
688396 \

--

IDM

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.

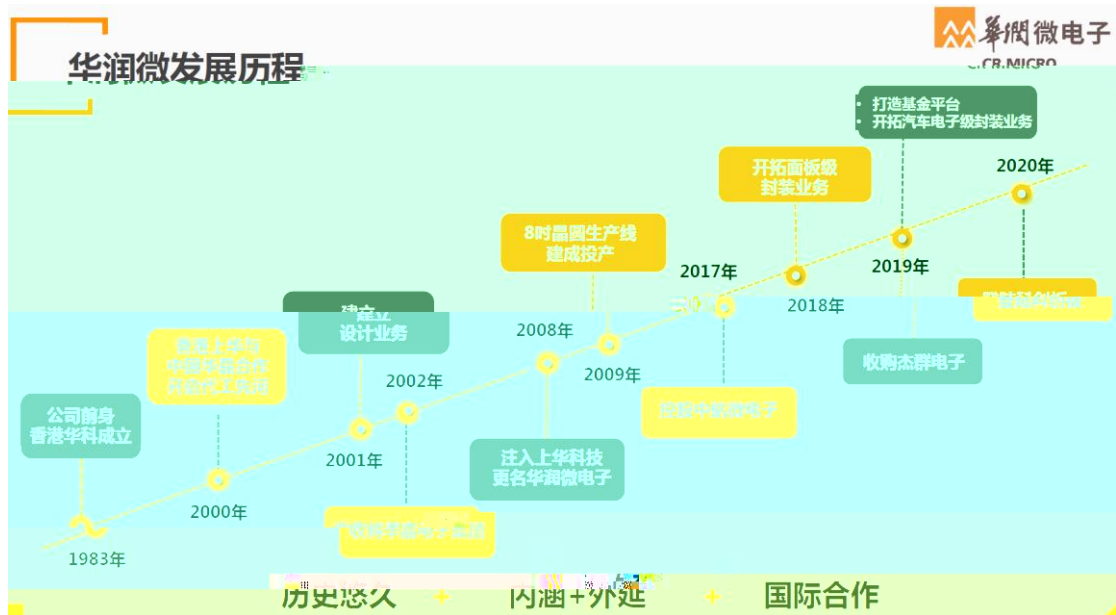
4

40

1983

4

1



14,000

2019 "

500 "

80

2



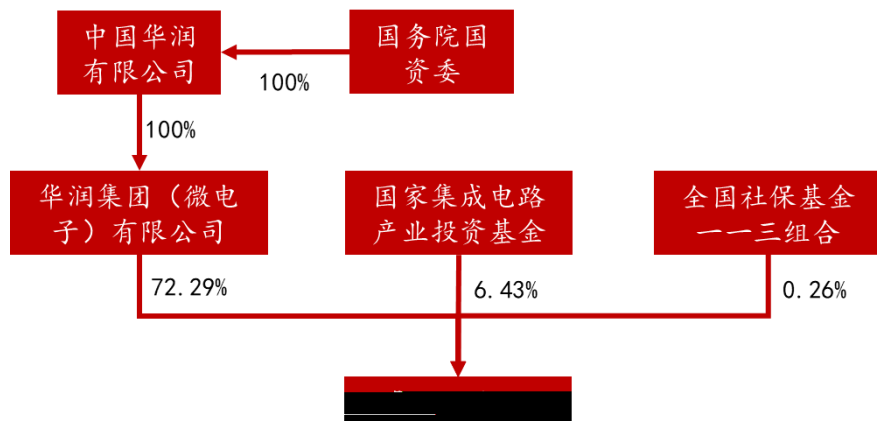
IPO

" "

7812.5

IPO

3



80

SK

4

	1	SK	2
		3	
	1		2
	1		2
MEMS	1		2
		3	

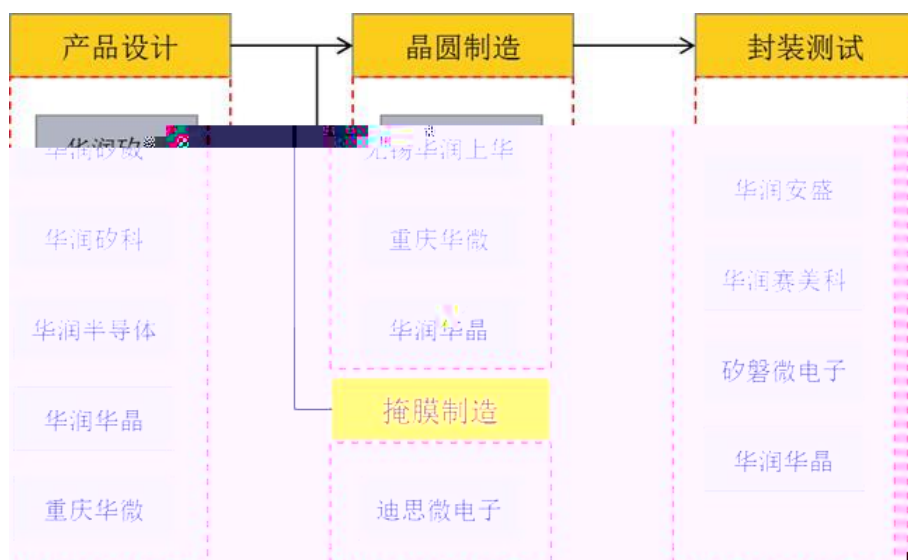
eeeworld

1.2.

IDM

" - - "

5



IDM

IDM

Fabless+

IDM

" Fabless+ "

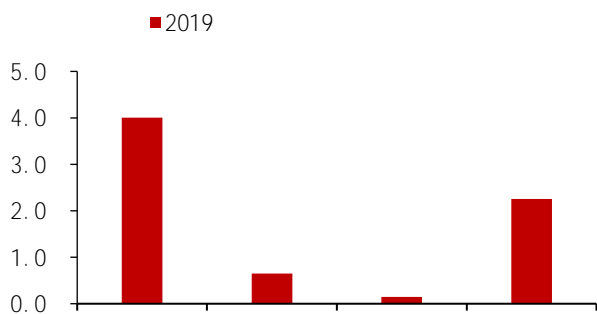
IDM

IDM

IHS Markit

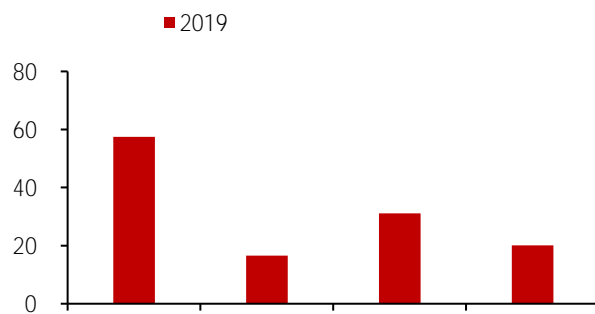
8

IDM



9

IDM



1.3.

40%

2019

7%

3000

3268

1401

10



11



BCD

BCD

Bi pol ar CMOS DMOS IC
BCD SOI BCD BCD 5700V BCD
0.11 m

MEMS
MEMS CMOS MEMS
MEMS

T0-220 T0-3P T0247 IPM
IPM DPAK PDFN PQFN

12

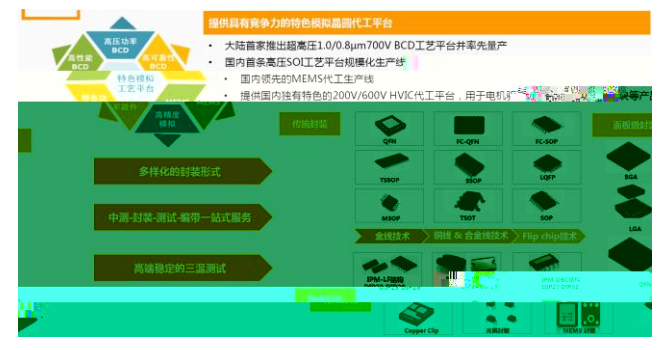


■ 晶圆制造
提供高性价比的6+8代工服务
中国排名前三本土晶圆制造企业

■ 封装制造
中国生产光耦产品的主要有四家，2018年华润硅微粉市场占有率第一
中国四大本土封装制造企业之一

■ 封装测试
公司拥有完备的半导体封装生产工艺及板贴、贴片、混合信号等多类封装测试生产工艺

13



提供具有竞争力的特色模拟晶圆代工平台

- 大陆首家推出超高压1.0/0.8um700V BCD工艺平台并率先量产
- 国内首家高压SOI工艺平台规模化生产产线
- 国内领先的MEMS代工生产线
- 提供国内独有的200V/600V HVIC代工平台，用于电机驱动

高压功率BCD
高压功率BCD
特色模拟工艺平台

提供封装

多样化的封装形式

中测-封装-测试-服务一站式服务

高精稳定的三温测试

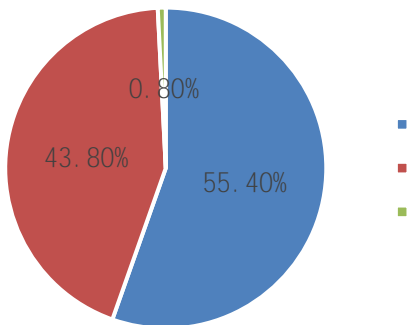
先进封装：QFN, FC-QFN, FC-SOP, TSSOP, SSOP, LQFP, SOP, SO8, BGA, LGA

先进封装：IPM-L3988, IPM-D8810, IPM-D8912

先进封装：CSP, 倒装焊, TSV, 3D IC

55% 44% 2019

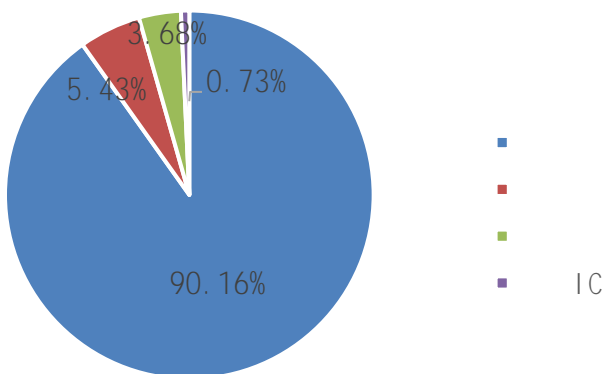
14



15



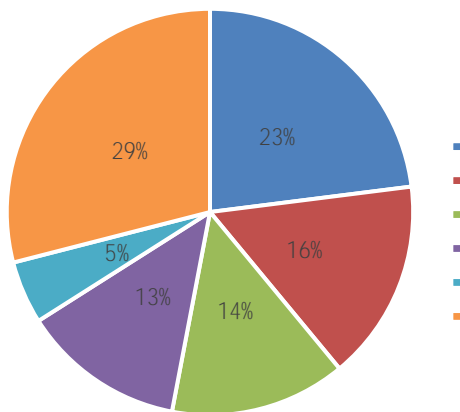
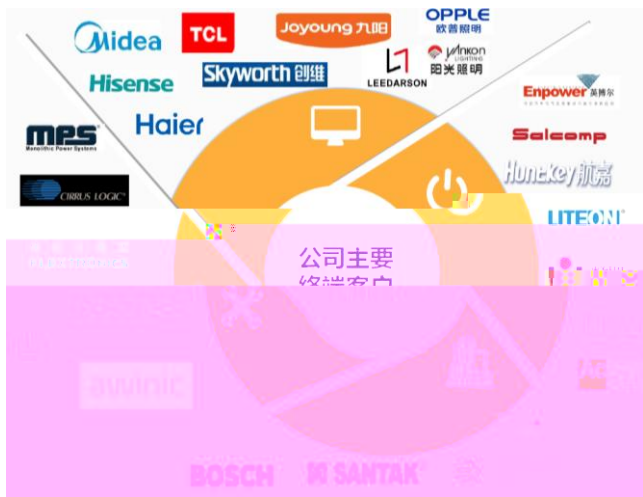
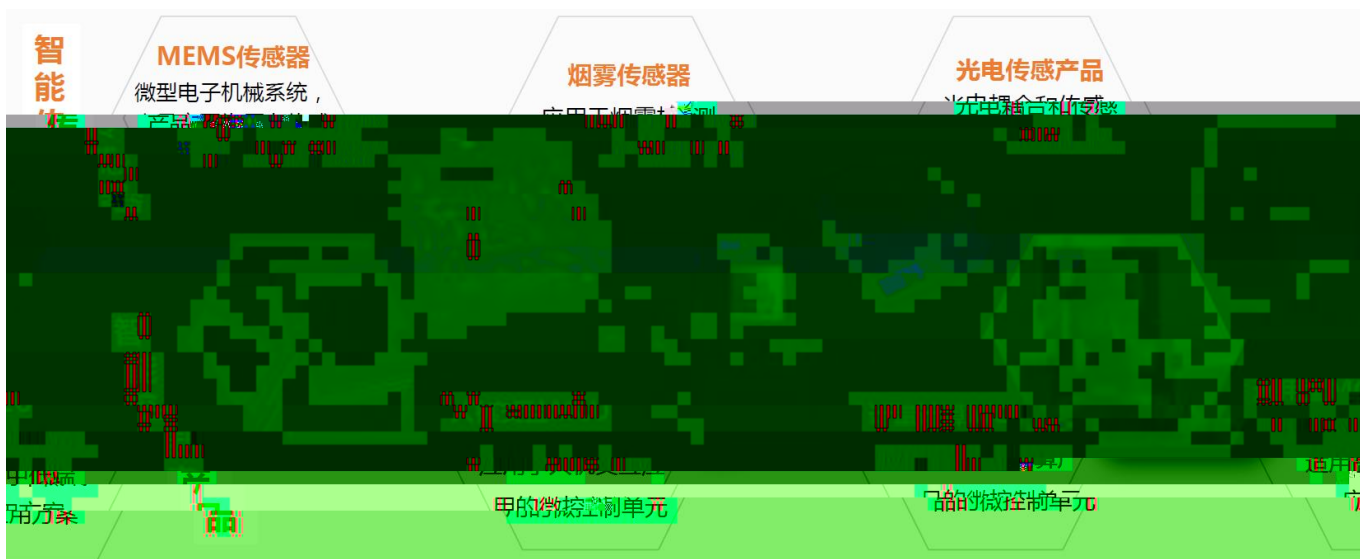
16



MOSFET
 IDM
 MOSFET
 -100V 1500V
 VDMOS MOSFET
 MOS MOS

17 MOSFET

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



"

"

IDM

IDM

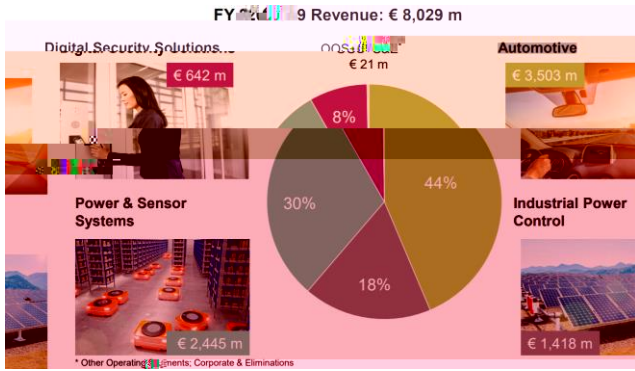
"

"

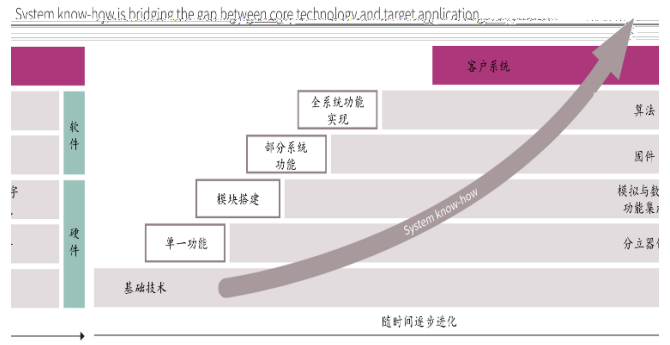
"

"

23



24



2. +

8

2.1.

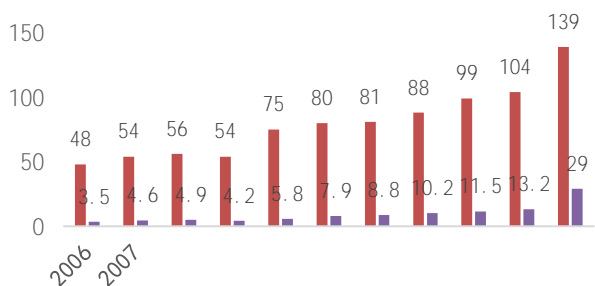
IDM

2015

950

25 IC

26



IC Insight

2.2.

1

400

IC

IHS Market 2018 391 2021
 441 CAGR 4.1% MOSFET IGBT

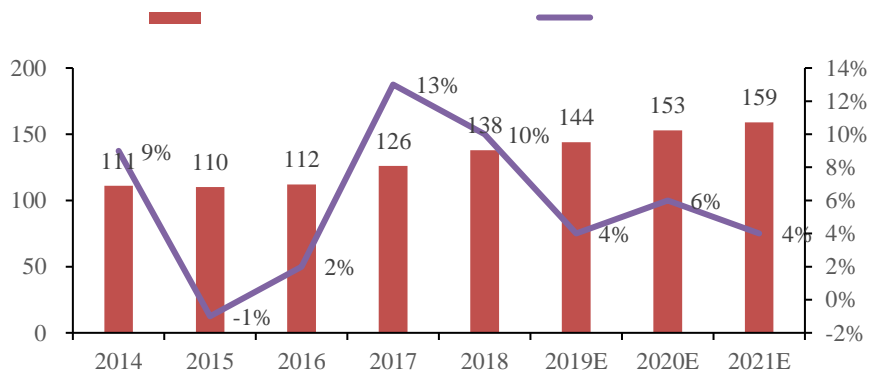
5

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

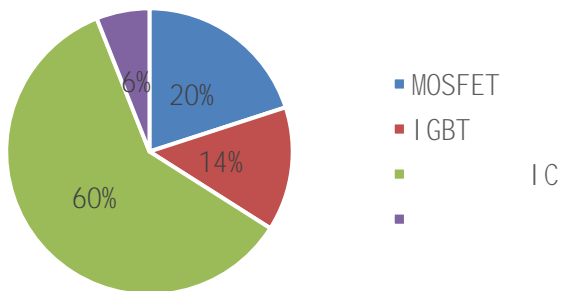
IGBT

IGBT

MOSFET

IC MOSFET IGBT

29



IHS Markit

ASP

Gartner

2016

40% 13%

27%

strategic Analysis

338

704

108%

55%

71

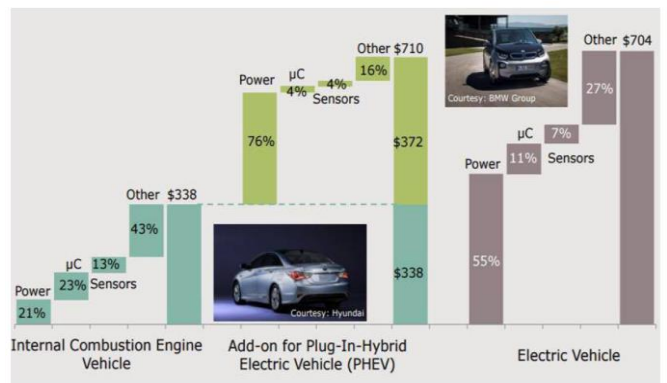
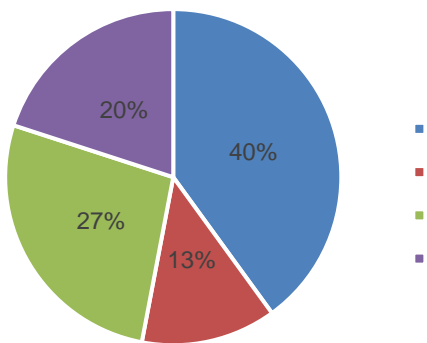
387

21%

5

30

31



Gartner 2016

Strategic Analysis

50

IEA

310

1300

24%

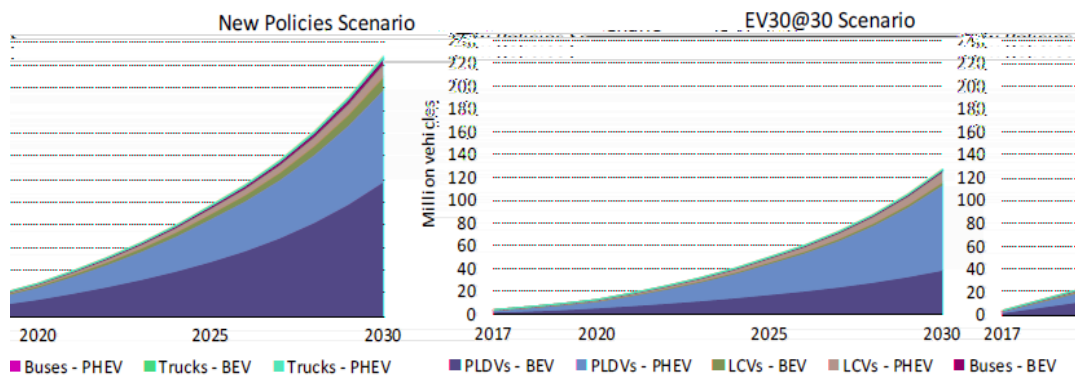
2030

12500

2020

50

32

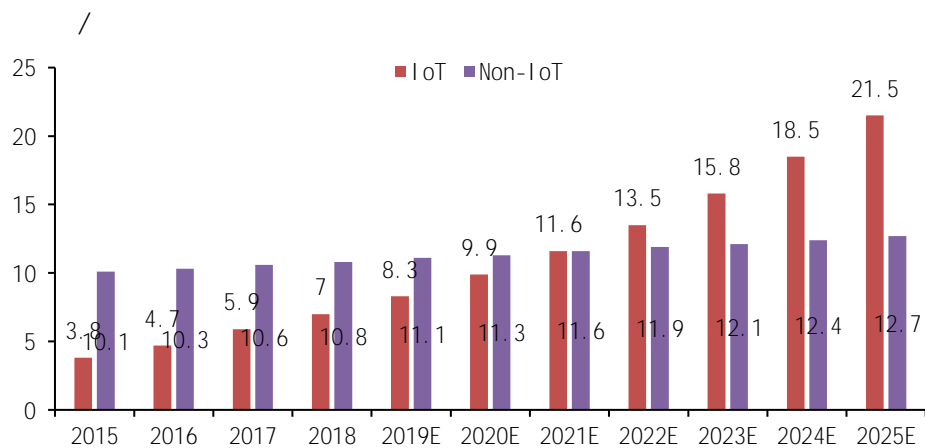


IEA

2 MEMS

IoT Analytics 2020
 4570 CAGR 28.5%
 100 2025 220
 MEMS

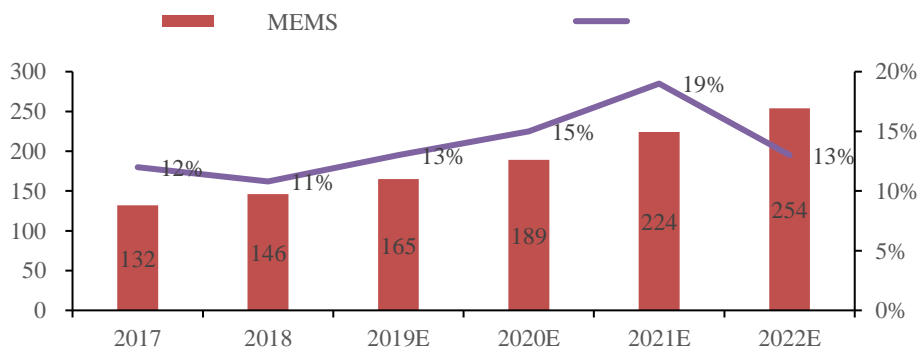
33



IoT Analytics

MEMS 146
 MEMS YoI e
 Development 2018-2022 MEMS 14.85%

34 MEMS



YoI e

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

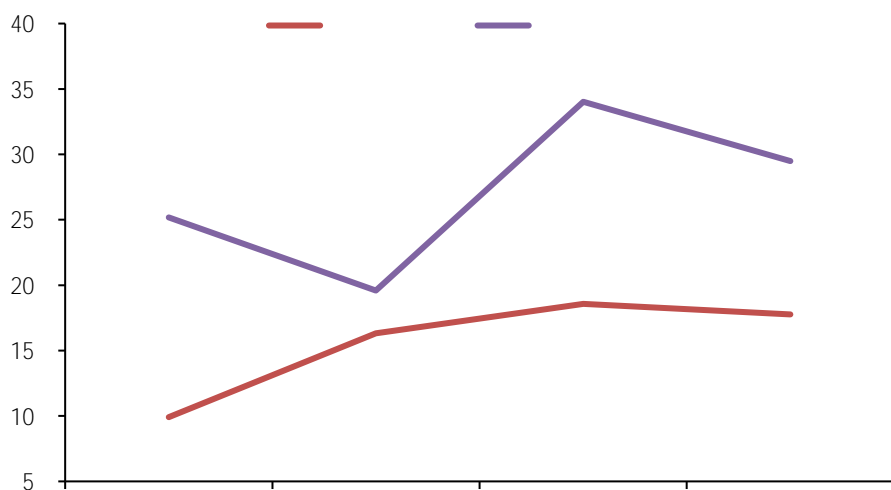
3.

3.1.

		20%				30%
MCU	30%		MEMS	40%		

41

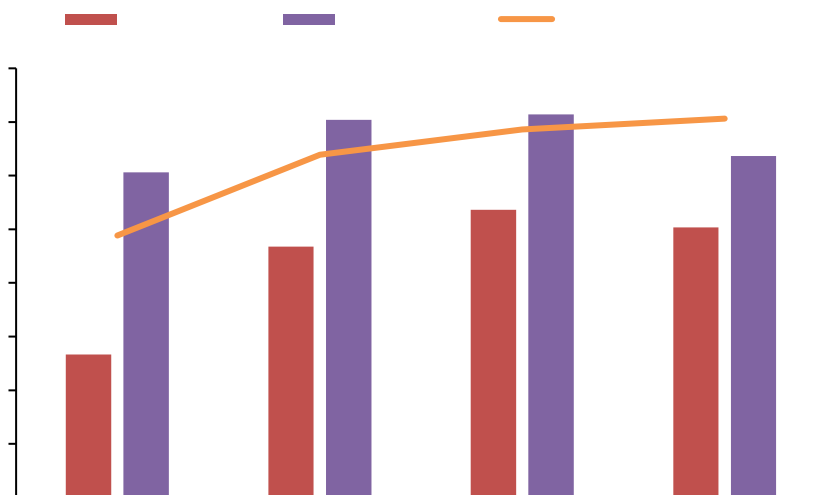
%



2019 44%

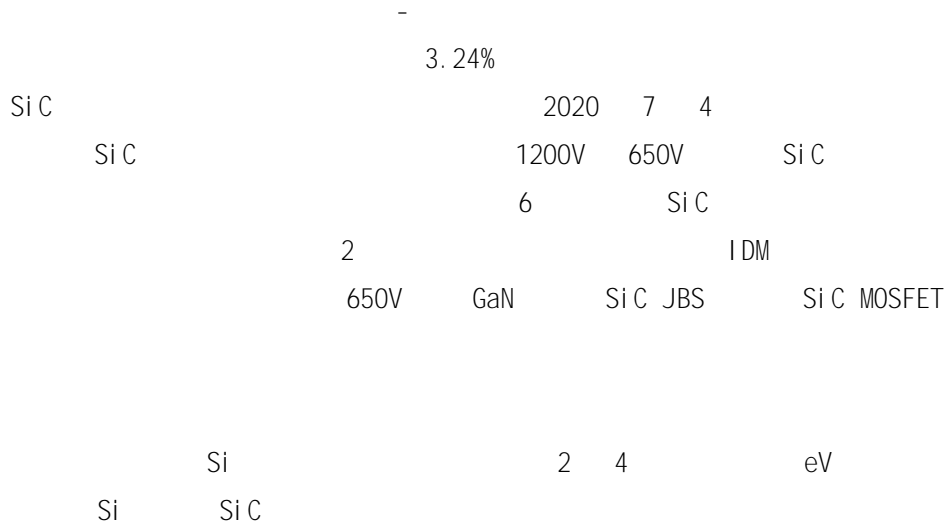
2016 30%

42

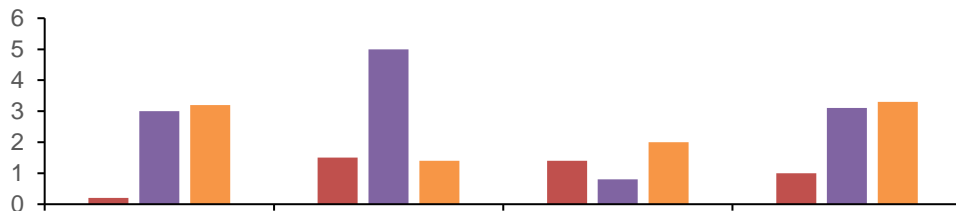


3.2.

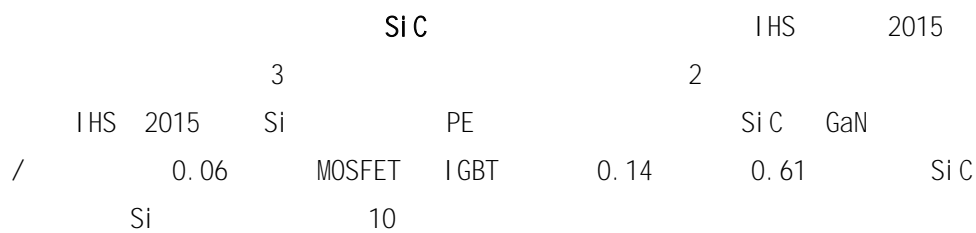
IGBT



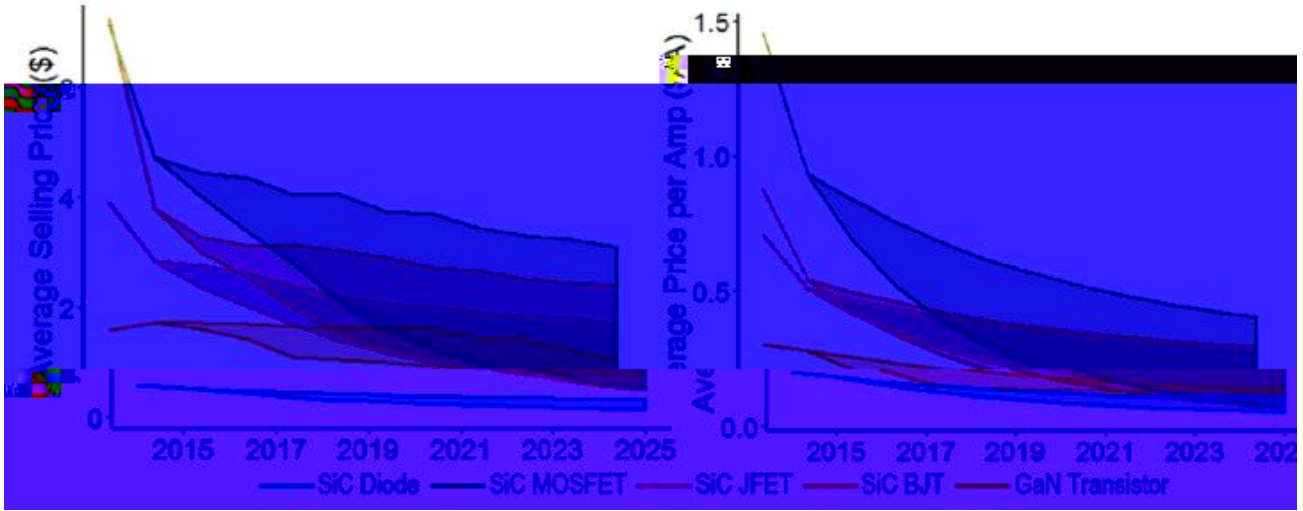
43



ORNL



44 SIC



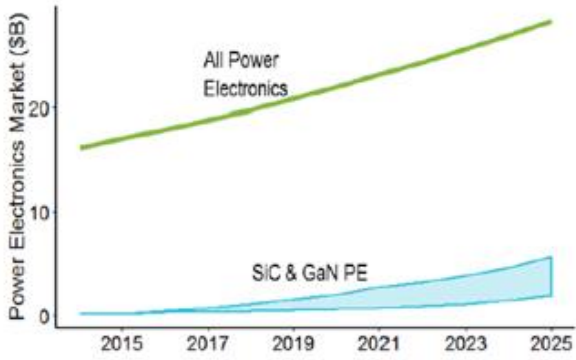
IHS(2016)

12

50

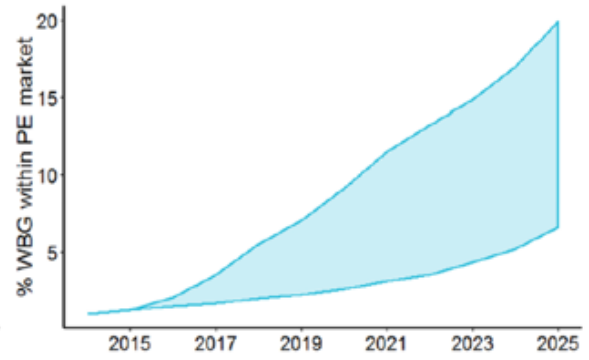
2025

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%
	6,271.0	5,743.0	6,556.54	7,380.04	8,141.66
	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
				103	77	60

wind 2020 8 12

5.

1

2

3

49

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

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

6			
6			
6			

" "

/

/

/



8 9

0510-82833337
0510-82833217



1198 3704 3705 3706

021-61649996