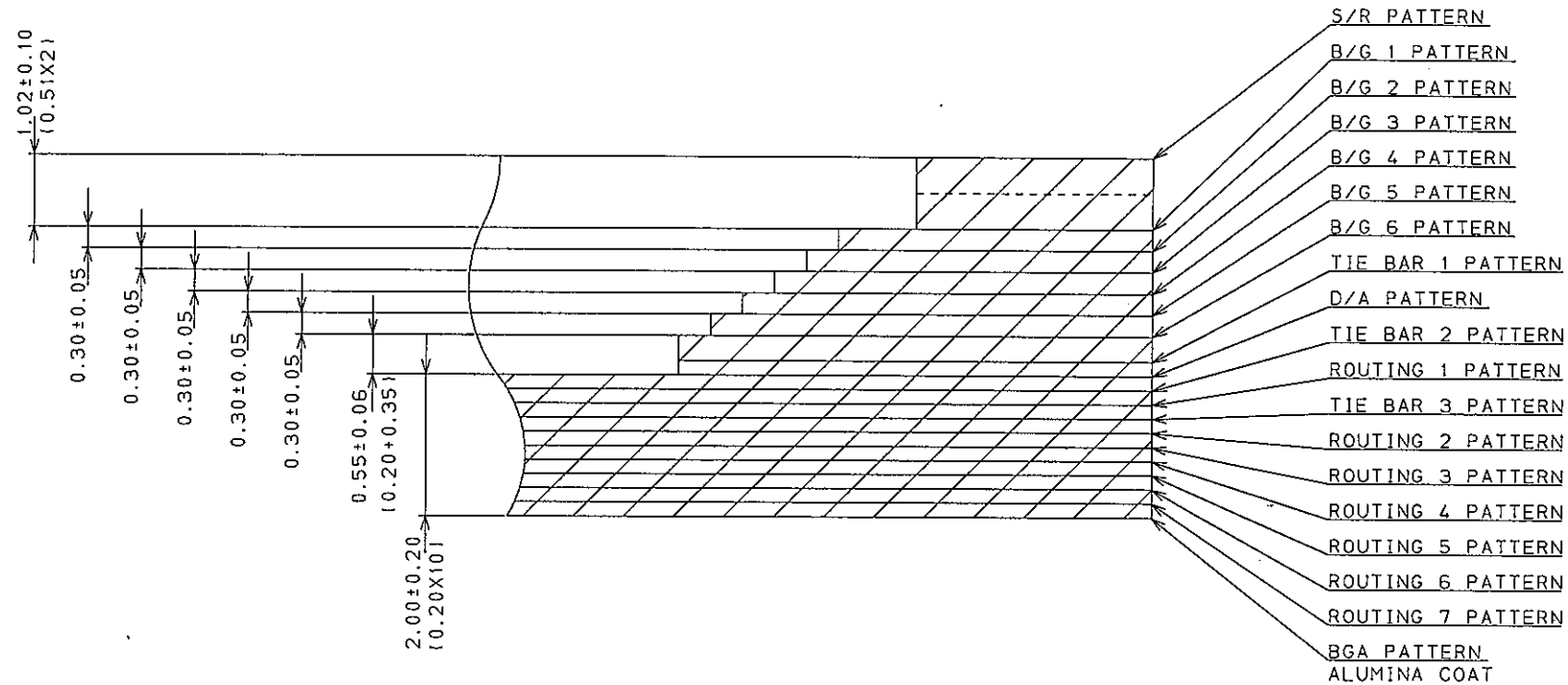


NTK

LATEST REVISION'S DESCRIPTION

E SEE SHEET 1 & 3 OF 11.



E	RE DRAWING	APR.-27-2012
D	RE DRAWING	FEB.-14-2012
C	RE DRAWING	FEB.-03-2012
B	RE DRAWING	JAN.-25-2012
A	RE DRAWING	JAN.-17-2012
φ	NEW DRAWING	DEC.-16-2011

Rev.	Description	Date
E	RE DRAWING	APR.-27-2012
D	RE DRAWING	FEB.-14-2012
C	RE DRAWING	FEB.-03-2012
B	RE DRAWING	JAN.-25-2012
A	RE DRAWING	JAN.-17-2012
φ	NEW DRAWING	DEC.-16-2011

UNLESS OTHERWISE SPECIFIED
TOLERANCES: ± 1 %
N. L. T. 1 DECIMALS X.X ±0.25
2 DECIMALS X.XX ±0.13
CUSTOMER
BOSTON MICROMACHINES
DWG NO.

DRAWN
M.UNO
CHECKED
M.UNO
APPROVED
S.NISHIMURA
UNIT MM
SCALE /

NTK
NGK SPARK PLUG CO., LTD.
TITLE
PACKAGE LAY-UP
DWG NO.
IRKJ3F1-2311A

MODIFIED
DWG NO.

PART NO.

SHEET 2 OF 11

1 2 3 4 5 **NTV** 7 8 9 10 11

E	CHG. CAVITY DIMENSION.
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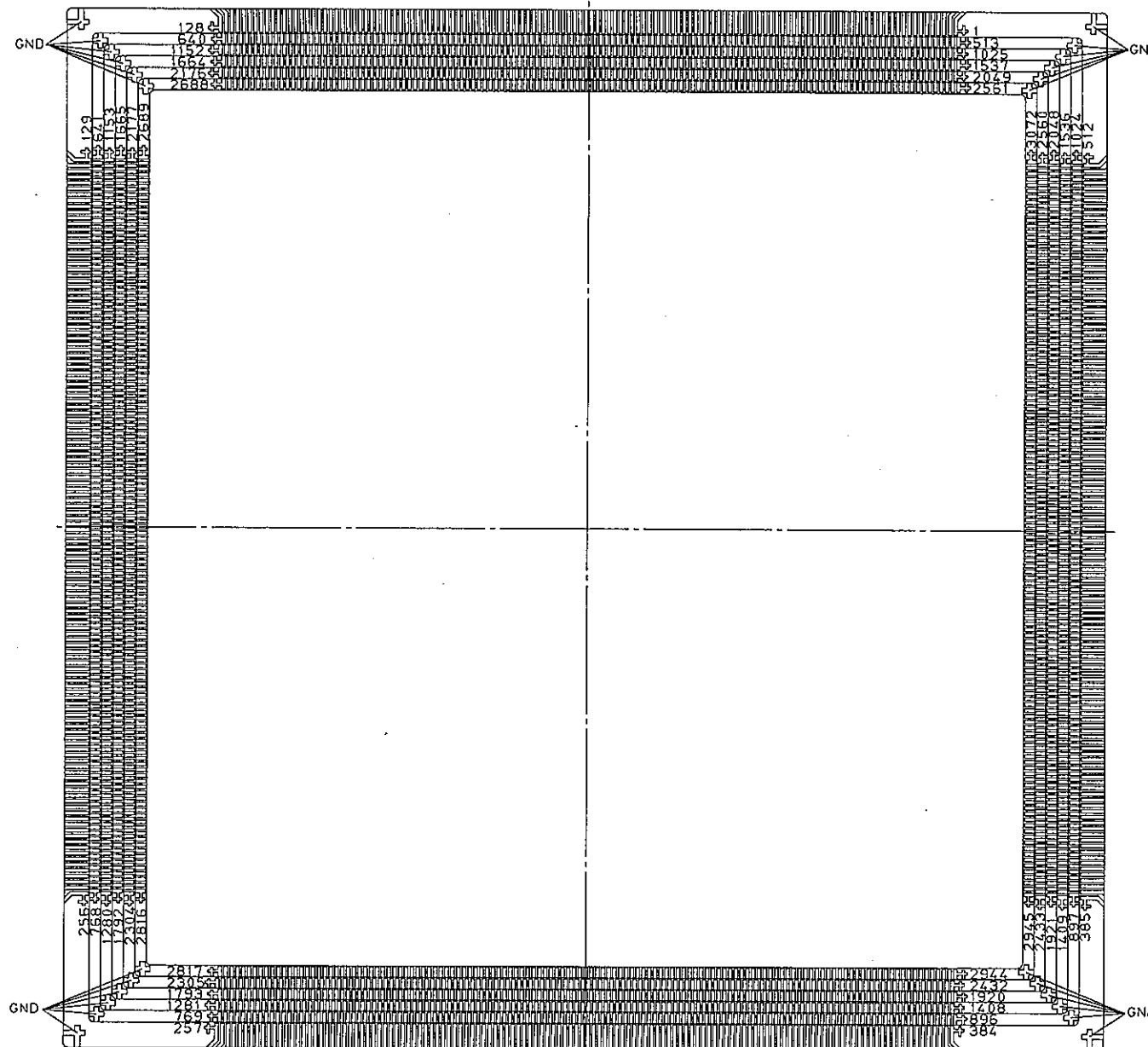


SHEET 3 OF 11

NTK

LATEST REVISION'S DESCRIPTION

E SEE SHEET 1 & 3 OF 11.



E	RE DRAWING	APR.-27 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
0	NEW DRAWING	DEC.-16 -2011

Rev.	Description	Date
	NTK	
	NGK SPARK PLUG CO., LTD.	
	TITLE	
	B/G PADS NO. DETAIL	
	DWG NO.	
	IRKJ3F1-2311A	

UNLESS OTHERWISE SPECIFIED
TOLERANCES: ± 1 %
N. L. T. 1 DECIMALS X.X ± 0.25
2 DECIMALS X.XX ± 0.13

CUSTOMER
BOSTON MICROMACHINES

DWG NO.

DRAWN
M.UNO

CHECKED
M.UNO

APPROVED
S.NISHIMURA

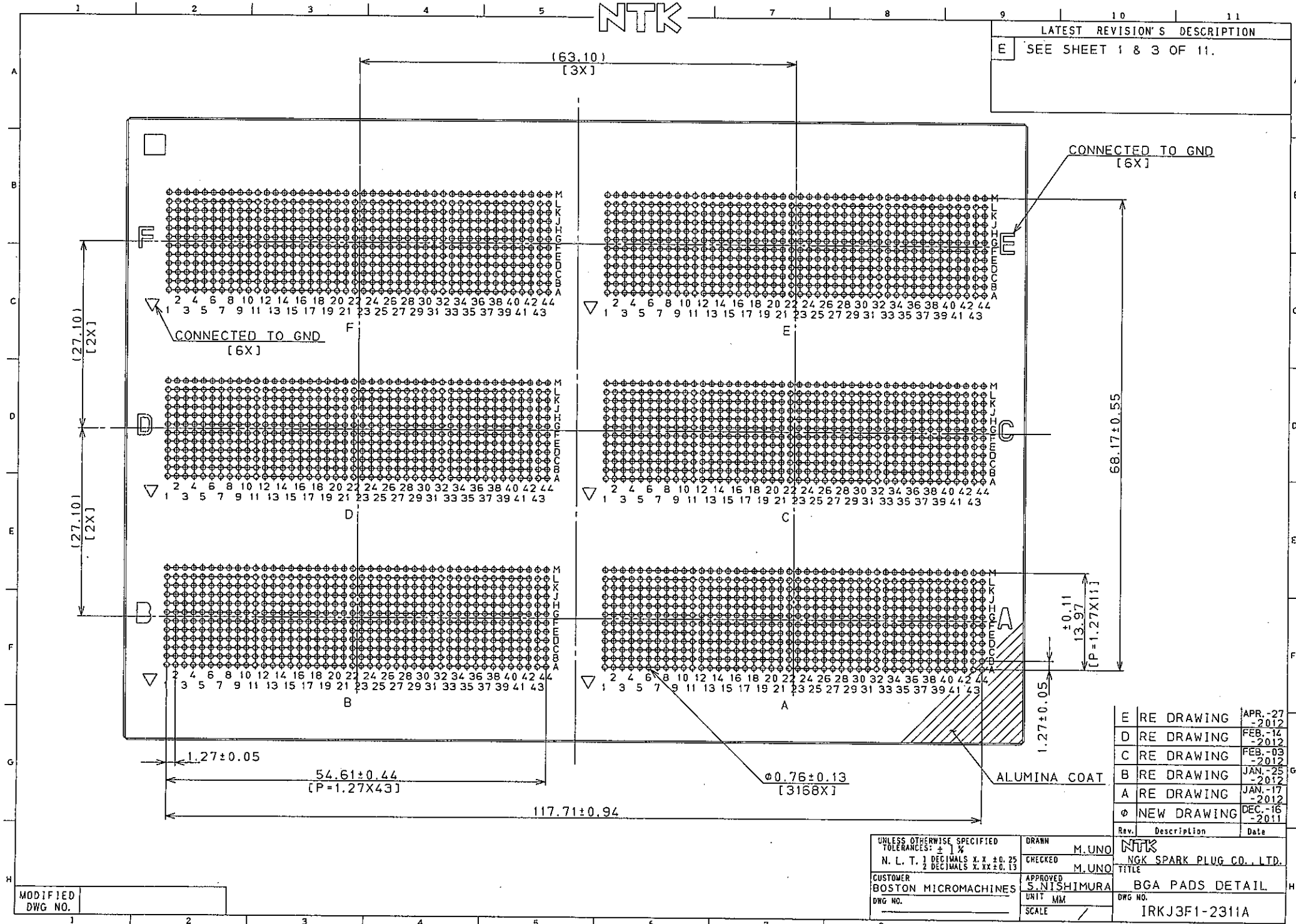
UNIT MM

SCALE /

MODIFIED
DWG NO.

PART NO.

SHEET 4 OF 11



E	RE DRAWING	APR.-27 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
Ø	NEW DRAWING	DEC.-16 -2011

REV.	DESCRIPTION	DATE
0	NTK	
	NGK SPARK PLUG CO., LTD.	
	TITLE	
A	CONNECTION TABLE III	
	DWG NO.	
	IRKJ3F1-2311A	

SHEET 6 OF 11

CONNECTION TABLE

PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA
621	D-E43	671	C-M22	721	C-E38	771	C-G28	821	C-G13	871	C-G3	921	D-A26	971	D-L4	1021	D-F14	1071	F-L36	1121	F-D44	1171	A-H11	1206	A-K23		
622	D-D43	672	C-L22	722	C-C38	772	C-G27	822	C-H13	872	C-H3	922	D-B26	972	D-M3	1022	D-E20	1072	F-J36	1122	F-D43	1172	A-D37	1207	A-H23		
623	D-C43	673	C-M23	723	C-A38	773	C-G26	823	C-J13	873	C-J3	923	D-A25	973	D-M4	1023	D-E21	1073	F-M37	1123	F-D42	1173	A-K12	1208	A-L24		
624	D-G44	674	C-L23	724	C-D37	774	C-G25	824	C-K13	874	C-K3	924	D-B25	974	D-M5	1024	D-D21	1074	F-L37	1124	F-D41	1174	A-G38	1209	A-J24		
625	D-F44	675	C-K33	725	C-B37	775	C-G24	825	C-F12	875	C-F2	925	D-A24	975	D-J6	1025	F-L13	1075	F-K37	1125	F-C44	1175	A-M13	1210	A-M25		
626	D-E44	676	C-H33	726	C-E36	776	C-K24	826	C-G12	876	C-G2	926	D-B24	976	D-L6	1026	F-M14	1076	F-J37	1126	F-C43	1176	A-F38	1211	A-K25		
627	D-D44	677	C-L34	727	C-C36	777	C-L24	827	C-H12	877	C-H2	927	D-A23	977	D-H7	1027	F-L14	1077	F-M38	1127	F-C42	1177	A-J13	1212	A-H25		
628	D-B39	678	C-J34	728	C-A36	778	C-M24	828	C-J12	878	C-J2	928	D-B23	978	D-K7	1028	F-M15	1078	F-L38	1128	F-C41	1178	A-E38	1213	A-L26		
629	D-C44	679	C-M35	729	C-D35	779	C-G23	829	C-K12	879	C-K2	929	D-A22	979	D-M7	1029	F-L15	1079	F-K38	1129	F-B44	1179	A-L14	1214	A-J26		
630	D-B40	680	C-K35	730	C-B35	780	C-H23	830	C-F11	880	C-F1	930	D-B22	980	D-J8	1030	F-M16	1080	F-J38	1130	F-B43	1180	A-D38	1215	A-M27		
631	D-B41	681	C-H35	731	C-E34	781	C-J23	831	C-G11	881	C-G1	931	D-C12	981	D-L8	1031	F-L16	1081	F-M39	1131	F-B42	1181	A-K14	1216	A-K27		
632	D-B43	682	C-L36	732	C-C34	782	C-K23	832	C-H11	882	C-H1	932	D-E12	982	D-H9	1032	F-M17	1082	F-L39	1132	F-A44	1182	A-H14	1217	A-H27		
633	D-B44	683	C-J36	733	C-A34	783	C-G22	833	C-J11	883	C-J1	933	D-B11	983	D-K9	1033	F-L17	1083	F-K39	1133	F-A43	1183	A-C38	1218	A-L28		
634	D-B42	684	C-M37	734	C-D33	784	C-H22	834	C-K11	884	C-L6	934	D-D11	984	D-M9	1034	F-M18	1084	F-J39	1134	F-A42	1184	A-M15	1219	A-J28		
635	D-A39	685	C-K37	735	C-B33	785	C-J22	835	C-F10	885	C-K1	935	D-A10	985	D-J10	1035	F-L18	1085	F-M40	1135	F-B41	1185	A-K15	1220	A-M29		
636	D-A42	686	C-H37	736	C-D40	786	C-K22	836	C-G10	886	C-L5	936	D-C10	986	D-L10	1036	F-M19	1086	F-L40	1136	F-A41	1186	A-G39	1221	A-K29		
637	D-A43	687	C-L38	737	C-G40	787	C-G21	837	C-H10	887	C-L4	937	D-E10	987	D-H11	1037	F-L19	1087	F-K40	1137	F-D40	1187	A-H15	1222	A-H29		
638	D-A44	688	C-J38	738	C-H40	788	C-H21	838	C-J10	888	C-L2	938	D-B9	988	D-K11	1038	F-M20	1088	F-J40	1138	F-C40	1188	A-L16	1223	A-L30		
639	D-A41	689	C-M39	739	C-F40	789	C-J21	839	C-K10	889	C-L1	939	D-D9	989	D-M11	1039	F-L20	1089	F-M44	1139	F-B40	1189	A-J16	1224	A-J30		
640	D-A40	690	C-K39	740	C-E40	790	C-K21	840	C-F9	890	C-L3	940	D-A8	990	D-J12	1040	F-M21	1090	F-M43	1140	F-A40	1190	A-M17	1225	A-M31		
641	C-M7	691	C-H39	741	C-G39	791	C-G20	841	C-G9	891	C-M6	941	D-C8	991	D-L12	1041	F-L21	1091	F-M42	1141	F-D39	1191	A-K17	1226	A-K31		
642	C-L7	692	C-L40	742	C-F39	792	C-H20	842	C-H9	892	C-M3	942	D-E8	992	D-J5	1042	F-M22	1092	F-M41	1142	F-C39	1192	A-H17	1227	A-H31		
643	C-M8	693	C-J40	743	C-G38	793	C-J20	843	C-J9	893	C-M2	943	D-B7	993	D-F5	1043	F-L22	1093	F-L44	1143	F-B39	1193	A-L18	1228	A-L32		
644	C-L8	694	C-M42	744	C-F38	794	C-K20	844	C-K9	894	C-M1	944	D-D7	994	D-E5	1044	F-M23	1094	F-L43	1144	F-A39	1194	A-J18	1229	A-J32		
645	C-M9	695	C-M41	745	C-M26	795	C-G19	845	C-F8	895	C-M4	945	D-A6	995	D-G5	1045	F-L23	1095	F-L42	1145	F-D38	1195	A-M19	1230	A-M33		
646	C-L9	696	C-L42	746	C-G37	796	C-H19	846	C-G8	896	C-M5	946	D-C6	996	D-H5	1046	F-M24	1096	F-L41	1146	F-C38	1196	A-K19	1231	A-K33		
647	C-M10	697	C-L41	747	C-F37	797	C-J19	847	C-H8	897	D-A38	947	D-E6	997	D-F6	1047	F-L24	1097	F-K44	1147	F-B38	1197	A-H19	1232	A-H33		
648	C-L10	698	C-K42	748	C-M25	798	C-K19	848	C-J8	898	D-B38	948	D-B5	998	D-G6	1048	F-M25	1098	F-K43	1148	F-A38	1198	A-L20	1233	A-L34		
649	C-M11	699	C-K41	749	C-G36	799	C-G18	849	C-K8	899	D-A37	949	D-D5	999	D-F7	1049	F-L25	1099	F-K42	1149	F-D37	1199	A-J20	1234	A-J34		
650	C-L11	700	C-J42	750	C-F36	800	C-H18	850	C-F7	900	D-B37	950	D-A3	1000	D-G7	1050	F-M26	1100	F-K41	1150	F-C37	1200	A-M21	1235	A-M35		
651	C-M12	701	C-J41	751	C-L26	801	C-J18	851	C-G7	901	D-A36	951	D-A4	1001	D-A19	1051	F-L26	1101	F-J44	1151	F-B37	1201	A-K21	1236	A-K35		
652	C-M13	702	C-H42	752	C-G35	802	C-K18	852	C-H7	902	D-B36	952	D-B3	1002	D-F8	1052	F-M27	1102	F-J43	1152	F-A37	1202	A-H21	1237	A-H35		
653	C-L12	703	C-H41	753	C-F35	803	C-G17	853	C-J7	903	D-A35	953	D-B4	1003	D-G8	1053	F-L27	1103	F-J42	1153	A-D31	1203	A-L22	1238	A-L36		
654	C-L13	704	C-G42	754	C-L25	804	C-H17	854	C-K7	904	D-B35	954	D-C3	1004	D-A20	1054	F-M28	1104	F-J41	1154	A-F31	1204	A-J22	1239	A-J36		
655	C-M14	705	C-G41	755	C-G34	805	C-J17	855	C-F6	905	D-A34	955	D-C4	1005	D-F9	1055	F-L28	1105	F-H44	1155	A-E31	1205	A-M23	1240	A-M37		
656	C-L14	706	C-F42	756	C-F34	806	C-K17	856	C-G6	906	D-B34	956	D-D3	1006	D-G9	1056	F-M29	1106	F-H43	1156	A-G30						
657	C-M15	707	C-F41	757	C-G33	807	C-G16	857	C-H6	907	D-A33	957	D-D4	1007	D-B19	1057	F-L29	1107	F-H42	1157	A-G31						
658	C-L15	708	C-E42	758	C-K26	808	C-H16	858	C-J6	908	D-A32	958	D-E3	1008	D-F10	1058	F-M30	1108	F-H41	1158	A-G32						
659	C-M16	709	C-E41	759	C-F33	809	C-J16	859	C-K6	909	D-B33	959	D-E4	1009	D-G10	1059	F-L30	1109	F-G44	1159	A-F36						
660	C-L16	710	C-D42	760	C-K25	810	C-K16	860	C-F5	910	D-B32	960	D-F3	1010	D-B20	1060	F-M31	1110	F-G43	1160	A-F35						
661	C-M17	711	C-D41	761	C-G32	811	C-G15	861	C-G5	911	D-A31	961	D-F4	1011	D-F11	1061	F-L31	1111	F-G42	1161	A-G36						
662	C-L17	712	C-C42	762	C-F32	812	C-H15	862	C-H5	912	D-B31	962	D-G3	1012	D-G11	1062	F-M32	1112	F-G41	1162	A-E36						
663	C-M18	713	C-C41	763	C-J25	813	C-J15	863	C-J5	913	D-A30	963	D-G4	1013	D-F12	1063	F-L32	1113	F-F44	1163	A-K9						
664	C-L18	714	C-B42	764	C-F31	814	C-K15	864	C-K5	914	D-B30	964	D-H3	1014	D-C19	1064	F-M33	1114	F-F43	1164	A-D36						
665	C-M19	715	C-B41	765	C-G31	815	C-F14	865	C-F4	915	D-A29	965	D-H4	1015	D-G12	1065	F-L33	1115	F-F42	1165	A-M10						
666	C-L19	716	C-A42	766	C-H25	816	C-G14	866	C-G4	916	D-B29	966	D-J3	1016	D-C20	1066	F-M34	1116	F-F41	1166	A-G37						
667	C-M20	717	C-A41	767	C-H24	817	C-H14	867	C-H4	917	D-A28	967	D-J4	1017	D-F13	1067	F-L34	1117	F-E44	1167	A-J10						
668	C-L20	718	C-A40	768	C-J24	818	C-J14	868	C-J4	918	D-B28	968	D-K3	1018	D-G13	1068	F-M35	1118	F-E43	1168	A-F37						
669	C-M21	719	C-D39	769	C-G30	819	C-K14	869	C-K4	919	D-A27	969	D-K4	1019	D-D20	1069	F-L35	1119	F-E42	1169	A-L11						
670	C-L21	720	C-B39	770	C-G29	820	C-F13	870	C-F3	920	D-B27	970	D-L3	1020	D-G14	1070	F-M36	1120	F-F41	1170	A-E37						

E	RE DRAWING	APR.-27 -2012
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C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
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Φ	NEW DRAWING	DEC.-16 -2011
Rev	Description	Date

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TOLERANCES: $\pm 1\%$
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CUSTOMER
BOSTON MICROMACHINES
DWG NO.

DRAWN	M. UN
CHECKED	M. UN
APPROVED	
S. NISHIMUR	
UNIT	MM

Rev.	Description	Date
0	NTK	
0	NGK SPARK PLUG CO., LTD.	
	TITLE	
A	CONNECTION TABLE (2)	
	DWG NO.	

MODIFIED DWG. NO.

PART NO.

SHEET 7 OF 11

E SEE SHEET 1 & 3 OF 11.

CONNECTION TABLE

PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA	PAD	BGA
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E	RE DRAWING	APR.-27 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
Ø	NEW DRAWING	DEC.-16 -2011

UNLESS OTHERWISE SPECIFIED
TOLERANCES: $\pm 1\%$

N. L. T.	1 DECIMALS	X. X	± 0.2
	2 DECIMALS	X. XX	± 0.1

CUSTOMER
BOSTON MICROMACHINES

BOSTON MICROMACHINES
PKG NO.

DRAWN M. UN

5	CHECKED	M. UN
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APPROVED
S. NISHIMUR

UNIT	MM
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Rev.	Description	Date
0	NTK	

0	NGK SPARK PLUG CO., LTD.
0	TITLE

CONNECTION TABLE (3)

DWG NO.	
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MODIFIED
DWG NO.

PART NO.

SHEET 8 OF 11

CONNECTION TABLE

[illegible]

E	RE DRAWING	APR.-27 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
Φ	NEW DRAWING	DEC.-16 -2011

UNLESS OTHERWISE SPECIFIED
TOLERANCES: $\pm 1\%$
N. L. T. 1 DECIMALS X.X ± 0.25
2 DECIMALS X.XX ± 0.13

5	DRAWN	M. UNO
8	CHECKED	M. UNO

CUSTOMER
BOSTON MICROMACHINES
DWG NO.

APPROVED
S. NISHIMURA
UNIT MM

REV.	DESCRIPTION	DATE
0	NTK	
0	NGK SPARK PLUG CO., LTD.	
	TITLE	
A	CONNECTION TABLE (4)	
	DRG NO.	
	1DK 1051 0011	

MODIFIED DWG NO.	
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PART NO.

SHEET 9 OF 11

E	RE DRAWING	APR.-21 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
Ø	NEW DRAWING	DEC.-16 -2011

REV.	DESCRIPTION	DATE
NTK	NGK SPARK PLUG CO., LTD.	
TITLE	CONNECTION TABLE 15	
DWG NO.	IRK 13E1-2311A	

SHEET 10 OF 11

NTK

LATEST REVISION'S DESCRIPTION

E SEE SHEET 1 & 3 OF 11.

CONNECTION TABLE

GND					
A-F15	B-F15	C-F15	D-F15	E-F15	F-F15
A-F16	B-F16	C-F16	D-F16	E-F16	F-F16
A-F17	B-F17	C-F17	D-F17	E-F17	F-F17
A-F18	B-F18	C-F18	D-F18	E-F18	F-F18
A-F19	B-F19	C-F19	D-F19	E-F19	F-F19
A-F20	B-F20	C-F20	D-F20	E-F20	F-F20
A-F21	B-F21	C-F21	D-F21	E-F21	F-F21
A-F22	B-F22	C-F22	D-F22	E-F22	F-F22
A-F23	B-F23	C-F23	D-F23	E-F23	F-F23
A-F24	B-F24	C-F24	D-F24	E-F24	F-F24
A-F25	B-F25	C-F25	D-F25	E-F25	F-F25
A-F26	B-F26	C-F26	D-F26	E-F26	F-F26
A-F27	B-F27	C-F27	D-F27	E-F27	F-F27
A-F28	B-F28	C-F28	D-F28	E-F28	F-F28
A-F29	B-F29	C-F29	D-F29	E-F29	F-F29
A-F30	B-F30	C-F30	D-F30	E-F30	F-F30

E	RE DRAWING	APR.-27 -2012
D	RE DRAWING	FEB.-14 -2012
C	RE DRAWING	FEB.-03 -2012
B	RE DRAWING	JAN.-25 -2012
A	RE DRAWING	JAN.-17 -2012
Ø	NEW DRAWING	DEC.-16 -2011

Rev.	Description	Date
	NTK	
	NGK SPARK PLUG CO., LTD.	
	TITLE	
	CONNECTION TABLE (61	
	DWG NO.	
	IRKJ3F1-2311A	

UNLESS OTHERWISE SPECIFIED TOLERANCES: ± 1 % N. L. T. 1 DECIMALS X.X ±0.25 2 DECIMALS X.XX ±0.13		DRAWN M.UNO
CUSTOMER BOSTON MICROMACHINES		CHECKED M.UNO
DWG NO.		APPROVED S.NISHIMURA
		UNIT MM
		SCALE /

MODIFIED
DWG NO.