

The logo consists of the letters 'EMC' in a stylized, blocky font. The 'E' and 'M' are blue, while the 'C' is green. The letters are set against a dark blue background that transitions into a lighter blue and white curved shape on the left side of the slide.

EMC

Elite Material Co., Ltd.

Global leading provider of eco-friendly laminates

IR Publication

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Market position of the company

Global No. 1 provider of:

- Halogen-free laminates
- Laminates for HDI (high-density interconnect) PCB
- Laminates for smartphones

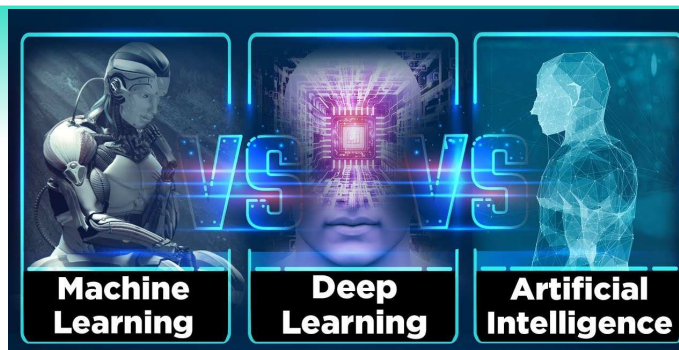


HDI growth remains on the upward trend

- Proliferation of HDI PCB applications
- Material upgrade raises the laminate dollar content per square inch



Proliferation of HDI PCB applications - Devices



Smartphones



SSD & Memory modules



Ultra thin Laptops & tablets



Gaming



AR/VR



Smart Speakers

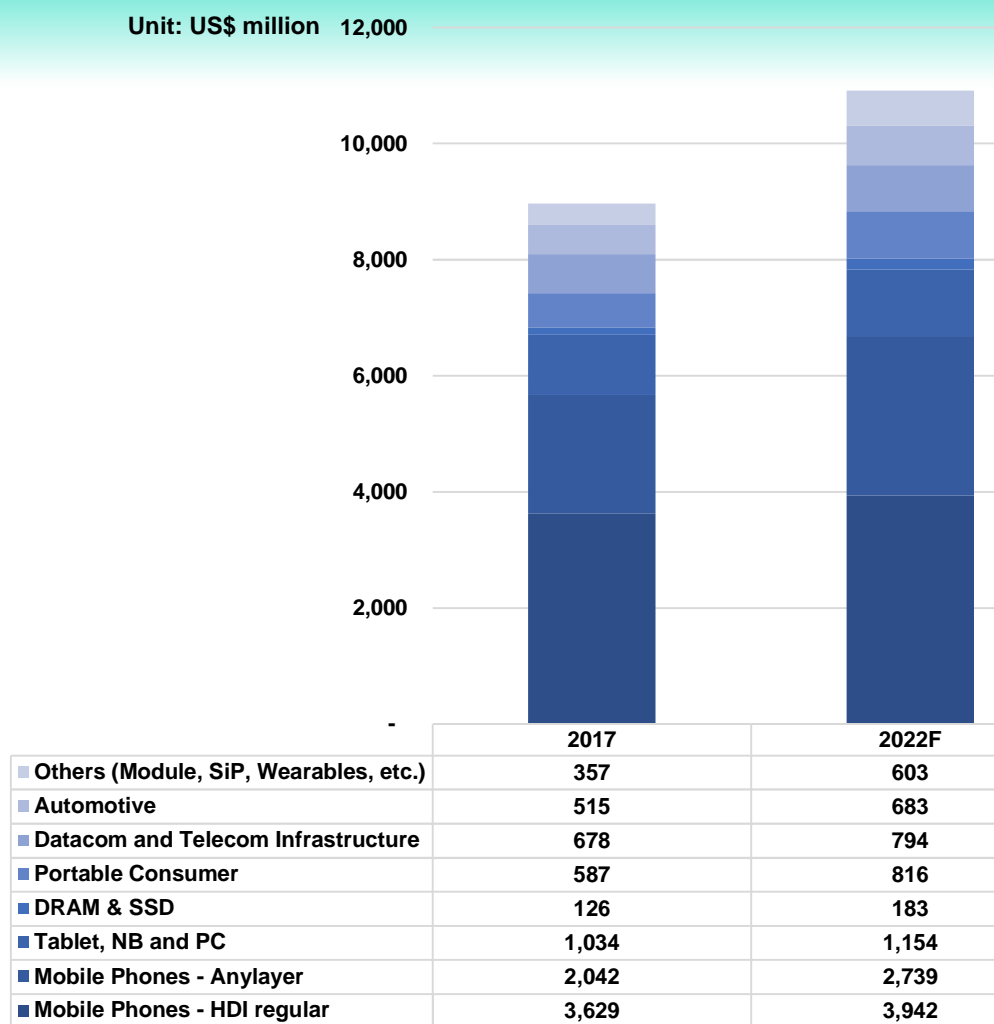


Drones



Wearables

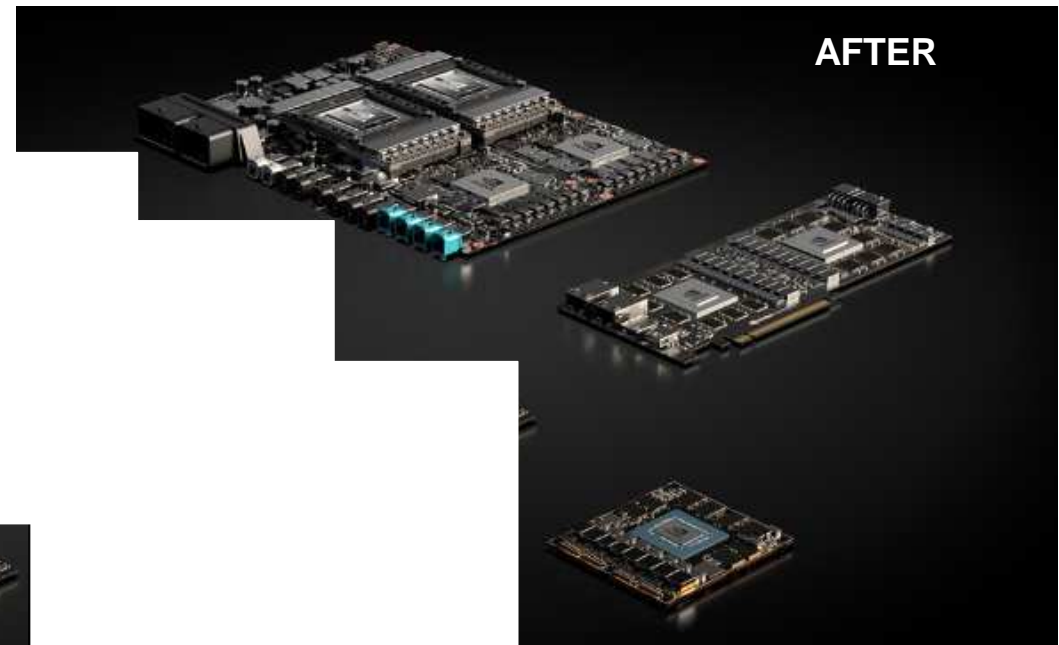
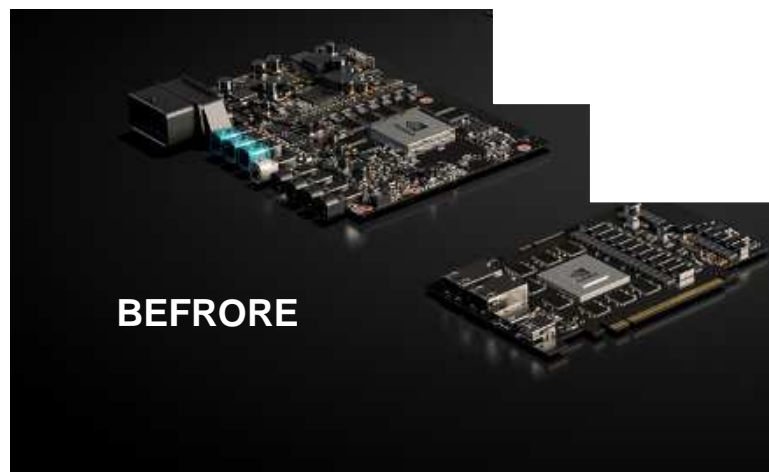
Multiple factors drive the growth of HDI



- CAGR of overall HDI growth is forecast to be 4.0% from 2017 to 2022.
- Any-layer HDI consumed by mobile phones is predicted to have a CAGR of 6.05% during the forecast period.
 - Implication: Laminate \$ content rises, though the total number of smartphone units is considered to be stagnant.
- SSD & DRAM would have the highest CAGR of 7.75%.
- Increasing electronic content of automotive vehicles, e.g. ADAS, telematics, and infotainment systems, leads to HDI growth, projected to have a CAGR of 5.81%.
- **PCBs in datacom & telecom infrastructure begin to adopt fine line/pitch design.**
 - Implication 1: HDI construction technique becomes common for infrastructure beginning from PCIe Gen 4 and Gen 5.
 - Implication 2: The upgrade at material and construction technique for infrastructure is an irreversible trend while 5G era is approaching.

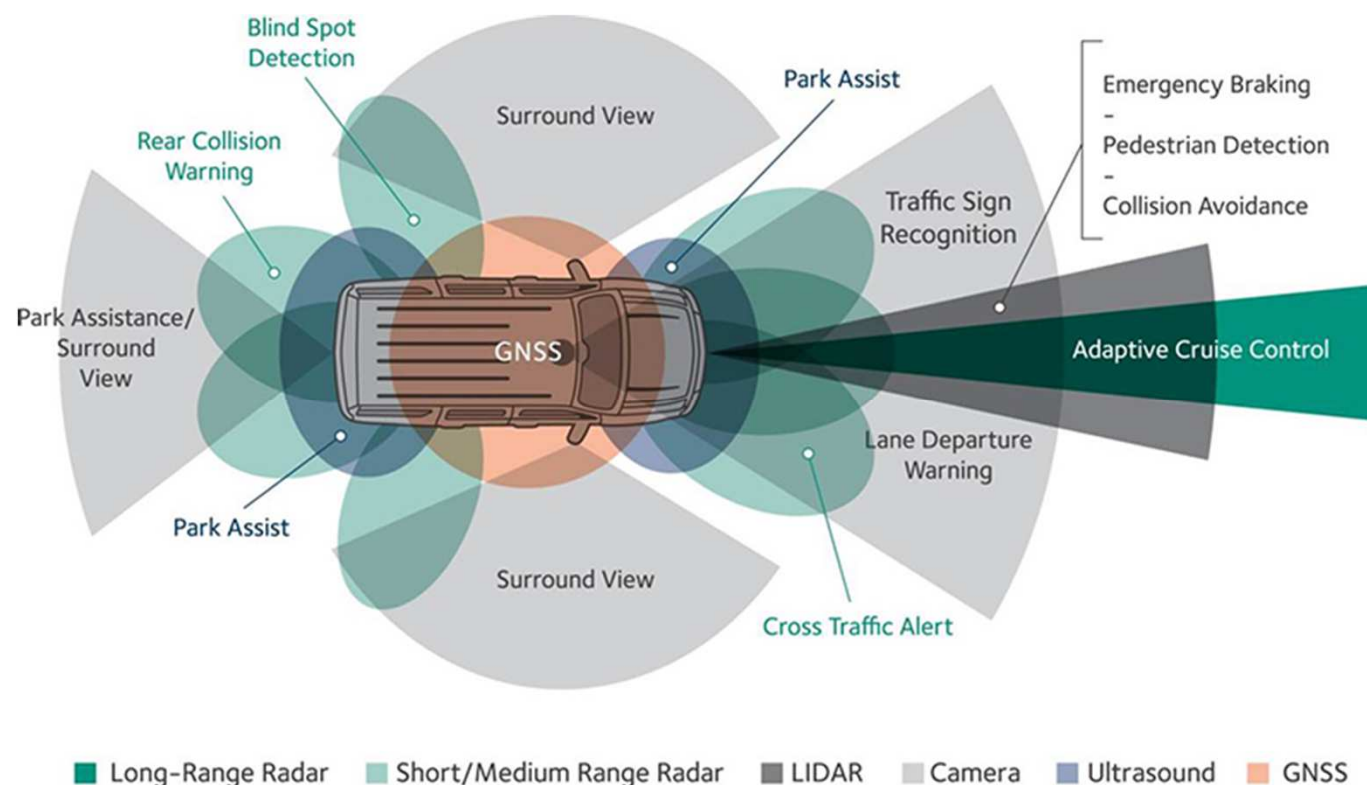
PCB design of networking infrastructure is migrating

- **Trend 1: Halogen-free.** HF laminates are preferred or required.
 - New platforms of PCIe 4 include, but are not limited to, Intel's Whitely, request only halogen-free laminates.
- **Trend 2: HDI.** AI semiconductors, GPUs and CPUs, and heterogeneous integration of semiconductors increase pin counts substantially.
 - Fine line/pitch HDI architecture design by PCB constructors becomes common.
- **Trend 3: Multi-lamination,** which is a must in HDI construction technique.
- Decades of experiences and knowledge EMC accumulated in HF and HDI now a competitive advantage unrivalled by peers.



Source: nVidia

Increasing electronic content per car



■ Autonomous and Safety

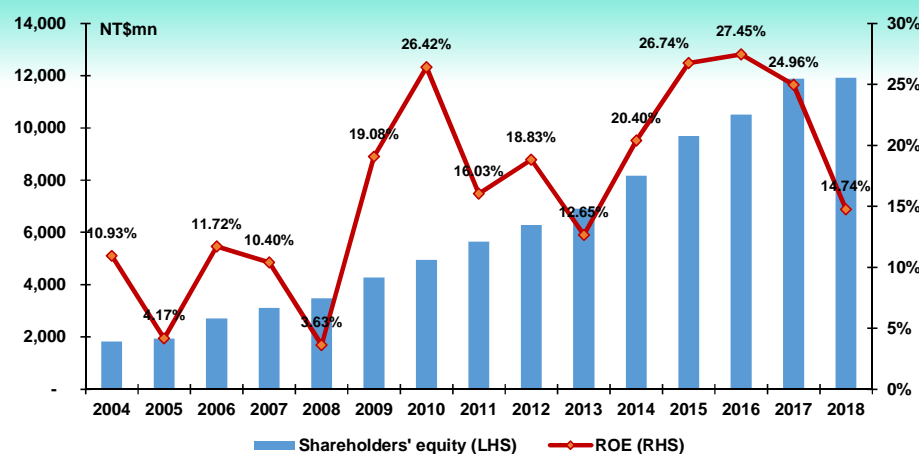
- Radar
- Camera / Vision system
- In-vehicle server / AI Module
- Chassis and safety ECUs
- Active sensing ECUs

■ Connectivity and Infotainment

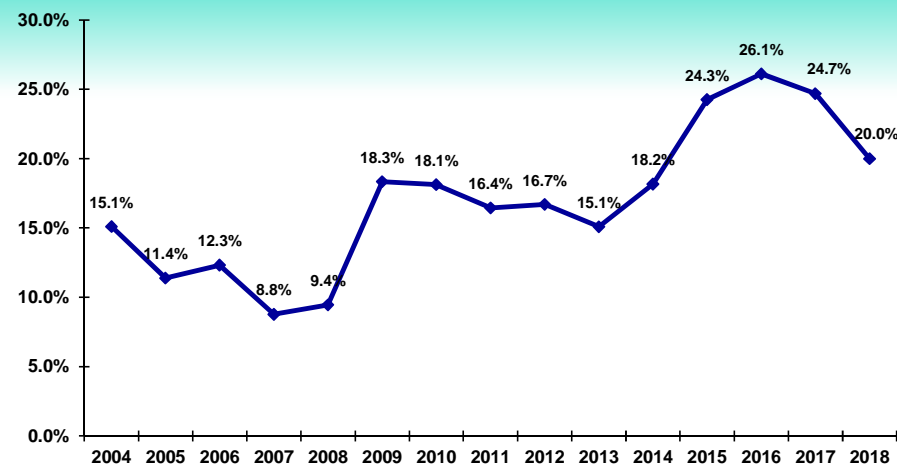
- V2X connection
- Central gateway
- Intelligent CarKey
- GNSS (Global Navigation Satellite System)
- Infotainment ECU / Module / e-Cockpit (WiFi, Bluetooth, Wireless access, Memory, Cellular, Navi)

Operating and financial results

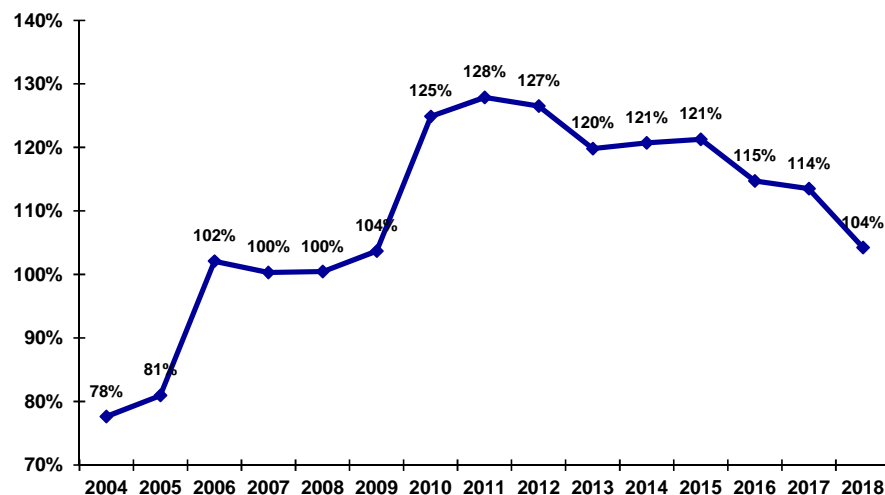
ROE trend



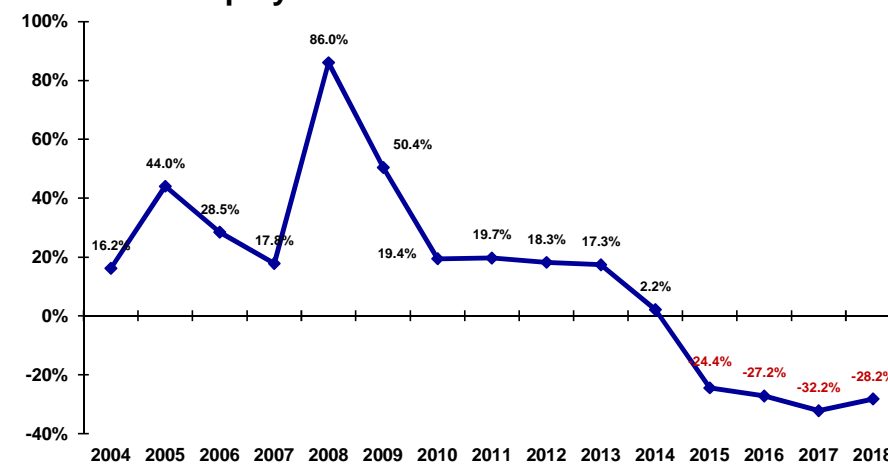
LT gross margin trend



Asset turnover ratio

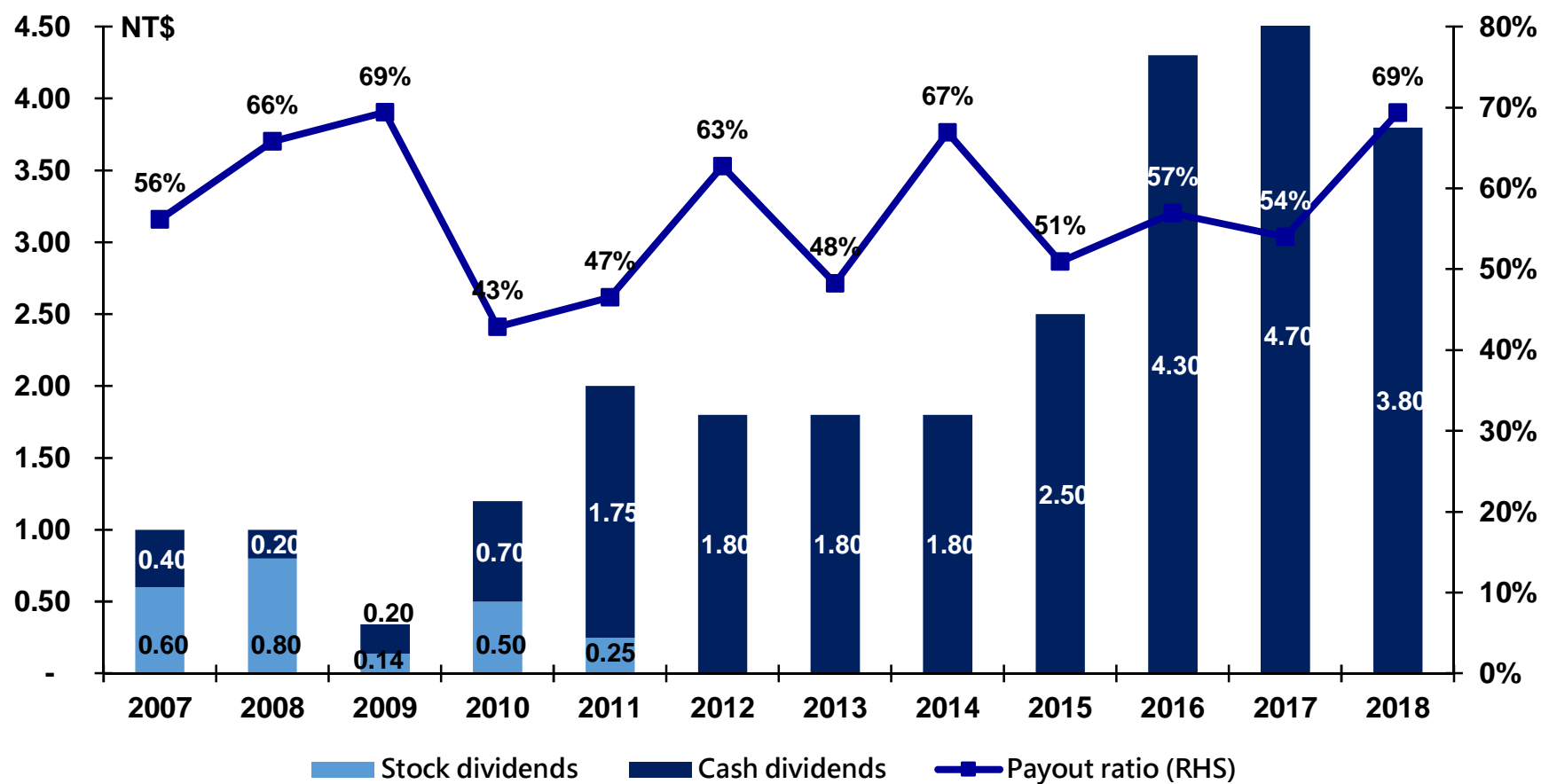


Net debt/equity ratio



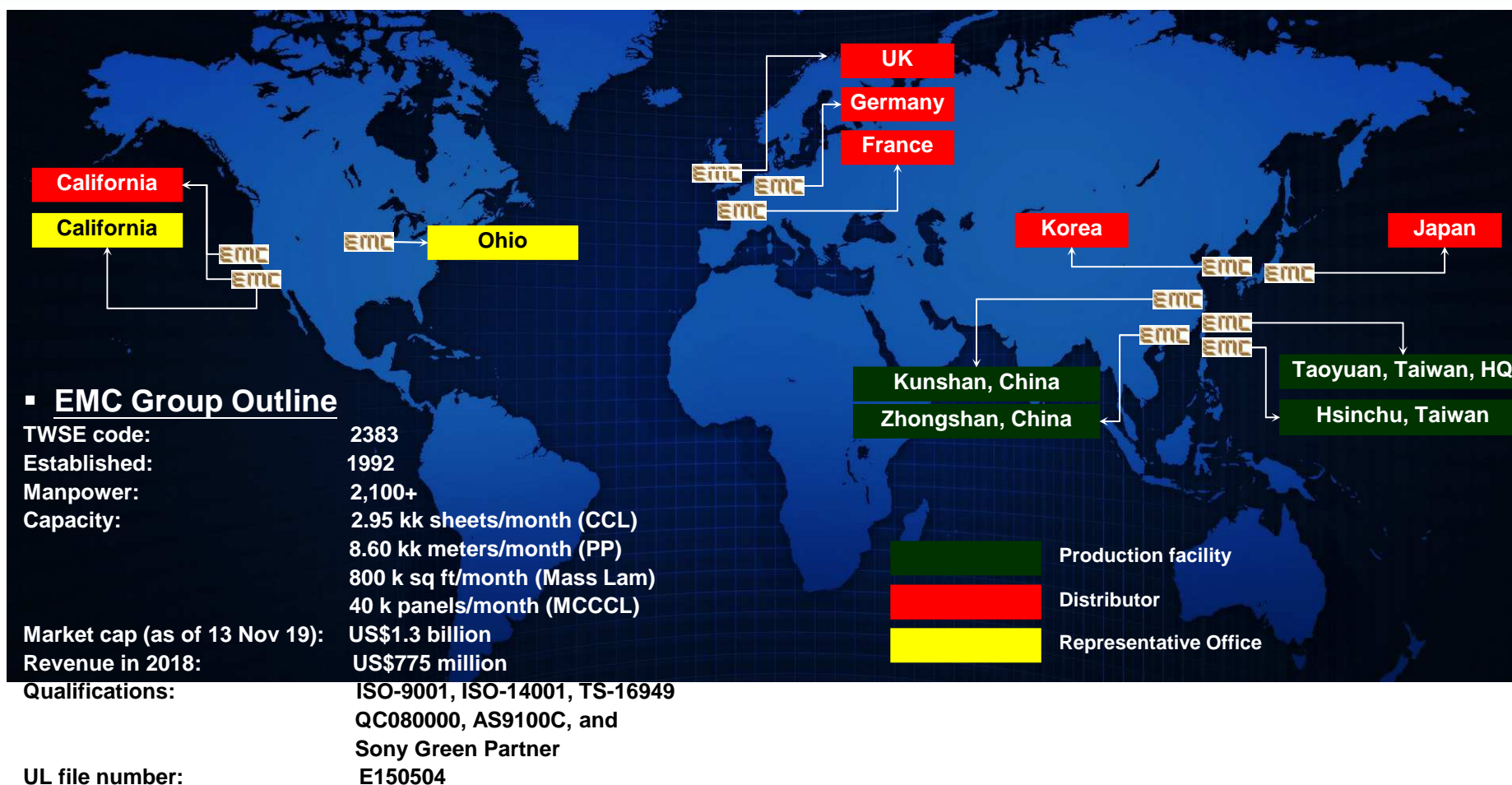
Note: Net debt = Interest-bearing debts – cash amount

Dividend payout history



APPENDIX

Company profile – global footprint



Production site and monthly capacity



2Q19 P&L summary

Unit: NT\$ million

	3Q19	2Q19	QoQ	3Q18	YoY
Revenue	6,975	6,038	15.5%	6,459	8.0%
Gross profit	1,823	1,482	23.0%	1,425	27.9%
Operating profit	1,303	964	35.1%	938	38.8%
Interest income (expenses)	(11)	(11)	-	(8)	-
Other income (expenses)	68	30	-	19	-
Income before tax	1,360	983	38.3%	949	43.2%
Tax expenses	399	311	28.4%	297	34.3%
Net income	960	672	42.8%	652	47.3%
EPS (NT\$) - basic	3.00	2.10	42.8%	2.04	47.2%
Gross margin (%)	26.1%	24.5%		22.1%	
Operating margin (%)	18.7%	16.0%		14.5%	
Net margin (%)	13.8%	11.1%		10.1%	

Five-year consolidated P&L summary

Unit: NT\$ million

	2014	2015	2016	2017	2018	1~3Q, 18	1~3Q, 19	YoY
Revenue	18,885	20,870	22,070	23,610	22,891	17,487	18,085	3.4%
Gross profit	3,431	5,064	5,766	5,828	4,576	3,597	4,379	21.7%
Operating profit	1,832	3,249	3,939	4,007	2,755	2,198	2,919	32.8%
Interest income (expenses)	(47)	(36)	(27)	(35)	(33)	(21)	(34)	-
Other income (expenses)	53	117	6	57	104	43	137	-
Income before tax	1,838	3,331	3,917	4,028	2,827	2,220	3,022	36.1%
Tax expenses	297	938	1,143	1,233	1,072	893	913	2.3%
Net income	1,542	2,392	2,774	2,795	1,754	1,327	2,108	58.8%
EPS (NT\$) - basic	4.82	7.48	8.68	8.74	5.48	4.15	6.59	58.8%
Gross margin (%)	18.2%	24.3%	26.1%	24.7%	20.0%	20.6%	24.2%	
Operating margin (%)	9.7%	15.6%	17.8%	17.0%	12.0%	12.6%	16.1%	
Net margin (%)	8.2%	11.5%	12.6%	11.8%	7.7%	7.6%	11.7%	