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688396 \

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IDM

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IDM

IDM

+

IDM

8

				2020-2022		65.6	
73.8		81.4		7.4	8.7	10.2	
	83.9%	17.7%	18.2%		0.61	0.71	0.84
PE	88	75	63x	"	"		
		1			2		
3							



26		.....
27		.....
28		.....
29		.....
30		.....
31		.....
32		.....
33		.....
34	<i>MEMS</i>	.....
35		.....
36	<i>MEMS</i>	.....
37	<i>MCU</i>	.....
38	<i>MCU</i>	.....
39		.....
40	<i>IDM</i>	.....
41		% .....
42		.....
43		.....
44	<i>SIC</i>	.....
45	<i>SIC</i>	.....
46		.....
47		.....
48		.....
49		.....

1.

IDM

IDM

1.1.

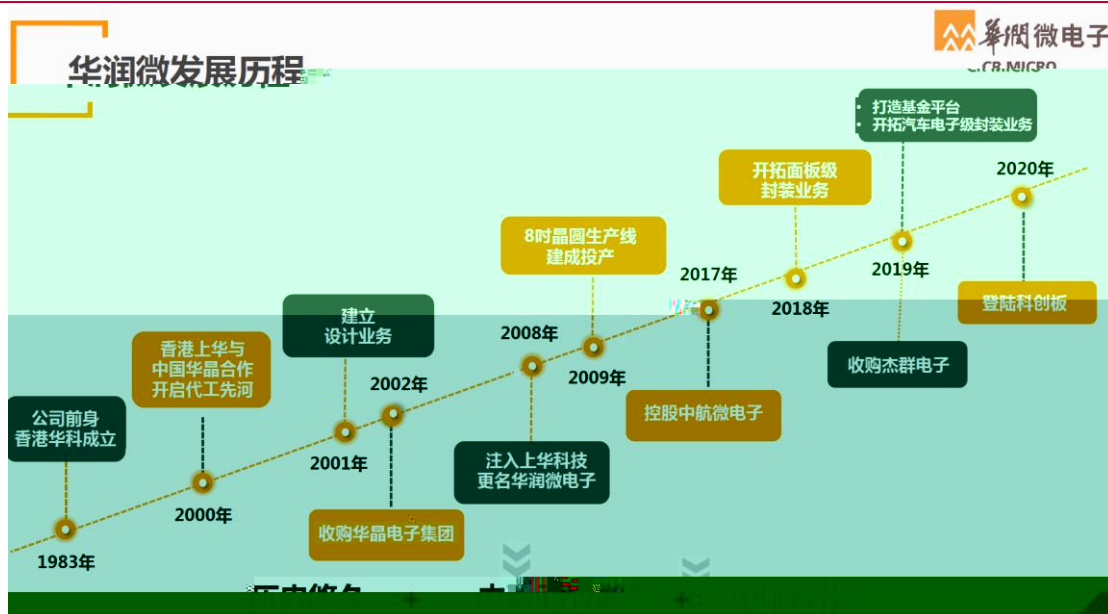
4

40

1983

4

1



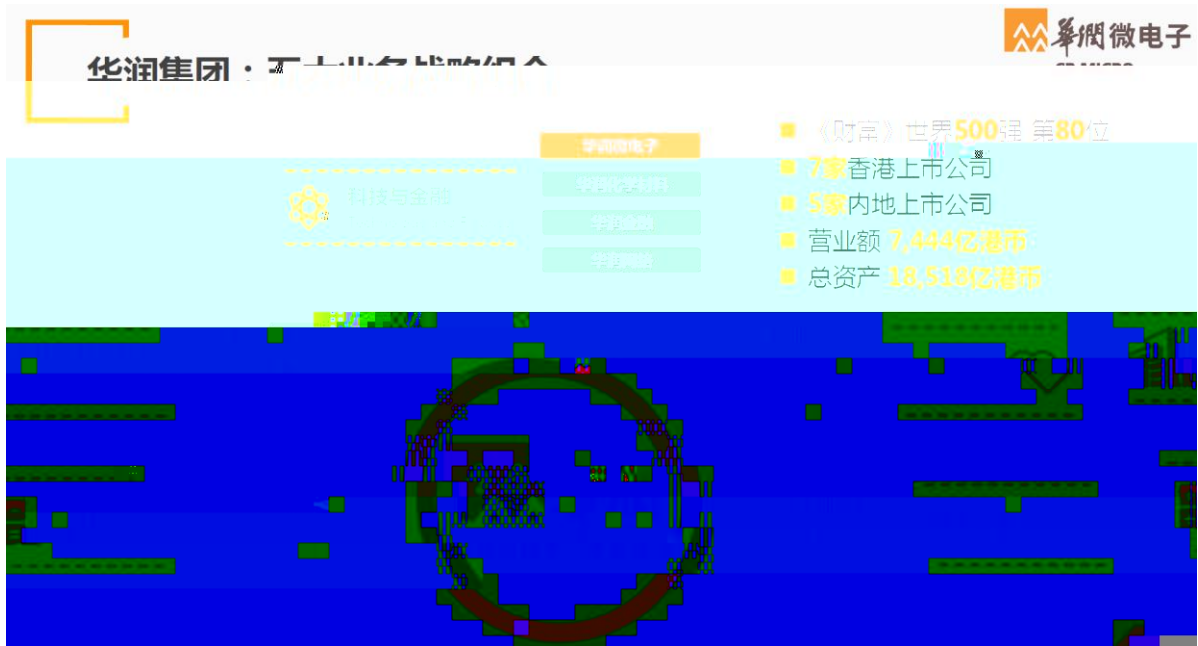
14,000

2019 "

500 "

80

2



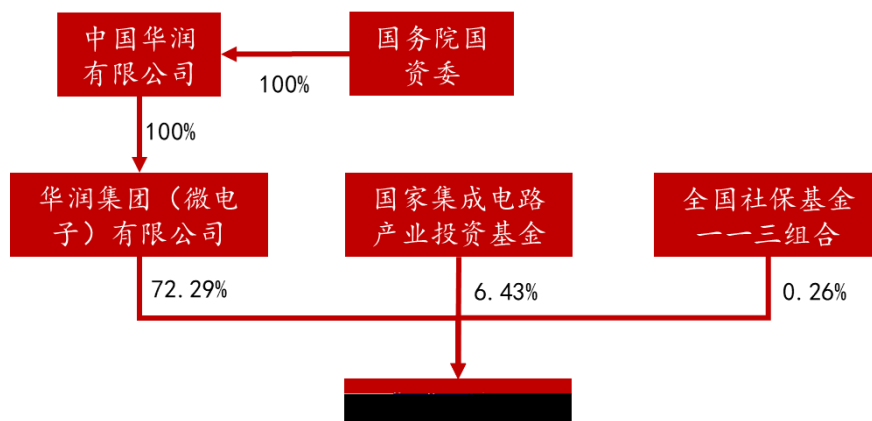
IPO

" "

7812.5

IPO

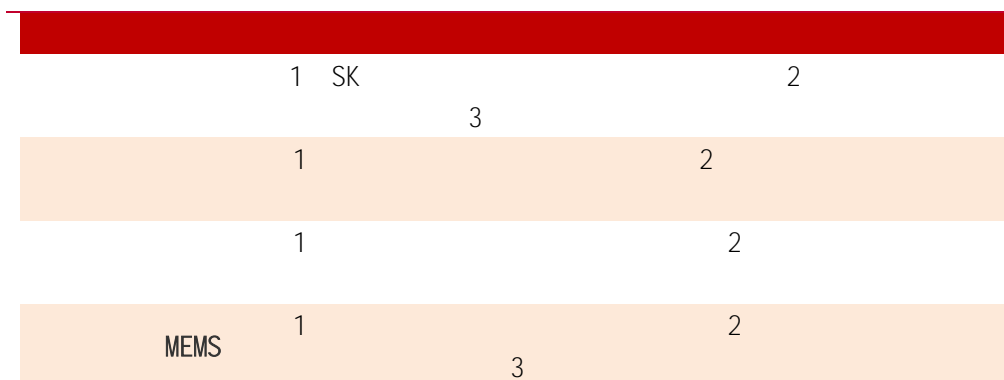
3



80

SK

4

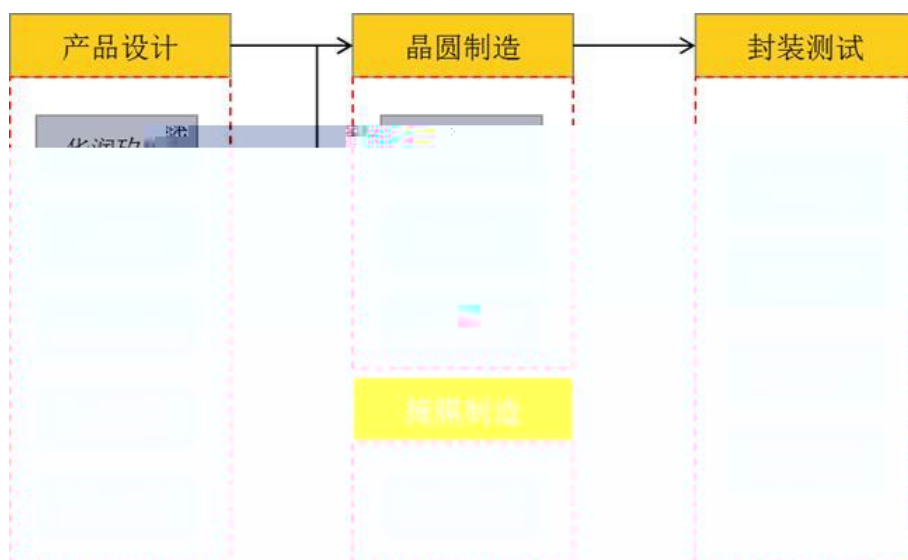


eeowrd

1.2.

IDM " - - "

5



IDM

IDM

Fab less+

IDM

" Fab less+ "



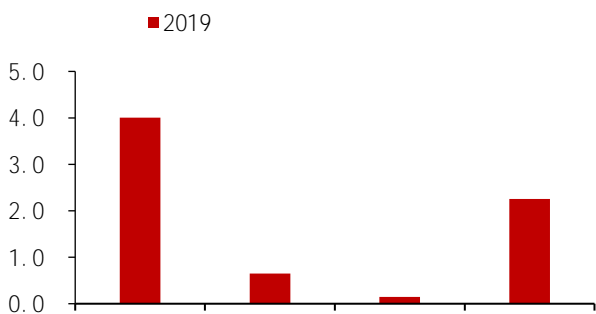
IDM

IDM

IHS Markit

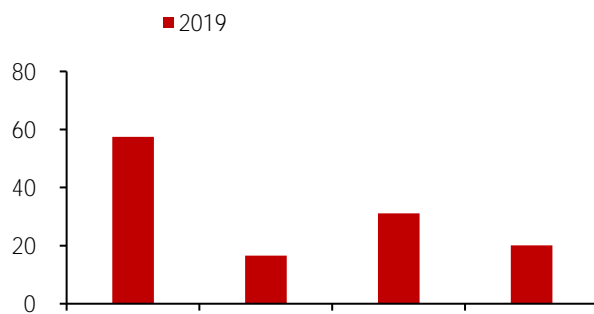
8

IDM



9

IDM



1.3.

40%

2019

7%

3000

3268

1401

10



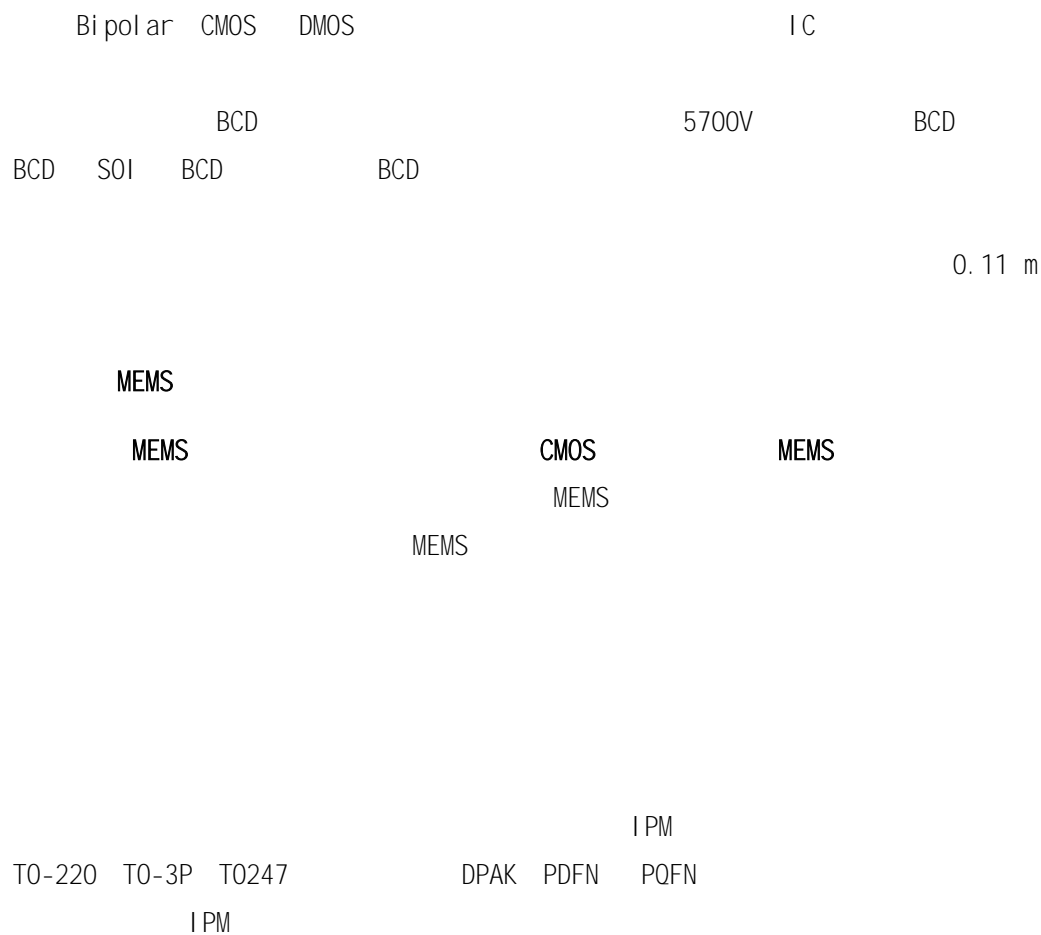
11



BCD

BCD





12

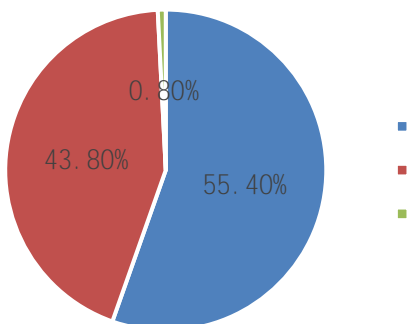


13



55% 44% 2019

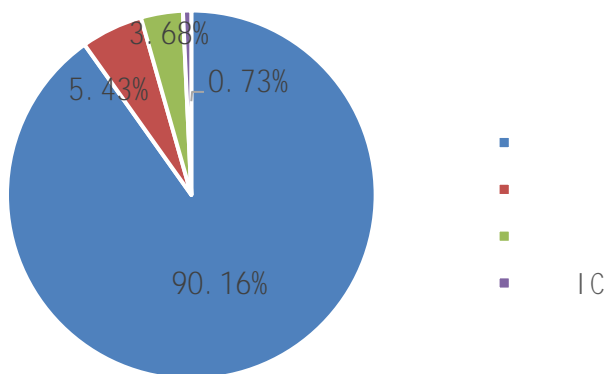
14



15



16

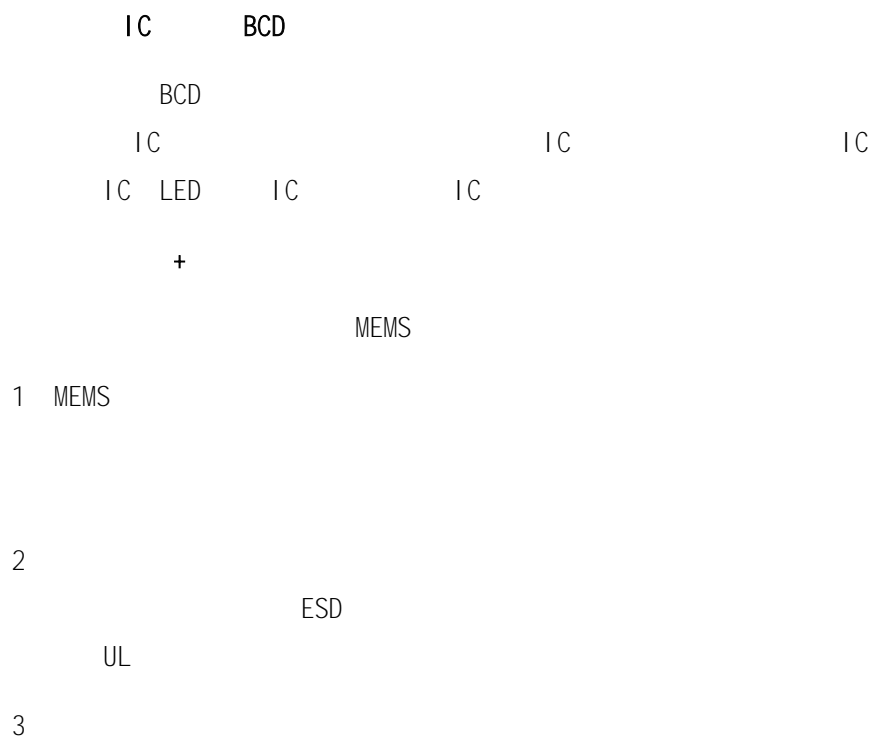


MOSFET  
 IDM  
 MOSFET  
 VDMOS  
 MOSFET  
 MOS  
 MOS  
 MOS

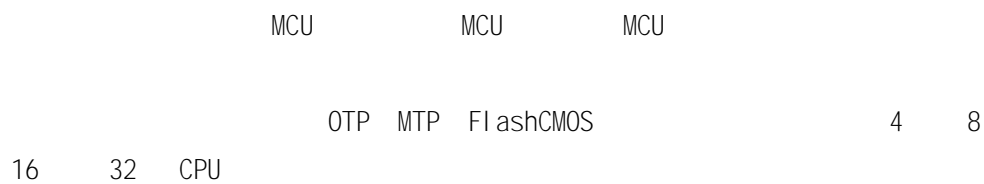
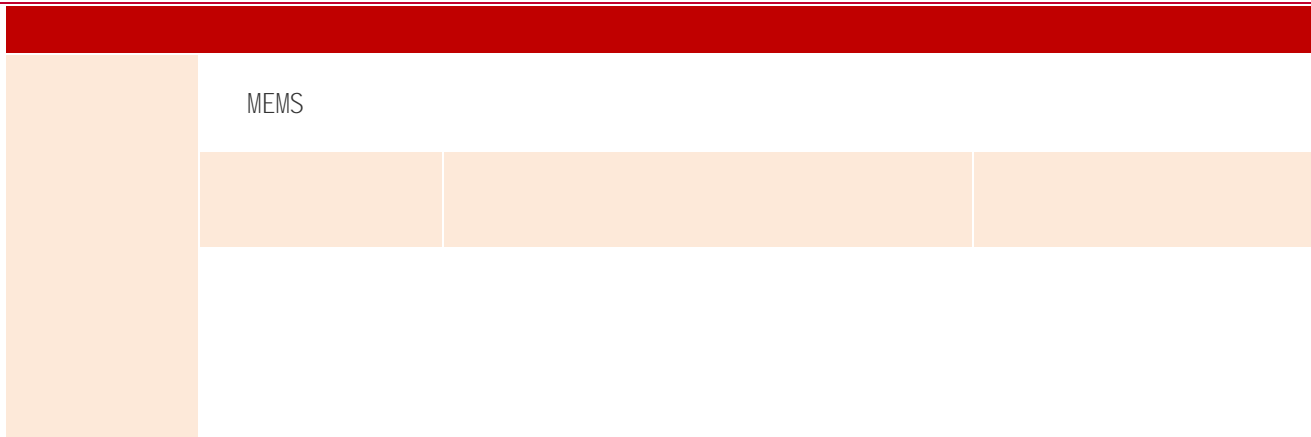
17 MOSFET

30V-900V		40V-900V		-60V-150V		-100V-1500V	
	MOS					OS	MOS
	MOS				MOS	OS	
			MOS		MOS		
	MOS		MOS		MOS		
	MOS			P	MOS		
	MOS						

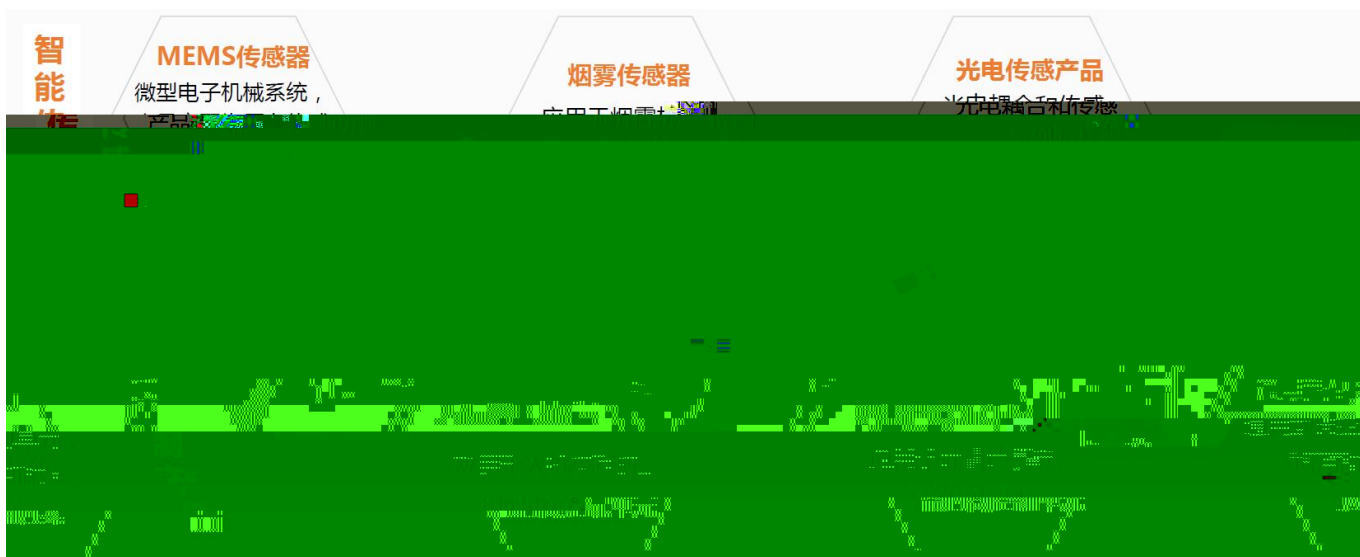
FRD



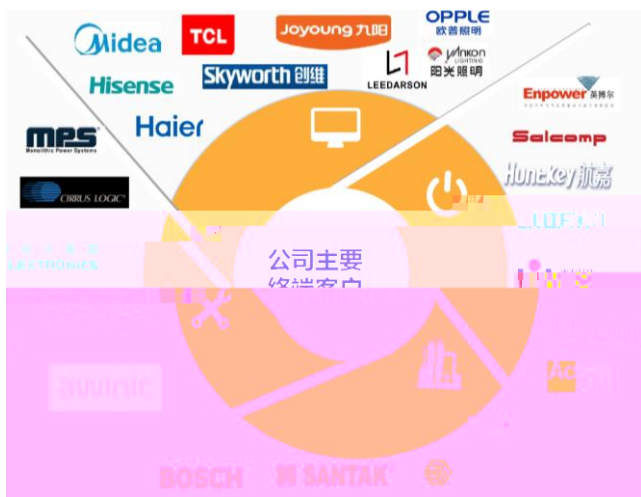
19



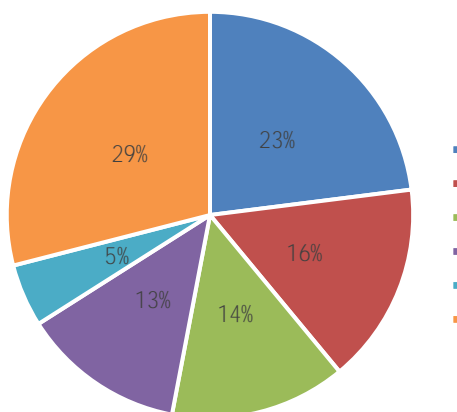
20



21



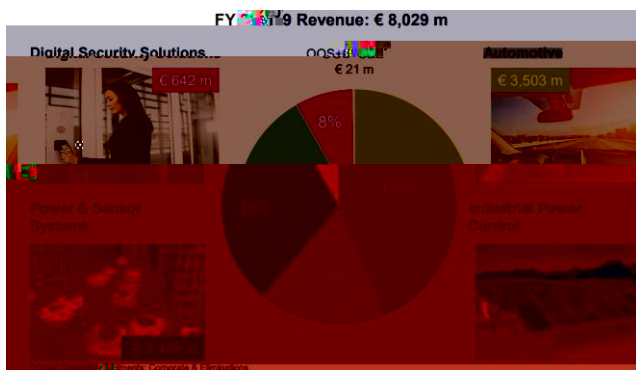
22



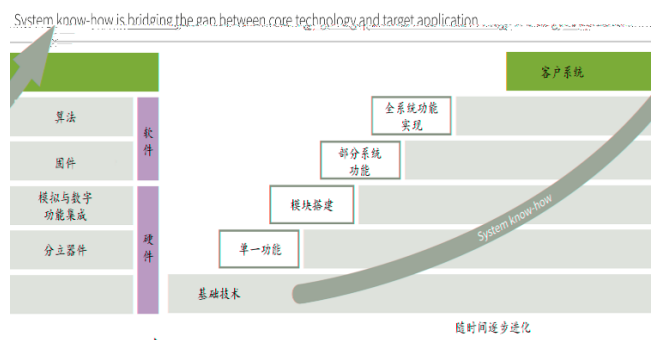
IDM

IDM

23



24



2. +

IDM

8

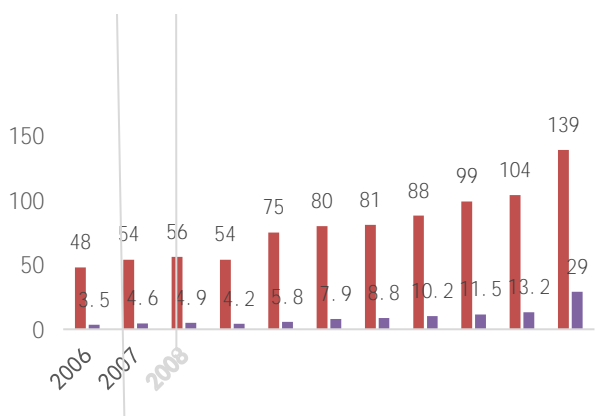
2.1.

2015

950

25 IC

26



IC Insight

## 2.2.

1

400

IC

IHS Market 2018 441 CAGR 4.1% 391 2021  
 MOSFET IGBT

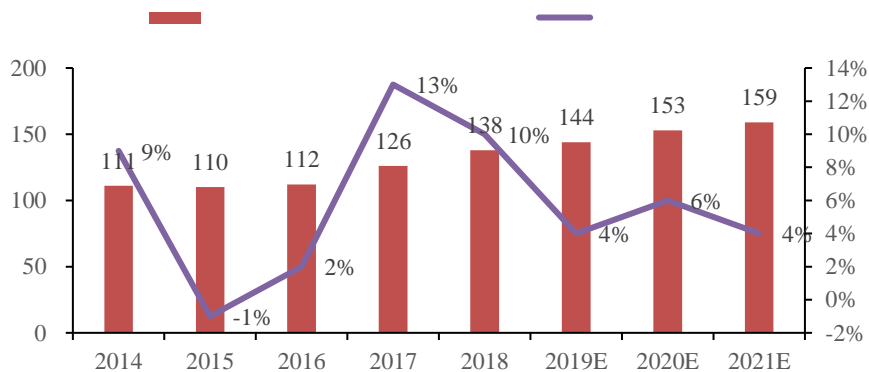
5

27

IHS Market

35%  
 2018  
 138 9.5% 35%  
 2021 159  
 4.8%

28



IHS Markit

IGBT

IHS Markit

IC MOSFET IGBT  
 61% 20% 14% IGBT

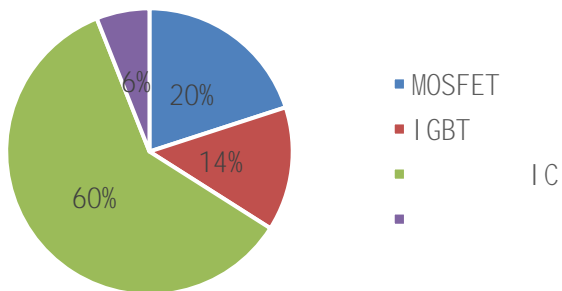
IGBT

IGBT

MOSFET

IC MOSFET IGBT

29



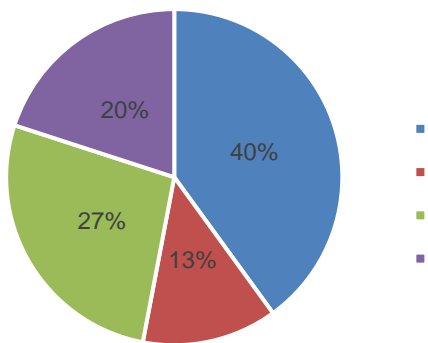
IHS Markit



ASP

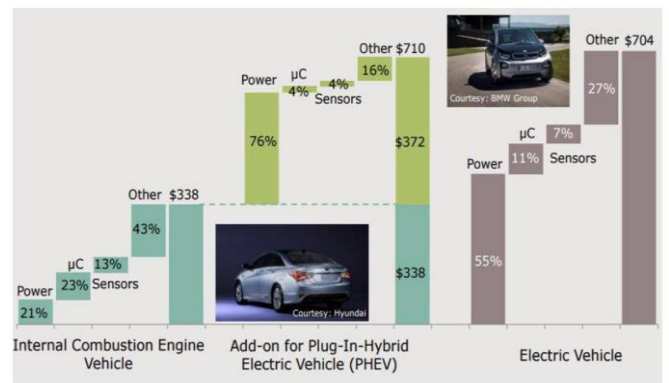


30



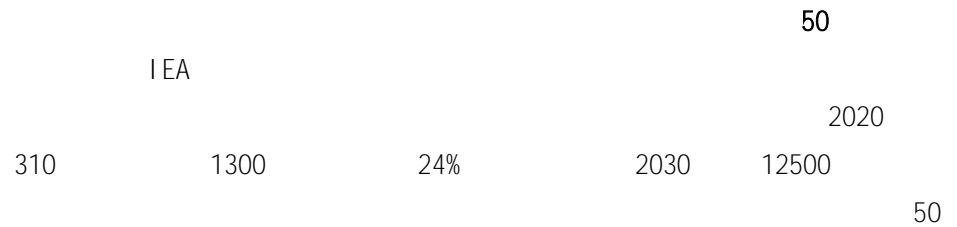
Gartner 2016

31

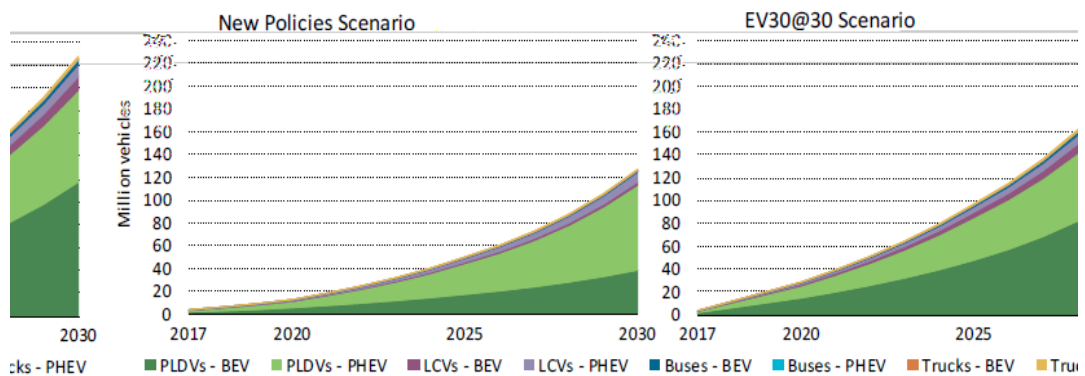


Strategic Analysis

IEA



32

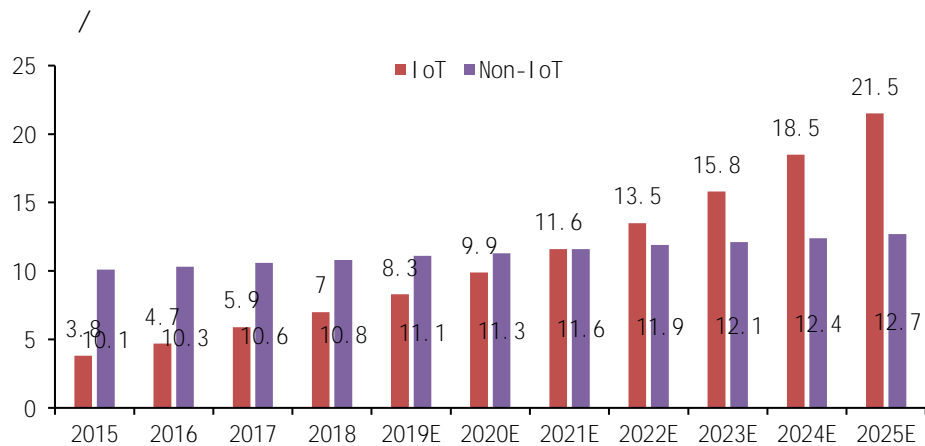


IEA

2 MEMS

IoT Analytics 2020  
 4570 CAGR 28.5%  
 100 2025 220  
 MEMS

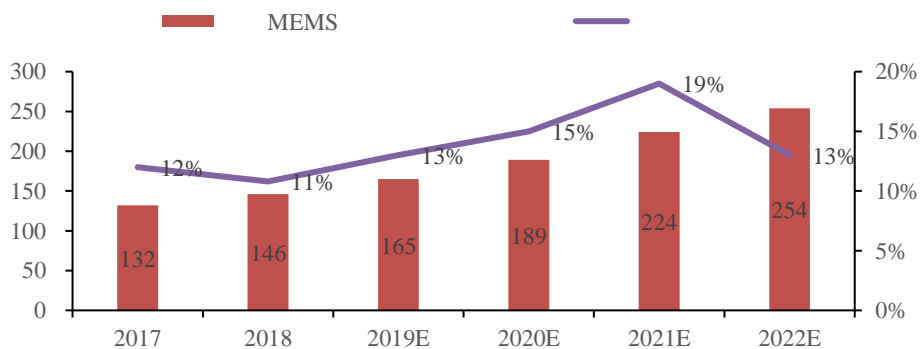
33



IoT Analytics

**MEMS** 146  
 MEMS Development 2018-2022 MEMS YoY e 14.85%

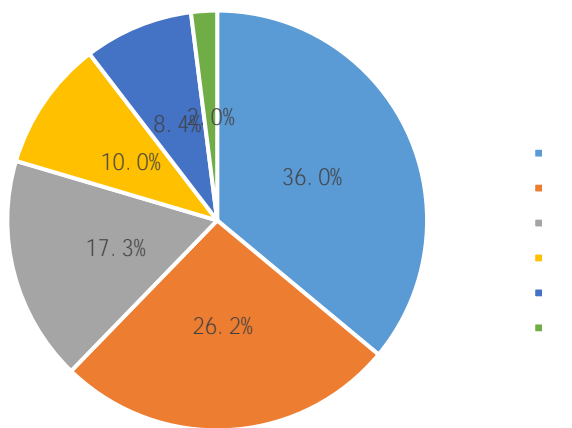
34 MEMS



YoY e

8.35%      26.2%      30%      B I S Research      17.2%      10.21%      36%

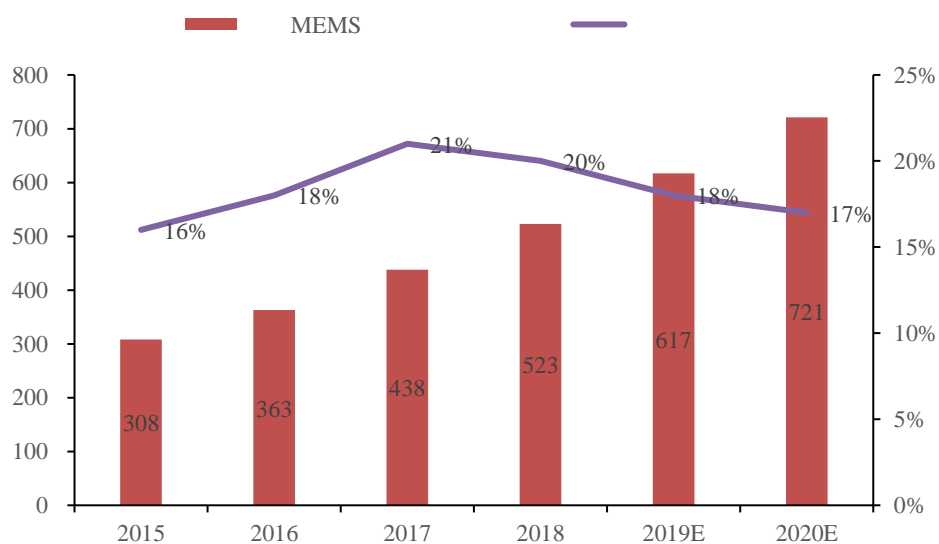
35



B I S Research

MEMS      MEMS      523      60%      19.5%      17.41%      18-2020

36 MEMS



I D M      MEMS      MEMS      MEMS      MEMS      I D M  
 MEMS      MEMS      MEMS      MEMS      MEMS      I D M  
 Yo l e D e v e l o p m e n t 2 0 1 7      MEMS      I D M

3 MCU

MCU Micro Control Unit  
CPU RAM ROM

I/O

MCU

MCU 4 8 16

32

MCU 240 MCU

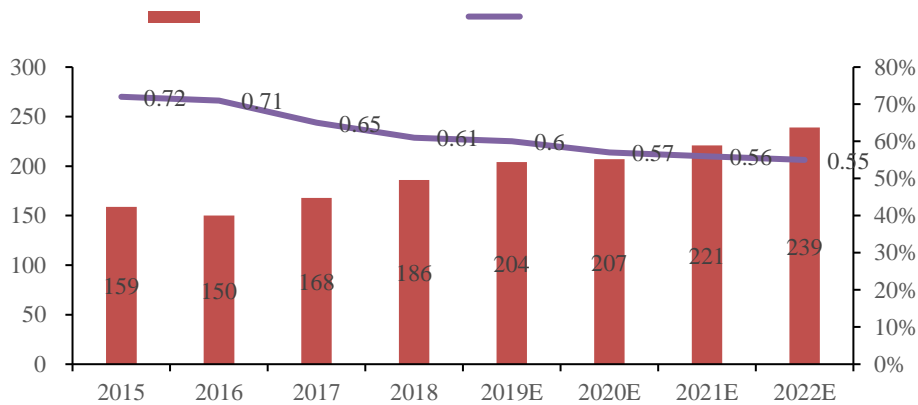
MCU IC Insights

2018 MCU 186.2 3 11.4%

2018-2022 6.42% 2022 MCU

240

**37 MCU**



IC Insights

MCU 40

MCU IHS Markit 2017 MCU

46 5 9.5%



60									
	62							69	
PEPINNOVATION									
	40	IDM							
IDM									
			5	6			8		
		230				8	8		73
			3				12		8 /
									8
	4			100				MOSFET	IGBT
	6				4	/			
	8							8	
			8	BCD					8 MEMS
	BCD	MEMS		16,000					23.11
2.75			2018	9					

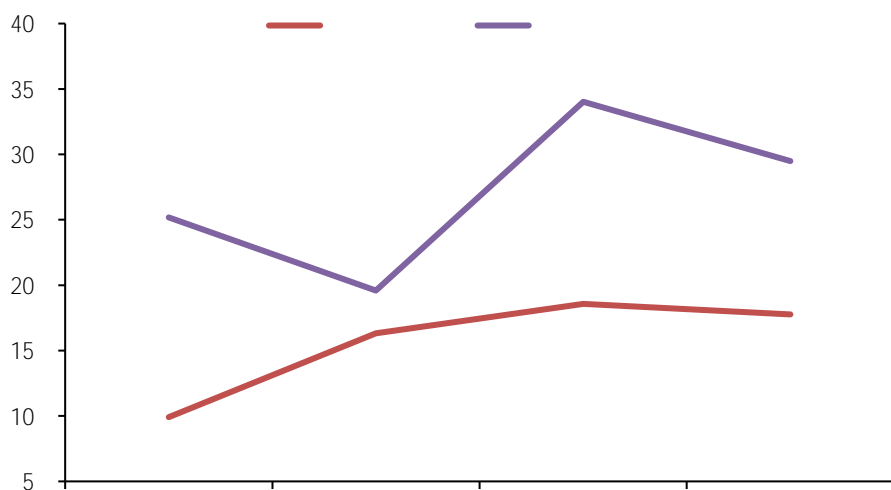
### 3.

#### 3.1.

		20%				30%
MCU	30%		MEMS	40%		

41

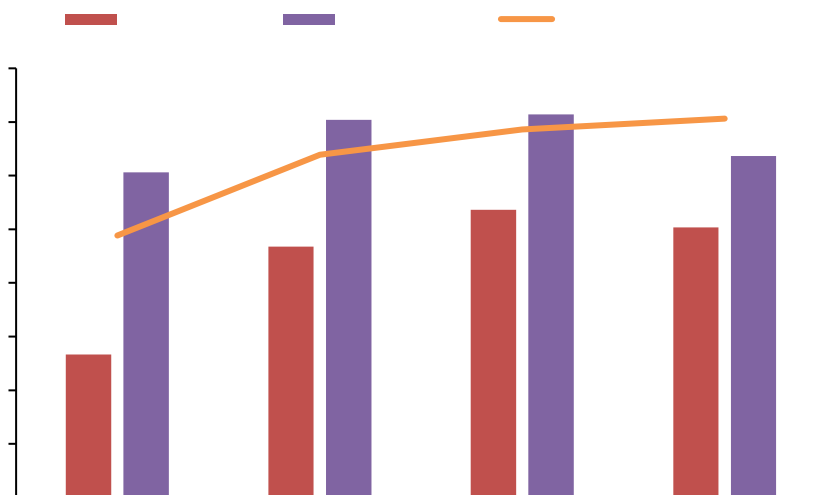
%



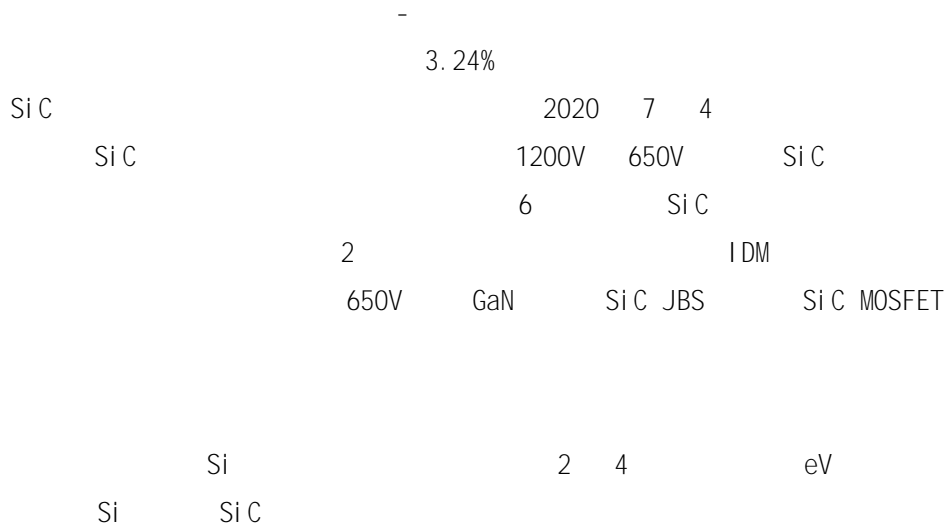
2019 44%

2016 30%

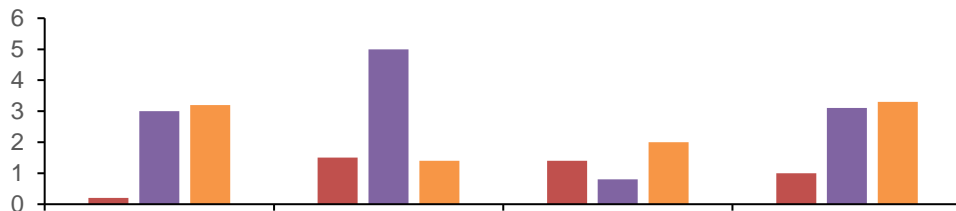
42



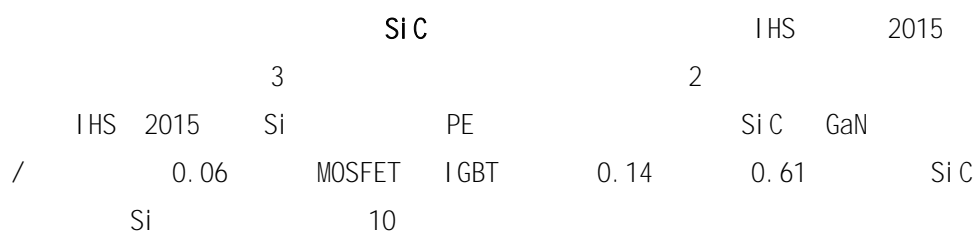
3.2.



43

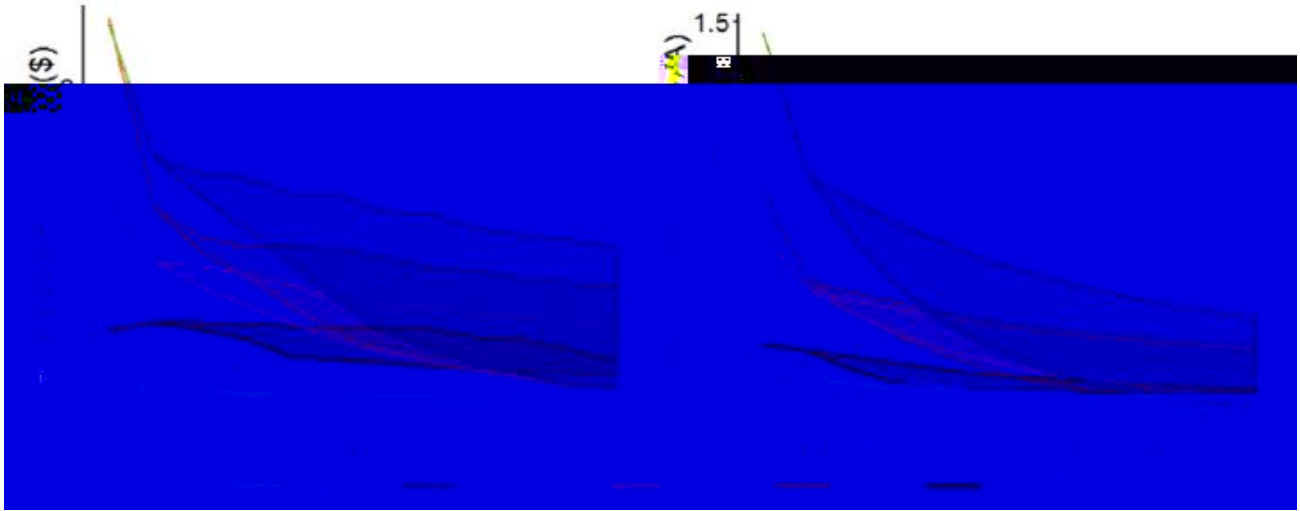


ORNL





44 SIC



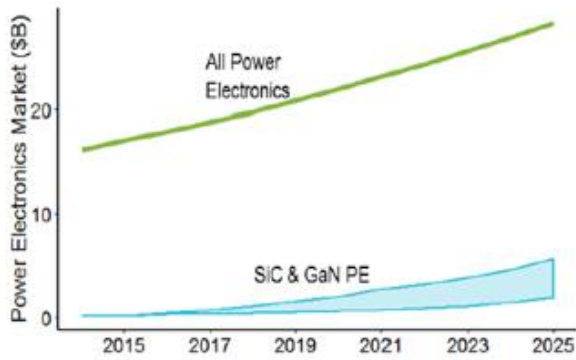
IHS(2016)

12

50

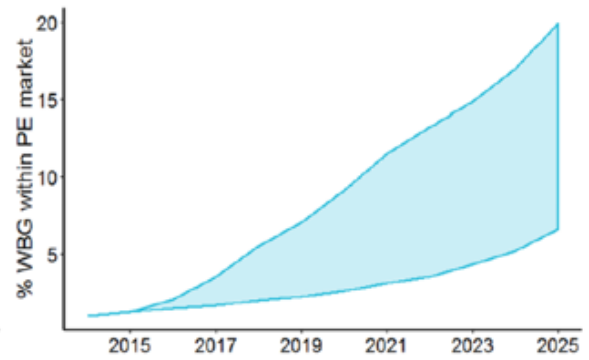
2025

45 SIC



IHS(2016)

46



IHS(2016)

4.

IDM

1

2

3

8

2020-2022

65.6

73.8

81.4

7.4

8.7

10.2

2020-2022

0.61

0.71

0.84

PE

88

75

63

47

/	2018	2019	2020E	2021E	2022E
	3,572.00	3,184.00	3502.40	3782.59	4009.55
	1.50%	-11.00%	10.00%	8.00%	6%
	18.57%	17.76%	18.50%	18.50%	18.50%
	2,683.00	2,516.00	3,019.20	3,562.66	4,097.05
	14.70%	-6.20%	20.00%	18.00%	15.00%
	34.02%	29.48%	33.50%	34.00%	34.50%
	15.00	44.00	35.00	35.00	35.00
	-22%	193.00%	-20%	0%	0%
	28.46%	10.04%	15.00%	15.00%	15.00%
	<b>6,271.0</b>	<b>5,743.0</b>	<b>6,556.54</b>	<b>7,380.04</b>	<b>8,141.66</b>
	6.72%	-8.42%	14.17%	12.56%	10.32%
	25.20%	22.84%	25.39%	25.97%	26.54%

IDM

2021

80

" "

48

	EPS			PE		
	2020E	2021E	2022E	2020	2021E	2022E
247	0.17	0.22	0.26	111	86	73
345	1.10	1.52	2.13	195	142	101
132	0.50	0.63	0.79	54	43	34
148	0.63	0.80	1.04	50	39	30
				<b>103</b>	<b>77</b>	<b>60</b>

wind 2020 8 12

## 5.

1

2

3

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49

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:	2018A	2019A	2020E	2021E	2022E	:	2018A	2019A	2020E	2021E	2022E
	1538	1931	3110								

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6	20%		
6	10%		
6	5%		
6		10%	10%
6	10%		

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6			
6			
6			

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" "

/

/

/



8 9

0510-82833337  
0510-82833217



1198 3704 3705 3706

021-61649996