

2017

	k_core	degree centrality	pagerank	betweenness centrality	closeness centrality
Samsung Electronics	8	0.277777778	0.02593435	0.011603736	0.387096774
Toshiba	8	0.277777778	0.035223865	0.004159738	0.371134021
Texas Instruments	8	1.111111111	0.067142489	0.574010571	0.666666667
Analog Devices	8	0.277777778	0.025001148	0.002433862	0.43902439
Nvidia	8	0.388888889	0.037755835	0.033268284	0.45
Micron	8	0.277777778	0.029134123	0.004549062	0.45
Western Digital	6	0.166666667	0.02026235	0	0.423529412
Monolithic	8	0.666666667	0.05073316	0.111014739	0.52173913
ON Semi	6	0.222222222	0.024547644	0.003923647	0.371134021
Cypress	8	0.5	0.034797339	0.072747887	0.486486486
Microchip	8	0.5	0.042150223	0.044221867	0.461538462
TDK	8	0.444444444	0.04623913	0.074988662	0.382978723
Murata	6	0.222222222	0.039032304	0.00638196	0.349514563
Infineon	8	0.222222222	0.022387998	0.000529101	0.428571429
Intel	8	0.444444444	0.030913648	0.067066756	0.493150685
Diodes	6	0.166666667	0.017586727	0	0.327272727
Winbond	8	0.277777778	0.04202419	0.004115646	0.352941176
WangHong	6	0.166666667	0.044803062	0	0.336448598
Qualcomm	8	0.333333333	0.024903948	0.082044825	0.486486486
ROHM	6	0.333333333	0.038264465	0.033185311	0.363636364
Toyota	6	0.222222222	0.017442968	0.000529101	0.428571429
Vishay	6	0.166666667	0.014564907	0	0.423529412
HuiRong	8	0.388888889	0.02423584	0.096341304	0.473684211
STMicro	8	0.333333333	0.033088986	0.01005165	0.455696203
Mediatek	6	0.222222222	0.027083897	0.000529101	0.285714286
DENSO	8	0.388888889	0.025333011	0.084488708	0.493150685
Sony	8	0.333333333	0.014919844	0.105632573	0.486486486
Sensata	8	0.388888889	0.014498149	0.082350718	0.461538462
Melexis	6	0.166666667	0.009527583	0	0.43373494
Bosch	8	0.333333333	0.021466147	0.03404132	0.467532468
NXP	6	0.166666667	0.008931525	0	0.349514563
Skyhynix	6	0.166666667	0.008396457	0	0.423529412
Fuji Electric	8	0.333333333	0.021282852	0.006643991	0.349514563
Maxim Power Corp. (I	6	0.166666667	0.019013919	0	0.330275229
Renesas	8	0.277777778	0.017632102	0.004701436	0.352941176
Sanken	6	0.166666667	0.011113678	0	0.387096774
Digi-Key	6	0.166666667	0.012630138	0	0.283464567

2018

	k_core	degree centrality	pagerank	betweenness centrality	closeness centrality
Murata	6	0.162162162	0.041273631	0	0.336363636
TDK	6	0.216216216	0.046895683	0.009403451	0.420454545
Toyota	6	0.972972973	0.06501569	0.295549337	0.649122807
Sony	6	0.27027027	0.026729268	0.004179179	0.4625
Texas Instruments	6	0.972972973	0.060370192	0.322979202	0.649122807
Analog Devices	6	0.324324324	0.026112531	0.016881871	0.513888889
Microchip	6	0.216216216	0.020811732	0.000500501	0.451219512
Monolithic	6	0.702702703	0.045968962	0.158420181	0.587301587
Western Digital	6	0.324324324	0.020578781	0.028551513	0.44047619
Micron	6	0.378378378	0.032140214	0.022957842	0.5
Sensata	6	0.378378378	0.022292199	0.044556461	0.486842105
Infineon	6	0.540540541	0.036515636	0.069007825	0.506849315
Cypress	6	0.810810811	0.05193988	0.212680321	0.606557377
ON Semi	6	0.27027027	0.021828598	0.006606607	0.456790123
Vishay	6	0.216216216	0.018735233	0.000750751	0.435294118
Winbond	6	0.216216216	0.033650076	0.008794725	0.397849462
WangHong	6	0.162162162	0.036707383	0	0.313559322
Nvidia	6	0.432432432	0.026048499	0.03013013	0.5
Samsung Electronics	6	0.162162162	0.016325846	0	0.415730337
Intel	6	0.162162162	0.016168578	0	0.451219512
Diodes	6	0.324324324	0.023344392	0.02513585	0.486842105
Delphi Technologies	6	0.216216216	0.018109592	0.006181181	0.451219512
Qualcomm	6	0.216216216	0.016666894	0.003078078	0.493333333
NXP	6	0.216216216	0.021881678	0.000500501	0.385416667
Melexis	6	0.27027027	0.028500514	0.00896304	0.430232558
STMicro	6	0.27027027	0.031179084	0.010342449	0.430232558
DENSO	6	0.216216216	0.020551888	0.001126126	0.425287356
ROHM	6	0.27027027	0.033102599	0.012406454	0.435294118
Sanken	6	0.162162162	0.011981323	0	0.44047619
Mediatek	6	0.27027027	0.029721535	0.020786894	0.430232558
Skyhynix	6	0.162162162	0.019420992	0	0.345794393
Fuji Electric	6	0.162162162	0.009239048	0	0.44047619
HuiRong	6	0.162162162	0.012697445	0	0.420454545
Maxim Power Corp. (	6	0.162162162	0.015672003	0	0.381443299
Digi-Key	6	0.162162162	0.010476617	0	0.389473684
Bosch	6	0.216216216	0.010985401	0.005355355	0.451219512
Renesas	6	0.162162162	0.010292254	0	0.411111111
Toshiba	6	0.162162162	0.01006813	0	0.425287356

2019

	k_core	degree centrality	pagerank	betweenness centrality	closeness centrality
Winbond	6	0.157894737	0.046185348	0	0.376237624
WangHong	6	0.210526316	0.04219815	0.000474158	0.38
Murata	6	0.210526316	0.031583991	0.002393371	0.408602151
TDK	6	0.315789474	0.042021737	0.033108916	0.4
STMicro	6	0.421052632	0.045061123	0.063536671	0.431818182
Melexis	6	0.263157895	0.032192214	0.024970684	0.413043478
Vishay	6	0.315789474	0.023300298	0.015499284	0.417582418
Sensata	6	0.210526316	0.020934083	0.000711238	0.314049587
Texas Instruments	6	0.894736842	0.057855746	0.439159267	0.62295082
Analog Devices	6	0.368421053	0.032505399	0.013791626	0.441860465
Micron	6	0.315789474	0.036700188	0.018765729	0.426966292
Nvidia	6	0.421052632	0.034390637	0.040928532	0.431818182
Western Digital	6	0.210526316	0.023648088	0.000474158	0.322033898
Microchip	6	0.526315789	0.036273844	0.122073285	0.558823529
Monolithic	6	0.157894737	0.015086257	0	0.4
Sanken	6	0.157894737	0.027110847	0	0.387755102
Toshiba	6	0.315789474	0.031742846	0.032351391	0.4
Sony	6	0.315789474	0.026227358	0.00707512	0.413043478
Digi-Key	6	0.157894737	0.01794185	0	0.376237624
ON Semi	6	0.526315789	0.038283577	0.086092914	0.447058824
Toyota	6	0.684210526	0.030629802	0.234391094	0.558823529
Intel	6	0.842105263	0.040996334	0.304511449	0.575757576
ROHM	6	0.578947368	0.035263478	0.073951285	0.441860465
Infineon	6	0.157894737	0.012650849	0	0.408602151
Fuji Electric	6	0.157894737	0.012462309	0	0.408602151
Samsung Electronics	6	0.210526316	0.015256738	0.00883073	0.457831325
Diodes	6	0.210526316	0.015976407	0.009879018	0.413043478
Qualcomm	6	0.157894737	0.010988539	0	0.452380952
Ams AG (AMS)	6	0.157894737	0.017980556	0	0.308943089
Cypress	6	0.263157895	0.013949775	0.003244598	0.404255319
HuiRong	6	0.210526316	0.011615074	0.002483122	0.441860465
DENSO	6	0.210526316	0.016959741	0.006627386	0.481012658
Mediatek	6	0.315789474	0.02080654	0.007871029	0.408602151
Bosch	6	0.157894737	0.017227415	0	0.294573643
NXP	6	0.210526316	0.023205344	0.003536996	0.319327731
Delphi Technologies	6	0.210526316	0.012799683	0.002299668	0.4
Skyhynix	6	0.157894737	0.011711182	0	0.319327731
Renesas	6	0.157894737	0.011648809	0	0.395833333
Maxim Power Corp. (	6	0.157894737	0.006627842	0	0.319327731

2020

	k_core	degree centrality	pagerank	betweenness centrality	closeness centrality
Winbond	6	0.153846154	0.031357439	0	0.327731092
WangHong	6	0.205128205	0.038994556	0.000449843	0.330508475
Micron	6	0.41025641	0.033629677	0.042307205	0.493670886
Western Digital	6	0.153846154	0.01586716	0	0.397959184
TDK	8	0.256410256	0.030174111	0.027481701	0.419354839
Murata	8	0.307692308	0.037170922	0.005263158	0.32231405
Diodes	8	0.358974359	0.02580551	0.046146117	0.428571429
Analog Devices	8	1.025641026	0.053194291	0.455352231	0.629032258
Sensata	6	0.307692308	0.022357404	0.045333295	0.423913043
Delphi Technologies	6	0.256410256	0.030198841	0.030399089	0.414893617
Qualcomm	6	0.153846154	0.012396847	0	0.443181818
ON Semi	6	0.307692308	0.020419711	0.022648183	0.423913043
Microchip	6	0.307692308	0.021238036	0.020002775	0.481481481
Texas Instruments	6	0.41025641	0.025211561	0.047437236	0.506493506
Toyota	6	0.717948718	0.042662506	0.15377105	0.469879518
Bosch	6	0.205128205	0.021319655	0.000449843	0.333333333
Samsung Electronics	6	0.307692308	0.028384952	0.022552136	0.419354839
Fuji Electric	6	0.153846154	0.018047622	0	0.330508475
Nvidia	6	0.153846154	0.013662011	0	0.414893617
Sony	6	0.615384615	0.037452985	0.149702485	0.549295775
Infineon	6	0.820512821	0.047258151	0.285129007	0.582089552
Toshiba	6	0.205128205	0.046259885	0.000674764	0.30952381
Vishay	8	0.358974359	0.022853603	0.042305108	0.428571429
Ams AG (AMS)	6	0.307692308	0.03056283	0.015740716	0.423913043
Monolithic	6	0.41025641	0.02728326	0.056219051	0.52
Broadcom	6	0.205128205	0.014713927	0.000449843	0.453488372
STMicro	6	0.153846154	0.011717806	0	0.453488372
Intel	6	0.205128205	0.017056624	0.000980014	0.410526316
ROHM	8	0.256410256	0.023295814	0.025857448	0.419354839
Skyhynix	6	0.256410256	0.022873471	0.01903116	0.414893617
Melexis	6	0.153846154	0.013792321	0	0.39
HuiRong	6	0.153846154	0.010014147	0	0.448275862
Maxim Power Corp. (I	6	0.153846154	0.048434359	0	0.3046875
NXP	6	0.153846154	0.009880942	0	0.448275862
DENSO	6	0.205128205	0.017673505	0.000449843	0.393939394
Mediatek	6	0.256410256	0.0228383	0.01355631	0.423913043
Digi-Key	6	0.205128205	0.012074206	0.000674764	0.397959184
Cypress	6	0.153846154	0.013755327	0	0.386138614
Sanken	6	0.153846154	0.015562056	0	0.312
Renesas	6	0.153846154	0.01255367	0	0.312

2021

	k_core	degree centrality	pagerank	betweenness centrality	closeness centrality
WangHong	6	0.205128205	0.044065223	0.000449843	0.312
Winbond	6	0.153846154	0.037976639	0	0.30952381
Murata	6	0.41025641	0.040805597	0.084034544	0.423913043
TDK	6	0.256410256	0.041243427	0.005825461	0.32231405
Microchip	6	1.025641026	0.06049111	0.491745378	0.619047619
ON Semi	6	0.41025641	0.031035078	0.080697729	0.513157895
Texas Instruments	6	0.307692308	0.02978086	0.01050679	0.410526316
Analog Devices	6	0.512820513	0.039540559	0.048194698	0.448275862
Monolithic	6	0.461538462	0.040177211	0.022202696	0.423913043
Micron	6	0.41025641	0.02893531	0.098698361	0.438202247
Western Digital	6	0.358974359	0.025652989	0.035284278	0.428571429
ROHM	6	0.256410256	0.029484469	0.029557622	0.410526316
Qualcomm	6	0.307692308	0.026931666	0.004430949	0.414893617
STMicro	6	0.358974359	0.038083902	0.039772508	0.4875
Melexis	6	0.256410256	0.028835217	0.026948782	0.475609756
Infineon	6	0.820512821	0.034734644	0.380564279	0.590909091
Mediatek	6	0.256410256	0.023811909	0.022763005	0.402061856
Sensata	6	0.205128205	0.018461991	0.010259376	0.410526316
Vishay	6	0.358974359	0.020604848	0.056282026	0.5
Nvidia	6	0.205128205	0.016916435	0.0046824	0.464285714
Diodes	6	0.256410256	0.0175421	0.008775143	0.475609756
Digi-Key	6	0.205128205	0.019295239	0.000449843	0.402061856
Intel	6	0.153846154	0.011716433	0	0.397959184
Toyota	6	0.307692308	0.021292851	0.020653213	0.448275862
Sanken	6	0.512820513	0.029555378	0.090025904	0.433333333
Sony	6	0.205128205	0.018173873	0.000449843	0.402061856
Samsung Electronics	6	0.153846154	0.011047661	0	0.386138614
Ams AG (AMS)	6	0.205128205	0.027184192	0.006612686	0.39
Skyhynix	6	0.205128205	0.020125124	0.000719748	0.317073171
NXP	6	0.153846154	0.027163419	0	0.312
Duck Creek Technolc	6	0.256410256	0.024488815	0.001844354	0.319672131
Broadcom	6	0.256410256	0.009648326	0.014959456	0.402061856
Renesas	6	0.153846154	0.021355266	0	0.3046875
Bosch	6	0.205128205	0.02553224	0.000449843	0.307086614
Fuji Electric	6	0.153846154	0.010003591	0	0.397959184
HuiRong	6	0.153846154	0.012481779	0	0.397959184
Nouya	6	0.153846154	0.009066327	0	0.393939394
Toshiba	6	0.153846154	0.008766588	0	0.40625
DENSO	6	0.153846154	0.00773275	0	0.327731092
Maxim Power Corp. (l	6	0.153846154	0.010258963	0	0.336206897