

22 March 2007

Initiate Coverage

Current S\$0.51
 Target S\$0.63

FUNDAMENTALS
Good
VALUATION
Attractive
TECHNICALS
Neutral

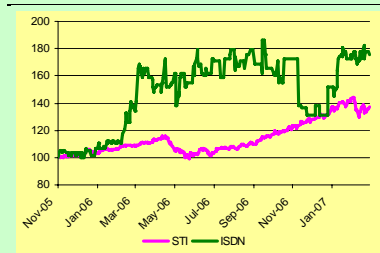
MAIN ACTIVITIES

A precision engineering solutions company specialising in designing, manufacturing and supplying of integrated motion control solutions used in industrial equipment in various manufacturing industries e.g. semiconductors, general automation, manufacturing of hard disk drives, industries using surface mount technology.

ISSUE STATISTICS

No of shares: 158.8m
 Market cap: S\$81.0m
 Year Hi/Lo: S\$0.54/S\$0.38
 Listing Bourse: SGX-Mainboard
 Listing Date: November 2005

SHARE PRICE v STI



Source: SIAS Research

ANALYST

Alfie Yeo
alfie@siasresearch.com

ISDN Holdings

Motion control across industries

BUY

ISDN Holdings is a precision engineering solutions company specializing in the designing, manufacturing and supplying of motion control components in industrial equipment used across many industries.

The company, which derives 45% of sales from China and 55% from South-east Asia, is positioning itself for accelerated growth in China. It has plans to expand its sales offices there from 35 in FY05 and 42 at the end of FY06 to a total of 50 by end FY07.

It is also centralizing its manufacturing operations from various locations such as Suzhou, Beijing and Shanghai to one location in Wujiang, Jiangsu Province, by FY07, with a view to maximizing operational efficiencies and improving profitability. Net profit margins are expected to improve from 9.4% in FY06 to 10.4% in FY07 and 11.3% in FY08 as result of the consolidation.

We are expecting earnings growth to accelerate in FY07, with earnings forecast to grow by 41% to S\$8.9m or 5.6 cents per share, as revenue growth picks up to 28% to S\$85.4m.

Based on peer comparison, we determined that ISDN may trade up to 12.3x current year earnings. Based on our discounted cashflow model, we separately determined that the company may be worth S\$91.4m in market cap – 13% more than the current market capitalisation of S\$81.8m. A blend of the two valuation approaches suggests a target price of S\$0.63 – which represents a 24% upside from current price.

Financial Summary

S\$m (Y/E Dec)	FY05	FY06	FY07F	FY08F
Turnover	54.9	66.6	85.4	106.1
EBITDA	6.0	6.7	8.5	11.5
Net profit	6.0	6.3	8.9	12.0
Dil EPS (Scts)	3.8	3.9	5.6	7.5
EPS Growth (%)	(16.7)	4.7	41.4	34.9
P/E (x)	13.5	12.9	9.1	6.8
P/BV (x)	4.3	3.5	2.4	1.9
Div yield (%)	3.5	3.9	4.9	6.9
ROE (%)	31.7	28.0	27.3	28.1
Net Gearing (%)	Cash	Cash	Cash	Cash
Current ratio (x)	1.7	1.9	2.1	2.2

Source: Company, SIAS Research

Refer to last page for important disclaimer

TABLE OF CONTENTS

Company	3
Investment Merits	7
Risks	10
Financials	11
Forecasts	12
Valuations	13
Financial Tables & Ratios	14
Appendix I – Key Management & Shareholders	15
Disclaimer	16

COMPANY

Has over 300 staff in 42 locations servicing over 3,000 customers

Precision engineering company specialising in motion control and industrial computing

History and background: ISDN Holdings has humble beginnings in 1987 as a small trading and distribution company in Singapore dealing in “servo motors” and related components. As it marks its 20th anniversary in 2007, the company has grown into a formidable integrated engineering solutions provider with over 300 employees in 42 offices, servicing more than 3,000 customers through over 500 suppliers.

ISDN is today a precision engineering solutions company which provides integrated motion control solutions and industrial computing solutions to a wide range of industries e.g. Medical, Robotics, Factory Automation, Oil & Gas, Water Treatment, Manufacturing, Hard Disk Drive and Semiconductor Industries.

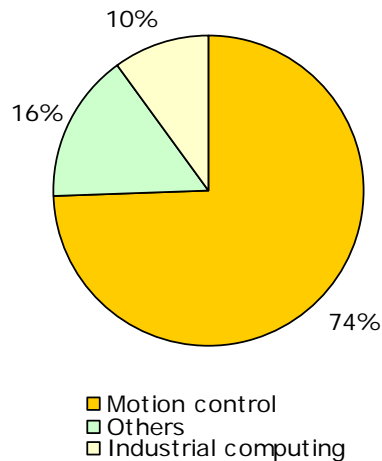
The Company designs and custom-builds engineering solutions and industrial computing solutions for industrial customers as well as for manufacturers of specialized equipment.

It has built a strong sales and distribution network for motors, components and related engineering products, with after-sales technical and product support services.

Two business segments: ISDN’s business is divided into two main divisions:

- 1) Engineering Solutions Division (90% of FY06 sales); and
- 2) Industrial Computing Division (10% of FY06 sales).

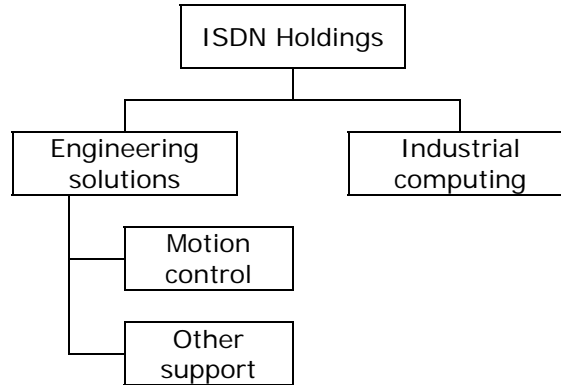
Figure 1: Revenue segment FY06



Source: Company

In Industrial Computing, the less significant of the two divisions, ISDN develops solutions to meet its customers' industrial computing needs. It customises and assembles industrial computer systems as well as installs the necessary software.

Figure 2: Business segments



Source: Company

Extensive capabilities extend from design and testing to manufacture and supply

Integrated capabilities extend from design and testing to manufacture and supply: In the Motion Control Division, the company designs, assembles and installs motion control systems for customers from a wide range of industries e.g. semiconductor, general automation, manufacturing and hard disk drive manufacturing.

It has diverse, well-integrated capabilities to design, prototype, procure, assemble and supply high value added motion control components that form an integral and critical part of customers' equipment, production process or their end products. Its capabilities extend to systematic controls, testing, installation and commissioning, as well as provision of continuing technical support as part of its after-sales services.

It has also helped a global medical device company to develop a new radiotherapy simulator that can mechanically move and position a patient with precision. Also, in medical devices, ISDN has worked with a China-based manufacturer to design an insulin pump that can dispense a precise dose of insulin at a precise timing to a diabetic patient.

ISDN is a sizeable player in a field of small players

Company has diverse customer base across many growth industries

Engineering support services cover gears, gear boxes, laser equipment: Beyond designing and supplying motion control components, ISDN also provides engineering support in related areas such as industrial vision, precision gears, gear boxes, and laser technologies applied in precision measurement and cutting. It is additionally engaged in the assembly or manufacture of special purpose motors and gears, and the trading and distribution of motors, components and other spare parts.

ISDN has advantage of scale over Asian competitors: Within Asia, most of ISDN's competitors are small, private companies from Singapore, Malaysia, Thailand, Hong Kong and China, typically with annual sales of under S\$10m. That makes ISDN, with annual sales of S\$60-85m, one of the largest integrated precision engineering companies of its kind in the region.

Another possible source of competition is new entrants into Asia from Europe or North America such as Emerson Electric, Rockwell Automation, Schneider Electric, Allied Motion Technologies and SFA Engineering Corporation. Competition from such non-Asian players, however, tends to be blunted by the high cost of setting up extensive, and far-flung operations in Asia.

Diversified clientele: ISDN has a diversified client base, with companies in semiconductors accounting for 41% of sales and companies involved in general automation accounting for another 38% of sales. (See Fig 3.) Other key industries where ISDN find its customers are manufacturing and manufacturing of hard disk drives.

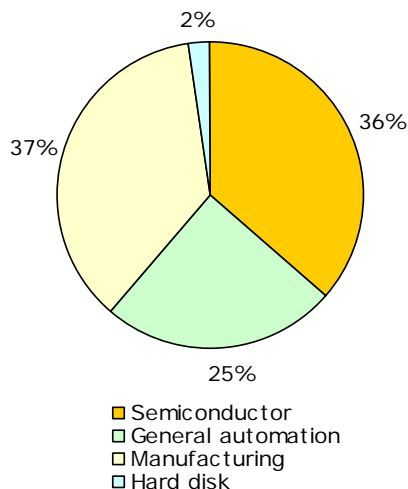
Given the advent of automation in general and industrial robotics in particular, ISDN has established clientele in an ever-widening range of industries that now includes aerospace and medical devices and medical equipment too.

Figure 3: Customer base

Industry	Applications	Customers
Medical Equipment	Collimator for cancer radiation	Top Chinese manufacturers eg Topslane, YPSun
Medical Consumer	Insulin pumps	Top Chinese manufacturers eg. Fornia, Dintao Yiliao
Manufacturing	Line assembly automation	Amtek
Semiconductor	PCB mounting systems, ultra-fast feeders, SMT placement equipment, wafer processing systems.	AMD, Kulicke & Soffa, ASM
Aerospace	Aircraft maintenance (tooling for rapid sheet metal parts production)	AVIC I, China's 1 st aerospace industrial company

Source: Company

Figure 4: Industrial mix FY06



Source: Company

INVESTMENT MERITS

Growth of China's manufacturing capex means ample opportunities for ISDN

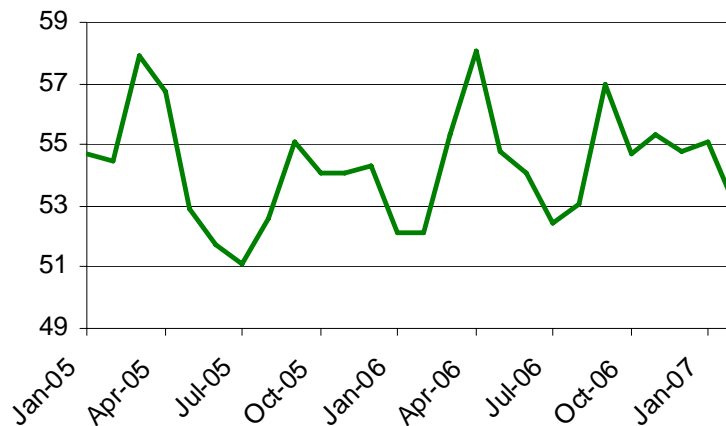
Domestic and foreign companies are increasing automation

Economic and manufacturing industry outlook supports sustained growth of ISDN's business: Increases in capital spending and equipment purchases in the manufacturing industry, particularly in China, will directly benefit ISDN's business of providing motion control systems in a wide range of manufacturing applications.

China's economy grew by 10.7% to US\$2.7t in 2006 and is projected to grow a further 9.0% or US\$241.2b in 2007, according to official sources quoted in the official Xinhua News Agency. In the longer term, China's economic growth is estimated to stay in the 7 to 8% range over the next 10 years, driven mainly by manufacturing activity.

China's manufacturing activities have been growing rapidly, stimulating demand for new capital equipment and capital spending. This, in turn, has presented ISDN with a growing market in general automation and manufacturing into which to sell its capabilities. This demand is driven by domestic and multinational companies in China upgrading their manufacturing plants through automation to boost productivity as well as niche end product companies who require its specific engineering solutions.

Figure 5: China Manufacturing PMI



Source: Bloomberg

Increases in sales network alone could grow revenue by 20%

ISDN has set its sights on China market with plans to open up to 50 sales offices: ISDN is positioning itself to do more business in China, a market from which it derived almost S\$30m of sales or 55% of total sales in FY06. It has expanded its sales network in China from 35 offices in FY05, to 42 at the end of FY06. It has plans to increase the total number of sales offices to 50 by the end of FY07.

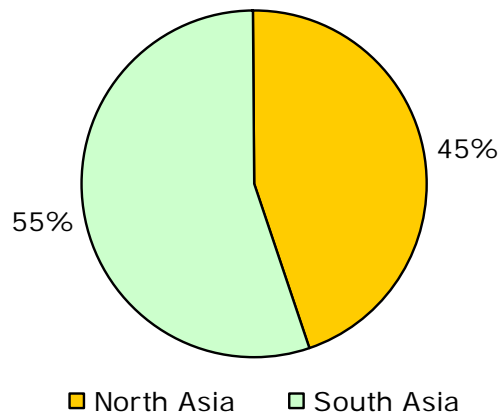
Figure 6: China Sales analysis

	FY05	FY06	FY07F
Revenue (S\$m)	21.9	29.8	35.5
Offices	35	42	50
Revenue growth (%)	16.5	35.8	35.5
Sales/office (S\$m)	0.63	0.71	0.71

Source: Company

Expanding sales network can raise overall sales by 20% in FY07: Assuming that each sales office were to generate S\$0.7m of sales, about the same as in FY05 and FY06, the expanding China sales network could continue to deliver another 35% growth in China sales in FY07. This would be equivalent to a 19.5% increase in overall sales at the group level, with China sales accounting for an important 55% of group sales.

Figure 7: Geographical mix FY06



Source: Company

Strategic alliances add to capabilities

Growing through partnerships and alliances: One of ISDN's growth strategies has been to establish manufacturing joint ventures with principals such as Maxon and Eisele in Asia. The JVs with Maxon and Eisele have expanded the company's capability, skill sets and market reach. As the management aims to become a one-stop engineering solutions provider to its customers, we believe that there is more room for it to enhance its capabilities through the acquisition of other related businesses.

Consolidating operations in one location will raise efficiencies, boost margins

Low-volume, high value, wide mix business insulates ISDN from volatility

Consolidating operations to enhance efficiency: ISDN has purchased an industrial land in Wujiang, Jiangsu province, China to develop into a Centre of Excellence where its operations, JVs and associates will be housed in one single location. We believe that this will enhance its operating efficiency and will as a result improve its financial performance, particularly in terms of gross and operating profit margins.

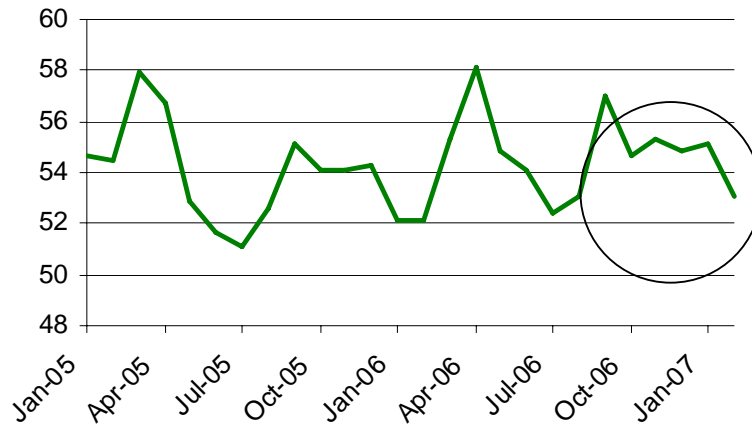
Resilient business model: ISDN addresses a high-mix, low-volume, high value-added market segment with customized needs. It provides high value-added solutions and supplies assembled components, which together represent a relatively small but critical part of its customer's production process and their end products. To be successful, demand has to be sufficiently broad-based and of a critical scale to generate spontaneous and sustained orders for an organization like ISDN. The Company has over 3,000 customers with 80% of them being repeat customers. This base has been growing at 15%-20% annually since 1987. This unique business model insulates the Company from market volatility as (i) demand is sufficiently broad-based, and (ii) revenue exposure is diversified with a high mix.

Exposed to ups and downs of manufacturing

RISKS

Any slowdown in manufacturing may hurt ISDN's business flows: The biggest macro-economic risk would be any slowdown in the manufacturing activity in China. Since 2005, China has seen growth in the manufacturing sector with the PMI above the 50 level. As long as China's manufacturing sector continues to grow, capital spending will remain buoyant. A slowdown in the manufacturing cycle would reduce sales activities from capital expansion revenue to a more maintenance revenue pattern, which would still benefit ISDN.

Figure 8: China Manufacturing PMI



Source: Bloomberg

Semicon exposure high but declining

Exposure to semiconductors high but declining: Figure 3 shows that the semiconductor industry contributes to almost half of the group's revenue in FY06. The semiconductor industry is well known for its volatility and short product lifecycles. For ISDN, profit margin from the semiconductor sector is also slightly lower compared with profit margins in other segments. The group's exposure to this sector has been declining, from 44% in FY05 to 36% in FY06 as it accelerates revenue growth in its manufacturing and automation segments. This favourable trend will likely continue as ISDN establishes a track record in other industries.

FINANCIALS

Growing revenues but margins have fallen

Profit margins stable as revenue keeps growing: Revenue has been growing at a CAGR of 24.5% from S\$53.5m in FY04 to S\$66.6m in FY06. Gross profit margins have remained stable at 27%-30% during this period, while operating margins have fallen due to increasing operating costs, arising from factors such as the setting up of more and more sales offices.

Figure 9: Profitability and Margins

S\$m	FY04	FY05	FY06
Revenue	53.5	54.9	66.6
Operating profit	7.0	6.7	6.9
Net profit	5.9	5.9	6.2
Revenue growth (%)	37.1	3.2	20.3
Net profit growth (%)	92.1	0.5	4.6
Gross margin (%)	27.7	30.6	29.6
Operating margin (%)	13.1	12.2	10.4
Net margin (%)	11.0	10.7	9.3

Source: Company, SIAS Research

Strong balance sheet supports plans

Balance sheet is strong, can support sales network expansion plans: The company has S\$5.5m of borrowings and has a net cash balance equivalent to 1.3 cents per share. Working capital is strong with the current ratio at 1.9x. With such a strong balance sheet, the company can proceed with current expansion plans without incurring any significant stress on its finances.

Based on results of the last few years, the company has been generating attractive returns on equity of about 30% in FY06 and in FY05.

Figure 10: Balance Sheet

	FY05	FY06
Net gearing (%)	Cash	Cash
Current ratio (x)	1.7	1.9
ROE (%)	31.2	28.0
Net Cash (S\$m)	7.7	2.1
Net Cash/Sh (Scts)	4.8	1.3

Source: Company, SIAS Research

Free cash flows falling due to capex

Cashflow improving, but cash has been applied to fund expansion: There has been a trend of improving operating cashflow. However, owing to increased capital spending, free cash generation has fallen from 0.9 cents per share in FY05 to 0 cents in FY06.

Cash and cash equivalents amounted to S\$7.6m in FY06, down from S\$11.9m at FY05. Approximately S\$4m were deployed towards investing and financing activities during FY06 as the company expanded in China and the Asian region.

Expansion of sales network, consolidation of manufacture operations will drive growth in FY07

Figure 11: Cashflows

S\$	FY05	FY06
Op Cashflow	2.5	2.4
FCF	(1.0)	(2.4)
FCF/share (Scts)	0.9	0.0
NAV/share (Scts)	11.9	13.9

Source: Company, SIAS Research

Net asset value per share improved from 11.9 cents in FY05 to 13.9 cents at the end of FY06.

FORECASTS

Forecasts: With the expansion of its sales efforts through the continuous expansion of sales offices to take advantage of the growth of China's manufacturing sector, we can expect revenue to grow by 28% in FY07, a slightly brisker pace than FY06's 21%.

We expect profit margins to improve at the gross, operating and net levels with plans to bring its entire manufacturing operations under a single facility in Wujiang, Jiangsu Province, China. This centralization of manufacturing location will enhance operating efficiency and result in better profitability.

As a result, we are projecting a 41% jump in earnings to S\$8.9m – representing a massive acceleration from FY06's muted 5% growth when gross profit margins were under pressure.

Figure 12: Key forecasts

S\$m	FY05	FY06	FY07F	FY08F
Revenues	54.9	66.6	85.4	106.1
EBITDA	6.0	6.7	8.5	11.5
Net profit	6.0	6.3	8.9	12.0
EPS (Scts)	3.8	3.9	5.6	7.5

Source: Company, SIAS Research

VALUATIONS

Similar issues across Asia suggest a 12.3x PER

There is a lack of comparable peers in the Singapore stock market. So, we comb the region's exchanges and elsewhere to identify a list of close comparables. Our basket of American, European, Korean and Japanese stocks are trading at 12.3x current-year earnings. At this valuation, ISDN would trade at S\$0.69 – 35% higher than current share price of S\$0.51.

While there is no formal dividend policy, ISDN has been paying out dividends in excess of 40% of net earnings since it listed. At the current share price of S\$0.51, the proposed dividend of S\$0.0183 for FY06 translates to a dividend yield of almost 3.6%.

Figure 13: Listed Comparables

Company	Price Local	P/E	P/E	Yield	ROE
		FY07 (x)	FY08 (x)	FY07 (%)	FY07 (%)
Yasakawa Electric (JPY)	1335	17.3	15.9	0.4	27.1
Emerson Electric (USD)	43.06	16.6	14.8	2.1	24.0
Rockwell Auto (USD)	61.30	16.4	14.5	1.5	28.2
Schneider Elec (EUR)	90.91	14.1	12.3	0.0	15.4
SFA Engineering (KRW)	33100	6.7	6.0	3.3	27.9
ISDN	0.51	2.8	2.8	3.5	28.1
Average		12.3	11.1	1.8	25.1

Source: SIAS Research, Bloomberg

DCF model priced stock at 56.5 cents

Based on our DCF model, we derived a valuation of S\$0.565 for ISDN, implying a price multiple of 10.3x and a potential upside of 13% over ISDN's current market price of S\$0.51.

Blended approach suggests a target price of S\$0.63

Taking a blended valuation approach (DCF target price of S\$0.565 and target price of S\$0.69 based on FY07 P/E multiple of 12.3x) with an average of the two, we determined a fair theoretical valuation of S\$0.63 for ISDN. At this price, the stock offers a 24% potential upside over current share price.

FINANCIAL TABLES AND RATIOS

(Y/E Dec)	FY05	FY06	FY07F	FY08F
Profit & Loss (\$m)				
Turnover	54.9	66.6	85.4	106.1
EBITDA	6.7	6.9	8.9	11.9
Pretax	7.5	7.6	10.6	14.0
Earnings	6.0	6.3	8.9	12.0
EPS (fully diluted - Scts)	3.8	3.9	5.6	7.5
EPS (fully diluted - Scts)	3.8	3.9	5.6	7.5
Balance Sheet (\$m)				
Long Term Assets	7.0	10.0	12.5	15.0
Current Assets	33.3	32.6	44.8	57.0
Current Liabilities	19.6	17.3	21.7	26.1
Long Term Liabilities	1.4	2.4	2.6	2.8
Total Equity	18.9	22.4	32.5	42.5
Cash Flow (\$m)				
Operating Cash Flow	2.2	1.8	4.7	7.1
Investing Cash Flow	4.9	(2.7)	(20.5)	(18.0)
Financing Cash Flow	4.8	(3.4)	21.4	15.7
Financial Ratios				
Revenue Growth (%)	2.6	21.4	28.2	24.3
Operating Profit Growth (%)	(4.7)	3.3	29.2	33.8
Earnings Growth (%)	0.4	4.7	41.4	34.9
EPS Growth (%)	(16.7)	4.7	41.4	34.9
EBITDA Margin (%)	12.2	10.4	10.4	11.2
Net Margin (%)	10.9	9.4	10.4	11.3
Current Ratio (x)	1.7	1.9	2.1	2.2
Book value per share (Scts)	11.9	14.4	20.8	27.2
Net (Debt)/ Cash per share (Scts)	4.8	1.3	4.7	7.7
Net Debt / Equity (%)	Cash	Cash	Cash	Cash
Dividend payout ratio (%)	47.8	50.7	44.8	46.5
Return on Equity (%)	31.7	28.0	27.3	28.1
Return on Asset (%)	14.8	14.7	15.5	16.6
Debtor Days	87.1	74.3	74.5	74.5
Creditor Days	64.1	58.7	58.7	58.7
Inventory Days	72.0	81.1	81.1	81.1
Cash Conversion Cycle	95.0	96.7	96.9	96.9
Valuations				
Price to sales (x)	1.5	1.2	1.0	0.8
PER (x)	13.7	13.1	9.2	6.8
Price to book (x)	4.3	3.6	2.5	1.9
Dividend Yield (%)	3.5	3.9	4.9	6.8

Source: Company, SIAS Research

Appendix I – Key Management & Shareholders

Key Management

MD and President	Mr Teo Cher Koon
Exec Dir & SVP (PRC Operations)	Mr Kong Deyang

Source: Company

Major Shareholders

Teo Cher Koon	56.9%
Stutz Hans Rudolf	7.6%

Source: Company

Teo Cher Koon is the group's Managing Director and President. He joined Servo Dynamics Pte Ltd ("Servo Dynamics") in 1987. He has more than 20 years of experience in the engineering solutions and industrial computing business and is experienced in all aspects of the business. Mr. Teo is responsible for formulating corporate strategies, general management and providing technical advice to ISDN and is particularly active in procurement and the marketing activities of the Company. Mr. Teo is instrumental in sourcing new products and technology and securing new customers for the Company. Mr. Teo obtained his Bachelor of Engineering (Mechanical) from the National University of Singapore in 1987. Before that, he was a sales engineer in a local engineering product distribution company, K L Chua & Brothers Pte Ltd from 1981 to 1984.

Kong Deyang is Executive Director and Senior Vice President (PRC Operations) in charge of all aspects of ISDN's business operations in the PRC, from charting and developing growth policies for the PRC businesses to managing the daily operations in China. He has been with the Company since 1995. Mr. Kong began his career in a PRC government linked company involved in nuclear R&D as supervisor and was later promoted to senior R&D engineer for high-speed cameras in 1982. From 1994 to 1995, he became a sales manager in the same company for CNC computerized quilting machines. Mr. Kong graduated from the Beijing Technical University in 1982 with his Bachelor in Applied Physics and was awarded the "Young and Middle-aged State-ranking Experts with Outstanding Contribution" Award by the PRC state council in 1994.

DISCLAIMER

SIAS Research Pte Ltd received compensation for conducting this valuation research. The estimated fair value of the stock is statement of opinion, and not statement of fact or recommendation on the stock.

As of the date of the report, the analyst and his immediate family do not hold positions in the securities recommended in this report.

This research report is based on information, which we believe to be reliable. Any opinions expressed reflect our judgment at report date and are subject to change without notice. This research material is for information only. It does not have regards to the specific investment objectives, financial situation and the particular needs of any specific person who may receive or access this research material. It is not to be construed as an offer, or solicitation of an offer to sell or buy securities referred herein. The use of this material does not absolve you of your responsibility for your own investment decisions. We accept no liability for any direct or indirect loss arising from the use of this research material. We, our associates, directors and/or employees may have an interest in the securities and/or companies mentioned herein. This research material may not be reproduced, distributed or published for any purpose by anyone without our specific prior consent.