



12.80

336.94

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

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

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

1.**IDM**

2017

2004

2018

2018

62.71

IDM

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

600V-6500V IGBT

SBD

8

Trench

FRD

IC

IC

1

IC

AC-DC

AC-DC

LED

IC

LED

IC

2

MEMS

MCU

MCU

MCU

4 8 16 32 CPU OTP MTP Flash CMOS

3

MCU

MCU

PC

MCU

MCU

MCU

MCU

8

16

32

CPU

MCU

4

2018

3	6	Analog	BCD	MEMS	DMOS	Power Discrete	247
---	---	--------	-----	------	------	----------------	-----

1	8	Advance	BCD	Analog	DMOS	73
---	---	---------	-----	--------	------	----

1	8	MOS SBD	MOS	MOS	60
---	---	------------	-----	-----	----

SBD

199

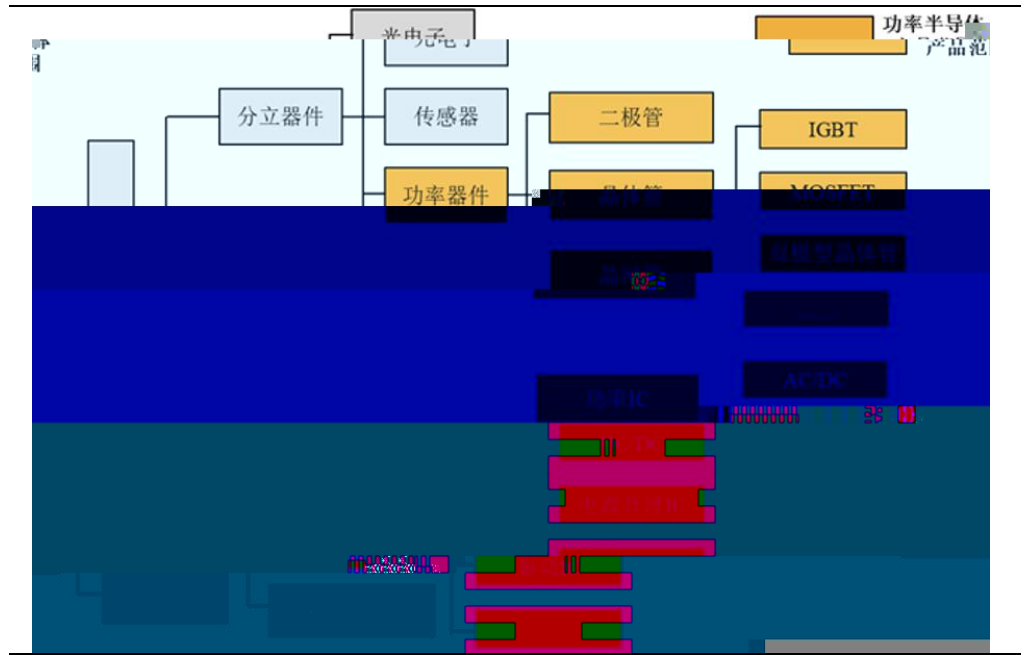
QFP QFN PQFN FC-QFN TSSOP SSOP
MSOP IPM 62

MSOP IPM

69

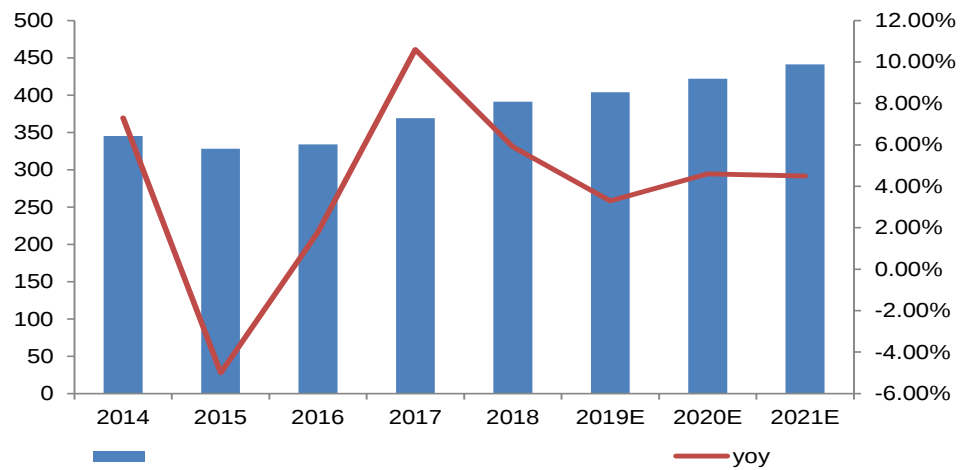
2.4

2



IHS Markit 2021 2018 391
441 4.1%

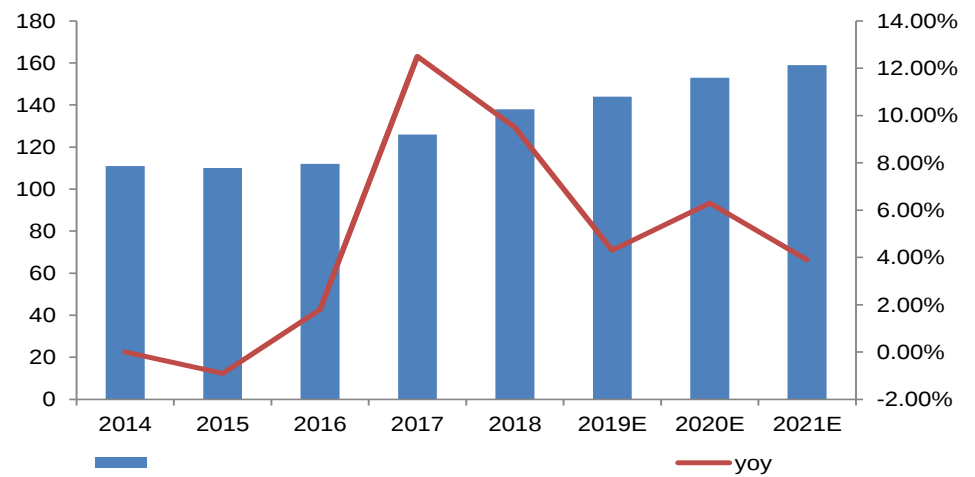
3 2014-2021



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 2.88% IC 84.3
GaN SiC

IC

MOSFET

MOSFET

IHS MOSFET

40%

IHS Markit 2018 MOSFET
27.92 2016 -2018 15.03%

Type-C MOSFET

IGBT

IGBT

BJT MOSFET MOSFET IGBT

IHS Markit 2016 IGBT 11.74% IGBT
15.40 2018 19.23

CPU 16 IGBT 1700V

IGBT

IGBT

IGBT

IGBT

MOSFET

IC MOSFET

3.2 MEMS

A/D

MEMS

2018

MEMS

146

10.8%

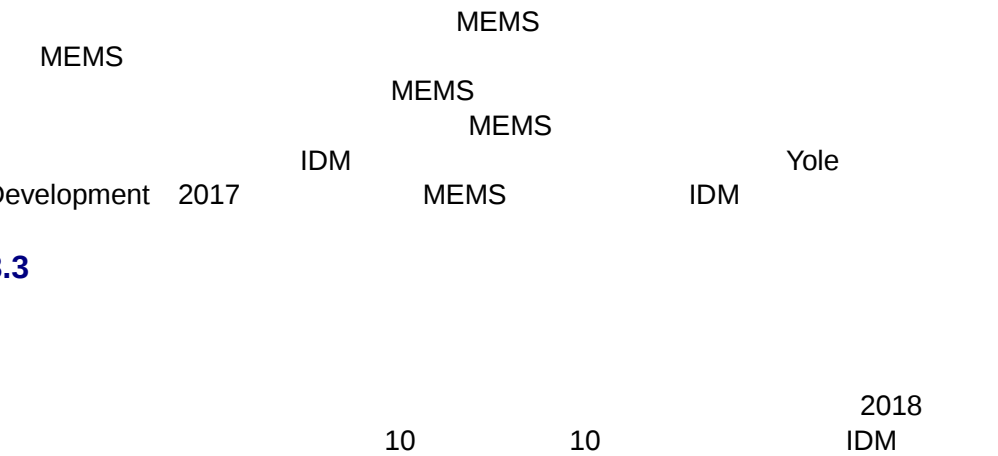
MEMS
Yole Development
14.85%

2018-2022

MEMS

5 2017-2022

MEMS

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

-100V 1500V
MOSFET
MOS VDMOS

MOS
IHS Markit

MOSFET
MOSFET 2018

MOSFET

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
336943049

292994049

25%

8

8

8 BCD

8

MEMS

BCD

MEMS

16000

IC

2019~2021
 20.00% 5.00% 5.00% 5.00% -10.00% 20.00%

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				

4 2016 2017 2018 2019H1 IC
0.34 / 0.23 / 0.36 / 0.26 /

10.00% 10.00% 2020 5G IC
IC 2019~2021 -20.00%
30.00% 10.00% 10.00%

12	IC	2018	2019E	2020E	2021E
		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					

5 2016 2017 2018 2019H1
1290.33 / 1427.53 / 1493.01 / 1464.63
/ 2017

2019
2020 5G
2019~2021
-5.00% 5.00% 5.00% -5.00% 5.00% 5.00%

13					
		2018	2019E	2020E	2021E
wind		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%

6 2020 5G
2019~2021 -10.00% 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

7 2020 5G
2019~2021 -15.00%

10.00% 10.00%

8 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

9 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					PB 2020 3.00~3.50x
					268~313
	PE	PB			268~284
		IPO		22.04~23.36 /	
2020		PE		55~58x	2020
3.00~3.18x					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
						6271	5782	6754	7924
	0.35	0.29	0.40	0.57		4690	4395	4979	5763
	3.41	3.46	7.35	7.92	%	25.2%	24.0%	26.3%	27.3%
	1.22	1.38	1.08	1.24		85	78	91	107
	0.00	0.00	0.00	0.00	%	1.3%	1.3%	1.3%	1.3%
						126	104	128	158
P/E	36.24	43.46	31.79	22.34	%	2.0%	1.8%	1.9%	2.0%
P/B	3.75	3.70	1.74	1.62		374	335	378	444
P/S	1.69	1.95	2.30	1.96					

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