendor status to MPC from JVC Corporation for the production of drums.
2001	Accreditation to MPC from the British Standards Institutions certifying the quality system of MPC has met the requirements of ISO 9001:2000, in which the scope of registration covers the manufacturing of DDS drums and VCR drums.
2003	Accreditation to MPC from the Procurement Global Head Office, Sony Corporation certifying the successfully established environmental management system which has met the requirements of the Sony Green Partner Program.
2003	Award of long term contract to MPC from Honeywell International Inc. for the manufacture of aerospace components.
2004	Award of vendor status to FIPL pursuant to an agreement between FInc and a large Japanese multinational corporation for the design and manufacturing of high capacity data storage drives and systems.
2004	Award of contract to FIPL from a major telecommunications company in China for the design, development and assembly of PHS handphones.

5.4.16 Premises

The Fotronics Group's locations of operations which are strategically located in Malaysia, Singapore, Hong Kong and China are as follows:

Subsidiary company	Location of operating facility
FMSB	No. 16, Jalan 227 Section 51A 46100 Petaling Jaya Selangor Darul Ehsan Malaysia
FTSB	No. 16, Jalan 227 Section 51A 46100 Petaling Jaya Selangor Darul Ehsan Malaysia
MPC	No. 5, Tuas Ave 12 Singapore 639025 Singapore
FIPL	No. 5, Tuas Ave 12 Singapore 639025 Singapore
Vtrek (China)	Vtrek Industrial Garden Dewei Shibei Industrial Road Dashi Town, Panyu Borough 511430 Guangzhou City China
Vtrek (HK)	1212, Harbour Crystal Centre 100, Granville Road Tsim Sha Tsui, Kowloon Hong Kong

5.5 INFORMATION ON SUBSIDIARY COMPANIES

Details of Fotronics' subsidiary companies are as follows:

5.5.1 Information on FMSB

(a) History and business

FMSB was incorporated in Malaysia under the Act as a private limited company on 27 June 1988. FMSB is principally involved in precision assembly of magnetic recording heads and drums and assembly of AV equipment. FMSB is a wholly-owned subsidiary company of Fotronics.

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

(b) Share capital

The present authorised and issued and fully paid-up share capital are as follows:

Type	No. of ordinary shares	Par value RM	RM
Authorised	10,000,000	1.00	10,000,000
Issued and paid-up	6,000,000	1.00	6,000,000

Changes in the issued and paid-up share capital of FMSB since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value RM	Consideration	Cumulative issued and paid-up share capital RM
27.06.1988	2	1.00	Subscribers' shares	2
08.09.1989	674,080	1.00	Cash	674,082
03.10.1990	1,325,918	1.00	Cash	2,000,000
08.02.1991	1,500,000	1.00	Cash	3,500,000
12.08.1991	1,500,000	1.00	Consideration other than cash	5,000,000
10.03.2000	1,000,000	1.00	Cash	6,000,000

(c) Subsidiary and Associated Companies

FMSB has a wholly-owned subsidiary company, FTSB and no associated company. Details of FTSB are set out in Section 5.5.2 of this Prospectus.

5.5.2 Information on FTSB

(a) History and business

FTSB was incorporated in Malaysia under the Act as a private limited company on 2 March 1987. FTSB is principally involved in the marketing and distribution of AV equipment and parts. FTSB is a wholly-owned subsidiary company of FMSB.

(b) Share capital

The present authorised and issued and fully paid-up share capital are as follows:

Type	No. of ordinary shares	Par value RM	RM
Authorised	500,000	1.00	500,000
Issued and paid-up	500,000	1.00	500,000

Changes in the issued and paid-up share capital of FTSB since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value RM	Consideration	Cumulative issued and paid-up share capital RM
02.03.1987	2	1.00	Subscribers' shares	2
21.07.1988	499,998	1.00	Cash	500,000

(c) Subsidiary and Associated Companies

FTSB has no subsidiary company or associated company.

5.5.3 Information on MPC

(a) History and business

MPC was incorporated in Singapore under the Singapore Companies Act, Cap 50 as a private limited company on 4 December 2000. MPC is principally involved in precision manufacture and assembly of parts and components for the AV, computer and aerospace industries. MPC is a wholly-owned subsidiary company of Fotronics.

(b) Share capital

The present authorised and issued and fully paid-up share capital are as follows:

Type	No. of ordinary shares	Par value SGD	SGD
Authorised	5,000,000	1.00	5,000,000
Issued and paid-up	5,000,000	1.00	5,000,000

Changes in the issued and paid-up share capital of MPC since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value SGD	Consideration	Cumulative issued and paid-up share capital SGD
04.12.2000	2	1.00	Subscribers' shares	2
31.01.2001	4,999,998	1.00	Consideration other than cash	5,000,000

(c) Subsidiary and Associated Companies

MPC does not have any subsidiary company or associated company.

5.5.4 Information on Vtrek (HK)

(a) History and business

Vtrek (HK) was incorporated in Hong Kong under the Companies Ordinance, Chapter 32 as a private limited company on 21 May 1992 under the name of Sowo International Limited. It subsequently changed its name and assumed its present name on 20 July 2001. Vtrek (HK) is principally involved in investment holding. Vtrek (HK) is a 60%-owned subsidiary company of Fotronics.

(b) Share capital

The present authorised and issued and fully paid-up share capital are as follows:

Type	No. of ordinary shares	Par value HKD	HKD
Authorised	5,510,000	1.00	5,510,000
Issued and paid-up	5,510,000	1.00	5,510,000

Changes in the issued and paid-up share capital of Vtrek (HK) since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value HKD	Consideration	Cumulative issued and paid-up share capital HKD
21.05.1992	2	1.00	Subscribers' shares	2
01.07.1992	9,998	1.00	Cash	10,000
21.08.2002	500,000	1.00	Cash	510,000
01.02.2004	5,000,000	1.00	Consideration other than cash	5,510,000

(c) Subsidiary and Associated Companies

Vtrek (HK) has a wholly-owned subsidiary company, Vtrek (China) and no associated company. Details of Vtrek (China) are set out in Section 5.5.5 of this Prospectus.

(d) Substantial Shareholders

The substantial shareholders of Vtrek (HK) and their respective shareholding, as at 23 December 2004 are as follows:

		<---------- Ordinary shares ---------->			
		<--------- Direct ---------->		<------- Indirect ------>	
Name	Nationality / country of incorporation	No. of shares held	%	No. of shares held	%
Fotronics	Malaysia	3,306,000	60.0	-	-
Zhuang Bing Wu	Chinese	2,204,000	40.0	-	-

5.5.5 Information on Vtrek (China)

(a) History and business

Vtrek (China) was established in China as a wholly-owned foreign enterprise on 20 August 2001. Vtrek (China) is principally involved in precision assembly of micro-optic components for the digital imaging and optical data storage industries. Vtrek (China) is a wholly-owned subsidiary company of Vtrek (HK).

(b) Share capital

The present approved investment amount, registered capital and paid-up capital are as follows:

Type	USD
Approved investment amount	28,000,000
Registered capital	11,200,000
Paid-up capital	1,914,823

Changes in the issued and paid-up registered capital in cash of Vtrek (China) based on the Capital Verification Report issued by Guangzhou Decent Certified Public Accountants Co., Ltd since its incorporation are as follows:

Date of contribution	Consideration	Cumulative paid-up capital USD
25.04.2002	Cash	320,566
09.04.2003	Cash	550,679
24.12.2003	Cash	1,914,823

(c) Subsidiary and Associated Companies

Vtrek (China) has no subsidiary company or associated company.

5.5.6 Information on FIPL

(a) History and business

FIPL was incorporated in Singapore under the Singapore Companies Act, Cap 50 as a private limited company on 8 April 2003. FIPL is principally involved in the precision assembly of parts and components for the telecommunications and digital imaging industries. FIPL is a wholly-owned subsidiary company of Fotronics.

(b) Share capital

The present authorised and issued and fully paid-up share capital are as follows:

Type	No. of ordinary shares	Par value SGD	SGD
Authorised	100,000	1.00	100,000
Issued and paid-up	2	1.00	2

Changes in the issued and paid-up share capital of FIPL since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value SGD	Consideration	Cumulative issued and paid-up share capital SGD
08.04.2003	2	1.00	Subscribers' shares	2

(c) Subsidiary and Associated Companies

FIPL does not have any subsidiary company or associated company.

5.6 INDUSTRY OVERVIEW AND PROSPECTS *(Source: Independent Industry Research Report by BER dated 21 July 2004)*

5.6.1 Overview of the World Economy

The outlook for the global economy is increasingly optimistic following the strong upturn in the second half of 2003. In spite of the uncertainties in the first half of that year resulting from the Iraq War and the outbreak of the Severe Acute Respiratory Syndrome ("SARS") crisis, world economic growth strengthened in the second half of 2003. World output and global trade increased by 3.2% and between 3.5% to 4.5%, respectively in 2003. Growth was supported by the economic upturns in Japan, the Euro Zone countries and the USA in the past six (6) months.

Amidst improved prospects, there was an upward revision in the growth projections of world output and international trade in 2004. World output and international trade are projected to grow at a faster pace of 4.1% and between 5% to 6%, respectively in 2004. The USA is expected to lead world growth supported by an expansionary monetary and fiscal policy that has been in place for some time, as well as productivity gains, investment and inventory rebuilding. Meanwhile, in the Euro Area, growth is expected to recover gradually as expansionary fiscal policies continue to be adopted in major Euro Area economies. While the economic recovery in Japan is affected by long-term structural problems, deflationary pressures have begun to ease and signs of sustainable recovery have emerged since the second half of 2003. In the UK, economic growth is expected to remain resilient, underpinned by public and private consumption. Meanwhile growth in the Asian economies will also strengthen on the back of expected stronger exports, private consumption and investment performances.

5.6.2 Overview of the Malaysian Economy

In 2003, the Malaysian economy expanded 5.2% compared with 4.1% in the previous year. Stronger economic performance was evident especially in the second half of the year in spite of the impact of the external crises during the first half of 2003.

The proactive monetary and fiscal policy measures implemented by the government in response to uncertainties in the first half of the year supported growth and provided the platform for the private sector to take the lead in driving the economy forward. Meanwhile sustained growth in investment activity in the major industrial economies as well as higher commodity prices resulted in stronger export performance.

Following a recovery in the international and domestic economy, real GDP is projected to increase between 6.0% and 6.5% in 2004. Economic growth will be supported by stronger performances from the manufacturing, services and export sectors.

5.6.3 Overview of the China Economy

Economic prospects for the East Asian economies are expected to strengthen in 2004 with China taking the lead in growth. China is forecast to register 8.3% growth in 2004. While exports and private consumption are expected to increase, investment expenditure is expected to moderate in line with the government's policy to achieve a more balanced and sustainable growth path.

5.6.4 Overview of the Singapore Economy

In Singapore, growth is expected to strengthen in the range of 3.5% to 5.5% in 2004. This is attributed to an expected recovery in global information technology spending. Meanwhile, improvements in labour market conditions and the country's low interest rate environment should help stimulate positive sentiments and consumer demand.

5.6.5 Demand and Supply

Precision engineering plays a critical supporting role in the growth and development of high technology industries (which includes the electrical and electronics, office and computing machinery and aerospace sectors). On the demand side, the global electronics industry has been partly driven by increasing demand for more portable products. Portability is one of the key aspects of competition among OEMs in the electronics industry today. In order to make products portable, more and more parts and components are required to be miniaturised.

The microelectronics revolution, which began in the 1960s, placed increasing emphasis on the miniaturisation of electronic parts and components. Precision engineering plays a critical role in this respect as some of the key characteristics of precision manufactured products include:

- "Smallness" of the parts produced (in the micron and sub-micron range);
- Extreme accuracy in the manufacturing process; and
- Reliability of the parts manufactured.

Precision engineered parts and components are used in a wide range of applications today. Precision engineering companies have been highly challenged to deliver a wide range of products for consumer, commercial, industrial and military applications. Moreover, information collected by the USA's National Aeronautics and Space Administration ("NASA") Scientific and Technical Information programme indicates that the underlying trend in miniaturisation will continue at an exponential rate in the long run. Hence, the demands made on the precision engineering industry are only likely to increase in future.

5.6.6 Precision Engineering Industry in Malaysia

In 2001, the Malaysian census of manufacturing industries enumerated 242 establishments engaged in the manufacture of television and radio receivers, sounds or video recording or reproducing apparatus and associated goods; office, accounting and computing machinery; and optical instruments and photographic equipment. These establishments represented 1.2% of the total number of manufacturing establishments in Malaysia. In 2002, their combined sales value amounted to RM42.5 billion or 13.8% of the total manufacturing sales value.

However, the number of establishments in the abovementioned sectors that apply precision engineering techniques is indeterminate. Precision engineering as an industry, per se in Malaysia is less well defined. Hence principal statistics for the precision engineering sector are currently unavailable.

5.6.7 Industry Players and Competitors

Although there are several precision engineering companies in Singapore and Malaysia, their level of engineering capabilities are indeterminate and their product mixes are quite diverse. Based on the *Independent Industry Research Report by BER dated 21 July 2004*, none of the precision engineering companies studied in Singapore and Malaysia manufacture a similar product mix to the Fotronics Group. The Fotronics Group's competitors are either the large global original brand manufacturers that manufacture their own components or a handful of specialised global component contract manufacturers.

5.6.7.1 DDS Component Manufacturers

Some members of the DDS consortium that manufacture DDS components and magnetic recording heads are listed below:

- TDK Corporation;
- SAE Hong Kong;
- Seagate Technology; and
- Matsushita Kotobuki Electronics Industries, Ltd ("MKE").

In the DDS consortium, TDK Corporation is likely to be the major supplier of ferrite cores for the drums while its subsidiary company, SAE Hong Kong manufactures the magnetic recording heads for computer disc drives. Seagate Technology is a global manufacturer of HDDs and read-write heads. The Fotronics Group is a sub-contractor in the USD464 million DDS/DAT drive industry.

5.6.7.2 OPU Component Suppliers

Mitsumi Electric Co Ltd and the Enplas group of companies ("Enplas Group") have been identified as major global suppliers of OPU.

Mitsumi Electric Co Ltd is the larger of the competitors in terms of revenue. Meanwhile, the Enplas Group is a relatively small contract manufacturer of high-precision, high-performance plastic parts and products in terms of asset size and revenue. The Enplas Group ventured into providing optplanics products including optical heads for VCD, DVD, CD-R and CCD cameras. The company has 13 manufacturing and sales affiliates in Thailand, Malaysia, Hong Kong, Taiwan, Korea, China and the USA. The Fotronics Group is a sub-contract assembler of the grating lenses in OPU for Enplas Corporation (Japan).

5.6.7.3 AIS Lens Assemblers

Amkor Technology Inc., Advance Semiconductor Engineering Inc. ("ASE") and Enplas Corporation have been identified as major assemblers of the AIS lens components.

Amkor Technology Inc. is a semiconductor test and assembly company. Amkor Technology Inc., amongst others, develops and assembles AIS lens modules for a range of products such as handphone cameras, computers and toys. Amkor Technology Inc. is the second largest AIS manufacturing company studied in the *Independent Industry Research Report by BER dated 21 July 2004*. Meanwhile, ASE is another major global supplier of semiconductor testing and assembly in the digital imaging industry. Currently, ASE is the largest competitor by asset size.

5.6.7.4 VCR Drumheads Component Manufacturers

Some of the global drumheads manufacturers identified are as follows:

- Mitsumi Electric Co. Ltd;
- Alps Electric Co Ltd;
- TDK Manufacturing (Hong Kong) Co. Ltd.;
- Axel International Inc. ("Axel"); and
- Ahead Magnetics, Inc. ("Ahead Magnetics")

Alps Electric Co Ltd and Mitsumi Electric Co. Ltd are global manufacturers of a range of components including magnetic recording heads for VCRs. These two (2) companies have several subsidiary companies located throughout Southeast Asia. Mitsumi Electric Co. Ltd has four (4) subsidiary companies in the region specialising in producing a range of head and drum components for various electronic and computer products including VCRs. Others such as TDK Manufacturing (Hong Kong) Co. Ltd., Axel, and Ahead Magnetics are smaller companies (or subsidiary of companies) that specialise strictly in the manufacture of VCR drumheads. Due to FInc's long history in the manufacture of VCR drumheads, the Fotronics Group believes that they remain one of the largest global manufacturers of VCR drumheads today.

5.6.7.5 Handphone Manufacturers in China

The telecommunications equipment industry in China is highly competitive. Currently, China has over 100 telecommunications plants producing handphone parts and equipment. However, competition is mainly among the foreign firms. These include:

- Motorola (China) Electronics Ltd. (the only wholly-owned foreign entity);
- Hangzhou Eastern Telecommunications Company (a Motorola joint venture);
- Beijing Nokia;
- Ericsson (China) Co., Ltd.;
- Beijing Matsushita;
- Wuhan NEC Mobile Communication Co., Ltd.;
- Shanghai Siemens; and
- Shenzhen Philips.

Motorola (China) Electronics Ltd. and Beijing Nokia are the two (2) largest producers accounting for 36% of the market in July 2003. Besides the foreign competitors, local Chinese companies, TCL Corporation, Ningbo Bird Co., Ltd. and Amoisonic have grown significantly to account for a sizeable share of the handphone set market.

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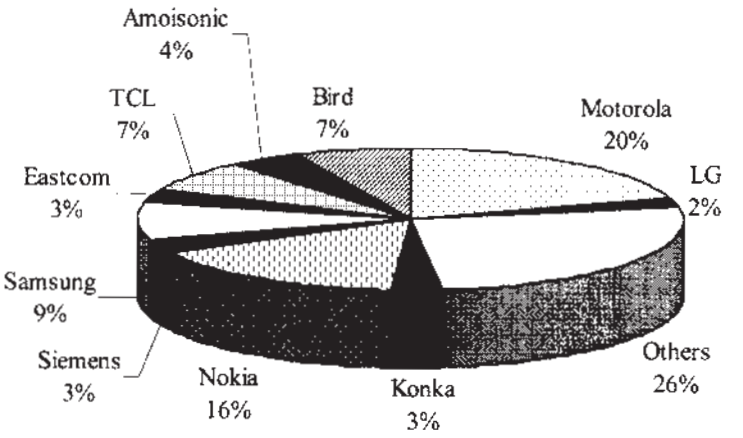
Market share of handphone sets by major foreign brands, July 2003



Source: Various sources as cited in the Independent Industry Research Report by BER dated 21 July 2004

5.6.8 End User Market Prospects

5.6.8.1 Optical Data Storage and DVD Players

Global optical disc drive revenues expanded rapidly in 2000 at a rate of 43% over 1999. Towards the end of the 1990s and the beginning of the 21st century, annual revenues exceeded USD10 billion. However, growth declined steeply by 35% in 2001, consistent with the deterioration in the global economy and weak business sentiments which saw firms in many countries holding back on information technology expenditures.

In terms of DVD players, unit sales worldwide grew rapidly from 782,000 units in 1997 to just under 20 million units sold in 2000 or at an annual average growth rate of 192.6% during this period. During the late 1990s, growth in DVD unit sales was supported by a major jump in sales to North America, Europe and China. Due to the rapidly growing acceptance of DVD players as an optical data storage device, Philips/CMI as cited in the *Independent Industry Research Report by BER dated 21 July 2004* are quite optimistic that by 2004, 48.5 million units will be sold worldwide, of which growth will mostly be driven by China and Central and South America ("CSA"). Future growth in North America and Europe will taper off as a result of higher household penetration rates.

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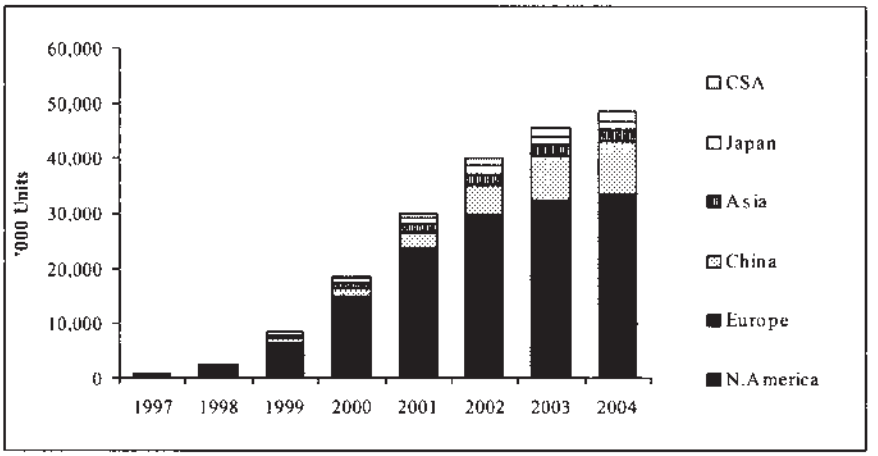
Global DVD players market trend by region, 1997-2004f ('000 Units)



Source: Philips/CMI Estimation in Karwal, R. "DVD Video in India" Philips, India, as cited in the Independent Industry Research Report by BER dated 21 July 2004

- *Substitutes*

  In the home AV industry, the VCR is still the major contender to the DVD player. The DVD technology is still fairly new compared with the magnetic recording technology. Although DVD players have yet to supplant the VCR in home entertainment, the global market for DVD equipment is growing rapidly.

  Meanwhile, in the computer data storage industry, the main contenders to optical disc storage and DVD players are flash memory, magnetic disc and magnetic tape storage devices. However, these different data storage solutions serve different market segments depending on consumer requirements in terms of cost, capacity and device performance. Optical disc storage has the added advantage of being portable. Hence, it is unlikely to be completely replaced by competing devices in the near future.

- *Future Prospects for Optical Storage Products*

  Currently, demand may have been somewhat dampened by the sluggish global economic outlook. However, medium and long term prospects for OEMs and component manufacturers in optical storage are likely to be positive due to the wide range of applications that increasing optical storage can offer to the consumer entertainment, business, medical and social sectors.

5.6.8.2 Computer Data Storage and Drives

The market for magnetic tape storage drives can be segmented into compact tape drives (with maximum native capacities below 100 gigabytes), super tape drives (100 gigabytes and above) and tape libraries. In 2002, approximately 2.54 million units of magnetic tape drives were shipped worldwide. Compact tape drives accounted for 85% of global shipments, super tape drives accounted for another 12% whilst tape libraries accounted for approximately 3%.

Compact Tape Drives: The global market for compact tape drives, in terms of volumes of worldwide shipments, is dominated by DDS/DAT products. In 2002, 2.17 million units of compact tape drives were shipped worldwide, of which just over one (1) million units were DDS/DAT units. Total revenue of DDS/DAT drives amounted to USD464 million and accounted for 48% of the compact tape market. Meanwhile DLT/SDLT held the second (19%) largest shares of the global market for compact tape drives.

5. INFORMATION ON THE FOTRONICS GROUP *(cont'd)*

Super Tape Drives: International Business Machines Corporation ("IBM") is the dominant global supplier of super tape drives. In 2002, Freeman Reports as cited in the *Independent Industry Research Report by BER dated 21 July 2004* estimated 305,000 units of super tape drives were shipped worldwide. IBM's LTO units accounted for 58% of the market compared with 35% for Quantum Corporation's SDLT. Sony Corporation's AIT product is the smallest competitor in the market with the remaining 7%.

Tape Libraries: Tape libraries comprise the smallest share of the magnetic tape drive market. In 2002, 65,400 units of these high data storage systems were shipped worldwide accounting for 2.6% of the global market. The market for tape libraries is dominated by LTO and DLT/SDLT. These two (2) products accounted for more than 90% of the market.

- *Substitutes*

  Various computer data storage solutions are currently available in the market besides magnetic tape drives. These include HDDs, optical disc storage media (such as CD-ROM and DVD-ROM) and flash memory. However, different data storage devices serve different market segments depending on consumers' requirements in terms of cost, capacity and device performance. Magnetic tape storage solutions are targeted at enterprise data storage needs where users require very large storage capacities, often in a multi-user environment. Other data storage devices have much smaller capacities though they have rapid read/access speed. Magnetic tape storage devices are still perceived to be the most cost effective means to back up large amounts of enterprise data though its cost advantage is increasingly challenged by falling HDD prices.

- *Future Prospects*

  Prospects for manufacturers of magnetic storage devices are generally positive in the medium to long term. Industry experts project worldwide shipments of compact tape drives to increase 3.75% in 2003 and at a compound average growth rate of 4.7% annually to 2008. By 2008, worldwide shipments are anticipated to reach 2.83 million units valued at USD3.3 billion.

  Prior to Hewlett-Packard Development Company's ("Hewlett-Packard") announcement, worldwide shipments of DDS products were expected to peak in 2003. The main reason is that the launch of DDS fifth series generation ("DDS-5") marks the last generation of DDS models to be produced. However in May 2004, Hewlett-Packard announced its intention to extend the technology roadmap for DDS products. Nonetheless, DDS drives will still account for the largest share of the market in 2003 with approximately one (1) million units shipped. Hewlett-Packard's intention to extend the DDS technology to the eighth generation model in the medium term in view of its popularity is likely to result in sustained global demand for DDS products.

  The Fotronics Group's future prospects in providing components for other compact tape drives are also positive in the medium and long term. By 2008, 1.3 million units of DLT, LTO and SAIT drives are forecast to be shipped, accounting for 46% of the market. In the medium to long term, the compact tape market will be largely driven by DLT and LTO storage drives.

  While forecasts for super tape drives are currently unavailable, shipments of tape libraries are expected to expand from 65,400 units in 2002 to 117,000 units by 2008. Just over 50% of the tape libraries market will be dominated by LTO. Eight (8) millimetres tape libraries will account for another 16.2% by 2008. Prospects for component manufacturers of these tape libraries are positive in the medium to long term.

5.6.8.3 Digital Imaging Products

Continued developments in photonics (or optics) technology and the convergence of digital with computing technology combined with improvements in digital resolution resulted in growing demand for digital imaging devices. Digital imaging equipment is increasingly used in consumer, commercial, industrial and security-related equipment. These include digital cameras, scanners, machine vision equipment and close circuit television cameras. The increasing shift towards using light energy as a means of communications has driven growth in image sensors and related micro-optic components. Prospects for digital imaging manufacturers and component suppliers and assemblers are likely to expand positively in the medium and long term.

- *Future Market Prospects for Digital Cameras and Handphone Cameras*

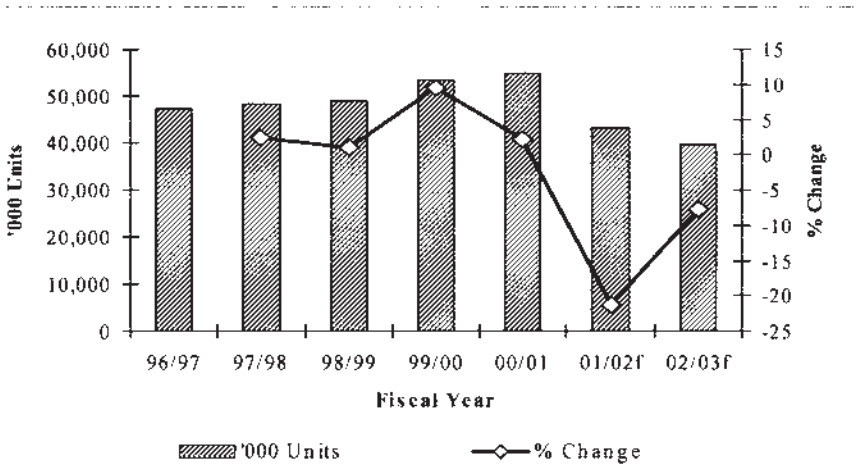
  Outlook for Digital Cameras: Global unit sales of digital cameras are forecast to grow at a compounded annual growth rate of approximately 20% from 14 million units to 42 million units during the period 2001-2005. In value terms, digital camera revenues will double from USD5 billion to USD10 billion in the same period.

  Handphone Cameras: Handphone cameras will be the fastest growing segment in the photography industry in the medium term. International Data Corporation, a market research company as cited in the *Independent Industry Research Report by BER dated 21 July 2004* predicts worldwide unit sales to almost double annually from 19 million in 2002 to 34 million in 2003 and to 125 million by 2005.

5.6.8.4 VCR Products

The VCR has been in existence for almost 30 years. During its long history, it has penetrated millions of households around the world. Based on the *Independent Industry Research Report by BER dated 21 July 2004*, a survey conducted on the top ten (10) video products in USA households for instance, shows that the VCR is the second most common product in USA homes after colour televisions. The said survey found that 92% of households owned a VCR in 2002 compared with only 35% that owned a DVD.

Global VCR market trends for years ending 1996-2003p

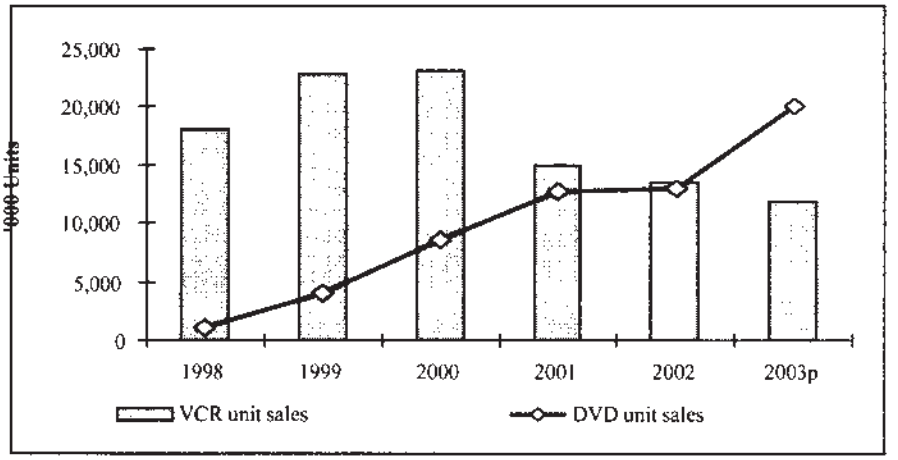


Source: Business Expansion of Home Entertainment Company, Pioneer Corporation, 27 November 2000 as cited in the Independent Industry Research Report by BER dated 21 July 2004

- *Substitutes*

Theatres and the home DVD system are competitive threats to the VHS market. These two (2) segments of the film and television industry present consumers with alternative viewing experiences in terms of higher visual and audio quality. Numerous consumer electronic analysts have noted that DVD players, in particular, are fast becoming the preferred choice for the home viewing of movies. The digitisation of images and sound, together with vast improvements made in sound control technology and equipment has enabled crisper images and more superior sound quality than the traditional analog format.

In the USA for instance, sales of DVD players (which include laser disc combos, DVD/VCRs and portables) are currently taking the lead in growth of home audio-visual entertainment. Sales have increased nearly thirteen (13) fold from one (1) million units sold to dealers in 1998 to 12.9 million units in 2002. During the same period, the share of VCR sales in terms of VCR and DVD units fell from 98.4% to 51.3% by 2002.



Source: USA Consumer Electronics Association, 2003 as cited in the Independent Industry Research Report by BER dated 21 July 2004

- *Future Market Prospects*

Despite DVD's rapid growth, country-based evidence suggests that in the short to medium term, VHS will still remain an important source of home movie entertainment for some countries such as the USA. The prolonged existence of the VCR is due to the following reasons:

(a) Due to its long history of existence, VCR has penetrated millions of households around the world. Even in the USA, where growth of DVD sales is fastest, statistical evidence suggests that only 35% of households own a DVD compared with 92% that currently have a VCR. Manufacturers of DVD decks will therefore need to further promote their products to be able to replace the VCR.

(b) The second important factor is digital technology to date has mostly produced DVD players. The concept of a DVD recorder was only introduced in the last few years. At present, the average price of the DVD player is twice that of a VCR. Meanwhile, due to its recent entry into the market, a recordable DVD unit is much more costly. Prices of DVD equipment will need to fall quite considerably before they can completely substitute the VCR as a product with similar, if not superior, record and playback functions.

(c) Interestingly, a third factor prolonging the existence of the VCR is the introduction of HDTV. Current DVD players and software do not support HDTV viewing. The current state of recordable DVD units also does not address the high definition issue. Meanwhile, JVC Corporation and Mitsubishi Electric Corporation have been developing the digital D-VHS system. The D-VHS VCR is totally compatible with standard VHS and it is also able to record 18 approved digital television formats. The D-VHS VCR re-poses a direct competitive threat to DVD equipment manufacturers.

(d) In terms of the viewing media, global revenues from the rental and sales of VHS films are still quite sizeable and widespread, for instance, in the advanced countries. This is in spite of the large market for sales of DVD movies, such as in the USA.

Hence, in the short to medium term, opportunities for manufacturers of VCR drumheads are still present. This partly explains the continued production of VCRs by major manufacturers but on a reducing scale. Meanwhile component manufacturers like the Fotronics Group still services the OEMs and replacement markets because of the size of the global VCR market after 30 years in existence. Moreover, the Fotronics Group has built a global presence in drumheads that OEMs, distributors and households have come to rely upon.

In the long term, however, the USA Consumer Electronics Association concludes that VCR consumers are looking to upgrade to a new technology. The high rate of growth in DVD equipment sales since 2000 together with the rapid growth in sales of DVD movies are very strong indicators of the underlying trend towards digital AV technology.

5.6.8.5 Telecommunications Equipment Market in China

China has the world's largest market for telecommunications products. By 2001, China had overtaken the USA as the world's largest handphone market. Despite the rapid growth, the level of tele-density is still low. Subscribers, both fixed and mobile accounted for a mere 24% of the population and only 2% are "netizens". By June 2002, the number of fixed line subscribers had increased to 198 million while handphone users increased by 31.35 million. Statistics indicate a rapid increase in tele-density with 30.2 and 13.86 out of every 100 having fixed and handphones respectively. Industry experts predict that handphone users will surpass that of fixed line users by mid 2003.

China's concessions upon joining the World Trade Organisation will result in increasing liberalisation of its telecommunications industry. For the current Tenth Five (5)-Year Plan, the Ministry of Information Industry postulates that the information industry will continue to grow rapidly with output in 2005 doubling the level of 2000, with a share of GDP amounting to 7%. The growth rate of the telecommunications industry will continue to outstrip overall economic growth. Revenue from the communications industry will reach RMB1 trillion (based on the average annual growth rate of 23.4%), of which telecommunications will account for RMB920 billion, three (3) times that of year 2000. It will be a strategic industry that drives the growth of the economy in speeding up the restructuring and strengthening the competitiveness of the economy. China intends to position itself as one of the leading countries in the manufacture and production of information technologies.

However, the handphone segment is highly competitive as a result of three (3) competing technology standards currently available in the market. These are notably, Code Division Multiple Access ("CDMA") (digital wireless technology), Global System for Mobile communications ("GSM") and PHS. Moreover, China has over 100 telecommunications plants currently producing handphone parts and equipment. The industry is currently in a state of flux as a result of intensive competition; further mergers and acquisitions can be expected in future.

5.6.9 Government Legislation, Policies and Incentives

Malaysia

The Malaysian government provides fiscal, financial and technical assistance to encourage domestic supply of specific products and services, including those of precision engineering companies. Fiscal incentives for selected products include the Pioneer Status and Investment Tax Allowance under the Promotion of Investments Act, 1986. Financial assistance includes various available funds such as the Technology Acquisition Fund and Commercialisation of R&D Fund. Meanwhile various government ministries, agencies, universities and colleges administer programmes for skills development, market development and technology enhancement.

Singapore

The Singapore government has focused its economic development strategy on building Singapore as an "intelligent island." From this perspective, the precision engineering industry is envisaged to play a pivotal role. The Singapore government actively supports and promotes the growth and development of the industry by creating market access and providing the following supporting infrastructure:

- Singapore's Free Trade Agreements ("FTA") – companies can leverage on Singapore's FTA with major economies such as Japan and USA for greater market access.
- National Technology Infrastructure – opportunities for R&D collaboration with over ten (10) government supported research institutes.
- Comprehensive Supporting Infrastructure – including financial services, third party logistics providers, management consultancies and a manufacturing sector that generates a range of complementary products required by other industries.
- Strong Talent Pool – 11,000 engineers and technicians graduate annually.
- Twinning with Riau – availability of cost effective manufacturing locations on the jointly developed Singapore-Indonesian islands of Riau.

5.7 MAJOR CUSTOMERS

The top ten (10) major customers of the Group for the financial year ended 31 March 2004 are as follows:

Customer	Country	% of Group revenue	Length of relationship (years)
Enplas Corporation	Japan	39.4	4
P.T. Sat Nusapersada Brothers	Indonesia	15.1	4
JVC Procurement Asia	Singapore	10.1	4
Daewoo International Singapore Pte Ltd	Singapore	7.8	2
FInc	Japan	5.1	10
Sony Electronics (S) Pte Ltd	Singapore	4.3	4
Hiroshige Malaysia Sdn Bhd	Malaysia	2.7	4
Chip Hong Trading	Malaysia	0.8	10
Leng Space Electronic	Malaysia	0.5	3
Radiotronic Sdn Bhd	Malaysia	0.4	10

The Group has three (3) major customers which contributed to more than ten percent (10%) of the Group's total revenue for the financial year ended 31 March 2004.

P.T. Sat Nusapersada Brothers is a sub-contractor of the Group. P.T. Sat Nusapersada Brothers purchases the manufactured semi-processed drums from the Group for assembly. Subsequently, the completed drums are resold to the Fotronics Group. Moving forward, the Group plans to process the completed drums in-house, hence avoiding the dependency on P.T. Sat Nusapersada Brothers.

For the financial year ended 31 March 2004, Enplas Corporation contributed approximately 39% of the Group's total revenue. Enplas Corporation is currently the largest customer of the Fotronics Group due to the general increase in demand for micro-optic products assembled by Vtrek (China). However, the Group has plans to diversify into the manufacturing and assembling of other products such as handphone sets and parts and components for the digital cameras.

5.8 MAJOR SUPPLIERS

The top ten (10) major suppliers of the Group for the financial year ended 31 March 2004 are as follows:

Supplier	Country	% of Total purchases	Length of relationship (years)
FInc	Japan	41.5	10
Daewoo International Corporation	Korea	12.6	1
Mitsui Busan Metal Sales Co. Ltd.	Japan	10.3	4
Sony Electronics (S) Pte Ltd	Singapore	9.9	4
Hiroshige (Malaysia) Sdn Bhd	Malaysia	9.5	4
Xiamen Overseas Chinese Electronics Co. Ltd.	China	4.1	3
Joust Technical Services	Singapore	2.5	4
Mintwell Industry Pte Ltd	Singapore	2.3	5
Hiroshige Corporation	Hong Kong	1.4	4
Shenzhen Shark Digital Technology Co. Ltd.	China	1.3	1

The Group has three (3) major suppliers which contributed to more than ten percent (10%) of the Group's total purchases for the financial year ended 31 March 2004.

FInc contributed approximately 42% of the Group's total purchase for the financial year ended 31 March 2004. FInc is currently the largest supplier of the Fotronics Group due to the purchase of raw materials such as magnetic recording head tips, magnetic recording head base and other consumable items for FMSB and MPC for the manufacture and assembly of drumheads. Despite FInc being the largest supplier of the Fotronics Group currently, the Group is confident that there will not be any disruption in the supply of raw materials due to its long and established relationship with FInc.

5.8.1 Sources and Availability of Supplies

The raw materials used by the Fotronics Group are sourced locally as well as imported from foreign sources. The principal raw materials used are aluminium, magnetic recording head tips and magnetic recording head bases for the manufacturing and assembly of drumheads. Due to the availability of the raw materials from long established suppliers, the Group is confident that there will not be any disruption in the supply of raw materials. Notwithstanding the established relationships with existing suppliers, the Fotronics Group can easily switch suppliers due to the generic nature of the raw materials, which are readily obtainable.

In the assembly of micro-optic lenses, the requisite components or parts are provided by the Group's customer, Enplas Corporation. In the assembly of camera modules, the Group will source for all the components and parts required for the assembly of the camera modules. In this respect, the Group also works closely with its customers to assemble the various parts and components within each camera module manufactured by other contract manufacturers.

To ensure competitive pricing and reliability of supply, the Fotronics Group also sources its raw materials from a pool of other suppliers with established business relationships with the Group. To minimise dependence on any one particular supplier, efforts are being made to ensure that the raw materials are sourced from several suppliers. The Group has developed and maintained a strong working relationship with its suppliers. The Fotronics Group did not experience any disruption in the supply of raw materials for the past 12 months from the date of this Prospectus.

5.9 PROSPECTS AND FUTURE PLANS OF THE FOTRONICS GROUP

(Source: Independent Industry Research Report by BER dated 21 July 2004)

The Fotronics Group is a technology design house that is engaged in the precision manufacture and assembly of critical intermediate components for the global high technology and ICT industries. Fotronics as well as certain of its Directors have been indirectly involved in the ICT revolution via the Technical Assistance and Know-How Agreement with FInc. The Group's founding business is in the manufacture and assembly of VCR drumheads and has grown to build a reputation in the global magnetic drumheads market that global manufacturers and value added resellers have come to rely upon. Due to the prolonged existence of the VCR, short term opportunities still exist for these components. However, in the longer term, these opportunities are likely to decline.

In view of its technical expertise in magnetic recording technology, the Group has since expanded into the manufacture and assembly of magnetic tape storage devices such DDS and AIT drives and other computer tape drives for computer data storage needs. The global outlook is positive for computer magnetic tape drives and components due to sustained global demand for enterprise data storage solutions.

With new and emerging products and opportunities that have arisen from the Information Age and market liberalisation in China, Fotronics will play a much larger role in these areas in the future. The Group is already involved in the assembly of critical components such as micro-optic lenses used in OPU for CD and DVD players and in AIS for digital cameras and handphone cameras. Future plans are in place to further expand into the assembly of camera modules for the digital imaging industry. In key areas such as micro-optic components assembly, collaboration rather than competition among suppliers in different segments of the supply chain is the requisite to bring to market a fully assembled, complex product at cost effective prices. In this respect, the ability of Fotronics to work closely with global OEMs and/or other major global contract manufacturers is integral to building global smart partnerships. Moreover, the recent introduction of DVD players and digital imaging equipment imply that global households penetration rates are still quite low. Industry sources predict worldwide demand for such optoelectronic enabled products to grow rapidly in future especially with increasing use of multimedia. Fotronics has an early mover advantage in the precision assembly of OPU and AIS lens components and its early entry should help entrench its market position.

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By the first quarter of 2005, the Fotronics Group will commence production of PHS handphones. In respect of the market prospects for Fotronics' business in handphone assembly, China has a large internal market for telecommunications products due to its large population size and the low rate of technology diffusion especially in many parts of rural China. At present, the PHS system is a successful intermediate solution between fixed line technology and mobile communications. The PHS system offers consumers limited communications mobility at lower prices. Although opportunities exist for PHS handphone manufacturers due to China's Ministry of Information Industry's ambitious targets to develop the telecommunications sector, competition is intense. This is due to the existence of fixed line and various mobile communications technologies in addition to the proliferation of telecommunications equipment manufacturers. The industry is also in a state of flux with China's commitment to liberalise the telecommunications sector under the World Trade Organisation presenting all equipment manufacturers, Fotronics notwithstanding, with both opportunities and challenges.

Lastly, the Fotronics Group has commenced R&D and design efforts for the AES and ALS. The Group's expansion into aerospace parts and components provides the Group with an initial foothold into the aviation industry.

5.10 SYARIAH STATUS

Fotronics has voluntarily submitted an application to the SC for the Syariah compliance review to be carried out by the SAC of the SC as part of the process to obtain its Syariah status at the Public Issue stage.

The SAC of the SC has classified this company as Syariah-approved based on the latest 12-month audited financial year and the Syariah criteria adopted by the SAC of the SC.

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