Micro-Mechanics (Holdings) Ltd

High margin, High ROE consumables business

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SINGAPORE | TECHNOLOGY | INITIATION

- A 60%-margin, 30%-ROE consumables business with a 15-year earnings CAGR of 20%
- Expect strong earnings momentum from current surge in semiconductor industry sales
- Initiate coverage with a BUY rating and SGD2.00 target price, implying a 35% upside plus dividends.

Company Background

Micro-Mechanics (MMH) produces consumable tools and parts used in the back-end semiconductor process, in particular, die attach and wire bonding. These include rubber tips that pick up tiny bare semiconductors (called dies) that have been cut from a wafer and then placed onto a metal pad (called leadframe that connects to outside world or circuit board). This die will then be encapsulated into the ubiquitous semiconductor chips we see everywhere. Another major product are tools used in the wire-bonding process. An example is a clamp to hold the lead frame during the wire-bonding process of the die. It is also building up capabilities to serve the front-end of the semiconductor industry through its US operations. We do not expect this to contribute materially to earnings in the near term. MMH has a dividend policy of not less than 40% of earnings. Dividend yield is presently at 5.2%

Investment Merits

1. **Enviable track record.** MMH has an impressive 15-year track record of growing earnings by 20% CAGR. This has been accomplished together with strong operating cash-flows and an unlevered balance sheet. ROE has averaged 27% over the past three years. We expect ROE to cross 30% this year as earning accelerate.
2. **High margins from intellectual property and execution.** MMH enjoys huge gross margins of almost 60%. This is the highest amongst its listed global peers in semiconductor back-end supply chain. We believe its high margins is a culmination of its intellectual property in material science and strong execution in customising products which require extreme micrometre precision.
3. **Strong semiconductor growth.** MMH Jun 17 quarter earnings jumped by 60% YoY. The momentum looks sustainable as recent semiconductor industry sales remain robust.

We initiate MMH with a BUY and a target price of S$2.00, 35% upside including dividends. Our target price pegs MMH at 15x PE FY/18e, which is in-line with peers in the back-end semiconductor supply chain. We believe this is conservative given its superior margins, ROE and dividend yield.

The report is produced by Phillip Securities Research under the 'SGX StockFacts Research Programme' (administered by SGX) and has received monetary compensation for the production of the report from the entity mentioned in the report.

BUY (Initiation)

LAST TRADED PRICE	SGD 1.545
FORECAST DIV	SGD 0.08
TARGET PRICE	SGD 2.00
TOTAL RETURN	34.6%

COMPANY DATA

BLOOMBERG	MMH SP
O/S UNITS (MN) :	139
MARKET CAP (USD mn / SGD mn) :	159 / 215
52 - WK HI/LO (SGD) :	1.55 / 0.83
3M Average Daily T/O (mn) :	0.05

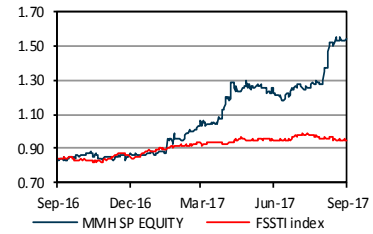
MAJOR SHAREHOLDERS (%)

SARCADIA LLC	27.1%
CHRIS BORCH	25.4%
LOW MING WAH	5.1%

PRICE PERFORMANCE (%)

	1MTH	3MTH	1YR
COMPANY	20.8	22.7	96.9
STI RETURN	(0.93)	0.91	16.53

PRICE VS. STI



Source: Bloomberg, PSR

KEY FINANCIALS (MMH SP)

SGD mn	FY16	FY17	FY18e	FY19e
Revenue	51.3	57.2	63.5	71.1
EBITDA	20.1	22.5	28.0	32.0
NPAT	11.9	14.8	18.4	21.4
EPS (SGD)	0.086	0.106	0.132	0.154
PER, x	18.1	14.5	11.7	10.0
P/BV, x	4.3	3.9	3.5	3.1
DPU (SGD)	0.06	0.07	0.08	0.08
DVD YIELD (%)	3.9	4.5	5.2	5.2
ROE (%)	24.5	28.2	31.9	32.9

Source: Bloomberg, PSR

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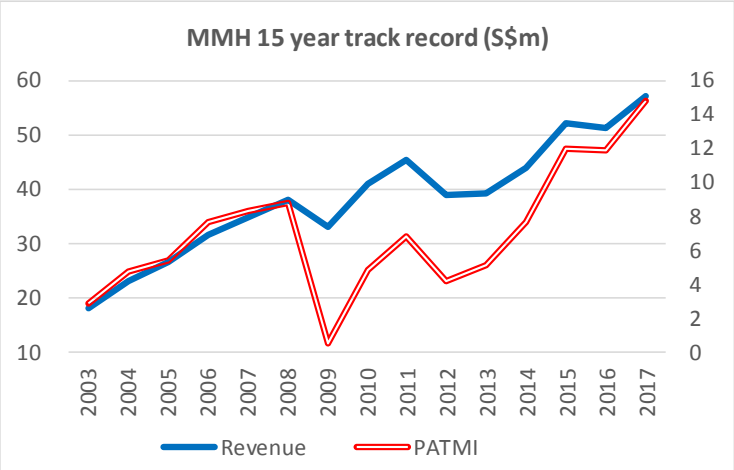
Background

Micro-Mechanics (MMH) was founded by Mr Christopher Borch in 1983. It was listed in June 2003. In its 14 years since listing, revenues have more than tripled and earnings have increased five-fold. During this time, the company has also returned more than S$70m in dividends.

MMH manufactures precision tools and consumable products for the semiconductor industry. Core products manufactured are used in the die attach and wire bond process of the assembly and testing stage. It is also building up capabilities to serve the front-end of the semiconductor industry through its US operations. MMH has five manufacturing facilities in Singapore (1983), Malaysia (1989), Philippines (1998), China (2004) and USA (2008). Also worth mentioning MMH is ranked 19th out of 606 companies on SGX in terms of Singapore Governance and Transparency Index.

**in parenthesis is the year the factories were established.*

Figure 1: Since GFC impact in 2009, MMH growth has been stellar



Source: Company, PSR

What Micro-Mechanics manufactures?

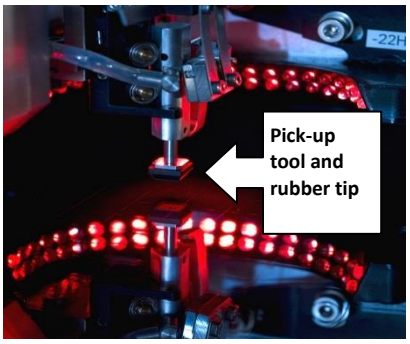
MMH produces consumable tools and parts used in two steps of the back-end semiconductor process, in particular, die attach and wire bonding (refer to Appendix 1). In addition, MMH has made the strategic step to produce tools and parts for the wafer-fabrication equipment industry from its US factory.

a) <u>Die attach tools (~60% of revenue)*</u>

- Rubber/plastic tips and pick-up tools: To pick up the die from the wafer and place them onto the leadframe. The size of these tips can be less than 10mm (Figure 2 to 4).
- Die ejector needles: To separate the die by pushing it out from the wafer to allow for pick-up.
- Dispensing nozzles: To dispense epoxy/adhesive onto the leadframe before the die is placed on the epoxy.

Refer to Appendix 2 for more details of the die attach process.

Figure 2: How it fits in a machine



Source: Kulicke & Soffa

Figure 3: Rubber tips less than size of a needle

Source: Company

Figure 4: Brown plastic tips with pick-up tool, measured in millimetres and tip size 0.2mm

Source: Company

Figure 5: Pick-up tool (excluding the rubber tips)

Source: Company

b) Wire bonding tools (~25% of revenue)

- Wire bond clamps: Top plate and lower heater plate which hold the leadframe down during the ball bonding process which uses gold/copper wire.

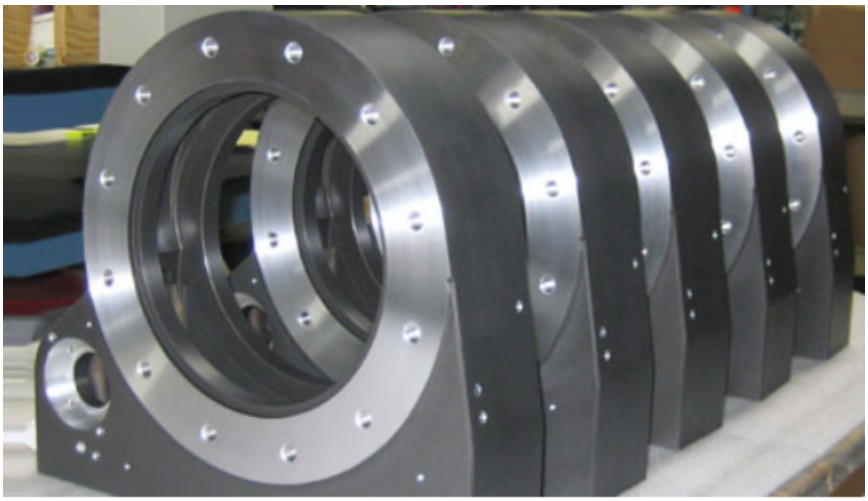
  Refer to Appendix 3 for more details.

c) Precision parts and tools in wafer-fabrication (~15% of revenue)

- Parts and tools used in critical wafer-fabrication processes: Customers are the front end semiconductor equipment makers. Tools produced are used in the vapour deposition and etch machine. The revenue generated in this division comes from the US manufacturing facility.

  US operations have been loss-making, but in FY17 the losses have narrowed considerably. MMH embarked on the strategy to penetrate front-end semiconductor industry (and laser, medical, aerospace) following the acquisition of Advanced Machine Programming in May 2008 for S$2.5mn. Since FY09, US operations have been suffering accumulated losses totalling S$12mn. In FY16, MMH redefined its business strategy to focus on manufacturing process-critical parts and tools for the front-end semiconductor industry.

Figure 6: Precision part for front-end equipment



Source: Company

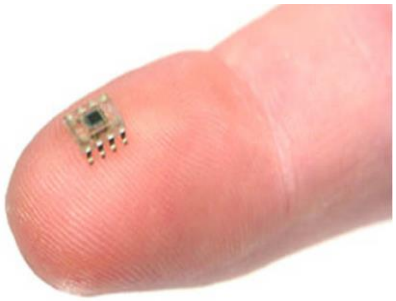
**MMH does not disclose the revenue breakdown by product type. This is based on revenue breakdown last disclosed in FY2006. Similarly, MMH does not disclose the quantity of products sold. Last disclosure was in prospectus FY2002 which was approximately 200k PUTs, 6000 rubber tips, 180k die ejector needles and 9600 wire bond tools.*

Competitive advantages

To enjoy manufacturing gross margins of 60% and 40% EBITDA margins, we believe it is due to the tremendous complexity and technology required in producing these tiny little parts which the limit competition. Below are some of the competitive advantages which we believe MMH enjoys:

1. **Increased miniaturization:** With miniaturization of electronic products and semiconductors, we have seen a dramatic shrinkage of die sizes. Dies sizes are now as small as $1mm^2$ to $10mm^2$ depending on the application. Not only is the size of the die shrinking but the thickness of the die is collapsing from 60 microns to less than 20 microns (i.e. 0.02mm).
2. **Complex material engineering:** The material used in producing the rubber tips require a significant amount of R&D. Materials must avoid electrostatic discharge (ESG) that can burn the semiconductor chip. These materials used must be purified to avoid chemical or organic contamination. The material composition of these tools is proprietary developed by MMH.
3. **Need for customization:** An interesting "quirk" about MMH tools and consumables is the level of customization. Every customer will require some level of customization for their tools despite some using the same die attach or wire bonding machine. Customers look for fast turnaround times for the tools they require. This customization we believe creates an additional barrier and even exclusivity. Such customization is highly complex due to the quick turnaround time (as short as 6 days). It also means customers prefer to work with a single source or supplier to save cost, in our opinion.
4. **High quality and reliability:** The quality of the tools requires high precision and consistency due to:
   - Die placement and rotation accuracy – The accuracy in placing the die now encroaching the 3 micrometres or micron*. There is little tolerance for error in positioning these dies.
   - Delicate material – Due to the size and fragility of the die, it can be easily contaminated, cracked or scratch.
   - Stability – Due to the high volume and automated process in die attach, it requires the highest quality and reliability of the tools

Figure 7: Chips are getting really small



Source: Company

** Micrometre or micron (µm): Width of a single strand of human hair range from 10 to 200 microns.*

What we find most attractive about MMH?

1. Huge margins

MMH gross margins have averaged 55% over the past five years. The most recent quarter margin expanded to almost 60%. As Figure 8 suggests, MMH has consistently enjoyed high gross margins. Only in the 2009 global financial crises, gross margins suffered and even then, margins bottomed out at 40%.

When we compare MMH margins, against other parts of the back-end eco-system, MMH margins stand as the highest (Figure 13) and is easily double of the industry average. As mentioned earlier, the high margins are a result of the complexity in manufacturing the product, high efficiency (24/7 automated machining), extensive customization and quick turnaround time demanded by customers (as short as 6 days).

2. Long track record of compounding earnings and dividends

When we look at MMH 15-year history, the track record is impressive. Over the past 15 years, revenue has compounded almost 10% per year. Profits have performed even better, compounding at 20%. It seems that MMH's growth is accelerating. The 5-year track record for earnings is now 28% CAGR. MMH has a dividend policy of not less than 40% of earnings.

Figure 8: Enviable track record of earnings and dividends

Category	5 years	15 years
Revenue (CAGR)	8.1%	9.6%
PATMI (CAGR)	28.6%	19.7%
Dividends per share (CAGR)	21.7%	16.6%
Revenue per employee (CAGR)	10.0%	3.8%
Gross margins (Average)	55.3%	54.6%
EBITDA margins (Average)	35.6%	31.6%

Source: Company, PSR

3. Healthy Balance Sheet

MMH has no leverage on its balance sheet. The company is in a net cash position of $22m. In its 15 years track record, MMH has always been in net cash position due to the positive cash-flow generated every year. Despite its large cash holdings, MMH posted unlevered ROE of 28% in FY17.

4. Consumable nature of the product

Another strength of MMH products is the consumable feature of the tools. In general, some of the tools, in particular higher-end semiconductors, need to be replaced every 8-hour shift by the customer. This is to contain contamination and ensure precision of the process. This means the demand for the product is more recurrent and depend on the output of semiconductor rather than on lumpy capital expenditure cycles.

5. Huge growth opportunity ahead

The key driver for MMH growth will be increased sophistication of packages and unit growth of semiconductors. It is hard to compute the exact impact of advanced chip packages on demand. But we can use semiconductor unit growth to have a good gauge for demand, especially due to the consumable nature of MMH products. Demand for semiconductors is expected to grow 9% per year on a per unit basis from 2016 till 2021, according to Gartner. The various drivers to unit growth are represented in Figure 9.

Figure 9: Multiple drivers of semiconductor unit growth

End product	Unit CAGR (2016-2021)	Comment
Solid state lighting	33%	LED is turning more pervasive in commercial buildings. Energy savings as much as 50% makes it a compelling technology. The installed base of smart lighting to reach more than 2.5b units by 2021. LED solution increasingly used with sensor and controls for smart lighting solution.
Autonomous vehicle	22%	To roll-out autonomous vehicle features, it will incorporate sensing technologies (cameras, lidar), 3D mapping, data analytics, path planning algorithms, etc.
Hybrid and EV	15%	EV cars expected to rise from 4m to 13.5m by 2021.
Internet of things	15%	There are 6.4b IOT units in 2016; this will reach more than 20b in 2021. IOT or connected devices will be deployed in electric meters, security meter, TVs, healthcare devices, LED lights, HVAC, etc.
Solid state	15%	NAND flash is displacing hard disk drives and huge demand for flash in smartphones.
Wearables	14%	Wearable devices expected to almost double from 265m 2016 to 504m in 2021. Wearables include smart watches, Bluetooth headset, wristband and other fitness monitors. Kids, luxury and fashion smartwatches will be major new categories.
Servers cloud computing	9%	Businesses are now shifting to "cloud-first" IT infrastructure and various business models using the cloud is mushrooming - software as a service (SaaS), infrastructure as a service (IaaS) and platform as a service (PaaS).

Source: Kulicke & Soffa, Gartner, PSR

6. Advanced packages still require die attach process

As semiconductor packages evolve, the requirement for the pick and placing of dies becomes ever more critical.

- Wafer Level packaging such as Fan Out packaging process will require die attach process during the wafer reconstruction phase. Dies still need to be picked from the wafer and placed on a separate metal carrier for moulding.
- NAND memory dies continues to be stacked, as much as 32x on top of each other in a single package.
- Flip chip process requires an even higher accuracy than standard epoxy die. The bumps on the die have aligned to the bond pads on the substrate. Flip chip demands two tools, the first to lift bumped die and another tool to flip it over.

Figure 10: Simple summary of packaging categories

Category	Packages
High-end	2.5D, 3D/TSV
Mid-end	SiP, WLP
Low-end	Wirebond

Source: PSR, media

7. Wide customer base and low concentration risk

MMH has more than 600 active clients. Customers are basically from three broad categories:

(i) Outsourced semiconductor assembly and tests (OSAT) operators such as Advanced Semiconductor Engineering, Amkor, Unisem and JCET. There are more than 100 such companies globally;

(ii) Independent device manufacturers (IDM) which are companies that design, manufacture and sell semiconductors such as Bosch, Infineon, Micron and NXP;

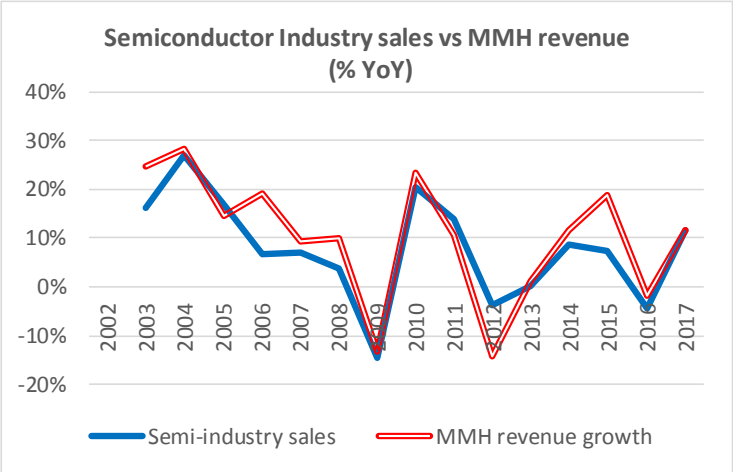
(iii) Wafer fabs which are involved in front-end wafer production stage and also undertake some back-end processes such as TSMC, Intel and Samsung.

How we forecast revenues?

The earnings model for MMH is straightforward in terms of margins and capital expenditure. Most challenging will be the initial step to forecast revenue.

Step 1: We tracked how MMH revenue compares to global semiconductor industry revenues. As per Figure 11, MMH revenue has a close correlation (+0.9 correlation coefficient) with semiconductor industry revenues.

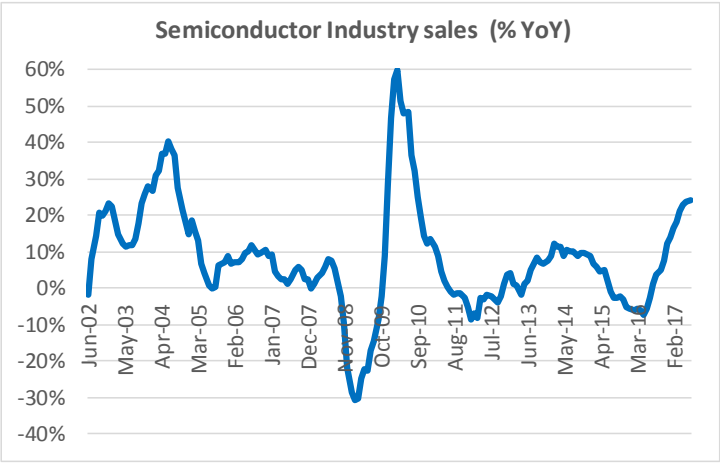
Figure 11: High correlation of 0.9 between semiconductor industry and MMH revenues



Source: Semiconductor Industry Association, Bloomberg, PSR

Semiconductor sales have been robust in 2017 and the pace of growth is accelerating. Latest July 2017 semiconductor sales growth was 24%, fastest pace of growth in almost 7 years.

Figure 12: Strong Jul17 +24% YoY, sets up a healthy 1Q18 revenue for MMH



Source: Semiconductor Industry Association, Bloomberg, PSR

Step 2: We use the estimated 9% unit* growth of semiconductors as our base forecast and an additional 2-3% points incremental growth due to the increased number of dies being stacked or condensed into every semiconductor chip. However, the current spike in semiconductor sales provides upside surprise to our forecast in the near term.

**Source: Gartner Jul17 forecast, Kulicke & Soffa*

Valuation

Our target price for MMH is 15x PE 1-year forward. As reflected in Figure 13, valuations for back-end supply chain is between 16-17x. We base our valuations off the back-end semiconductor supply chain. We believe the valuation is conservative given MMH superior margins, ROE and dividend yield.

MMH ranks well amongst peers in the supply chain

MMH EBITDA margins of 40% is the highest and more than double the various players in back-end supply chain. In terms of dividend yield, MMH also ranks the highest in the supply chain.

When comparing ROE, only BE Semiconductor and Inari are higher. But valuations of both companies are much steeper at 16-19x forward PE and more than 5x P/BV.

Figure 13: MMH has the best EBITDA margin and dividend yield

Company	1 Mth Perf.	3 Mth Perf.	YTD Perf.	Share Px Local Crcy	Mkt. Cap. (US$ m)	PE Yr 0	PE Yr + 1	PE Yr + 2	P/BV Yr 0	Dividend Yield	ROE Yr 0	EV/ EBITDA	EBITDA Margin
OSAT													
Advanced Semi.	0.8%	-1.2%	12.6%	37.1	10,152	14.2	13.5	12.2	1.8	3.7%	14.8%	6.7	20.4%
Silicon Precision Ind.	-0.4%	-4.1%	-0.3%	47.7	4,917	15.0	15.9	14.0	2.3	3.7%	13.6%	6.3	28.3%
Jiangsu Changjiang	8.7%	5.9%	-2.0%	17.3	3,568	221.2	51.0	32.0	2.7	0.1%	2.8%	10.0	15.8%
Amkor Tech.	16.0%	-9.2%	-7.0%	9.8	2,347	14.3	11.1	12.7	1.6	0.0%	19.3%	3.8	21.8%
Inari Amertron	-1.4%	22.8%	47.9%	2.5	1,179	21.7	19.0	16.5	5.6	3.4%	29.2%	13.3	26.3%
Unisem	-2.5%	11.9%	63.6%	3.9	675	17.5	15.1	13.8	3.2	2.8%	12.7%	6.8	25.4%
MPI	-3.6%	1.5%	80.8%	13.4	635	15.0	13.5	12.8	2.4	2.0%	16.9%	5.2	28.5%
Globetronics	0.2%	3.9%	79.3%	6.2	419	68.4	31.0	17.4	6.8	3.1%	9.8%	15.9	23.8%
	2.9%	0.2%	12.0%		23,893	17.5	15.8	14.3	2.3	2.7%	13.8%	7.3	22.2%
Equipment makers													
Teradyne	5.7%	9.3%	40.9%	35.8	7,080	23.8	18.2	17.3	3.5	0.8%	20.6%	10.1	3.4%
ASM Pacific	18.2%	4.5%	40.8%	115.7	6,051	32.3	18.5	18.3	4.5	0.0%	25.9%	13.0	17.1%
BE Semiconductor	8.2%	22.9%	87.7%	59.0	2,811	36.2	16.3	16.5	6.6	3.0%	33.7%	11.5	23.9%
Tokyo Seimitsu	5.4%	3.1%	13.6%	3935	1,453	16.5	14.3	13.1	1.8	1.8%	13.0%	6.9	20.7%
Kulicke & Soffa	4.6%	-5.7%	23.9%	19.8	1,406	25.8	11.4	9.8	1.6	-	10.2%	5.8	11.0%
Micro-Mechanics	20.8%	22.7%	78.0%	1.54	158	14.5	11.6	10.0	3.9	4.5%	28.1%	8.7	39.4%
	10.1%	8.3%	44.8%		18,959	26.5	16.8	16.1	4.0	0.9%	22.9%	10.7	13.0%

Source: Bloomberg, PSR, Prices as at 20Sep17

APPENDIX 1 - Semiconductor Front-End and Back-End

In the manufacturing of a semiconductor, we can generally split the process into front-end and back-end. The front end is where the semiconductor wafer is fabricated. Once this wafer is produced, the back-end process will commence. This starts with the testing of the wafer, dicing it and eventually packaging or encapsulating it into the final semiconductor product we often see.

MMH is focused on two steps of the back-end process which are die attach and wire bond.

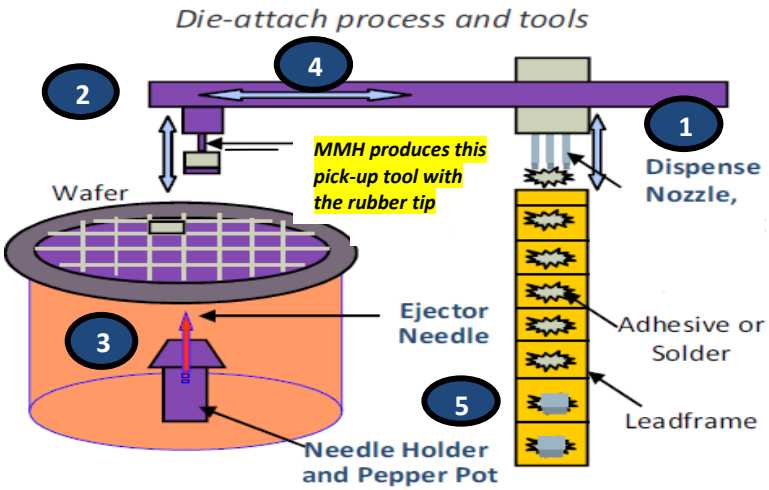
Figure 14: MMH is focused mainly on supplying **die attach** and **wire bond** tools

Back-end Steps	Comment	Equipment makers
Wafer Test ⇩	A wafer prober is used to test every individual die or integrated circuit.	Tokyo Seimitsu, Tokyo Electron, SEME
Dicing ⇩	A diamond dicing saw is used to cut the wafer into individual chips (or called dies).	Disco, Tokyo Seimitsu
Die Attach ⇩	The process of attaching the die from the wafer onto the leadframe. This process is also called die bonding because a form of paste or epoxy is used to stick the die unto the leadframe.	BE Semiconductor, ASM Pacific, Fasford Technology
Wire Bond ⇩	The process of providing electrical connection between the silicon chip and the external leads of the semiconductor device using very fine copper or gold wires.	Kulicke & Soffa, ASM Pacific, Shinkawa
Encapsulate ⇩	Cover or encapsulate the chip with plastic or ceramic mould (into that black looking chip we always see).	Towa, ASM Pacific, Apic Yamada, BE Semiconductor
Test	Test handlers are used for final inspection of chip functionality, voltage, etc.	Teradyne, Cohu/Delta Design, Tech Wing, Xcerra, Advantest

Source: PSR

APPENDIX 2 - Closer look at die attach process

Figure 15: Illustration of die attach steps



Source: Company, PSR

Figure 16: It all happens inside this die attach machine

Source: BE Semiconductor

Step 1: Dispense the epoxy (glue)

The leadframe (metallic device to connect the die to the outside world or circuit board) moves into the dispensing position. A dispensing nozzle mounted at the lower portion of an epoxy dispenser moves downward and dispenses a pre-set amount of epoxy or adhesive (glue) on the leadframe.

Step 2: Bond Head/collect attached with pick-up tool/tip

The bond head, mounted on a holder or pick-up tools such as the rubber tip, Hi-Temp PUT or carbide collet moves downward to the silicon wafer and activates a vacuum to pick up the silicon die from the silicon wafer.

Step 3: Ejection needle pushes out the die

Upon lowering the pick-up-tool to the die on the silicon wafer, a mechanism below the silicon wafer pushes the die out of the tape on the silicon wafer using an ejector needle. The die is transferred to the pick-up-tool and held by vacuum.

Stage 4: Bond head moves die to leadframe

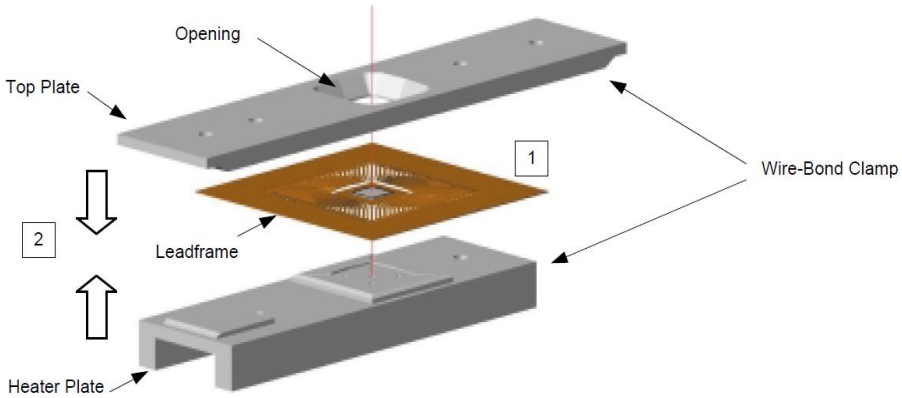
The bond head which is holding the die lowers the die onto the top of the dispensed epoxy or adhesive on the leadframe

Stage 5: Attach the die with some force

A small amount of force is applied to the die to spread the epoxy or adhesive below the die.

APPENDIX 3 - Wire bonding process

Figure 17: Illustration of clamps used to hold the leadframe during wire bonding



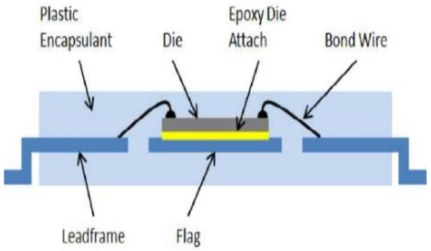
Source: Company Prospectus

Step 1: Leadframe moves into the bonding position where the silicon dies is in line with the opening on the top plate and heater plate.

Step 2: The leadframe is being held in position between the top plate and heater plate by means of the downward movement of the top plate and the upward movement of the heater plate.

Step 3: once the leadframe is held in position, the welding begins to connect the die or chip with wires to the leadframe. Schematic of bond wire attached to die is shown in Figure 18.

Figure 18: Wire bonding connects the ***bond wire*** to the leadframe (or legs that stick out of a semiconductor chip)

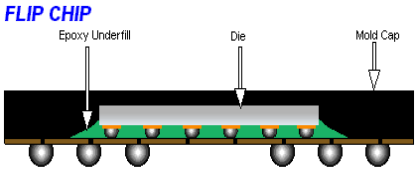


Source: BE Semiconductor

Wire bonding

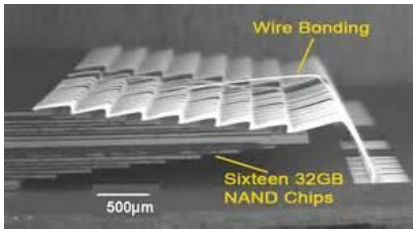
Wire bonding is considered the less advanced traditional form of semiconductor packaging. Nevertheless, around 80% of semiconductor packages are still wire bonded. The biggest growth area for wire bonding in is flash memory. The architecture is about multilayer stacking of dies (and 3D). A single flash chip may have 64 dies stacked on each other and wire-bonded. Figure 20 shows a flash chip with 16 dies stacked on each other. There are multiple layers of wire bonding to connect each die.

Figure 19: No wire bond needed on flip chip but solder bumps under the die



Source:www.pcmag.com

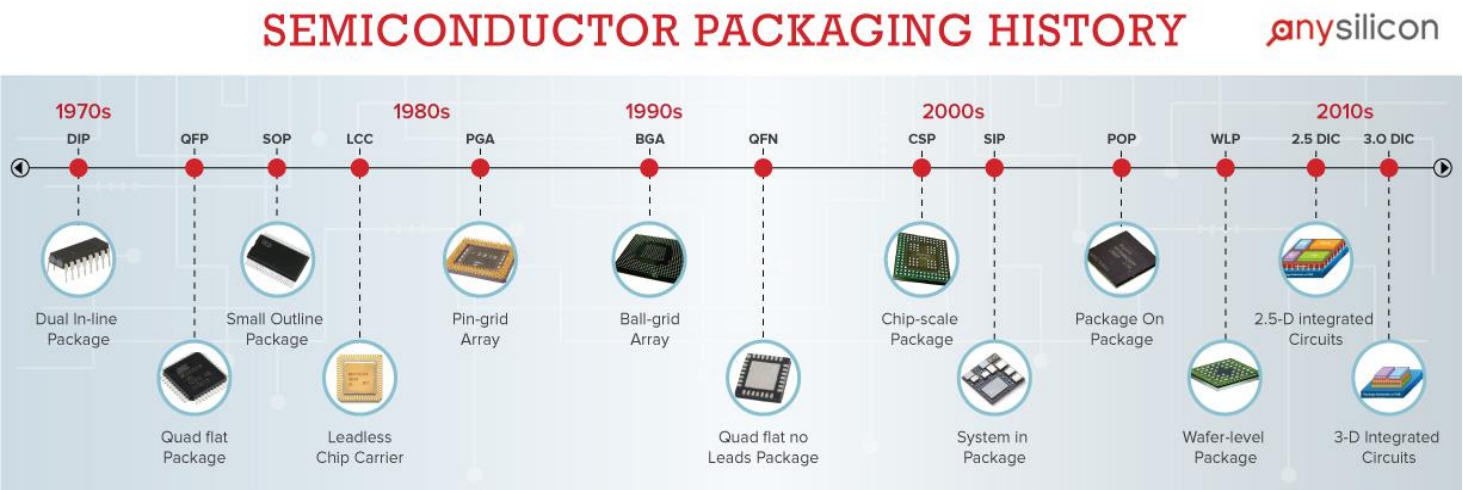
Figure 20: Layers on layers of die stacked and wire-bonded on each other



Source:www.pcper.com

APPENDIX 4 – Brief history of semiconductor packaging

Figure 21: Semiconductor package keeps evolving



Source: anysilicon

Semiconductor packages started in the 1970s with dual in-line package (DIPP). But the limited pins or legs affected the quality of the interconnection between the chip and the board. Maximum pins were 50-60m.

Next came the quadruple flat package (QFP) in the mid-1970s. This meant there were pins on all four sides of the packages instead of just two with DIPP.

The 1980s came the pin-grid array (PGA) which allowed much tinnier pins and provided an array.

In the 1990s, came the ball-grid array (BGA), which used solder balls rather than pins which are not structurally resilient. Pins or now balls, could go up to 1000. However, these balls or connection were on the periphery only.

Flip chip packaging arrived in the 2000s where solder balls were everywhere and not just on the periphery. Flip chip did not require wire but solder bumps to connect the chip.

More advanced packaging came in the year 2000 such as system-in-package (SiP) where multiple chips are packaged together in a single package. There is also package on package (PoP) where two or more packages are sitting on top of another. It is done to save PCB area. For instance, the A5 microprocessor has three dies, the microprocessor and two DRAMs. Latest is the 3D package, where dies are stacked and interconnected using through-silicon vias (TSVs), a kind of hole burrowed through the dies.

Financials

Income Statement

Y/E Jun, SGD mn	FY15	FY16	FY17	FY18e	FY19e
Revenue	**52.1**	**51.2**	**57.2**	**63.5**	**71.1**
EBITDA	**18.5**	**19.5**	**22.1**	**28.0**	**32.0**
Depreciation & Amortisation	(4.6)	(4.4)	(4.3)	(4.9)	(5.0)
EBIT	**13.9**	**15.1**	**17.8**	**23.1**	**27.0**
Net Finance Inc/(Exp)	0.0	0.0	0.0	0.0	0.0
Profit before tax	**15.3**	**15.7**	**18.5**	**23.6**	**27.5**
Taxation	**(3.3)**	**(3.8)**	**(3.7)**	**(5.2)**	**(6.0)**
Net profit before NCI	**12.0**	**11.9**	**14.8**	**18.4**	**21.4**
Non-controlling interest	0.0	0.0	0.0	0.0	0.0
Net profit, reported	**12.0**	**11.9**	**14.8**	**18.4**	**21.4**

Per share data (SGD)

Y/E Jun	FY15	FY16	FY17	FY18e	FY19e
EPS, reported	0.086	0.086	0.106	0.132	0.154
DPU	0.05	0.06	0.08	0.08	0.08
BVPS	0.34	0.36	0.39	0.44	0.50

Cash Flow

Y/E Jun, SGD mn	FY15	FY16	FY17	FY18e	FY19e
CFO					
Profit before tax	**15.3**	**15.7**	**18.5**	**23.6**	**27.5**
Depreciation & Amortisation	4.6	4.4	4.3	4.9	5.0
WC changes	(3.0)	(0.6)	(0.6)	(1.6)	0.5
Net finance inc/(exp)	(0.1)	(0.1)	(0.1)	0.0	0.0
Tax paid	(2.3)	(3.2)	(3.9)	(5.2)	(6.0)
Others	(0.5)	0.0	(0.2)	0.0	0.0
Cashflow from ops	**14.1**	**16.3**	**18.1**	**21.7**	**27.0**
CFI					
CAPEX, net	(4.9)	(4.1)	(5.1)	(6.0)	(5.0)
Others	0.6	1.2	0.4	0.2	0.0
Cashflow from investments	**(4.3)**	**(2.9)**	**(4.7)**	**(5.8)**	**(5.0)**
Share issuance, net	0.0	0.0	0.0	0.0	0.0
Loans, net of repayments	0.0	0.0	0.0	0.0	0.0
Dividends	(5.5)	(6.9)	(9.7)	(12.5)	(12.5)
Others	0.0	0.0	0.0	0.0	0.0
Cashflow from financing	**(5.5)**	**(6.9)**	**(9.7)**	**(12.5)**	**(12.5)**
Net change in cash	**4.9**	**5.7**	**3.5**	**3.2**	**9.5**
CCE, end	**15.9**	**20.8**	**23.5**	**26.6**	**36.1**

Source: Company, Phillip Securities Research (Singapore) Estimates

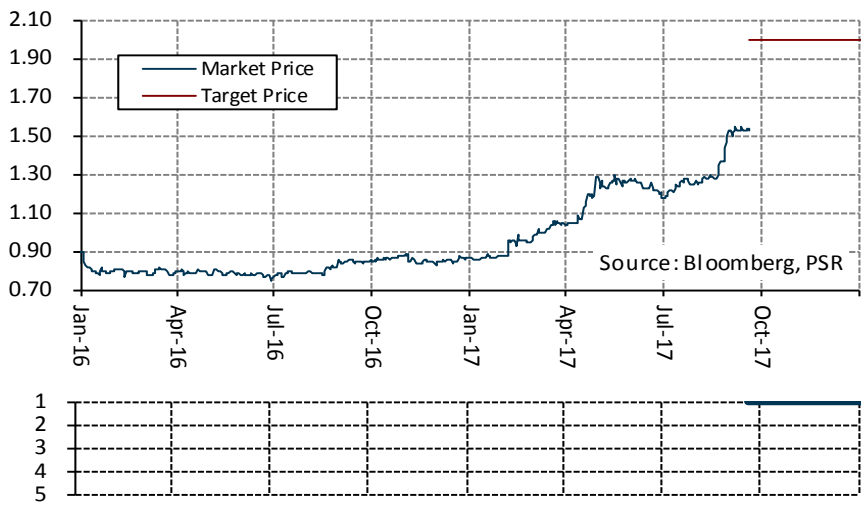
Balance Sheet

Y/E Jun, SGD mn	FY15	FY16	FY17	FY18e	FY19e
ASSETS					
PPE	26.6	25.5	26.1	27.2	27.1
Others	0.3	0.1	0.4	0.4	0.4
Total non-current assets	**26.9**	**25.6**	**26.5**	**27.6**	**27.5**
Accounts receivables	10.1	10.3	11.9	11.4	13.9
Cash	15.1	20.0	23.4	26.6	36.1
Inventories	3.5	3.2	3.6	4.1	4.7
Others	0.1	0.2	0.0	0.0	0.0
Total current assets	**28.8**	**33.7**	**38.9**	**42.1**	**54.7**
Total Assets	**55.7**	**59.3**	**65.4**	**69.6**	**82.3**
LIABILITIES					
Accounts payables	6.0	5.9	7.8	6.1	9.9
Short term loans	0.0	0.0	0.0	0.0	0.0
Others	1.5	1.6	1.3	1.3	1.3
Total current liabilities	**7.5**	**7.5**	**9.1**	**7.4**	**11.2**
Long term loans	0.0	0.0	0.0	0.0	0.0
Others	1.3	1.5	1.7	1.7	1.7
Total non-current liabilities	**1.3**	**1.5**	**1.7**	**1.7**	**1.7**
Total Liabilities	**8.8**	**9.0**	**10.8**	**9.1**	**12.9**
EQUITY					
Non-controlling interests	0.0	0.0	0.0	0.0	0.0
Shareholder Equity	**46.8**	**50.2**	**54.7**	**60.6**	**69.5**

Valuation Ratios

Y/E Jun	FY15	FY16	FY17	FY18e	FY19e
P/E (X)	17.9	18.1	14.5	11.7	10.0
P/B (X)	4.6	4.3	3.9	3.5	3.1
EV/EBITDA (X)	119.2	112.8	99.4	78.2	68.2
Dividend Yield	3.2%	3.9%	5.2%	5.2%	5.2%
Growth & Margins					
Growth					
Revenue	18.9%	-1.7%	11.7%	11.0%	12.0%
EBITDA	42.3%	5.4%	13.3%	26.9%	14.1%
EBIT	59.8%	8.6%	17.9%	29.7%	16.7%
Net profit, adj.	55.8%	-0.8%	24.4%	24.4%	16.4%
Margins					
EBITDA margin	35.5%	38.1%	38.6%	44.2%	45.0%
EBIT margin	26.7%	29.5%	31.1%	36.4%	37.9%
Net profit margin	23.0%	23.2%	25.9%	29.0%	30.1%
Key Ratios					
ROE (%)	1.8%	24.5%	28.2%	31.9%	32.9%
ROA (%)	0.9%	20.7%	23.7%	27.3%	28.2%
Net Debt / (Cash)	(15)	(20)	(23)	(27)	(36)
Net Gearing (X)	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash

Ratings History



PSR Rating System

Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
<-20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

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