			Registered			Paccivo			
		IPC-SM-782 Component	Land Pattern	Faabmedia land	Land Pattern	Generic			
JEDEC Number		Identifier	Number	pattern name	Status	Symbol	Family	Description	Pins
DO-217				·			Button Rectifier	Button Rectifier	
DO-200 DO-211	Cancelled replaced by TO-244-AA-AB						Disc Type Flange Mounted Family	Disc Type Flange Mounted Family (Rectangular base)	
DO-211 DO-213	Cancelled replaced by 10-244-AA-AB						Leadless Family	riange Mounted Family (Rectangular base)	
DO-213 AA			200A	IPC-RLPN-200A	Done		Metal Electrode Face (MELF) Components	SOD-80/MLL 34 Diode	
DO-204							Lead Mounted Family	Lead Mounted Family (Round Lead Axial)	
DO-204-AA				DO-204-AA					
DO-204-AB				DO-204-AB					
DO-204-AC				DO-204-AC					
DO-204-AD DO-204-AE				DO-204-AD DO-204-AE					
DO-204-AL DO-204-AF				DO-204-AE					
DO-204-AG				DO-204-AG					
DO-204-AH				DO-204-AH					
DO-204-AJ				DO-204-AJ					
DO-204-AK DO-204-AL				DO-204-AK DO-204-AL	Done				
DO-204-AL DO-204-AM				DO-204-AL DO-204-AM	Done				
DO-204-AN				DO-204-AN					
DO-204-AP				DO-204-AP					
DO-204-AR				DO-204-AR					
		SOD 123	220A	IPC-RLPN-220A	Done		Plastic Surface Mount Family	C Bend Plastic Surface-Mount	
DO-214AA DO-215		SMB	221A	IPC-RLPN-221A	Done		Plactic Surface Mount Family	Gull Wing Plactic Surface Mount	
DO-215 DO-216							Plastic Surface Mount Family Plastic Surface Mount Family	Gull Wing Plastic Surface-Mount Gull Wing Plastic Surface-Mount	
DO-218							Plastic Surface Mount Family	Power Outline Plastic Surface Mount C-Bend	
DO-219							Plastic Surface Mount Family	Outline Plastic Surface Mount Flat	
DO-7	(Archived) see DO-204-AA						Round Body Axial Lead	Axial Lead, Round Body	
DO-13	(Archived) see DO-202-AA (Also Archived)						Round Body Axial Lead	Axial Lead, Round Body	
DO-15 DO-29	(Archived) see DO-204-AC (Archived) see DO-204-AF						Round Body Axial Lead Round Body Axial Lead	Axial Lead, Round Body Axial Lead, Round Body	
DO-29 DO-34	(Archived) see DO-204-AG						Round Body Axial Lead	Axial Lead, Round Body Axial Lead, Round Body	
DO-35	(Archived) see DO-204-AG						Round Body Axial Lead	Axial Lead, Round Body Axial Lead, Round Body	
DO-41	(Archived) see DO-204-AL						Round Body Axial Lead	Axial Lead, Round Body	
DO-201							Round Body Axial Type	Axial Type, Round Body, Tapered-End	
DO-208							Sing-End, Press-Fit	Sing-End, Press-Fit, Flanged	
DO-209 DO-203							Sing-End, Press-Fit Stud Hex Base	Sing-End, Press-Fit, Flanged Stud-Hex Base, Solid Terminals	
DO-205							Stud Hex Base	Stud-Hex Base, Fles Terminals	
DO-5	see DO-203-AB						Terminal Stud, Axial Lead	Terminal Stud, Axial Lead	
MO-010							Axial Quad Family	1.56 mm (0.065") Pitch	12
MO-017							Axial Quad Family	2.54mm (0.100") Pitch	52, 62
MO-149							Ball Grid Array (BGA) Family	Tape BGA 1, 1.27, 1.5mm Pitch	100 thru 2401
MO-151							Ball Grid Array (BGA) Family	Plastic BGA 1, 1.27, 1.5mm Pitch	16 thru 1089
		PBGA 7x7 FE16 PBGA 7x7 FO9	1020 1021				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	4x4 3x3
		PBGA 8x8 FO25	1021				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	5x5
		PBGA 8x8 FE16	1023				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	4x4
		PBGA 9x9 FE36	1024				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	6x6
		PBGA 9x9 FO25	1025				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	5x5
		PBGA 10x10 FE36	1026				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	6x6
		PBGA 10x10 FO25	1027				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	5x5
		PBGA 11x11 FO49 PBGA 11x11 FE36	1028 1029				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	7x7 6x6
		PBGA 11x11 FE36 PBGA 12x12 FE64	1030				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	8x8
		PBGA 12x12 FO49	1031				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	7x7
		PBGA 13x13 FE64	1032				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	8x8
		PBGA 13x13 FO49	1033				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	7x7
		PBGA 14x14 FO81	1034				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	9x9
		PBGA 14x14 FE64	1035				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	8x8
		PBGA 15x15 FE100 PBGA 15x15 FO81	1036 1037				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	10x10 9x9
		PBGA 17x17 FO121	1037				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	11x11
		PBGA 17x17 FE100	1039				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	10×10
		PBGA 19x19 FE144	1040				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	12x12
		PBGA 19x19 FO121	1041				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	11x11
		PBGA 21x21 FE196	1042				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	14x14
		PBGA 21x21 F0169	1043 1044				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	13x13 15x15
		PBGA 23x23 FO225 PBGA 23x23 FE196	1044 1045				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	15x15 14x14
		PBGA 23x23 FE196 PBGA 25x25 FE256	1045				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	14X14 16X16
		PBGA 25x25 F0225	1047				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	15x15
		PBGA 27x27 FE324	1048				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	18x18
		PBGA 27x27 FO289	1049				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	17x17
		PBGA 29x29 FO361	1050				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	19x19
		PBGA 29x29 FE324	1051				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	18x18
		PBGA 31x31 FE400	1052				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	20x20
		PBGA 31x31 FO361 PBGA 33x33 FE484	1053 1054				Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch Plastic BGA 1.5mm Pitch	19x19 22x22
		PBGA 33x33 FO441	1054				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	21x21
		PBGA 35x35 FO529	1056				Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	23x23

		Packages and LandPatterns		
PBGA 35x35 FE484	1057	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	22x22
PBGA 37.5x37.5 FO625	1057	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	25x25
PBGA 37.5x37.5 FF576	1056		Plastic BGA 1.5mm Pitch	23x23 24x24
		Ball Grid Array (BGA) Family		
PBGA 40x40 FE676 PBGA 40x40 FO625	1060 1061	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	26x26
		Ball Grid Array (BGA) Family		25x25
PBGA 42.5x42.5 FE784	1062	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	28×28
PBGA 42.5x42.5 FO729	1063	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	27x27
PBGA 45x45 FE900	1064	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	30x30
PBGA 45x45 FO841	1065	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	29x29
PBGA 47.5x47.5 FO961	1066	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	31x31
PBGA 47.5x47.5 FE900	1067	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	30x30
PBGA 50x50 FO1089	1068	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	33x33
PBGA 50x50 FE1024	1069	Ball Grid Array (BGA) Family	Plastic BGA 1.5mm Pitch	32x32
PBGA 7x7 FO25	960	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	5x5
PBGA 7x7 FE16	961	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	4x4
PBGA 8x8 FE36	962	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	6x6
PBGA 8x8 FO25	963	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	5x5
PBGA 9x9 FE36	964	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	6x6
PBGA 9x9 FO25	965	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	5x5
PBGA 10×10 FE49	966	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	7×7
PBGA 10x10 FO36	967	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	6x6
PBGA 10x10 F030	968		Plastic BGA 1.27mm Pitch	8x8
PBGA 11x11 FD49	969	Ball Grid Array (BGA) Family Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	7x7
PBGA 11x11 F049 PBGA 12x12 FE81	909	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	9x9
PBGA 12×12 FO64	971	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	8x8
PBGA 13x13 FE100	972	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	10×10
PBGA 13x13 FO81	973	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	9x9
PBGA 14x14 FE100	974	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	10×10
PBGA 14x14 FO81	975	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	9x9
PBGA 15x15 FO121	976	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	11x11
PBGA 15x15 FE100	977	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	10×10
PBGA 17x17 FO169	978	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	13x13
PBGA 17x17 FE144	979	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	12x12
PBGA 19x19 FE196	980	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	14×14
PBGA 19x19 FO169	981	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	13x13
PBGA 21x21 FE256	982	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	16x16
PBGA 21x21 FO225	983	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	15×15
PBGA 23x23 FE324	984	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	18x18
PBGA 23x23 FO289	985	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	17x17
PBGA 25x25 FO361	986	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	19x19
PBGA 25x25 FE324	987	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	18×18
PBGA 27x27 FO441	988	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	21x21
PBGA 27x27 FE400	989	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	20x20
PBGA 27X27 FE400 PBGA 29X29 FE484	999	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	20x20 22x22
	990			
PBGA 29x29 FO441	991	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	21x21
PBGA 31x31 FE576	992	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	24x24
PBGA 31x31 FO529		Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	23x23
PBGA 33x33 FO625	994	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	25x25
PBGA 33x33 FE576	995	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	24x24
PBGA 35x35 FO729	996	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	27x27
PBGA 35x35 FE676	997	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	26x26
PBGA 37.5x37.5 FO841	998	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	29x29
PBGA 37.5x37.5 FE784	999	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	28x28
PBGA 40x40 FO961	1000	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	31x31
PBGA 40x40 FE900	1001	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	30x30
PBGA 42.5x42.5 FO1089	1002	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	33x33
PBGA 42.5x42.5 FE1024	1003	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	32x32
PBGA 45x45 FO1225	1004	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	35x35
PBGA 45x45 FO1156	1005	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	34x34
PBGA 47.5x47.5 FO1369	1006	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	37x37
PBGA 47.5x47.5 FE1296	1007	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	36x36
PBGA 50x50 FO1521	1008	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	39x39
PBGA 50x50 FE1444	1009	Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch	38x38
PBGA 7x7 FE36	900	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	6x6
PBGA 7x7 FO25	901	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	5x5
PBGA 8x8 FO49	902	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	7×7
PBGA 8x8 FE36	903	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	6x6
PBGA 9x9 FE64	904	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	8x8
PBGA 9x9 FO49	905	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	7x7
PBGA 10x10 FO81	906	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	9x9
PBGA 10x10 F061	907	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	8x8
PBGA 10x10 FE100	908	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	10x10
PBGA 11x11 FE100 PBGA 11x11 FO81	908	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	9x9
PBGA 11x11 F081 PBGA 12x12 F0121	910		Plastic BGA 1mm Pitch	9x9 11x11
	910	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	11x11 10x10
PBGA 12x12 FE100 PBGA 13x13 FF144	911	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	10x10 12x12
		Ball Grid Array (BGA) Family		
PBGA 13x13 FO121	913	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	11x11
PBGA 14x14 FO169	914	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	13x13
PBGA 14×14 FE144	915	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	12×12
PBGA 15x15 FE196	916	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	14×14
PBGA 15x15 FO169	917	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	13x13
PBGA 17x17 FE256	918	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	16x16
PBGA 17x17 FO225	919	Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch	15x15

FE1156? IPC-SM-782 mistake? 14.1.2 P4

PBGA 19x19 FE324	920
PBGA 19x19 FO289	921
PBGA 21x21 FE400	922
PBGA 21x21 FO361	923
PBGA 23x23 FE484	924
PBGA 23x23 FO441	925
PBGA 25x25 FE576	926
PBGA 25x25 FO529	927
PBGA 27x27 FE676	928
PBGA 27x27 FO625	929
PBGA 29x29 FE784	930
PBGA 29x29 FO729	931
PBGA 31x31 FE900	932
PBGA 31x31 FO841	933
PBGA 33x33 FE1024	934
PBGA 33x33 FO961	935
PBGA 35x35 FE1156	936
PBGA 35x35 FO1089	937
PBGA 37.5x37.5 FO1369	938
PBGA 37.5x37.5 FE1296	939
PBGA 40x40 FO1521	940
PBGA 40x40 FE1444	941
PBGA 42.5x42.5 FE1764	942
PBGA 42.5x42.5 FO1681	943
PBGA 45x45 FE1936	945
PBGA 45x45 FO1849	946
PBGA 47.5x47.5 FO2209	947
PBGA 47.5x47.5 FE2116	948
PBGA 50x50 FO2401	949
PBGA 50x50 FE2304	950

Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
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Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Plastic BGA 1mm Pitch
Ball Grid Array (BGA) Family	Ceramic BGA Square 1mm, 1.27mm, 1.5mm Pitch
Ball Grid Array (BGA) Family	Ceramic BPA Rectangular
Ball Grid Array (BGA) Family	Ceramic CGA Rectangular

20X20
19x19
22x22
21x21
24x24
23x23
26x26
25x25
28x28
27x27
30x30
29x29
32x32
31x31
34x34
33x33
37x37
36x36
39x39
38x38
42x42
41x41
44x44
43x43
47x47
46x46
49x49
48x48
49, 64, 100, 121, 144, 196, 225, 423,
361, 400, 441, 484, 576, 625, 676,
784, 900, 1024
119, 153
113, 133

18x18 17x17 20x20

MO-156 MO-157 MO-159 MO-163 MO-192 MO-195
MO-205 MO-207

Ball Grid Array (BGA) Family	Ceramic BGA Square 1mm
Ball Grid Array (BGA) Family	Ceramic BPA Rectangular
Ball Grid Array (BGA) Family	Ceramic CGA Rectangular
Ball Grid Array (BGA) Family	Plastic BGA 1.27mm Pitch
Ball Grid Array (BGA) Family	Low Profile BGA Family
Ball Grid Array (BGA) Family	TFBGA 0.5mm Pitch

MO-210 MO-210AA-1 MO-210AB-1 MO-210AC-1 MO-210AC-1 MO-210AE-1 MO-210AF-1 MO-210AG-1 MO-210AH-1 MO-210AJ-1 MO-210AK-1 MO-210AL-1 MO-210AM-1 MO-210AN-1 MO-210AP-1 MO-210AR-1 MO-210AT-1 MO-210CA-2 MO-210CB-2 MO-210CC-2 MO-210CD-2 MO-210CE-2 MO-210CF-2 MO-210CG-2 MO-210CH-2 MO-210CJ-2 MO-211 MO-216 MO-219

,	
Ball Grid Array (BGA) Family	LFBGA 0.8mm Pitch (Square and Rectangular)
Ball Grid Array (BGA) Family	Chip Size BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Thin Fine Pitch BGA (Rectangular)
Ball Grid Array (BGA) Family	Die Size BGA
Ball Grid Array (BGA) Family	TFBGA 1mm and 0.8mm Pitch
Ball Grid Array (BGA) Family	LFBGA 0.8mm Pitch (Square and Rectangular)
Ball Grid Array (BGA) Family	XF-XBGA Two Row .50mm Pitch

221 60 80 90 56 128 64 48 48 63 63 40 60 84 4, 6, 9, 16, 20, 25, 36 64, 65, 68, 72, 73, 76, 77 48, 64, 80, 96, 112, 128, 144, 160, 176

64, 81, 96, 100, 114, 121, 126, 135, 140, 144, 150, 169, 196, 225, 289, 324, 361 24, 32, 40, 48, 64 60 60

64 60

195

MO-221 MO-225 MO-228

MO-233 MO-234

MO-242

MO-246 MO-044

MO-056

MO-057

Ball Grid Array (BGA) Family Ceramic Chip Carrier

Ceramic Chip Carrier

Ceramic Chip Carrier

Very Thin Profile, Fine Pitch BGA, 0.50mm 0.65mm Pitch TF-XBGA Dual Pitch (Square) TFR-XBGA-N (Rectangular) R-LBGA-L

.508mm (0.020") Center Square leadless

54, 62 60, 72 80, 165 Rectangular Die Size Stacked BGA 0.80mm Pitch Rectangular Fine Pitch Thin BGA 0.65mm Pitch 63, 87, 95, 71 1.27mm (0.050") Center Square Leaded .635mm (0.025") Center Square Leadless

52, 68, 84, 100, 132, 146, 164, 244 64, 104, 124, 164, 204, 244, 264

16, 35, 36, 48, 49, 60, 64, 81, 104, 144, 169, 256, 289

	Packac	ges and LandPatterns		
MO-062		Ceramic Chip Carrier	.635mm (0.025") Center Square Leadless	148
MO-107		Ceramic Chip Carrier Ceramic Chip Carrier	.635mm (0.025 ) Center Square Leadless .635mm (0.050") Center Square J-Lead	28, 44, 52, 68, 84
MO-110		Ceramic Chip Carrier	J-Lead Round Lead	16, 18, 20, 24, 28, 44, 52, 68, 84, 22, 32 16, 18, 20, 24, 28, 44, 52, 68, 84, 22,
MO-111		Ceramic Chip Carrier	Gull Wing Rounf Lead	32
MO-126		Ceramic Chip Carrier	.400 Body (0.050") Pitch Small Outline	26, 28, 32
MO-129		Ceramic Chip Carrier	Square (0.020") Top Brazed Leaded	256, 340 Non Conduct Tiebar
MO-130		Ceramic Chip Carrier	Square (0.015") Top Brazed Leaded	340 Non Conduct Tiebar
MO-131		Ceramic Chip Carrier	Square (0.025") Top Brazed Leaded	132, 144, 196, 224
MO-144		Ceramic Chip Carrier	.350" Body (0.050") Pitch Small Outline	26
MO-036		Ceramic DIP	7.62mm (0.300") Row Spacing	8, 14, 16, 18
MO-037		Ceramic DIP	10.16mm (0.400") Row Spacing	22
MO-058		Ceramic DIP	7.62mm (0.300") Row Spacing Cerdip	24, 28
MO-001		Dual-In-Line (DIP) Family	Row Spacing 7.62mm (0.300")	6, 8, 14, 16
MO-015		Dual-In-Line (DIP) Family	Row Spacing 15.24mm (0.600")	16, 24, 28, 32, 36, 40, 42
MO-016		Dual-In-Line (DIP) Family	Row Spacing 22.86mm (0.900")	36, 50, 52, 64
MO-024		Dual-In-Line (DIP) Family	Row Spacing 12.7mm (0.500")	24
MO-026 MO-028		Dual-In-Line (DIP) Family Dual-In-Line (DIP) Family	Row Spacing 10.1mm (0.400") Row Spacing 5.08mm (0.200")	22, 28 10
MO-028 MO-043		Dual-In-Line (DIP) Family	Row Spacing 19.05mm (0.750")	64
MO-095		Dual-In-Line (DIP) Family	Row Spacing 7.62mm (0.730")	8, 14, 16, 18, 20, 22, 24, 28, 32
MO-122		Dual-In-Line (DIP) Family	Row Spacing 0.050" (0.300")	14, 16, 20
MO-014		Flange Mounted Family Axial Lead	7.62/8.25mm (.300/.325") Pin Circle	4, 8, 10
MO-025		Flange Mounted Family Axial Lead	12.7mm (.500") Pin Circle	24
MO-079		Flange Mounted Family Axial Lead	3.81mm (1.25") Flange Family 6/12 Leads	12
MO-097		Flange Mounted Family Axial Lead	15.24mm (.600") Pin Circle	15
MO-003	420	Flat Pack Family	Width 5.08mm (.200") Pitch 1.27mm (0.050")	10
MO-003	421	Flat Pack Family	Width 5.08mm (.200") Pitch 1.27mm (0.050")	14
MO-004	422	Flat Pack Family	Width 7.62mm (.300") Pitch 1.27mm (0.050")	10
MO-004	423	Flat Pack Family	Width 7.62mm (.300") Pitch 1.27mm (0.050")	14
MO-004	424	Flat Pack Family	Width 7.62mm (.300") Pitch 1.27mm (0.050")	16
MO-018	425	Flat Pack Family	Width 10.16mm (.400") Pitch .89mm (0.035")	40
MO-019	426	Flat Pack Family	Width 10.16mm (.400") Pitch 1.27mm (0.050")	24
MO-019	427	Flat Pack Family	Width 10.16mm (.400") Pitch 1.27mm (0.050")	28
MO-019 MO-020	428	Flat Pack Family Flat Pack Family	Width 10.16mm (.400") Pitch 1.27mm (0.050") Width 12.70mm (.500") Pitch 1.27mm (0.050")	18 36
MO-020 MO-020	426	Flat Pack Family	Width 12.70mm (.500") Pitch 1.27mm (0.050")	40
MO-021	430	Flat Pack Family	Width 15.24mm (.600") Pitch 1.27mm (0.050")	16
MO-021	431	Flat Pack Family	Width 15.24mm (.600") Pitch 1.27mm (0.050")	24
MO-021	432	Flat Pack Family	Width 15.24mm (.600") Pitch 1.27mm (0.050")	36
MO-022	132	Flat Pack Family	Width 17.78mm (.700") Pitch 1.27mm (0.050")	20, 24, 28, 42, 40
MO-022	433	Flat Pack Family	Width 17.78mm (.700") Pitch 1.27mm (0.050")	20
MO-022	434	Flat Pack Family	Width 17.78mm (.700") Pitch 1.27mm (0.050")	42
MO-023	435	Flat Pack Family	Width 22.86mm (.900") Pitch 1.27mm (0.050")	36
MO-023	436	Flat Pack Family	Width 22.86mm (.900") Pitch 1.27mm (0.050")	50
MO-032		Flat Pack Family	Width 16.64mm (.650") Pitch 1.27mm (0.050")	42, 52
MO-092		Flat Pack Family	Width 6.35mm (.300") CERPACK 1.27mm (0.050")	10, 14, 16, 18
MO-098		Flat Pack Family	(.260") Pitch Braze-Lead (0.050")	10, 14, 16, 18
MO-101		Flat Pack Family	Width (.550") Pitch (0.050") Top-Braze	48
MO-106 MO-115		Flat Pack Family Flat Pack Family	(.535") Pitch 0.76mm(0.030") Width (.480") Pitch (0.050")	22, 24, 28 32
MO-115 MO-186		Floppy Disk Card	FDC	22
MO-188		Grid Array Family (PGA)	3.81mm (.125") Pitch	16
MO-003		Grid Array Family (PGA)	2.54mm (.100") Pitch	40
				81, 100, 121, 144, 169, 196, 225,
MO-066		Grid Array Family (PGA)	2.54mm (.100") Pitch Ceramic SO	256, 289, 324, 361, 400 81, 100, 121, 144, 169, 196, 225,
MO-067		Grid Array Family (PGA)	2.54mm (.100") Pitch Ceramic Large Outline	256, 289, 324, 361, 400 81, 100, 121, 144, 169, 196, 225,
MO-083		Grid Array Family (PGA)	2.54mm (.100") Plastic	256, 289, 324, 361, 400 145, 181, 221, 265, 313, 365, 421, 481, 545, 613, 685, 761, 841, 1013,
MO-128		Grid Array Family (PGA)	2.54mm (.100") Pitch Ceramic Staggered Pins	1301 288, 323, 360, 399, 440, 483, 528,
MO-145		Grid Array Family (PGA)	2.54mm (.100") Pitch Ceramic Surface Mount	575, 624, 675, 728, 783 361, 400, 441, 529, 625, 767, 784,
MO-158 MO-002		Grid Array Family (PGA) Header Family	Ceramic CGA Pin Circle 5.08mm (0.200")	900, etc.
				8, 10, 12
MO-006 MO-007		Header Family Header Family	Pin Circle 5.84mm (0.230") Pin Circle 3.58mm (0.141")	8, 10, 12 8
MO-007 MO-008		Header Family Header Family	Pin Circle 3.58mm (0.141") Pin Circle 2.54mm (0.100")	8
MO-008 MO-009		Header Family Header Family	Pin Circle 2.54mm (0.100") Pin Circle 5.08mm (0.200")	10
MO-010		Header Family	Pin Circle 3.06mm (0.200 ) Pin Circle 1.65mm (0.065")	12
MO-013		Header Family	Pin Circle 1.89mm (0.468")	9
MO-169		Header Family	Plastic Surface-Mounted Header	3, 5, 7, 11, 15
MO-218		Header Family	Plastic Staggered Header	7, 9
MO-231		Header Family	Plastic Surface Mounted Header	15
MO-235		Header Family	Surface Mounted Peripheral	5
MO-162		Heat Slug Packages	Plastic Flatpack	48
MO-166		Heat Slug Packages	Plastic SO	20, 24, 30, 36
MO-184		Heat Slug Packages	Plastic SO	10, 12, 16, 29
MO-188		Heat Slug Packages	Power PQFP with Heat Slug	20, 32, 26, 40, 42, 52, 64

Page 4

		Packages	and LandPatterns		
MO-148 MO-075 MO-075 MO-076 MO-217 MO-047 MO-047 MO-047 MO-047 MO-047 MO-047 MO-047 MO-047 MO-047 MO-048 MO-229 MO-232 MO-240 MO-245 MO-048 MO-078 MO-098 MO-096 MO-096 MO-097 MO-060 MO-086	PLCC-20 PLCC-28 PLCC-44 PLCC-52 PLCC-68 PLCC-84 PLCC-100 PLCC-124	790A 791A 792A 793A 794A 795A 796A 797A	and LandPatterns  Mutlichip Module (MCM-C) Non-Hermetic Leadless Chip Carrier Non-Hermetic Leadless Chip Carrier Non-Hermetic Leadless Chip Carrier Non-Hermetic Leadless Chip Carrier Plastic Dual Flat No Lead Plastic Flange Mounted Header Family Power Module Power Module Power Module Power Module Power Module Quad Flatpack Family	Mutlichip Module (MCM-C)  1.27mm (0.050") Lead Spacing Quad  1.27mm (0.050") Lead Spacing SO  Very Very Thin Quad Bottom Terminal Chip Carrier  1.27mm (0.050") Lead Spacing Square  1.27mm (0.050") Lead Spacing  1.28mm (0.100") Lead Spacing  1.28mm (0.100") Lead Spacing  1.28mm (0.100") Lead Spacing  1.28mm (0.100") Lead Spacing  1.28mm (0.025") Lead Spacing  1.28mm (0.025") Lead Spacing  1.28mm (0.025") Lead Spacing  1.28mm (0.025") Cerquad Gullwing  1.27mm (0.050") Cerquad Gullwing	20, 24, 28, 44, 68, 84 8, 14, 16, 20, 24, 28 24, 32, 48, 64 20, 28, 44, 52, 68, 84, 100, 124 20, 28, 44, 52, 68, 84, 100, 124 55, 66 84, 100, 12, 14, 16, 18 6, 8, 10, 12, 16 11, 15, 17, 23 5, 7 7, 5 12 16 16 28 132 29, 68, 84, 100, 132, 164, 146, 244 40, 52, 68, 84, 132, 220 68, 84, 100, 132, 164, 196 68, 84, 100, 132, 164, 196
MO-087 MO-087 MO-089 MO-090 MC-100 MC-100 MO-104  MO-108	SQFP 5x5-24 SQFP 5x5-32 SQFP 5x5-32 SQFP 5x5-32 SQFP 5x5-40 SQFP 5x5-40 SQFP 5x5-40 SQFP 6x6-40 SQFP 6x6-40 SQFP 6x6-40 SQFP 6x6-40 SQFP 6x6-40 SQFP 6x6-64 SQFP 6x6-64 SQFP 7x7-40 SQFP 7x7-40 SQFP 7x7-64 SQFP 7x7-64 SQFP 7x7-64 SQFP 7x7-60 SQFP 10x10-72 SQFP 10x10-72 SQFP 10x10-72 SQFP 10x10-88 SQFP 10x10-112 SQFP 10x10-88 SQFP 10x10-112 SQFP 10x10-120 SQFP 12x12-48 SQFP 12x12-48 SQFP 12x12-108 SQFP 12x12-108 SQFP 12x12-108 SQFP 12x12-108 SQFP 12x12-116 SQFP 12x12-136 SQFP 12x12-144 QFP 12x12-144	550A 551A 552A 553A 554A 555A 556A 557A 558A 559A 560A 561A 562A 563A 564A 565A 566A 567A 571A 571A 571A 572A 571A 573A 571A 575A 576A 577A 580A 581A 581A 582A 581A 582A 581A 582A 581A 582A 581A 582A 581A 582A 581A 582A 581A 582A 581A 582A 583A 584A 585A 566A 577A 577A 577A 577A 580A 581A 582A 583A 584A 585A 586A 587A 577A 580A 581A 582A 583A 584A 583A 584A 585A 586A 587A 577A 577A 577A 580A 581A 582A 583A 584A 583A 584A 585A	Quad Flatpack Family	1.27mm (0.050") Ceramic Cerquad J-Lead 1.27mm (0.050") Plastic Ouadpack Gullwing 0.635mm (0.025") Ceramic Leaded .508mm (0.025") Ceramic Leaded .508mm (0.025") Ceramic OPP Ceramic OPP. Ocs Pitch Gull-wing Plastic Metric OPP 3.2mm Footprint Gull-w	28, 44, 52, 68, 84 28, 44, 52, 68, 84 84, 100, 132, 144, 172, 196 256 196 44, 52, 64, 80, 100, 120, 128, 144, 160, 184, 232

			Packages and LandPatterns	
MO-108	SQFP 14x14-100	592A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SOFP 14x14-108	593A	Ouad Flatpack Family	Plastic Metric OFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x14-120	594A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x14-128	595A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x14-168	596A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x14-176	597A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-144	600A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-152	601A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-184	602A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-192	603A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-248	604A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x20-256	605A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 24x24-176	609A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 24x24-184	610A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 24x24-224	611A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 24x24-232	612A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 24x24-296 SOFP 24x24-304	613A 614A	Quad Flatpack Family Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 28x28-120	618A	Quad Flatpack Family  Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-120	619A	Quad Flatpack Family  Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 28x28-126	620A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-160	621A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-208	622A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SOFP 28x28-216	623A	Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-264	624A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-272	625A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-352	626A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 28x28-360	627A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	QFP 32x32-184	630A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-240	631A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-248	632A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-304	633A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-312	634A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-400	635A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 32x32-408	636A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 36x36-272	640A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 36x36-280	641A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 36x36-344	642A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 36x36-352	643A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 36x36-456 SQFP 36x36-464	644A 645A	Quad Flatpack Family Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	QFP 40x40-232	650A	Quad Flatpack Family Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 40x40-304	651A	Quad Flatpack Family  Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 40x40-304 SQFP 40x40-312	652A	Quad Flatpack Family  Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SOFP 40x40-312	653A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-Wing
MO-108	SQFP 40x40-384	654A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 40x40-512	655A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 40x40-520	656A	Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 44x44-336	660A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SOFP 44x44-344	661A	Ouad Flatpack Family	Plastic Metric OFP 3.2mm Footprint Gull-wing
MO-108	SQFP 44x44-424	662A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 44x44-432	663A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 44x44-568	664A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 44x44-576	665A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-32	680A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-40	681A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-44	682A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-52	683A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-60	684A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 5x7-68	685A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 7x10-52	690A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 7x10-60 SQFP 7x10-68	691A 692A	Quad Flatpack Family Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing Plastic Metric QFP 3.2mm Footprint Gull-wing
		693A		
MO-108 MO-108	SQFP 7x10-76 SQFP 7x10-92	694A	Quad Flatpack Family Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SOFP 7x10-92 SOFP 7x10-100	695A	Ouad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SOFP 10x14-80	700A	Quad Flatpack Family  Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 10x14-88	701A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SOFP 10x14-100	702A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 10x14-108	703A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 10x14-140	704A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 10x14-148	705A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	QFP 14x20-80	710A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	QFP 14x20-100	711A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-120	712A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-128	713A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-152	714A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-160	715A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-208	716A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 14x20-216	717A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x28-176	720A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x28-184	721A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x28-224	722A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108 MO-108	SQFP 20x28-232 SQFP 20x28-300	723A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
		724A 725A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing
MO-108	SQFP 20x28-308	120A	Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing

					rackay	es and Landratterns		
MO-108 MO-108 MO-108 MO-108 MO-108 MO-108		SQFP 28x40-256 SQFP 28x40-264 SQFP 28x40-324 SQFP 28x40-332 SQFP 28x40-432 SQFP 28x40-440	730A 731A 7312A 733A 734A 735A			Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family	Plastic Metric QFP 3.2mm Footprint Gull-wing Plastic Metric QFP 3.2mm Footprint Gull-wing	44 52 64 00 100 120 120 144
MO-112 MO-113 MO-114 MO-125 MO-134	(could this be the MS-044 refered to by IPC-SM-	7827)  CQFP-28  CQFP-36  CQFP-44  CQFP-52  CQFP-84  CQFP-120  CQFP-128  CQFP-128  CQFP-144  CQFP-144  CQFP-160  CQFP-160  CQFP-160  CQFP-196	750A 751A 752A 753A 755A 756A 757A 758A 759A 760A 761A 762A 763A			Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family Quad Flatpack Family	Plastic Metric QFP 3.9mm Footprint Gull-wing Ceramic QFP with Tie Bar .025 Pitch Ceramic QFP .65, 8.0 Pitch Ceramic QFP .025 Pitch Gull-wing .50mm Pitch Ceramic QFP	44, 52, 64, 80, 100, 120, 128, 144, 160, 184, 232 164, 146 120, 128, 144, 160 132 224, 256, 288, 320, 351
MO-136	Replaced by MS-026					Quad Flatpack Family	Thin QFP 1.0 and 1.4mm Thick	32, 40, 48, 52, 64, 80, 100, 112, 120, 128, 144, 160, 176, 208, 216, 256 64, 80, 100, 120, 128, 144, 176, 216,
MO-143						Quad Flatpack Family	.4 & .5mm Fine Pitch QFP	208, 240, 256, 272, 292, 296, 304, 336, 376
MO 173						Out Fisher I. Faville	The OFF of the House Country	200 240 255 205 204 275
MO-173 MO-189						Quad Flatpack Family Quad Flatpack Family	Thin QFP with Heat Spreader Plastic QFP Heat Slug	208, 240, 256, 296, 304, 376 16, 20, 24, 32, 40, 48
MO-198						Quad Flatpack Family	PQFP-B 3 Tier Family	216, 264, 312, 360, 408, 456
MO-204						Quad Flatpack Family	QFP with Heat Sink	52, 64, 80, 100
MO-208						Quad Flatpack Family	QFP no Lead	7, 8, 12, 16, 20, 24, 28, 36, 48
MO-212						Quad Flatpack Family	Rectangular PQFP 1.0mm Thick Body 3.20 Foot Print	100 4, 8, 12, 14, 16, 18, 20, 22, 24, 28,
MO-220 MO-239						Quad Flatpack Family  Quad Flatpack Family	QFP No-Lead-Thermally Enhanced .80, .65, .50, Pitch  Very Thin PQFP No-Lead Thermally Enhanced .50 Pitch	32, 36, 38, 40, 44, 48, 52, 56 64, 80, 96, 112, 128, 144, 160, 176,
MO-241 MO-243						Quad Flatpack Family Quad Flatpack Family	Dual Compatable Thermally Enhanced -PQFP/PSO-N Thermally Enhanced Plastic Bumped QFP	14, 16, 20 16, 24, 32, 40, 48, 56, 64, 72 60, 68, 76, 84, 92, 100, 108, 116, 124, 132, 136, 140, 156, 164, 172, 180, 196, 204, 220, 228, 232, 252,
MO-247						Quad Flatpack Family	Plastic Quad No-Lead staggered Multi-Row	292, 316 8, 12, 16, 20, 22, 24, 2832, 36, 40,
MO-248 MO-250 MO-012 MO-029 MO-030 MO-031 MO-033 MO-034 MO-041 MO-042 MO-042						Quad Flatpack Family Quad Flatpack Family Quad In-Line (QUIP) Family Rectangular Chip Carrier Rectangular Chip Carrier Rectangular Chip Carrier Rectangular Chip Carrier	Thermally Enhanced Plastic Ultra Thin and Extremely Thin Fin P Thermally Enhanced Plastic Bumped Very Thin and Very Very T 2.54mm (.100") Pltch 5.08/10.16 (.200/.400") Row Spacing 19.05/23.50 (/750/.925") Row Spacing 5.08/10.16 (.200/.400") Row Spacing 17.78/22.86mm (.700/.900") Row Spacing 19.05/23.50 (/750/.925") Row Spacing 1.27mm (0.050") Center Type E 1.27mm (0.050") Center Type F 1.07mm (0.040") Center Leadless Staggered	hin 24, 32, 36, 40, 44, 48, 52, 56, 64, 72 12 16 42 14 42, 52, 64 42, 64, 52 18, 20, 28, 32 18, 20 32
MO-118 MO-118AA		SSO48	330A			Shrink Small Outline (SSOP) Family	SSOP .300" Body Width (.025") Pitch	28, 48, 56, 64
MO-118AB		SSO56	331A					
MO-118AC		SSO28						
MO-118AD		SSO64						
MO-137 MO-150						Shrink Small Outline (SSOP) Family Shrink Small Outline (SSOP) Family	SSOP .150" Body Width (.025") Pitch SSOP 5.3mm Body Width (.65mm) Pitch	14, 16, 18, 20, 24, 28 8, 14, 16, 18, 20, 22, 24, 28, 30
MO-152						Shrink Small Outline (SSOP) Family	.4mm, .5mm, .65mm Pitch Family	8, 14, 16, 20, 24, 28, 36, 40, 48, 52,
MO-153 MO-153AB-1				MO-153AB-1	Done	Shrink Small Outline (SSOP) Family Shrink Small Outline (SSOP) Family	TSSOP 4.4, 5.1, 8mm Body Width Pitch TSSOP 4.4mm Body Width 0.65mm Pitch	56, 60, 64, 68 14
MO-154						Shrink Small Outline (SSOP) Family	SSOP 3.9 Body Width .4mm Pitch	
MO-209 MO-064						Shrink Small Outline (SSOP) Family SIMM/DIMM Family	SSOP No Lead 2.54mm (.100") Centers 30 Pin SIMM	6, 8, 10, 20, 24, 28, 36, 48 30
MO-064 MO-116						SIMM/DIMM Family SIMM/DIMM Family	2.54mm (.100") Centers 30 Pin SIMM 1.27mm (0.50") Pitch SIMM	72
MO-116 MO-160						SIMM/DIMM Family SIMM/DIMM Family	1.27mm (0.50") PICCH SIMM 1.27mm (0.50") PICCH DIMM	72 72, 84, 88
MO-160 MO-161						SIMM/DIMM Family	1.27mm (0.50") Pitch DIMM	100, 168
MO-167						SIMM/DIMM Family	1.27mm (0.50") Pitch DIMM	128
MO-172						SIMM/DIMM Family	1.27mm (0.50") Pitch DIMM	112, 200
						Page 7		

MO-177		
MO-179		
MO-185		
MO-190 MO-191		
MO-191 MO-206		
MO-214		
MO-215		
MO-224		
MO-227 MO-237		
MO-244		
MO-035		
MO-045 MO-055		
MO-068		
MO-141		
MO-046		
MO-059 MO-061		
MO-063		
MO-065		
MO-077	60114/200	4004
	SOJ 14/300 SOJ 16/300	480A 481A
	SOJ 18/300	482A
	SOJ 20/300	483A
	SOJ 22/300 SOJ 24/300	484A 485A
	SOJ 24/300 SOJ 26/300	486A
	SOJ 28/300	487A
	SOJ 14/350 SOJ 16/350	490A 491A
	SOJ 18/350	492A
	SOJ 20/350	493A
	SOJ 22/350 SOJ 24/350	494A 495A
	SOI 26/350	496A
	SOJ 28/350	497A
	SOJ 14/400	500A 501A
	SOJ 16/400 SOJ 18/400	501A 502A
	SOJ 20/400	503A
	SOJ 22/400	504A
	SOJ 24/400 SOJ 26/400	505A 506A
	SOJ 28/400	507A
	SOJ 14/450	510A
	SOJ 16/450 SOJ 18/450	511A 512A
	SOJ 20/450	513A
	SOJ 22/450	514A
	SOJ 24/450 SOJ 26/450	515A 516A
	SOJ 28/450	517A
MO-088 MO-091		
MO-105		
MO-117	SO64	332A
MO-119 MO-119AA	SO24W SO24W	307A 307A
MO-119AA MO-119AB	SO24W SO28W	307A 309A
MO-119AC	SO32W	311A
MO-119AD	SO36W	313A
MO-120 MO-120AA	SO24X	308A
MO-120AB	S028X	310A
MO-120AC	S032X	312A
MO-120AD MO-121	SO36X	314A
MO-121 MO-123		
MO-124		
MO-126		
MO-174 MO-175		
MO-175 MO-180		
MO-181		
MO-182		
MO-193 MO-194		
MO-194 MO-196		
MO-197		
MO-199		

SIMM/DIMM Family	.65mm Pitch SO-DIMM	200
SIMM/DIMM Family	1mm Pitch DIMM	278
SIMM/DIMM Family	1.27mm (0.50") SDIMM	72
SIMM/DIMM Family	0.80mm SO DIMM	144
SIMM/DIMM Family	1.27mm (0.50") DIMM	160
SIMM/DIMM Family	1.27mm (0.50") DDR DIMM	184
SIMM/DIMM Family	.5mm Pitch Micro-DIMM	144
SIMM/DIMM Family	1.00mm Pitch SDRAM DIMM	210
SIMM/DIMM Family	.60mm Pitch DDR SO-DIMM	200
SIMM/DIMM Family	1.00mm Pitch DDR SDRAM	232
SIMM/DIMM Family	1.00mm DDRII SDRAM	240
SIMM/DIMM Family	DDR2 Mini DIMM 0.60 Lead Centers	244
Single-In-Line (SIP) Family	2.54mm (.100") Row Spacing	11, 15, 17, 23
Single-In-Line (SIP) Family	3.81mm (.150") Row Spacing	9
Single-In-Line (SIP) Family	2.54mm (.100") Row Spacing Ceramic	11, 16
Single-In-Line (SIP) Family	2.54mm (.100") Row Spacing Edge Clip	22, 24, 30, 40
Single-In-Line (SIP) Family	0.50mm Lead Pitch Vertical Surface Mount	
Small Outline (SO) Family	5.3mm (0.200") Body Width Gull-wing	14, 16, 20
Small Outline (SO) Family	8.54mm (.330") Body Width Gull-Wing	24, 28
Small Outline (SO) Family	9.6mm (.400") Body Width SOJ	28, 32, 36, 40, 44
Small Outline (SO) Family	9.0mm (.350") Body Width SOJ	22
Small Outline (SO) Family	7.62mm (0.300") Body Width SOJ	24, 26
Small Outline (SO) Family	7.62mm (0.300") Body Width SOJ	24, 25, 28, 32

Small Outline (SO) Family Small Outline (SO) Family	7.62mm (0.300") Body Width SOJ 9.0mm (.350") Body Width SOJ	14, 26, 18, 20, 24, 28 26, 28
Small Outline (SO) Family	TSOJ	22, 24, 28
Small Outline (SO) Family	12mm Body Width SO Gull-wing .8mm Pitch	64
Small Outline (SO) Family	SOJ .300" Body Width	24, 28, 32, 36
Small Outline (SO) Family	SOJ .350" Body Width	24, 28, 32, 36

Small Outline (SO) Family	SOJ .330" Body Width	24, 28, 32, 36
Small Outline (SO) Family	12mm Body Width .8mm Pitch	64
Small Outline (SO) Family	12.7mm Body Width 1.27mm Pitch	32, 34, 36, 40, 70
Small Outline (SO) Family	9.6mm (.400") Body Width SO 50mm Pitch	28, 32
Small Outline (SO) Family	Plastic SO .8mm Pitch	70
Small Outline (SO) Family	SOP 12.6mm Body With	44, 48
Small Outline (SO) Family	SO Gull-wing 13.30mm Body Width	44, 56
Small Outline (SO) Family	SOJ Metric 16mm Body Width	40
Small Outline (SO) Family	Metric Thin SO 16mm Body Width	40, 62, 88, 100
Small Outline (SO) Family	6 Lead Thin SO	6
Small Outline (SO) Family	Plastic Thin Shrink SO	14, 16, 20, 24, 48, 56, 80, 100
Small Outline (SO) Family	Plastic Leadless SO (SON)	28
Small Outline (SO) Family	Plastic USON 0.5mm Pitch	40, 46
Small Outline (SO) Family	LSOJ	28, 32, 36, 40, 42, 44, 50, 54, 70

Page 8

MO-200 MO-226 MO-236 MO-236 MO-178 MO-178AA MO-178AB MO-178BA MO-203 MO-223		SOT23 SOT23-5 SOT23-6 SOT23-8	
MO-076 MO-109 MO-132 MO-133 MO-133 MO-135 MO-142AB MO-142AB MO-142AB MO-142AB MO-142BB MO-142BB MO-142BB MO-142BB MO-142BB MO-142BB MO-142CB MO-142		R-PBGA 22x14 R-PBGA 22x14 R-PBGA 25x21	1080 1081
MS-034 MS-002 MS-002 MS-002 MS-002 MS-003 MS-004		LCC-100 Type A LCC-124 Type A LCC-156 Type A	838 839 840
MS-004 MS-004 MS-004 MS-004 MS-004 MS-004 MS-004 MS-005 MS-005 MS-006 MS-007 MS-008 MS-009		LCC-16 Type C LCC-20 Type C LCC-24 Type C LCC-28 Type C LCC-44 Type C LCC-52 Type C LCC-68 Type C LCC-68 Type C	830 831 832 833 834 835 836 837
MS-014 MS-016 MS-016 MS-016 MS-016 MS-016 MS-016 MS-018 MS-001 MS-011 MS-011	Replaced MO-052	PLCC/R-18 PLCC/R-18-L PLCC/R-22 PLCC/R-28 PLCC/R-32	810A 811A 812A 813A 814A

Small Outline (SO) Family Small Outline (SO) Family	SOJ 2High/4High Plastic SO Heat Slug 7.5mm Body Width 1.0mm Pitch	32, 44
Small Outline (SO) Family	Plastic SO Exposed Heat Sink	20. 30. 36
Small Outline (SO) Family	USON	2, 3, 4
Small Outline (SO) Family		5, 6, 8
Small Outline (SO) Family	5 Lead	5
Small Outline (SO) Family	6 Lead	6
Small Outline (SO) Family	8 Lead	8
Small Outline (SO) Family	Shrink SOT	5, 6
Small Outline (SO) Family	Shrink SOT	5, 6, 8
		192, 256, 312, 376, 440, 446, 248, 328, 408, 488, 568, 648, 408, 512, 608, 712, 808, 416, 552, 680, 816,
TAPEPAK	Molded Carrier Ring Family	952, 1080
TAPEPAK	Molded Carrier Ring Family	
Thin Small Outline (TSOP) Family	7.62mm Body TSOP 2	20, 24, 24
Thin Small Outline (TSOP) Family	10.16mm Body TSOP 2	28, 32, 44
Thin Small Outline (TSOP) Family	12.70mm Body TSOP 2	32, 34, 50, 54
Thin Small Outline (TSOP) Family	TSOP 1	24, 32, 40, 48, 56

Thin Small Outline (TSOP) Family	TSOP2 16mm Body Width		
Thin Small Outline (TSOP) Family	TSOP 1 .55 Pitch	28	
Thin Small Outline (TSOP) Family	TSSOP	8	
Thin Small Outline (TSOP) Family	TSOP II 2High/4High	32	
Thin Small Outline (TSOP) Family	TSOP II 2High	54, 66	
ZIG-ZAG (ZIP) Family	2.54mm (.100") Row Spacing	16	
ZIG-ZAG (ZIP) Family	1.27mm (0.50") Row Spacing	19, 20, 24, 28, 40	
ZIG-ZAG (ZIP) Family	2.54mm (.100") Row Spacing	23, 26	
ZIG-ZAG (ZIP) Family	2.54mm (.050") Row Spacing	20, 24, 28	
ZIG-ZAG (ZIP) Family	R-PZIP .40mm Pitch	64	
ZIG-ZAG (ZIP) Family	PZIP .40mm Pitch	64	
Ball Grid Array	Rectangular Plastic BGA, 1.27mm, 1.0mm Pitch		
Ball Grid Array	Rectangular Plastic BGA, 1.27mm Pitch	17×7	
Ball Grid Array	Rectangular Plastic BGA, 1.27mm Pitch	17x9	
Ball Grid Array	Rectangular Plastic BGA, 1.27mm Pitch	19x11	
Ball Grid Array	Plastic Square BGA 1.0mm, 1.27mm 1.50mm Pitch		
Chip Carriers (LCC & PLCC)	Leadless Type A .050" Centers		
Chip Carriers (LCC & PLCC)	Leadless Type A .050" Centers		100
Chip Carriers (LCC & PLCC)	Leadless Type A .050" Centers		124
Chip Carriers (LCC & PLCC)	Leadless Type A .050" Centers		156
Chip Carriers (LCC & PLCC)	Leadless Type B .050" Centers		
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		16
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		20
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		24
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		28
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		44
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		52
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		68
Chip Carriers (LCC & PLCC)	Leadless Type C .050" Centers		84
Chip Carriers (LCC & PLCC)	Leadless Type D .050" Centers		
Chip Carriers (LCC & PLCC)	Leaded Type A .050" Centers		
Chip Carriers (LCC & PLCC)	Leaded Type A .050" Centers		
Chip Carriers (LCC & PLCC)	Leaded Type B .050" Centers		
Chip Carriers (LCC & PLCC)	Leadless Chip Carrier .040" Centers		
Chip Carriers (LCC & PLCC)	Leadless Single Layer .040" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Chip Carriers (LCC & PLCC)	Plastic Chip Carrier .050" Centers		
Dual-In-Line (DIP) Family	.300" Row Spacing		
Dual-In-Line (DIP) Family	.400" Row Spacing		
Dual-In-Line (DIP) Family	.400" Row Spacing Plastic		

Page 9

MS-001		DIP 8	860			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-001		DIP 14	861			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-001		DIP 16	862			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-001		DIP 18	863			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-001		DIP 20	864			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-011		DIP 22L	865			Dual-In-Line (DIP) Family	.400" Row Spacing
MS-001		DIP 24	866			Dual-In-Line (DIP) Family	.300" Row Spacing
MS-011		DIP 24L	867			Dual-In-Line (DIP) Family	.400" Row Spacing
		DIP 24X	868			Dual-In-Line (DIP) Family	
MS-001		DIP 28	869			Dual-In-Line (DIP) Family	.300" Row Spacing
		DIP 28X	870			Dual-In-Line (DIP) Family	
		DIP 40X	871			Dual-In-Line (DIP) Family	
		DIP 48X	872			Dual-In-Line (DIP) Family	
MS-015						Dual-In-Line (DIP) Family	.300"/.400"/.600"/.900" Side Brazed
MS-019						Dual-In-Line (DIP) Family	.300 (.070" Pitch)
MS-020						Dual-In-Line (DIP) Family	.600 (.070" Pitch)
MS-021						Dual-In-Line (DIP) Family	.750 (.070" Pitch)
MS-030						Dual-In-Line (DIP) Family	.300" Row Spacing Ceramic
MS-031						Dual-In-Line (DIP) Family	.400" Row Spacing Ceramic
MS-032						Dual-In-Line (DIP) Family	.600" Row Spacing Ceramic
MS-017						Pin Grid Array (PGA)	Ceramic PGA .100" Cavity Down
MS-026						Quad FlatPack (QFP)	Plastic 1.0 & 1.4mm Thich, 2mm foot[print
MS-022						Quad FlatPack (QFP)	Metric Plastic 1.0, 0.8 and 0.65mm Pitch
MS-029						Quad FlatPack (QFP)	Fine Pitch Plastic QFP 2.6 mm footprint
MS-012						Small Outline (SO & TSOP)	.150" Body Width SO
MS-012AA		SO8	300A	IPC-RLPN-300A	Done		•
		SO8W	301A	IPC-RLPN-301A	Done		
MS-012AB		5014	302A	IPC-RLPN-302A	Done		
		SO14W	303A	IPC-RLPN-303A	Done		
MS-012AC		5016	304A	11 C 11L1 11 303/1	50.10		
MS-013		3010	50 111			Small Outline (SO & TSOP)	.300" Body Width SO
MS-013 MS-013AA		SO16W	305A				,
MS-013AC		SO20W	306A				
MS-023		302011	500/1			Small Outline (SO & TSOP)	.300" Plastic SOJ
MS-027						Small Outline (SO & TSOP)	.400" SOI
MS-024						Small Outline (SO & TSOP)	10.16mm Body TSOPII
MS-025						Small Outline (SO & TSOP)	7.62mm Body TSOPII
TO-5	See TO-205-AA					Axial Leads	Axial Leads, .200 Pin Circle
TO-8	See TO-233-AA					Axial Leads	Axial Leads, .281 Pin Circle
TO-9	See 10-255-AA					Axial Leads Axial Leads	Axial Leads, .201 Pin Circle Axial Leads, .200 Pin Circle
TO-12	See TO-205-AB					Axial Leads Axial Leads	Axial Leads, .200 Pin Circle Axial Leads, .200 Pin Circle
TO-12	See TO-205-AB See TO-206-AA					Axial Leads Axial Leads	Axial Leads, .200 Pin Circle Axial Leads, .100 Pin Circle
TO-18	See TO-205-AC					Axial Leads Axial Leads	
	See TO-205-AC See TO-205-AD						4 Axial Leads, .200 Pin Circle
TO-39	See 10-205-AD					Axial Leads	Axial Leads, .200 Pin Circle
TO-42						Axial Leads	Axial Leads, .200 Pin Circle
TO-46	See TO-206-AB					Axial Leads	Axial Leads, .100 Pin Circle
TO-72						Axial Leads	4 Axial Leads, .100 Pin Circle
TO-73						Axial Leads	12 Axial Leads, .200 Pin Circle
TO-74						Axial Leads	10 Axial Leads, .200 Pin Circle
TO-75						Axial Leads	6 Axial Leads, .200 Pin Circle
TO-76						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-77						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-78						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-79						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-80						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-96						Axial Leads	10 Axial Leads, .230 Pin Circle
TO-97						Axial Leads	10 Axial Leads, .230 Pin Circle
TO-99						Axial Leads	8 Axial Leads, .200 Pin Circle
TO-100						Axial Leads	10 Axial Leads, .230 Pin Circle
TO-101						Axial Leads	12 Axial Leads, .230 Pin Circle
TO-215						Coaxial Type	Coaxial Type
TO-200						Disc Type Family	Disc Type Family
TO-3	See TO-204-AA					Diamond Base	Diamond Base, 0.430 Pin Spacing
TO-37						Diamond Base	Diamond Base, 0.200 Pin Circle
TO-41	See TO-204-AB					Diamond Base	Diamond Base, 0.430 Pin Circle
TO-66						Diamond Base	Diamond Base, 0.200 Pin Spacing
TO-123	See TO-213-AB					Diamond Base	Diamond Base, 0.200 Pin Circle
TO-124	See TO-213-AC					Diamond Base	Diamond Base, 0.200 Pin Circle
TO-87						Double-Ended Flatpack	Double-Ended 14 Lead Flatpack
TO-88						Double-Ended Flatpack	Double-Ended 14 Lead Flatpack
TO-89						Double-Ended Flatpack	Double-Ended 10 Lead Flatpack
TO-90						Double-Ended Flatpack	Double-Ended 10 Lead Flatpack
TO-91						Double-Ended Flatpack	Double-Ended 10 Lead Flatpack
TO-95						Double-Ended Flatpack	Double-Ended 14 Lead Flatpack
TO-250						Dual-In-Package	4 Lead DIP .300" Spacing
TO-204						Flange-Mounted Header Family	Flange-Mounted Header Family .430 Pin Spacing
TO-213						Flange-Mounted Header Family	Flange-Mounted Header .200 Spacing
TO-218						Flange-Mounted Header Family	Flange-Mounted Header
TO-219						Flange-Mounted Header Family	Flange-Mounted Header
TO-220						Flange-Mounted Header Family	Flange-Mounted Header
TO-220-Molded-7L	Lead-Staggered			TO-220-Molded-7Lea	ad-Staggered		. 4
TO-238						Flange-Mounted Header Family	Flange-Mounted Header, Rectangular
TO-257						Flange-Mounted Header Family	Flange-Mounted Header Family
TO-257						Flange-Mounted Header Family	Flange-Mounted 1:608 Spacing
TO-259						Flange-Mounted Header Family	Flange-Mounted Header Family
TO-262						Flange-Mounted Header Family	Flange-Mounted Header Family
. 5 202						gu mounted reduce running	

					rackages	and Landratterns	
TO-264 TO-267 TO-273 TO-247 TO-244 TO-92 TO-117 TO-126 TO-205 TO-205 TO-206 TO-236	See TO-232-AA See TO-225-AA	SOT23	210 210W	IPC-RLPN-210	Done	Flange-Mounted Header Family Flange-Mounted Header Family Flange-Mounted Package Flange-Mounted Peckage Flange-Mounted Rectangular Base Flat Index Axial Leaded Flat Leads Flat Leads Flat Leads Flat Mounted Transitor Flexible Terminals Header Family Header Family Small Outline (SO) Family Small Outline (SO) Family	Flange-Mounted Header Family Plastic Flange-Mounted Header Family Plastic Flange Mounted Package, 3 Leads Flange-Mounted Peripheral Terminal Flange-Mounted Rectangular Base Axial Leaded, Flat Index Lateral, 4 Flat Leads Flat Lead. 090° Pin Spacing Flat Mounted Transitor Stud-Hex, Flexible Terminals Header Type. 200 Pin Circle Header Type. 100 Pin Circle 3-pin SOT 3-pin SOT 3-pin SOT Wave Solder
TO-237						Header Family	Header Family, Flat Index
TO-243 TO-251 TO-252 TO-260 TO-263 TO-263AA TO-263AB TO-263BA TO-263BB TO-263CA		SOT 89	215	IPC-RLPN-215	Done	Header Family	Header Family, Peripheral Terminal Header Family, Peripheral Terminals Header Family, Surface Mount Ceramic Header Axial 3-Lead Surface Mounted Header
TO-263CB				TO-263CB		Header Family	Surface Mounted Header
TO-268 TO-85 TO-86 TO-266 TO-274 TO-265 TO-272 TO-275 TO-271 TO-269			237	IPC-RLPN-237	Done	Header Family Multiple-Ended Flatpack Multiple-Ended Flatpack Multiple-Ended Flatpack Opto Family Insertion Mount Plastic Clip Mounted Package Power Package Power Package Power Package Power Package Quad Flat Pack Surface Mount Small Outline	Surface Mounted Header R-PSFM-G2 Multiple-Ended 14-Lead Flatpack Multiple-Ended 14-Lead Flatpack Multiple-Ended 14-Lead Flatpack Opto Family Insertion Mount Plastic Clip Mounted Package, 3 Leads 3 Lead Flange Mount Power Package Two Lead Surface Mount Power Package Flatfice Flatfield F
TO-253		SOT 143	225	IPC-RLPN-225	Done	Small Outline Transistor (SOT)	Small Outline Transistor (SOT)
TO-253 TO-261 TO-208 TO-208 TO-94 TO-216 TO-202 TO-240 TS-004 TS-002	Reverse of TO-253 not included by IPC IPC-SM-782 outline grid doesn't work	SOT 143 SOT 223	230	IPC-RLPN-225R IPC-RLPN-230	Done Done	Small Outline Transistor (SOT) Small Outline Transistor (SOT) Solid Terminals Solid Terminals Stud-Mount Flex Lead Stud-Mount Flex Lead Stud-Mounted Stripline Tab-Mouted Peripheral Leads Terminal Strip Power Module Flange-Mounted Header Family Header Family	Small Outline Transistor (SOT) Small Outline Transistor (SOT) Stud Hex Base Family (Solid Terminals) Stud Hex Base Family (Solid Terminals) Stud-Mount Flex Lead Stud-Mounted Stripline Tab-Mouted Peripheral Leads Terminal Strip Power Module Flange-Mounted Header Family Header Family Insertion Mount (Peripheral Terminals)
TS-003	TO-252 (IPC-SM-782)		235A	IPC-RLPN-235A	Done	2 Lead Header Family Surface Mount	Header Family Surface Mounted (Peripheral Terminals)
TS-001 TS-005	TO-263 (IPC-SM-782)		236	IPC-RLPN-236	Done	Plastic Single-In-line Flange-Mounted Surface-Mounted Header Family	Plastic Single-In-line Flange-Mounted Surface-Mounted Header Family
15-005			236	IPC-KLPN-236	Done	Surface-Mounted Header Family	Surface-Mounted Header Family
			100A	IPC-RLPN-100A	Done	Chip Resistors mm [in]	1005 [0402]
			101A	IPC-RLPN-101A	Done	Chip Resistors mm [in]	1608 [0603]
			102A	IPC-RLPN-102A	Done	Chip Resistors mm [in]	2012 [0805]
			103A 104A	IPC-RLPN-103A IPC-RLPN-104A	Done Done	Chip Resistors mm [in] Chip Resistors mm [in]	3216 [1208] 3225 [1210]
			105A	IPC-RLPN-105A	Done	Chip Resistors mm [in]	5025 [2010]
			106A	IPC-RLPN-106A	Done	Chip Resistors mm [in]	6332 [2512]
			100W 101W 102W 103W 104W 105W 106W			Chip Resistors Wave Solder mm [in]	1005 [0402] 1608 [0603] 2012 [0805] 3216 [1208] 3225 [1210] 5025 [0210] 6332 [2512]
			130A 131A 132A 133A 134A 135A 136A 137A	IPC_RLPN_130A IPC_RLPN_131A IPC_RLPN_132A IPC_RLPN_133A IPC_RLPN_134A IPC_RLPN_135A IPC_RLPN_136A IPC_RLPN_137A	Done Done Done Done Done Done Done Done	Chip Capacitors mm [in]	1005 [0402] 1310 [0504] 1608 [0603] 2012 [0805] 3216 [1208] 3225 [1210] 4532 [1812] 4564 [1825]
			160A 161A 162A 163A 164A 165A	IPC-RLPN-160A IPC-RLPN-161A IPC-RLPN-162A IPC-RLPN-163A IPC-RLPN-164A IPC-RLPN-165A	Done Done Done Done Done Done	Inductors Inductors Inductors Inductors Inductors Inductors	2012 Chip 3216 Chip 4516 Chip 2825 Prec. w/w 3225 Prec. w/w 4532 Prec. w/w

				Packages	and LandPatterns		
	166A	IPC-RLPN-166A	Done		Inductors	5038 Prec. w/w	
	167A	IPC-RLPN-167A	Done		Inductors	3225/3220 Molded	
	168A	IPC-RLPN-168A	Done		Inductors	4035 Molded	
	169A	IPC-RLPN-169A	Done		Inductors	4532 Molded	
	170A	IPC-RLPN-170A	Done		Inductors	5650 Molded	
	171A	IPC-RLPN-171A	Done		Inductors	8530 Molded	
			_				
	180A	IPC_RLPN_180A		Done	Tantalum Capacitors mm	3216 [1208]	
	181A	IPC_RLPN_181A		Done	Tantalum Capacitors mm	3528	
	182A 183A	IPC_RLPN_182A		Done Done	Tantalum Capacitors mm	6032 7343	
	103A	IPC_RLPN_183A	Done	Done	Tantalum Capacitors mm	7343	
	201A	IDC DI DN 2014	D		Matal Flactured Face (MELF) Community	COD CTANUL AT Divis	
		IPC-RLPN-201A	Done		Metal Electrode Face (MELF) Components	SOD-87/MILL 41 Diode	
	202A 203A	IPC-RLPN-202A IPC-RLPN-203A	Done		Metal Electrode Face (MELF) Components Metal Electrode Face (MELF) Components	2012 [0805] Resistor 3216 [1208] Resistor	
	203A 204A	IPC-RLPN-203A	Done Done		Metal Electrode Face (MELF) Components		
	204A 205A	IPC-RLPN-204A	Done		Metal Electrode Face (MELF) Components		
					•		
SOT 89	215				Small Outline Transitors	TO-243	
SOP 6	360A				Small Outline Package		
SOP 8	361A				Small Outline Package		
SOP 10	362A				Small Outline Package		
SOP 12	363A				Small Outline Package		
SOP 14 SOP 16	364A				Small Outline Package		
SOP 16 SOP 18	365A				Small Outline Package		
	366A 367A				Small Outline Package		
SOP 20 SOP 22	367A 368A				Small Outline Package		
SOP 24	369A				Small Outline Package Small Outline Package		
SOP 28	370A				Small Outline Package Small Outline Package		
SOP 30	371A				Small Outline Package		
SOP 32	371A 372A				Small Outline Package Small Outline Package		
SOP 36	373A				Small Outline Package		
SOP 40	374A				Small Outline Package		
SOP 42	375A				Small Outline Package		
					•		
TSOP 6x14	390A				Thin Small Outline (TSOP) Family	10	
TSOP 6x16	391A				Thin Small Outline (TSOP) Family	2.	
TSOP 6x18	392A				Thin Small Outline (TSOP) Family	2	
TSOP 6x20	393A				Thin Small Outline (TSOP) Family	3	
TSOP 8x14	394A				Thin Small Outline (TSOP) Family	2.	
TSOP 8x16	395A				Thin Small Outline (TSOP) Family	3.	
TSOP 8x18	396A				Thin Small Outline (TSOP) Family	40	
TSOP 8x20	397A				Thin Small Outline (TSOP) Family		2
TSOP 10x14	398A				Thin Small Outline (TSOP) Family	2	
TSOP 10x16	399A				Thin Small Outline (TSOP) Family	4	
TSOP 10x18	400A				Thin Small Outline (TSOP) Family	41	
TSOP 10x20	401A				Thin Small Outline (TSOP) Family	6.	
TSOP 12x14	402A				Thin Small Outline (TSOP) Family	31	
TSOP 12×16	403A				Thin Small Outline (TSOP) Family	41	
TSOP 12x18	404A				Thin Small Outline (TSOP) Family	6	
TSOP 12x20	405A				Thin Small Outline (TSOP) Family	71	6
		SER1360	Done				
		SLC7530-SC	Done				

#### CoilCraft Power Inductors

SER1360	Single Connector Dual Connector – Series Mode Dual Connector – Parallel Mode Dual Connector – Two Winding Mode	SER1360	Done
SLC7530-SC		SLC7530-SC	Done
SLC7530-DC-SM		SLC7530-DC-SM	Done
SLC7530-DC-PM		SLC7530-DC-PM	Done
SLC7530-DC-TWM		SLC7530-DC-TWM	Done
DO3316 Series		DO3316	Done
DO1608 Series		DO1608	Done
594 Series	Vishay Sprague Capacitors  B Body C Body D Body R Body	SMT-Cap-B SMT-Cap-C SMT-Cap-D SMT-Cap-R	Done Done Done Done

# Components

Top Level Description

Voltage regulator N Channel FET Synchronous Buck Regulator Controller for Low Output Voltages

Voltage regulator Simple Switcher ® 5 Amp Step Down Voltage Regulator with Adjustable Current Limiter

FET

ConfigurationPROMS Platform Flash In-System Programmable Configuration PROMS

# Components

Manufacturor	Manufacturor Part Number	Packages
National Semiconductor	LM-2737	MO-153AB-1
National Semiconductor	LM-2679	TO-263, (TO-220-molded-7Lead-Staggered), LLP-14
Xilinx	XCF16P	MO210AD-1, MO-142DD

Diodes

Manufacturor	Description	Part number	JEDEC JEP-95	Package	Symbol Status
Vishay	Silicon Epitaxial Planar Zenor Diode	BZT55-series	DO-213 AA	SOD-80	

# Pack and Land Pattern Standards

MIL-PRF-55365/4 (CWR06)