

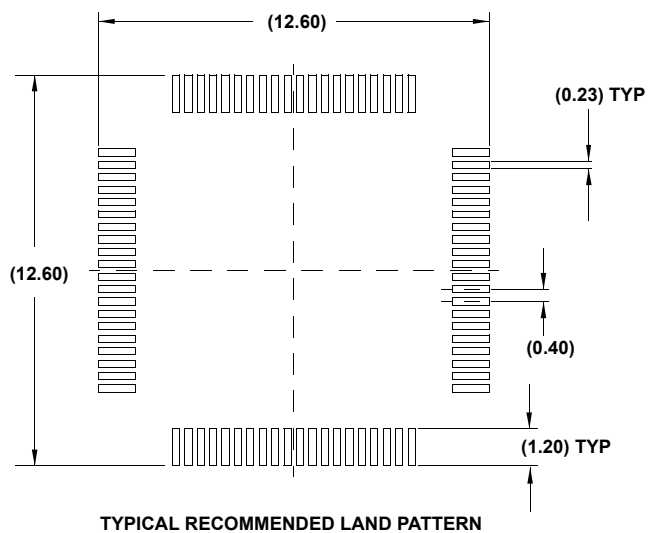
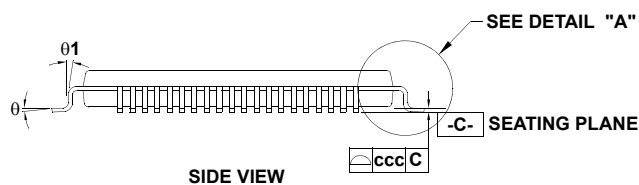
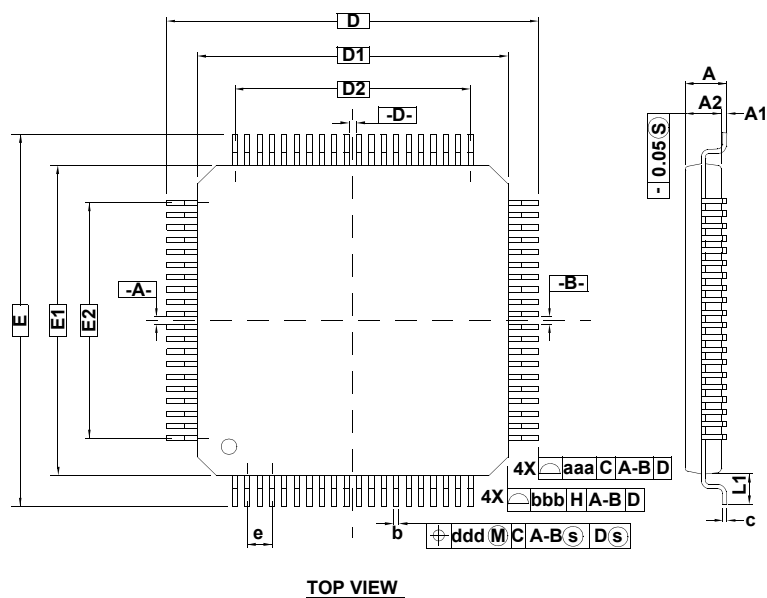
# Plastic Packages for Integrated Circuits

## Package Outline Drawing

Q80.10x10

80 LEAD QUAD FLATPACK PACKAGE (LQFP)

Rev 0, 8/11



SYMBOL	MILLIMETERS			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	1.60	-	-	0.063
A1	0.05	-	0.15	0.002	-	0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
D	12.00 BSC.			0.472 BSC.		
D1	10.00 BSC.			0.393 BSC.		
E	12.00 BSC.			0.472 BSC.		
E1	10.00 BSC.			0.393 BSC.		
R2	0.08	-	0.20	0.003	-	0.008
R1	0.08	-	-	0.003	-	-
θ	0°	3.5°	7°	0°	3.5°	7°
θ1	0°	-	-	0°	-	-
θ2	11°	12°	13°	11°	12°	13°
θ3	11°	12°	13°	11°	12°	13°
c	0.09	-	0.20	0.004	-	0.008
L	0.45	0.60	0.75	0.018	0.024	0.030
L1	1.00 REF			0.039 REF		
S	0.20	-	-	0.008	-	-
b	0.13	0.16	0.23	0.005	0.006	0.009
e	0.40 BSC.			0.016 BSC.		
D2	7.60			0.299		
E2	7.60			0.299		
TOLERANCES OF FORM AND POSITION						
aaa	0.20			0.008		
bbb	0.20			0.008		
ccc	0.08			0.003		
ddd	0.07			0.003		

**NOTES:**

- Dimensions D1 and E1 do not include mold protrusion. Allowable protrusion is 0.25mm per side. D1 and E1 are maximum plastic body size dimensions including mold mismatch.
- Dimension b does not include dambar protrusion. Allowable dambar protrusion shall not cause the lead width to exceed the maximum b dimension by more than 0.08mm. Dambar cannot be located on the lower radius or the foot. Minimum space between protrusion and an adjacent lead is 0.07mm for 0.4mm and 0.5mm pitch packages.
- Dimension of 44L "b" different with JEDEC spec (ASE: 0.22/0.30/0.38) (JEDEC: 0.30/0.37/0.45)

