PASSIVE SYSTEM ALLIANCE

Prosperity Dielectrics Co., Ltd.

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2020 Investor Conference

(Stock code: 6173)

Date:2020.08.25

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Company Profile

Prosperity Dielectrics Corp :

- Established June, 1990
- Capital NTD 1.72 Billion
- Employee 1,203
- Brand PDC, Frontier
- Revenue NTD 4.35 Billion/2019 Y (YoY:-24%)
  NTD 2.4 Billion/2020 H1 (YoY:+1%)

Branch Office/ Plant :

- Taiwan Taoyuan / Yangmei Plant
- China Wujiang/ Yongzhou Plant /Shenzhen Plant /Dongguan Office

Production experience :

- Powder Since 1995 (25 years)
- MLCC/CR Since 1990 (30 years)
- Coil Since 1972 (48 years)

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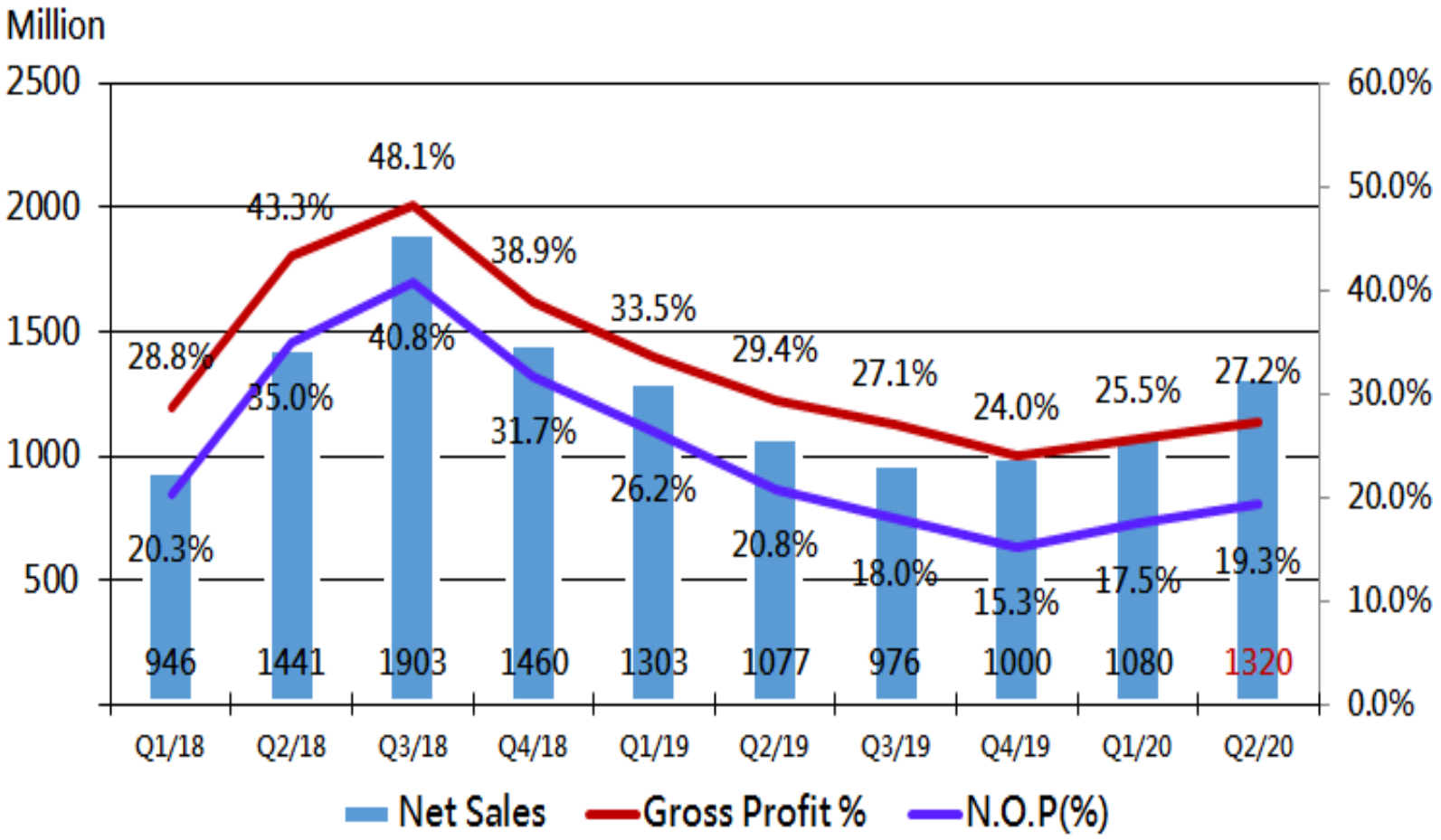
Income statement

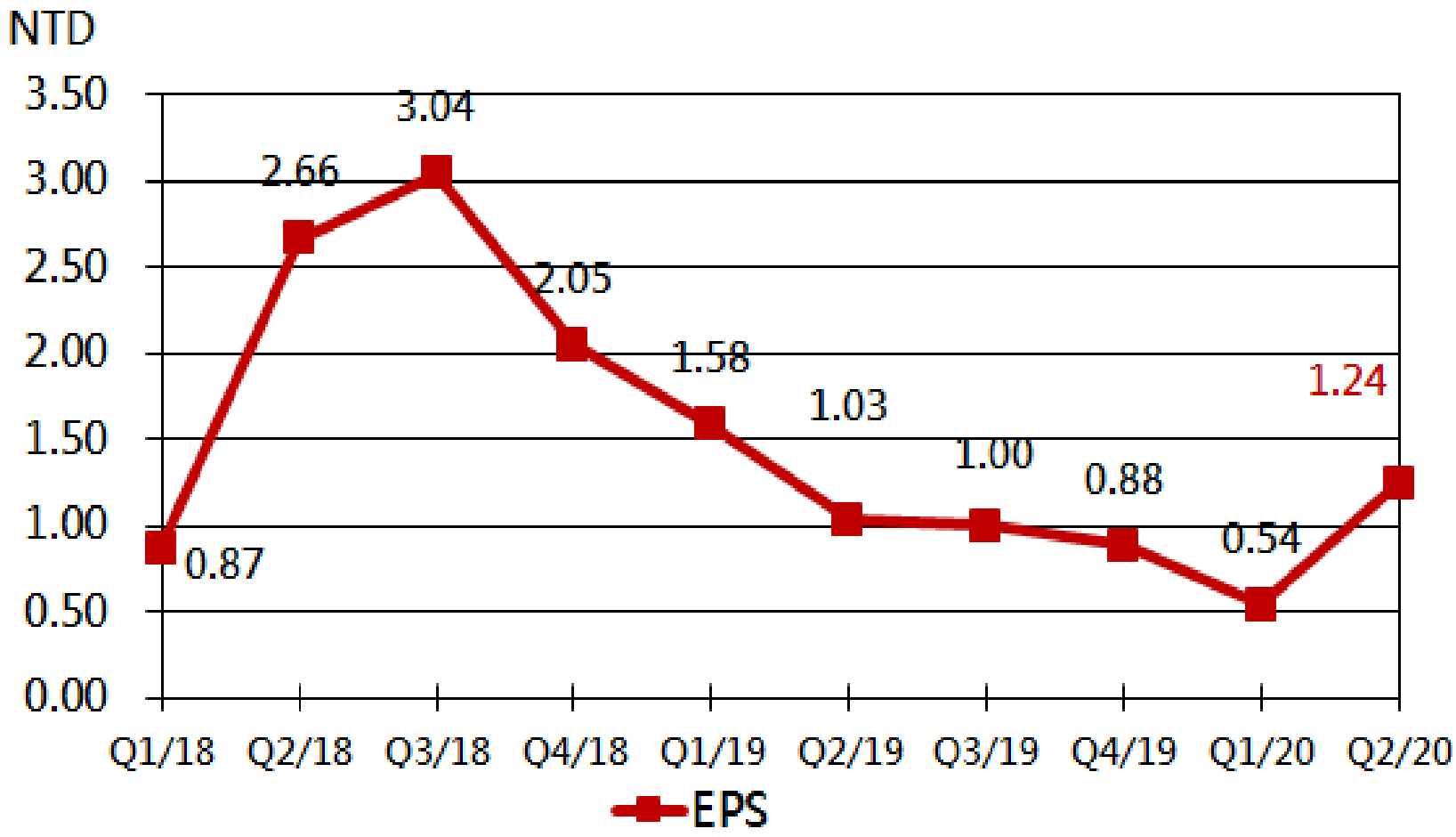
In Million NTD Except NTD for Earnings Per Share

	2020 Q2	2020 Q1	QoQ	change(%)	2020 H1	2019 H1	YoY	change(%)
Net Sales	1,320	1,080	239	22%	2,400	2,380	20	1%
Gross Profit	359	276	84	30%	635	753	(118)	-16%
Gross Profit(%)	27.2%	25.5%	1.7%		26.5%	31.6%	-5.2%	
N.O.P	254	189	66	35%	443	566	(123)	-22%
N.O.P(%)	19.3%	17.5%	1.8%		18.5%	23.8%	-5.3%	
Income Before Tax	280	120	161	134%	400	587	(187)	-32%
Net Income	213	93	120	129%	306	449	(144)	-32%
Net Income(%)	16.1%	8.6%	7.5%		12.7%	18.9%	-6.1%	
EPS(NTD)	1.24	0.54	0.7		1.78	2.61	(0.83)	

Quarterly Revenue & Gross Margin Trend



EPS Trend-by Quarter



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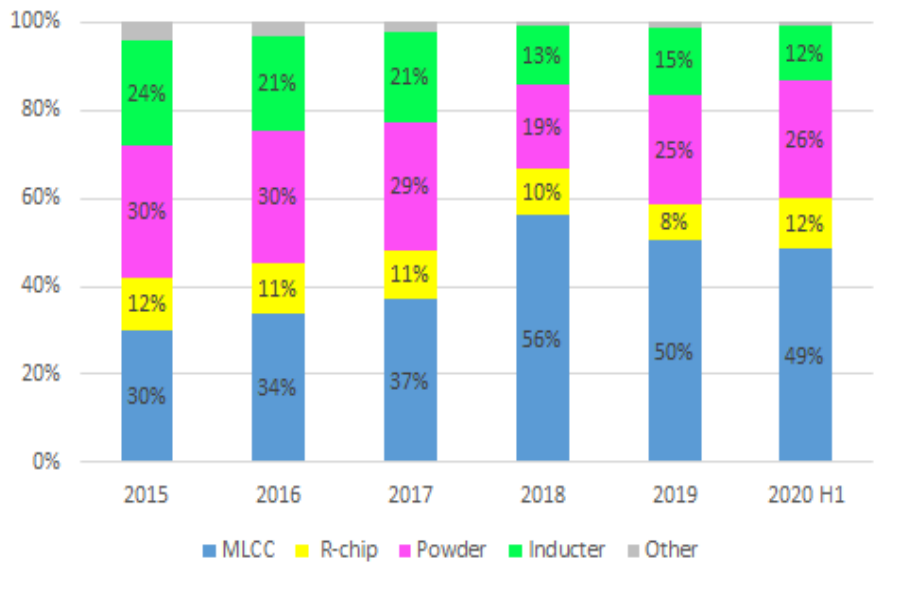
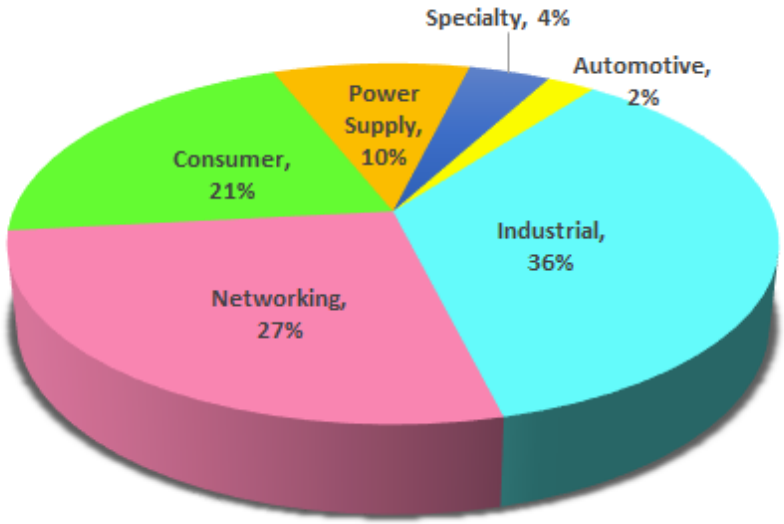
2020 H1 Sales Breakdown

By Product



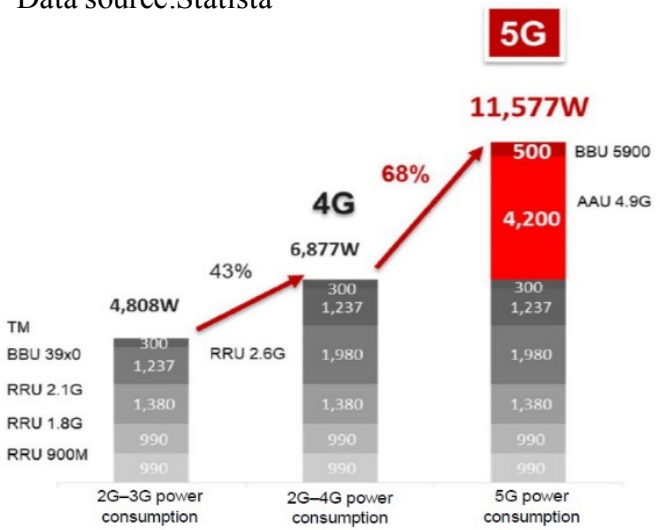
By Application



- Large size/high power passive component products and dielectric ceramic powder are the company's main products.
- Product application segments include: Networking(including 5G、IOT,etc.), industrial(including AI、Airspace,etc.), and automotive applications.

Market opportunities - 5G

Data source:Statista



Changes in the major application market in the future will correspondingly change their demand for the company's products.

- Business Opportunities in 5G – 5G market is estimated to grow at a rapid rate of 80% compound annual growth rate and facilitate the increase of the power module.
- With the rapid growth of the 5G market, the passive component consumption for 5G has increased significantly, especially the power of 5G applications has increased by 68% compared with 4G, which relatively drives the demand for high-power passive components.

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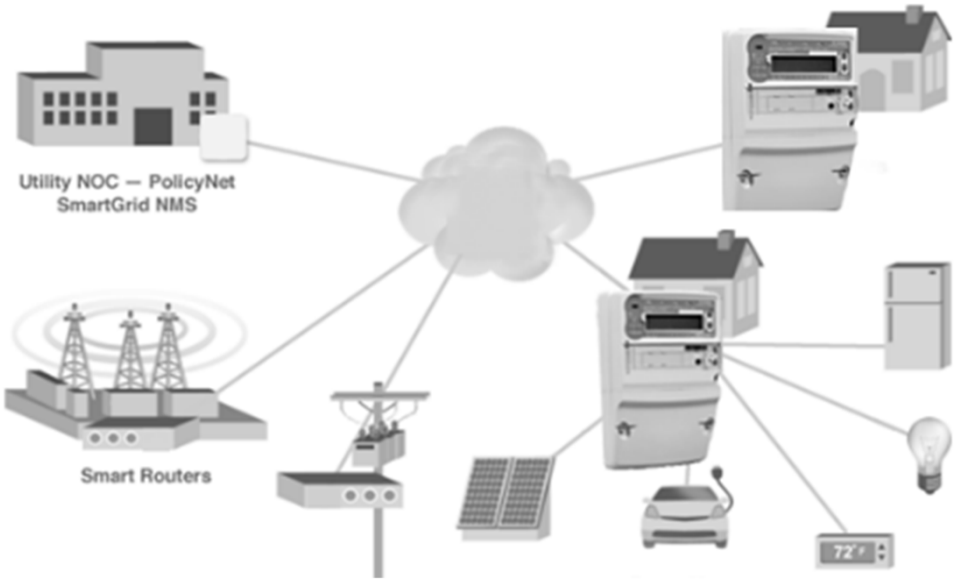
PDC Product Solutions for 5G



Automotive/Industrial

- Big Size Mid-Volt./ High-Volt. MLCC
- Safety MLCC
- Mega cap MLCC
- Power Inductor/ Wire-Wound
- Chip Resistor
- Current Sensor Resistor

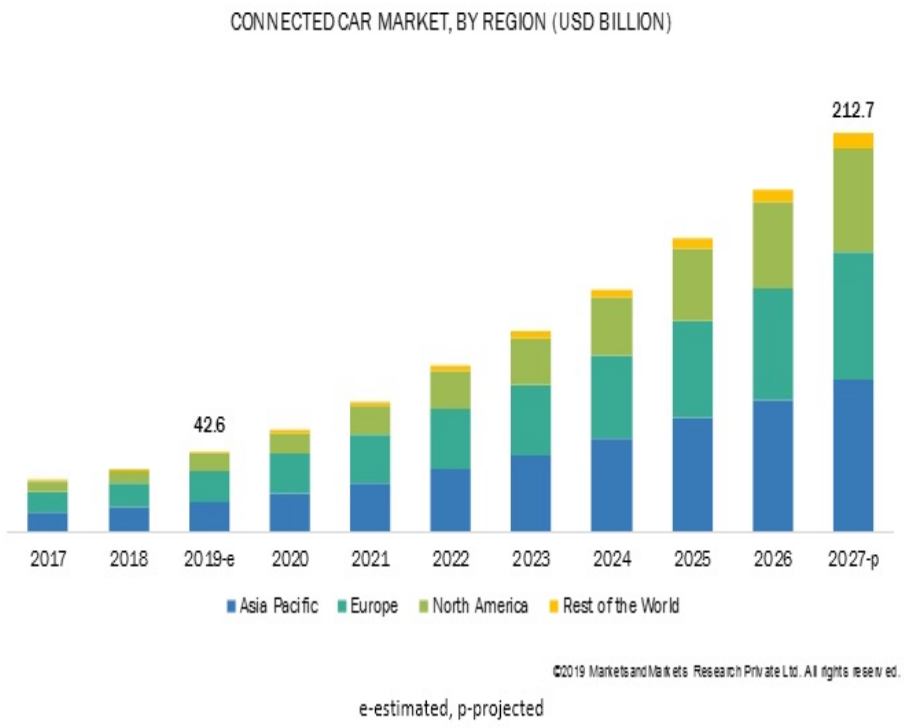
Base Station

- Big Size Mid-Volt./ High-Volt. MLCC
- Power Inductor/ Wire-Wound
- Power Inductor/ Molding
- Chip Resistor
- Current Sensor Resistor

Communication

- RF Inductor
- Power Inductor/ Wire-Wound
- Power Inductor/ Molding
- Chip Resistor

Market opportunities-Automobile



Source:Secondary Research

Changes in the major application market in the future will correspondingly change their demand for the company's products.

- Automotive business opportunities-Connected cars are expected to grow rapidly at a compound annual growth rate of 22%. The demand for passive components in ECU and ADAS may increase several times compared to the original fuel vehicles.
- With a rising penetration rate of electric vehicles, the battery system has been converted from 12V to 48V, which greatly boosts the demand for mid to high voltage MLCC and large-size passive components.

PDC Product Solutions- Automotive

Body Electronics

- RF Inductor
- Power Inductor
- Big Size Mid-Volt./ High-Volt. MLCC
- Common Mode Choke
- Current Sensing Resistor

Ethernet Phy

- RF Inductor
- Power Inductor
- Big Size Mid-Volt./ High-Volt. MLCC
- Common Mode Choke

Lighting

- Power Inductor
- Big Size Mid-Volt./ High-Volt. MLCC
- Current Sensor Resistor

GPS/DVBT/BT/WiFi/FM/GSM

- RF Inductor

ECU

- Power Inductor
- Common Mode Choke
- Big Size Mid-Volt./ High-Volt. MLCC
- Chip Resistor

Infotainment

- RF Inductor
- Power Inductor
- Common Mode Choke
- Current Sensor Resistor

ADAS

- Power Inductor
- RF Inductor
- Big Size Mid-Volt./ High-Volt. MLCC
- Common Mode Choke
- Current Sensor Resistor

Market opportunities-Third-generation semiconductors(GaN、SiC)

SiC/GaN More suitable for high voltage/high frequency

Comparison Chart	Si	SiC	GaN	
Energy gap(Ev)	1.1	3.25	3.4	
Electron saturation velocity	1x	2x	2.2x	The higher the propagation speed, the faster (high frequency)
Dielectric constant	11.8	9.7	10	The smaller the propagation delay
Critical electric field	1x	10x	7.3x	The higher the pressure resistance (high pressure)
Thermal Conductivity	1.5	5	1.3	The higher the temperature resistance (high temperature)

Source:Yole、福邦投顧彙整

Comparison of fast chargers with different materials and wattages

PROSPERITY DIELECTRICS CO., LTD. Source:GaNFast

Possessing the characteristics of small in size, high efficiency and low heat generation, fast chargers with GaN (gallium nitride) MOS will eventually replace its internal electrolytic capacitors and Disc safety capacitors with large-size MLCC.

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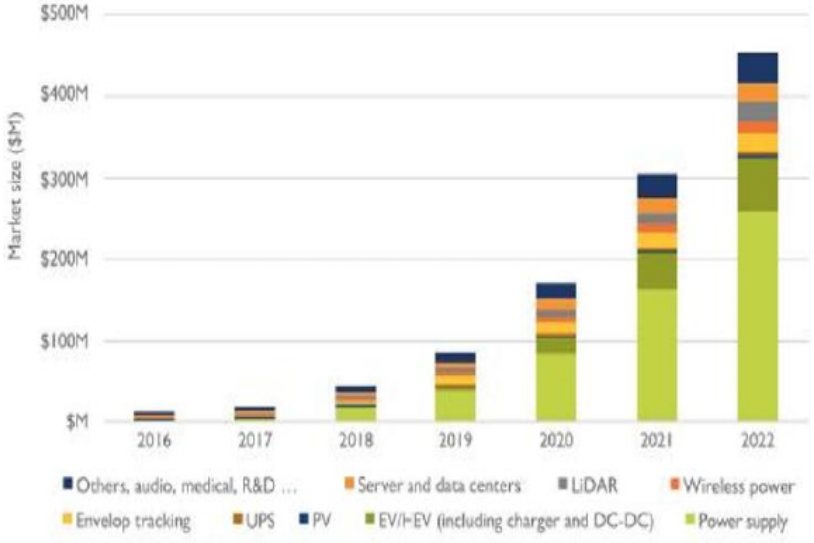
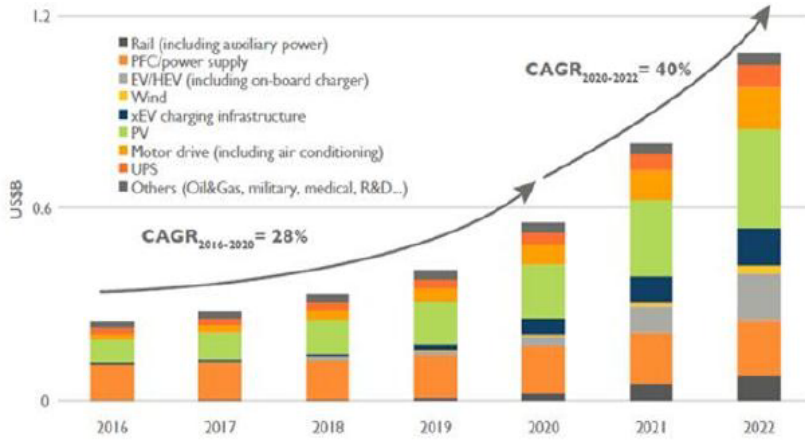
Market opportunities-Third-generation semiconductors(GaN、SiC)

GaN Market size forecast (2020~2022 Estimated CAGR60%)



SiCMarket size forecast (2020~2022Estimated CAGR40%)



Source:Yole、福邦投顧彙整

Changes in the major application market in the future will correspondingly change their demand for the company's products.

- The third generation of GaN/SiC semiconductors are expected to be wildly used in Power, EV, and other industrial applications. These applications will hence drive the demand for high-power passive components.

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Opportunity

- 5G applications will expeditiously increase the demand for high-power passive components.
- Automotive business opportunities - The fast-growing connected cars and improved penetration of electric cars increase the consumption of mid to high voltage MLCCs and large-size passive components.
- The booming of the third-generation GaN/SiC semiconductor will also drive the demand for high-power passive components.
- Although the COVID-19 and relation change between the U.S. and China will affect the future economic prospect, the trend of increasing demand for passive components triggered by the technological development mentioned previously remains unchanged.

Business Focus

- **MLCC –**
  - In response to future industrial application needs, continue to develop large-size and medium-to-high voltage MLCCs and expand production capacity.
  - With the ability of independent development of material and process technology, the company is expected to reduce costs and enhance competitiveness. All these will enable the company to pitch in the high value-added markets for large sizes medium and high voltage MLCCs.
- **Dielectric Powder –**
  - Continue to develop dielectric powders for high-end and high-capacitance MLCC applications and establish high-capacity powder production capacity.
  - In response to the growing needs of the 5G/AI market, continue to develop microwave powders for high-end applications.
  - Continue to develop LTCC materials for RF components.
- **Continue to integrate products and expand sales through the PSA platform.**

Thank you!

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