

# **KESM Industries Bhd**

# Positioned for long term growth

Despite its share price more than doubling over the past year, we believe that this under-researched gem has further upside potential amid rising car production by global automakers and increased chip content in vehicles. Among the initiatives taken to capitalize on these trends include i) Massive RM75m-80m/p.a. CAPEX plans over the next two years ii) Developing technologies to take on more complex/higher margin products iii) Increase operational efficiencies and greater economies of scale. We are estimating FY17/FY18E net profits of RM38.8m/RM44.3m (+26.5%/14.1%) and are initiating coverage on KESM with an OUTPERFORM rating and a Target Price of RM15.20 based on 15x FY18E PER.

Betting big on the automotive segment. KESM's foray into the Testing Services business over the years has begun to bear fruit and KESM now enjoys a market-leading position as the largest independent "Burn-in & Test" services company in Malaysia. Through its acquisition of the remaining 34.6% equity interest in KESM Test for RM35.0m (May-2015), KESM now has a stronger foothold in the high growth automotive semiconductor market – an area of high growth at a 2014-2019E CAGR of 4.9%, far outpacing the computer and consumer segments which are only expected to grow at a pace of 1.5%-2.8%.

In a sweet spot. We believe that KESM is uniquely positioned to benefit from two salient trends: i) Rising car production by global automakers (Global light vehicles sales are expected to reach 93.8m units in 2017 (+2.7%) and accelerate at a 2016-2020E CAGR of 2.8%) and ii) Increased chip content within vehicles where the value of electronics is expected to grow from US\$315 in 2012 to US\$385 by 2017. Currently, the automotive semiconductor business already accounts for sizeable 70-80% if KESM's revenue base (UNISEM:17% and MPI:24% as at the latest quarter).

**CAPEX plans are expected to more than double to** RM75-80m for FY17E/FY18E (FY16: RM30m), the bulk of which is in testing equipment for automotive semiconductors. We believe this will provide a c.10% increase in overall capacity p.a. Given the longer product life cycles of 3-7 years for automotive semiconductors (compared to 1-7 years for the commercial segment) and recurring nature of the business, we also envisage that KESM will also benefit from better long-term earnings visibility and smoothened quarterly delivery.

We expect FY17-FY18E net profit to grow by 26.5%/14.1% to RM38.8m/RM44.3m on the back of 10.3%/11.7% revenue growth (RM315.1m/RM351.8m). Our revenue assumptions are based on i) Organic growth via capacity expansion of its testing services, which will increase overall capacities by 10% ii) Assume overall utilisation rate to maintain at 80% iii) Higher ASPs given the increasing complexities of chips being tested. We also expect EBIT margins to expand by 1.3ppt-0.2ppt for FY17E/FY18E to 14.1%/14.3%, taking into account and increase in operational efficiency and as a result of automation and economies of scale.

We initiate coverage on KESM with an OUTPERFORM call and a target price of RM15.20 based on the ascribed 15x PER over FY18E EPS of RM1.01. Our valuation is in-line with local OSAT players MPI and UNISEM, both of which we recently assigned up-cycle valuations in view of the industry's recovery and favorable macro-economic factors.

## OUTPERFORM

Price: RM13.38 Target Price: RM15.20

Expected Capital Gain: RM1.82 +13.6% Expected Divd. Yield: RM0.09 +0.7% Expected Total Return: RM1.91 +14.3%

KLCI Index	1771.01
Stock Information	
Bloomberg Ticker	KESM MK Equity
Bursa Code	9334
Listing Market	Main Market
Shariah Compliant	Yes
Issued shares	43.0
Market Cap (RM m)	575.5
Par value per share (RM)	1.00
52-week range (H)	13.54
52-week range (L)	3.99
Free Float	42%
Beta	0.6
3-mth avg daily vol:	50,349
Major Shareholders	
SUNRIGHT LTD	48.4%
COLLERY PETER	5.0%
WONG TEE FATT	5.0%
Summary Earnings Table	

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FY July (RM m)	2016A	2017E	2018E
Revenue	285.7	315.1	351.8
EBIT	36.7	44.5	50.2
PBT	36.2	44.5	50.8
Net profit	30.7	38.8	44.3
Core Net Profit	30.7	38.8	44.3
Consensus (NP)		29.9	38.0
Earnings Revision (%)	-	-	-
Core EPS (sen)	70.2	88.9	101.4
Core EPS growth (%)	80.2	26.5	14.1
DPS (sen)	7.5	9.0	10.3
BV/Share (RM)	6.6	7.4	8.3
Core PER	19.0	15.1	13.2
PBV (x)	2.0	1.8	1.6
Net	-0.3	-0.1	-0.3
Debt(Cash)/Equity	-0.3	-0.1	-0.3
Div. Yield (%)	0.6	0.7	0.8

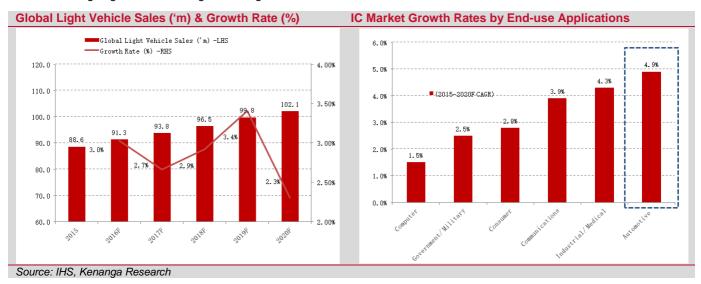


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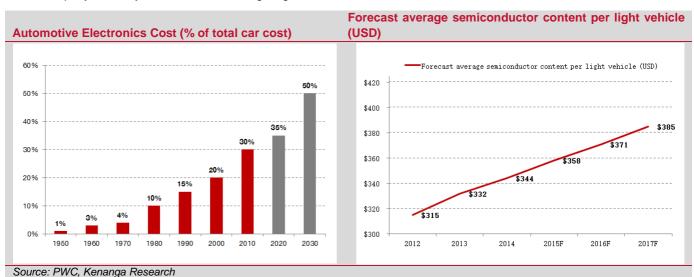
#### **INVESTMENT MERITS**

Stellar track record of earnings growth! Between FY12-FY16, KESM's net profit ballooned at an impressive CAGR of 64.8%. The scaling back of KESM's low margin EMS business in favour of the core business of burn-in and testing services (In particular, the more lucrative automotive semiconductor business) over the years has indeed paid back in droves. The Automotive semiconductor business now accounts for c.70-80% of KESM's revenue base compared to UNISEM: 17% and MPI:24%, and this represents an area of high growth, at a 2014-2019 CAGR of 4.9%, which far outpaces the 1.5%-4.3% growth in the remaining segments according to IC Insights.



Going forward, we expect growth in automotive semiconductors to be driven by two salient points: i) An increase in global vehicle productions, and ii) Rising chip content within vehicles.

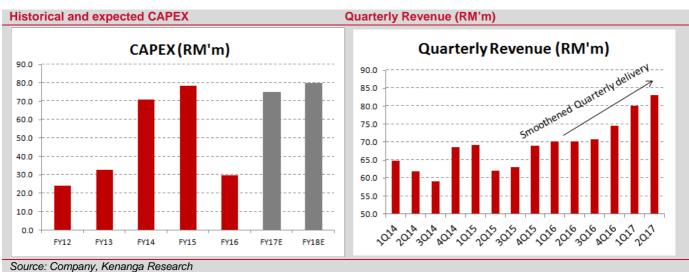
Benefiting from record global vehicle sales. 2016 was a record year for global light vehicle sales, at 91.3m units. Going into 2017E, this figure is expected to reach 93.8m units (+2.7%) and accelerate at 2016-2020E CAGR of 2.8% according to market research company IHS Markit. Growth is expected to be fuelled by the demand from the Asia-Pacific region, particularly China (accounts for a huge proportion of global vehicle sales at 25.4units or 27.8%) where growing middle class and rising disposal incomes have created a surge of new buyers in recent years. More importantly, KESM stands to benefit from this growing trend, as the company indirectly serves 9 of the 10 largest global automakers.



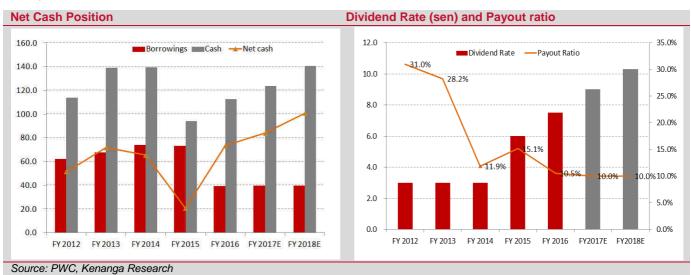
Rising chip content. In making cards smarter and safer, new features are being added into sensors and micro-controller, which have seen demand increasing and are of relatively high value. These microcontrollers are found in engine control systems, Advanced Driver Assistance Systems (ADAS) applications, global positioning systems and infotainment systems. We see this trend of increasing chip content gradually cascading down to even mid-to-low range cards going forward, and this potentially opens up opportunities in previously untapped car brands. Data suggest that semiconductor content per car is likely to grow from US\$315 in 2012 to US\$385 by 2017, and the overall cost of electronics in cars is expected to reach more than 30% by 2017.

**Prepping for growth!** KESM is poised to enter the next stage of growth following the completion of its RM35.0m exercise to acquire the remaining 34.6% equity interest in KESM Test (May-2015) from common shareholder Sunright Limited (Listed on the Main Board of SGX). Not only has KESM been given an immediate earnings boost in its testing business, the acquisition also allows the Group to have full control of the business development of KESM Test, which predominantly derives its business from the automotive market.

**CAPEX plans to accelerate.** Coupled with the further expansion these coming two years, we believe the acquisition was a necessary step to allow the Group to focus its strategy in growing its testing services and to strengthen its foothold in the automotive semiconductor market - a market which is expected to reach USD\$48.8b by 2022, at a CAGR of 5.8 % between 2016 and 2022. CAPEX plans are also set to increase to RM75-80m for FY17E/ FY18E, more than double the RM30m invested in FY16E. We gather that the bulk of this CAPEX is earmarked for the addition of new testing equipment (~70%) which will provide a 10% p.a. increase in capacity, with the balance being for upgrading and maintenance of existing machineries (~30%).



Longer product life cycles and a more consistent earnings delivery. The automotive market has a constant flow of new models with long product life cycles of 3-7 years. Because product life cycles are lengthy and complex, automakers are reluctant to switch semiconductor suppliers, as it entails high switching costs. Moreover, the supply agreements are for longer terms thus reducing the risk of losing customers to competitors. This compares to the remaining 20%- 30% of KESM's revenue base (commercial segment) which tends to be more cyclical in nature and has short product life cycles ranging from 1-7 years. The commercial segment is prone to major upswings and downswings in orders and involves media tablets, personal computers, smartphones and medical devices. As a result of increased contribution from automotive semiconductor business and recurring nature of the business, we believe that KESM will benefit from better long-term earnings visibility and smoothened quarterly earnings.



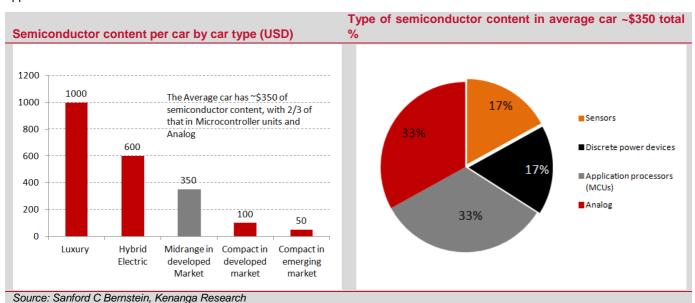
Strong balance sheet with huge cash pile of RM64.6m. Even with the expansion drive these past few years, KESM is still able to maintain a net cash position of RM64.6m (RM1.48/ share) at the latest quarter. Looking ahead, we expect CAPEX to come in at RM75m/RM80m for FY17/18E which we expect will keep dividends at a modest 10% payout ratio (providing a dividend yield of 0.7%/0.8%) in favour of longer-term growth ahead. Over the longer run, however, we would not discount the possibility of a higher dividend payout ratio, given KESM's strong cashflow generating capabilities (FY17E/FY18E free cashflow amounts to RM17.0m/ RM23.7m).

Crossing the RM500m market cap mark. Despite more than doubling its share price this past year, KESM still remains relatively low key with a low institutional ownership of just 5.1% according to Bloomberg. Given the strong growth potential, more stable earnings profile and breach above the RM500m market cap, we believe that the share price could see an influx in institutional investors, particularly for small-cap funds with a mandate to invest in companies with a minimum RM500m market cap. We also see scope for a bonus issue, given the high retained earnings of RM244.3m, and very low share base of just 43.7m. This, in effect, would pave the way for a transition in investor profile over time.

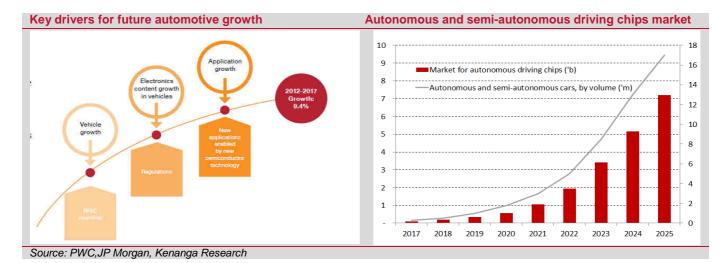
#### **INDUSTRY OUTLOOK**

Automotive semiconductor to grow at a 2016-2022 CAGR of 4.9%. According to semiconductor market research firm IC Insights, the automotive semiconductor market is forecasted to growth at a 2016-2022 CAGR of 4.9% to US\$48.8b, far outpacing traditional demand boosters such as computers and consumer markets, which are only expected to show anaemic growth of 1.5% and 2.8%, respectively over the same period. The most significant driving force is the increase in vehicle production, which in turn is leading the rise in demand for automotive semiconductors. At the same time, the rising trend of vehicle electrification and growing demand for advanced safety, comfort and convenience are other factors driving the growth of semiconductor content in automobiles.

Demand stems from tighter regulations, need for convenience and comfort. The three fastest-growing applications and the major consumers of the semiconductor content in vehicles are telematics and infotainment, powertrain, and safety, all of which KESM serves. The stringent standards and regulations are creating higher demand for semiconductor components in the safety and powertrain applications. Additionally, the intense competition among automakers to provide better convenience and comfort to their customers is necessitating the use of more and more semiconductor components for safety, telematics and infotainment applications.



Trend of chip content cascading down to mid-range and compact cars. Many of the innovations in automobiles in the last few years have been collision avoidance, braking, lane-change sensors and parking functions. A significant addition of growth in this market are as a result of the features previously limited to luxury cars now cascading down to mid-range cars and compact cars. In 2012, the average automobile had about US\$315 of semiconductor content, and figure is set to increase to US\$385 by 2017. Meanwhile, the overall cost of electronics in cars is expected to reach 50% by 2030 compared to 30% currently.



Longer term growth driver via Autonomous vehicles. While the widespread use of fully autonomous vehicles/self-driving cars may be ten or more years away, the proliferation of semi-autonomous vehicles would be more apparent. We expect to see continuous increase in driving assistance, forward collision warning and auto-braking are which are already in widespread distribution. With these come a spike in the amount of data sensed, processed and collected, requiring higher usage of chip content. To offer some context, hybrid and electric vehicles use US\$600-US\$1000 of semiconductor content, compared to the US\$350 used in the average automobile.

#### **COMPANY OUTLOOK**

In a sweet spot. KESM's move to scale back on the low margin EMS business in favour of growing its burn-in and testing services has begun to bear fruit with the company now enjoying a market-leading position as the largest "Burn-in & Test" service company in Malaysia. More specifically, focus has been towards the testing of automotive semiconductors, an area of high growth and lucrative margins. Automotive semiconductors now account for c.70%-80% of KESM's revenue base compared to the commercial segment which accounts for the remaining 20-30%. With the acquisition of the remaining 34.6% equity interest in KESM Test (in May 2015) for RM35.0m, not only has KESM been given an immediate earnings boost from its testing business, the Group now has full control over the business development which predominantly derives its business form the automotive market.

**Building upon KESM's forte.** Going forward, focus will remain towards growing the testing business, primarily in automotive semiconductors where KESM already has a strong position. Overall capacity utilisation is currently running at c.80%, with the RM53-56m(70%) of the RM75-80m CAPEX expansion (FY17-FY18E) expected to be earmarked for the addition of new testing equipment and the balance for maintenance and upgrading of existing machinery. We understand the new additions to testing equipment to provide a 10-15% welcome boost to capacities, and this would provide an immediate revenue contribution in-line with the key client's planned roll-outs of new products and features.

### Stringent quality requirements for semiconductor producers and OEMs

Parameter	Consumer	Industrial	Automotive
Temperature	0 - 40°C	-10 - 70°C	-40 - 160°C
Operation Time	2-5 years	5- 10 years	Up to 15 years
Humidity	Low	Environment	0% - 100%
Telerated Field Failure Rate	<10%	<1%	Target 0 failure
Documentation	Minimal	Conditional	Required
Supply	Average 1 year	~ 2 - 5 years	Up to 30 years

Source: PWC, Kenanga Research

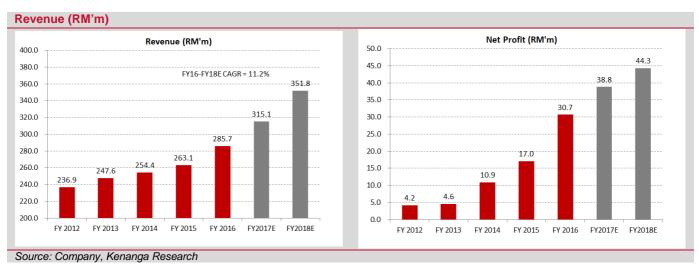
**Evolving to a higher margin product mix.** Applications for new chip technology are constantly growing and becoming increasingly complex. For example, the Advanced Driver Assistance Systems "ADAS" combines many different technologies such as micro-controllers, memories and digital signal processors all on a single chip and are of relatively high value. These new automotive components require a very stringent set of quality standard to ensure their functionality and reliability – and thus providing KESM with the advantage given their niche services and technological know-how.

Positioned to take on emerging technologies. In line with the growing need to meet stringent quality requirements and productivity gains for a new generation of chips, automotive makers are exploring ways to test during burn-in (TDBI). TDBI performs test using high temperatures and critical testing patterns to accelerate the defective failures in ICs. We believe that KESM is at the forefront of this innovation, and is well positioned to capitalise on this trend, following its successful development of proprietary process control for the TDBI to identify how, when and where devices or equipment may fail. In doing so, KESM also stands to benefit from cost efficiencies going forward.

**Building an economic moat.** Currently, KESM indirectly serves 9 of the 10 largest car brands globally, and we understand the clientele to be very sticky with their the IDMs given the stringent safety standards and quality requirements. As KESM possesses the ISO9000/ISO14000 and TS16949 certifications, KESM is an approved vendor for most automotive IDMs. Much more than other industries, automotive products can be the subject of recalls, involving lengthy and costly processes. Whilst not only generating significant barriers to entry, KESM has a very strong working relationship with its clientele given the automotive industry expectations of "Zero-defect". This also means that planning for expansion CAPEX is done hand-in-hand with the rollouts of new products and features, on a cost-plus basis.

#### **FINANCIAL ANALYSIS**

**Modest revenue growth as eyes on a bigger prize!** Between FY12-FY16, revenue grew at a modest CAGR of 4.8%. Although the scaling back of the box-build business had resulted in lower revenue, the move, however, able to grow its core business of burn-in and testing services was more than able to make up for the short fall. Evidence of this gradual shift in focus can be seen via the gradual reduction in the "Raw material and consumables used" cost component, which has been a continued reduction from –RM52.4m in FY12 to –RM31.6m in FY16.



However, FY12-FY16 Net Profit swelled at a CAGR of 64.8%! Meanwhile, increased focus towards the core business of burnin and testing services (in particular, towards the lucrative automotive semiconductors) has indeed paid back in droves over the years. Automotive semiconductor business now accounts for c.70-80% of KESM's revenue base (compared to 40-50% 4 years back), with the balance coming from the legacy commercial business. Higher margins from the testing services, increased operational efficiency and the immediate earnings boost from KESM's acquisition of the remaining 34.6% equity interest in KESM Test (May 2015) has resulted in FY12-16 net profit margins expanding from just 1.76% in FY12 to 10.74% (+8.98ppt) in FY16!

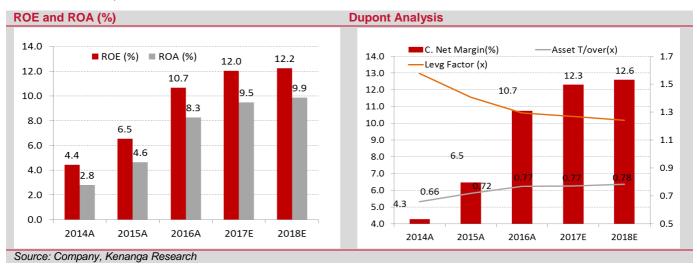
**Impressive start to FY17.** KESM reported 1H17 revenue of RM163.2m (+16.2% YoY) and Net Profit of RM20.0m (+32.7%). The strong performance was driven by increased demand for burn-in and test services. More importantly, the higher revenue and greater economies of scale were more than able to offset the increase in operating expenses, including higher employee benefits expense (+19%), depreciation (+10.7%) and other expenses (+9.9%). In effect, these led to 1H17 net margins expanding to 12.2% (+1.5ppt vis a vis 1H16).

Going forward, we expect FY17-FY18E net profit to grow by 26.5%/14.1% to RM38.8m/RM44.3m on the back of 10.3%/11.7% revenue growth (RM315.1m/RM351.8m). Higher chip content within vehicles and an increase in global vehicle production are two salient points driving revenue growth.

 Nevertheless, our revenue assumptions are based on i) Organic growth via capacity expansion of its testing services, which will increase overall capacities by 10% p.a. based on RM75m-RM80m CAPEX. ii) we conservatively assume overall utilisation rate to maintain at 80%, after accounting for new capacities iii) ASPs to increase by 5% for FY17E/ FY18E given the increasing complexities of chips being tested

2. We expect EBIT margins to expand by 1.3ppt-0.2ppt for FY17E/FY18E to 14.1%/14.3%, taking into account the higher margin products, and increases in operational efficiency and economies of scale which would more than offset against the higher deprecation charge. Meanwhile, the higher CAPEX over the next two years should also see tax allowances and as such, we have estimated an effective tax rate of 12.7% FY17E/FY18E compared to 15.3% in FY16.

Strong balance sheet with huge cash pile of RM64.6m. Despite the expansion drive these past few years, KESM is still able to maintain a net cash position of RM64.6m (RM1.48/ share) at the latest quarter. Looking ahead, we expect CAPEX to come in at RM75m/RM80m for FY17/18E which we expect will keep dividends at a modest 10% payout ratio (providing a dividend yield of 0.7%/0.8%) in favour of longer-term growth ahead. Over the longer run, however, we would not discount the possibility of a higher dividend payout ratio, given KESM's strong cashflow generating capabilities (FY17E/FY18E free cashflow amounts to RM17.0m/RM23.7m).



A breakout year for ROE. Prior to FY16, KESM's ROE ranged from a mere 1.8% to 6%. A combination of an asset heavy business, large cash pile and low gearing were the main culprits for this. Nevertheless, higher margin products and services, and increase in operational efficiency has boosted net margins gradually in recent years. Coupled with the improvement in asset turnover (0.66x in FY14 to 0.77x in FY16), KESM has managed to double its ROE to 10.7% in FY16. Based on our estimates, we expect ROE to improve further to 12.0%/12.2% for FY17E/FY18E (in-line with peers MPI and UNISEM), without the need to gearing up.

### PEER COMPARISON

**Superior earnings growth.** Within our coverage, we believe that KESM's closest peers are MPI and UNISEM, both of which are Outsourced Semiconductor Assembly and Test players (OSAT). Comparatively, KESM's revenue and earnings growth are superior due to the huge expansion plans in its testing business, which would see FY17E/FY18E revenue growth of 10.3%/11.7% and net profit growth of 26.5%/14.1% compared to single-digit growth estimates for MPI and UNISEM's top and bottomline.

**Comparable profitability, but set to expand beyond peers.** KESM's net margins (FY16: 10.7%) are comparable to MPI (10.3%) and UNISEM (12.1%). Nevertheless, KESM's margins are set to expand to 12.3%/12.6% (FY17E/FY18E), surpassing both MPI and UNISEM – driven by a gradual shift to higher-margin product mix within the automotive semiconductor space.

Company	Price (RM)	Can	Revenue (RM'm)		Core Net Profit (RM'm)			Revenue Growth		Core Net Profit Growth		Net Profit Margin			
			FY16A	FY17E	FY18E	FY16A	FY17E	FY18E	FY17E	FY18E	FY17E	FY18E	FY16A	FY17E	FY18E
KESM	13.38	584.7	285.7	315.1	351.8	30.7	38.8	44.3	10.3%	11.7%	26.5%	14.1%	10.7%	12.3%	12.6%
Core Coverage															
MPI	13.10	2,749.5	1,463.0	1,547.0	1,556.0	149.9	159.6	161.5	5.7%	0.6%	6.5%	1.2%	10.2%	10.3%	10.4%
UNISEM	3.50	2,568.3	1,323.0	1,429.0	1,495.0	160.5	171.1	174.0	8.0%	4.6%	6.6%	1.7%	12.1%	12.0%	11.6%
NOTION	1.30	425.8	230.4	306.8	393.7	2.6	25.4	35.2	33.2%	28.3%	876.9%	38.6%	1.1%	8.3%	8.9%
SKPRES	1.31	1,594.3	1,051.0	1,914.1	2,272.8	82.1	105.5	135.0	82.1%	18.7%	28.5%	28.0%	7.8%	5.5%	5.9%
PIE	2.32	891.0	579.3	775.3	913.7	38.9	66.4	73.6	33.8%	17.9%	70.7%	10.8%	6.7%	8.6%	8.1%
Peer Average									32.6%	14.0%	197.8%	16.1%	7.6%	8.9%	9.0%

Source: Company, Kenanga Research

25 May 2017

#### **VALUATIONS**

	-	Market		PER (x)			PBV (x)		Fwd Di	v. Yield		Target	
Company	Price (RM)	Cap (RM'm)	FY16A	FY17E	FY18E	FY16A	FY17E	FY18E	FY17E	FY18E	Fwd ROE	Price (RM)	Rating
KESM	13.38	584.7	19.0	15.1	13.2	2.0	1.8	1.6	0.6%	0.7%	12.0%	15.2	OP
Core Cove	<u>rage</u>												
MPI	13.1	2,749.5	18.3	17.2	17.0	2.8	2.5	2.2	2.1%	2.1%	14.4%	14.85	OP
UNISEM	3.5	2,568.3	16.0	15.0	14.8	1.8	1.7	1.6	3.4%	3.6%	11.4%	3.55	MP
NOTION	1.3	425.8	163.8	16.8	12.1	1.5	1.1	1.1	2.3%	3.1%	6.7%	1.66	OP
SKPRES	1.31	1,594.3	19.4	15.1	11.8	4.7	3.9	3.2	3.2%	4.1%	26.0%	1.45	MP
PIE	2.32	891.0	22.9	13.4	12.1	2.4	2.1	1.9	3.4%	3.8%	15.8%	2.87	OP
Peer Average			48.1	15.5	13.6	2.6	2.3	2.0	2.9%	3.3%	14.8%		

We initiate coverage on KESM with an OUTPERFORM call and a target price of RM15.20 based on the ascribed 15x PER over FY18E EPS of RM1.02. Our valuation is in-line with local OSAT players MPI and UNISEM, both of which we recently assigned up-cycle valuations in view of the industry's recovery and favourable macro-economic factors (see Technology sector report dated 28-March).

Although KESM's market capitalisation is comparatively small at RM584.7m (vis-a-vis closest peers like MPI and UNISEM, which are RM2.5b-RM2.8b) and dividend yield is low at 0.7% /0.8% (compared to the sector average of 3.0%/3.4%), we believe that pegging KESM valuation to the sector peers is still warranted given its unique position within a fast-growing segment, superior earnings growth of 26.5%/11.4% for FY17/FY18E (compared to MPI and UNISEM's 6.5%/1.1% and 6.6%/1.7% growth rates, respectively) and cash-rich position (comparable to the net cash position for MPI and UNISEM).

#### **RISKS**

**Customer concentration risk.** Two of KESM's largest customers account for a high proportion of revenue at 69%. While KESM's extensive industry experience, proprietary processes and close working relationship with customers offers a degree of economic moat, the loss of either of these customers (via the IDMs' in-house burn-in and testing) or the advent of new entrants would severely curtail earnings. Although KESM's management team is prudent in its investments and highly adaptive, the qualification process for to be an approved vendor for new customers is often a lengthy process.

Cyclical industry dependent on global economy. Both the automotive industry and the semiconductor industry is cyclical and highly sensitive to macro-economic factors such as a global economic slowdown. Demand for higher-end vehicles are especially dependent on the state of the global economy, of which luxury vehicles require require higher chip content. Although KESM has the technological know-how to transition from the automotive semiconductor business to the commercial business, any shocks to the global economy would still have an immediate impact on earnings.

**Longer than expected gestation periods.** KESM operates within a high CAPEX industry, where its close working relationships with the IDMs result in KESM's expansion plans being rolled out in synchrony with the development of new products and features. Longer than expected gestation periods or a slower transition towards automation will affect margin.

#### **APPENDIX**

#### **Company Background:**

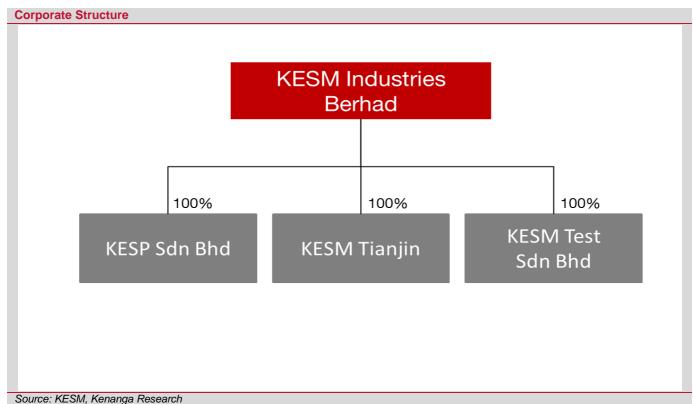
KESM began as a company involved in burn-in services for the semiconductor industry in 1978 and has since grown to become the largest independent "burn-in" and "test" services company in Malaysia. KESM was publicly listed in 1994 and became the first burn-in "service company" to be accredited with ISO 9002, ISP 14000, TS 16949 and QS 9000. The company serves the electronics and semiconductor industries and is associated with the Sunright Group of companies, a listed company in Singapore.

Recently, KESM completed the acquisition of the remaining 34.6% equity interest in KESM Test (in May 2015) from Sunright which has provided the company with a stronger foothold in the automotive semiconductor segment. The automotive semiconductor segment now accounts for c.80% of revenue with the balance coming from the commercial segment.

The KESMI Group comprises KESM Industries Berhad (KESM), KESM Test (M) Sdn Bhd (KTM) and KESP Sdn. Bhd.(KESP). KESM and KTM is strategically located in one of the prime industrial hub in the Sg Way Free Industrial Zone in Petaling Jaya and KESP is located in Penang.

### Services offered:

- Semiconductor burn-in services
- · Electrical testing of semiconductor IC
- Tape and reel assembly

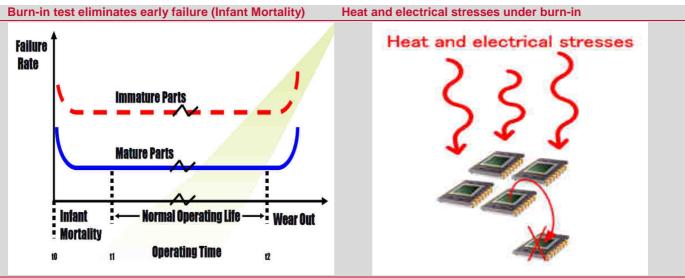


## **Business Model:**

### Burn-In:

An integrated circuit may be defective at the time it is produced or it may have a latent defect which permits it to operate according to specifications for a period of time but eventually causes it to fail. Burn-in is the process by which components of a system are exercised prior to being placed in service and often, prior to the system being completely assembled from those component. Burn-in is a process of stressing semiconductors to weed out potential weak circuits. The technique involves subjecting a device to heat and voltage stress for several hours or days and exercising it through the limits of its electircal performance.

The intention is to detect those particular components that would fail as a result of the initial, high-failure rate portion of the bathtub curve of component reliability. If the burn-in period is made sufficiently long (and, perhaps, artificially stressful), the system can then be trusted to be mostly free of further early failures once the burn-in process is complete. Burn-in test eliminates early failures by applying heat and electrical stresses to devices in order to ensure their quality and reliability.



Source: Company, Kenanga Research

## **Testing:**

Following the burn-in process, a semiconductor device has to be tested to determine whether it operates as intended as well as graded for its quality (usually known as the post burn-in test). Generally, there are two types of electrical tests:

- · Parametric testing determines whether the electrical characteristics of the device come within certain specified limits.
- Functional testing determines whether the device performs its specified function.



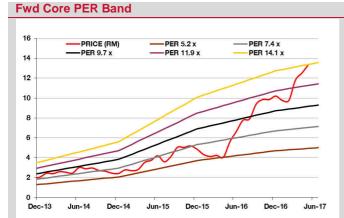
## **Board of Directors**

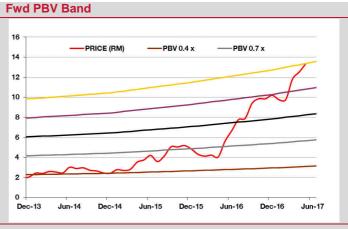
Name	Position	Background
Samuel Lim Syn Soo	Non-Independent Executive Director	<ul> <li>Mr Samuel Lim is the Executive Chairman and Chief Executive Officer of the Company and has been on the Board since 6 September 1986. Mr Lim co-founded and led the Company to become Malaysia's largest independent provider of burn-in and testing services.</li> <li>Mr Lim holds a Diploma in Industrial Engineering (Canada) and has more than 44 years of experience in the semiconductor and electronics industry.</li> <li>Prior to the establishing of KESM Industries Berhad, Mr Lim held senior positions including engineering, manufacturing and marketing in U.S. multinational companies. As one of the local pioneers in the semiconductor industry, Mr Lim received 3 U.S. patent families in recognition of his inventions in various solutions involving "Burn-in and test".</li> <li>Mr Lim also sits on the Board of Sunright Limited, a company listed on the Main Board of the Singapore Exchange Securities Trading Limited and several other private companies in Singapore, Malaysia, Taiwan, China, Philippines and USA.</li> </ul>

Kenneth Tan Teoh Khoon	Non-Independent Executive Director	<ul> <li>Mr Kenneth Tan was first appointed to the Board on 20 January 1992 and was last re-elected on 15 January 2015. Mr Tan is responsible for the Group's strategic direction, new business initiatives, investor relations and oversees the financial management of the Group.</li> <li>Mr Tan holds a Bachelor of Accountancy degree from the National University of Singapore and is a Fellow Chartered Accountant of Singapore of the Institute of Singapore Chartered Accountant</li> <li>Prior to joining the Group in 1987, he worked in an international accounting firm, a major property group in Singapore and subsequently in a diversified multinational group in the manufacturing and packaging industries.</li> <li>Mr Tan is currently an executive director of Sunright Limited and also sits on the Boards of several other private limited companies in Singapore, Malaysia, Taiwan, China, Philippines and USA.</li> </ul>
Ms Lim Mee Ing	Non-Independent Non- Executive Director	<ul> <li>Ms Lim was first appointed to the Board on 19 February 1990 and was last re-elected on 9 January 2014. She is also a member of the Audit Committee and Nominating Committee.</li> <li>Ms Lim holds a Diploma from the Institute of Bankers, and has more than 18 years of working experience in the banking profession before her retirement in 1990.</li> <li>From 1973 to 1990, she worked with the Singapore Branch of Barclays Bank PLC in various senior positions. Prior to her exit, she was responsible for marketing the global securities and custodian services of the bank. Ms Lim was also a director of Barclays Bank (S) Nominees Pte Ltd from September 1982 to March 1990. She was a member of the Committee on Securities Industry of the Association of Banks in Singapore from September 1987 to March 1990.</li> <li>Ms Lim is currently a non-executive director of Sunright Limited and also sits on the Board of a private limited company in China</li> </ul>
TUAN HAJI ZAKARIAH BIN YET, AMS, AMN	Senior Independent Non- Executive Director	<ul> <li>Tuan Haji Zakariah was first appointed to the Board on 27         January 1995 as a Non-Independent Non-Executive Director         and was redesignated as Independent Non-Executive Director         on 8 March 2011. He was last re-elected on 15 January 2015.</li> <li>He has a Master of Science in Engineering Business         Management from Warwick University, United Kingdom.</li> <li>Tuan Haji Zakariah is also the Senior Independent Director and         Chairman of the Audit Committee and Nominating Committee.         His last position before his retirement was as the Chief         Executive Officer of TH Global Services Sdn Bhd from 1 July         2011 to 31 January 2013. Following his departure from LTH,         Tuan Haji Zakariah became the Chief Operating Officer of         Kopetro Travel and Tours Sdn Bhd, a subsidiary company of         Cooperative of Petronas and retired on 16 May 2014.</li> </ul>
MR YONG CHEE HOU	Independent Non-Executive Director	<ul> <li>Mr Yong was first appointed to the Board on 11 January 2002 and was last re-elected on 14 January 2016. He is also a member of the Audit Committee and Nominating Committee of the Company.</li> <li>Mr Yong graduated from the University of Hull, United Kingdom with a Bachelor of Science (Hons) Degree in Economics and Accounting and qualified as a member of the Institute of Chartered Accountants in England and Wales. He is a member of the Malaysian Institute of Accountants. Mr Yong has spent over 9 years in the accountancy professi on. He also sits on the Boards of several private limited companies in Malaysia.</li> </ul>



Income Statement	Financial Data & Ratios										
FY July (RM m)	2014A	2015A	2016A	2017E	2018E	FYJuly (RM m)	2014A	2015A	2016A	2017E	2018E
Revenue	254.4	263.1	285.7	315.1	351.8	Growth (%)					
EBITDA	72.6	82.7	92.0	105.6	117.2	Revenue	2.7	3.4	8.6	10.3	11.7
EBIT	18.9	25.1	36.7	44.5	50.2	EBITDA	5.9	13.9	11.1	14.9	10.9
Finance costs	0.9	(1.1)	(0.5)	(0.0)	0.5	EBIT	38.3	32.7	46.4	77.2	12.9
PBT	19.8	24.0	36.2	44.5	50.8	PBT	41.2	21.4	50.8	22.7	14.1
Taxation	(3.5)	(3.1)	(5.6)	(5.7)	(6.5)	C. Net Income	138.2	56.5	80.2	26.5	14.1
Minority Interest	(5.5)	(3.9)	0.0	0.0	0.0						
Net Profit	10.9	17.0	30.7	38.8	44.3	Profitability (%)					
Core Net Profit	10.9	17.0	30.7	38.8	44.3	EBITDA Margin	28.6	31.4	32.2	33.5	33.3
						EBIT Margin	7.4	9.5	12.9	14.1	14.3
						PBT Margin	7.8	9.1	12.7	14.1	14.4
Balance Sheet						Net Profit	4.3	6.5	10.7	12.3	12.6
FY July (RM m)	2014A	2015A	2016A	2017E	2018E	Eff. Tax Rate	17.5	12.7	15.3	12.7	12.7
Fixed Assets	161.2	187.6	170.4	184.2	197.2	ROE	4.4	6.5	10.7	12.0	12.2
Intangible Assets	0.0	0.0	0.0	0.0	0.0	ROA	2.8	4.6	8.3	9.5	9.9
Other FA	4.7	4.5	0.6	0.6	0.6						
Inventories	11.6	10.1	8.5	7.9	9.0	DuPont Analysis					
Receivables	63.1	65.5	70.4	82.6	91.6	Net Margin(%)	4.3	6.5	10.7	12.3	12.6
Other Current	3.9	5.4	5.5	5.5	5.5	Asset T/over(x)	0.7	0.7	0.8	0.8	0.8
Assets						` '					
Cash	147.0	98.0	116.9	128.6	145.9	Levg Factor (x)	1.6	1.4	1.3	1.3	1.2
Total Assets	386.9	366.6	371.7	408.8	449.3	ROE (%)	4.4	6.5	10.7	12.0	12.2
Payables	5.6	4.2	45.2	46.2	46.8	Leverage					
ST Borrowings	37.1	40.4	29.5	30.0	30.0	Debt/Asset (x)	0.2	0.2	0.1	0.1	0.1
Other ST Liability	23.5	26.6	0.4	0.4	0.4	Debt/Equity (x)	0.3	0.3	0.1	0.1	0.1
LT Borrowings	36.8	33.0	9.9	9.9	9.9	N. Cash/(Debt)	73.1	24.6	77.6	88.8	106.0
Other LT Liability	2.4	2.0	0.0	0.0	0.0	N. Debt/Eqty(x)	-0.3	-0.1	-0.3	-0.3	-0.3
Minorities Int.	36.1	0.0	0.0	0.0	0.0						
Net Assets	245.5	260.5	287.4	322.3	362.2	Valuations					
						EPS (sen)	24.9	39.0	70.2	88.9	101.4
Share Capital	43.7	43.7	43.7	43.7	43.7	Core EPS (sen)	24.9	39.0	70.2	88.9	101.4
Reserves	201.8	216.8	243.7	278.6	318.5	NDPS (sen)	3.0	6.0	7.5	9.0	10.3
Equity	245.5	260.5	287.4	322.3	362.2	BVPS (RM)	5.6	6.0	6.6	7.4	8.3
, ,						PER (x)	53.7	34.3	19.0	15.1	13.2
Cashflow Statemer	nt					Core PER (x)	53.7	34.3	19.0	15.1	13.2
FY July (RM m)	2014A	2015A	2016A	2017E	2018E	Net Div. Yld(%)	0.2	0.4	0.6	0.7	0.8
Operating CF	65.9	77.6	126.7	92.0	103.7	P/BV (x)	2.4	2.2	2.0	1.8	1.6
Investing CF	(69.9)	(75.2)	(30.0)	(75.0)	(80.0)	, ,					
Financing CF	4.2	(47.8)	(39.3)	(5.9)	(6.4)						
Change In Cash	0.1	(45.4)	57.4	11.0	17.3						
Free CF	(4.0)	2.4	96.7	17.0	23.7						
Source: Kenanga R	esearch										





Source: Bloomberg, Kenanga Research

## Stock Ratings are defined as follows:

#### **Stock Recommendations**

OUTPERFORM : A particular stock's Expected Total Return is MORE than 10%

MARKET PERFORM : A particular stock's Expected Total Return is WITHIN the range of -5% to 10%

UNDERPERFORM : A particular stock's Expected Total Return is LESS than -5%

#### Sector Recommendations\*\*\*

OVERWEIGHT : A particular sector's Expected Total Return is MORE than 10%

NEUTRAL : A particular sector's Expected Total Return is WITHIN the range of -5% to 10%

UNDERWEIGHT : A particular sector's Expected Total Return is LESS than -5%

\*\*\*Sector recommendations are defined based on market capitalisation weighted average expected total return for stocks under our coverage.

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