

NTI-100, World Top PCB Makers by Revenue in 2017 (Revenue≥\$100 million) Unit: \$ million

Rank	Maker	Nationality	2016 Rev	2017 rev	Growth	Comments
1	ZD Tech*	Taiwan	2,695	3,575	32.7%	Apple orders (FPC and MSAP) pushed ZDT up
2	Nippon Mektron*	Japan	3,248	3,198	-1.5%	Apple and automotive (targeting \$1B in several years)
3	TTM Technologies	USA	2,533	2,659	5.0%	Well balanced market. Top "bare board" maker.
4	Unimicron	Taiwan	2,058	2,135	3.7%	Constructing huge plants in Hunagshi, Hubei Prov
5	Compeq	Taiwan	1,495	1,778	18.9%	Apple and other products, Strong Rigid-Flex.
6	Young Poong Group*	S. Korea	1,099	1,715	56.0%	FPC for Apple, MSAP for Galaxy S9
7	Tripod	Taiwan	1,429	1,505	5.3%	Strong automotive, Xiantao plant expanding
8	HannStar	Taiwan	1,295	1,302	0.5%	HannStar+ GBM, acquired amajor share of ELNA
9	Samsung E-M	S. Korea	1,176	1,279	8.8%	Two plants in Korea, One in China & one in Vietnam
10	AT&S	Austria	920	1,119	21.6%	Number one supplier of MSAP products to Apple
11	Fujikura*	Japan	829	1,109	33.8%	Strong come-back, assembly is mainly in Shanghai
12	Sumitomo Denko*	Japan	1,090	1,097	0.6%	Stagnant, seems to have lost money in FPC division
13	KBC PCB Group	China	964	1,057	9.6%	Now, 35% are coming from automtoive PCB
14	Ibiden	Japan	874	1,024	17.2%	Strong come back with black ink
15	Meiko	Japan	849	961	13.2%	Automotive and smartphones (Chinese & Samsung)
16	Mflex (Dongshan Prec)*	China	522	946	81.2%	What a growth! Acquiring Multek, New Plant
17	Daeduck Group	S. Korea	845	880	4.1%	Re-organizing business divisions
18	Nanya PCB	Taiwan	958	875	-8.7%	Not working FC-BGA with Intel, automotive direction
19	Wus Group	Taiwan	721	862	19.6%	Strong high-layer MLB and automotive, New Plant
20	Flexium*	Taiwan	627	849	35.4%	Apple, Apple, Apple
21	Shennan Circuit	China	680	842	23.8%	Strong growth. A new plant in Nantong
22	Chin Poon	Taiwan	786	780	-0.8%	World top automotive PCB maker
23	LG Innotek	S. Korea	718	773	7.7%	Package substrates strong
24	CMK	Japan	648	753	16.2%	More than 70% come from automtoive
25	T.P.T.	Taiwan	720	740	2.8%	Motherboards
26	Kinsus	Taiwan	761	734	-3.5%	Taiwan (3 plants), China (2 plants), Pakcage Sub
27	Simmtech	S. Korea	701	718	2.4%	Memory modules, now owns Eastern of Japan
28	Shinko Denski	Japan	708	686	-3.1%	FC-BGA not so strong?
29	Kyocera PCB	Japan	600	665	10.8%	\$2.1 billion if ceramic substrates & PCB are included
30	Gold Circuit	Taiwan	639	631	-3.0%	High-layer count pricing down layer count down
31	Kinwong*	China	486	620	27.6%	Finished the second extention in Jiangxi & a new plant

32	BH Flex*	S. Korea	329	612	86.0%	Apple
33	Unitech	Taiwan	415	597	43.9%	Strong capacity expansion, rigid-flex strong, new plant
34	Multek	USA	500	550	10.0%	Being acquired by Mflex (Dong Shan Precision)
35	SI Flex*	S. Korea	422	514	21.8%	Vietnam plant doing well
36	Shenzhen Fast Print	China	435	486	11.7%	QTA, Proto, owns Expection Circuit & Harbor Elec.
37	Ellington	China	434	486	12.0%	Emphasis on automtoive
38	Isu-Petasys	S. Korea	490	470	-4.0%	High-layer count pricing down, layer count down
39	Shenzhen Suntain	China	332	459	38.2%	Building a new plant in Zhuhai
40	Murata*	Japan	n.a.	450	n.a.	Only spllier of LCP antenna boards to Apple in 2017
41	KCE Electronics	Thailand	412	427	3.6%	Automotive 70%
42	Career*	Taiwan	458	425	-7.2%	Embarking on LCP antenna boards
43	Kyoden	Japan	382	391	2.4%	Steady as it goes, emphasis on automotive
44	Dynamic	Taiwan	387	382	-1.3%	Gigantic plant under construction in Huangshi, Hubei
45	Founder Tech	China	413	381	-7.7%	Stumbled uop high-layer count MLB?
36	Hitachi Chemical	Japan	321	374	16.5%	Singapore is doing well
47	Nitto Denko	Japan	380	372	-2.1%	Sold its Suzhou plant to Nippon Mektron
48	Victory Giant	China	269	361	34.2%	Smart factory expansion is something to see
49	CCTC	China	270	342	26.7%	Expanding HDI portion and automotive growing
50	APEX	Taiwan	282	341	20.9%	Collaborates with Kyoden Thailand
51	Sanmina	USA	330	330	0.0%	Shutting down Owego (NY) plant
52	Wuzhou*	China	317	329	3.8%	New plant in Jiangxi Province
53	Guangdong Xinda	China	284	300	5.6%	No Comments
54	Gul Technologies	Singapore	243	294	21.0%	More than 30% from automtoive
55	APCB	Taiwan	282	287	1.8%	Thailand expanding
56	Olympic	China	238	283	19.9%	Strong automotive
57	ASE	Taiwan	258	281	8.9%	Substrate making Div of world number one OSAT
58	Redboard	China	249	276	7.0%	Emphasis on rigid-flex
59	DAP	S. Korea	219	264	20.5%	emphasis on automotive
60	Bomin	China	200	260	30.0%	Tahong plant expanding production
61	Aoshikan	China	194	257	32.5%	Yi Yuang plant expanding
62	Shirai Denshi	Japan	248	252	1.6%	Automotive doing well
63	DG Shengyi Electronics	China	219	248	13.2%	High layer count MLB (Huawei is the largest client)
64	Taihon Circuit Industrial	Taiwan	212	246	16.0%	Formerly MGC Group, not sure if it is Taiwanese
65	Sun & Lynn	China	220	238	8.2%	Modest growth

66	Ichia*	Taiwan	200	236	18.0%	Did well in 2017, waste treatment problem in Suzhou
67	Palwonn	Taiwan	211	229	8.5%	Not so clear
68	Boardtek	Taiwan	241	225	-6.6%	Lost some server orders
69	Fujitsu	Japan	222	222	0.0%	Vietnam expanding for automotive
70	Xiamen Hongxin*	China	155	219	43.1%	Strong FPC maker
70	Guangdong Chaochua	China	153	213	39.2%	SS, DB and Laminates, etc (but \$213 is PCB only)
71	STEMCO	S. Korea	194	199	2.6%	COF maker
72	Kunshan Huaxing	China	194	197	1.5%	No Comments
73	Kyosha	Japan	172	188	9.3%	The world largest SSB makers with 450Ks.qm/m
74	MFS*	Singapore	165	185	12.1%	Plants are in Melakka & Huna Province
75	Somacis	Italy	137	181	32.1%	China growing well. Graphic PLC is under Somacis
76	Liang Dar	Taiwan	167	173	3.6%	Strong metal core PCB (Taiwan & China)
77	Onpress	China	150	173	15.3%	Automotive PCB strong
78	Guangzhou Kingshine	China	143	167	16.8%	No Comments
79	AKM*	China	122	166	36.1%	FPC
80	Daisho Denshi	Japan	160	164	2.5%	Hig end package substrates, automotive
81	BYD*	China	155	163	5.2%	Spin-off from BYD battery & automobile company
82	CEE PCB	China	117	159	35.9%	No Comments
83	KSG (+Häuserman)	Germany	100	159	59.0%	Pushcaded Häusermann of Austria in 2017
84	Shenzhen Sunshine	China	121	156	28.9%	Owens a small maker in Germany
85	Würth Elektronik	China	143	151	5.6%	Technology oriented
86	3Win Group	China	138	147	6.5%	No Comments
87	NBC	Japan	142	146	2.8%	No Comments
88	Guangzhou Jun Ya	China	118	146	23.7%	No Comments
89	Huading Group	China	136	146	7.4%	No Comments
90	OKI PCB Group	Japan	140	143	2.1%	Grew by acquisitions (Avionics, Yokogawa, Tanaka)
91	Lead-Tech*	China	124	143	15.3%	Big plant in Huangshi, Hubei and expanding
92	Ji'An Mankun	China	127	141	11.0%	4 plants
93	Changzhou Haihong	China	112	141	25.9%	No Comments
94	Yamamoto Mfg	Japan	103	140	35.9%	Japan (2 plants)-High layer count and Donggung
95	Suzhou Forein FPC*	China	121	140	15.7%	Apple?
96	Amphenol PCB Div	USA	130	140	7.7%	New Hampshire, Guangzhou (FPC) and Invotec
97	New Flex*	S. Korea	108	135	25.0%	Planty is Vietnam expanding
98	SZ Jove Enterprise	China	118	135	14.4%	No Comments

99	Kunshan Wanzhen PCB	China	129	132	2.3%	No Comments
100	Schweizer	Germany	131	132	0.8%	Automotive PCB. A new plant under const in China
101	Jiangsu Suhan	China	103	128	24.3%	No Comments
102	Elna	Japan	148	122	-18.1%	Capacitor business owned by Yuden & PCB by GBM
103	Guangzhou GCI	China	107	122	14.0%	No Comments
104	Zhuhai Kingsun PCB	China	110	121	10.0%	No Comments
105	Netron Soft Tech*	China	105	120	14.3%	No Comments
106	Kunshan Hua Zhu	China	108	116	7.4%	No Comments
107	SDG Precision Tech	China	98	114	15.0%	No Comments
108	SZ Shinwu	China	110	114	3.6%	No Comments
109	Hyunwoo	S. Korea	103	113	9.7%	No Comments
110	Zhuhai Topsun Elec	China	106	113	6.6%	No Comments
111	Brain Power	Taiwan	98	112	14.3%	Memory modules etc. The plant in China
112	HT Circuits	China	96	109	13.5%	No Comments
113	Mutual Tceh	Taiwan	104	106	1.9%	Microwave
114	Eastern	Japan	88	106	20.5%	70% owned by Simmtech, will be a Korean in 2018
115	HT (HeTon) Electronics	China	98	103	5.1%	No Comments
	Top 15 Total		51,199	58,183	13.8%	Lareg gets larger and faster, Money talks

(Compiled by N.T. Information Ltd)