UMC ELECTRONICS, an EMS Specialist, Supports Manufacturing in Japan!

Financial Results for the Second Quarter ended September 30, 2017

UMC Electronics Co., Ltd. (Securities Code: 6615)





1.	. FY2017 (Fiscal Year Ending March 2017) Second-Quarter Consolidated Financial Results · · · · · · ·			
2.	Sales by Product Category · · · · · · · · · · · · · 10			
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Summary of Consolidated Financial Results



(Millions of yen)	FY2016 1H	FY2017 1H	YoY	
	211	211	Change	Percentage change
Net Sales	52,248	62,341	+10,093	+19.3%
(Plant Output)*1	11,577 22.2%	13,184 21.1%	+1,607 (1.0pt)	+13.9%
Gross Profit	3,413 6.5%	3,690 5.9%	+277 (0.6pt)	+8.1%
Operating Income	1,470 2.8%	1,280 2.1%	(190) (0.7pt)	(2.9%)
Ordinary income	1,002 1.9%	1,108 1.8%	+106 (0.1pt)	+10.6%
Net Income	316 0.6%	748 1.2%	+432 +0.6pt	+136.3%
USD Rate (JPY)	Average 105.35 End of period 101.12	Average 111.07 End of period 112.74	+5.72 +11.62	

^{*1} Plant Output= Net sales - Parts cost
The net sales of an EMS company depends heavily on the product unit price and thus the Company discloses it as an indicator of "plant output," which shows the added value.



LIME

Summary of Consolidated Financial Results (FY2017/Q1~Q2)

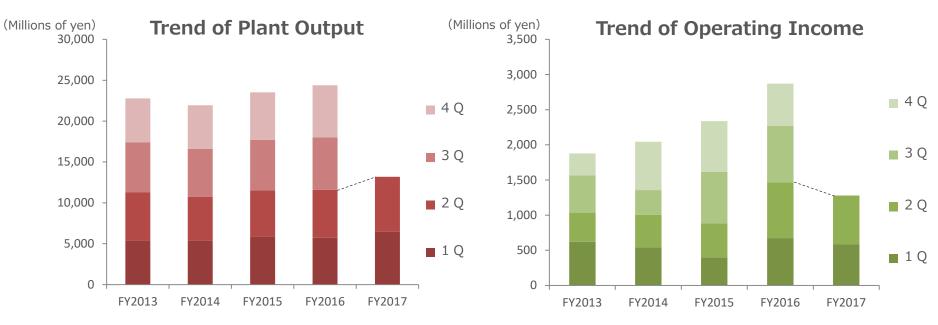
(Millions of yen)	FY2017	FY2017	QoQ	
	Q1	Q2	Change	Percentage change
Net Sales	30,016	32,325	+2,309	+7.7%
(Plant Output)*1	6,479 21.6%	6,704 20.7%	+225 (0.9pt)	+3.5%
Gross Profit	1,749 5.8%	1,940 6.0%	+191 +0.2pt	+10.9%
Operating Income	583 1.9%	696 2.2%	+113 +0.3pt	+19.3%
Ordinary income	500 1.7%	607 1.9%	+107 +0.2pt	+21.4%
Net Income	340 1.1%	408 1.3%	+68 +0.2pt	19.8 -
USD Rate (JPY)	Average 111.10 End of period 112.00	Average 111.07 End of period 112.74	(0.03) (0.74)	

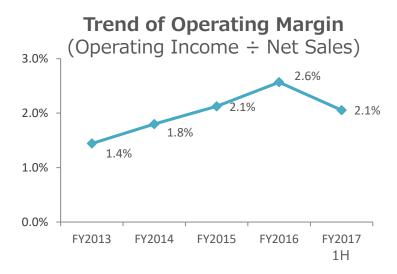
^{*1} Plant Output= Net sales - Parts cost

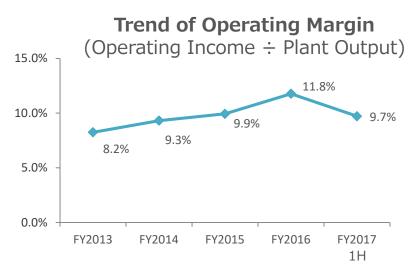


Performance Trends







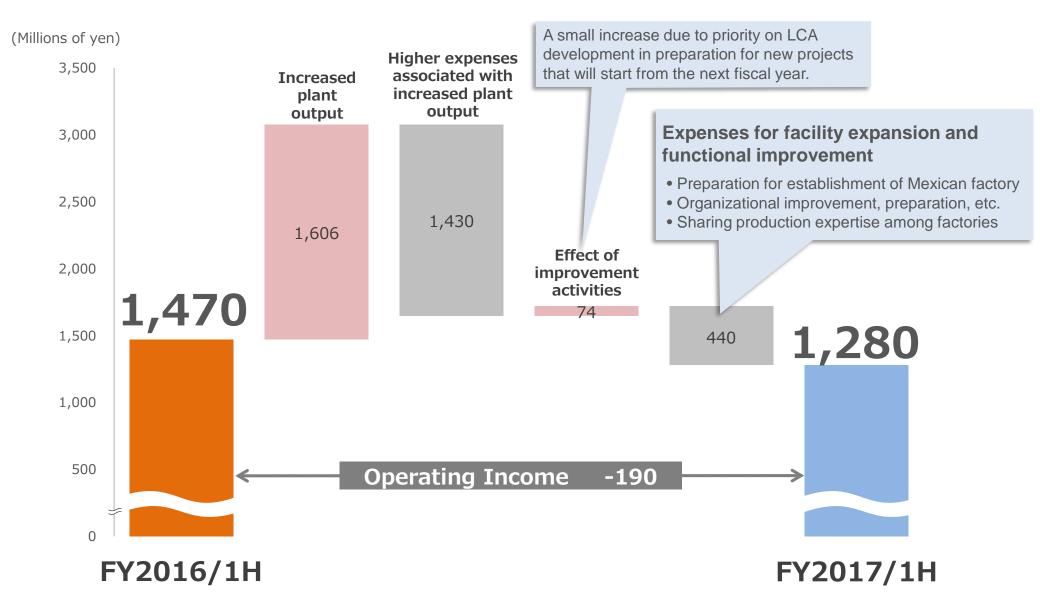


Factors for C

LIMIC

Factors for Change in Consolidated Operating Income (FY2016/1H vs.FY2017/1H)





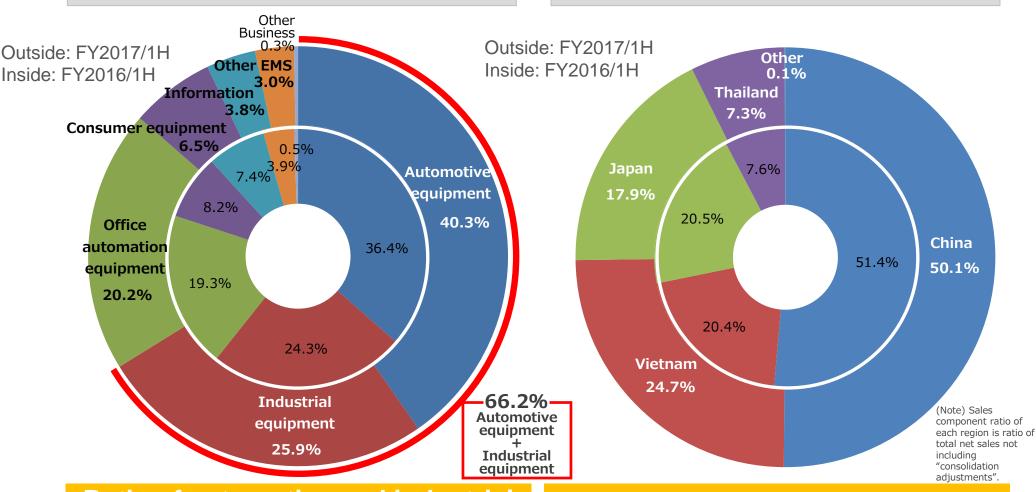


Sales Breakdowns by Product Category and by Region





Net sales by region



Ratio of automotive and industrial equipment sales rose 5.5% YoY

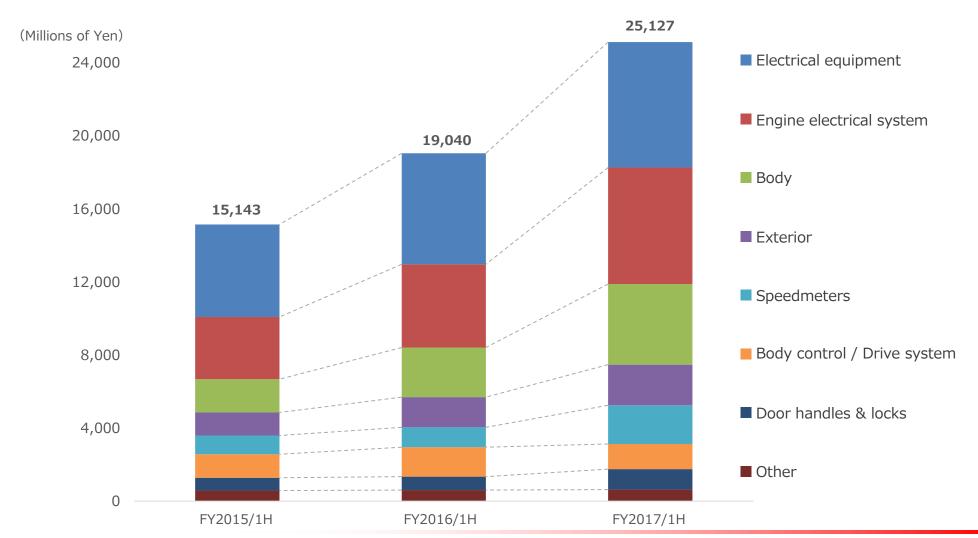
Base in Vietnam was growth



Sales Breakdowns by Product Category



Sales of electrical and body products around engines related to "running, turning, and stopping" increased.

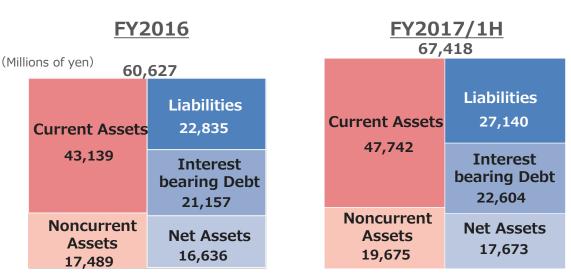




Balance sheet and Cash flow



Balance Sheet



Cash Conversion Cycle

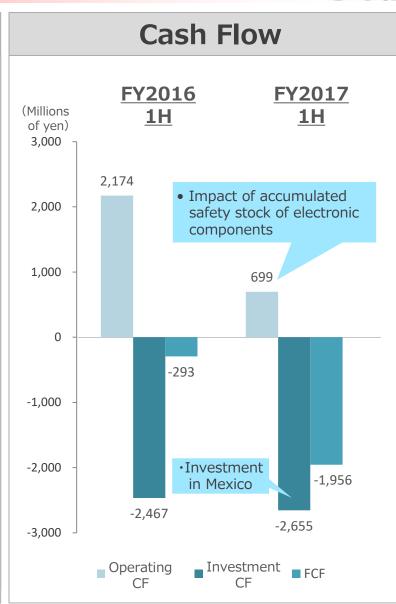
Notes and accounts receivable -trade 18,765	Notes and accounts payable-trade 19,322	CCC	Notes and accounts receivable -trade 21,302	Notes and accounts payable-trade 22,936
Inventories 12,800	12,243	<u>+0.09 months</u>	Inventories※ 16,136	14,502

- Safety stock continues to accumulate as a measure against the current tightness of the electronic component market.
- CCC at the end of the period is at the 1.39-month level.

Total Assets ¥60,627million Equity Ratio 27.4%

Total Assets ¥67,418million Equity Ratio 26.2%

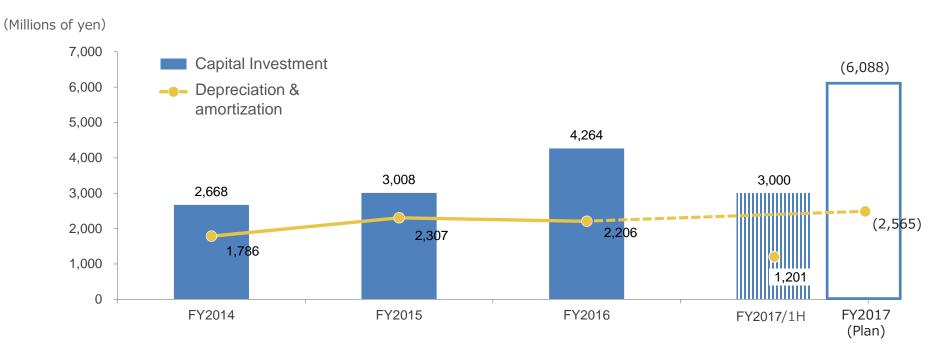
(Note) Interest-bearing debt is all liabilities recorded on the balance sheet on which the Company pays interest





Capital Investment and Depreciation & Amortization





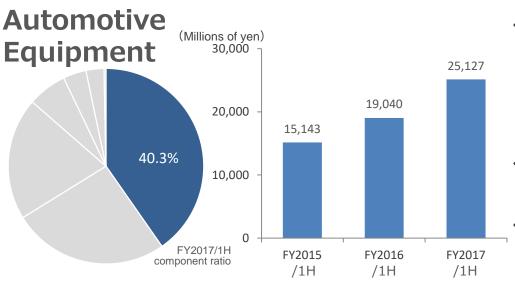
Breakdown of Capital Investment

(h4:11: C)				FY2017/1H
(Millions of yen)	FY2014	FY2015	FY2016	Actual
Japan	567	318	860	357
China	1,533	1,157	1,233	905
Vietnam	496	959	664	588
Thailand	72	574	423	199
Mexico	0	0	1,081	951
Total	2,668	3,008	4,264	3,000



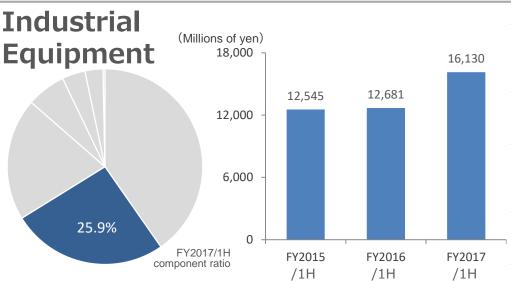
Net Sales by Product Category





- ◆ Sales of critical safety parts such as power trains, control and drive systems were strong because our track record in domestically produced power control products continued to be recognized in China.
- Expansion of various electrical equipment for environmentallyfriendly vehicles.
- Expansion of transactions with customers with competitiveness in the market.





- Sales of power supply systems, inverters and motor drivers of leading Japanese manufacturers were strong.
- ◆ Sales of power supply-related products and products for semiconductor testers were strong.
- ◆ Proposed business development in Vietnam, which is an export base with price competitiveness, to customers.
- ◆ In FY2017, the portfolio will be changed due to a shift to higher value-added products.
- ◆ Conceptualize LCA for power supply systems



power supply



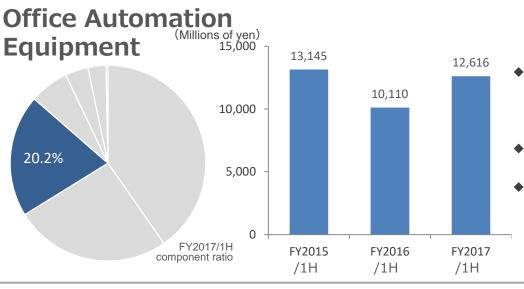


Payment terminal



Net Sales by Product Category

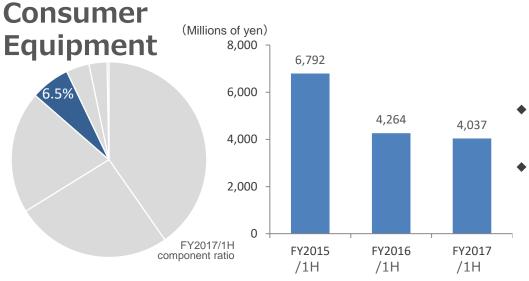




- ◆The in-house share expanded due to the consolidation of vendors on the customers' side.
- ◆The market is on track for recovery.
- Approach from the design stage, taking advantage of enhanced value chains.



Various circuit boards for leading printer manufacturers



- ◆ Price competition among brand manufacturers was fierce.
- Products are narrowed down to value-added products.



lighting

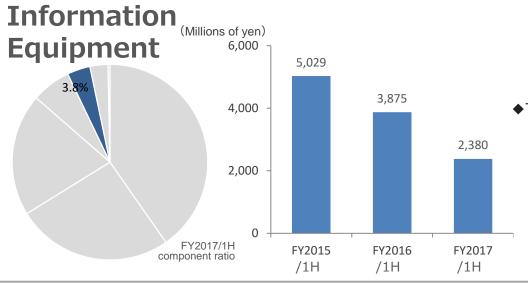
LED





Net Sales by Product Category





◆Transferred mature products with stable demand from China to Vietnam while maintaining cost competitiveness.

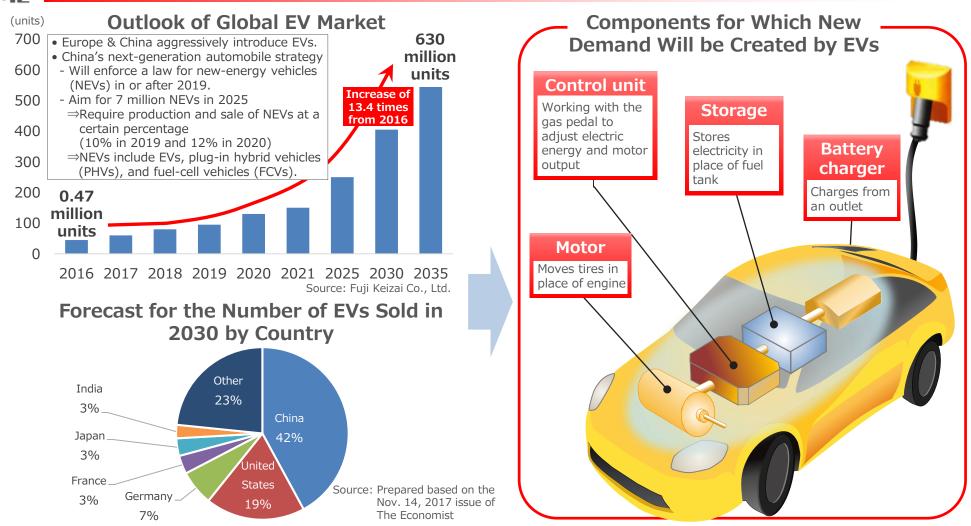


Optical pickup



Changes in Market Environment: Trends Regarding EVs





→Increase the presence of UMC Electronics that has experience in the overseas production of critical safety parts such as power control products.

Samples made on



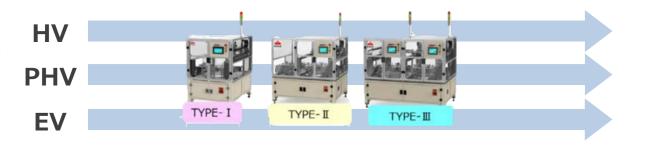
Progress of New Automotive Equipment Project



2018 - 2020

Project roadmap for mass production from 2018 to 2020

More than 10 projects ahead of mass production are ongoing



Each project stage the actual mass as of Nov. 2017 production line **Kickoff** Customer SE activities Process preparation Test production Process planning evaluation

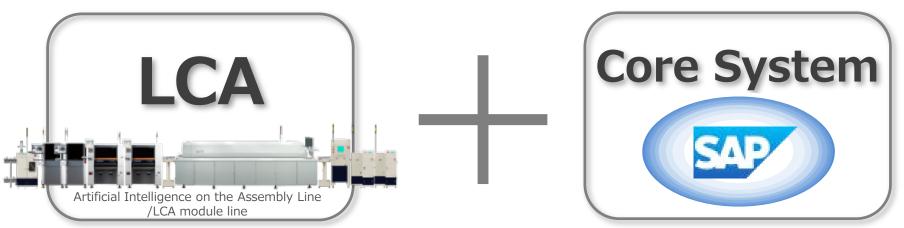
Low-cost automation (LCA) design and prototyping

Focus on preparation for the introduction of LCA for mass production that will begin in or after the next fiscal year.

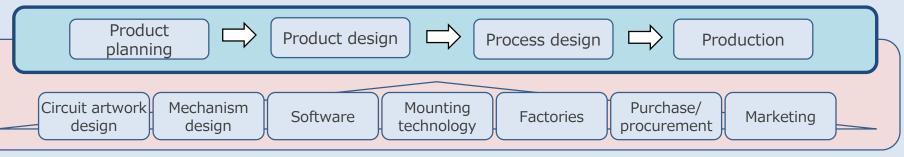


Concept of Smart Factory





"Manufacturing through a total solution" from upstream design to mounting technology and manufacturing



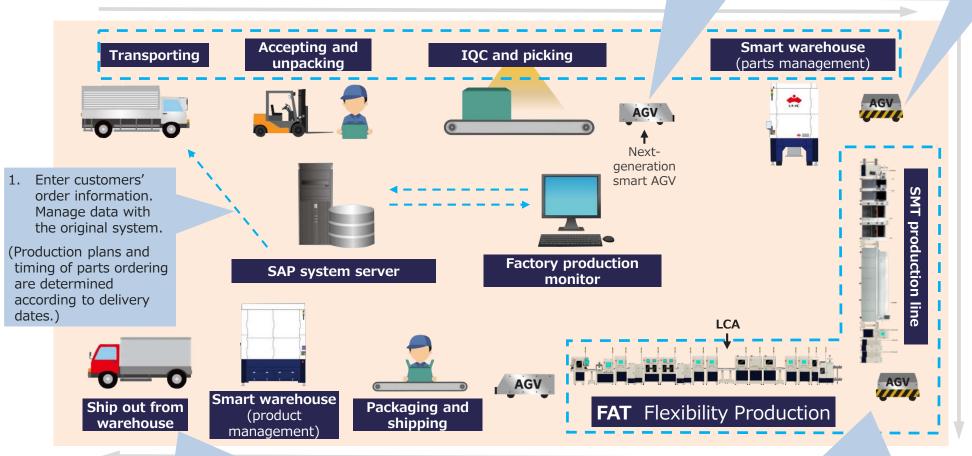
- Links between design, mounting technology, and factories through "PCB design standardization"
- Services to customers are provided mainly by substrate installation and assembly factories and supported by molding and die-casting factories.



Concept of Smart Factory



- 2. Parts delivered are stored in automatic warehouses linked to systems.
- 3. Sent to production lines at the right time using internally designed and developed AGV.



5. Finished products return to the smart warehouse and are shipped according to delivery dates set by customers.

4. Automatic transportation is used in production lines from SMT to FAT through LCA .



Participation in IoT Exhibitions



IoT Exhibition (August) in Shenzhen, China, and IoT/M2M Exhibition in Makuhari (November)



- Exhibited UMC's automotive-related achievements and promoted its newest production lines
- Described initiatives for smart factories
 - Proposals using the design and introduction of mounting technology systems

UMC Electronics' smart factories based on LCA and IoT

Photo above: IoT Exhibition in Shenzhen, China (Aug. 16-18) Photo below: IoT/M2M Exhibition in Makuhari (Nov. 8-10)



BIG Account Strategy Map



Marketing activities and system that link the business environment and UMC's characteristics and strengths with orders

System

Program Manager (PM) System

Propose collaboration strategy and build long-term partnerships to fully satisfy customer needs

Target (approach)/status

1. Industry's top manufacturers that lead manufacturing expertise

(develop new methods and technologies with customers)

Increase in new negotiations through offers from upstream design

- Global demand for chargers, inverters, and DC/DC converters is expected to increase in response to demand for EVs
- Body products (sunroofs, ECU for sliding doors, etc.) increase.

Regions Expansion from Japan, China, and Southeast Asia to North America, Mexico, and Europe Marketing in view of European Tier-1 companies Shift systems and organization to outside Japan with Chinese factories as the main production base. (standardization and Propose a shift of manufacturing policies) production to costcompetitive Vietnamese factories Establish Chicago sales office Engineers also stationed in Chicago to respond from factory, sales, and Establish Wuhan sales office technology to warehouse to customers operating global business.

- 2. Manufacturers focusing on new technologies while entrusting suppliers with manufacturing (fabless-style approach)
- Orders for automotive products are received from global manufacturers successively in Japan, China, Thailand, and Mexico.
- 3. Top specialized manufacturers in existing product segments

(UMCE prepares plans to solve customers' problems)

- Inverter projects for EVs
- Power supply business projects
- Semiconductor-related business

"Manufacturing through a total solution" from upstream design to mounting technology and manufacturing

Use of smart factories

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