(688396)

IDM

( )	( )
021-38676820	021-38677388
wangcong@gtjas.com	zhangtianwen@gtjas.com

2020.06.08

1. IDM

1.1.

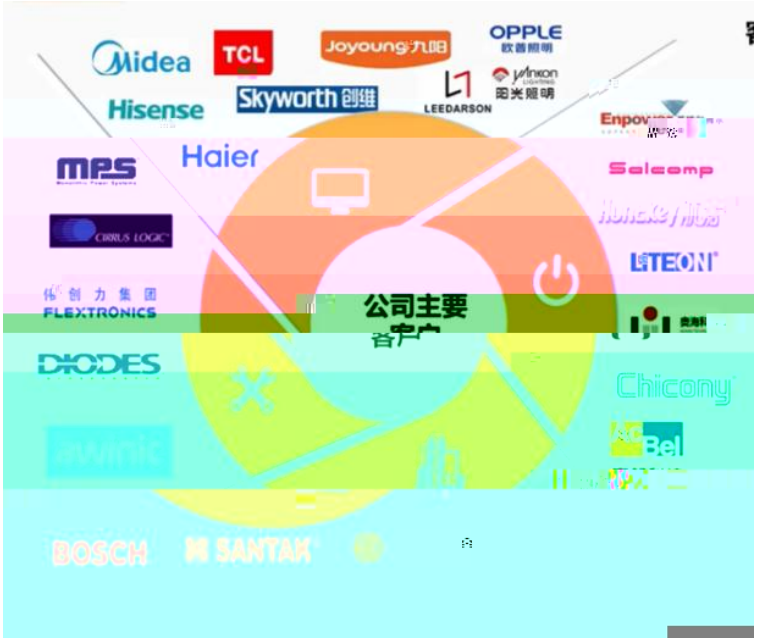
2019
IDM 44% 56%

1

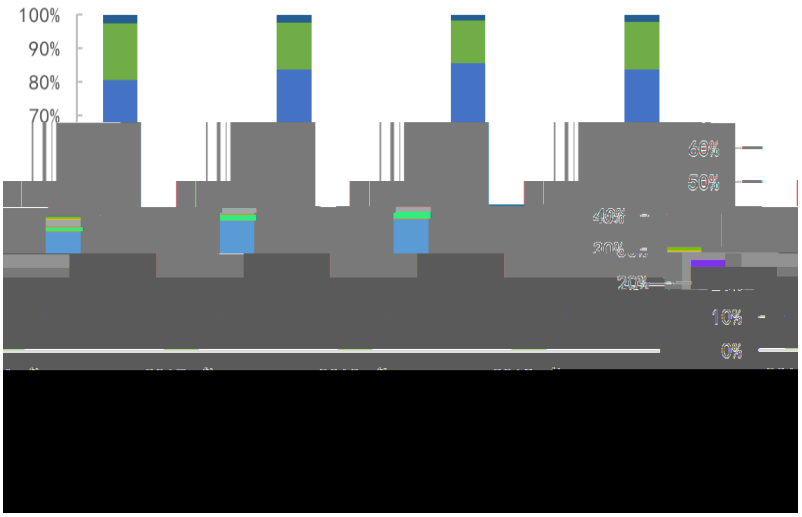
2019
MOSFET

2
6 247 / 8
133 / 1.0-0.11 μ m
SOI BCD
CMOS CMOS Bipolar BiCMOS
BCD MEMS
IPM MPS Diodes

1



3



4

2019 2,578
PCT 399 291
1,401 1,228
173 MOSFET IGBT FRD MEMS
SBD
BCD

2019
1771 1128
737

1:

				%
2019 1-6	**1**		**7,889.40**	**2.99%**
	2	**MPS International, Ltd**	**7,222.97**	**2.74%**
	3	**Diodes Incorporated**	**5,665.30**	**2.15%**
	4		**5,195.50**	**1.97%**
	5		**5,149.24**	**1.95%**
			31,122.41	**11.79%**

1.2.

2016-2018 2016
2018 43.97 58.76 62.71
19.4% -3.03 0.70
4.29 2017

2019
2020Q1 2019
57.43 8.42% 4.01
6.68% 2019 2018 4
2020Q1 13.82
16.53% 1.14 450.35%

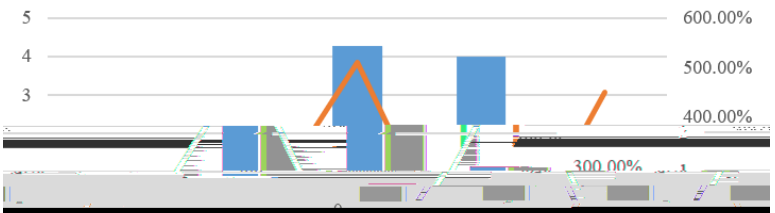
2019

5 2020Q1

[redacted]

wind

6 2020



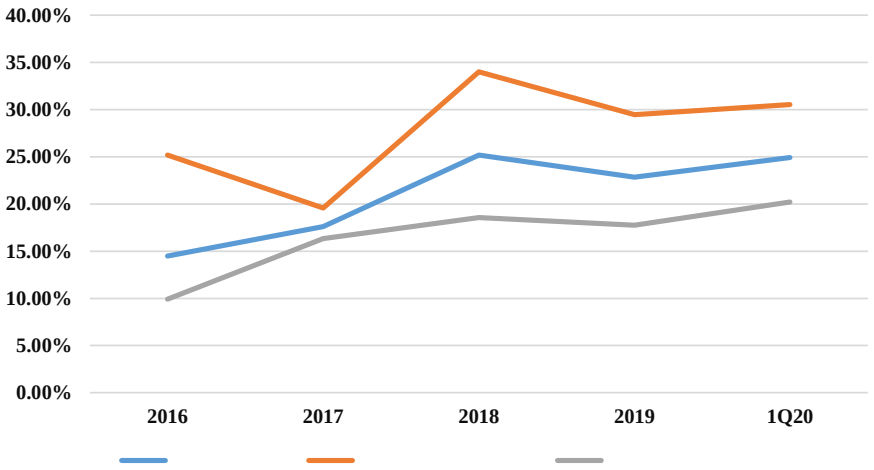
[redacted]

wind

20Q1 2016 -2019 14.49%
17.62% 25.20% 22.84% 2020 24.92% 2019

2020Q1

7 20Q1



wind

1.3.

CRH (Micro) 100%
CRH 75%
2.92%

IPO

IC

2021 **160**

Omdia 2019 2018

166 8% 40%

2020 149

6% 2021 2022

167

13 **2020** **14** **2017-2022**

2021

Omdia 2020

Omdia 2019

IC

IC

GaN SiC IC

I.29 757.4S,Nen-US0(EW8

IGBT

17

VDMOS MOS

IHS Markit MOSFET

MOSFET

18 2019 MOSFET

Omdia 2019

MOS **MOS**

2019 MOS MOS

1.7 5A-43A MOS

MOS

30V

MOS

MOS

2019 MOSFET

4 /

IC

IC IC

IC LED IC

BCD

IC IC

100

SOC IC QI

IC

IC

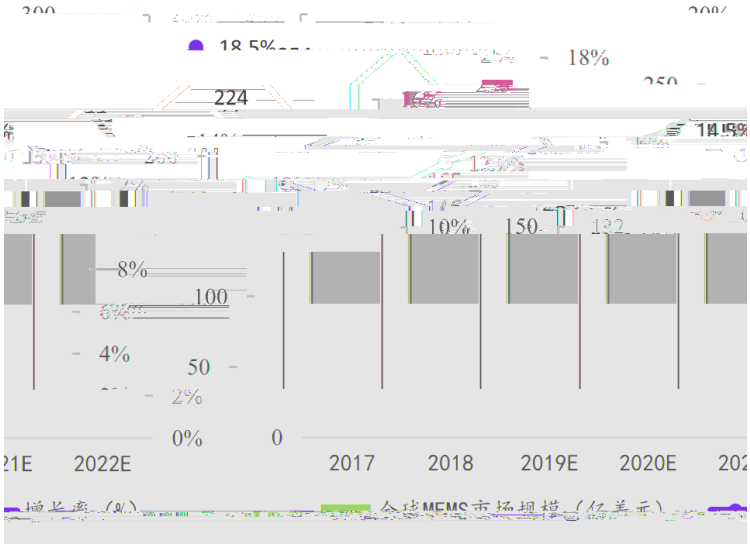
2-7 5-8

10

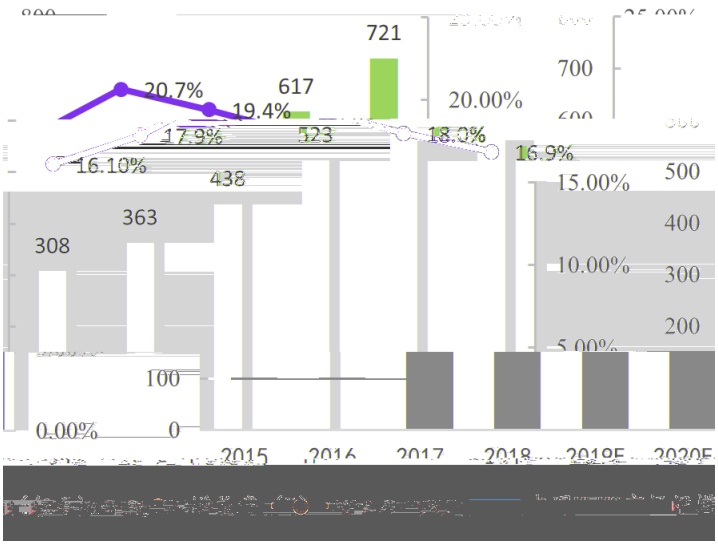
2018 MEMS 523

19.5% 2018-2020 17.41%

19 MEMS



20 MEMS



Yole

IDM

MEMS

MEMS

IDM Yole Development 2017

MEMS IDM

MEMS MEMS

MEMS

IC

3:

	MEMS		

2.3.

MCU

3. BCD/MEMS

2019 31.84
8.09 14.19% 2.97%
23.75 14.75%
152.7 14.75% 4.29 19.98%
2019
71.29% 24.82%

22

wind

BCD
MEMS **IPM**

6 247 / 8

CMOS Bipolar BiCMOS
BCD MEMS

		81.59%	**79.57%**	**82.42%**	**-**

2016 -2018 8 2019

2017 8 83.11%
99.01% 2017 52.41%
8
2016 -2018 6
6
6
2016 -2018
2019

IC MEMS

0.35-90nm
0.35um-90nm

IC

23

IC Insights

M

Transparency Market Research

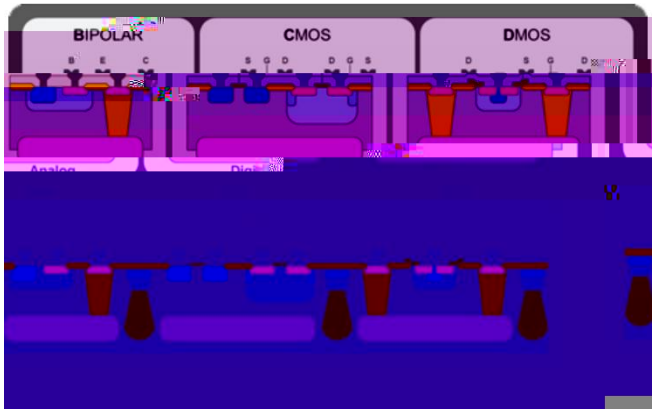
IC

IC 2026

565 2018-2026 CAGR 10.69%

MEMS MCU 2.2 2.3

24 BCD



25 IC

Transparency Market Research

4.

BCD/MEMS

30 15 8 BCD

8 MEMS

BCD MEMS 16,000 6

SiC GaN

IC MEMS

3

6

5 15

2019

67,320.13

7:

			%
1	8	150,000	50%
2		60,000	20%
3		30,000	10%
4		60,000	20%
		300,000	100%

8

BCD MEMS

16,000 2019 8 MEMS

3

6 8

MEMS

BCD

0.11um BCD 0.11um

BCD e-flash 5V I/O

PMIC sub-PMIC

BMS

BCD MEMS 16,000

1

SiC GaN

Yole Development 2022 GaN

11 SiC 4.5

IDM

650V GaN SiC JBS SiC

MOSFET

SiC

6 SiC JBS

JBS 1200V 650V

MOSFET

2020 SiC

GaN 6

GaN

650V

GaN MOCVD GaN MOCVD

2020

IDM

2020/2021/2022 22.88%/19.79%/32.00%

2020/2021/2022 5.20%/10.58%/ 8.00%

2020/2021/2022 52%/50%/45%

2020/2021/2022

IDM

50%

PB 2020 PB 4.95 2020 7.42
PB 62.60

PS 2020 PS 9.80 2020 14.70
PS 77.86

62.60

9 2020 6 6

			P/S				PB		
			2020E	2020E	2021E	2022E	2020E	2021E	2022E
300623.SZ		25.07	14.16	4.79	5.39	6.59	5.23	4.65	3.81