

600584



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 2017
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 20
 90% 20 20
 ÷ 20
 4
 20% 271,968,800
 271,968,800

1
 38,827,559
 6.50
 2 29 29
 19%

3

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36

6

435,000

20	173,492	162,000
	235,000	150,000
	134,750	123,000
	543,242	435,000

7

19%

14.28%

8

IC		Integrated Circuit, IC
TR		
IDM		
FC		Flip Chip
Flip Chip on L/F		Flip Chip on Lead/Fram
BGA		Ball Grid Array
FBGA		Fine-Pitch Ball Grid Array
PBGA		Plastic Ball Grid Array
FCBGA		Flip Chip Ball Grid Array
LGA		Land Grid Array
FCLGA		Flip Chip Land Grid Array
SIP		Single In-line Package
QFN		Quad Flat No-lead
Bumping Bump		
MEMS		Micro Electro Mechanical systems
WLP		Wafer Level Packaging
CSP		Chip Scale Package
WLCSP		Wafer Level Chip Scale Packaging CSP
TSV		Through-Silicon Via
SiP		System in Package
eWLB		Embedded Wafer Level Ball Grid Array
FO-WLP Fan-Out WLP		Fan-Out Wafer Level Package

FCOL		FlipChip on Leadframe
------	--	-----------------------

.....	1
.....	2
.....	5
.....	9
.....	11
.....	11
.....	11
.....	13
.....	13
.....	15
.....	16
.....	16
.....	17
.....	18
.....	18
.....	20
.....	22
1 	25
.....	27
.....	27
.....	29
.....	32
1 	34
.....	38
.....	38
.....	38
.....	40

.....	46
.....	46

Jiangsu Changjiang Electronics Technology Co.,Ltd.

78

1,359,844,003

600584.SH

" "

OSAT

2014 6
 " "

WLP TSV CSP

2015 5 2025

3D 2016

3

2009 2016 1,109

4,335.5 21.50%

2016

1,644.3 24.1%

2016 25.1%

1

9.54%

14.28%

A

1.00

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A

A

20

90%

20

20

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20

$$P1 = \frac{P0}{1+N} - \frac{D}{1+N}$$

20%

271,968,800

271,968,800

1

38,827,559

6.50

29

29

19%

5

5

1

3

3

1

36

12

435,000

15

20	173,492	162,000
	235,000	150,000
	134,750	123,000
	543,242	435,000

9.54%

14.28%

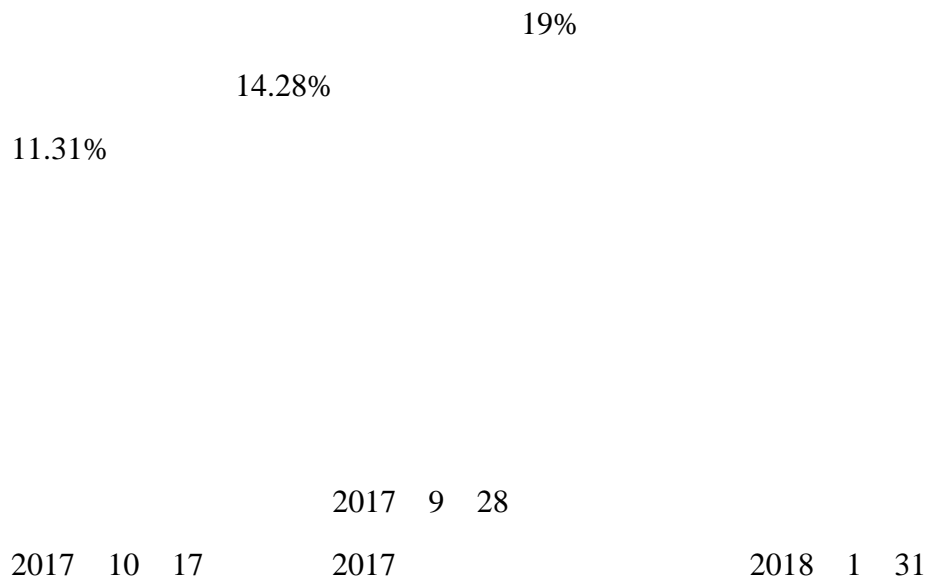
2017 12 31

1,359,844,003

14.28%

13.57%

9.54%



	9,872,000
	2014 9 26
	2 52 7 718

2014 4

2017 12 31

5%

	/		
1		360.00	36.47%
2		220.00	22.29%
3		110.00	11.14%
4		100.00	10.13%
5		50.00	5.06%
6		50.00	5.06%
7		50.00	5.06%
8		47.20	4.78%
		987.20	100.00%

2014 9

1

	2016 12 31
	6,500,202.98
	21.92
	6,500,224.90
	4,322.49
	24,657.91
	28,980.40
	6,471,244.50
	2016
	20,488.70
	195,254.05
	214,839.82
	213,085.33

2017

5

9.54%

24

19

	1,200.00
	2009 3 3
	18 2 1 -1



981

SMI

0.35

28

2017 12 31

5%

1	16.24%
2	15.06%
3	7.48%

1
2 3
51%

14.28%

24

24

	500,100
	2016 9 20
	1-1803

		100	0.02%
		500,000	99.98%
		500,100	100%

		1,000	0.10%
		133,000	13.29%
		267,000	26.67%
		600,000	59.94%
		1,001,00	100%

2015 9

50

2015

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2013 11

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2017 9 30

13

5%

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12		
13		

2016 9

1

	2016 12 31
	24,862.79
	24,862.79
	0
	24,862.79
	2016
	0
	-137.21
	-137.21
	-137.21

24

24

1

	1,000
	2017 8 29
	777 19 608

1

1

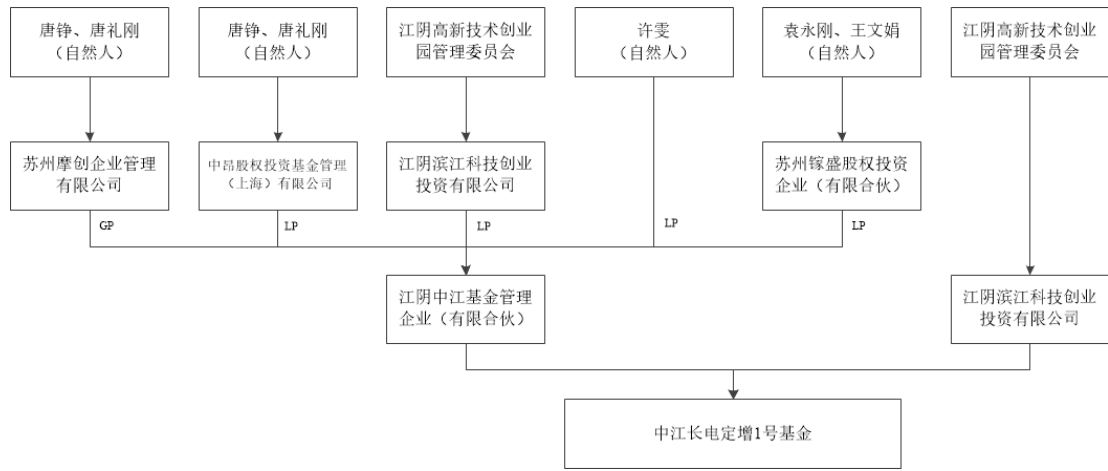
1

3

2

2017 12 31

1



3 1

1

4

1

2017 9 28

2018 1 31

1

90% / 20 / 20 = 20

$$P_1 = \frac{P_0 - D}{1 + N}$$

2

29

29

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19% "

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×

43.50

78.3784%

29:37

×

>43.50

2.4

4.2.2

4.2.2

1

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2

/ 1 / 2

15 15
1%
2017 9 28 2018 1 31

1

$$90\% \frac{20}{20} = \frac{20}{20}$$

N

$$P1 = P0 / (1+N)$$

P0

/

D

P1

/

$$P1 = P0 - D$$

$$P1 = (P0 - D) / (1+N)$$

2

38,827,559

"

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6.5

38,827,559

38,827,559

N

$$1+N \times 38,827,559$$

1

2

2

1

/ 2

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15

15

1%

2017 9 28

2018 1 31

1

90%

20

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20

$$\begin{array}{r}
 P_0 \\
 / \\
 P_1
 \end{array}
 \quad
 \begin{array}{r}
 D \\
 / \\
 P_1 = P_0 - D
 \end{array}
 \quad
 \begin{array}{r}
 P_1 = P_0 / (1 + N) \\
 P_1 = (P_0 - D) / (1 + N)
 \end{array}$$

2

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13.5135%

5:37

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2017 9 28

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1

90%

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7.6923%

3:39

1

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2

1

/ 2

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1,000

2017	1-6		2,201.3	19.1%
		21.1%	830.1	25.6%
	571.2		800.1	13.2%
		IC		

2

"

CSP

WLP

TSV

"

2025

"

3D

"

"

" "

"

3

40% 2010

6% 2014

10%

2012

1,000

2016

1,564.3

LGA FC/QFN BGA

3D-TSV

TV

4G

" "

20

1

FBGA PBGA SIP P-SIP -LGA

20

3

2

1

Fan-out eWLB WLCSP SiP BUMP PoP

2017 9 30

2,681

1,740

	FBGA	PBGA	P-SiP IC
QFN		FC-BGA	
2			
			MEMS
			FBGA
3			
			IC
3			
	173,492		169,498
			3,994
4			
			24,181
	7.52		10.74%

5

78

6

[2017]69

201732028100415

1

Bumping WLCSP

82 Bumping 47

3

2

1

2003

Bumping

WL-CSP

WLCSP

Bumping

2016

Bumping

136

2

3		90%	
IC		TOP10	
3	235,000	224,414	
10,586			
4		36,587	
	7.25	12.51%	
5		78	
6		3202851600839	
		[2016]71	

		2017 9 30	2016 12 31	2015 12 31	2014 12 31
		2.17	2.41	2.60	1.76
600584.SH		0.86	0.68	0.66	0.86

2

2016	2017	1-9	2014	2015
59,085.42	96,429.98	77,651.26	22,398.20	

/

	2016	12	31			77.55%
0.68		0.52		2017	9	30
70.12%		0.86			0.64	
		1				

5G

2015

SIA 2016

3,389

2015

1.1%

2

<

>

1

2

3

1

2

	2017	9	30	
2,550,127,842.18				8.16%

3

2015 12 31

1

2015

2

2015

2016

OSAT

IC Insights

2

1

2017

2

2017 12 31

1,359,844,003

14.28%

13.57%

9.54%

19%

14.28%

3

1

1

1

4

3 —

2013 12 24 2013

"

1

2

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2

3

1

2

3

70%

4

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6

1

2

2/3

"

56

3

2014 2016

2014	984.57	15,666.65	6.28%
2015	1,035.91	5,199.75	19.92%
2016	1,553.87	10,633.44	14.61%
			10,499.95
			34.04%

30%

2016 -2018

3 —

2016-2018

" "

2016-2018

1

2

2016-2018

1

2

3

4

2016-2018

2015

		1,359,844,003	
	271,968,800		
	1,631,812,803		
			2017
1			
2		2017	11
3		271,968,800	435,000.00
4			1,359,844,003
5	2016		10,633.44
		2016	10%
			2017
			10%
6			

7

1

	2016 /2016-12-31	2017 /2017-12-31		
1 2017				10.00%
	10,633.44	9,570.10	9,570.10	-
	-20,588.30	-22,647.12	-22,647.12	-
	2.44%	1.32%	1.25%	-0.06%
	0.103	0.063	0.062	-0.001
	0.103	0.063	0.062	-0.001
	-4.73%	-3.12%	-2.97%	0.15%
	-0.199	-0.149	-0.147	0.002
	-0.199	-0.149	-0.147	0.002
2 2017				
	10,633.44	10,633.44	10,633.44	-
	-20,588.30	-20,588.30	-20,588.30	-
	2.44%	1.46%	1.39%	-0.07%
	0.103	0.070	0.069	-0.001
	0.103	0.070	0.069	-0.001
	-4.73%	-2.83%	-2.70%	0.13%
	-0.199	-0.135	-0.133	0.002

Mk

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"

WLCSP Copper Pillar Bumping SiP Fan-out WLB

1 20

FBGA PBGA SIP P-SIP -LGA

20

2

Bumping WLCSP

82

Bumping 47

1

2015

2

2017 9 30

2,681

1,740

Fan-out WLB

SiP

3

90

20

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1

WLCSP Copper Pillar Bumping SiP Fan-out WLB
2015

2

20

65

2017

BU

1

BU

BU

BU

BU

KPI

CEO

2

BU

BU

BU

BU

FCCSP+POP+SiP

eWLB

Fan-out WLP

JSCC

Bumping

FC

Wirebond

Bumping

WLCSP

Wirebond+SIP

+FC/QFN/RF/COL

/

+FCOL+

IC

3

4

5

2

6

[2012]37

3

[2013]43

2016

2016-2018

7

[2014]17

[2013]110

[2015]31

" 1

2

3

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5

6

"

2017