

688396.SH

41.56
51.73
2020-06-04

● **IDM**
3 6 1 8 1 8

IDM

MOSFET

/	1215.93/237.14
/	50533/9855
/	50.99/32.38
30 /	23.37/948.88
3 /6 %	-11.71/-1.07

● 19Q4

SiC GaN

IGBT

12
2020~22

EPS

0.45/0.65/0.69

SAC S0260514050002
021-60750532
xuxingjun@gf.com.cn

2021 80 PE 51.73 /

SAC S0260519060001
SFC CE No. BFS478
021-60750632
gfwangliang@gf.com.cn

	2018A	2019A	2020E	2021E	2022E
	6,271	5,743	6,346	6,857	7,231
%	6.7	-8.4	10.5	8.0	5.4
EBITDA	1,500	983	1,166	1,361	1,333
	429	401	548	786	837
%	511.0	-6.7	36.8	43.4	6.5
EPS /	0.52	0.48	0.45	0.65	0.69
P/E	-	-	85.23	59.43	55.82
P/B	-	-	4.54	4.24	3.97
EV/EBITDA	-	-	35.40	29.74	29.72

688396.SH : 2020-02-20

IDM

021-60750632
wangzhaoguang@gf.com.cn

				.....	5
		IDM+		.....	5
				.....	9
2019	2020			.....	10
	2019		Q1	.....	10
	4			.....	12
			2020Q1	.....	13
		/		.....	17
				.....	17
				.....	18
				.....	20
				.....	20
		SIC GAN IGBT		.....	21
				.....	21
	12			.....	22
				.....	23
				.....	25

1		.....	6
2	IC	.....	7
3		.....	7
4		.....	7
5		.....	9
6	2018	.....	10
7		.....	19
8		.....	19
9		.....	21
10		.....	23
11		.....	24

IDM+

IDM

3 6

2 8

2

1

IDM

1

1.

2 IC

AC-DC		
LED IC		
BMSIC		
IC	78 1117	100mA-1A
IC		100W
IC		
IC	AB D	5mW-50W

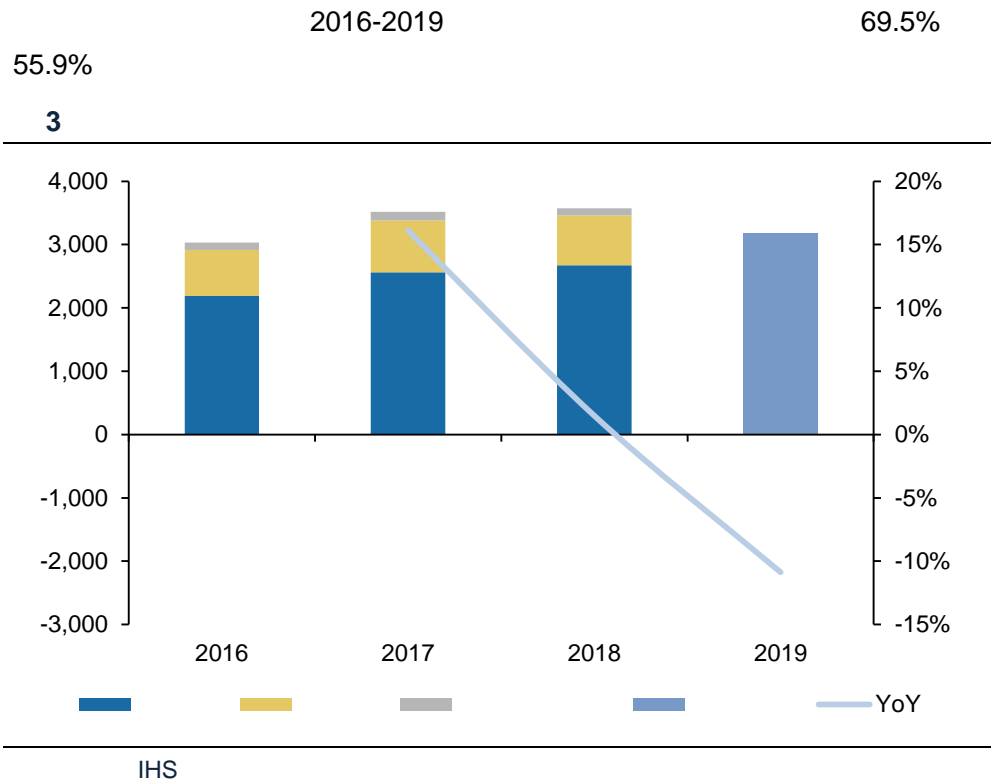
2

MEMS 2019
1.39 5.5%

3



2.



1 8 3 6
73 247 6
1 8 60
IC

62
50 m 12 /
FC

PEPINNOVATION

2.4 2018
27%

5

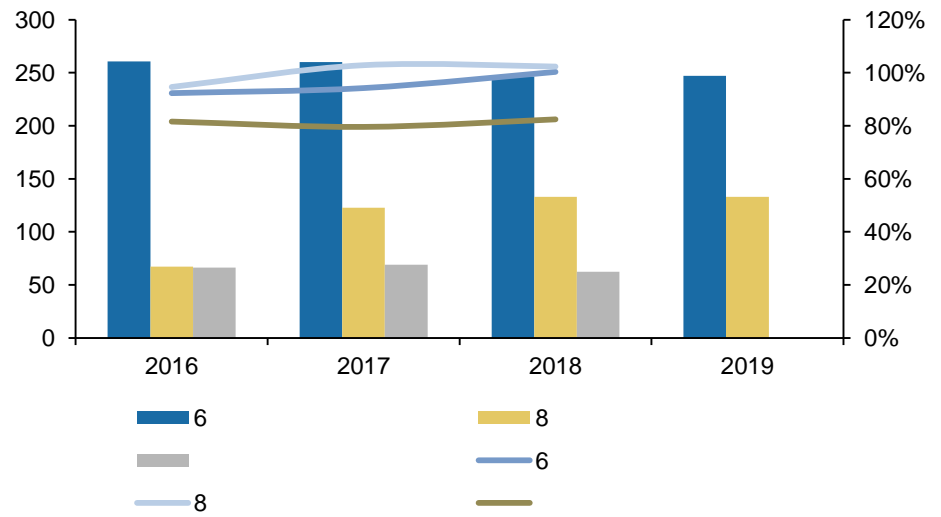
						2018	
3	6	Analog	BCD	MEMS	DMOS	PowerDiscrete	247
1	8	Advance	BCD	Analog	DMOS		73
1	8		MOS		MOS	MOS SBD	60
							199
QFP QFN PQFN FC-QFN TSSOP SSOP							62
MSOP IPM							69
							2.4

8 6

2018 8 6

80%

4



2018

IDM

6 2018

		2018	
1		509	
2		248	
3		239	
4		225	
5		111	
6	()	107	
7		92	
8		66	
9		65	
10		63	IDM

2019Q1 2020Q1

11.86 14.54 14.92 16.11

13.82

19Q1

19Q2

19Q4 20Q1

2019

-4.1% -25.8%

2019

IC

-6.2% 0.9% -9.6% -35.1%

-10.9%

IDM

2019

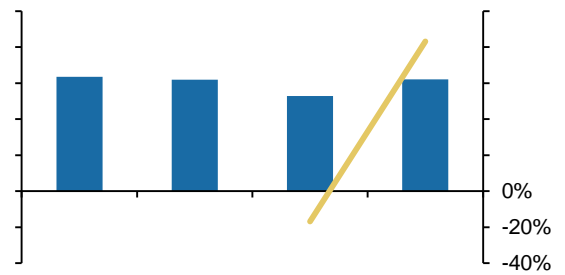
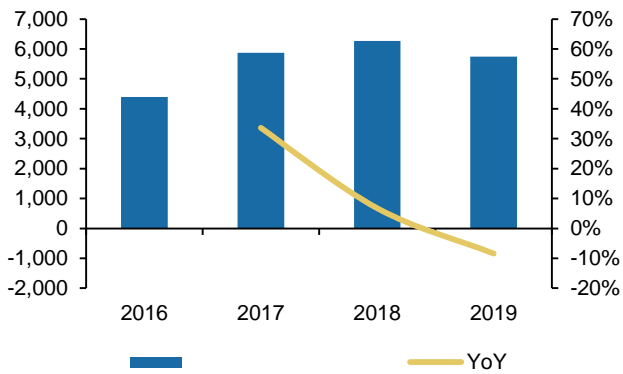
2020

Q3

5G

5

6



Wind

Wind

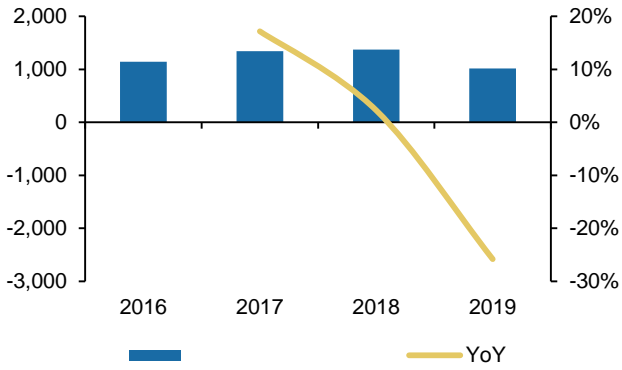
7

8

Wind

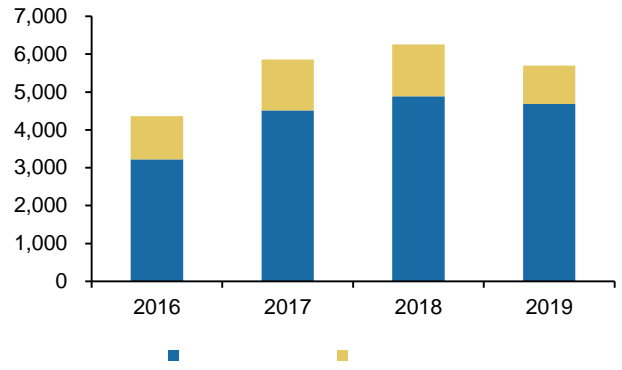
Wind

9



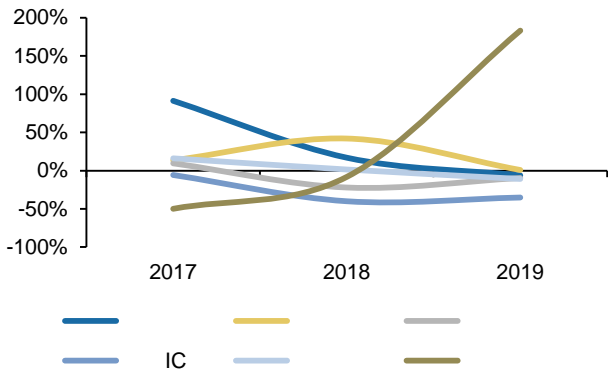
Wind

10



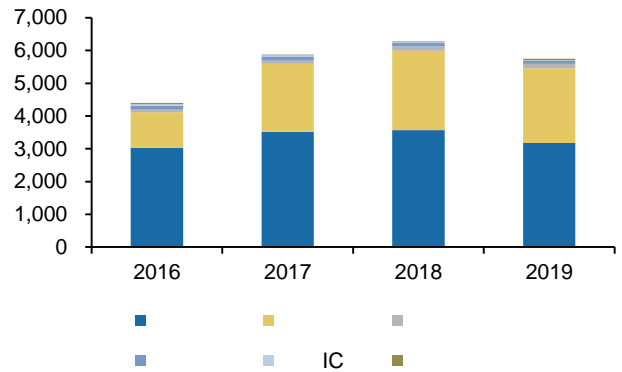
Wind

11



Wind

12

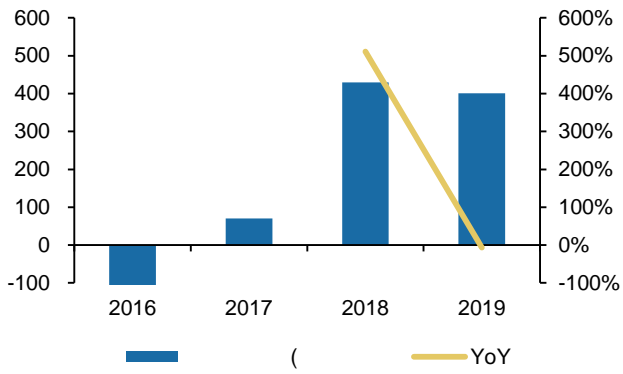


Wind

4

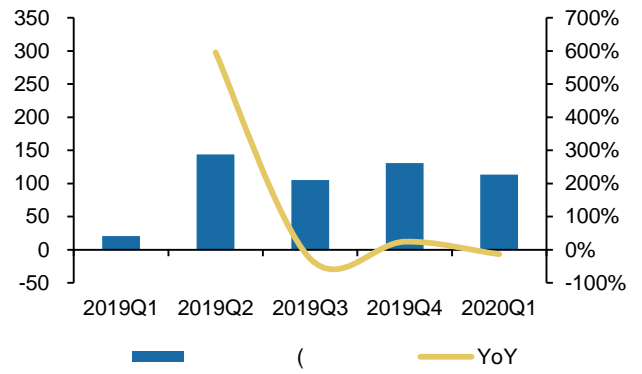
Year	Value	Change	IC
2019	22.8%	2.36pct	2016-2018
2019	24.9%	8.72pct	MOS
2020Q1	24.0%	0.90pct	
2019Q1	24.9%		
2020Q1	16.2%		
2019Q1	24.3%		
2019	25.4%		
2018	40.4%		IC
2019	30.9%		
2019	43.4%		
2019	47.6%		

20



Wind

21



Wind

2019

2019	61.13%	2019	5.76	112.46%	
2018		2019	92.92%	2019	71.33%
2020Q1		2019	2.71		
2019	1.37	2019	6.12	12.47%	
2020Q1		2019	3.08%		
2019	10.95	2019	7.25		

22

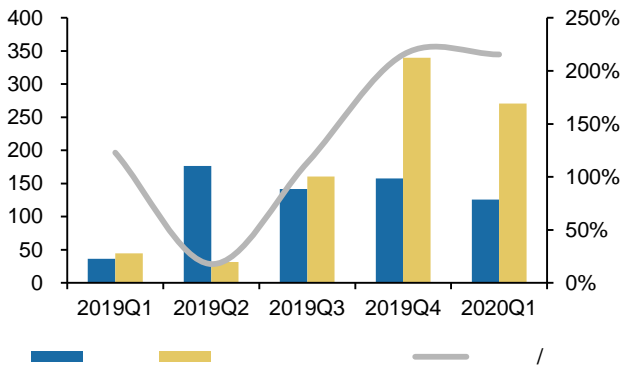


Wind

23

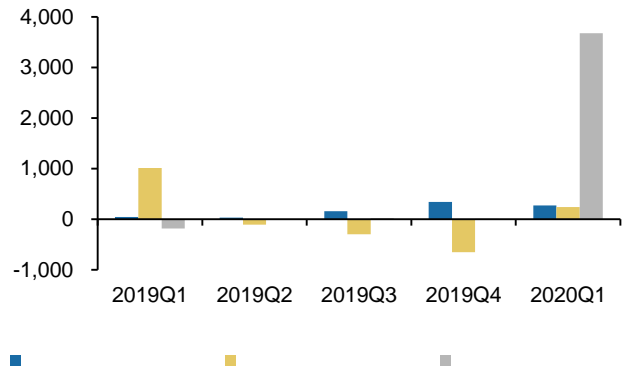
Wind

24



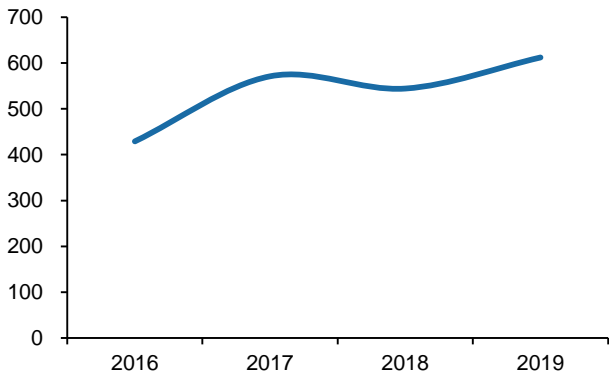
Wind

25



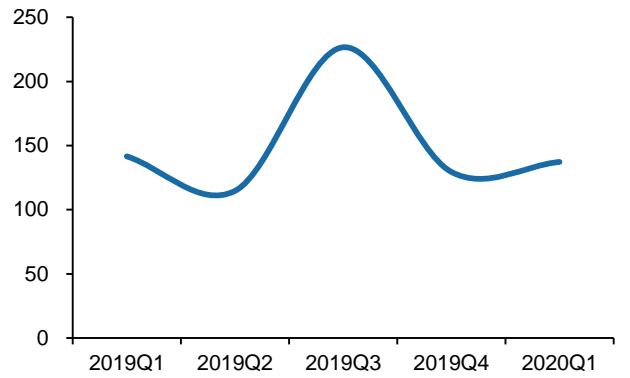
Wind

26



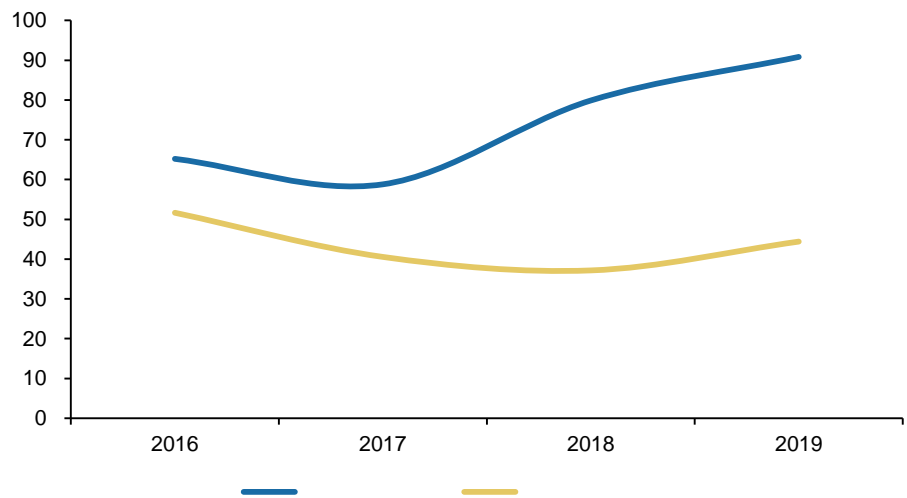
Wind

27



Wind

28

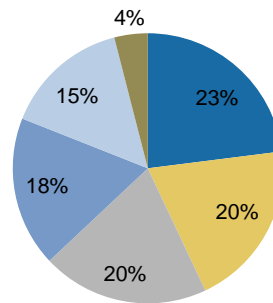


Wind

/

20% 20% IHS 2017 23%
18% 18%

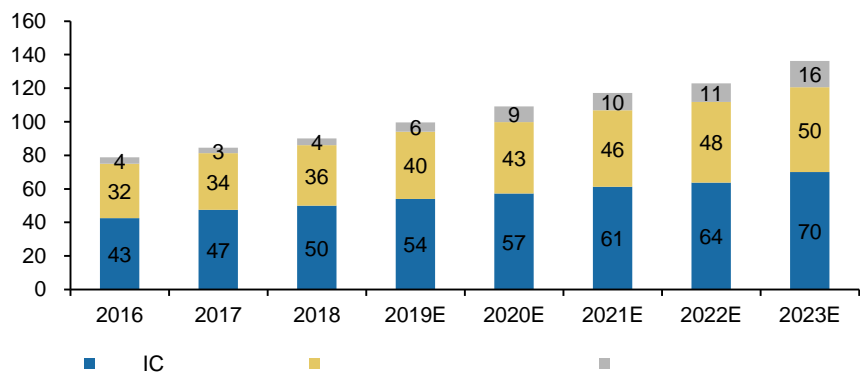
29 2017



IHS

MOSFET IGBT
IHS 2016 2023 8%
78.86 136.3

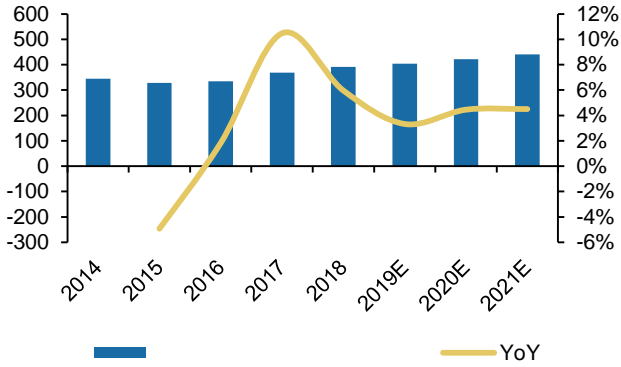
30



IHS

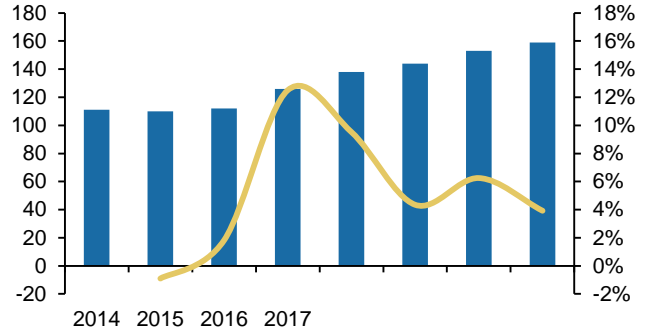
IHSMarket	2018	391	2021
	441	4.1%	
	2018	138	9.5%
	35%		2021
	159	4.8%	

31 2014-2021



IHS

32 2014-2021



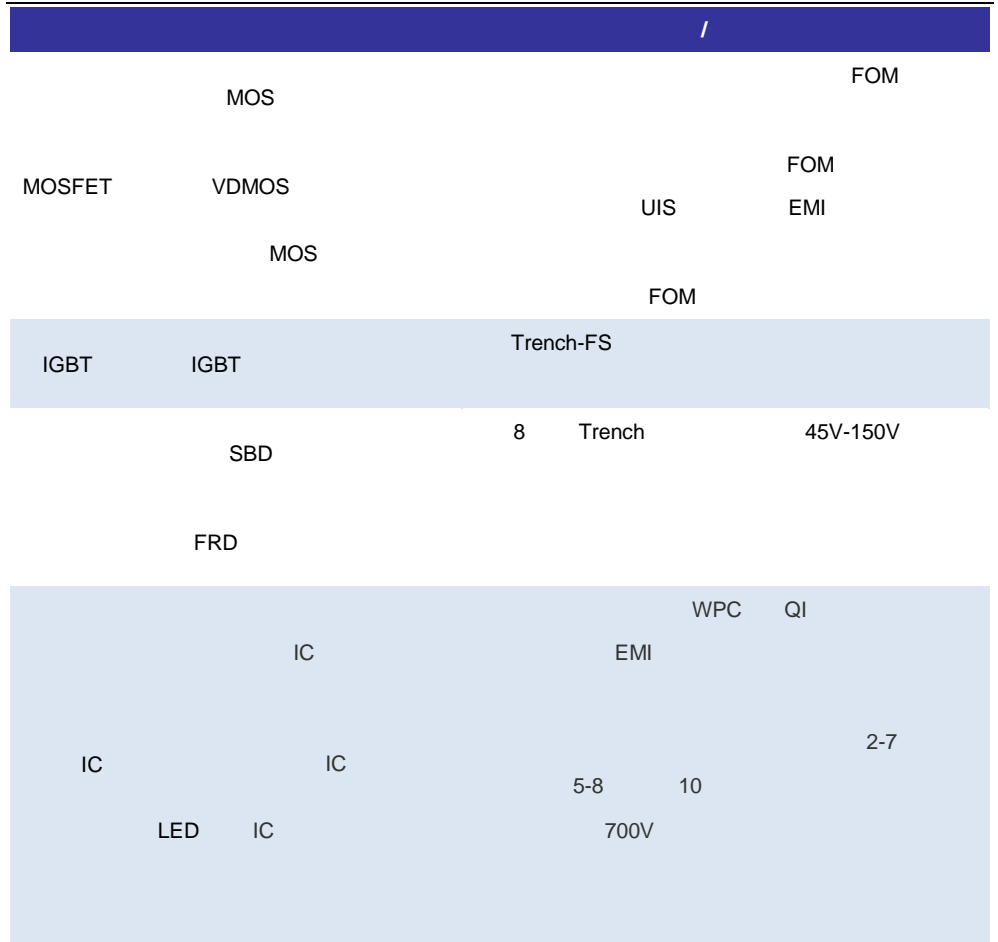
IHS

2018	IHS	138
391		2018
	35%	Dialog
42%	14%	

33 2018

IHS

7



8

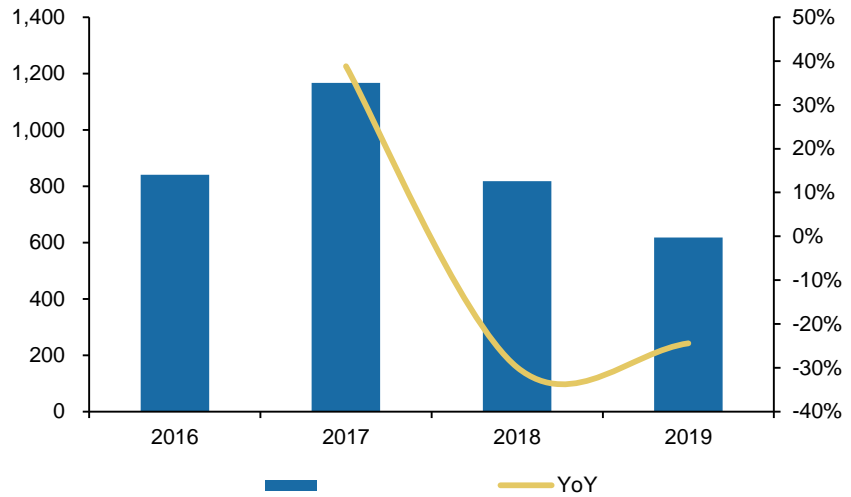
GaN		GaN	GaN	35
SiC	150C			

2017-2019 2019

8 3 5-6 2019

8 2-3 20

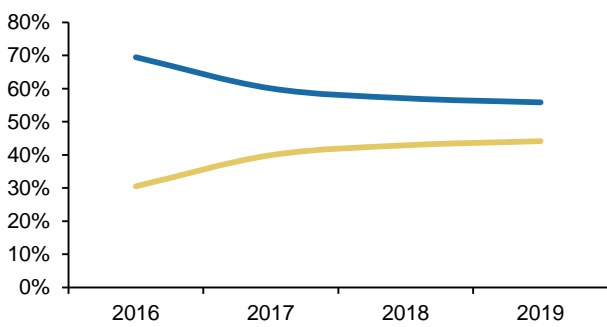
34



2016 30.5% 2019 44.1%

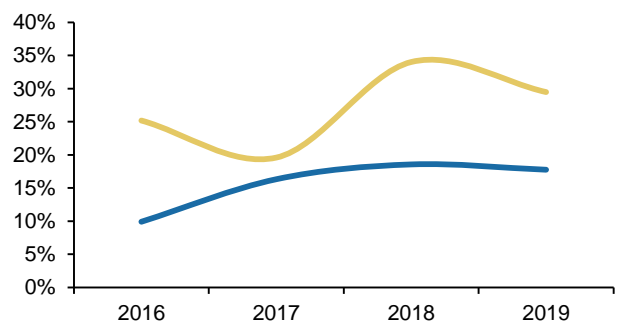
IDM

35



Wind

36



Wind

SiC GaN

6

IGBT

9

	eV	K
	1.1	1221
	0.7	1678
	1.4	1511
	3.05	2826
	3.4	1973
	6.2	2470
	5.5	3800
	3.37	2248

2018 35%

12

8 6

12

90nm

8

2018

12

IDM

IC

10

	2016	2017	2018	2019	2020E	2021E	2022E
	4,397	5,876	6,271	5,743	6,346	6,857	7,231
YoY		33.6%	6.7%	-8.4%	10.5%	8.0%	5.4%
	3,760	4,840	4,690	4,431	4,659	4,814	5,114
	14.5%	17.6%	25.2%	22.8%	26.6%	29.8%	29.3%
	3,032	3,520	3,572	3,184	3,400	3,474	3,347
YoY		16.1%	1.5%	-10.9%	6.8%	2.2%	-3.7%
	2,731	2,945	2,909	2,618	2,612	2,617	2,523
	9.9%	16.3%	18.6%	17.8%	23.2%	24.7%	24.6%
	2,188	2,563	2,674	2,255	2,480	2,554	2,427
YoY		17.2%	4.3%	-15.7%	10.0%	3.0%	-5.0%
	2,016	2,152	2,153		1,860	1,865	1,771
	7.8%	16.1%	19.5%		25.0%	27.0%	27.0%
	729	820	786	809	800	800	800
YoY		12.4%	-4.2%	3.0%	-1.1%	0.0%	0.0%
	625	683	666		656	656	656
	14.3%	16.8%	15.3%		18.0%	18.0%	18.0%
	114	136	112	120	120	120	120
YoY		19.2%	-17.9%	7.2%	0.0%	0.0%	0.0%
	90	111	90		96	96	96
	21.6%	18.8%	19.5%		20.0%	20.0%	20.0%
	1,332	2,339	2,683	2,516	2,907	3,342	3,844
YoY		75.6%	14.7%	-6.3%	15.5%	15.0%	15.0%
	996	1,881	1,771	1,774	2,011	2,161	2,555
	25.2%	19.6%	34.0%	29.5%	33.0%	35.0%	35.0%
	1,081	2,069	2,419	2,269	2,623	3,016	3,469
YoY		91.3%	16.9%	-6.2%	15.6%	15.0%	15.0%
	826	1,702	1,600	1,623	1,836	1,961	2,324
	23.6%	17.7%	33.8%	28.5%	30.0%	35.0%	33.0%
	85	97	138	139	160	184	211
YoY		13.6%	42.0%	0.9%	15.0%	15.0%	15.0%
	53	59	82	79	88	101	116
	37.5%	39.2%	40.4%	43.4%	45.0%	45.0%	45.0%
	116	128	99	90	103	119	137
YoY		9.5%	-22.1%	-9.6%	15.0%	15.0%	15.0%
	82	87	69	63	72	83	96
	29.4%	31.4%	30.7%	30.2%	30.0%	30.0%	30.0%
IC	49	46	28	18	21	24	27
YoY		-5.7%	-40.0%	-35.1%	15.0%	15.0%	15.0%
	35	32	19	9	14	17	19
	28.8%	30.3%	30.9%	47.6%	30.0%	30.0%	30.0%
	33	17	15	44	40	40	40
YoY		-49.9%	-8.2%	183.1%	-8.3%	0.0%	0.0%
	32	14	11	39	36	36	36
	3.2%	14.0%	28.4%	10.0%	10.0%	10.0%	10.0%

2019

Q4

2020 5G

IDM

10%/3%/-5%

25.0%/27.0%/27.0%

2020/21/22

2020/21/22

2020/21/22

34.00/34.74/33.47

6.8%/2.2%/-3.7%

23.2%/24.7%/24.6%

2019

IDM

IHS Markit 2018

12	31	2018A	2019A	2020E	2021E	2022E
		5,106	5,092	10,276	11,223	12,213
		1,538	1,931	6,951	7,768	8,617
		1,177	1,058	1,166	1,257	1,326
		1,181	1,055	1,109	1,146	1,217
		1,211	1,049	1,051	1,052	1,053
		4,886	5,003	4,928	4,953	5,038
		0	82	82	82	82
		3,898	3,816	3,776	3,836	3,956
		351	489	439	389	339
		294	275	290	305	320
		343	341	341	341	341
		9,992	10,095	15,204	16,176	17,251
		4,654	1,979	2,081	2,154	2,279
		0	0	0	0	0
		916	960	1,015	1,055	1,120
		3,737	1,019	1,066	1,099	1,159
		318	1,726	1,726	1,726	1,726
		0	1,506	1,506	1,506	1,506
		0	0	0	0	0
		318	220	220	220	220
		4,972	3,704	3,807	3,880	4,004
		830	830	1,216	1,216	1,216
		6,021	5,450	9,426	9,426	9,426
		-3,049	-1,225	-727	-1	766
		4,148	5,423	10,284	11,010	11,777
		872	968	1,113	1,286	1,470
		9,992	10,095	15,204	16,176	17,251

12	31	2018A	2019A	2020E	2021E	2022E
		6,271	5,743	6,346	6,857	7,231
		4,690	4,431	4,659	4,814	5,114
		85	66	76	82	87
		126	112	127	137	145
		374	377	381	384	383
		450	483	508	549	578
		0	31	-14	1	12
		-72	-37	-20	-30	-30
		0	0	0	0	0
		11	0	0	0	0
		586	478	771	1,065	1,134
		5	28	0	0	0
		591	506	771	1,065	1,134
		53	-6	77	107	113
		538	512	694	959	1,021
		108	112	146	173	184
		429	401	548	786	837
EBITDA		1,500	983	1,166	1,361	1,333
EPS		0.52	0.48	0.45	0.65	0.69

12	31	2018A	2019A	2020E	2021E	2022E
		1,482	576	1,255	1,425	1,467
		538	512	694	959	1,021
		953	709	570	470	410
		-95	-715	-81	-87	-47
		87	69	73	83	83
		-575	-41	-495	-495	-495
		-533	-611	-495	-495	-495
		0	-82	0	0	0
		-42	652	0	0	0
		-627	-180	4,260	-113	-123
		0	1,480	0	0	0
		85	0	386	0	0
		-712	-1,660	3,873	-113	-123
		317	374	5,020	817	849
		1,200	1,517	1,931	6,951	7,768
		1,517	1,891	6,951	7,768	8,617

12	31	2018A	2019A	2020E	2021E	2022E
		6.7%	-8.4%	10.5%	8.0%	5.4%
		1376.1%	-18.4%	61.4%	38.2%	6.5%
		511.0%	-6.7%	36.8%	43.4%	6.5%
		25.2%	22.8%	26.6%	29.8%	29.3%
		8.6%	8.9%	10.9%	14.0%	14.1%
ROE		10.4%	7.4%	5.3%	7.1%	7.1%
ROIC		6.7%	3.5%	4.2%	5.8%	5.6%
		49.8%	36.7%	25.0%	24.0%	23.2%
		99.1%	58.0%	33.4%	31.6%	30.2%
		1.10	2.57	4.94	5.21	5.36
		0.83	2.01	4.38	4.65	4.80
		0.63	0.57	0.42	0.42	0.42
		10.42	7.05	7.05	7.05	7.05
		5.31	5.44	5.72	5.98	5.94
		0.52	0.48	0.45	0.65	0.69
		1.79	0.69	1.03	1.17	1.21
		5.00	6.54	8.46	9.05	9.69
P/E		-	-	85.23	59.43	55.82
P/B		-	-	4.54	4.24	3.97
EV/EBITDA		-	-	35.40	29.74	29.72

2019 2014 2012
2019 2016 2015
2019 2018
2020

12 10%
 12 -10% +10%
 12 10%

12 15%
 12 5%-15%
 12 -5% +5%
 12 5%

26 35 6001 2 18 8 111 14
31 1401-1410
 510627 518026 100045 200120
 gfzqyf@gf.com.cn

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