

# Singapore Technology

# POSITIVE

[Unchanged]

## Time to get picky

### Still POSITIVE, but time to be selective and vigilant

We stay POSITIVE on Singapore Tech, as demand dynamics are still solid. Yet, in response to still stubborn supply-side bottlenecks, we are incrementally selective. We raise TP for AEM to SGD6.23 (16x FY22E P/E) as we increase FY22-23E EPS by 8% to factor in strong earnings momentum, and u/g FRKN to BUY on unchanged TP of SGD2.50 (15.5x FY22E P/E) after the recent correction. We prefer AEM, UMS and FRKN for exposure as we believe these face less supply-side bottlenecks than downstream players.

### Demand dynamics remain positive

If AEM can sustain 3Q-4Q21 quarterly revenue run-rate in FY22, this infers FY22E revenue potential of SGD700-800m (our est: SGD753m). Over FY22-23E, we believe upside drivers include Intel's expansion plans in Penang and Costa Rica, as well as the node migration to Intel 4 in 2H22. In our view, UMS' revenue upside can be unlocked if it is able to beef up its workforce sufficiently, on the back of robust demand outlook. FRKN and VMS' analytical and medical customers remain upbeat about FY22 prospects. AZTECH also sees robust demand from consumer IoT end markets that has not abated.

### Chip shortages well into 2H22

We expect UMS and VMS to be sequentially stronger in 4Q21 as they have resumed full workforce production since late 3Q21. With vaccinations, we are more optimistic towards the easing of labour bottlenecks than components - as many chipmakers expect shortages to last into 2H22 before easing in 2023. The key risk to this view is if Omicron results in the reintroduction of worker production limits and/or continue to limit worker immigration. Texas Instruments' (NR), one of the chipmakers widely blamed for current shortages, saw fast depleting finished goods in 3Q21 that resulted in overall inventory days being at 112, below desired levels of 130-190.

### Watch VMS if chip shortages ease

VMS reiterated that the demand outlook is strong but the key impediment remains chip shortages. Inventory has been creeping up, which we believe comprises WIP goods, as well as buffer stock. An alleviation of components shortages may help VMS speed up the rate of completing WIP products and translate into earnings upside vs. our FY22-23E, in our view. For the entire sector, the impact of Omicron towards supply chains and earnings is a risk that we are monitoring.

### Analyst

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Stock	Bloomberg code	Mkt cap (USD'm)	Rating	Price (LC)	TP (LC)	Upside (%)	P/E (x)		P/B (x)		Div yld (%)	
							21E	22E	21E	22E	21E	22E
Venture	VMS SP	3,934	Hold	18.63	19.18	7	18.1	16.8	2.0	2.0	4.0	4.0
AEM Holdings	AEM SP	1,027	Buy	5.15	6.23	22	18.2	13.1	4.2	3.4	1.4	1.9
UMS Holdings	UMSH SP	729	Buy	1.49	1.71	18	14.9	13.0	3.4	3.0	2.7	4.0
Frencken Group	FRKN SP	660	Buy	2.12	2.50	20	15.4	13.1	2.4	2.1	1.9	2.3
Aztech Global	AZTECH SP	545	Buy	0.97	1.26	33	10.1	7.7	2.7	2.1	2.8	3.9
Valuetronics	VALUE SP	168	Sell	0.53	0.50	(3)	8.1	12.4	1.1	0.9	5.7	2.3

Fig 1: Summary of outlook

Stock	Demand-side dynamics	Supply-side dynamics	Things to note
AEM	Management pointed towards quarterly run-rate in FY22E being comparable to 3Q-4Q21. This implies FY22E revenue potential of SGD700-800m (Our FY22E: SGD753m). We believe this is highly achievable on the back of i) new generations of equipment being catered for Intel's new chips (e.g. Sapphire Rapids); and ii) Intel's capex growth in FY22 (and expansion plans in assembly and test in Penang and Costa Rica).	Currently, AEM is not expecting any shipment delays, although it is mindful about such risks. AEM has strong relationships with its fabrication suppliers (largely in MY/SG), and works with distributors and manufacturers to secure the chips needed.  AEM's manufacturing is one that is primarily cell-based assembly. In that regard, leasing additional space and training new employees should take a few months.	In our view, the current demand-supply setup for AEM is among the most ideal in our SG tech coverage. On the upside, we look forward to the possibility of guidance increases on the back of stronger than expected momentum (AEM have thus far raised guidance every year since 2017).  On the supply side, around 2/3 of AEM's production capacity is in Singapore, where production in essential industries have seen minimal production disruptions as compared to Malaysia/ China. We believe our FY22E PATMI of SGD76m (+14% YoY) is not onerous, as it implies a run-rate of SGD19m per quarter, in line with our current 4Q21 estimate. In other words, we see upside from evidence that UMS is able secure the workforce it needs to convert demand potential into actual revenues.
UMS	Order outlook remains robust, which we believe is driven by i) WFE growth in 2022; coupled with ii) shift of geographical allocation from US to ASEAN. Applied Materials continues to expect robust outlook, and we believe that a shift from "just-in-time" to "just-in-case" may also bode well for UMS as Applied Materials beefs up inventory to anticipate order upside. AMAT believes that it is currently not experiencing double-bookings.	In our view, the key to unlock earnings upside vs. our estimates is primarily via access to labour. UMS currently expects to employ much of the required additional workforce by mid-FY22. The impact of components shortage is currently negligible.  On the back of robust demand outlook, UMS is doubling capex to c.SGD20m in FY22E. We expect some equipment to contribute to production capacity in the earlier part of FY22E, while a new factory is expected to complete in 3Q22.	We believe our FY22E PATMI of SGD76m (+14% YoY) is not onerous, as it implies a run-rate of SGD19m per quarter, in line with our current 4Q21 estimate. In other words, we see upside from evidence that UMS is able secure the workforce it needs to convert demand potential into actual revenues.
Frencken	The demand outlook among customers remain robust, including semiconductor, analytical and medical. We believe that "stable" HoH revenue expectation in 2H21 is largely due to supply chain bottlenecks. Our forecasts assume that a majority of shortfall will spill over into FY22E.	In 3Q21, we believe incremental bottlenecks were in automotive and possibly medical. While semiconductor bottlenecks appeared unchanged (FRKN maintained expectations for 2H2 semi revenue to be stable HoH), materials shortages have created some bottlenecks for customers like ASML, Applied Materials and Lam in latest quarter earnings. However, all are actively resolving this, and Frencken is also adding capacity as well.	Frencken's net margin fell 0.5 ppt YoY to 7.5% in 3Q21. This is due to increased freight and components prices. Our FY22-23E net margin expansion assumptions are now less aggressive to factor in some inefficiencies in passing costs along. We remain optimistic that over time, Frencken's margins should trend upwards with new products with greater value add.
Venture	Seeing strong trends in new product introduction activities which are expected to translate into mass production in the next 12 months.	Components shortages remain the key bottleneck. While VMS' inventory levels are high, these are largely WIP inventory, together with buffer stock. Without the chips in shortage, full products cannot be completed and shipped. While VMS can engage in component redesign, we suspect the scope here is limited.  Our checks suggest that labour is not a key constraint as VMS was agile to foresee worker restrictions and prepared ahead of time.	3Q21 net margin was resilient at 10% (although GPM was not disclosed). It may have been likely that if not for higher input costs that are not yet passed along, margins could have been higher. In any case, resilient margins likely indicate strong operational cost control.  Given the strong demand backdrop and high inventory levels, we believe the key swing factor for FY22-23E earnings is whether components shortage abate.
Aztech	Demand remains robust, with order book of SGD636m as at 14 Oct, expanding from SGD604m in 30 Jul. Of this, SGD454m are for delivery in 2022 (mostly in 1H22, and some in 3Q22).	In October, Aztech expressed that it does not expect the components shortage situation to abate in the next 6-12 months. We believe large customers like Customer A should continue to help Aztech secure components. However, smaller customers should have less bargaining power. We have observed that consumer electronics have been disproportionately hit as chip supplies prioritise other end-markets like mobile, laptop and even automotive	Aztech continues to expect to be able to pass along costs to management despite industry-high net margins (9M21: 12.1%, +0.5 ppt YoY) due to still robust demand for its products.  Barring a worsening of components and labour bottlenecks, we believe Aztech should deliver attractive YoY revenue and earnings growth in 1H22, due to the shift in revenue seasonality as 4Q21 deliveries are pushed out to 1H22 due to current chip shortages.
Valuetronics	With the move of customers' allocation largely done in FYMar22E, we are forecasting revenue growth of 6% in FY23E. Upside to our forecast may be from new customers, for which VALUE is currently finalising terms. One of these potential customers is a hardware provider for a retail chain store, and another provides cooling solutions for high performance computing.	Like most EMS players, components shortages is affecting VALUE's ability to fulfill orders. In the near term, China's Covid Zero policy is also discouraging workers to travel from the North to the South. Rising components and labour prices are negative to VALUE's margin prospects, in our view. While management endeavours to pass costs along, this must be done in a manner that does not erode VALUE's competitiveness	We are optimistic towards VALUE's longer-term prospects given a long-track record solid execution through the years. However, in the near term, components shortage and margin erosion risks may imply that investors could collect the stock at lower prices.

Source: Companies, Maybank Kim Eng

## Forecast revisions for AEM

Fig 2: AEM forecast revisions

	FY21E			FY22E			FY23E		
	New	Old	Chg (%)	New	Old	Chg (%)	New	Old	Chg (%)
Revenue (SGDm)	538.5	538.5	0.0	752.7	671.7	12.1	854.0	760.8	12.2
Gross profit (SGDm)	204.6	204.6	0.0	286.0	262.0	9.2	328.8	300.5	9.4
EBIT (SGDm)	96.6	96.6	0.0	144.1	133.2	8.2	170.7	157.5	8.4
EBITDA (SGDm)	105.3	105.3	0.0	152.5	141.6	7.7	180.1	166.8	8.0
Core net profit (SGDm)	82.0	82.0	0.0	121.5	112.4	8.1	143.2	132.2	8.3
EPS (SGD)	0.28	0.28	0.0	0.39	0.36	8.1	0.46	0.43	8.3
			Chg (ppt)			Chg (ppt)			Chg (ppt)
Gross margin	38.0%	38.0%	0.0	38.0%	39.0%	-1.0	38.5%	39.5%	-1.0
Staff cost as % of sales	15.0%	15.0%	0.0	15.0%	15.0%	0.0	15.0%	15.0%	0.0

Source: Maybank Kim Eng

We raised FY22-23E revenue/EPS by 12%/8% respectively to factor in the currently strong earnings momentum. Our tweaks are primarily assuming higher revenue from Intel than our previous forecast. We have reduced our gross margin assumption by 1ppt in FY22-23E to factor in rising costs and a scenario where not all costs can be fully passed along to customers.

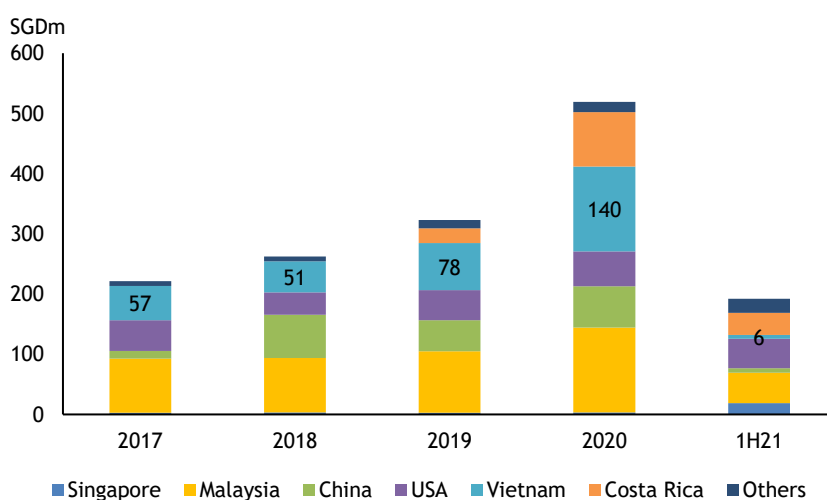
## Some things we are keeping an eye for

### AEM

We estimate Intel will spend around USD1.6b in Penang and Costa Rica to expand assembly and test capabilities. This should provide upside to AEM's revenue prospects. Another potential upside driver is the node migration to Intel 4, as products at new nodes typically require more testing. Intel 4 production is slated for 2H22 and products are expected to be out in 2023.

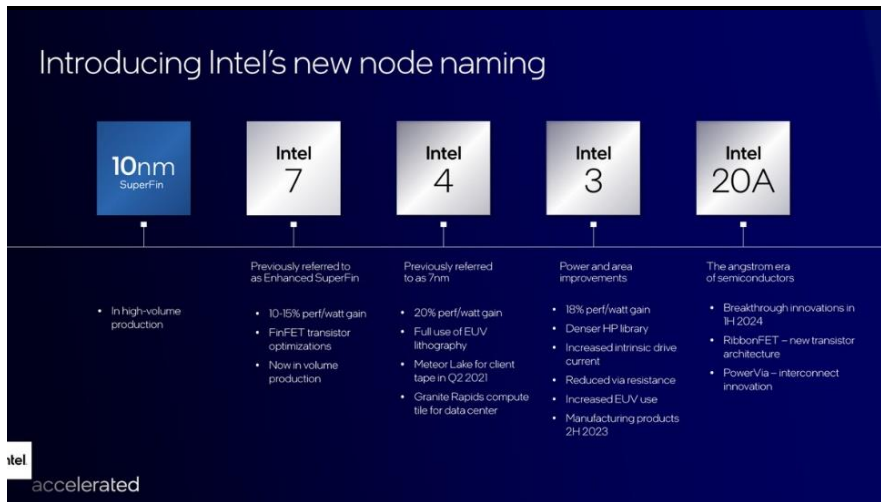
Fig 3: AEM's revenue by geography

In 2020, amid Intel's expansion in Vietnam, AEM's Vietnam revenue rose 75% YoY. Intel's expansion plans in Penang and Costa Rica may provide upside in this cycle.



Source: Company

Fig 4: Intel’s technology node roadmap



Source: Intel

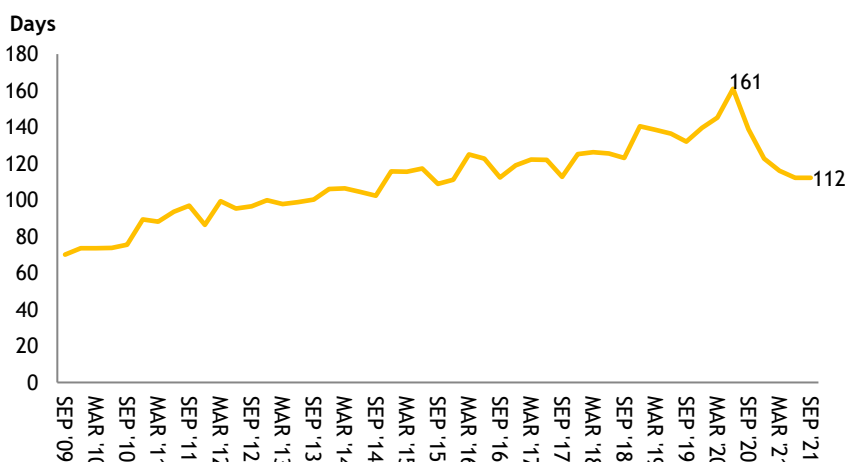
### Chip shortages (from the eyes of Texas Instruments)

One of the chipmakers blamed for current shortages is Texas Instruments. Texas Instruments’ analog chips are essential for duties such as voltage regulation, and its chips are inside almost all types of electronics. In early November, DigiTimes have singled out Texas Instruments as the epicenter of the chip shortage situation. In the media, as well as our conversations with companies that we cover, Texas Instruments’ chips was cited to be one of the key causes of bottlenecks that are currently being faced.

Texas Instrument’s latest quarterly days of inventories outstanding was 112 (Fig 4, below the desired range of 130-190). Underscoring the shortage, finished goods as a percentage of COGS was 51.1% (Fig 5), down from 85.2% a year ago before the onset of chip shortages.

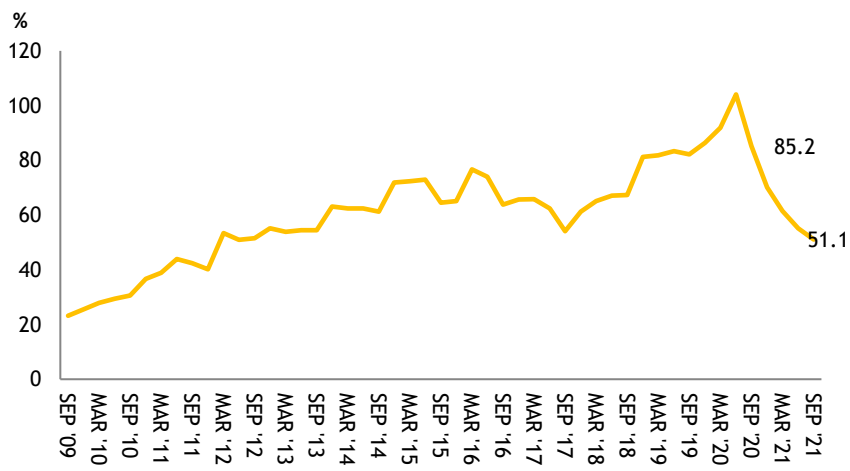
As Texas Instruments’ goal is to bring back inventory to more normalized levels, finished goods is a metric worth following, in our view, as this infers a more balanced demand-supply situation.

Fig 5: Texas Instruments’ days of inventories outstanding



Source: FactSet, Maybank Kim Eng

**Fig 6: Texas Instruments' avg quarterly finished goods as a % of quarterly COGS**



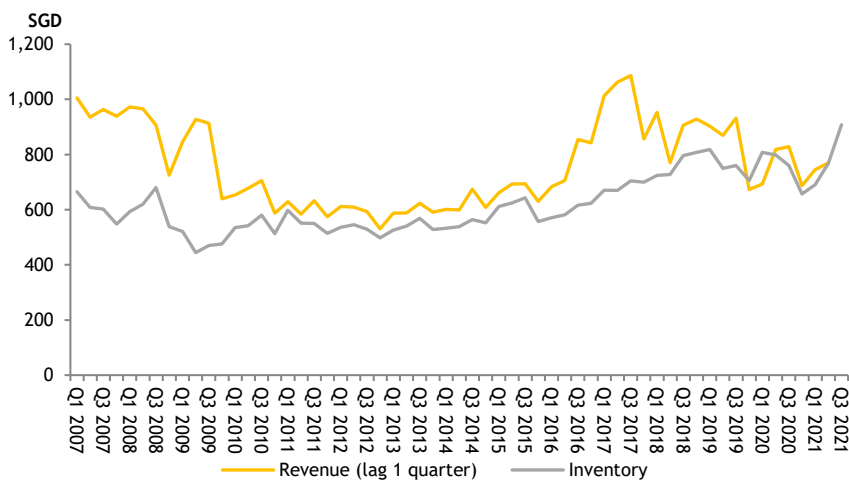
Source: FactSet, Maybank Kim Eng

## Venture

VMS' quarterly revenues have typically lead prior quarter inventory by an average of c.SGD150m. As at 3Q21, VMS' inventory levels were SGD908m (4Q20: SGD657m). While we expect 4Q21 to be sequentially stronger than 3Q21, we do not expect VMS to deliver revenue above SGD1b (our 4Q21 est: SGD841m) - as unlike in the past, current inventory levels likely include a significant chunk of buffer inventory and WIP goods that are pending the arrival of scarce chips in order to convert these into finished goods.

In other words, we view the build-up of inventory at Venture as akin to an elastic band storing potential energy, awaiting release. In this case, the release trigger is the alleviation of chip shortages. If this scenario pans out, there could be upside to our FY22-23E estimates and fair value.

**Fig 7: Venture - revenue (lag 1 quarter) vs. inventory**



Source: FactSet, Maybank Kim Eng

**AEM financial overview**

FYE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
<b>Key Metrics</b>					
P/E (reported) (x)	6.2	8.4	18.0	13.0	11.0
Core P/E (x)	10.3	9.7	18.0	13.0	11.0
Core FD P/E (x)	10.4	9.8	19.4	13.1	11.1
P/BV (x)	4.1	4.5	4.2	3.4	2.8
P/NTA (x)	4.1	4.5	4.2	3.4	2.8
Net dividend yield (%)	2.5	2.6	1.4	1.9	2.3
FCF yield (%)	11.1	8.2	nm	7.4	9.7
EV/EBITDA (x)	6.3	6.7	12.2	8.6	6.7
EV/EBIT (x)	6.9	7.2	13.7	9.3	7.2
<b>INCOME STATEMENT (SGD m)</b>					
Revenue	323.1	519.0	538.5	752.7	854.0
EBITDA	69.5	121.6	108.9	156.1	183.7
Depreciation	(4.4)	(6.1)	(8.7)	(8.4)	(9.3)
Amortisation	(1.5)	(2.3)	(3.6)	(3.6)	(3.6)
EBIT	63.6	113.2	96.6	144.1	170.7
Net interest income / (exp)	(0.2)	0.4	0.8	0.8	0.8
Associates & JV	0.5	0.2	1.5	1.5	1.0
Exceptionals	0.0	0.0	0.0	0.0	0.0
Other pretax income	0.0	0.0	0.0	0.0	0.0
Pretax profit	63.9	113.8	98.9	146.4	172.5
Income tax	(11.0)	(16.2)	(16.8)	(24.9)	(29.3)
Minorities	0.0	0.0	0.0	0.0	0.0
Discontinued operations	0.0	0.0	0.0	0.0	0.0
Reported net profit	52.9	97.6	82.0	121.5	143.2
Core net profit	52.9	97.6	82.0	121.5	143.2
<b>BALANCE SHEET (SGD m)</b>					
Cash & Short Term Investments	107.7	134.8	217.6	300.9	414.1
Accounts receivable	28.0	47.6	70.5	94.5	92.7
Inventory	57.5	79.7	130.7	163.4	153.2
Property, Plant & Equip (net)	6.4	8.1	28.5	28.1	26.8
Intangible assets	19.0	56.2	95.4	95.4	95.4
Investment in Associates & JVs	4.6	4.7	11.0	12.5	13.5
Other assets	4.9	4.5	7.1	7.1	7.1
<b>Total assets</b>	<b>228.0</b>	<b>335.5</b>	<b>560.8</b>	<b>701.8</b>	<b>802.6</b>
ST interest bearing debt	0.0	0.0	7.0	7.0	7.0
Accounts payable	73.1	83.7	90.1	140.0	133.4
LT interest bearing debt	0.0	0.0	60.5	60.5	60.5
Other liabilities	20.0	40.0	29.0	29.0	29.0
<b>Total Liabilities</b>	<b>93.6</b>	<b>124.1</b>	<b>186.1</b>	<b>236.0</b>	<b>229.4</b>
Shareholders Equity	134.3	211.4	374.7	465.8	573.2
Minority Interest	0.0	0.0	0.0	0.0	0.0
<b>Total shareholder equity</b>	<b>134.3</b>	<b>211.4</b>	<b>374.7</b>	<b>465.8</b>	<b>573.2</b>
<b>Total liabilities and equity</b>	<b>228.0</b>	<b>335.5</b>	<b>560.8</b>	<b>701.8</b>	<b>802.6</b>
<b>CASH FLOW (SGD m)</b>					
Pretax profit	63.9	113.8	98.9	146.4	172.5
Depreciation & amortisation	5.9	8.4	12.3	12.0	12.9
Adj net interest (income)/exp	0.0	0.0	0.0	0.0	0.0
Change in working capital	2.3	(27.2)	(77.6)	(6.8)	5.4
Cash taxes paid	(5.8)	(8.8)	(12.2)	(24.9)	(29.3)
Other operating cash flow	0.0	0.0	0.0	0.0	0.0
Cash flow from operations	65.8	86.0	19.9	125.2	160.6
Capex	(5.1)	(7.9)	(29.0)	(8.0)	(8.0)
Free cash flow	60.7	78.1	(9.1)	117.2	152.6
Dividends paid	(10.5)	(22.2)	(21.9)	(30.4)	(35.8)
Equity raised / (purchased)	0.0	4.9	103.1	0.0	0.0
Change in Debt	(0.3)	0.0	67.4	0.1	0.0
Other invest/financing cash flow	(1.3)	(34.7)	(56.7)	(3.6)	(3.6)
Effect of exch rate changes	0.2	0.0	0.0	0.0	0.0
Net cash flow	48.9	26.1	82.9	83.3	113.2

FYE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
<b>Key Ratios</b>					
<b>Growth ratios (%)</b>					
Revenue growth	23.2	60.6	3.8	39.8	13.5
EBITDA growth	65.8	74.9	(10.5)	43.4	17.7
EBIT growth	58.8	77.9	(14.6)	49.2	18.5
Pretax growth	59.9	78.1	(13.1)	48.1	17.9
Reported net profit growth	58.1	84.3	(15.9)	48.1	17.9
Core net profit growth	58.1	84.3	(15.9)	48.1	17.9
<b>Profitability ratios (%)</b>					
EBITDA margin	21.5	23.4	20.2	20.7	21.5
EBIT margin	19.7	21.8	17.9	19.2	20.0
Pretax profit margin	19.8	21.9	18.4	19.4	20.2
Payout ratio	26.0	25.4	25.0	25.0	25.0
<b>DuPont analysis</b>					
Net profit margin (%)	16.4	18.8	15.2	16.1	16.8
Revenue/Assets (x)	1.4	1.5	1.0	1.1	1.1
Assets/Equity (x)	1.7	1.6	1.5	1.5	1.4
ROAE (%)	47.3	56.4	28.0	28.9	27.6
ROAA (%)	29.1	34.6	18.3	19.2	19.0
<b>Liquidity &amp; Efficiency</b>					
Cash conversion cycle	5.2	15.0	59.2	64.1	54.2
Days receivable outstanding	27.7	26.2	39.5	39.5	39.5
Days inventory outstanding	80.2	78.3	113.4	113.4	108.5
Days payables outstanding	102.7	89.5	93.7	88.8	93.7
Dividend cover (x)	3.8	3.9	4.0	4.0	4.0
Current ratio (x)	2.2	2.4	3.7	3.4	4.2
<b>Leverage &amp; Expense Analysis</b>					
Asset/Liability (x)	2.4	2.7	3.0	3.0	3.5
Net gearing (%) (incl perps)	net cash	net cash	net cash	net cash	net cash
Net gearing (%) (excl. perps)	net cash	net cash	net cash	net cash	net cash
Net interest cover (x)	nm	na	na	na	na
Debt/EBITDA (x)	0.0	0.0	0.6	0.4	0.4
Capex/revenue (%)	1.6	1.5	5.4	1.1	0.9
Net debt/ (net cash)	(107.7)	(134.8)	(150.2)	(233.4)	(346.6)

Source: Company; Maybank



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