Equity Explorer

COMPANY ANALYSER

DBS VICKERS SECURITIES

Singapore Equity Research 30 April 2004

Serial System

Serial Acquisitions

Serial Systems supplies active and passive electronic components to customers who operate within the electronics industry. The increase in customers' demand and incremental sales and earnings from new acquisitions had improved Group sales by 96% in FY03. Although we rate the stock Fully Valued, we see the possible divestment in associate company, Wintech Microelectronics, yielding potential cash proceeds of nearly 15c per share. At current levels, the stock is trading at 26.8x FY04 earnings and 11.4x FY05 earnings.

The Business

- **Renewed focus on key distribution business and aims to build pan Asian network.** The Group distributes a wide range of active and passive electronic components. Main customers are major electronics players operating in Asia. Texas Instrument is an important supplier whose products accounted for about 65% of Group revenue last year. Over the last two years, Serial Systems have acquired three Korean companies; Tong Baek Trading, Unitron Tech, Sangsoo Co., and another Hong Kong company; T&S Technology.
- **Rising demand from customers and acquisitions will boost sales growth.** Sales are expected to rise over the next three years driven by customer demand and incremental sales from new acquisitions. Demand from customers has increased due to the recovery in the electronics industry and the general economy. The Group will also benefit from incremental sales from its new acquisitions. The Group continues to evaluate potential candidates for acquisitions. Earnings are expected to be affected by a final provision for inventory in the consumer electronics division this year.
- **Strong relationship with TI sets it apart from other competitors.** There are numerous competitors operating in the region but we see its relationship with TI as an important differentiating factor from the others. Its plan to grow a pan Asian regional network, if successful, should also set it apart from the smaller players in the industry.

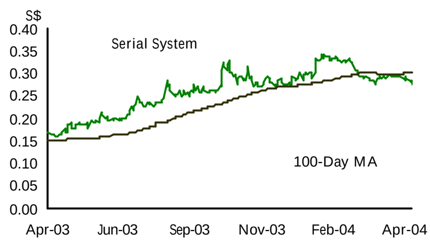
The Stock

- **Fair value derived using sector average PE and based on FY05 earnings.** Our fair value for the stock is 29.5c based on FY 05 earnings and a target PE multiple of 12.3x which is also the sector average. This also represents a 7.2% upside from its current level.
- **The stock rose more than 110% in just over a year.** The stock has risen more than 110% since it hit bottom at 13c on 25 Mar 03. Improving business prospects and the buoyant stock market were the likely drivers behind the stock appreciation. In addition substantial shareholder Sam Goi has continued to invest in the stock and has raised his shareholdings from 9.48% to 11.20% in over a year.
- **New customer acquisitions, agency agreements and new acquisitions could give share price more room to appreciate** Positive news flow regarding new customers, agency agreements or new acquisitions are potential catalysts in driving the stock price. In particular, new acquisitions with strong incremental earnings and bought at a fair price should be viewed favorably by the market.

Forecasts and Valuation

FYE Dec	2003	2004F	2005F	2006F
Sales (S$m)	325	452	520	546
EBITDA (S$m)	8.7	6.5	12.5	10.5
Net Profit (S$m)	3.2	21.6	6.3	4.5
EPS - FD (Sc)	1.0	7.1	2.1	1.5
EPS Gth (%)	-133	-7	134	-24
BVps (S$)	0.26	0.33	0.35	0.36
DPS (Sc)	0.3	0.4	0.4	0.4
P/Sales (x)	0.26	0.25	0.19	0.15
EV/EBITDA (x)	11.2	15.9	7.7	7.8
P/E (x)	25.5	36.0	13.7	15.3
P/BV (x)	1.07	1.12	0.95	0.78
P/CF (x)	20.1	4.8	12.2	12.9
Div Yield (%)	1.1	1.1	1.3	1.5
ROE (%)	5.5	3.1	6.9	5.1
Net Gearing (%)	12	Cash	Cash	Cash

Share Price Chart



Don See (65) 6398-7955 donsee@dbsvickers.com

Fully Valued

Bloomberg: SERL SP
Reuters: SERL.SI
Sector: Electronics Component Distribution

S$0.275

Price Target:
1-year S$0.295

STI: 1,842.03

At a Glance

Company Description:
One line description of the company,its businesses and operations

General Data:

Issued Cap (m shs)	303
Mkt Cap (S$m)	83
Mkt Cap (US$m)	49

Major Shareholders:

Derek Goh (%)	18.27
Sam Goi (%)	11.20
Free Float (%)	70.53
Avg Vol/Day ('000)	218

Management:
Chairman & CEO:
Derek Goh
Exec. Director:
Chin Yeow Hon

Share Performance:

	Share Price	Rel STI
Past 1m	-5%	-4%
Past 3m	-20%	-19%
Past 6m	-7%	-12%
Past 1yr	67%	26%

Consensus EPS:
NA

Refer to important disclosures at the end of this report

The Business Model

· **Electronics component distribution & consumer electronics development.** Serial System was founded in 1998 and the company manages two main core businesses which are Electronics Components Distribution and Consumer Electronics Development. Managed under wholly owned subsidiary, Serial Microelectronics Pte Ltd, the Group distributes a wide range of active and passive electronic components to original equipment manufacturers (OEMs) and electronic contract manufacturers (ECMs). The development of consumer electronics is managed by Terapin Technology. A Video CD recorder and a MP3 CD recorder, developed by the division, are believed to be the first of its kind in the world. Sales of the two products were, however, not encouraging. The Group has won a number of accolades and these include the following:

- Winner of the Enterprise 50 list, 5th position in 1995
- Winner of the Enterprise 50 list, 1st position in 1996
- Technology Achievement Awards by National Science & Technology Board – 1999
- G-Mark Good Design by Japan Industrial Design Promotion Organization – 2001

The list of electronic components that Serial System distributes include DSPs, CPUs, Analog, Advanced Digital Logic, Mixed Signal, Non-violatile and Violatile Memories, Optoelectronics, Communications ICs, MCUs, Discretes, Connectors, Capacitors, Resistors, Inductors, Crystal Oscillators, Relays

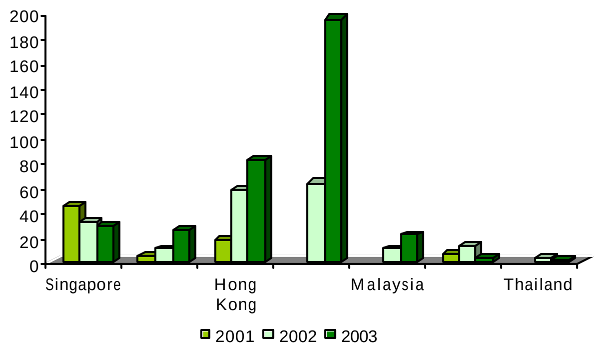
Serial System Ltd

Serial Microelectronics Pte Ltd (100%)	EbridgeX.com Pte Ltd (85.6%)	Serial System Sdn. Bhd. (100%)	Serial Investment Pte Ltd (100%)	Serial System (Hong Kong) (100%)	Terapin Technology (100%)	Teraoptix, Inc (Delaware) (100%)	Wintech Microelectronics (21.56%)
Serial Microelectronics (HK) Ltd (80%) Hi-Tech Business Associates Tong Baek Trading (89.5%) T&S Technology Ltd Sangsoo Co., Ltd			Shenzhen Guo Ye Technology (85%) Newfonts Technology (65%)			Teraoptix Inc (California) Teraoptix Management, Inc Texas Teraoptix, Limited Partnership (99%)	

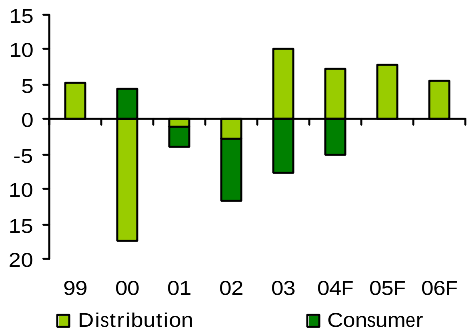
All wholly owned unless specified

Source: Company

Group sales by Geographical segments



Profit Breakdown (S$m)



Source: Company, DBS Vickers

Electronics Components Distribution

- **Focus is on the micro-electronic components.** The Group distributes a wide range of passive and active components to their customers who operates within the semiconductor industry. Passive components are those used in electronic circuits that have no processing, storage or logic abilities. These components are generally of a low-tech nature and lower dollar value. Examples include switches, fuses, circuit breakers, capacitors and resistors Active components are those that have some processing capability, a built-in logic function or some form of storage facility. These components command higher dollar value and examples include memory devices, integrated circuits and central processing units. The Group is focused on distributing these micro circuitry parts and does not carry finished or box build products.

- **Value added services and regional offices.** The Group, like most other distributors, provides some value added services. These include inventory management, design and support services. Inventory management services encompasses warehousing and logistics support, just-in-time, vendor managed and buffer stock programs while design services will cover application engineering support and system level and integrated chip design services. The Group has regional offices in Malaysia, Hong Kong, Philippines, China and South Korea.

- **Segmental revenue, profit & loss record.** Developed by Terapin Technology, the VCD recorder allowed consumers to convert their VHS format video into the Video CD format which is more portable and convenient. The MP3 CD recorder allows the user to use the player for playing MP3 music files without the need for further conversion and also allows duplication of files. It has also, recently, launched the Terapin Mine, which is a handheld storage device targeted at digital camera users.

Consumer Electronics Development

- **Design and development of embedded digital audio and video appliances.** The Group started to provide technological solutions to their customers in 1995. When it first started, it provided technical solutions for the Video CD player. It has built on this capability and currently it can offer state of the art high definition video processing solutions. Their technical solutions have been adopted by international consumer electronic brands in their DVD, VCD players and recorders. According to the company, they are, now, working with high definition video formats using advance video processors to enable high quality conversion between standard definition video formats and high definition video formats. These formats are then matched to high resolution LCB panels to create the best video display images. The full suite of services include:
  - Embedded audio and video system design consultancy
  - Complete embedded hardware firmware and software design
  - Key modules design and manufacturing
  - Full turnkey system development and production

- **Launched world's first VCD Recorder and MP3 CD Recorder.** Developed by Terapin Technology, the VCD recorder allowed consumers to convert their VHS format video into the Video CD format which is more portable and convenient. The MP3 CD recorder allows the user to use the player for playing MP3 music files without the need for further conversion and also allows duplication of files. It has also, recently, launched the Terapin Mine, which is a handheld storage device targeted at digital camera users.

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Growth Prospects

- **Semiconductor industry is expected to grow 9.8% CAGR through 2006 and expected to benefit the Group.** The Semiconductor Industry Association has projected a 16.8% growth for 2004, 5.8% in 2005 and 7% in 2006 for the chip industry. This represents a CAGR of 9.8% over the forecast period. Sales are expected to rise from $141bn in 2002 to $205bn in 2006. The industry is expected to grow fastest in the Asia Pacific region where a combination of migration of manufacturing and design services to the region and strong demand for semiconductor products is expected to drive growth. Sales to and within the region are projected to grow by 23.4% to $75.3bn in 2004, 8.2% in 2005 and 8.2% in 2006. Sales are expected to reach $88.2bn by then. Since the Group's business is closely tied with the prospects of the industry, the projections indicate the potential of their addressable market.

- **Asia Pacific region contributed more than 95% of Group sales.** Of the sales in the Asia Pacific region in FY03, South Korea accounted more than 55% sales. Going forward, the Group expects North Asian countries such as South Korea, China and Taiwan to continue to grow strongly. Nevertheless, the competitive landscape is littered with many suppliers both big and small. The Group will continue to focus its efforts to grow their regional network.

- **Size matters, growth by mergers & acquisition.** Increasingly, customers require their suppliers to have a pan Asian distribution network and presence to facilitate their global operations. The Serial System Group has already embarked on a "Go North" strategy in early 2000 and started new operations or bought into established distributors in the region. M & A activities will be able to add incremental sales and earnings to the Group.

- **Final inventory write-off in FY04, accounting earnings to grow.** The Group has gradually written off its investment and inventories in the electronics consumer appliance division. It expects to complete the final provision this year and net earnings will better reflect the growth in the distribution division.

Management

Key Management Team

Manager	Current Appointment	Previous Experience	Ownership
Derek Goh (Founder)	Executive Chairman - Responsible for Group Direction and Development	Degree of Honorary Doctors of Business Admin. & Philosophy. ASME & Rotary Club of Singapore's Entrepreneur of the Year in 1996. ASEAN Secretariat conferred 1999 ASEAN Best Young Entrepreneur Award.	>90 mil Shares (29.78%) & Options
Chin Yeow Hon (Joined 1992)	Executive Director & Group Senior VP & Acting COO- Assists Derek Goh on strategy formulation & execution. Leads the Group's resources in IT and growth strategy in technical competency development and demand creation.	Bachelor's degree in Electrical and Electronics Engineering. Was Director of Strategic Marketing in 1998, Serial System. Pioneered the Research and Design Division.	> 6.2 mil shares (2.06%)
Chua Teck Leong (Joined 1997)	Executive Director – Oversees investor relations, public relations and legal matters for the Group.	Bachelor of Laws (Honours) degree from the University of London in 1987.	30,000 shares
Philip Yu (Joined 2002)	Group Financial Controller – Oversees Group's financial matters.	Chartered Accountant with public accounting and corporate finance experience gained from Big 4 international firms.	
Roland Chan (Joined 2001)	Group Senior VP – Oversees corporate planning & development, human resource and finance departments.	Fellow of the Chartered Insurance Institute and Chartered Insurer. MBA degree from the University of Birmingham.	

Management Remuneration Structure

Directors' Compensation	Salary & AWS (%)	Fees (%)	Others (%)
$500K-$749K			
Derek Goh	84	5	11
$250K to $499,999			
Chin Yeow Hon	74	9	17
Less than $250K			
Chua Teck Leong	67	12	21
Other Executives' Compensation	Salary (%)	Bonus (%)	Others (%)
$250K to $499,999			
Kim Sang Yeol	43	57	0
Lee Jae Phil	63	24	13
Moon Baum Suk	69	25	6
Less than $250K			
Roland Chan	87	0	13
Johnson Ho	80	20	0

Source: Company

Corporate Strategy

· **Aims to become a Pan-Asian component distribution Group.** The Group believes that in order to stay competitive and to continue to offer strong value proposition for its suppliers and customers, it needs to build a strong Pan-Asian presence. To achieve their goal, the Group intends to expand via a merger or an acquisition. They have acquired two Korean distributors to add to their stable of subsidiaries and are seeking other possible candidates in the region.

· **$1bn sales target by 2008.** The Group has an internal target to achieve $1bn sales by 2008. Based on FY03 revenue of $324m, it would mean the Group will have to achieve 25% sales growth annually between now and 2008. Growth will come from both organic growth and growth via mergers & acquisitions. To grow organically, the Group intends to seek new agency agreements with principals to distribute more products and to secure new customers from the regions. The Group will scrutinize potential acquisition candidates and avoid overpaying for them.

· **Focus on working capital management.** Mismanagement of working capital poses the biggest operating risk to the Group. To better facilitate and manage their working capital, the Group has started to implement the SAP enterprise resource planning program on a firmwide basis. The program will help them to monitor the movement, location and availability of their inventories in order to avoid having capital locked up in excess inventory. The program also allows them to monitor their collection of trade receivables and ensure that receivables are collected as and when they fall due.

· **Stake in Wintech likely to be disposed to reap cash for expansion program.** Wintech, a Taiwan-based electronics component distributor, used to be subsidiary of Serial System Group prior to its listing in 2000. Serial System's stake in Wintech was, subsequently diluted from 55% to its current 21.56% through a number of share sale and placement which includes a listing on Taiwan OTC market in 2000. The Group expects its stake to be further diluted as Wintech continues to raise funds for its working capital requirements and expansion purposes. The Group does not rule out the possibility of selling its stake in Wintech in order to fund its own expansion program. Based on the outstanding 121.48m shares and an average share price of NT$33.2 for the year, Serial System's stake in Wintech is worth approximately $44.7m. This works out to be about 15c per share.

Segmental Forecasts

Sales	**64**	**153**	**79**	**164**	**316**	**452**	**520**	**546**
Distribution	61	96	60	153	310	450	518	543
Consumer	3	57	19	11	6	2	2	2
Segmental PBIT	**5.2**	**-13.1**	**-3.9**	**-11.8**	**2.3**	**2.2**	**7.8**	**5.4**
Distribution	5.2	-17.4	-0.9	-2.7	10.0	7.2	7.8	5.4
Consumer	0.0	4.4	-3.0	-9.1	-7.7	-5.0	0.0	0.0
PBIT Margins	8.1	-8.6	-4.9	-7.2	0.7	0.5	1.5	1.0
Distribution	8.5	-18.2	-1.4	-1.7	3.2	1.6	1.5	1.0
Consumer	-0.9	7.7	-16.2	-82.1	-129.7	0.0	0.0	0.0

Source: Company, DBSVickers' estimates

· **Distribution division to build on earnings momentum.** The distribution division benefited from the recovery in the global economy and the electronics industry. We expect the division to build on this earnings momentum through higher capex and IT spending in FY04 and FY05. We believe growth rate will slow in FY06 as the current business cycle moves into the slower phase. Our current assumptions have taken into account the acquisitions of Sangsoo & Unitron Tech but not sales from possible future acquisitions.

· **Consumer electronics division to be trimmed and scaled back.** The Group intends to write off the rest of its inventory in the division and the value to be written off is expected to be about $4m to $5m. Going forward, the division is not likely to be a significant contributor to Group sales but it will be retained for operational purposes.

· **Conservative margins assumptions due to its volatility nature.** Our margin assumptions are modest and conservative. Volatile component prices and shorter product life cycle can have a significant impact on earnings. During the period of rising component prices, earnings can increase quickly if the level of inventories is high. However, at the same time, shorter product life cycle also means that excess inventories are at risk of obsolescence.

Risks to Forecasts

- **Inventory prices decline.** As a distributor of a wide range of electronic components, the Group keeps a fair amount of inventory to meet customers' requests (verify the amount carried). The sharp decline in component prices will have an adverse effect on the Group as it bought inventory at higher prices but sold at lower levels. However, rising commodity prices will also have a beneficial effect on the Group as higher selling prices will translate into higher profits for the company. Inventory management will be crucial and the Group recognizes it. An enterprise resource planning software is currently being implemented to improve its management of working capital and inventory.

- **Sharp slowdown in the electronics industry.** Various industrial sources have given fairly optimistic projections for the electronics industry in 2004 and 2005. The Semiconductor Industry Association is projecting a 16.8% growth rate for the industry in 2004 and 5.8% in 2005. We have considered these projections in our model. If for one reason or another, the industry growth does not meet expectations, it could dent our forward sales and earnings forecasts and affects company valuations. However, we believe industrial forecasts are fairly modest and the Group should beat those projections easily if they succeed in acquiring other businesses.

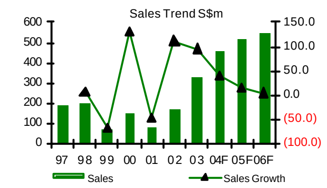
- **Excessive competition could impair our margin assumptions.** Our margin assumptions could be affected by excessive competition in the markets that the Group operates in. Competitors could resort to lowering prices in order to capture greater market share. Margins will be affected if the Group has to protect its share through lowering prices as well. However, given the strong market demand for electronic components as shown by the lengthening lead time, we believe the market is still growing and is big enough to be shared.

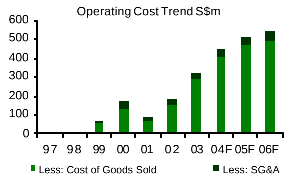
Financials – Income Statement

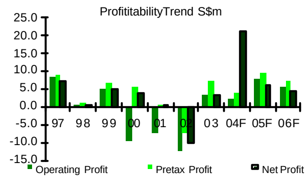
· **Fall in FY99 revenue is due to equity accounting for former subsidiary Wintech.** The Group's turnover declined sharply in FY99 due to dilution of its stake in former 55% owned subsidiary Wintech to 39.8%. As a result, the Wintech could only be equity accounted for by the Group.

· **Slower business and liquidation of subsidiary contributed to fall in revenue in FY01.** Due to a slowdown in the electronics industry and the close of its China subsidiary, the Group registered lower sales in FY01. However, sales picked up and grew strongly in year FY02 as the Group focused on its strength in its core business.

Income Statement







FYE Dec	97	98	99	00	01	02	03	04F	05F	06F
Sales	186.2	198.7	63.9	148.4	77.9	165.5	324.8	452.0	519.7	545.8
Less: Cost of Goods Sold	n.a.	n.a.	57.5	133.8	68.5	153.2	294.5	402.3	465.1	493.9
Gross Profit	n.a.	n.a.	6.4	14.6	9.3	12.3	34.7	49.7	54.6	51.8
Less: SG&A	n.a.	n.a.	6.1	37.9	18.5	26.9	31.5	47.5	46.8	46.4
Operating Profit	8.5	0.7	5.2	(9.3)	(7.2)	(12.2)	3.2	2.3	7.8	5.5
Less: Net Interest Exp (Inc)	0.5	1.7	0.3	0.5	0.1	0.1	(0.4)	(1.3)	(1.3)	(1.4)
Less: Associates Losses (Gains)	(0.6)	(0.9)	(2.1)	(15.7)	(7.3)	(5.5)	(4.4)	(0.2)	(0.2)	(0.2)
Pretax Profit	8.7	1.0	6.9	5.6	0.8	(7.1)	7.3	3.7	9.3	7.1
Less: Exceptional Losses (Gains)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(26.0)	0.0	0.0
Less: Tax	1.0	0.2	1.8	2.7	0.6	2.0	2.9	6.5	2.0	1.6
Inc(Loss) bef X-Ord Items	7.7	0.8	5.1	2.8	0.2	(9.1)	4.4	3.1	7.3	5.5
Less:Extraord L(G)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less: Minority Interests	0.6	0.3	(0.0)	(0.9)	(0.2)	0.8	1.2	1.0	1.0	1.0
Net Profit	7.1	0.6	5.1	3.7	0.3	(9.9)	3.2	21.6	6.3	4.5
Dividends & Cash Earnings										
Cash Dividends	1.6	0.4	1.5	3.0	1.5	0.3	0.7	1.0	1.0	1.0
Reinvested Earnings	5.4	0.2	3.6	0.7	(1.2)	(10.2)	2.5	20.6	5.3	3.5
Div Payout Ratio (%)	23.2	67.9	29.6	80.9	457.6	(3.0)	22.4	4.6	16.0	22.2
EBIT	8.5	0.7	5.2	(9.3)	(7.2)	(12.2)	7.6	5.0	10.6	8.5
Depreciation	0.2	0.4	0.3	1.4	1.3	1.4	1.0	1.6	1.9	2.0
EBITDA	8.8	1.1	5.5	(7.9)	(5.9)	(10.9)	8.7	6.5	12.5	10.5
Cash Flow	7.3	1.0	5.4	5.1	1.6	(8.5)	4.2	23.1	8.2	6.6
Growth Rates (%)										
Sales		7	(68)	132	(48)	113	96	39	15	5
COGS		n.a.	n.a.	133	(49)	124	92	37	16	6
SG&A		n.a.	n.a.	524	(51)	45	17	51	(1)	(1)
Opg Pft		(92)	619	n.a.	(22)	70	(1)	(30)	245	(30)
Pretax Pft		(89)	598	(20)	(86)	(1,017)	n.a.	(49)	151	(24)
Net Profit		(92)	811	(27)	(91)	n.a.	n.a.	580	(71)	(28)
Margins (%)										
Gross Margin	n.a.	n.a.	10.0	9.8	12.0	7.4	10.7	11.0	10.5	9.5
SGA % Sales	n.a.	n.a.	9.5	25.6	23.8	16.2	9.7	10.5	9.0	8.5
EBITDA Margin	4.7	0.6	8.5	-5.3	-7.6	-6.6	2.7	1.4	2.4	1.9
Operating Margin	4.6	0.4	8.1	-6.3	-9.3	-7.4	1.0	0.5	1.5	1.0
Net Margin	3.8	0.3	8.0	2.5	0.4	-6.0	1.0	4.8	1.2	0.8
Depr % of sales	0.1	0.2	0.4	0.9	1.6	0.8	0.3	0.3	0.4	0.4
Effective Tax Rate %	12	17	26	49	81	-28	40	22	22	22

Source: Historic – Bloomberg, Company AR; Forecasts: DBS Vickers

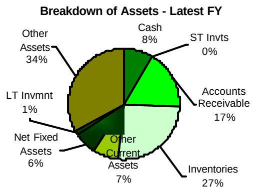
Financial – Balance Sheet

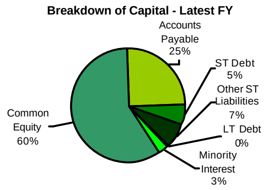
· **Account Receivables DOS has declined but expected to rise with increased sales.** The fall in Account Receivables DOS over the last 3 years is unlikely to be sustained as sales increase. Credit term of 60 days in China is common and we believe that higher sales in China will drive Account Receivables DOS higher. As a result, we expect cash cycle to rise to 70 days against the 30 days cash cycle in FY03.

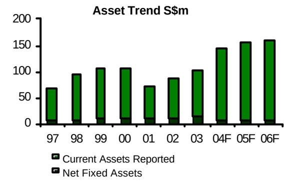
· **Expect sale of Wintech in FY04.** We are assuming that Wintech will be sold sometime in FY04 to boost its cash reserves. The cash may be used to fund the higher working capital requirement and/or for acquisitions.

· **Watch that working capital and cash requirements.** The Group had been in net cash position for six years prior to FY03 but cash reserves have dropped substantially and the Group may have to increase their borrowings to fund their working capital and operations.

Balance Sheet







FYE Dec	97	98	99	00	01	02	03	04F	05F	06F
Cash	8	29	57	28	20	11	12	34	31	30
ST Invts	0	0	0	0	0	0	0	0	0	0
Accounts Receivable	35	30	21	19	9	23	24	38	43	45
Inventories	18	29	13	38	27	35	41	57	65	68
Other Current Assets	2	2	4	11	7	9	10	10	10	10
Current Assets Reported	63	90	95	96	63	78	88	138	149	154
Gross Fixed Assets	7	8	12	12	12	13	19	14	15	16
Accumulated Depreciation	1	2	2	2	3	5	6	7	9	11
Net Fixed Assets	6	6	10	10	9	9	13	7	6	5
LT Invmnt	0	1	0	0	2	2	0	11	15	19
Other Assets	0	5	17	21	33	44	44	25	25	25
Total Assets	**69**	**101**	**122**	**127**	**106**	**133**	**145**	**182**	**196**	**204**
Accounts Payable	20	28	17	27	10	33	38	53	61	64
ST Debt	8	24	6	0	0	7	20	20	20	20
Other ST Liabilities	4	0	3	8	3	10	2	2	2	2
Current Liabilities	32	53	27	35	13	50	59	74	82	85
LT Debt	0	0	0	0	0	0	2	2	2	2
Other LT Liabilities	0	0	1	1	1	1	1	1	1	1
Total Liabilities	32	53	28	36	13	51	62	77	85	88
Preferred Equity	0	0	0	0	0	0	0	0	0	0
Minority Interest	2	2	4	1	1	4	3	4	5	6
Common Equity	35	47	91	90	92	78	79	100	105	109
Total Shareholders' Equity	37	48	95	91	93	82	83	104	111	115
Total Liabilities and Equity	**69**	**101**	**122**	**127**	**106**	**133**	**145**	**181**	**195**	**203**
Shares Outstanding	250	274	302	300	302	302	302	302	302	302
Accounts Rec DOS	67	54	118	47	42	49	27	30	30	30
Inventory DOS	36	53	74	93	125	77	45	45	45	45
Accounts Payable DOS	38	50	99	65	44	72	42	42	42	42
Working Capital	31	37	68	61	51	29	28	64	67	69
Non Cash Working Capital	31	33	17	33	31	25	35	50	56	58
Net Cash (Debt)	0	5	51	27	20	4	(9)	12	9	9
Net Gearing (%)	Cash	Cash	Cash	Cash	Cash	Cash	12	Cash	Cash	Cash

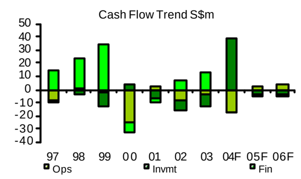
Source: Historic – Bloomberg, Company AR; Forecasts: DBS Vickers

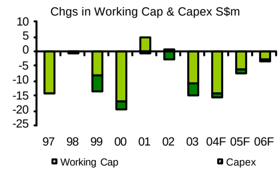
Financials – Cash Flow

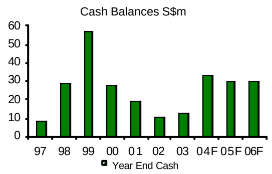
· **Cash flow from operations will continue to be negative.** We expect cash flow from operations to remain in the red as higher sales drive working capital requirements higher. Higher requirement is driven by the need to have higher sales support as well as the lengthening of the cash cycle.

· **Wintech divestment to reap cash of $44.7m.** We assume that the Group will divest its entire 21.96% stake in Wintech at an average share price of NT$33 which should translate into cash proceeds of $44.7m.

Cash Flow







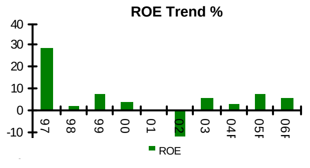
FYE Dec	97	98	99	00	01	02	03	04F	05F	06F
Cash Flow Net Income	8.7	1.0	5.7	0.3	(3.6)	(12.3)	2.9	21.6	6.3	4.5
Depreciation & Amortization	0.2	0.4	0.5	1.7	1.6	2.3	2.9	1.6	1.9	2.0
Other Non-Cash Adjustments	(4.0)	(1.5)	0.3	(9.9)	(0.6)	0.5	1.0	(26.0)	0.0	0.0
Changes in Non-Cash Work Cap	(13.8)	0.3	(7.9)	(17.0)	4.5	0.5	(10.9)	(14.4)	(6.2)	(2.4)
Cash From Operations	(8.9)	0.2	(1.4)	(24.9)	1.9	(8.9)	(4.1)	(17.2)	2.0	4.2
Disposal of Fixed Assets	0.0	0.0	0.1	0.3	0.4	0.1	(1.0)	0.0	0.0	0.0
Capital Expenditures/Prop Add	(0.4)	(0.9)	(5.9)	(2.8)	(0.9)	(2.5)	(3.9)	(1.0)	(0.9)	(0.8)
Decrease in Investments	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase in Investments	(0.1)	(0.5)	0.0	0.0	0.0	0.0	(2.9)	(5.0)	(3.0)	(3.0)
Other Investing Activities	0.0	(2.4)	(4.9)	6.0	(6.3)	(4.0)	(0.5)	44.7	0.0	0.0
Cash from Investing Activities	(0.5)	(3.5)	(10.7)	3.6	(6.8)	(6.5)	(8.3)	38.7	(3.9)	(3.8)
Dividends Paid	(1.6)	(1.6)	(3.3)	(1.5)	(3.0)	(1.5)	(0.3)	(0.7)	(1.0)	(1.0)
Inc(Dec) in ST Borrowings	3.1	14.2	(2.5)	(6.0)	0.0	0.0	0.0	0.0	0.0	0.0
Increase in LT Borrowings	0.0	0.0	0.0	0.0	0.0	9.5	15.5	0.0	0.0	0.0
Reimbursement of LT Borrowings	(0.0)	(0.0)	0.0	0.0	(0.0)	(1.3)	(1.1)	0.0	0.0	0.0
Increase in Capital Stocks	13.0	12.0	37.8	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Decrease in Capital Stocks	0.0	0.0	(1.0)	(1.8)	0.0	0.0	0.0	0.0	0.0	0.0
Other Financing Activities	(0.1)	(0.4)	3.5	1.3	(0.0)	0.0	(0.5)	0.0	0.0	0.0
Cash from Financing Activities	14.4	24.2	34.6	(7.8)	(3.0)	6.7	13.7	(0.7)	(1.0)	(1.0)
Net Changes in Cash / ST Invmt	5.1	20.9	22.5	(29.1)	(7.9)	(8.7)	1.3	20.7	(3.0)	(0.6)
Free Cash Flow	(9.3)	(0.6)	(7.3)	(27.6)	1.0	(11.4)	(8.0)	(18.3)	1.0	3.4
Free Cash Flow/Basic Shr	(4.0)	0.0	(2.0)	(9.0)	0.0	(4.0)	(2.6)	(6.1)	0.3	1.1
Cash Flow per Share	(4.0)	0.0	0.0	(8.0)	1.0	(3.0)	1.4	7.7	2.7	2.2

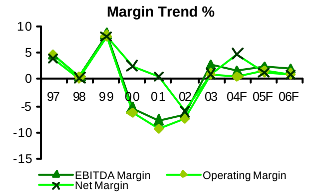
Source: Historic – Bloomberg, Company AR; Forecasts: DBS Vickers

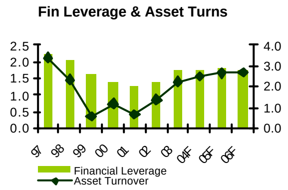
Financials – ROE Drivers

· **Asset turns likely driver of ROE.** We expect asset turns to drive ROE going forward as sales are expected to increase about 20% CAGR over the next three years. Expanding margin and higher bank borrowings could also drive ROE forward.

ROE Drivers







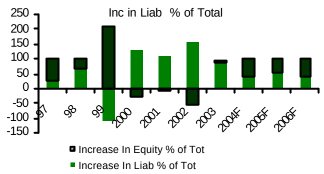
FYE Dec	97	98	99	00	01	02	03	04F	05F	06F
ROE Decomposition										
Sales Growth	1.1	6.7	-67.9	132.4	-47.5	112.6	96.3	39.1	15.0	5.0
Asset Turnover	3.4	2.3	0.6	1.2	0.7	1.4	2.2	2.5	2.7	2.7
Gross Margin	n.a.	n.a.	10.0	9.8	12.0	7.5	10.7	11.0	10.5	9.5
EBIT Margin	4.6	0.4	8.1	-6.3	-9.3	-7.4	2.4	1.1	2.0	1.6
Interest Burden	102.3	138.7	133.5	-59.7	-10.7	57.7	224.9	164.3	119.4	129.5
Pretax Margin	4.7	0.5	10.8	3.7	1.0	-4.3	2.2	0.8	1.8	1.3
Tax Burden	81.2	56.1	73.8	66.8	42.6	140.1	60.0	83.5	78.0	78.0
Profit Margin	3.8	0.3	8.0	2.5	0.4	-6.0	1.3	0.7	1.4	1.0
Return on Assets	13.0	0.7	4.6	3.0	0.3	-8.3	3.0	1.7	3.7	2.7
Financial Leverage	2.2	2.1	1.6	1.4	1.3	1.4	1.8	1.7	1.8	1.8
Return on Equity	28.8	1.4	7.4	4.1	0.4	-11.7	5.5	3.1	6.9	5.1
Return On Capital Emp	24.6	3.8	6.1	3.2	0.2	-9.8	3.5	1.3	4.3	2.8
Activity Ratios										
Inventory Turnover (COGS)	n.a.	n.a.	2.7	5.2	2.1	4.9	7.3	7.1	7.2	7.2
Inventory Days (COGS)	n.a.	n.a.	203.4	70.5	174.1	74.2	49.6	50.6	50.3	49.7
Accounts Receivable Turns	6.6	6.2	2.5	7.4	5.5	10.4	13.3	12.0	12.0	12.0
AR Days	55.4	59.1	217.9	49.7	66.9	35.2	27.0	30.0	30.0	30.0
Gross Fixed Asset Turns	38.3	27.5	6.5	12.2	6.4	13.0	16.8	31.2	33.7	33.6
Net Fixed Asset Turnover	49.7	34.2	7.8	14.8	8.4	19.0	24.1	64.2	85.4	112.4

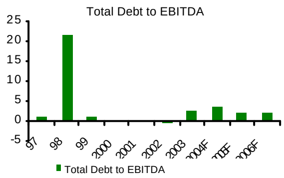
Source: Historic – Bloomberg, Company AR; Forecasts: DBS Vickers

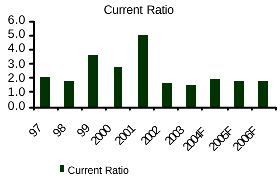
Financials – Capital Structure

· **Low debt levels, higher gearing for expansion likely.** The Group has low debt levels with rising interest coverage. The Group should be able to tap on this source of financing for their expansion program.

Capital Structure







FYE Dec	97	98	99	2000	2001	2002	2003	2004F	2005F	2006F
Sources of Capital										
Net Change Short Term Debt	0.2	16.6	-18.3	-6.0	0.0	7.0	12.5	0.0	0.0	0.0
Net Change Long Term Debt	0.0	0.0	0.0	0.0	0.0	0.2	1.7	0.0	0.0	0.0
NetChngSources ofCap Othr Liab	6.8	4.2	-4.6	11.9	-22.9	33.0	0.0	0.0	0.0	0.0
Increase In Liabilities	7.0	20.8	-23.0	5.9	-22.9	40.2	11.5	14.8	7.9	3.0
Increase In Liab % of Tot	24.6	64.3	-107.7	126.5	109.0	152.1	89.6	40.7	55.1	40.0
Reinvested Earnings	5.4	0.2	3.6	0.7	-1.2	-10.2	2.5	20.6	5.3	3.5
External Equity Financing	16.0	11.4	40.7	-1.9	3.1	-3.6	0.1	0.0	0.0	0.0
Increase In Equity	21.4	11.5	44.3	-1.2	1.9	-13.8	1.2	20.6	5.3	3.5
Increase In Equity % of Tot	75.4	35.7	207.7	-26.5	-9.0	-52.1	6.8	59.3	44.2	59.7
Fixed Charge Coverage										
EBIT to Interest Expense	15.7	0.4	19.8	-18.8	-136.2	-84.4	-21.8	-4.0	-8.1	-6.0
EBITDA Less Cap Exp/Int Exp	15.4	0.2	-0.9	-20.9	-123.9	-85.8	-13.7	-4.4	-8.8	-6.9
Total Debt to EBITDA	0.9	21.1	1.1	0.0	0.0	-0.7	2.5	3.3	1.7	2.0
CFO to Total Debt	-1.1	0.0	-0.2	-540.4	48.4	-1.2	-0.2	-0.8	0.1	0.2
Leverage Analysis										
Assets/Equity	1.9	2.1	1.3	1.4	1.1	1.6	1.8	1.7	1.8	1.8
LT Debt to Total Capital (%)	0.0	0.0	0.0	0.0	0.0	0.3	1.3	1.0	1.0	0.9
Debt To Market Cap Ratio	0.1	0.4	0.0	0.0	0.0	0.1	25.3	25.8	25.8	25.3
Total Debts to Total Capital	17.4	33.5	6.0	0.1	0.0	8.1	20.6	17.0	16.2	15.7
Total Debt to Total Assets	11.3	24.1	4.9	0.0	0.0	5.5	14.7	11.8	10.9	10.5
Total Debt (ST & LT Debt)	7.8	24.4	6.0	0.1	0.0	7.2	21.4	21.4	21.4	21.4
Liquidity Analysis										
Cash Ratio	0.3	0.6	2.1	0.8	1.6	0.2	0.2	0.5	0.4	0.4
Current Ratio	2.0	1.7	3.6	2.7	5.0	1.6	1.5	1.9	1.8	1.8
Cash & Equiv to CA (%)	12.9	32.2	59.8	28.7	31.2	14.1	14.0	24.3	20.5	19.4
Op Inc to Current Liab	0.3	0.0	0.2	-0.3	-0.6		0.1	0.0	0.1	0.1
Op Inc to LT Debt	473.6	59.7	215.7	-258.4	-257.7	-54.9	1.7	1.2	4.1	2.9
Op Inc to Total Debt	1.1	0.0	0.9	-202.3	-185.0	-1.7	0.2	0.1	0.4	0.3
Working Capital S$m	31.1	37.3	68.0	60.6	50.5	28.5	28.2	63.9	67.1	68.9

Source: Historic – Bloomberg, Company AR; Forecasts: DBS Vickers

Valuation

· **Sector average PE a better measure.** Volatile earnings over the last five years, prior to FY03, have rendered the use of historical PE averages inconclusive for valuation purpose.

Instead, we will use sector average PE as a reference point. The company's peers in the distribution segment, include WPG, Achieva, Ultro, Flextech and Unidux. Sector average for this division is at 12.3x. Our target multiple of 12.3x is based on the sector average PE multiple.

Our 12 month target price, based on FY05 earnings, is 29.5c. This target price represents a 7% upside from the last traded price of 27.5c. If Wintech is divested at an average price of NT$33, cash proceeds per share could amount to about 15c.

Precision Engineering Companies Financials

Plastic	Market Cap (S$m)	Sales FY04 (S$m)	Gross Margins (%)	Operating Margins (%)	Net margins (%)	3-yr average ROA (%)	3-yr average ROE (%)
Serial System	84.8	324.8	7.45	-7.40	0.98	-1.68	-2.40
WPG Int'l	52.8	301.9	4.62	0.94	0.63	2.16	6.65
Achieva	93.8	521.3	4.68	-0.28	0.52	1.90	6.28
Unidux	10.7	86.9	6.32	0.79	-2.40	4.80	18.54
Flextech	81.8	372.0	9.61	-0.79	0.81	-5.92	-59.64
Ultro Technologies	28.4	163.2	3.26	-2.42	1.52	-3.80	-8.25

Source: DBS Vickers, Bloomberg, IBES Estimates, Share prices as at 28th Apr 2004

Peer Comparison – Electronics Components Distribution

Sector Peers	Bloomberg Ticker	Current P/ Sales (x)	P/ Book (x)	Trailing PE (x)	5-yrs Ave PE (x)	5-yrs Ave P/B (x)	5-yrs Ave P/S (x)
Serial Systems	SERL SP	0.51	1.08	26.7	165.2	2.3	1.7
WPG Int'l	WPG SP	0.10	1.19	16.4	14.0	0.8	0.2
Achieva	ACH SP	0.18	1.71	31.7	19.2	2.2	0.2
Unidux	UNDX SP	0.08	0.74	-	11.5	1.3	0.2
Ultro Technologies	UT SP	0.17	0.64	11.5	31.8	3.2	0.5
Flextech	FLEX SP	0.20	11.55	25.1	16.9	7.4	0.7
				Sector Average	43.1	2.9	0.6
				Sector Average (excl outliers)	12.3	0.9	0.3

Source: DBS Vickers, Bloomberg, Share prices as of 28 Apr 2004

Historical Valuation Serial System

Metric	5-yr High	5-yr Low	5-yr Average	Current	FY04F	FY05F
PE	724.4	12.1	368.3	26.7	12.3	12.3
P/B	9.5	0.7	5.1	1.1	0.9	0.9
P/S	5.9	0.2	3.1	0.5	0.3	0.3

Source: Bloomberg, Share price as of 28th Apr 2004

Valuation Metrics

	Target Multiple (x)	Target Price - 2004F (S cts)	Target Price - 2005F (S cts)
PE (x)	12.3	12.5	29.5
P/B (x)	0.9	28.5	33.0
P/S (x)	0.3	37.5	44.0

Source: DBS Vickers, Bloomberg