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ASIA/PACIFIC

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Taiwan Discovery

Phison (8299.TWO) Analyst Meeting Key Takeaways

Conclusion: Management expects 2008 revenue to be down Y/Y. November/December sales will decline M/M after 22% M/M growth in October. For 2008, management aims for NT$500mn or ~NT$4.40 EPS on Q/Q profits growth in 4Q08 (October gross margin improved to ~7% from 3% in 3Q08; continued gross margin improvement in November). Phison is trading on 13x 2008e consensus P/E and 1.3x 3Q08 P/B.

What's New: Phison reported 3Q08 EPS of NT$0.57 (net profit NT$71mn) vs NT$1.05 in 2Q08 and NT$5.24 in 3Q07. 3Q08 revenue NT$5.2bn, +5% Q/Q and -11% Y/Y. 3Q08 gross margin 3.2%, down 700bps Q/Q and down 1000bps Y/Y on reduced inventory.

Value Added Data: 1. 3Q08 USB controller shipment 32.5mn units, +29% Q/Q; +78% Y/Y. Memory Card controller shipment 39.6mn units, flat Q/Q; +162% Y/Y. Solid State Disk (SSD) controller shipment 4.8mn units, +153% Q/Q from when it started in 2Q08. 2. Phison reduced inventory to NT$1.3bn in October; vs September NT$1.5bn; June NT$2.4bn. 3. Phison shipped 4mn units of 3 bits-per-cell Flash controllers in 3Q08, used for ~50% of Toshiba's 56nm 3 bits-per-cell NAND flash output.

Operational Insights: Pending IP Issue with SanDisk – SanDisk filed charges against Phison with US International Trade Commission (ITC) and US District Court (Western District of Wisconsin) in October 2007 for four patent infringements. ITC held hearing last week; management expects favorable ruling to Phison. It has booked NT$100mn legal expenses year-to-date.

SSD Controller Progress: Phison plans to use Parallel Advanced Technology Attachment (PATA) controller for SSD for low-end (32 GB). It will mass produce Serial Advanced Technology Attachment (SATA) controllers in 1Q09 (after 6 months delay) on 90nm technology for high-end 64/128GB SSD. It expects NAND Flash makers to aggressively lower Flash ASP to increase SSD penetration in notebooks.

Stock Data

Rating	NOT RATED
Ticker (Reuters)	8299.TWO
Price (Nov 10, 2008)	NT$53.20
Market Cap (NT$ mn)	6,743
Foreign Ownership (%)	28.64%
Outstanding Shares (mn)	126
3M/6M/12M Rel. Perf. (%)	-27 / -28 / -26
6M Avg. Daily Turnover (NT$ mn)	399

Company Description
Phison was established in 2000, it designs and sell NAND Flash controllers and provide system integration service to its customers. It partners with Toshiba and Hynix for NAND Flash Supply.

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3 bits-per-cell Trend: Phison mentioned its 43nm 3-bits-per-cell Flash controller has passed Toshiba's qualification. Management mentioned Toshiba will begin mass production of 43nm 3-bits-per-cell NAND Flash technology in 1Q09. Phison will be the only controller supplier besides Toshiba's internal solution. Phison will debut 43nm 3-bit-per-cell controller for USB Pen Drives and Flash Cards in 1Q09 (50% of controller shipped will have 3 bit-per-cell capability).

NAND Flash Market Update: Phison expects NAND flash over-supply in 4Q08/1Q09. It thinks Samsung has two months inventory. Management expects NAND Flash vendors to hold back on capacity expansion and focus on process migration. Phison thinks Samsung will likely skip 42nm and start 37nm instead on cost/yield; Hynix will skip 48nm technology and plans for 41nm technology mass production in 1Q09. Toshiba is already in mass production of 43nm 16 gigabit NAND Flash (~500 dies per 12" wafer) and will sample 32 nm NAND flash by February 2009.

Background: Phison, established in 2000, designs and sells NAND Flash controllers and provides system integration services to customers including partnerships with Toshiba, Hynix, Kingston, etc. In 2007, it shipped 142mn units of Flash controller ICs and leads the USB Flash controller market with 35% market share.

Alliance with Toshiba, Hynix, Kingston: Toshiba is the largest Flash provider for Phison and holds 16% of Phison's share. Phison is one of Tohsiba's top five customers and targets to be top three in 1H09 with market share gain. Hynix and Kingston invested in Phison's private placement in June 2008, at ~2% and ~1% of outstanding shares, respectively. Phison's strategy is to become NAND Flash maker controller supplier and customer at the same time. It will produce finished NAND products but has no plans for branding, to avoid conflict of interest.

Exhibit 1

Summary of Consensus View: Phison

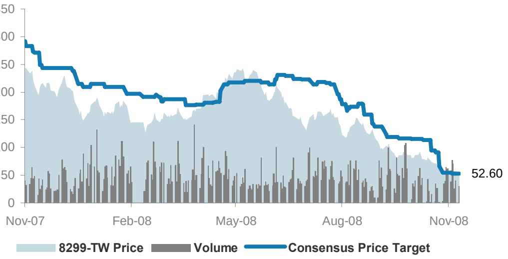
Phison Electronics Corp.

8299-TW

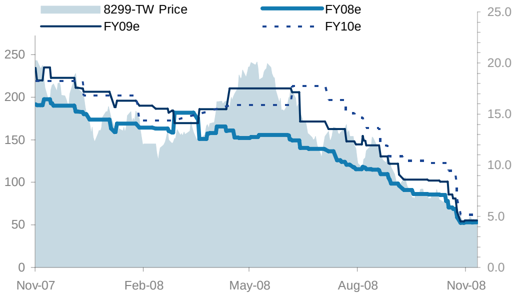
Consensus recommendations

Current Price		Avg Price Target
53.2	-1%	52.6

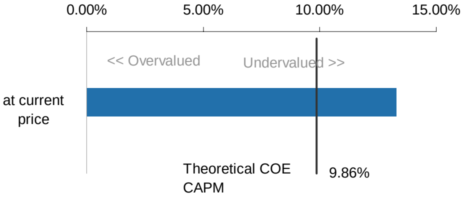
Price vs Average Price Target



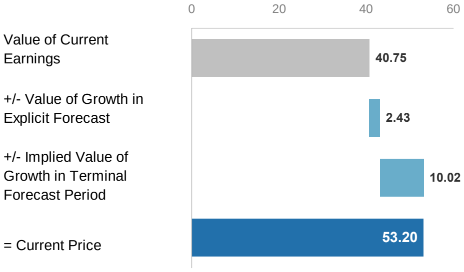
Price vs. Annual EPS Estimates (FY08-10)



Implied cost of equity



Current Value of Future Earnings



Sector Yardstick

Phison Electronics Corp.

key metrics ranked relative to Information Technology sector

	Phison Electronics Corp. percentile range (vs. peers) 0–20	20–40	40–60	60–80	80–100%	Peer Mean
Price / Volatility						
12m price perf				-74.8%		-13.8%
3m price perf	-61.2%					-48.8%
1m price perf		-32.8%				-69.2%
12m hist vol				67.8%		71.6%
Growth						
Sales 1yr hist					62.7%	17.6%
EBIT 1yr hist					38.7%	-44.3%
EPS (1 yr fwd)			-61.3%			-324.9%
EPS (2 yrs fwd)	-36.5%					21.6%
Valuation						
P/E (1 yr fwd)					12.1x	4.0x
P/E (2 yrs fwd)					11.6x	4.3x
P/Book					4.4x	2.4x
EV/Ebitda				2.5x		3.7x
Profitability						
ROE					35.6%	8.3%
EBITDA margin			7.9%			7.2%
EBIT margin			7.6%			5.7%
Net inc. margin					6.9%	4.0%
Cash Flow						
FCF/Market Cap				23.9%		8.6%
FCF/Sales				7.6%		5.8%
Liquidity						
Cash ratio			100.7%			103.4%
Quick ratio			183.2%			209.5%
Current ratio			247.8%			276.6%
Financial Leverage						
Debt/Assets	0.0%					15.1%
Debt/Equity	0.0%					29.8%
Net Debt/Equity	-55.2%					-7.8%

Source: Morgan Stanley Research, Factset data

Exhibit 2

Phison Financial Summary

All values in millions except per share data - (Taiwan Dollar)

Income Statement

	12/2004	12/2005	12/2006	12/2007
Net Sales	3,991	6,308	12,452	20,258
COGS	3,424	5,316	10,744	17,950
Gross Profit	568	992	1,708	2,309
SG&A	179	354	515	656
EBIT	361	580	1,104	1,531
Net NO Income	0	(0)	0	0
PBT	361	580	1,104	1,531
Taxes	12	(10)	32	136
Net Profit	348	590	1,071	1,395
EPS	3.71	6.03	9.79	11.8
DPS	1.74	2.59	3.18	5.81

Balance Sheet

	12/2004	12/2005	12/2006	12/2007
Cash & Equivalents	383	406	1,136	1,914
Marketable Securities	97	389	349	864
Acct Receivable	685	1,106	2,164	1,838
Inventories	230	638	1,499	1,783
Total Current Assets	1,396	2,539	5,148	6,399
PP&E	20	29	78	535
Goodwill	0	0	0	0
Amortizable Intangibles	8	20	27	46
Other Assets	144	284	536	776
Total Fixed Asset	172	333	640	1,357
Total Assets	1,567	2,872	5,788	7,756
Accounts Payable	631	856	2,649	2,411
Other Accrued Expenses	50	146	183	208
Income Taxes Payable	5	20	86	112
Deferred Revenue	0	0	0	0
Deferred Taxes	0	0	0	0
Total Current Liabilities	686	1,022	2,918	2,731
L/T Debt	0	0	0	0
Minority Interest	0	0	0	0
Other Liabilities	53	80	23	29
Total L/T Liabilities	53	80	23	29
Total Liabilities	739	1,102	2,941	2,760
Preferred Equity	0	0	0	0
Shareholders' Equity	828	1,770	2,847	4,997
Liabs+Shr'hlders Eq	1,567	2,872	5,788	7,756

Cash Flow Statement

	12/2004	12/2005	12/2006	12/2007
Cash Flow From Operating				
Net Income	348	590	1,071	1,395
Dep & Amort.	14	29	40	68
Chg in WC	1	(492)	(23)	(146)
Chg in Other Liabs	(18)	(132)	(250)	(121)
CF from Operations	345	(5)	838	1,195
Cash Flow from Investing				
Capital Expenditures	(14)	(11)	(66)	(482)
Change in ST Investments	(44)	292	(40)	515
Other Investing Cash Flow	28	(310)	(62)	(669)
CF from Investing	(29)	(29)	(168)	(637)
Cash Flow from Financing				
Dividends	(18)	(127)	(210)	(290)
Change in Debt	(31)	0	0	0
Change in Equity	0	502	221	1,045
Change in Preferred Stock	0	0	0	0
Other Financing Cash Flow	1	(24)	(5)	(2)
CF from Financing	(47)	351	6	753
Other Cash Flow - Including FX	(1)	(294)	54	(534)
Change in Cash	267	23	730	778

Ratio Analysis

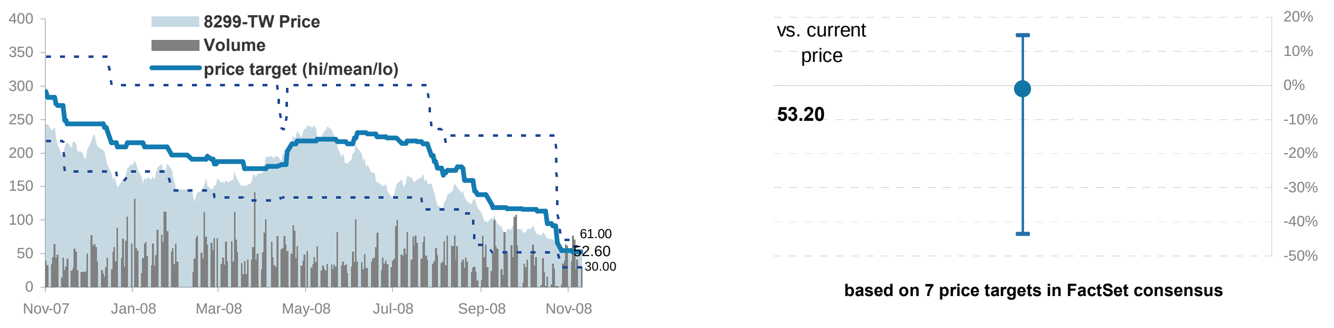
	12/2004	**12/2005**	12/2006	12/2007
Growth				
Sales	61.6%	58.0%	97.4%	62.7%
EBITDA	48.8%	62.8%	87.7%	39.8%
Operating Profit	48.1%	61.0%	90.1%	38.7%
Net Income	40.1%	69.4%	81.5%	30.2%
EPS	35.4%	62.4%	62.4%	20.8%
Margins				
EBITDA	9.4%	9.7%	9.2%	7.9%
Gross Margin	14.2%	15.7%	13.7%	11.4%
EBIT	9.0%	9.2%	8.9%	7.6%
Net Income	8.7%	9.4%	8.6%	6.9%
Returns				
ROE (Beginning Equity)	70.1%	71.2%	60.5%	49.0%
ROA	31.0%	37.0%	38.4%	26.4%
RNOA	128.7%	166.7%	109.9%	102.4%
Leverage				
Net Debt/Equity	-46.2%	-22.9%	-39.9%	-38.3%
Gross Debt/Equity	0.0%	0.0%	0.0%	0.0%

Source: Company data & Factset

Source: Morgan Stanley Research, Factset data

Exhibit 3

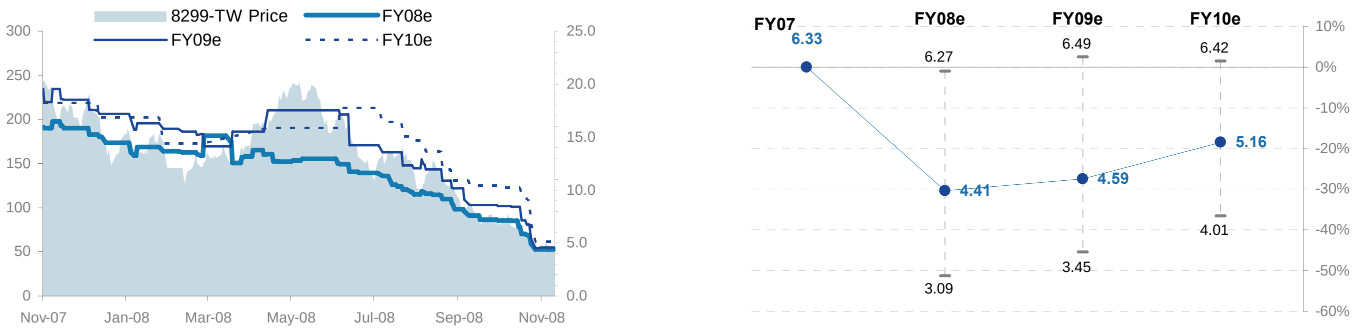
Phison: Consensus Price Target and EPS Estimates



Changes to Price Targets (hi/mean/low)

Current Upside to Price Targets

based on 7 price targets in FactSet consensus



Price vs. Annual EPS Estimates (FY08-10)

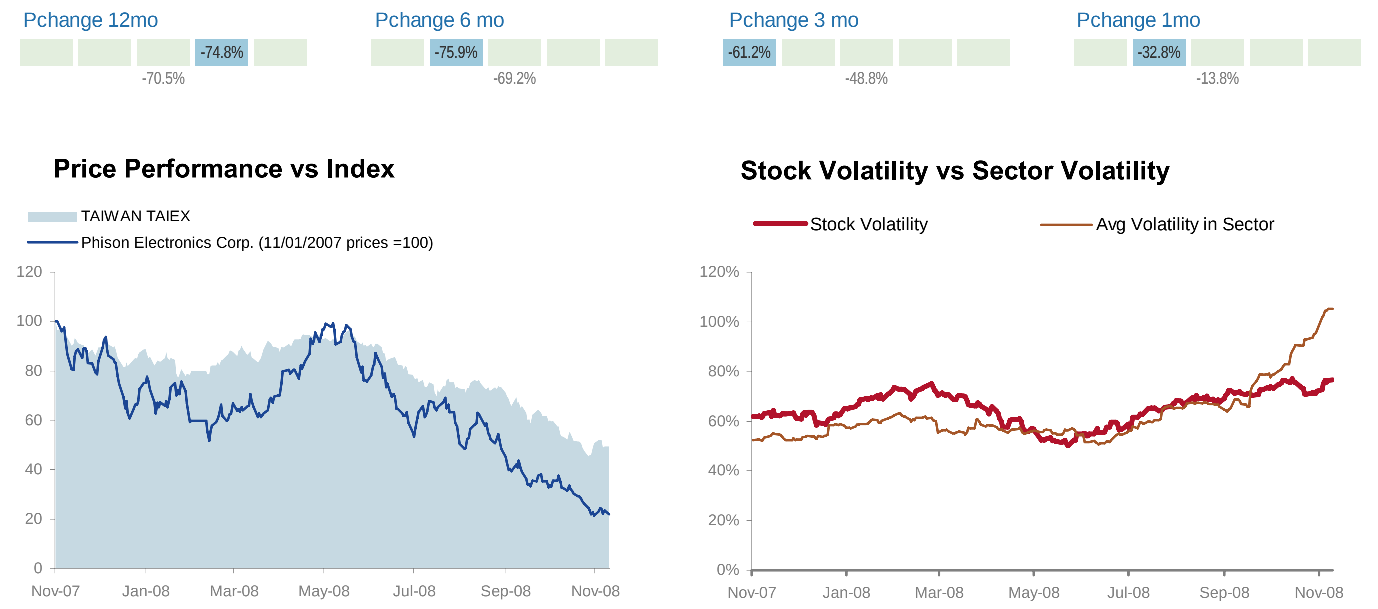
Current Ranges for EPS Estimates

	Current Price	Mean Price Target	% Upside to Mean Price Target	Current Distribution of Ratings Sell	Hold	Buy
SMART Modular Technologies Inc.	1.93	3.41	76%	0	7	1
SanDisk Corp.	9.70	14.23	47%	3	15	1
Transcend Information Inc.	51	57	11%	0	0	0
Phison Electronics Corp.	53.20	52.60	-1%	4	1	0
A-DATA Technology Co. Ltd.	12.90	10.82	-16%	1	0	0

Source: Morgan Stanley Research, Factset data

Exhibit 4

Phison: Price Performance and Volatility



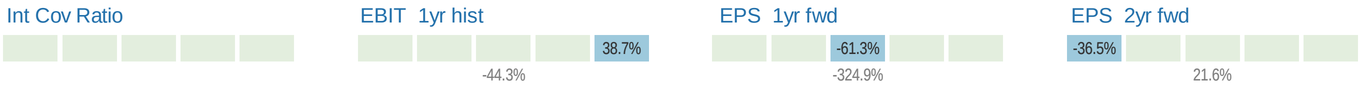
Price Performance and Volatility vs. Industry Peer Group

	12 mo. Δ (%)	3 mo. Δ (%)	1 mo. Δ (%)	12 mo. volatility (%)
Transcend Information Inc.	-51.1%	-40.3%	2.8%	57.6%
Power Quotient International Co. Ltd.	-71.8%	-48.4%	-10.5%	64.0%
SMART Modular Technologies Inc.	-74.8%	-48.7%	9.7%	93.8%
SanDisk Corp.	-75.1%	-41.8%	-39.1%	86.4%
Phison Electronics Corp.	-75.2%	-63.1%	-33.6%	67.8%
A-DATA Technology Co. Ltd.	-77.2%	-60.8%	-16.1%	59.9%

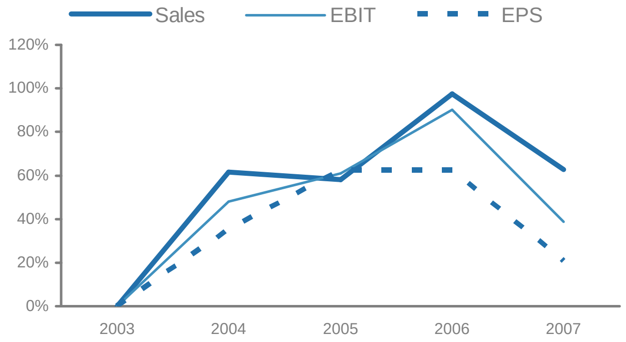
Source: Morgan Stanley Research, Factset data

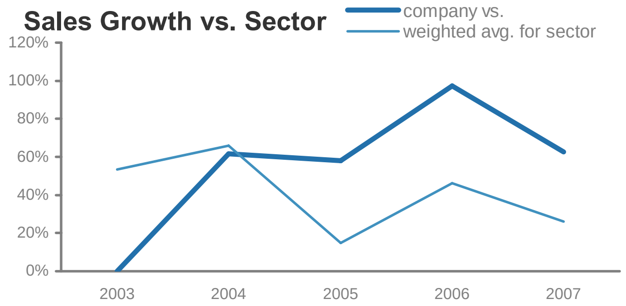
Exhibit 5

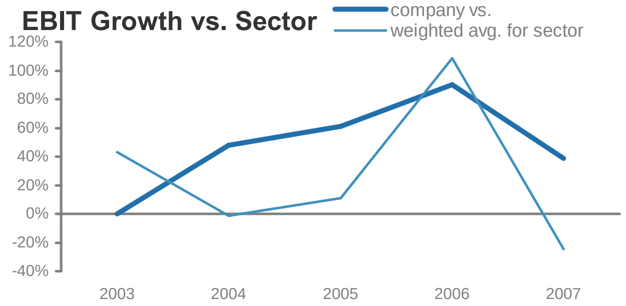
Phison Growth vs Peer Group

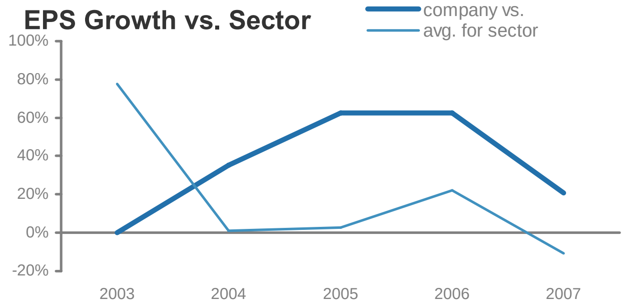


Company's Annual Growth Rates in...

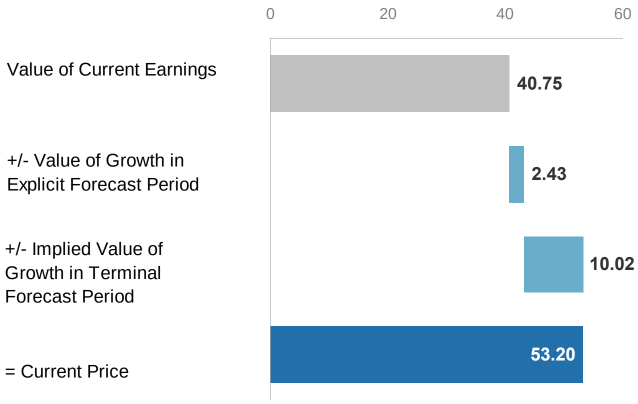



Sales Growth vs. Sector


EBIT Growth vs. Sector

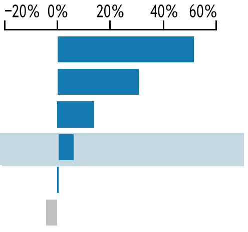

EPS Growth vs. Sector

What's in the Price: Implied Value of Growth



What's in the Price: Implied Terminal Growth Rate vs. Peers

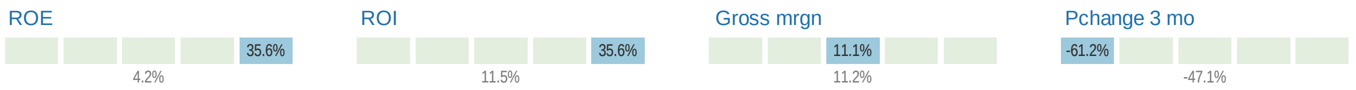
	Cost of Equity	Implied terminal growth rate (years 4+)
Sandisk Corp	10.1%	51.4%
Power Quotient Int	9.9%	30.3%
Smart Modular Technologies	11.1%	13.9%
Phison Electronics	**9.9%**	**5.5%**
A-Data Technology	9.7%	0.1%
Transcend Informat	10.3%	-4.1%



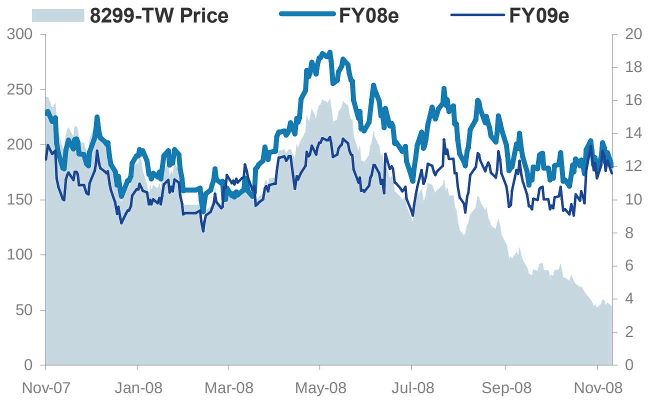
Source: Morgan Stanley Research, Factset data

Exhibit 6

Phison: Valuation vs Peers



Price and P/E (1-yr and 2-yr fwd)



P/E (1-yr fwd)

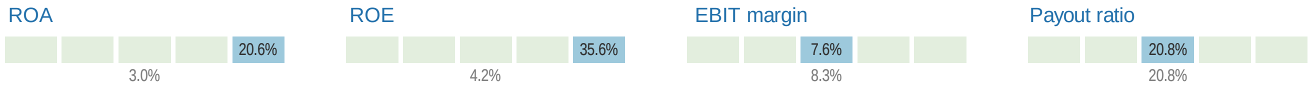
Relative Valuation vs. Industry Peers

	P/E (FY1)	P/E (FY2)	P/Book	EV/Ebitda	EPS growth (2yr CAGR)
Phison Electronics Corp.	12.1	11.6	4.4	2	39%
SMART Modular Technologies Inc.	10.3	5.7	2.7	1	
Transcend Information Inc.	8.9	8.1	2.8	4	34%
A-DATA Technology Co. Ltd.	NM	7.2	1.8	13	-81%
SanDisk Corp.	NM	NM	1.6	2	-32%

Source: Morgan Stanley Research, Factset data

Exhibit 7

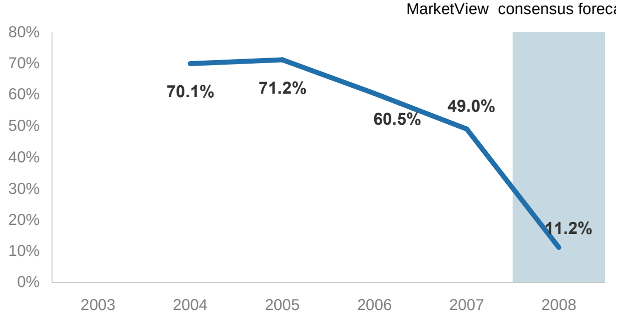
Phison Profitability Analysis

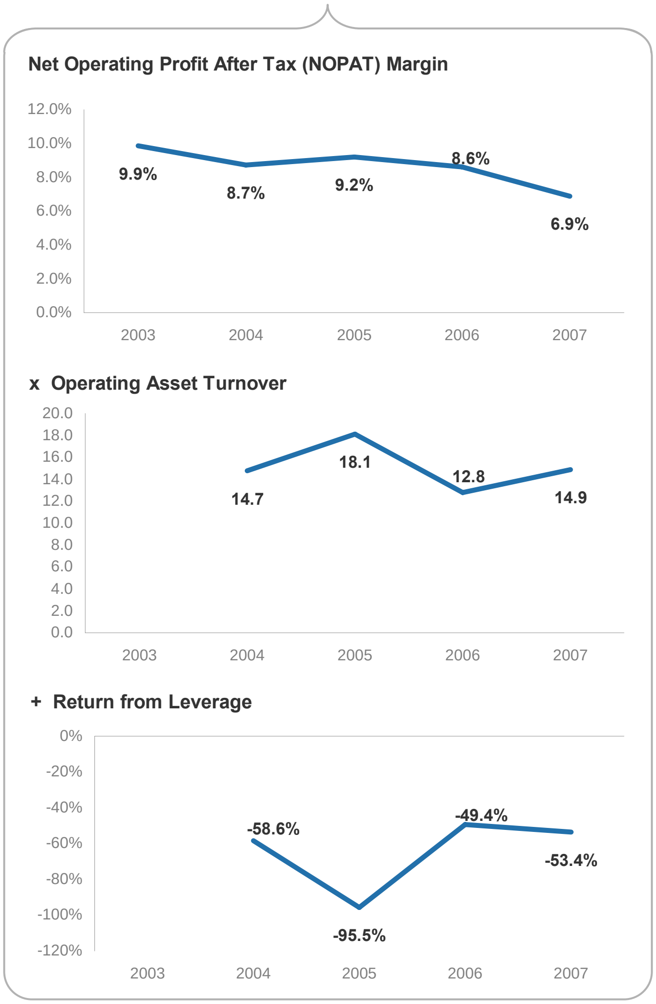


ROE Analysis

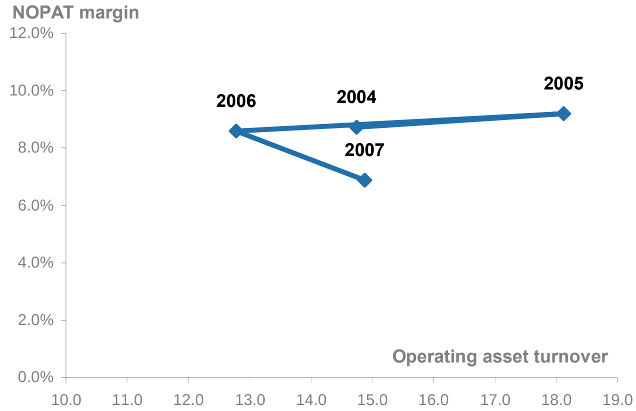
Return on equity (ROE) is the percentage return on capital raised from (or reinvested by) shareholders. The return on equity (ROE) metric is calculated by dividing net income by beginning shareholders' equity. ROE can also be decomposed into return on net operating assets plus the leverage effect (both financial and other). Finally, ROE can be calculated by the sum of return on net operating assets (RNOA), return from leverage, and return on net other funding. All calculations yield the same result. ROE is used for absolute and relative stock and sector valuation.

ROE (Beginning Equity)

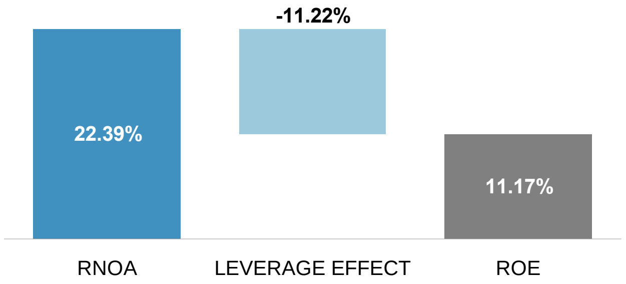




Profitability Map



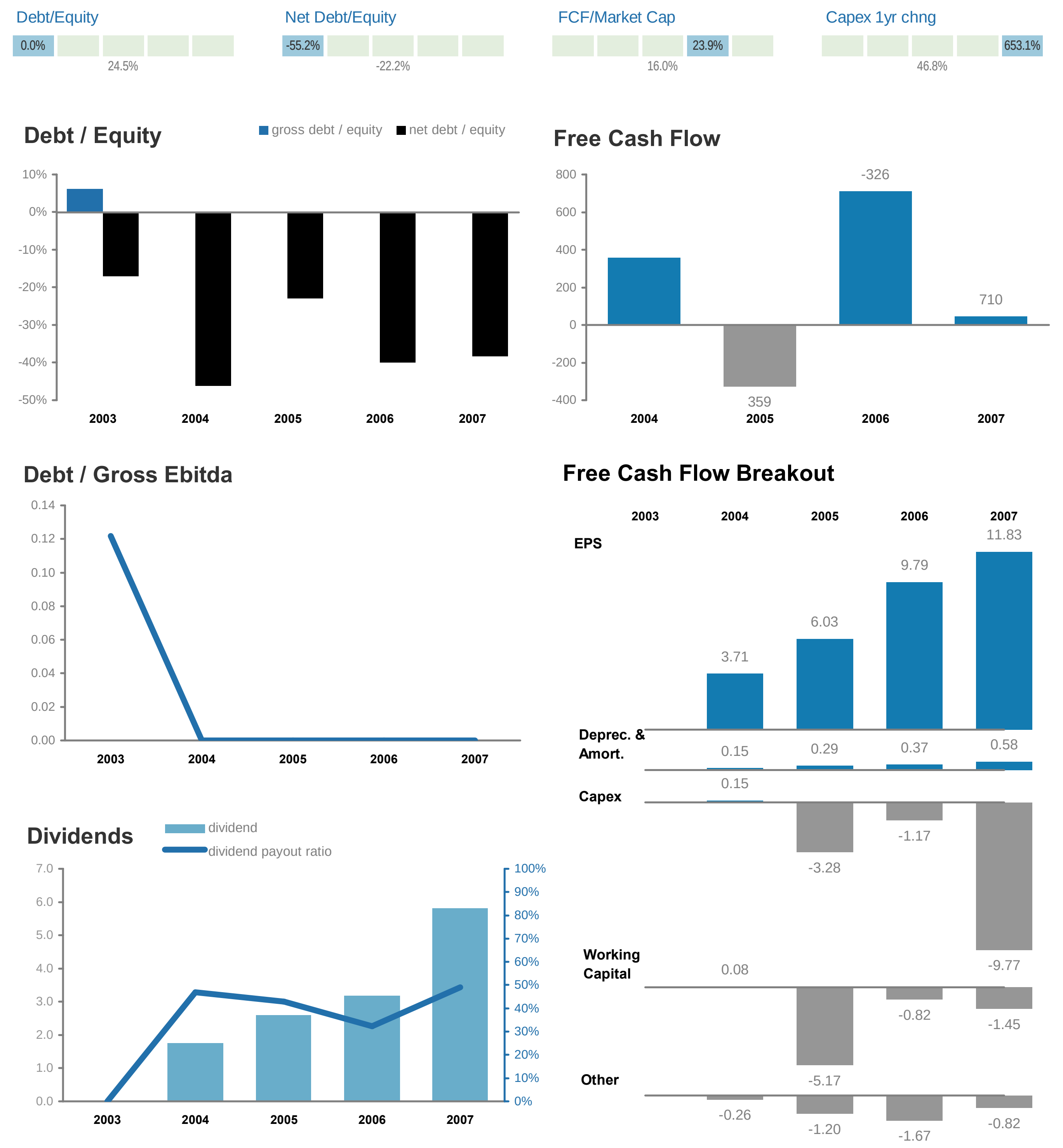
ROE Decomposition (2008)



Source: Morgan Stanley Research, Factset data

Exhibit 8

Phison: Leverage and Cash Flows Analysis



Source: Morgan Stanley Research, Factset data

Exhibit 9

Phison: Factor Analysis

	Phison Electronics Corp. percentile range (vs. peers)					Peer Mean
Valuation	0 20	40	60	80	100%	
P/E LTM			15.4x			49.1x
P/E (FY1)					12.1x	4.0x
P/E (FY2)					11.6x	4.3x
P/Book					4.4x	2.4x
P/CF					14.0x	11.6x
P/Sales					1.1x	0.9x
EV/Ebitda				2.5x		3.7x
EV/Sales				0.2x		0.2x
Performance						
Pchange 1mo		-32.8%				-13.8%
Pchange 3 mo	-61.2%					-48.8%
Pchange 6 mo		-75.9%				-69.2%
Pchange 12mo				-74.8%		-70.5%
Efficiency						
Cash Turn				6.5x		15.2x
Fix Asset Turn					35.5x	19.3x
Inventory Turn					11.4x	9.5x
Total Asset Turn				2.6x		2.4x
Work Cap Turn				5.0x		6.8x
LTD/Work Cap	0.0x					0.2x
Cash Flow						
FCF/Market Cap				23.9%		8.6%
FCF/Sales				7.6%		5.8%
Liquidity						
Cash ratio			100.7%			103.4%
Quick ratio			183.2%			209.5%
Current ratio			247.8%			276.6%

	Phison Electronics Corp. percentile range (vs. peers)					Peer Mean
Growth	0 20	40	60	80	100%	
EPS 1yr fwd			-61.3%			-324.9%
EPS 2yr fwd	-36.5%					21.6%
EPS 1yr hist				20.0%		3908.0%
EPS 3yr hist					45.1%	-5.5%
EPS 5yr hist						0.8%
BVPS 1yr hist					17.4%	10.5%
DPS 1yr hist					82.9%	-19.8%
EBIT 1yr hist					38.7%	-44.3%
Sales 1yr hist					62.7%	17.6%
Quality						
ROA					20.6%	5.9%
ROE					35.6%	8.3%
EBIT margin			7.6%			5.7%
Net inc. margin					6.9%	4.0%
Payout ratio			20.8%			21.9%
Gross mrgn			11.1%			12.5%
ROI					35.6%	10.5%
Financial Leverage						
Debt/Assets	0.0%					15.1%
Debt/Equity	0.0%					29.8%
Net Debt/Equity	-55.2%					-7.8%
Capex Discipline						
Capex/Deprec					2181.9%	1179.2%
Capex/Sales			2.4%			3.7%
FCF/EPS		114.6%				271.2%
Depr 1yr chng					64.2%	42.4%
Shares out 1yr chng			8.5%			6.0%
Capex 1yr chng					653.1%	231.1%

Source Morgan Stanley Research, Factset data

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(as of October 31, 2008)

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	Coverage Universe		Investment Banking Clients (IBC)		
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	**869**	**39%**	**275**	**42%**	**32%**
Equal-weight/Hold	**983**	**44%**	**286**	**44%**	**28%**
Underweight/Sell	**403**	**18%**	**89**	**14%**	**22%**
Total	**2,255**		**650**		

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