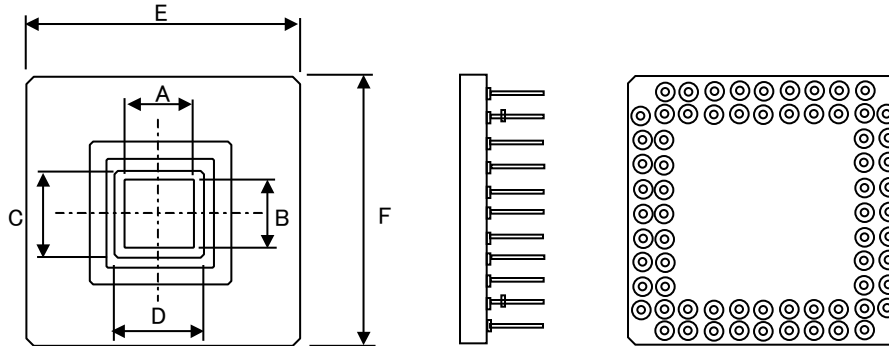
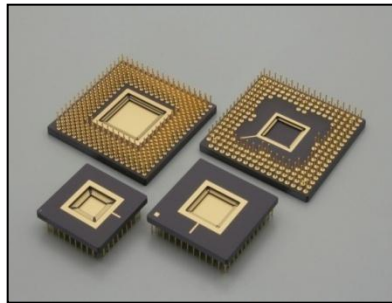


# NTK CPGA ( Ceramic – Pin Grid Array )



UNIT: inch

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.		
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT		PIN ROW	PITCH			SEAL RING
	A	X	B	C	X	D	E	X	F														
28	0.200	x	0.200	0.280	x	0.280	U	0.600	x	0.600	0.025	0.020	0.040		0.085	0.180	0.050	6x6	0.100	B	0	-	IP - 8912B-MO
28	0.250	x	0.250	0.435	x	0.380	U	0.650	x	0.550	0.020	0.020	0.040		0.080	0.180	0.067	6x5	0.100	B	0	PAD A & B	IP - 8564A-OP
28	0.435	x	0.250	0.505	x	0.445	U	0.650	x	0.550	0.020	0.030	0.040		0.090	0.180	0.067	6x5	0.100	B	0	-	IP - 8742B
28	0.435	x	0.375	0.505	x	0.445	U	0.650	x	0.550	0.020	0.020	0.040		0.080	0.180	0.067	6x5	0.100	B	0	PAD A & B	IP - 8476E-MO
30	0.480	x	0.390	0.550	x	0.450	U	0.650	x	0.550	0.020	0.020	0.040		0.080	0.180	0.067	6x5	0.100	B	0	PAD No.15	IP - 8725A-MO
32	0.220	x	0.220	0.280	x	0.280	U	0.900	x	0.900	0.020	0.025	0.020		0.065	0.180	0.050	8x8	0.100	B	-	-	IP - 8627B-MO
36	0.320	x	0.570	0.425	x	0.630	U	0.760	x	0.760	0.025	0.030	0.040		0.095	0.180	0.067	7x7	0.100	B	0	-	IP - 8907A-MO
44	0.945	x	0.945	1.166	x	1.166	U	1.378	x	1.378	0.020	0.020	0.020	0.040	0.100	0.180		12x12	0.100	B	-	No.1	IP - 8361B-C
44	1.102	x	1.063		x		U	1.800	x	1.300	0.050	0.040			0.090	0.150		11x4	0.100	B	-	PAD No.1,8,19,20,31,38	IP - 2037A-MO
51	0.730	x	0.690	0.810	x	0.770	U	1.580	x	1.580	0.035	0.035	0.055		0.125	0.150		13x4	0.100	B	-	PIN C1,C13	IP - 1851A-MO
64	0.400	x	0.400	0.480	x	0.480	U	1.000	x	1.000	0.020	0.020	0.040		0.080	0.180	0.050	10x10	0.100	B	0	0	IP - 2219A-MO
64	1.350	x	0.194	1.525	x	0.420	U	1.660	x	0.860	0.030	0.020	0.030	0.040	0.120	0.180		16x4	0.100	B	-	PAD 52,45,13,20	IP - 2009A-MO



# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: inch

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		
	A	X	B	C	X	D	E	X	F														
66	0.825	x	0.825	1.052	x	1.052	U	1.172	x	1.172	0.035	0.025	0.055	0.040	0.155	0.180	0.030	11x6	0.100	B	GND	-	IP - 1632A-MO
66	0.865	x	0.865	0.950	x	0.950	U	1.080	x	1.080	0.040	0.025	0.040		0.105	0.180	0.030	11x6	0.100	B	GND	-	IP - 2099A-MO
68	0.250	x	0.250	0.350	x	0.350	D	1.150	x	1.150	0.025	0.025	0.030		0.080	0.180	0.050	11x11	0.100	B	-	0	IP - 1298A
68	0.291	x	0.291	0.465	x	0.465	U	1.100	x	1.100	0.025	0.025	0.025		0.075	0.180	0.050	11x11	0.100	B	0	0	IP - 8143H
68	0.291	x	0.291	0.465	x	0.465	U	1.100	x	1.100	0.022	0.025	0.043		0.090	0.180	0.050	11x11	0.100	B	0	0	IP - 8548C
68	0.320	x	0.380	0.420	x	0.480	U	1.060	x	1.060	0.020	0.020	0.040		0.080	0.180	0.050	10x10	0.100	B	0	0	IP - 8054FA
68	0.330	x	0.330	0.480	x	0.480	U	1.060	x	1.060	0.020	0.020	0.040		0.080	0.180	0.050	10x10	0.100	B	0	B/G PAD No.8,27,44,63	IP - 982DA-MO
68	0.350	x	0.350	0.420	x	0.420	D	1.150	x	1.150	0.025	0.025	0.040		0.090	0.180	0.050	11x11	0.100	B	0	0	IP - 8153D-MO
68	0.350	x	0.350	0.470	x	0.470	U	1.100	x	1.100	0.020	0.025	0.040		0.085	0.180	0.050	11x11	0.100	B	0	0	IP - 1206C
68	0.394	x	0.394	0.525	x	0.525	U	1.100	x	1.100	0.025	0.025	0.025		0.075	0.180	0.050	11x11	0.100	B	0	GND	IP - 944D-MO
68	0.440	x	0.440	0.560	x	0.560	U	1.100	x	1.100	0.020	0.025	0.030		0.075	0.180	0.050	11x11	0.100	B	-	GND PAD, PIN F2	IP - 8788C-MO
68	0.450	x	0.450	0.522	x	0.522	D	1.150	x	1.150	0.025	0.025	0.040		0.090	0.180	0.051	11x11	0.100	B	0	PAD A, No.62	IP - 8961B-MO
68	0.470	x	0.470	0.560	x	0.560	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	0	IP - 8510A
68	0.470	x	0.470	0.560	x	0.560	U	1.100	x	1.100	0.040	0.020	0.040		0.100	0.150	0.050	11x11	0.100	B	-	B/G PAD No.8	IP - 1504-MO
68	0.470	x	0.470	0.560	x	0.560	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	0	IP - 2146B-MO
68	0.520	x	0.520	0.630	x	0.630	U	1.100	x	1.100	0.030	0.035	0.040		0.105	0.180	0.050	11x11	0.100	B	0	GND PAD	IP - 8664A
68	0.580	x	0.580	0.700	x	0.700	U	1.100	x	1.100	0.020	0.025	0.030		0.075	0.180	0.050	11x11	0.100	B	-	GND PAD	IP - 1778B-MO
72	0.551	x	0.551	0.866	x	0.866	U	1.098	x	1.098	0.047	0.020	0.025	0.025	0.117	0.150	0.039	11x11	0.100	B	-	C3PIN	IP - 2197A-MO
74	1.816	x	1.521	1.816	x	1.662	U	1.989	x	1.858	0.048	0.025	0.093		0.166	0.180	0.039	37x4	0.100	B	4 PINS	-	IP - 1925A-MO
82	1.299	x	1.299	1.457	x	1.457	U	1.634	x	1.634	0.020	0.020	0.025	0.060	0.125	0.180		15x15	0.100	B	-	GND	IP - 1782AA-MO
84	0.235	x	0.235	0.430	x	0.430	U	1.060	x	1.060	0.020	0.025	0.040		0.085	0.180	0.050	10x10	0.100	B	0	-	IP - 2181A-MO
84	0.240	x	0.240	0.480	x	0.480	U	1.060	x	1.060	0.015	0.010	0.030	0.030	0.085	0.180	0.050	10x10	0.100	B	0	-	IP - 1882A-MO
84	0.300	x	0.300	0.480	x	0.480	U	1.060	x	1.060	0.015	0.010	0.030	0.030	0.085	0.180	0.050	10x10	0.100	B	0	-	IP - 1937A-MO
84	0.350	x	0.350	0.430	x	0.430	U	1.060	x	1.060	0.020	0.025	0.040		0.085	0.150	0.050	10x10	0.100	B	0	0	IP - 8691A-MO

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: inch

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		DIE ATTACH
	A	X	B	C	X	D	E	X	F														
84	0.350	x	0.350	0.550	x	0.550	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180		13x13	0.100	B	0	0	IP - 8188G
84	0.350	x	0.350	0.480	x	0.480	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	0	IP - 8396G
84	0.350	x	0.350	0.480	x	0.480	U	1.160	x	1.160	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	0	IP - 8993B
84	0.400	x	0.400	0.490	x	0.490	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	0	IP - 1114A
84	0.420	x	0.420	0.500	x	0.500	U	1.060	x	1.060	0.020	0.030	0.030		0.080	0.180	0.050	10x10	0.100	B	0	0	IP - 1055AB
84	0.470	x	0.470	0.560	x	0.560	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	No.10	IP - 8480AB
84	0.470	x	0.470	0.590	x	0.590	U	1.100	x	1.100	0.020	0.025	0.040		0.085	0.180	0.050	11x11	0.100	B	-	GND PAD	IP - 1174B-MO
84	0.520	x	0.520	0.630	x	0.630	U	1.100	x	1.100	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	0	GND PAD	IP - 8765A-MO
85	0.270	x	0.270	0.560	x	0.560	U	1.100	x	1.100	0.020	0.025	0.040		0.085	0.180	0.050	11x11	0.100	B	0	0	IP - 1849A
85	0.480	x	0.400	0.616	x	0.536	U	1.160	x	1.160	0.020	0.020	0.040		0.080	0.180	0.050	11x11	0.100	B	VSS	PAD No.65, 98, 131	IP - 1813A-MO
100	0.350	x	0.350	0.430	x	0.430	U	1.060	x	1.060	0.020	0.035	0.035		0.090	0.180	0.050	10x10	0.100	B	0	-	IP - 1313A
100	0.350	x	0.350	0.430	x	0.430	U	1.060	x	1.060	0.020	0.020	0.040		0.080	0.180	0.050	10x10	0.100	B	0	0	IP - 2168A
100	0.350	x	0.350	0.550	x	0.550	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	0	IP - 8188E
100	0.400	x	0.400	0.510	x	0.510	U	1.060	x	1.060	0.020	0.025	0.040		0.085	0.180	0.050	10x10	0.100	B	0	No.39	IP - 8731C
100	0.470	x	0.470	0.570	x	0.570	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	0	IP - 8180-MO
100	1.110	x	1.110	1.270	x	1.270	U	1.400	x	1.400	0.050	0.025	0.075		0.150	0.180	0.050	14x14	0.100	B	-	-	IP - 1872A-MO
101	0.433	x	0.433	0.550	x	0.550	U	1.320	x	1.320	0.025	0.025	0.040		0.090	0.180	0.050	13x13	0.100	B	0	0	IP - 8449C
101	0.500	x	0.500	0.640	x	0.640	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	-	IP - 1823A-MO
108	0.350	x	0.350	0.550	x	0.550	U	1.200	x	1.200	0.020	0.020	0.040		0.080	0.180	0.050	12x12	0.100	B	0	0	IP - 2155A-MO
108	0.450	x	0.450	0.550	x	0.550	U	1.200	x	1.200	0.020	0.020	0.040		0.080	0.180	0.050	12x12	0.100	B	0	0	IP - 2113A-MO
120	0.315	x	0.315	0.470	x	0.470	D	1.360	x	1.360	0.025	0.010	0.020	0.040	0.095	0.170	0.050	13x13	0.100	B	VSS	VSS	IP - 1827A-MO
120	0.325	x	0.325	0.550	x	0.550	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	-	IP - 1759A
120	0.350	x	0.350	0.650	x	0.650	U	1.100	x	1.100	0.025	0.020	0.020	0.060	0.125	0.150	0.068	11x11	0.100	B	0	PAD A,D,E and H	IP - 8342C-MO
120	0.433	x	0.433	0.550	x	0.550	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	-	IP - 8878G

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: inch

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.		
	DIE CAV.			TOP CAV.						1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		DIE ATTACH	
	A	X	B	C	X	D	UP(U) DOWN(D)	E	X	F													
120	0.433	x	0.433	0.550	x	0.550	U	1.320	x	1.320	0.020	0.025	0.040		0.085	0.180	0.050	13x13	0.100	B	-	GND PAD	IP - 1176B-MO
120	0.472	x	0.472	0.630	x	0.630	U	1.320	x	1.320	0.020	0.025	0.040		0.085	0.180	0.050	13x13	0.100	B	-	GND PAD	IP - 1177B-MO
120	0.472	x	0.472	0.550	x	0.550	U	1.320	x	1.320	0.020	0.020	0.040		0.080	0.180	0.050	13x13	0.100	B	0	0	IP - 8981C
120	0.520	x	0.520	0.630	x	0.630	U	1.320	x	1.320	0.020	0.025	0.040		0.085	0.180	0.050	13x13	0.100	B	-	GND PAD	IP - 8551C-MO
120	0.520	x	0.520	0.630	x	0.630	U	1.320	x	1.320	0.020	0.025	0.040		0.085	0.180	0.050	13x13	0.100	B	0	GND PAD	IP - 8216GA-MO
121	0.394	x	0.472	0.551	x	0.551	U	0.700	x	0.700	0.030	0.020	0.030		0.080	0.079		13x13	0.050	B	-	-	IP - 2133A-MO
121	0.433	x	0.433	0.550	x	0.550	U	1.320	x	1.320	0.030	0.025	0.030		0.085	0.180	0.050	13x13	0.100	B	0	0	IP - 1666A
121	0.520	x	0.520	0.630	x	0.630	U	1.320	x	1.320	0.035	0.025	0.040		0.100	0.150	0.050	13x13	0.100	B	0	-	IP - 1816B-MO
121	0.551	x	0.551	0.650	x	0.650	U	1.320	x	1.320	0.030	0.025	0.040		0.095	0.180	0.050	13x13	0.100	B	0	0	IP - 2136B-MO
121	0.670	x	0.670	0.800	x	0.800	U	1.320	x	1.320	0.030	0.025	0.030		0.085	0.180	0.050	13x13	0.100	B	0	0	IP - 2179B-MO
123	1.930	x	0.956	2.260	x	1.307	U	2.600	x	1.600	0.039	0.054	0.020	0.054	0.168	0.220		25x10	0.100	B	0	PAD No.3, 21, 38, 56	IP - 2251B-MO
132	0.320	x	0.320	0.630	x	0.630	U	1.400	x	1.400	0.020	0.010	0.030	0.030	0.090	0.180	0.050	14x14	0.100	B	0	0	IP - 1841C-MO
132	0.358	x	0.358	0.476	x	0.476	U	1.360	x	1.360	0.020	0.030	0.055		0.105	0.180	0.050	13x13	0.100	B	0	-	IP - 1115B-MO
132	0.375	x	0.375	0.560	x	0.560	U	1.400	x	1.400	0.030	0.020	0.040		0.090	0.180	0.050	14x14	0.100	B	0	0	IP - 2187A
132	0.450	x	0.450	0.550	x	0.550	U	1.400	x	1.400	0.020	0.025	0.045		0.090	0.180	0.050	14x14	0.100	B	0	0	IP - 2122A-MO
132	0.510	x	0.510	0.620	x	0.620	U	1.360	x	1.360	0.025	0.025	0.030		0.080	0.180	0.050	13x13	0.100	B	GND	GND	IP - 1214B
132	0.550	x	0.550	0.630	x	0.630	U	1.400	x	1.400	0.025	0.025	0.040		0.090	0.180	0.050	14x14	0.100	B	0	-	IP - 1398A-MO
133	0.340	x	0.340	0.500	x	0.500	U	1.360	x	1.360	0.020	0.025	0.045		0.090	0.180	0.050	13x13	0.100	B	GND	GND	IP - 1361A-MO
133	0.450	x	0.450	0.550	x	0.550	U	1.460	x	1.460	0.020	0.025	0.045		0.090	0.180	0.050	14x14	0.100	B	0	0	IP - 8991B
133	0.495	x	0.375	0.630	x	0.510	U	1.360	x	1.360	0.025	0.010	0.015	0.040	0.090	0.180	0.050	13x13	0.100	B	VSS	VSS	IP - 8655CA-MO
135	0.602	x	0.528	0.748	x	0.685	U	1.460	x	1.460	0.020	0.020	0.040		0.080	0.180	0.050	14x14	0.100	B	-	0	IP - 975G-MO
135	0.665	x	0.650	0.811	x	0.795	U	1.460	x	1.460	0.020	0.020	0.041		0.081	0.180	0.050	14x14	0.100	B	-	0	IP - 8497AA-MO
144	0.425	x	0.425	0.630	x	0.630	U	1.575	x	1.575	0.020	0.020	0.040		0.080	0.180	0.050	15x15	0.100	B	0	-	IP - 947D
144	0.400	x	0.400	0.630	x	0.630	U	1.575	x	1.575	0.020	0.020	0.040		0.080	0.180	0.050	15x15	0.100	B	0	0	IP - 8573A

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: inch

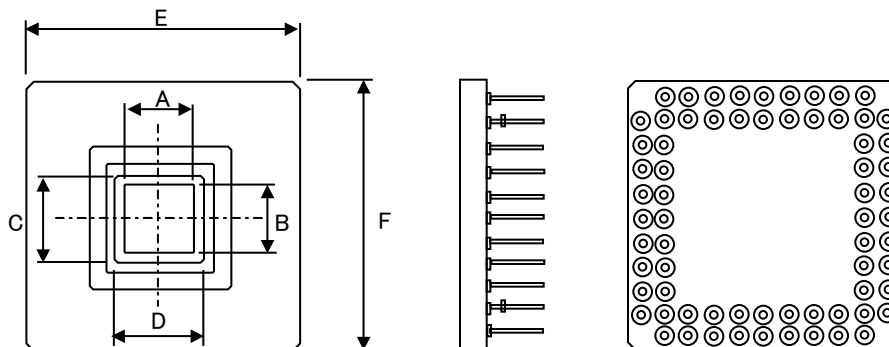
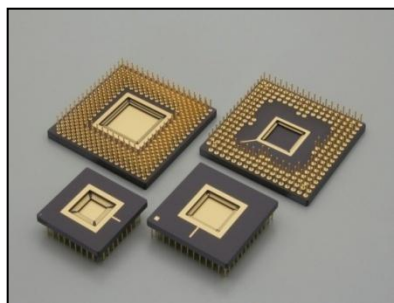
LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.		
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT		PIN ROW	PITCH			SEAL RING
	A	X	B	C	X	D	E	X	F														
144	0.472	x	0.472	0.630	x	0.630	U	1.575	x	1.575	0.020	0.025	0.040		0.085	0.180	0.050	15x15	0.100	B	0	0	IP - 8575L-MO
144	0.472	x	0.472	0.630	x	0.630	U	1.574	x	1.574	0.020	0.025	0.040		0.085	0.180	0.050	15x15	0.100	B	-	GND PAD	IP - 1180B-MO
144	0.540	x	0.540	0.630	x	0.630	U	1.575	x	1.575	0.020	0.020	0.040		0.080	0.180	0.050	15x15	0.100	B	0	0	IP - 1169A-MO
144	0.700	x	0.700	0.815	x	0.815	U	1.575	x	1.575	0.025	0.025	0.030		0.080	0.180	0.050	15x15	0.100	B	0	0	IP - 2116C-MO
144	1.000	x	1.000	1.100	x	1.100	U	1.950	x	1.950	0.040	0.040	0.040		0.120	0.180	0.050	15x15	0.100	B	-	-	IP - 1997A-MO
145	0.300	x	0.300	0.500	x	0.500	U	1.575	x	1.575	0.020	0.010	0.025	0.035	0.090	0.180	0.050	15x15	0.100	B	0	0	IP - 1938A-MO
145	0.320	x	0.320	0.470	x	0.470	U	1.575	x	1.575	0.020	0.020	0.020	0.040	0.100	0.180	0.050	15x15	0.100	B	0	0	IP - 2097A-MO
155	0.400	x	0.400	0.600	x	0.600	D	1.660	x	1.660	0.025	0.025	0.040		0.090	0.230	0.100	16x16	0.100	B	0	-	IP - 2021B-MO
156	0.435	x	0.435	0.550	x	0.550	D	1.660	x	1.660	0.020	0.020	0.040		0.080	0.180	0.050	16x16	0.100	B	0	VSS	IP - 1269BA-MO
160	0.300	x	0.300	0.500	x	0.500	U	1.560	x	1.560	0.020	0.015	0.025	0.030	0.090	0.180	0.050	15x15	0.100	B	0	0	IP - 1716A-MO
160	0.787	x	0.787	0.866	x	0.866	U	1.560	x	1.560	0.020	0.020	0.040		0.080	0.180		15x15	0.100	B	0	0	IP - 2159A-MO
176	0.360	x	0.360	0.560	x	0.560	U	1.570	x	1.570	0.025	0.020	0.020	0.040	0.105	0.180	0.050	15x15	0.100	B	GND	GND	IP - 1769A-MO
176	0.530	x	0.530	0.730	x	0.730	U	1.570	x	1.570	0.025	0.020	0.020	0.040	0.105	0.180	0.050	15x15	0.100	B	GND	GND	IP - 1683A-MO
179	0.614	x	0.614	0.824	x	0.824	D	1.860	x	1.860	0.020	0.015	0.030	0.040	0.105	0.245	0.100	18x18	0.100	B	0	I GND	IP - 1102C-MO
180	0.422	x	0.422	0.630	x	0.630	U	1.575	x	1.575	0.020	0.020	0.020	0.040	0.100	0.180	0.050	15x15	0.100	B	0	0	IP - 8344B
180	0.490	x	0.490	0.690	x	0.690	U	1.575	x	1.575	0.020	0.010	0.025	0.030	0.085	0.180	0.050	15x15	0.100	B	-	-	IP - 8516E-MO
180	0.650	x	0.650	0.815	x	0.815	U	1.575	x	1.575	0.020	0.020	0.020	0.040	0.100	0.180	0.050	15x15	0.100	B	0	0	IP - 8837B-MO
181	0.472	x	0.472	0.630	x	0.630	U	1.575	x	1.575	0.020	0.020	0.025	0.040	0.105	0.180	0.050	15x15	0.100	B	0	0	IP - 1758B-MO
181	0.550	x	0.550	0.700	x	0.700	U	1.575	x	1.575	0.020	0.020	0.020	0.040	0.100	0.180	0.050	15x15	0.100	B	0	0	IP - 8385B-MO
181	1.300	x	1.300	1.600	x	1.600	U	1.850	x	1.850	0.035	0.025	0.040		0.100	0.180	0.050	18x18	0.100	B	0	PIN A1	IP - 2127A-MO
201	0.874	x	0.874	1.142	x	1.142	U	1.500	x	1.500	0.010	0.040	0.025	0.040	0.115	0.180		15x15	0.100	B	-	PIN F6	IP - 2065A-MO
207	0.500	x	0.520	0.680	x	0.680	D	1.770	x	1.770	0.025	0.020	0.030	0.040	0.115	0.180	0.050	17x17	0.100	B	GND	GND	IP - 1215B
208	0.345	x	0.345	0.505	x	0.505	U	1.700	x	1.700	0.025	0.020	0.020	0.025	0.090	0.180	0.050	17x17	0.100	B	0	-	IP - 2100A-MO
208	0.345	x	0.345	0.505	x	0.505	U	1.700	x	1.700	0.025	0.020	0.020	0.025	0.090	0.180	0.050	17x17	0.100	B	-	-	IP - 2273A-MO

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: inch

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		DIE ATTACH
	A	X	B	C	X	D	E	X	F														
208	0.551	x	0.551	0.799	x	0.799	U	1.700	x	1.700	0.020	0.012	0.025	0.040	0.097	0.150	0.039	17x17	0.100	B	0	0	IP - 8149Z-MO
209	0.394	x	0.394	0.614	x	0.614	U	1.700	x	1.700	0.025	0.010	0.020	0.045	0.100	0.180	0.050	17x17	0.100	B	0	0	IP - 8488D-MO
209	0.551	x	0.551	0.669	x	0.669	U	1.693	x	1.693	0.020	0.020	0.040		0.080	0.189	0.040	17x17	0.100	B	0	0	IP - 2126A-MO
223	0.450	x	0.450	0.570	x	0.570	D	1.860	x	1.860	0.030	0.025	0.040		0.095	0.180	0.050	18x18	0.100	B	0	VSS	IP - 1708D-MO
223	0.650	x	0.650	0.811	x	0.811	D	1.860	x	1.860	0.022	0.016	0.023	0.040	0.101	0.190	0.070	18x18	0.100	B	0	0	IP - 1801A-MO
256	0.630	x	0.630	0.790	x	0.790	U	2.000	x	2.000	0.020	0.020	0.030	0.060	0.130	0.180	0.050	20x20	0.100	B	0	0	IP - 2091C-OP
257	0.620	x	0.570	0.770	x	0.770	D	1.970	x	1.970	0.025	0.025	0.025	0.030	0.105	0.180	0.050	19x19	0.100	B	0	GND PAD	IP - 1208A-MO
257	1.024	x	1.024	1.181	x	1.181	U	2.000	x	2.000	0.020	0.020	0.030	0.060	0.130	0.180	0.050	20x20	0.100	B	0	0	IP - 2090B
257	1.181	x	0.472	1.339	x	0.630	U	2.000	x	2.000	0.020	0.020	0.030	0.060	0.130	0.180	0.050	20x20	0.100	B	0	0	IP - 2081A-MO
280	0.768	x	0.768	1.067	x	1.067	U	1.900	x	1.900	0.010	0.039	0.012	0.020	0.118	0.149	0.039	19x19	0.100	B	-	0	IP - 2059A-MO
280	0.840	x	0.840	1.067	x	1.067	U	1.900	x	1.900	0.039	0.012	0.020	0.047	0.118	0.150	0.039	19x19	0.100	B	-	-	IP - 2016B-MO
281	0.350	x	0.350	0.450	x	0.450	U	1.950	x	1.950	0.025	0.010	0.025	0.050	0.120	0.180	0.050	19x19	0.100	B	0	0	IP - 2331AA-MO
281	0.591	x	0.591	0.748	x	0.748	U	1.950	x	1.950	0.025	0.010	0.025	0.050	0.120	0.180	0.050	19x19	0.100	B	0	GND	IP - 8018D-MO
281	0.840	x	0.840	1.067	x	1.067	U	1.417	x	1.417	0.039	0.012	0.020	0.047	0.118	0.100		26x26	0.050	B	-	-	IP - 2153A-MO
288	2.500	x	0.565	2.795	x	1.020	U	3.150	x	2.000	0.040	0.035	0.020	0.020	0.170	0.280		24x12	0.100	B	-	0	IP - 2104A-MO
289	1.248	x	1.051	1.563	x	1.366	U	2.087	x	1.693	0.020	0.039	0.030	0.059	0.148	0.180	0.050	20x16	0.100	B	-	0	IP - 2131A-MO
299	0.480	x	0.480	0.827	x	0.827	D	2.060	x	2.060	0.025	0.010	0.025	0.070	0.150	0.180	0.050	20x20	0.100	B	0	VSS	IP - 8310CA-MO
299	0.600	x	0.600	0.810	x	0.810	D	2.060	x	2.060	0.020	0.010	0.055		0.085	0.180	0.050	20x20	0.100	B	GND	GND	IP - 1486A-MO
391	0.481	x	0.428	0.661	x	0.608	D	1.860	x	1.860	0.022	0.010	0.025	0.051	0.108	0.180	0.050	35x35	0.100	B	0	0	IP - 2145A-OP
391	0.591	x	0.591	0.734	x	0.734	D	1.860	x	1.860	0.022	0.010	0.025	0.051	0.108	0.180	0.050	35x35	0.100	B	4 PAD	0	IP - 2261A-MO
625	0.677	x	0.677	1.008	x	1.008	U	2.598	x	2.598	0.020	0.020	0.020	0.020	0.121	0.180		25x25	0.100	B	-	-	IP - 2225A-MO
1024	0.715	x	0.715	0.893	x	0.893	U	1.700	x	1.700	0.012	0.012	0.012	0.012	0.106	0.090		32x32	0.050	B	GND	GND	IP - 2205A-MO

# NTK CPGA ( Ceramic – Pin Grid Array )



UNIT: mm

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		DIE ATTACH
	A	X	B	C	X	D	E	X	F														
28	5.08	x	5.08	7.11	x	7.11	U	15.240	x	15.240	0.635	0.508	1.016		2.159	4.572	1.270	6x6	2.540	B	0	-	IP - 8912B-MO
28	6.35	x	6.35	11.05	x	9.65	U	16.510	x	13.970	0.508	0.508	1.016		2.032	4.572	1.700	6x5	2.540	B	0	PAD A & B	IP - 8564A-OP
28	11.05	x	6.35	12.83	x	11.30	U	16.510	x	13.970	0.508	0.762	1.016		2.286	4.572	1.702	6x5	2.540	B	0	-	IP - 8742B
28	11.05	x	9.53	12.83	x	11.30	U	16.510	x	13.970	0.508	0.508	1.016		2.032	4.572	1.700	6x5	2.540	B	0	PAD A & B	IP - 8476E-MO
30	12.19	x	9.91	13.97	x	11.43	U	16.510	x	13.970	0.508	0.508	1.016		2.032	4.572	1.699	6x5	2.540	B	0	PAD No.15	IP - 8725A-MO
32	5.59	x	5.59	7.11	x	7.11	U	22.860	x	22.860	0.508	0.635	0.508		1.651	4.572	1.270	8x8	2.540	B	-	-	IP - 8627B-MO
36	8.13	x	14.48	10.80	x	16.00	U	19.304	x	19.304	0.635	0.762	1.016		2.413	4.572	1.702	7x7	2.540	B	0	-	IP - 8907A-MO
44	24.00	x	24.00	29.61	x	29.61	U	35.001	x	35.001	0.508	0.508	0.508	1.016	2.540	4.572		12x12	2.540	B	-	No.1	IP - 8361B-C
44	28.00	x	27.00		x		U	45.720	x	33.020	1.270	1.016			2.286	3.810		11x4	2.540	B	-	PAD No.1,8,19,20,31,38	IP - 2037A-MO
51	18.54	x	17.53	20.57	x	19.56	U	40.132	x	40.132	0.889	0.889	1.397		3.175	3.810		13x4	2.540	B	-	PIN C1,C13	IP - 1851A-MO
64	10.16	x	10.16	12.19	x	12.19	U	25.400	x	25.400	0.508	0.508	1.016		2.032	4.572	1.270	10x10	2.540	B	0	0	IP - 2219A-MO
64	34.29	x	4.93	38.74	x	10.67	U	42.164	x	21.844	0.762	0.508	0.762	1.016	3.048	4.572		16x4	2.540	B	-	PAD 52,45,13,20	IP - 2009A-MO



# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: mm

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		
	A	X	B	C	X	D	E	X	F														
66	20.96	x	20.96	26.72	x	26.72	U	29.769	x	29.769	0.889	0.635	1.397	1.016	3.937	4.572	0.762	11x6	2.540	B	GND	-	IP - 1632A-MO
66	21.97	x	21.97	24.13	x	24.13	U	27.432	x	27.432	1.016	0.635	1.016		2.667	4.572	0.762	11x6	2.540	B	GND	-	IP - 2099A-MO
68	6.35	x	6.35	8.89	x	8.89	D	29.210	x	29.210	0.635	0.635	0.762		2.032	4.572	1.270	11x11	2.540	B	-	0	IP - 1298A
68	7.39	x	7.39	11.81	x	11.81	U	27.940	x	27.940	0.635	0.635	0.635		1.905	4.572	1.270	11x11	2.540	B	0	0	IP - 8143H
68	7.39	x	7.39	11.81	x	11.81	U	27.940	x	27.940	0.559	0.635	1.092		2.286	4.572	1.270	11x11	2.540	B	0	0	IP - 8548C
68	8.13	x	9.65	10.67	x	12.19	U	26.924	x	26.924	0.508	0.508	1.016		2.032	4.572	1.270	10x10	2.540	B	0	0	IP - 8054FA
68	8.38	x	8.38	12.19	x	12.19	U	26.924	x	26.924	0.508	0.508	1.016		2.032	4.572	1.270	10x10	2.540	B	0	B/G PAD No.8,27,44,63	IP - 982DA-MO
68	8.89	x	8.89	10.67	x	10.67	D	29.210	x	29.210	0.635	0.635	1.016		2.286	4.572	1.270	11x11	2.540	B	0	0	IP - 8153D-MO
68	8.89	x	8.89	11.94	x	11.94	U	27.940	x	27.940	0.508	0.635	1.016		2.159	4.572	1.270	11x11	2.540	B	0	0	IP - 1206C
68	10.01	x	10.01	13.34	x	13.34	U	27.940	x	27.940	0.635	0.635	0.635		1.905	4.570	1.270	11x11	2.540	B	0	GND	IP - 944D-MO
68	11.18	x	11.18	14.22	x	14.22	U	27.940	x	27.940	0.508	0.635	0.762		1.905	4.572	1.270	11x11	2.540	B	-	GND PAD, PIN F2	IP - 8788C-MO
68	11.43	x	11.43	13.26	x	13.26	D	29.210	x	29.210	0.635	0.635	1.016		2.286	4.572	1.295	11x11	2.540	B	0	PAD A, No.62	IP - 8961B-MO
68	11.94	x	11.94	14.22	x	14.22	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	0	IP - 8510A
68	11.94	x	11.94	14.22	x	14.22	U	27.940	x	27.940	1.016	0.508	1.016		2.540	3.810	1.270	11x11	2.540	B	-	B/G PAD No.8	IP - 1504-MO
68	11.94	x	11.94	14.22	x	14.22	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	0	IP - 2146B-MO
68	13.21	x	13.21	16.00	x	16.00	U	27.940	x	27.940	0.762	0.889	1.016		2.667	4.572	1.270	11x11	2.540	B	0	GND PAD	IP - 8664A
68	14.73	x	14.73	17.78	x	17.78	U	27.940	x	27.940	0.508	0.635	0.762		1.905	4.572	1.270	11x11	2.540	B	-	GND PAD	IP - 1778B-MO
72	14.00	x	14.00	22.00	x	22.00	U	27.899	x	27.899	1.199	0.508	0.635	0.635	2.977	3.810	1.001	11x11	2.540	B	-	C3PIN	IP - 2197A-MO
74	46.12	x	38.62	46.12	x	42.22	U	50.521	x	47.201	1.210	0.635	2.370		4.215	4.572	1.001	37x4	2.540	B	4 PINS	-	IP - 1925A-MO
82	33.00	x	33.00	37.00	x	37.00	U	41.501	x	41.501	0.508	0.508	0.635	1.524	3.175	4.572		15x15	2.540	B	-	GND	IP - 1782AA-MO
84	5.97	x	5.97	10.92	x	10.92	U	26.924	x	26.924	0.508	0.635	1.016		2.159	4.572	1.270	10x10	2.540	B	0	-	IP - 2181A-MO
84	6.10	x	6.10	12.19	x	12.19	U	26.924	x	26.924	0.381	0.254	0.762	0.762	2.159	4.572	1.270	10x10	2.540	B	0	-	IP - 1882A-MO
84	7.62	x	7.62	12.19	x	12.19	U	26.924	x	26.924	0.381	0.254	0.762	0.762	2.159	4.572	1.270	10x10	2.540	B	0	-	IP - 1937A-MO
84	8.89	x	8.89	10.92	x	10.92	U	26.924	x	26.924	0.508	0.635	1.016		2.159	3.810	1.270	10x10	2.540	B	0	0	IP - 8691A-MO



# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: mm

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.		
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT		PIN ROW	PITCH		SEAL RING	DIE ATTACH
	A	X	B	C	X	D	E	X	F														
84	8.89	x	8.89	13.97	x	13.97	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572		13x13	2.540	B	0	0	IP - 8188G
84	8.89	x	8.89	12.19	x	12.19	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	0	IP - 8396G
84	8.89	x	8.89	12.19	x	12.19	U	29.464	x	29.464	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	0	IP - 8993B
84	10.16	x	10.16	12.45	x	12.45	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	0	IP - 1114A
84	10.67	x	10.67	12.70	x	12.70	U	26.924	x	26.924	0.508	0.762	0.762		2.032	4.572	1.270	10x10	2.540	B	0	0	IP - 1055AB
84	11.94	x	11.94	14.22	x	14.22	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	No.10	IP - 8480AB
84	11.94	x	11.94	14.99	x	14.99	U	27.940	x	27.940	0.508	0.635	1.016		2.159	4.572	1.270	11x11	2.540	B	-	GND PAD	IP - 1174B-MO
84	13.21	x	13.21	16.00	x	16.00	U	27.940	x	27.940	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	0	GND PAD	IP - 8765A-MO
85	6.86	x	6.86	14.22	x	14.22	U	27.940	x	27.940	0.508	0.635	1.016		2.159	4.572	1.270	11x11	2.540	B	0	0	IP - 1849A
85	12.19	x	10.16	15.65	x	13.61	U	29.464	x	29.464	0.508	0.508	1.016		2.032	4.572	1.270	11x11	2.540	B	VSS	PAD No.65, 98, 131	IP - 1813A-MO
100	8.89	x	8.89	10.92	x	10.92	U	26.924	x	26.924	0.508	0.889	0.889		2.286	4.572	1.270	10x10	2.540	B	0	-	IP - 1313A
100	8.89	x	8.89	10.92	x	10.92	U	26.924	x	26.924	0.508	0.508	1.016		2.032	4.572	1.270	10x10	2.540	B	0	0	IP - 2168A
100	8.89	x	8.89	13.97	x	13.97	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	0	IP - 8188E
100	10.16	x	10.16	12.95	x	12.95	U	26.924	x	26.924	0.508	0.635	1.016		2.159	4.572	1.270	10x10	2.540	B	0	No.39	IP - 8731C
100	11.94	x	11.94	14.48	x	14.48	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	0	IP - 8180-MO
100	28.19	x	28.19	32.26	x	32.26	U	35.560	x	35.560	1.270	0.635	1.905		3.810	4.572	1.270	14x14	2.540	B	-	-	IP - 1872A-MO
101	11.00	x	11.00	13.97	x	13.97	U	33.528	x	33.528	0.635	0.635	1.016		2.286	4.572	1.270	13x13	2.540	B	0	0	IP - 8449C
101	12.70	x	12.70	16.26	x	16.26	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	-	IP - 1823A-MO
108	8.89	x	8.89	13.97	x	13.97	U	30.480	x	30.480	0.508	0.508	1.016		2.032	4.570	1.270	12x12	2.540	B	0	0	IP - 2155A-MO
108	11.43	x	11.43	13.97	x	13.97	U	30.480	x	30.480	0.508	0.508	1.016		2.032	4.572	1.270	12x12	2.540	B	0	0	IP - 2113A-MO
120	8.00	x	8.00	11.94	x	11.94	D	34.544	x	34.544	0.635	0.254	0.508	1.016	2.413	4.318	1.270	13x13	2.540	B	VSS	VSS	IP - 1827A-MO
120	8.26	x	8.26	13.97	x	13.97	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	-	IP - 1759A
120	8.89	x	8.89	16.51	x	16.51	U	27.940	x	27.940	0.635	0.508	0.508	1.524	3.175	3.810	1.727	11x11	2.540	B	0	PAD A,D,E and H	IP - 8342C-MO
120	11.00	x	11.00	13.97	x	13.97	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	-	IP - 8878G

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: mm

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.		
	DIE CAV.			TOP CAV.						UP(U) DOWN(D)	1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT		PIN ROW	PITCH		SEAL RING	DIE ATTACH
	A	X	B	C	X	D	E	X	F														
120	11.00	x	11.00	13.97	x	13.97	U	33.528	x	33.528	0.508	0.635	1.016		2.159	4.572	1.270	13x13	2.540	B	-	GND PAD	IP - 1176B-MO
120	11.99	x	11.99	16.00	x	16.00	U	33.528	x	33.528	0.508	0.635	1.016		2.159	4.572	1.270	13x13	2.540	B	-	GND PAD	IP - 1177B-MO
120	11.99	x	11.99	13.97	x	13.97	U	33.528	x	33.528	0.508	0.508	1.016		2.032	4.572	1.270	13x13	2.540	B	0	0	IP - 8981C
120	13.21	x	13.21	16.00	x	16.00	U	33.528	x	33.528	0.508	0.635	1.016		2.159	4.572	1.270	13x13	2.540	B	-	GND PAD	IP - 8551C-MO
120	13.21	x	13.21	16.00	x	16.00	U	33.528	x	33.528	0.508	0.635	1.016		2.159	4.572	1.270	13x13	2.540	B	0	GND PAD	IP - 8216GA-MO
121	10.00	x	12.00	14.00	x	14.00	U	17.780	x	17.780	0.760	0.508	0.760		2.028	1.999		13x13	1.270	B	-	-	IP - 2133A-MO
121	11.00	x	11.00	13.97	x	13.97	U	33.528	x	33.528	0.762	0.635	0.762		2.159	4.572	1.270	13x13	2.540	B	0	0	IP - 1666A
121	13.21	x	13.21	16.00	x	16.00	U	33.528	x	33.528	0.889	0.635	1.016		2.540	3.810	1.270	13x13	2.540	B	0	-	IP - 1816B-MO
121	14.00	x	14.00	16.51	x	16.51	U	33.528	x	33.528	0.762	0.635	1.016		2.413	4.572	1.270	13x13	2.540	B	0	0	IP - 2136B-MO
121	17.02	x	17.02	20.32	x	20.32	U	33.528	x	33.528	0.762	0.635	0.762		2.159	4.572	1.270	13x13	2.540	B	0	0	IP - 2179B-MO
123	49.02	x	24.28	57.40	x	33.20	U	66.040	x	40.640	1.001	1.379	0.500	1.379	4.260	5.588		25x10	2.540	B	0	PAD No.3, 21, 38, 56	IP - 2251B-MO
132	8.13	x	8.13	16.00	x	16.00	U	35.560	x	35.560	0.508	0.254	0.762	0.762	2.286	4.572	1.270	14x14	2.540	B	0	0	IP - 1841C-MO
132	9.09	x	9.09	12.09	x	12.09	U	34.544	x	34.544	0.508	0.762	1.397		2.667	4.572	1.270	13x13	2.540	B	0	-	IP - 1115B-MO
132	9.53	x	9.53	14.22	x	14.22	U	35.560	x	35.560	0.762	0.508	1.016		2.286	4.572	1.270	14x14	2.540	B	0	0	IP - 2187A
132	11.43	x	11.43	13.97	x	13.97	U	35.560	x	35.560	0.508	0.635	1.143		2.286	4.572	1.270	14x14	2.540	B	0	0	IP - 2122A-MO
132	12.95	x	12.95	15.75	x	15.75	U	34.544	x	34.544	0.635	0.635	0.762		2.032	4.572	1.270	13x13	2.540	B	GND	GND	IP - 1214B
132	13.97	x	13.97	16.00	x	16.00	U	35.560	x	35.560	0.635	0.635	1.016		2.286	4.572	1.270	14x14	2.540	B	0	-	IP - 1398A-MO
133	8.64	x	8.64	12.70	x	12.70	U	34.544	x	34.544	0.508	0.635	1.143		2.286	4.572	1.270	13x13	2.540	B	GND	GND	IP - 1361A-MO
133	11.43	x	11.43	13.97	x	13.97	U	37.084	x	37.084	0.508	0.635	1.143		2.286	4.572	1.270	14x14	2.540	B	0	0	IP - 8991B
133	12.57	x	9.53	16.00	x	12.95	U	34.544	x	34.544	0.635	0.254	0.381	1.016	2.286	4.572	1.270	13x13	2.540	B	VSS	VSS	IP - 8655CA-MO
135	15.29	x	13.41	19.00	x	17.40	U	37.084	x	37.084	0.508	0.508	1.016		2.032	4.572	1.270	14x14	2.540	B	-	0	IP - 975G-MO
135	16.90	x	16.50	20.60	x	20.20	U	37.084	x	37.084	0.508	0.508	1.049		2.065	4.572	1.270	14x14	2.540	B	-	0	IP - 8497AA-MO
144	10.80	x	10.80	16.00	x	16.00	U	40.005	x	40.005	0.508	0.508	1.016		2.032	4.572	1.270	15x15	2.540	B	0		IP - 947D
144	10.16	x	10.16	16.00	x	16.00	U	40.005	x	40.005	0.508	0.508	1.016		2.032	4.572	1.270	15x15	2.540	B	0	0	IP - 8573A

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: mm

LEAD COUNT	CAVITY							OVERALL			LAYER THICKNESS					PIN			NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.			UP(U) DOWN(D)				1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW		PITCH	SEAL RING		DIE ATTACH
	A	X	B	C	X	D		E	X	F													
144	11.99	x	11.99	16.00	x	16.00	U	40.010	x	40.010	0.508	0.635	1.016		2.159	4.572	1.270	15x15	2.540	B	0	0	IP - 8575L-MO
144	11.99	x	11.99	16.00	x	16.00	U	39.980	x	39.980	0.508	0.635	1.016		2.159	4.572	1.270	15x15	2.540	B	-	GND PAD	IP - 1180B-MO
144	13.72	x	13.72	16.00	x	16.00	U	40.010	x	40.010	0.508	0.508	1.016		2.032	4.572	1.270	15x15	2.540	B	0	0	IP - 1169A-MO
144	17.78	x	17.78	20.70	x	20.70	U	40.010	x	40.010	0.635	0.635	0.762		2.032	4.572	1.270	15x15	2.540	B	0	0	IP - 2116C-MO
144	25.40	x	25.40	27.94	x	27.94	U	49.530	x	49.530	1.016	1.016	1.016		3.048	4.572	1.270	15x15	2.540	B	-	-	IP - 1997A-MO
145	7.62	x	7.62	12.70	x	12.70	U	40.010	x	40.010	0.508	0.254	0.635	0.889	2.286	4.572	1.270	15x15	2.540	B	0	0	IP - 1938A-MO
145	8.13	x	8.13	11.94	x	11.94	U	40.010	x	40.010	0.508	0.508	0.508	1.016	2.540	4.572	1.270	15x15	2.540	B	0	0	IP - 2097A-MO
155	10.16	x	10.16	15.24	x	15.24	D	42.164	x	42.164	0.635	0.635	1.016		2.286	5.842	2.540	16x16	2.540	B	0	-	IP - 2021B-MO
156	11.05	x	11.05	13.97	x	13.97	D	42.164	x	42.164	0.508	0.508	1.016		2.032	4.572	1.270	16x16	2.540	B	0	VSS	IP - 1269BA-MO
160	7.62	x	7.62	12.70	x	12.70	U	39.624	x	39.624	0.508	0.381	0.635	0.762	2.286	4.572	1.270	15x15	2.540	B	0	0	IP - 1716A-MO
160	20.00	x	20.00	22.00	x	22.00	U	39.624	x	39.624	0.508	0.508	1.016		2.032	4.572		15x15	2.540	B	0	0	IP - 2159A-MO
176	9.14	x	9.14	14.22	x	14.22	U	39.878	x	39.878	0.635	0.508	0.508	1.016	2.667	4.572	1.270	15x15	2.540	B	GND	GND	IP - 1769A-MO
176	13.46	x	13.46	18.54	x	18.54	U	39.878	x	39.878	0.635	0.508	0.508	1.016	2.667	4.572	1.270	15x15	2.540	B	GND	GND	IP - 1683A-MO
179	15.60	x	15.60	20.93	x	20.93	D	47.244	x	47.244	0.508	0.381	0.762	1.016	2.667	6.223	2.540	18x18	2.540	B	0	I GND	IP - 1102C-MO
180	10.72	x	10.72	16.00	x	16.00	U	40.005	x	40.005	0.508	0.508	0.508	1.016	2.540	4.572	1.270	15x15	2.540	B	0	0	IP - 8344B
180	12.45	x	12.45	17.53	x	17.53	U	40.010	x	40.010	0.508	0.254	0.635	0.762	2.159	4.572	1.270	15x15	2.540	B	-	-	IP - 8516E-MO
180	16.51	x	16.51	20.70	x	20.70	U	40.010	x	40.010	0.508	0.508	0.508	1.016	2.540	4.572	1.270	15x15	2.540	B	0	0	IP - 8837B-MO
181	11.99	x	11.99	16.00	x	16.00	U	40.010	x	40.010	0.508	0.508	0.635	1.016	2.667	4.572	1.270	15x15	2.540	B	0	0	IP - 1758B-MO
181	13.97	x	13.97	17.78	x	17.78	U	40.010	x	40.010	0.508	0.508	0.508	1.016	2.540	4.572	1.270	15x15	2.540	B	0	0	IP - 8385B-MO
181	33.02	x	33.02	40.64	x	40.64	U	46.990	x	46.990	0.889	0.635	1.016		2.540	4.572	1.270	18x18	2.540	B	0	PIN A1	IP - 2127A-MO
201	22.20	x	22.20	29.00	x	29.00	U	38.100	x	38.100	0.254	1.016	0.635	1.016	2.921	4.572		15x15	2.540	B	-	PIN F6	IP - 2065A-MO
207	12.70	x	13.21	17.27	x	17.27	D	44.958	x	44.958	0.635	0.508	0.762	1.016	2.921	4.572	1.270	17x17	2.540	B	GND	GND	IP - 1215B
208	8.76	x	8.76	12.83	x	12.83	U	43.180	x	43.180	0.635	0.508	0.508	0.635	2.286	4.572	1.270	17x17	2.540	B	0	-	IP - 2100A-MO
208	8.76	x	8.76	12.83	x	12.83	U	43.180	x	43.180	0.635	0.508	0.508	0.635	2.286	4.572	1.270	17x17	2.540	B	-	-	IP - 2273A-MO

# NTK CPGA ( Ceramic – Pin Grid Array )

UNIT: mm

LEAD COUNT	CAVITY						OVERALL			LAYER THICKNESS					PIN				NTK MATERIAL CODE B:Black W:White	CONNECTION (0:NON-Connect)		DRAWING NO.	
	DIE CAV.			TOP CAV.						1st	2nd	3rd	4th	TOTAL	LENGTH	STAND OFF HEIGHT	PIN ROW	PITCH		SEAL RING	DIE ATTACH		
	A	X	B	C	X	D	UP(U) DOWN(D)	E	X	F													
208	14.00	x	14.00	20.30	x	20.30	U	43.180	x	43.180	0.500	0.300	0.635	1.016	2.451	3.800	1.001	17x17	2.540	B	0	0	IP - 8149Z-MO
209	10.00	x	10.00	15.60	x	15.60	U	43.180	x	43.180	0.635	0.254	0.508	1.143	2.540	4.572	1.270	17x17	2.540	B	0	0	IP - 8488D-MO
209	14.00	x	14.00	16.99	x	16.99	U	43.000	x	43.000	0.508	0.508	1.016		2.032	4.801	1.016	17x17	2.540	B	0	0	IP - 2126A-MO
223	11.43	x	11.43	14.48	x	14.48	D	47.241	x	47.241	0.762	0.635	1.016		2.413	4.572	1.270	18x18	2.540	B	0	VSS	IP - 1708D-MO
223	16.51	x	16.51	20.60	x	20.60	D	47.244	x	47.244	0.559	0.406	0.584	1.016	2.565	4.826	1.778	18x18	2.540	B	0	0	IP - 1801A-MO
256	16.00	x	16.00	20.07	x	20.07	U	50.800	x	50.800	0.508	0.508	0.762	1.524	3.302	4.572	1.270	20x20	2.540	B	0	0	IP - 2091C-OP
257	15.75	x	14.48	19.56	x	19.56	D	50.038	x	50.038	0.635	0.635	0.635	0.762	2.667	4.572	1.270	19x19	2.540	B	0	GND PAD	IP - 1208A-MO
257	26.00	x	26.00	30.00	x	30.00	U	50.800	x	50.800	0.508	0.508	0.762	1.524	3.302	4.572	1.270	20x20	2.540	B	0	0	IP - 2090B
257	30.00	x	12.00	34.00	x	16.00	U	50.800	x	50.800	0.508	0.508	0.762	1.524	3.302	4.572	1.270	20x20	2.540	B	0	0	IP - 2081A-MO
280	19.51	x	19.51	27.10	x	27.10	U	48.260	x	48.260	0.249	0.991	0.305	0.508	2.997	3.785	0.991	19x19	2.540	B	-	0	IP - 2059A-MO
280	21.34	x	21.34	27.10	x	27.10	U	48.260	x	48.260	0.991	0.305	0.508	1.194	2.997	3.810	0.991	19x19	2.540	B	-	-	IP - 2016B-MO
281	8.89	x	8.89	11.43	x	11.43	U	49.530	x	49.530	0.635	0.254	0.635	1.280	3.058	4.572	1.270	19x19	2.540	B	0	0	IP - 2331AA-MO
281	15.00	x	15.00	19.00	x	19.00	U	49.530	x	49.530	0.635	0.254	0.635	1.280	3.058	4.572	1.270	19x19	2.540	B	0	GND	IP - 8018D-MO
281	21.34	x	21.34	27.10	x	27.10	U	35.999	x	35.999	1.001	0.300	0.500	1.199	3.000	0.100		26x26	1.270	B	-	-	IP - 2153A-MO
288	63.50	x	14.35	70.99	x	25.91	U	80.010	x	50.800	1.016	0.889	0.508	0.508	2.921	0.280		24x12	2.540	B	-	0	IP - 2104A-MO
289	31.70	x	26.70	39.70	x	34.70	U	53.000	x	43.002	0.500	1.001	0.749	1.499	3.749	0.180	1.270	20x16	2.540	B	-	0	IP - 2131A-MO
299	12.20	x	12.20	21.00	x	21.00	D	52.324	x	52.324	0.635	0.254	0.635	1.770	3.802	4.572	1.270	20x20	2.540	B	0	VSS	IP - 8310CA-MO
299	15.24	x	15.24	20.57	x	20.57	D	52.324	x	52.324	0.508	0.254	1.397		2.159	0.180	1.270	20x20	2.540	B	GND	GND	IP - 1486A-MO
391	12.22	x	10.88	16.79	x	15.45	D	47.244	x	47.244	0.559	0.254	0.635	1.300	2.748	0.180	1.270	35x35	2.540	B	0	0	IP - 2145A-OP
391	15.00	x	15.00	18.65	x	18.65	D	47.244	x	47.244	0.559	0.254	0.635	1.300	2.748	0.180	1.270	35x35	2.540	B	4 PAD	0	IP - 2261A-MO
625	17.20	x	17.20	25.60	x	25.60	U	65.999	x	65.999	0.508	0.508	0.508	0.508	0.121	0.180		25x25	2.540	B	-	-	IP - 2225A-MO
1024	18.16	x	18.16	22.68	x	22.68	U	43.180	x	43.180	0.300	0.300	0.300	0.300	0.106	0.090		32x32	1.270	B	GND	GND	IP - 2205A-MO