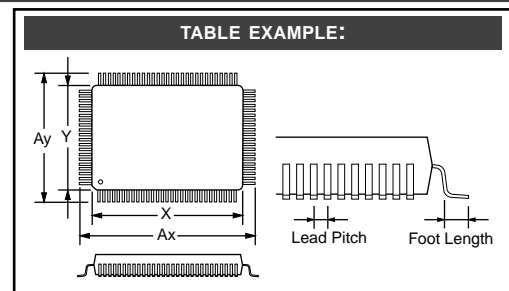




QFP CHIP PACKAGE SPECIFICATIONS – METRIC

Ironwood Package Code	Pin Count	Lead Pitch (mm)	Body Shape	Lead Tip to Tip Dimensions (mm)		Foot Length (mm) B	Package Dimensions (mm)		Body Material
				Ax	Ay		X	Y	
QFE32SA	32	0.80	SQR	9.0	9.0	0.80/0.60	7.0	7.0	Plastic
QFE44RA	44	0.80	REC	14.4	13.4	1.20	10.5	9.5	Plastic
QFE44SA	44	0.80	SQR	13.2	13.2	0.80	10.0	10.0	Plastic
QFE44SB	44	0.80	SQR	13.9	13.9	0.80	10.0	10.0	Plastic
QFE44SC	44	0.80	SQR	12.3	12.3	0.80	10.0	10.0	Plastic
QFE44SD	44	1.00	SQR	17.6	17.6	0.80	14.0	14.0	Plastic
QFE44SE	44	0.80	SQR	12.0	12.0	0.50	10.0	10.0	-
QFE44SF	44	0.80	SQR	14.4	14.4	1.40	10.0	10.0	Plastic
QFE44SG	44	1.00	SQR	18.7	18.7	1.60	14.0	14.0	Plastic
QFE44SH	44	0.80	SQR	12.6	12.6	0.75	10.0	10.0	Plastic
QFE48SB	48	0.50	SQR	9.0	9.0	0.50	7.0	7.0	Plastic
QFE48SC	48	0.80	SQR	17.2	17.2	0.50	12.0	12.0	Plastic
QFE52SA	52	0.65	SQR	13.2	13.2	0.80	10.0	10.0	Plastic
QFE52SB	52	0.65	SQR	13.9	13.9	0.80	10.0	10.0	Plastic
QFE52SC	52	1.00	SQR	17.2	17.2	0.80	14.0	14.0	Plastic
QFE52SD	52	1.00	SQR	17.9	17.9	0.80	14.0	14.0	Plastic
QFE52SE	52	0.65	SQR	12.0	12.0	0.50	10.0	10.0	Plastic
QFE52SF	52	1.00	SQR	17.6	17.6	0.80	14.0	14.0	Plastic
QFE56SA	56	0.65	SQR	14.5	14.5	1.20	10.5	10.5	Plastic
QFE56SB	56	0.80	SQR	16.8	12.8	0.60	14.0	10.0	Plastic
QFE60RA	60	1.00	REC	24.0	20.0	0.80	19.0	15.0	Plastic
QFE60RB	60	1.00	REC	25.6	19.6	0.80	20.0	14.0	Plastic
QFE60SA	60	0.80	SQR	17.9	17.9	0.80	14.0	14.0	Plastic
QFE60SB	60	0.80	SQR	17.2	17.2	0.80	14.0	14.0	Plastic
QFE64RA	64	1.00	REC	25.5	19.6	1.25	20.0	14.0	Plastic
QFE64RB	64	1.00	REC	23.2	17.2	0.80	20.0	14.0	Plastic
QFE64RC	64	1.00	REC	23.9	17.9	0.80	20.0	14.0	Plastic
QFE64RD	64	1.00	REC	24.8	18.8	0.90	20.0	14.0	Plastic
QFE64RE	64	0.50	REC	24.8	18.8	1.20	20.0	14.0	Plastic
QFE64SA	64	0.80	SQR	16.4	16.4	0.80	14.0	14.0	Plastic
QFE64SB	64	0.80	SQR	17.2	17.2	0.80	14.0	14.0	Plastic
QFE64SC	64	0.80	SQR	17.9	17.9	0.80	14.0	14.0	Plastic
QFE64SD	64	0.50	SQR	12.0	12.0	0.50	10.0	10.0	Plastic
QFE64SE	64	0.80	SQR	17.6	17.6	0.80	14.0	14.0	Plastic
QFE64SF	64	0.80	SQR	16.0	16.0	0.80	14.0	14.0	Plastic
QFE64SG	64	0.65	SQR	15.3	15.3	0.80	12.0	12.0	Plastic
QFE64SH	64	0.80	SQR	16.8	16.8	0.60	14.0	14.0	Plastic



QFP CHIP PACKAGE SPECIFICATIONS – METRIC

Ironwood Package Code	Pin Count	Lead Pitch (mm)	Body Shape	Lead Tip to Tip Dimensions (mm)		Foot Length (mm) B	Package Dimensions (mm)		Body Material
				Ax	Ay		X	Y	
QFE72SA	72	0.80	SQR	23.1	18.2	1.70	20.0	16.0	Plastic
QFE74SA	74	1.00	SQR	23.2	23.2	0.80	20.0	20.0	Plastic
QFE76SA	76	1.00	SQR	23.2	23.2	0.80	20.0	20.0	Plastic
QFE80RA	80	0.80	REC	25.6	19.6	1.70	20.0	14.0	Plastic
QFE80RB	80	0.80	REC	23.2	17.2	0.80	20.0	14.0	Plastic
QFE80RC	80	0.80	REC	23.9	17.9	0.80	20.0	14.0	Plastic
QFE80RD	80	0.80	REC	25.0	19.0	1.30	20.0	14.0	Plastic
QFE80RE	80	0.80	REC	24.8	18.8	1.20	20.0	14.0	Plastic
QFE80SA	80	0.65	SQR	17.2	17.2	0.80	14.0	14.0	Plastic
QFE80SB	80	0.65	SQR	17.9	17.9	0.80	14.0	14.0	Plastic
QFE80SC	80	0.50	SQR	14.0	14.0	0.50	12.0	12.0	Plastic
QFE80SD	80	0.65	SQR	16.0	16.0	0.80	14.0	14.0	Plastic
QFE80SE	80	0.50	SQR	15.2	15.2	0.80	12.0	12.0	-
QFE80SF	80	0.50	SQR	15.9	15.9	0.80	12.0	12.0	-
QFE88SA	88	0.65	SQR	19.2	19.2	0.80	16.0	16.0	Plastic
QFE94SA	94	0.80	SQR	23.2	23.2	0.80	20.0	20.0	Plastic
QFE100RA	100	0.65	REC	25.6	19.6	1.70	20.0	14.0	Plastic
QFE100RB	100	0.65	REC	23.2	17.2	0.80	20.0	14.0	Plastic
QFE100RC	100	0.65	REC	23.9	17.9	0.80	20.0	14.0	Plastic
QFE100RD	100	0.65	REC	23.2	17.2	0.58	19.2	13.2	Ceramic
QFE100RE	100	0.65	REC	23.6	17.6	1.30	20.0	14.0	Plastic
QFE100RF	100	0.65	REC	22.0	16.0	0.80	20.0	14.0	-
QFE100RG	100	0.65	REC	24.8	18.8	1.20	20.0	14.0	Plastic
QFE100SA	100	0.65	SQR	29.0	29.0	0.81	24.1	24.1	Plastic
QFE100SB	100	0.80	SQR	27.8	27.8	0.80	22.0	22.0	Plastic
QFE100SC	100	0.50	SQR	16.0	16.0	0.50	14.0	14.0	Plastic
QFE100SD	100	0.50	SQR	17.2	17.2	0.55	14.0	14.0	Plastic
QFE112SA	112	0.65	SQR	23.2	23.2	0.80	19.2	19.2	Plastic
QFE112SB	112	0.65	SQR	23.2	23.2	0.80	20.0	20.0	Plastic
QFE112SC	112	0.65	SQR	22.00	22.00	0.60	20.0	20.0	-
QFE120SA	120	0.80	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE120SB	120	0.80	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE120SC	120	0.40	SQR	16.0	16.0	0.50	14.0	14.0	Plastic
QFE120SD	120	0.50	SQR	18.4	18.4	0.60	16.0	16.0	Plastic
QFE120SE	120	0.50	SQR	22.0	22.0	0.50	20.0	20.0	Plastic
QFE128RA	128	0.50	REC	23.6	17.6	0.50	20.0	14.0	Plastic
QFE128RB	128	0.50	REC	22.0	16.0	0.50	20.0	14.0	Plastic
QFE128RC	128	0.50	REC	23.2	17.2	0.75	20.0	14.0	Plastic
QFE128SA	128	0.80	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE128SB	128	0.80	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE128SC	128	0.80	SQR	33.2	33.2	1.30	28.0	28.0	Plastic
QFE128SD	128	0.40	SQR	16.0	16.0	0.60	14.0	14.0	Plastic
QFE128SE	128	0.80	SQR	31.2	31.2	0.68	27.69	27.69	Plastic

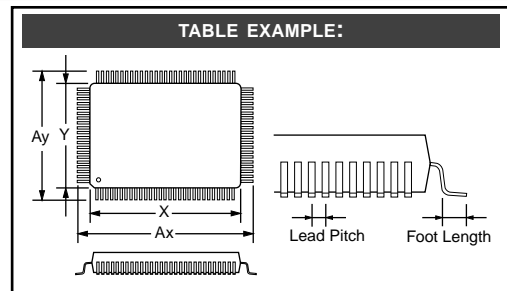




QFP CHIP PACKAGE SPECIFICATIONS – METRIC

Ironwood Package Code	Pin Count	Lead Pitch (mm)	Body Shape	Lead Tip to Tip Dimensions (mm)		Foot Length (mm) B	Package Dimensions (mm)		Body Material
				Ax	Ay		X	Y	
QFE132SA	132	0.635	SQR	27.435	27.435	0.635	24.13	24.13	Plastic
QFE136SA	136	0.65	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE136SB	136	0.80	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE136SC	136	0.80	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE144SA	144	0.65	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE144SB	144	0.65	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE144SC	144	0.50	SQR	22.0	22.0	0.50	20.0	20.0	Plastic
QFE144SD	144	0.50	SQR	23.2	23.2	0.80	20.0	20.0	Plastic
QFE144SE	144	0.50	SQR	22.0	22.0	0.50	20.0	20.0	Metal
QFE144SG	144	0.50	SQR	22.6	22.6	0.50	20.0	20.0	Plastic
QFE160SA	160	0.65	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE160SB	160	0.65	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE160SC	160	0.50	SQR	26.0	26.0	0.50	24.0	24.0	Plastic
QFE160SD	160	0.30	SQR	16.0	16.0	0.50	14.0	14.0	Plastic
QFE168SA	168	0.65	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE168SB	168	0.65	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE176SA	176	0.50	SQR	26.0	26.0	0.50	24.0	24.0	Plastic
QFE176SB	176	0.50	SQR	26.6	26.6	0.50	24.0	24.0	Plastic
QFE184SA	184	0.65	SQR	35.2	35.2	0.80	32.0	32.0	Plastic
QFE184SB	184	0.65	SQR	35.9	35.9	0.80	32.0	32.0	Plastic
QFE184SC	184	0.65	SQR	35.9	35.9	1.20	32.0	32.0	Plastic
QFE184SD	184	0.50	SQR	30.6	30.6	0.50	28.0	28.0	Plastic
QFE184SE	184	0.65	SQR	34.9	34.9	0.80	31.3	31.3	Ceramic
QFE208SA *	208	0.50	SQR	30.0	30.0	0.50	28.0	28.0	Plastic
QFE208SB *	208	0.50	SQR	30.6	30.6	0.50	28.0	28.0	Plastic
QFE208SC *	208	0.50	SQR	31.3	31.3	0.50	28.0	28.0	Plastic
QFE208SD *	208	0.50	SQR	32.5	32.5	0.50?	28.0	28.0	Plastic
QFE208SE *	208	0.50	SQR	31.2	31.2	0.80	28.0	28.0	Plastic
QFE208SF *	208	0.50	SQR	31.9	31.9	0.80	28.0	28.0	Plastic
QFE208SG *	208	0.50	SQR	30.6	30.6	0.50	27.6	27.6	Metal
QFE208SH *	208	0.50	SQR	30.6	30.6	0.5	27.2	27.2	Plastic
QFE216SA	216	0.50	SQR	30.6	30.6	0.50	28.0	28.0	Plastic
QFE232SA	232	0.50	SQR	43.2	43.2	0.80	40.0	40.0	Plastic
QFE232SB	232	0.50	SQR	43.9	43.9	0.80	40.0	40.0	Plastic
QFE240SA	240	0.65	SQR	43.2	43.2	0.80	40.0	40.0	Plastic
QFE240SB	240	0.65	SQR	43.9	43.9	0.80	40.0	40.0	Plastic
QFE240SC	240	0.50	SQR	34.6	34.6	0.50	32.0	32.0	Plastic

* PLEASE CALL FOR ASSISTANCE IN DETERMINING THE CORRECT 208 LEAD QFP PACKAGE CODE



QFP CHIP PACKAGE SPECIFICATIONS – METRIC

Ironwood Package Code	Pin Count	Lead Pitch (mm)	Body Shape	Lead Tip to Tip Dimensions (mm)		Foot Length (mm) B	Package Dimensions (mm)		Body Material
				Ax	Ay		X	Y	
QFE240SD	240	0.50	SQR	34.6	34.6	0.50	-	-	Metal
QFE256RA	256	0.50	REC	42.6	30.6	0.50	40.0	28.0	Plastic
QFE256RB	256	0.50	REC	39.2	27.2	0.50	37.5	25.7	Plastic
QFE256RC	256	0.50	REC	42.6	30.6	0.50	39.2	27.2	Plastic
QFE256SA	256	0.65	SQR	non-formed		-	46.0	46.0	Plastic
QFE256SB	256	0.50	SQR	40.132	40.132	-	31	31	Ceramic
QFE256SC	256	0.50	SQR	41.402	41.402	-	31	31	Ceramic
QFE304SA	304	0.50	SQR	42.6	42.6	0.80	40.0	40.0	Plastic
QFE352SA	352	0.50	SQR	51.3	51.3	0.50	48.0	48.0	Plastic

