8. INFORMATION ON THE AEM GROUP

8.1 History

AEM was incorporated in Malaysia under the Companies Act, 1965 on 20 February 2001 as a public limited company under its present name. On 19 March 2001, it obtained its Certificate of Commencement of Business from the Registrar of Companies, and in accordance with Section 142 of the Companies Act, 1965, held a statutory meeting on 4 May 2001.

The Group was one of the pioneers in the manufacturing of single-sided PCB in Malaysia when it commenced its operation in 1990. Technical knowledge and expertise were provided by one of its founders and current Managing Director, Mr. Yang Wu-Hsiung. The Group set up its first manufacturing plant in Sungai Petani, Kedah Darul Aman. Subsequently in 1999, the Group expanded its production facilities to Thailand to set up its second manufacturing plant in the Bangpoo Industrial Estate located in Samutprakarn, Bangkok, Thailand.

Prior to 1998, the Group catered mainly to the computer related products sector which accounted for more than 50% of its output but since then, steps were taken to diversify into other segments. Today, management estimates that the Group's output can be segregated into four (4) segments, namely computer peripherals, consumer electronics, telecommunication equipment and office equipment.

In 1999, the Group diversified into a small scale business related to chemical processing and trading activities. The secondary business was set up in line with the environmental regulations imposed by the Government on PCB manufacturers to reduce pollution resultant from their manufacturing process. The recycling business, which is a sub-division of its chemical processing activities, complements the PCB manufacturing process in terms of recycling of industrial effluents.

8.2 Share Capital

The authorised, and issued and fully paid-up share capital of AEM as at the date hereof are as follows:-

	No. of shares	Par value RM	Total share capital RM
Authorised:-			
Ordinary shares	100,000,000	0.50	50,000,000
Issued and fully paid-up:-			
Ordinary shares	68,000,000	0.50	34,000,000

The changes in the issued and fully paid-up share capital of the Company since its incorporation are as follows:-

Date of allotment	No. of ordinary shares allotted	Par value RM	Consideration	Issued and paid-up share capital RM
20.02.2001	2	1.00	Cash; Subscribers' shares	2
25.03.2002	4	0.50	Subdivision of par value of to RM0.50 per share the ordinary shares	2
09.05.2002	61,943,848	0.50	Issued at approximately RM0.56 per share pursuant to the Acquisition of AEC	30,971,926
24.05.2002	6,056,148	0.50	Rights issue of new ordinary shares at par on the basis of approximately 98 new ordinary shares for every 1,000 ordinary shares held	34,000,000

8.3 Restructuring and Listing Exercise

In conjunction with, and as an integral part of the Listing, the Company implemented a restructuring exercise which was approved by the FIC, MITI and SC on 25 October 2001 and 20 March 2002; 7 November 2001 and 18 March 2002; and 28 November 2001 and 6 March 2002, respectively and which involved the following:-

8.3.1 Acquisition of AEC

On 22 August 2001, AEM entered into a conditional Share Sale Agreement with the shareholders of AEC for the acquisition of the entire equity interest in AEC comprising 10,000,000 ordinary shares of RM1.00 each for a total purchase consideration of RM34,971,924, satisfied wholly by the issuance of 30,971,924 new ordinary shares of RM1.00 each in AEM, credited as fully paid-up, at an issue price of approximately RM1.13 per new AEM share. On 26 April 2002, AEM and the vendors of AEC entered into a Supplemental Share Sale Agreement to revise the purchase consideration by the issuance of 61,943,848 new ordinary shares of RM0.50 each in AEM, credited as fully paid-up, at an issue price of approximately RM0.56 per new AEM share. The Acquisition of AEC was completed on 9 May 2002.

The shareholders of AEC, their respective shareholdings therein and the number of AEM shares issued to them pursuant to the Acquisition of AEC are as follows:-

	Chaushaldings in	AEC	No. of new AEM ordinary shares of RM0.50 each issued as
Shareholders of AEC	——Shareholdings in No. of shares held	% held	consideration
Dato' Mohamed Azman bin Yahya	2,350,000#	23.50	14,556,804
Stanza	2,092,853	20.93	12,963,936
Peninsular	1,524,647	15.25	9,444,250
Hsu Pao Lu	570,000	5.70	3,530,800
Rithauddin Hussein Jamalatiff bin Jamaluddin	550,000	5.50	3,406,912
Datin Hajah Sumaiah bte Sarif	417,401	4.17	2,585,542
Saffie bin Bakar, A.M.P., P.J.K.	363,360	3.63	2,250,792
Liaw Hsin Chung	260,000	2.60	1,610,540
Yang Chao-Tung	200,855	2.01	1,244,174
Hsu Yu Tang	183,235	1.83	1,135,028
Tham Keng Chuen	143,866	1.44	891,162
Cher Tze Hang	142,812	1.43	884,632
Lim Hun Hooi	119,978	1.20	743,190
Loh Ah Heoh	119,400	1.19	739,610
Yang Chueh-Kuang	109,870	1.10	680,578
Tan Ah Lee	105,891	1.06	655,930
Yang Wu-Hsiung	103,083	1.03	638,536
Wu, Michael Chien Lung	84,000	0.84	520,328
Yang Chueh-Yu	67,950	0.68	420,908
Wu Hsien Sao	56,000	0.56	346,886
Chen Chu Chia	51,433	0.51	318,596
Ng Soo Chai	48,750	0.49	301,976
Yang Cheng Hsiung	44,000	0.44	272,552
Lim Kok Hock	38,133	0.38	236,210
Wong Mei Hwa	35,000	0.35	216,804
Roseni bte Yusoff	34,894	0.35	216,146

			ordinary shares of RM0.50 each
G	——Shareholdings in		issued as
Shareholders of AEC	No. of shares held	% held	consideration
Tang Yew Khuan @ Tan Ewe Kuan	33,832	0.34	209,568
Lin King Lung	32,908	0.33	203,844
Ng Soo Heng	28,629	0.29	177,340
Chew Siam Cheng	15,920	0.16	98,614
Yeoh Kee Hoon	15,806	0.16	97,908
Chen Hun Kwang	10,513	0.10	65,122
Ng Sui Ping	10,168	0.10	62,984
Teoh Kok Cheow	10,000	0.10	61,944
Hu Mei Chiao	8,340	0.08	51,662
Huang Kun Tsai	7,843	0.08	48,582
Chang Shiu Fu	6,930	0.07	42,928
Choong Bee Leong	1,700	0.02	10,530
	10,000,000	100.00	61,943,848

No. of new AEM

Note:-

The purchase consideration of RM34,971,924 for the Acquisition of AEC was arrived at on a willing-buyer willing-seller basis after taking into consideration the following:-

		RM
Consolidated NT	A of AEC as at 31 December 2000*	24,491,635
Adjusted for:	Net revaluation surplus arising from the revaluation of landed properties	1,650,289
	Subsequent payment by certain shareholders of AEC on their respective issued shares capital which were not fully paid-up on issuance	8,830,000
Adjusted consolid	dated NTA	34,971,924

Note:-

Subsequent to the Acquisition of AEC, AEC disposed off its 51% equity interest in the issued and paid-up share capital of MWSB to AEM for a total cash consideration of RM777,530. The purchase consideration was arrived at based on the NTA of MWSB of RM1,547,292 as at 31 December 2000 and after taking into consideration the deficit arising from revaluation of its landed property of RM22,724. The disposal was in line with AEM's internal reorganisation to rationalise its corporate structure.

The 61,943,848 new ordinary shares of RM0.50 each in AEM issued pursuant to the Acquisition of AEC shall rank pari passu in all respects with the existing ordinary shares of AEM and carry all rights to receive in full all dividends and other distributions declared and paid subsequent to the allotment thereof.

Held through CIMB Nominees (Tempatan) Sdn Bhd

^{*} As at 31 December 2001, AEC holds 100% and 51% equity interest in AET and MWSB respectively.

Upon completion of the Acquisition of AEC, the issued and fully paid-up share capital of AEM increased from RM2 comprising 4 ordinary shares of RM0.50 each to RM30,971,926 comprising 61,943,852 ordinary shares of RM0.50 each.

8.3.2 Rights Issue

On 24 May 2002, AEM implemented a rights issue of 6,056,148 new ordinary shares of RM0.50 each at par on the basis of approximately 98 new ordinary shares of RM0.50 each for every 1,000 ordinary shares of RM0.50 each held after the Acquisition of AEC.

The 6,056,148 new ordinary shares of RM0.50 each in AEM issued pursuant to the Rights Issue shall rank pari passu in all respects with the existing ordinary shares of AEM and carry all rights to receive in full all dividends and other distributions declared and paid subsequent to the allotment thereof.

Upon completion of the Rights Issue, the issued and fully paid-up share capital of AEM increased from RM30,971,926 comprising 61,943,852 ordinary shares of RM0.50 each to RM34,000,000 comprising 68,000,000 ordinary shares of RM0.50 each.

8.3.3 Public Issue

AEM is now making a public issue of 12,000,000 new ordinary shares of RM0.50 each in AEM at an issue price of RM0.80 per new ordinary share to identified investors (by way of private placement), eligible Directors and employees of the AEM and its subsidiaries in Malaysia, and the Malaysian public, which is the subject of this Prospectus.

Upon completion of the Public Issue, the issued and fully paid-up share capital of AEM will increase from RM34,000,000 comprising 68,000,000 ordinary shares of RM0.50 each to RM40,000,000 comprising 80,000,000 ordinary shares of RM0.50 each.

8.3.4 Listing and Quotation

Listing of and quotation for the 80,000,000 ordinary shares of RM0.50 each, representing the entire enlarged issued and fully paid-up share capital of AEM will be sought on the Second Board of KLSE.

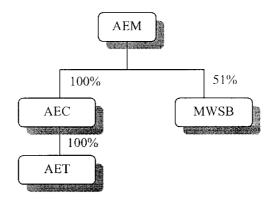
8.4 Business Overview

8.4.1 Background

AEM is principally an investment holding company. The core business activity of the Group is in the manufacturing of rigid PCB, namely single-sided PCB. The PCB manufacturing activity is undertaken by AEC and AET. The Group's secondary business activity involves chemical processing and trading activities and is undertaken by MWSB.

For the financial year ended 31 December 2001, approximately 92% of the Group's total revenue was generated from PCB sales whilst the balance of approximately 8% was generated by its secondary business.

The current structure of the AEM Group is as follows:-



Details on the subsidiaries of AEM are set out in Sections 8.5 and 10 of this Prospectus.

(i) Manufacturing of PCB

PCB is an integral part of any electronic product as it is a device that provides the necessary electrical interconnection between the base material and the individual electronic component. PCB forms the backbone of the electronics and electrical industry as it is required in all electronic products that uses a circuitry system.

Manufacturing of PCB (excluding rigid single-sided circuit board) in Malaysia is recognised as a promoted activity and is eligible for consideration for Pioneer Status and Investment Tax Allowance. AEC is currently claiming Reinvestment Allowance under Section 133A, Schedule 7A of the Income Tax Act for its PCB manufacturing activity whilst AET was granted 3 years income tax exemption by the Board of Investment of Thailand, which will expire on 31 May 2003.

At present, the Group has two (2) manufacturing plants located in Sungai Petani, Kedah Darul Aman and Samutprakarn, Bangkok, Thailand. Its main base of operation is in Sungai Petani and at present, the Group is in the process of expanding its plant in Samutprakarn, Thailand.

The PCB manufacturing plant in Sungai Petani has a built-up area of approximately 4,450 square metres and is equipped with three (3) production lines. Currently, the manufacturing plant in Sungai Petani is operating on two (2) twelve (12)-hour shifts on a six (6)-day week basis.

The PCB manufacturing plant in Thailand commenced operations in June 2000. It has a built-up area of approximately 3,731 square metres and is currently equipped with one (1) production line. The plant will have an additional production line with the acquisition of the machinery set out in Section 4.8 of this Prospectus. Currently, the manufacturing plant in Thailand is operating on one (1) eight (8)-hour shift on a six (6)-day week basis.

At present, the AEM Group is principally involved in the manufacturing of single-sided PCB. However, with the acquisition of a automated production line for the production of Silver Through Hole ("STH") double-sided PCB, the Group expects to commence commercial production of STH double-sided PCB in third quarter of 2002.

(ii) Chemical Processing and Trading Activities

The Group ventured into chemical processing and trading activities in 1999 in line with the environmental regulations imposed by the Government on PCB manufacturers to treat industrial effluents produced in the process of PCB manufacturing. The chemical processing and trading activities complement the Group's PCB manufacturing process and promote the Group's awareness on environmental issues. The subsidiary of the Group involved in chemical processing activities, MWSB, is a company registered with the Department of Environment of the states of Kedah and Perlis as an Environmental Consultant for the control of water pollution.

At present, the Group's chemical processing activity includes the installation of waste water treatment facilities, waste recycling facilities, waste water treatment management, sludge management, technical services and laboratory support. Other than the laboratory (for chemical testing and quality control), and the chemical production and waste treatment facility located adjacent to its PCB manufacturing plant in Sungai Petani measuring 432 square metres, the Group also operates its chemical processing and trading activities from the following premises:-

Address	Built-up area (square metres)	Function
5, Jalan Angsana ¼ Perusahaan Ringan Angsana 08000 Sungai Petani Kedah Darul Aman (own premise)	423	Administration and sales office and technical service office
No. 800A, Batu Dua Jalan Kuala Ketil 08000 Sungai Petani Kedah Darul Aman (rented premise)	1,145	Chemicals storage and repacking

The chemical testing and quality control conducted at the laboratory (measuring approximately 11.2 square metres) as mentioned above are dependent on the different needs of customers and involve quantitative methods to measure the characteristics of the waste water and chemicals. The most common methods used are Spectrophotometric and Titration methods.

In addition, the Group also carries out consultancy services and waste recycling activities to complement its waste water treatment activities.

Other than its chemical processing activities, the Group is also involved in the trading of a wide variety of industrial chemicals. In this regard, the Group carries out research and development activities to develop suitable chemicals formulation to meet the different needs of its customers.

8.4.2 Range of Products and Services

(i) Manufacturing of PCB

A PCB is essentially a flat board on which chips and other electronic components are mounted and are connected to each other via copper pathways. The board is usually made of CCL. In its simplest form, PCB start from single-sided boards, followed by double-sided boards, flexible boards and the more advanced multi-layered boards. PCB itself is a necessary electronic component as it forms the backbone device that provides electrical interconnections in almost all electronic products. The PCB provides a surface for mounting electrical components such as resistors, transistors and capacitors. Essentially, electronic products will not be able to function without PCB. Previously, without the advent of miniaturisation of circuits, interconnection of electrical wiring was transmitted mainly through copper wire. With PCB, complex circuitry can be compressed and miniaturised onto a small copper board. At present, the Directors are not aware of any substitutes for PCB.

The application of single-sided PCB is highly diverse. The PCB produced by the AEM Group are mainly used in the following industry sectors:-

Industry Sector	End-Product Application	% of revenue from sales of PCB for the financial year ended 31 December 2001
Computer peripherals	Display monitorsKeyboardsSwitching power suppliesPrinters	35.0%
Consumer electronics	 Audio products Video Cassette Recorders Video Compact Disc Players Digital Video Disc Players Microwave Ovens Air conditioners Air purifiers Water heaters Remote controlled cars Televisions Vacuum cleaners Dishwashers Washing machines Home security systems 	40.0%
Telecommunications equipment	 Key telephone systems Cordless telephones House telephones Mobile phone chargers Answering machines 	10.0%
Office equipment	Facsimile machinesPhotocopiers	15.0%

Single-Sided PCB

Single-sided PCB are generally used in the manufacturing of electronic products for consumer and office equipment such as calculators, digital clocks, telephones, facsimile machines, cash registers and various audio and visual equipment.

Double-Sided PCB

Double-sided PCB are more sophisticated boards with electronic circuits printed on both sides which minimises the use of conductor crossover (a jumper seated on the back side of PCB which comprises a conductor wire inserted to two (2) PCB's holes to provide additional conductive circuit for single-sided PCB) in complete circuits and are used in the manufacturing of computer peripherals, consumer electronics, telecommunications equipment, entertainment products (for example, video games) and measuring instruments.

(ii) Chemical Processing and Trading Activities

The range of chemicals used and traded by the Group in the provision of waste water treatment and chemicals trading business are as follows:-

- Waste Water Treatment Chemicals (Polyaluminium Chloride and Sulphuric Acid)
- Odour Control Chemicals (Activated Carbon and Hydrogen Peroxide)
- Boiler and Cooling Tower Chemicals (Wood-Ex Sol 9, Alkali 410, Polymer and Chlorine tablet)
- PCB Chemicals (Hydrochloric Acid and Caustic Soda Flake)
- Paper and Textile Chemicals (Sodium Hypochlorite and Hydrogen Peroxide)
- Industrial and Electronic Grade Chemicals (Sodium Hydroxide and Hydrochloric Acid)

The main industrial chemicals traded are as follows:-

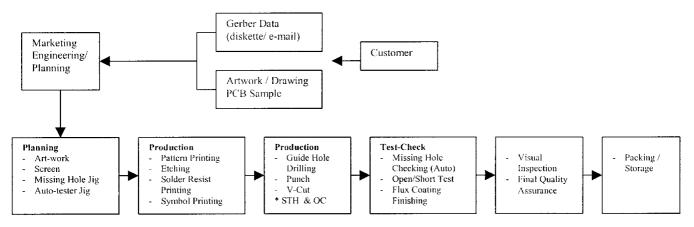
- Electroplating Chemicals (AC 131 and Nitric Acid)
- Waste Water Treatment Chemicals (Polyaluminium Chloride and Sulphuric Acid)
- Boiler Chemicals (Wood-Ex Sol 9 and Alkali 410)
- Industrial and Electronic Grade Chemicals (Sodium Hydroxide and Hydrochloric Acid)

8.4.3 Production Processes

(i) Manufacture of PCB

The main raw materials used in the manufacturing of PCB are CCL, industrial chemicals and printing ink.

A summary of the manufacturing process is as set out below:-



Notes:-

STH - Silver Through Hole

OC - Oven Curing

The manufacturing process starts with the planning stage followed-by the production stage which includes printing, soldering, hole punching/drilling and coating processes, and finally the PCB will undergo several inspection and quality assurance processes prior to packaging and delivery.

Planning Stage

The planning stage involves several processes such as artwork design and screen preparation, missing hole jig and auto-tester jig. Initially, the customer's designs or drawings of electronic data in "Gerber" format are either e-mailed or sent in the form of floppy disk to the Group's engineering and planning department. The data is then processed at the "Computer Aided Design" station, using computerised camera for enlargement and reduction functions, generating artwork data to be plotted by the laser plotter. A digitiser is used to measure the artwork to perform statistical process check and to generate "XY" data for test fixture fabrication. Thereafter, the artwork is transferred to the screen for printing. Prior to production, the quality control department will inspect the sample PCB through several test-check processes comprising mainly of the Missing Hole Jig and Auto-Tester Jig testing processes. The missing Hole Jig is a process to ensure that there are no missing holes on the PCB whilst the Auto-Tester Jig process aims to detect any open/short pattern in the PCB printing. Open pattern refers to break circuit due to printing process problem whilst short pattern refers to a connection not designed for in the circuit which is also caused by printing process problem.

Production will commence upon receipt of customer's confirmation on the required specification which indicates the design specification and quantity to produce.

Production Stage

The production stage mainly involves pattern printing, etching, solder resist printing, symbol printing, guide hole drilling, punching and v-cuting. The unprocessed CCL are cut to specified printing sizes and loaded onto a fully automatic printing line which comprises four (4) to five (5) printing cycles. The printing line prints the circuit pattern onto the bare CCL, etches out the unwanted copper to reveal the circuitry lines, strips the ink and finally prints the solder resist onto the CCL. The symbol printing process is an optional printing process which involves printing the front and/or back of the CCL to indicate the component's function and for identification purposes.

Other processes include carbon undercoat printing and gold/nickel plating. Undercoating printing is only required for carbon related PCB and the plating process involves coating the PCB with an undercoat to prevent the carbon from fusing with the copper circuitry. The gold/nickel plating is an optional process which is used for different types of PCB, depending on the sensitivity of the PCB.

The printed and etched laminates are then loaded onto fully automated camera registration assisted drilling machines. Drilling is an exacting process requiring extreme precision in the placement of guide holes for the punching process. The punching process involves piercing and shaping the PCB with custom-made tooling. Specifically designed automated oven and hydraulic driven "fine-hole" piercing equipment is incorporated to produce small holes and fine pitch PCB.

The Group's automated printing lines are specifically set-up for high precision production to produce fine lines and high density PCB. To meet the demand of tighter specifications by its customers, the Camera Catcher Device ("CCD") Auto Printing machinery and etching equipment are used. The printers are equipped with camera registration assisted by the CCD Auto Printing machinery and are capable of achieving an accuracy of twenty five (25) micron and fifty (50) micron for repeatability. With the assistance of a statistical process control program, the printing processes are designed and fine tuned to meet the customers' specifications.

Specifically for double-sided PCB, the Group will use the Computerised Numeric Control drilling process whereby the holes are drilled inside the semifabricated PCB, instead of punching, to produce a smoother drill hole surface that allows the silver ink to adhere to the surface. Immediately after the drilling process, the semi-fabricated PCB undergo the Silver Through Hole ("STH") process. The STH process involves a specialised machine to print/squeeze silver ink onto/through the drilled holes to create conductivity between the double-sided PCB. Finally, the semi-fabricated PCB printed with silver ink will go through a heating and solidifying process. The heating oven used in this process is known as the Numerical Control Conveyer Oven.

Test-Check Stage

All PCB are subject to electrical testing. Specially designed testing fixtures are interfaced into both the semi and fully automated testing equipment to check for the functionality of the PCB. High voltage testing is carried out only for carbon PCB.

The test-check stage involves missing holes checking, open/short test and flux coating finishing. After the missing holes checking and open/short testing processes, the PCB will undergo a finishing process known as the flux coating process which prevents oxidisation on the copper surface of the PCB.

The finishing operation involves post cleaning and coating of the PCB. The conventional "rosin" based flux is used for PCB that is compatible with the wave soldering process. A more complex anti-tarnish finishing of copper coating is used for PCB which can withstand the higher temperature requirement of the Infra-Red Reflow Soldering process.

Quality Assurance Stage

Prior to packing and shipping to its customers, all PCB are subjected to stringent quality control inspection. In addition, all processes are closely checked and monitored by the Group's trained quality control personnel. Emphasis is given to the smooth running of the manufacturing process by the use of statistical process control program to ensure that quality is consistently maintained throughout.

Finally, the finished product will be packed and delivered to the customers.

(ii) Chemical Processing and Trading Activities

In the provision of waste water treatment, the Group is initially engaged as an Environmental Consultant for the clients who need to comply with the acceptable standards of waste water discharge set by the Department of Environment ("DOE"). Upon its engagement, experienced technicians will be stationed on-site at the clients' production facilities to determine the flow rate of waste water discharged and to obtain raw waste water samples for further analysis to be conducted at the laboratory. The two (2) frequently used methods employed by the Group to measure the quantity of waste water produced is to install a flow metre at a point of discharge and the use of a V-notch, which involves measurement of water levels in the drainage system at specific time intervals against a pre-set mark. The waste water samples collected at the client's premises will be analysed by trained laboratory executives to justify the waste water's character. Subsequently, based on the results of the waste water analysis, a suitable treatment system would be recommended to meet the individual needs and requirements of its customers. Thereafter, the waste water test results as well as the recommended treatment system are submitted to the DOE for approval. On obtaining a written approval from the DOE, construction and installation works including coordinating the delivery of the necessary equipment and commissioning of the treatment plant will be carried out. Upon commissioning of the treatment plant, the treated water is sent to an independent laboratory for analysis, the results of which will be submitted to the DOE as proof of compliance with DOE's prescribed standards for waste water discharge.

The recycling activity is a symbiotic process which reduces the clients' disposal costs. In the recycling process, the Group is able to recycle the recovered Spend Enchant into polyaluminium chloride ("PAC") and copper. Spend Enchant is a used chemical from the PCB production process which is very valuable to recycling companies. The recovered PAC can be used as waste water treatment chemical which is either sold to other waste water treatment companies or used internally whilst the recovered copper in the form of copper sulphate, copper oxide and copper cement are sold to companies in China for further processing into copper based products. The recycling process is thus an environmentally friendly process in addition to providing cost competitive chemicals and additional source of revenue to the Group.

Generally, under the consultancy division, the Group is engaged on a contractual basis to provide service and maintenance of the treatment systems installed. This includes the supply of the chemicals used by the treatment plant, weekly routine inspections of the plant and stationing of technicians on-site to monitor the running of the plant.

8.4.4 Operating Capacity and Output

Presently, the Group has two (2) manufacturing plants located in Sungai Petani, Kedah Darul Aman and Samutprakarn, Bangkok, Thailand. There are three (3) production lines in operation at the Sungai Petani plant and one (1) production line at the Samutprakarn plant, which has an estimated monthly full production capacity of 120,000 square metres (1,440,000 square metres per annum) and 30,000 square metres (360,000 square metres per annum) of PCB respectively. The total output of AEC and AET for the financial year ended 31 December 2001 was approximately 1,114,000 square metres and 205,425 square metres of PCB respectively.

During the second half of the financial year ended 31 December 2001, the Group purchased additional machinery for both its Sungai Petani and Thailand plants. With the commissioning of the new machinery in September and October 2001 for the plants in Thailand and Sungai Petani respectively, the capacity of the Sungai Petani's plant will remain the same as the additional machinery purchased are mainly for value adding purposes such as machines for quality inspection and the manufacturing of Silver Through Hole double-sided PCB, whilst the Thailand plant's monthly production capacity increased from 9,000 square metres to 30,000 square metres with the new production line.

With the acquisition of the machinery set out in Section 4.8 of this Prospectus, AET will have two (2) production lines and will increase its production capacity to 60,000 square metres per month from the current capacity of 30,000 square metres per month.

8.4.5 Technology/software/systems used by the AEM Group

(i) Manufacturing of PCB

As an upstream manufacturer of PCB, the Group does not utilise any specific technology in its production processes, which mainly involve the transfer of circuitry design onto the board for screen printing.

The Group has its own in-house expertise for applying technical expertise and creativity in product design. The Group maintains an active Engineering Department which is primarily involved in the modification and improvement of customers' specifications. The department currently engages thirty six (36) employees and is focused on process engineering which encompasses the following:-

- ensuring cost effectiveness whilst maintaining quality
- product development for value added PCB

The Research and Development ("R&D") Department is fully computerised with several computer software applications such as Graphic Code Computer Aided Manufacturer, Tyester Soft, Prism NT, Gerber Plot Control 7.8, Gerber Plot Queue 7.4 and Solaris, which are used in its design processes. These applications are continually updated and expanded to keep pace with the Group's R&D requirements.

(ii) Chemical Processing and Trading Activities

Based on the nature of this business which is relatively labour intensive and does not require sophisticated technological know-how, there are no significant or specialised technology/software/systems used.

8.4.6 Marketing and Distribution

(i) Manufacturing of PCB

The PCB sector is noted for the close relationship between the component manufacturers, and manufacturers or assemblers of electrical products. These relationships are governed by three (3) main principles namely quality, competitive pricing and timely delivery of products. These are the very same principles adopted by the AEM Group in establishing and maintaining good relationships with its principal customers. The AEM Group has a wide and dynamic clientele base. Amongst its reputable customers are Sharp-Roxy Corporation (M) Sdn Bhd, Aiwa Electronics (M) Sdn Bhd, Acer Technologies Sdn Bhd (now known as Benq Technologies Sdn Bhd), Sharp Manufacturing Corporation (M) Sdn Bhd, Delta Electronics (Thailand) Public Company Ltd., Capetronic International (Thailand) Public Company Ltd. and Formosa Prosonic Industries Berhad, to name a few.

The Group currently caters for both the local and export markets. For the financial year ended 31 December 2001, its revenue is essentially segmented into the following:-

- (a) 11% of total PCB sales was generated by direct exports to MNC in Singapore (9%) and Indonesia (2%); and
- (b) the remaining 89% was generated from sales to MNC with a domestic presence. However, these MNC will ultimately export their products to the global market.

Approximately 90.0% of the Group's PCB from its Thailand operations, AET, are sold to customers in Thailand, which ultimately export their products to the global market. AET's main customer is Delta Electronics (Thailand) Public Co. Ltd. which accounted for 30% of the revenue of AET (2.5% of the Group's revenue) for the financial year ended 31 December 2001.

The Group does not have any formal contracts with its customers in line with the industry norm. The Group's customers only provide work orders for a specific period.

The main customers of the AEM Group and their contribution to the Group's revenue (more than 5.0% of the Group's revenue) for the financial year ended 31 December 2001 are as follows:-

Revenue	for	the	vear	ended 31	December	2001

Customers	Length of relationship (years)	RM 000	Percentage of revenue from PCB division	Percentage of total revenue %
Acer Technologies Sdn Bhd (now known as Benq Technologies Sdn Bhd)	10	9,728	17.09	15.78
Aiwa Electronics (M) Sdn Bhd	2	6,647	11.68	10.78
Sharp-Roxy Corporation (M) Sdn Bhd	5	6,734	11.83	10.92
Sharp Manufacturing Corporation (M) Sdn Bhd	1	3,422	6.01	5.55
Toyama Pte. Ltd.	1	3,362	5.91	5.45
		29,893	52.52	48.48

As at 31 March 2002, the Group has a total of ten (10) marketing personnel, six (6) of whom are based in Malaysia and four (4) in Thailand, who are actively involved in promoting and distributing PCB produced by the Group to existing as well as new customers. The sales team is also responsible for customer service and carrying out market surveys of potential diversification/identification of products, analysis of the competitive environment and the establishment of a distribution network.

The AEM Group's marketing strategy is mainly focused on direct dealings with its customers. This strategy is highly effective for the PCB sector due to the stringent compliance with design specifications specified by the respective brand owners.

The Group also plans to promote its products to other assemblers on a global basis. The first step towards this direction has been taken by its venture into the Thailand market. The cross border expansion was made possible by the Group's established reputation and proven track record of its management as well as the strategic alliance with existing reputable customers, which provides the Group with opportunities and access to overseas markets.

(ii) Chemical Processing and Trading Activities

As at 31 March 2002, the Group has a total of four (4) marketing personnel actively involved in promoting the chemical processing services and chemical trading activity of the Group to existing as well as new customers. The sales team is also responsible for customer service and carrying out market surveys on potential new chemical products and the establishment of a distribution network.

The Group has entered into agreements/contracts with some of its customers, of which majority of the agreements/contracts entered into with the customers are for a period of one (1) to two (2) years with the client's option of renewing the agreements/contracts.

The main customers of the AEM Group and their contribution to revenue generated from chemical processing and trading activities ("Processing Division") and total Group revenue for the financial year ended 31 December 2001 are as follows:-

		Revenue for the year ended 31 December			
	Length		_		
G .	of		of revenue from	Percentage	
Customers	relation -ship		Processing Division	of total revenue	
	(years)	RM 000	1/0	⁰⁄₀	
Shorubber (Malaysia) Sdn Bhd	3	1,258	25.03	2.04	
Jyoto Works Malaysia Sdn Bhd	7	448	8.91	0.73	
Top Run International Trading Company	2	224	4.46	0.36	
Sanwa (M) Sdn Bhd	5	197	3.92	0.32	
	•	2,127	42.32	3.45	

8.4.7 Competitors and Vulnerability to Imports

Manufacturing of PCB

The AEM Group faces competition domestically from existing players in the industry as well as globally. Manufacturers of PCB operate under moderate competitive intensity. Other than the AEM Group, there are estimated sixteen (16) key rigid PCB manufacturers in Malaysia with an output valued at approximately RM750 million in 2001. However, the intensity of competition is higher at the global level particularly with the other lower cost producing manufacturers. Generally, competition from other countries is mainly from China and Thailand for single-sided PCB and Taiwan for double-sided and multi-layered PCB. (Source: Vital Factor Consulting Sdn Bhd's Assessment of the Electronics Industry Focusing on the Manufacture of PCB dated 28 May 2002)

Competition at the local level is less intense due to the small number of operators. However, as the sector is highly export oriented, the global demand for PCB will ensure that this industry continues to be sustainable.

8.4.8 Sourcing of Raw Materials

(i) Manufacturing of PCB

The main raw materials used in manufacturing of PCB are CCL, industrial chemicals and printing ink which are sourced mainly from Japan, Korea, Taiwan, China, Singapore and the USA as well as locally.

The approximate combination of raw materials used for the manufacturing of PCB is as follows:-

Types of raw material CCL Industrial chemicals Printing ink	for the financial year ended 31 December 2001
CCL	87.10
Industrial chemicals	8.22
Printing ink	4.68
	100.00

Copper Clad Laminates

CCL is the most significant raw material required for the manufacturing of PCB. There are two (2) major local suppliers of CCL in Malaysia, namely Hitachi Chemical (Johor) Co. Ltd. and SNC Industrial Laminate Sdn Bhd. However, the main source of supply of CCL is through imports as the foreign suppliers are able to provide competitive pricing and accommodate the various quality and width specification of the CCL required for the Group's PCB production. The Group mainly sources the CCL from Korea followed by Taiwan and China which represent approximately 70%, 21% and 9% respectively of the Group's CCL purchases for the financial year ended 31 December 2001.

The major exporting countries of CCL are Japan, France, Korea, Germany, Singapore, Hong Kong and Netherlands, with Japan being the major supplier, accounting for approximately 43.5% of Malaysia's import of copper plates, sheets and strips, which include CCL, in 2001. There are ample sources of supply of CCL from overseas, hence, the threat of shortage is minimal. (Source: Vital Factor Consulting Sdn Bhd's Assessment of the Electronic Industry Focusing on the Manufacture of PCB dated 28 May 2002)

Industrial Chemicals

The industrial chemicals used in PCB manufacturing include hydrochloric acid, sodium hydroxide and sulphuric acid. These chemicals are classified as inorganic chemicals. Generally, Malaysia is self-sufficient with the abovementioned industrial chemicals. Coupled with the presence of several local producers of the hydrochloric acid, sodium hydroxide and sulphuric acid, the Directors of AEM do not foresee any shortage of supply of the Group's industrial chemicals requirement.

Printing Ink

The printing ink used in manufacturing of PCB is a specialised printing ink and is mainly sourced through imports as it is presently not available locally.

Some of the major exporting countries of this specialised ink include Japan, the USA and Singapore, with Japan and the USA accounting for 52.8% and 22.0% respectively of Malaysia's import of other ink, including printing ink, in 2001. (Source: Vital Factor Consulting Sdn Bhd's Assessment of the Electronic Industry Focusing on the Manufacture of PCB dated 28 May 2002)

(ii) Chemical Processing and Trading Activities

The major purchases of the Group's chemical processing and trading division comprise of industrial chemicals used in its treatment and recycling activities. These chemicals are widely available locally as well as overseas and competition amongst suppliers ensures competitive pricing.

(iii) Analysis of Suppliers

Details of the major suppliers of raw material to the Group, including the percentage of total purchases from each supplier based on total purchases for the financial year ended 31 December 2001, are as follows:-

Suppliers	Raw Materials	Length of relationship (years)	RM 000	Percentage of total purchases for the year ended 31.12.2001
Doosan Electro Materials (S) Pte. Ltd.	CCL	7	13,578	47.70*
Multiclad Corporation	CCL	1	3,517	12.35
Jamplan Marketing Ltd.	CCL	8	2,144	7.53
Hsiang Fu Trading Co., Ltd.	CCL	1	1,717	6.03
Sheang Fuh Industry Co. Ltd.	CCL	1	1,263	4.44
Eternal Chemical Co. Ltd.	CCL	10	1,142	4.01
Ching Chia Corporation	CCL	12	1,076	3.78
Taiyo Ink International (S) Pte. Ltd.	Printing ink	9	909	3.19
Kiharu Chemical (M) Sdn Bhd	Industrial chemicals	1	717	2.52
Kimia Zue Huat Sdn Bhd	Industrial chemicals	10	540	1.90
		_	26,603	93.45
Others			1,866	6.55
		_	28,469	100.00
Mata		_		

Note:

8.4.9 Quality Control

As PCB is a critical component of any finished electronic product, the AEM Group places utmost emphasis on the quality of its PCB. The Group has incorporated a series of quality assurance processes to ensure that its PCB meet the quality standard requirements of the various countries of export of the MNC and other export based customers. This is particularly critical in PCB manufacturing, as any defect in the PCB will inadvertently render the finished product useless. To achieve the high quality standard, the Group has its in-house quality control processes which is a comprehensive system that involves all aspects of quality control and assurance starting from quality check of incoming raw material, in-process quality assurance (sampling check and audits) to 100% quality control inspection on the finished products to meet both internal and external quality requirements.

The Group has also gained recognition from its customers. This is reflected in a number of accreditation and awards obtained to-date such as the Winner of the Best Vendor Award from Philips Audio Electronics Sdn Bhd for two (2) consecutive years in 1992/93 and 1993/94 and Winner of the Best Vendor Award from Acer Technologies Sdn Bhd (now known as Benq Technologies Sdn Bhd) in 1997.

^{&#}x27; Rounded up

The Group was awarded the internationally acclaimed Quality System Certification Mark MS ISO 9002 Model on 26 September 1995 for Quality Assurance in Production, Installation and Servicing within the scope of manufacturing single-sided PCB. In addition, the Group has via Amallion Enterprise Corp., since 1990, obtained the approval of the Underwriters Laboratories Inc. ("UL"), a non-profit product safety testing and certification organisation in the USA, authorising AEC to use the recognised marking of UL on its single-sided and double-sided PCB. The UL conducts product safety testing according to world-wide standards, and evaluates and approves the materials and processes used by the Group at its manufacturing facility through periodic quarterly inspection by its representatives. The UL's recognised marking allows the Group's products to gain worldwide recognition and acceptance, and also broadens its export market to the USA and Europe.

The accreditation and awards are demonstrative of the AEM Group's excellence in quality and service and more importantly, its ability to meet the requirements of its customers.

8.4.10 Research and Development ("R&D")

The Group is geared towards maintaining its competitive edge and market leadership with active research and development. The Group's R&D Department is located at AEC's premise at Sungai Petani, Kedah Darul Aman.

The Group has been operating a systematic operating procedure to ensure its products and services are of consistent quality within adequate safety standards as well as improvement in productivity. The R&D Department's policies and directions are:-

- (a) Improvement in processes, materials and production technologies;
- (b) Development of new innovative products;
- (c) Product improvements; and
- (d) New materials and new processes development.

The R&D Department is headed by Mr. Choong Bee Leong, Senior Engineering Manager of AEC and assisted by Mr. Ong Eng Theam, Quality Assurance Manager of AEC. Both of them have extensive industrial and electronics engineering, operation research, quality control procedure and work-flow processes experience. The profiles of Mr. Choong Bee Leong and Mr. Ong Eng Theam are set out in Section 9.4.2 of this Prospectus.

The department is well equipped with modern equipment and computer aided facilities for R&D such as Automatic CCD X-Y Checker, Pin Gauge, Micro Ohmage Tester, pH meter, Micro Scope and Grinding Machine, Ultra-Violet Spectrometer, Ultra-Violet Integrator, Thermometer, Film Thickness Checker, Micro Thickness Checker, Tension Checker, Viscosity Checker, Department Gauge and Chemical Lab Equipment.

The R&D Department had improved and will continue to improve the Group's production process, products and usage of raw material to further improve quality yield. The R&D Department is currently conducting further research on the production of STH double-sided PCB, which production is expected to commence in third quarter of 2002.

The Department's future assignments include the following:-

- (i) study on the relationship between the printing screen and print out with the objective to improve the gap between print out lines;
- (ii) study on the usage of in house equipment to determine the ability to manufacture flexible PCB;
- (iii) study on recycle of chemicals used so as to reduce cost of chemicals and improve the etching efficiency; and
- (iv) study on methods to switch the circuit testing from conventional contact testing to laser detection with the objective to reduce rejects and improve cost of testing.

8.4.11 Market

In 1999, there were 925 companies in the manufacturing of electronic products in Malaysia. The ex-factory sales value of Semiconductors, Other Electronic Components and Communication Equipment and Apparatus grew at an average annual rate of 12.4% between 1997 and 2001. PCB is classified under Other Electronics Components. (Source: Vital Factor Consulting Sdn Bhd's Assessment of the Electronic Industry Focusing on the Manufacture of PCB dated 28 May 2002).

In 2001, the total output of rigid PCB manufacturing in Malaysia was estimated at RM750 million, whilst AEC's revenue for its PCB manufacturing operations in Malaysia was RM53.64 million in 2001. As such, the Group's market share in Malaysia based on a RM750 million market share for rigid PCB was 7%. In 2001, there were approximately sixteen (16) other major PCB manufacturers in Malaysia. Based on the estimated production level of rigid PCB in Malaysia, AEC ranks sixth with an estimated production of approximately 1.10 million square metres of PCB in 2001. In 2001, the manufacture of Semiconductors, Other Electronics Components and Communication Equipment and Apparatus reached RM92.3 billion (Source: Vital Factor Consulting Sdn Bhd's Assessment of the Electronic Industry Focusing on the Manufacture of PCB dated 28 May 2002).

8.4.12 Management and Employees

The Directors of AEM are supported by a team of qualified management staff who are experienced in their respective field. As at 31 March 2002, the Group has a total workforce of 402 employees. The employees do not belong to any labour union and enjoy a cordial relationship with the management.

Its employees can be generally segregated into the following categories, namely:-

	<ae0< th=""><th><u> </u></th><th><m< th=""><th colspan="3">-MWSB> <aet< th=""></aet<></th></m<></th></ae0<>	<u> </u>	<m< th=""><th colspan="3">-MWSB> <aet< th=""></aet<></th></m<>	-MWSB> <aet< th=""></aet<>		
Category	No. of employees	Average no. of years in service	No. of employees	Average no. of years in service	No. of employees	Average no. of years in service
Managerial/ Professional	6	8	7	3	4	2
Technical/ Supervisory	63	4	26	3	20	11/2
Clerical	35	5	3	1	14	2
General Workers	8	5	-	-	2	2
Factory Workers	151	5	5	<1	58	2
	263	-	41		98	

The Group's operations in Malaysia currently employ 65 foreign employees of which 54 are Bangladeshi, 9 Nepalese and 2 Taiwanese. The Group's operations in Thailand, AET, employs 3 non-Thai employees, comprising 1 Taiwanese and 2 Bangladeshi.

The Group actively promotes the upgrading of its junior staff's skills through on-the-job training under close supervision and guidance of the senior management team as disclosed in Section 9.4 of this Prospectus.

8.4.13 Location of Principal Assets, Production Facility and Principal Place of Business

The principal assets of the AEM Group are located in the principal place of business and production facilities of the Group as follows:-

Principal place of business : Lot 87, Persiaran Sebelas

Kawasan Perusahaan Bakar Arang

08000 Sungai Petani Kedah Darul Aman

Production facilities

AEC : Lot 87, Persiaran Sebelas

Kawasan Perusahaan Bakar Arang

08000 Sungai Petani Kedah Darul Aman

AET : 707 Moo 4

Bangpoo Industrial Estate Praeksa, Muang District Samutprakarn Province

Thailand

MWSB : 5, Jalan Angsana ¼

Perusahaan Ringan Angsana

08000 Sungai Petani Kedah Darul Aman

No. 800A, Batu Dua Jalan Kuala Ketil 08000 Sungai Petani Kedah Darul Aman (rented premise)

8.5 Subsidiaries and Associated Companies

Details of AEM's subsidiaries as at the date hereof are as follows:-

Name	Country of incorporation	Date of incorporation	Authorised share capital ('000)	Issued and paid-up share capital (*000)	Principal activities
AEC	Malaysia	15.10.87	RM10,000	RM10,000	Manufacturing of PCB
MWSB	Malaysia	16.01.95	RM1,000	RM600	Chemical processing and trading activities, provision of waste water treatment facilities and waste water recycling services.

Name	Country of incorporation	Date of incorporation	Registered share capital (*000)	Paid-up share capital ('000)	Principal activities
AET	Thailand	24.05.90	THB110,000	THB110,000	Manufacturing of PCB

AEC and MWSB commenced operations in March 1990 and September 1995 respectively whilst AET commenced operations in June 2000. AEC became a shareholder of AET on 2 August 1999.

As at the date hereof, AEM does not have any associated company. Details on the subsidiaries of AEM are set out in Section 10 of this Prospectus.

8.6 Proforma Consolidated Income Statements

The following is a summary of the proforma audited consolidated results of AEM Group for the past five (5) financial years ended 31 December 1997 to 2001, prepared based on the audited financial statements of the companies of the AEM Group, for illustrative purposes, on the assumption that the current structure of the Group had been in existence throughout the financial years under review:-

Financial year ended 31 December	1997 RM 000	1998 RM 000	1999 RM 000	2000 RM 000	2001 RM 000
Revenue - Manufacturing of PCB	24,809	39,185	51,034	51,732	56,922
- Chemical processing and trading	-	-	2,479	4,380	4,717
- Others	-	-	354	-	-
	24,809	39,185	53,867	56,112	61,639
Profit before amortisation depreciation, interest and taxation	5,084	6,750	8,800	10,516	12,937
Amortisation	-	-	(287)	(287)	(287)
Depreciation	(1,464)	(2,063)	(2,451)	(3,174)	(4,183)
Interest expense	(1,582)	(1,915)	(1,930)	(1,472)	(1,768)
Profit before taxation	2,038	2,772	4,132	5,583	6,699
Taxation	-	-	10	(464)	(842)
Profit after taxation but before minority interests and pre-acquisition loss	2,038	2,772	4,142	5,119	5,857
Minority interests	-	-	(126)	(202)	(287)
Pre-acquisition loss		-	269	-	-
Profit attributable to shareholders	2,038	2,772	4,285	4,917	5,570
No. of ordinary shares assumed in issue*	61,943,852	61,943,852	61,943,852	61,943,852	61,943,852
Net EPS (scn)	3.29	4.48	6.92	7.94	8.99
Gross dividend rate (%)	-	-	-	-	-

Notes:-

^{*} The assumed issued and paid-up share capital of 61,943,852 ordinary shares of RM0.50 each is based on the issued and paid-up share capital of AEM after the Acquisition of AEC but prior to the Rights Issue and Public Issue.

(i) The Group profit before taxation can be further analysed as follows:-

Financial year ended 31 December	1997 RM 000	1998 RM 000	1999 RM 000	2000 RM 000	2001 RM 000
Manufacturing of PCB	2,038	2,772	4,205	5,104	5,971
Chemical processing and trading	-	-	226	479	733
Others	=	ے	(299)#	-	(5)
	2,038	2,772	4,132	5,583	6,699

- # Loss from AET's umbrella business prior to its acquisition by AEC.
- (ii) Revenue increased by 13.39% to RM24.81 million for the financial year ended 31 December 1997 due to an increase in demand from its existing customers and new customers secured during the year arising from the devaluation of the Ringgit. This had the effect of making Malaysian made products cheaper in the international market. Profit before taxation increased in tandem with revenue by 18.56% to RM2.04 million for the financial year ended 31 December 1997.
- (iii) Revenue increased by 57.95% to RM39.19 million for the financial year ended 31 December 1998 due to the boom of the electronics and electrical industry and aided by the devalued Ringgit. Profit before taxation increased by 36.02% to RM2.77 million in tandem with higher sales volume.
- (iv) Revenue increased by 37.47% to RM53.87 million for the financial year ended 31 December 1999 due to the increase in customers demand as a result of the continued boom of the electronics and electrical industry and the inclusion of MWSB's revenue after its acquisition. Profit before taxation increased by 49.06% to RM4.13 million for the financial year ended 31 December 1999 due to the increased revenue from AEC and contribution of profit from MWSB.
- (v) Revenue increased marginally by 4.17% to RM56.11 million for the financial year ended 31 December 2000 due to AEC's reduction in average selling prices as compared to the financial year ended 31 December 1999 because majority of the customers requested for lower material grade so as to remain competitive e.g. from fibre glass board to paper phenolic board. The said decrease was however mitigated by the increase in chemical and waste water treatment sales from MWSB. Profit before taxation increased by 35.12% to RM5.58 million mainly due to the lower cost of production arising from the benefit of a second fully automated printing line being installed and commissioned in the second half of the year for AEC, the substantial increase in gross revenue for MWSB and the decrease in interest expense.
- (vi) Revenue increased by 9.85% to RM61.64 million for the financial year ended 31 December 2001 due mainly to the increase in sales by AET arising from higher demand from its customers. Profit before taxation increased by 19.99% to RM6.70 million is in line with the increased revenue of the Group and an increase in profitability due to decrease in expenses from AEC during the financial year.
- (vii) There were no taxation charges for the financial years ended 31 December 1997 and 31 December 1998 due mainly to the availability of unabsorbed tax losses, capital allowances and reinvestment allowance for offset against the tax adjusted/statutory income. The taxation for the financial year ended 31 December 1999 which was a tax waiver year, was in respect of under provision for taxation in prior years.
- (viii) The taxation charge represents a rate lower than the statutory income tax rate for the financial years ended 31 December 2000 and 31 December 2001 due to the claim for reinvestment allowance by AEC and the utilization of unabsorbed tax losses and capital allowances, reinvestment allowances by MWSB and the income tax exemption by the Board of Investment, Thailand for AET.
- (ix) There was no exceptional or extraordinary item in respect of the financial years under review.

8.7 Landed Properties

A summary of the information on landed properties of the AEM Group, all held for owner occupation, are as follows:-

Title/ Location	Registered/ Beneficial Owner	Description	Land Area (square metre)	Built- up Area (square metre)	Tenure (years)	Approximate Age of building (years)	Net book value as at 31.12.2000 '000	Market value '000	Material date of valuation	Revaluation surplus/ (deficit) '000
Lot No. P.T. 8565 Mukim Sungai Pasir, District of Kuala Muda, Kedah Darul Aman held under No. H.S.M. 171/90	Perbadanan Kemajuan Negeri Kedah (Subleased to AEC for 60 years commencing 24 March 1990)	Industrial; factory complex	14,213	4,450	99 expiring on 24 March 2089	9	RM5,864	RM6,060	1 June 2001	RM196
Lot No. 9998 Mukim Sungai Pasir, District of Kuala Muda, Kedah Darul Aman held under GRN 29629	AEC	Residential; single storey terrace house	156	61	Freehold	16	RM45	RM60	1 June 2001	RM15
Lot No. P.T. 25833 Sungai Petani Town, District of Kuala Muda, Kedah Darul Aman held under H.S.D. 131/95	MWSB	Industrial; 1½ storey light industrial Jactory	916	423	Freehold	5	RM413	RM390	1 June 2001	RM(23)
Lot No. 2892 Mukim Sungai Pasir, Tempat Gelugor, District of Kuala Muda, Kedah Darul Aman held under GM 1217	AEC	Residential; single storey terrace house	152	130	Freehold	25	#	N/A	N/A	#
Lot No. P.T. 801, Mukim Sungai Petani, District of Kuala Muda, Kedah Darul Aman held under HS(D) 884/1981	AEC	Residential; double- storey terrace house	143	262	Freehold	7	<u>@</u>	N/A	N/A	N/A
							RM6,322	RM6,510		RM188

Title/ Location	Registered/ Beneficial Owner	Description	Land Area (square metre)	Built- up Area (square metre)	Tenure (years)	Approxi- mate Age of building (years)	Net book value as at 31.12.2000 '000	Market value '000	Material date of valuation	Revaluation surplus/ (deficit) '000
Lots 304 and 305, Title Nos. 85367 and 85368, Praeksa Sub- District, Muang District, Samutprakam Province, Thailand	AET	Industrial; Double storey factory	5,760	3,731	Freehold	2	THB25,566 (RM2,244 ⁺)	THB42,100 (RM3,430*)	3 July 2001	THB16.534 (RM1.452 [†])

Notes:-

- * Not available as the acquisition was only completed in February 2001.
- What available as the acquisition was only completed in December 2001.
- * Based on an exchange rate of RM8.779: THB100.0 as at 31 December 2000.
- * Based on an exchange rate of RM1.00 : THB12.2785 as at 3 July 2001 as adopted in the Valuation Report.

The market valuations of the above landed properties were carried out by CH Williams Talhar & Wong, a firm of independent and professional valuers, using the Comparison, Cost, Investment and Income Capitalisation methods based on the material dates of valuation of 1 June 2001 and 3 July 2001. The Valuation Certificate is set out in Section 18 of this Prospectus.

The above valuations do not require the approval of the SC. The revaluation surplus/deficit, computed based on the net book values of the respective properties as at 31 December 2000, was incorporated in the accounts of the respective subsidiaries of AEM for the financial year ended 31 December 2001.

Details of purchases of properties during the two (2) years preceding the date of this Prospectus are as follows:-

Title/ Location	Vendor	Date of Acquisition*	Acquisition price RM
Lot No. 2892 Mukim Sungai Pasir, Tempat Gelugor, District of Kuala Muda, Kedah Darul Aman held under GM 1217	Khalidah bte Abdul Khalid	14 November 2000	95,000
Lot No. P.T. 801, Mukim Sungai Petani, District of Kuala Muda, Kedah Darul Amana held under HS(D) 994/1981	Yeoh Lee Chin	29 October 2001	130,000

Note:-

* Date of Sale and Purchase Agreement.

8.8 Major Approvals, Licences and Permits

Set out below are the major approvals, licences and permits issued to/obtained by the Group:-

Company	y Details	Equity conditions imposed	Expiry Date	Status of compliance
ЛЕС	Manufacturing license issued by MITI for the manufacturing of PCB	At least 30% of AEC's shares are to be held by Malaysians	N/A	Met
	Operating license issued by Majlis Perbandaran Sungai Petani for the advertising and the use of land to operate the business of manufacturing electrical and electronics products and to operate a restaurant, canteen or cafeteria	None	31.12.0	N/A
	Manufacturing warehouse and warehouse licences issued by the Royal Malaysian Customs for the manufacturing of PCB	None	30.11.02	N/A
	A certificate for MS ISO 9002: 1994 Quality Systems - Model for Quality Assurance in Production, Installation and Servicing issued by SIRIM QAS Sdn Bhd within the scope of manufacturing PCB	None	15.12.03	N/A
	The approval of Underwriters Laboratories Inc. ("UL") to use the recognised marking of UL on certain of AEC's products	None	N/A	N/A
AET	License issued by the Industrial Estate Authority of Thailand for use of land to operate business in the industrial estate for the manufacturing of PCB	None	31.12.03	N/A
	Certificate of operator in export processing zone issued by the Industrial Estate Authority of Thailand for the manufacturing of PCB	None	31.12.02	N/A
	Promotion Certificate issued by the Board of Investment of Thailand to certify that the company is promoted for the business of production of PCB	None	N/A	N/A
MWSB	Type 'B' Wholesaler's poisons license issued by Jabatan Kesihatan Negeri Kedah for the import, store and wholesale of ammonia, sodium hydroxide, hydrochloric acid, nitric acid and sulphuric acid	None	31.12.02	N/A
	Operating license issued by Majlis Perbandaran Sungai Petani for the advertising and the use of land to operate an office	None	31.12.02	N/A
	Operating license issued by Majlis Perbandaran Sungai Petani for the advertising and use of land for warehouse	None	31.12.02	N/A
Note:-				
N/A	Not applicable			

N/A Not applicable

8.9 Working Capital, Material Commitments for Capital Expenditure, Borrowings and Contingent Liabilities

(i) Working Capital

The Directors of AEM are of the opinion that, barring any unforescen circumstances and after taking into consideration the cashflow forecast and the banking facilities available and the net proceeds from the Rights Issue and Public Issue, the Group will have adequate working capital for its present foreseeable requirements.

(ii) Material Commitments for Capital Expenditure

Save for the purchase of machinery amounting to RM3.457 million as disclosed in note 1 of Section 4.8 of this Prospectus, there are no material commitments for capital expenditure contracted or known to be contracted by AEM or its subsidiaries, which may have a substantial impact on the financial position of the Group as at 15 May 2002 (being the latest practicable date at which such amounts could be calculated prior to the printing of this Prospectus).

(iii) Borrowings

As at 15 May 2002 (being the latest practicable date of which such amounts could be calculated prior to the printing of this Prospectus), the Group has total borrowings amounting to RM27.22 million, all of which are interest bearing, of which approximately RM9.36 million are long term whilst the balance of RM17.86 million are short term in nature.

(iv) Contingent Liabilities

There are no material contingent liabilities incurred by AEM and its subsidiaries as at 15 May 2002 (being the latest practicable date at which such amounts could be calculated prior to the printing of this Prospectus), other than those incurred in the ordinary course of business.