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12.80  
336.94

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1.	IDM	.....	5
2.		.....	5
3.	MEMS	.....	8
3.1		.....	8
3.2	MEMS	.....	11
3.3		.....	12
4.		.....	14
5.		.....	14
5.1		.....	14
5.2		.....	19
6.		.....	19
		.....	20

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1	.....	5	
2	.....	9	
3	2014-2021	.....9	
4	2014-2021	.....10	
5	2017-2022	MEMS	.....11

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1		IC	.....	6
2			.....	7
3			.....	7
4			.....	7
5	2018		.....	12
6	2018		.....	13
7	2018	MOSFET	.....	13
8			.....	14
9			.....	15
10			.....	15
11			.....	15
12		IC	.....	16
13			.....	16
14			.....	17
15			.....	17
16			.....	18
17	A	PE 2020	.....	19
18	A	PB 2020	.....	19

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1.

IDM

2017			2004
2018	2018	IDM	
2018	62.71	4.29	

MOSFET IGBT SBD FRD IC

SBD FRD

MOSFET IGBT

MOSFET

IDM

-100V 1500V  
MOSFET

MOSFET

MOS

VDMOS

MOS

IGBT SBD FRD  
Trench-FS  
8 Trench

600V-6500V IGBT

SBD

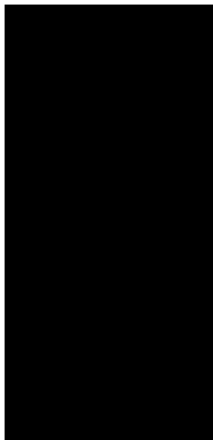
FRD

IC

IC

1

IC



AC-DC

AC-DC

LED IC

LED

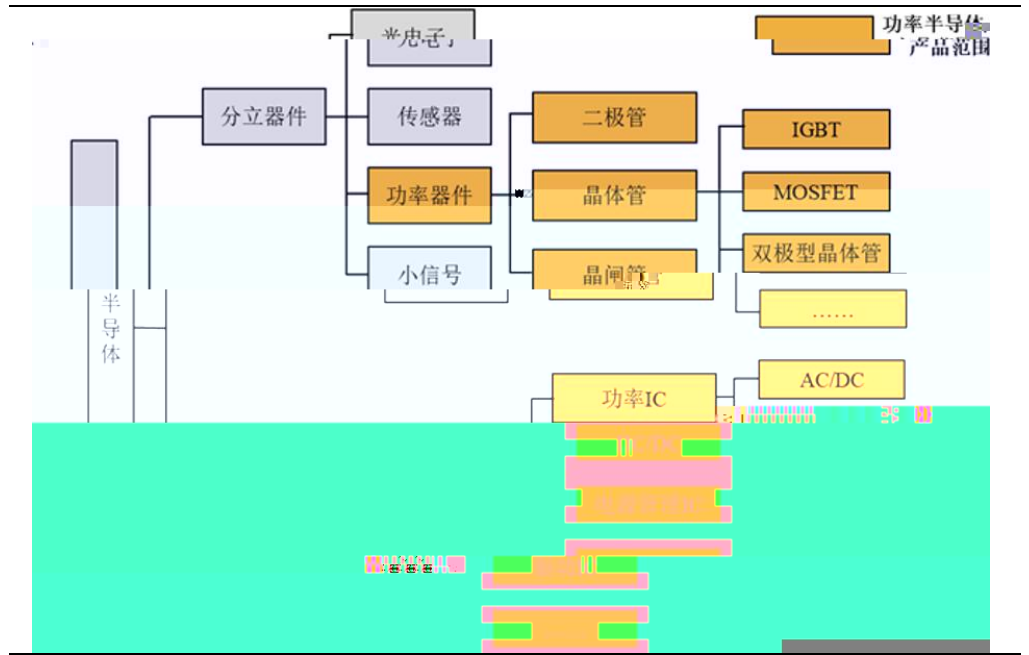
84.5US84.5US



	1	8	3	6						8
		73	6					247		6
						1.0-0.11	m			
Bipolar	BiCMOS		SOI	BCD	IGBT	MEMS	CMOS	GaN	SiC	CMOS
										BCD
										MEMS
		1	8							60
	SBD		MOS	MOS	IGBT	GaN				MOS
			IC							

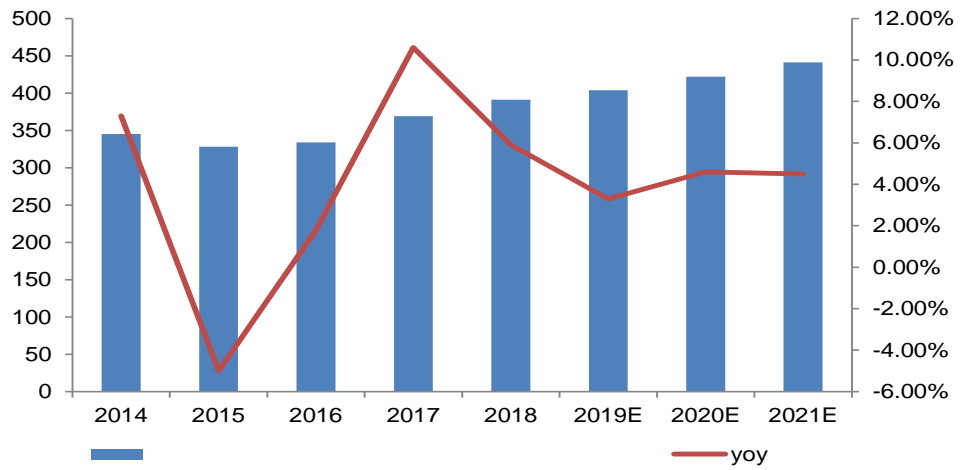


2



2021 IHS Markit 2018 391  
441 4.1%

3 2014-2021

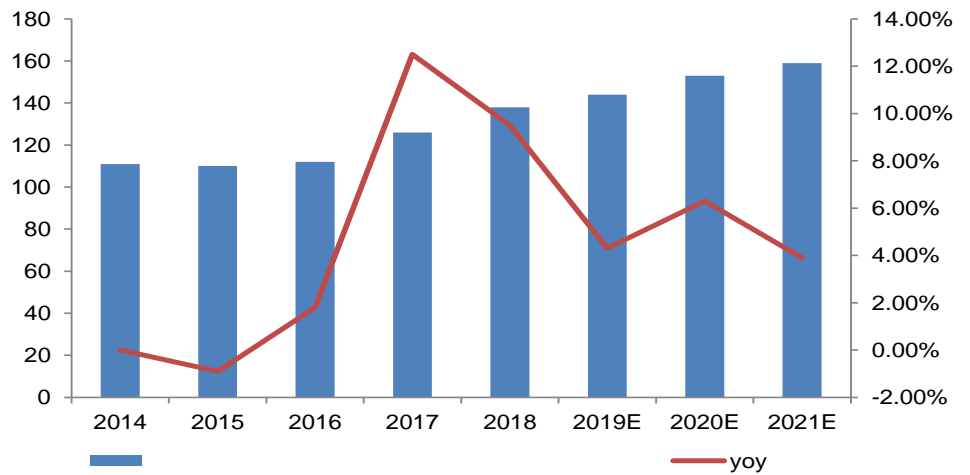


IHS Markit

2018 138  
35% 4.8%  
2021 159

9.5%

4 2014-2021



IHS Markit

IHS Markit  
MOSFET 60.98% IGBT 20.21% IC 13.92% 2018

IC  
IHS Markit 2016-2018 2018 IC 84.3  
2.88% IC  
GaN SiC

IC  
MOSFET  
IHS MOSFET  
40% MOSFET

IHS Markit 2016 -2018 2018 MOSFET  
27.92 15.03%

Type-C MOSFET MOSFET

IGBT IGBT BJT MOSFET MOSFET  
IGBT

IHS Markit 2016 IGBT 11.74% IGBT  
15.40 2018 19.23

CPU IGBT IGBT 1700V

IGBT

IGBT

IGBT

IGBT

MOSFET

IC MOSFET

### 3.2 MEMS

A/D

MEMS

2018

MEMS

146

10.8%

MEMS  
Yole Development  
14.85%

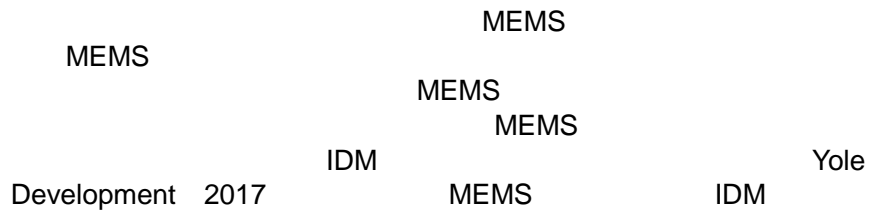
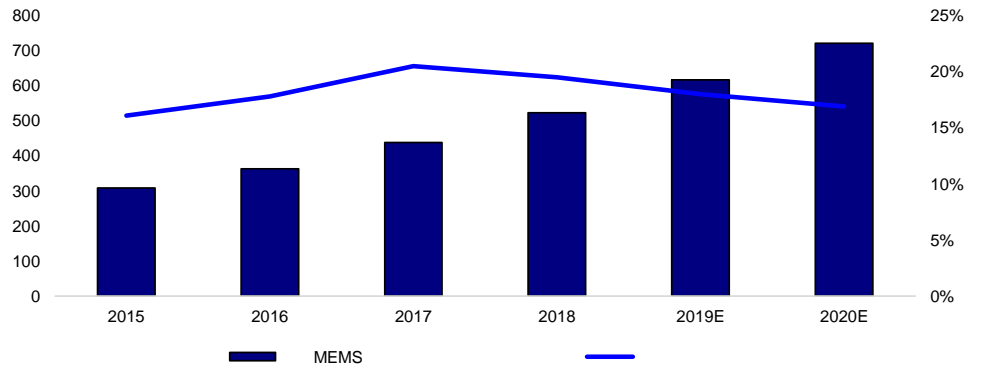
2018-2022

MEMS

5 2017-2022

MEMS

6 2015-2020 MEMS



3.3

10 10 2018  
IDM

5 2018

2018

1	509	
2	248	
3	239	
4	225	
5	111	
6	107	
7	92	
8	66	
9	65	
10	63	IDM

2018

6 2018

	2018
1	21.7
2	18.5
3	17.1
4	8.1
5	7.7
6	7.2
7	6.9
8	6.0
9	5.4
10	4.9

MOSFET  
MOSFET  
MOSFET  
MOS  
IHS Markit  
MOSFET

-100V 1500V  
MOSFET  
MOS VDMOS  
MOSFET  
MOSFET 2018

7 2018 MOSFET

	2018	MOSFET
1	52	28.4%
2	31	16.9%
3	16	8.7%
4	12	6.6%
5	12	6.6%
6	9	4.9%
7	51	27.9%
	183	100%

IHS Markit

IHS Markit 2018

MOSFET  
IHS Markit 2018

MOSFET

4.

	IPO	292994049			
	336943049		25%		8
					8
8	BCD			8	MEMS
					BCD
	MEMS	16000			

IC

2019~2021

-10.00% 20.00%

20.00%      5.00% 5.00% 5.00%

**9**

	2018	2019E	2020E	2021E
	2418.86	2324.56	2928.94	3690.47
yoy	16.93%	-3.90%	26.00%	26.00%
	33.83%	32.00%	34.00%	34.50%
	163.99	147.59	177.11	212.53
yoy	-0.47%	-10.00%	20.00%	20.00%
/	0.15	0.16	0.17	0.17
yoy				

	<b>4</b>		2016	2017	2018	2019H1	IC
		0.34 /	0.23 /	0.36 /	0.26 /		
			2020	5G			IC
			IC	2019~2021			-20.00%
	10.00%	10.00%	30.00%	10.00%	10.00%		

<b>12</b>		<b>IC</b>			
		<b>2018</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>
		27.61	28.99	35.07	42.44
	yoy	-40.02%	4.98%	21.00%	21.00%
		30.86%	33.00%	34.00%	35.00%
IC		7742.11	6193.69	6813.06	7494.36
	yoy	-61.08%	-20.00%	10.00%	10.00%
	/	0.36	0.47	0.51	0.57
	yoy	56.52%	30.00%	10.00%	10.00%

wind

	<b>5</b>		2016	2017	2018	2019H1	
		1290.33 /	1427.53 /	1493.01 /	1464.63		2017
		/					
			2019	5G			
			2020	2019~2021			
	-5.00%	5.00%	5.00%	-5.00%	5.00%	5.00%	

<b>13</b>					
		<b>2018</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>
		2674.27	2413.54	2660.92	2933.67
	yoy	4.33%	-9.75%	151.07%	21.55%
		19.49%	18.00%	20.00%	20.50%
		179.12	170.16	178.67	187.61
	yoy	-0.25%	-5.00%	5.00%	5.00%
	/	1493.01	1418.36	1489.28	1563.74
	yoy	4.59%	-5.00%	5.00%	5.00%

wind

	<b>6</b>		2020	5G		
		10.00%	2019~2021			-10.00%
						10.00%



**14**

	2018	2019E	2020E	2021E
	785.68	707.11	777.82	855.61
yoy	-4.20%	-10.00%	10.00%	10.00%
	15.28%	15.28%	16.00%	17.00%

wind

<b>7</b>	2020	5G		
	2019~2021			-15.00%
10.00%	10.00%			
<b>8</b>			2019~2021	
	800	800	400	400
400				

**15**

	2018	2019E	2020E	2021E
	111.96	95.16	104.68	115.15
yoy	-17.89%	-15.00%	10.00%	10.00%
	19.53%	20.00%	20.00%	20.00%

wind

<b>9</b>	IPO	878982146	IPO	336943049
	IPO	12.80 /	IPO	1215925195
		2019~2021		57.82 67.54 79.24
EPS	0.29 0.40 0.57 /			

16

		2018	2019E	2020E	2021E
		6270.80	5781.92	6754.22	7924.10
	yoy	6.73%	-7.80%	16.82%	17.32%
		25.20%	23.99%	26.28%	27.28%
		2418.86	2324.56	2928.94	3690.47
	yoy	16.93%	-3.90%	26.00%	26.00%
		33.83%	32.00%	34.00%	34.50%
		137.64	135.49	153.51	173.93
	yoy	41.99%	-1.56%	13.30%	13.30%
		40.39%	37.00%	40.00%	40.00%
		99.37	77.07	93.26	112.84
	yoy	-22.06%	-22.44%	21.00%	21.00%
		30.67%	28.55%	30.00%	30.00%
IC		27.61	28.99	35.07	42.44
	yoy	-40.02%	4.98%	21.00%	21.00%
		30.86%	33.00%	34.00%	35.00%
		2674.27	2413.54	2660.92	2933.67
	yoy	4.33%	-9.75%	10.25%	10.25%
		19.49%	18.00%	20.00%	20.50%



5.2

2018 62.71 4.29  
IDM

PE PB

PE IDM  
PE 2020 50~58x 245~284  
PB 2020 3.00~3.50x  
268~313

PE PB 268~284  
IPO PE 22.04~23.36 /  
2020 3.00~3.18x PE 55~58x 2020 PB

17 A	PE 2020
	PE x
	48
	51
	50
wind	2020 2 26

18 A	PB 2020
	PB x
	5.05
	5.48
	5.26
wind	2020 2 26

	2018	2019E	2020E	2021E	2018	2019E	2020E	2021E
P/E	6271	5782	5293	4804	4690	4395	4100	3805
P/B	3.75	3.70	3.65	3.60	5.2%	4.0%	3.8%	3.6%
P/S	1.69	1.95	2.30	2.65	85	78	71	64
	1.3%	1.3%	1.3%	1.3%	126	104	82	58
	2.0%	1.8%	1.6%	1.4%	374	335	296	244



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