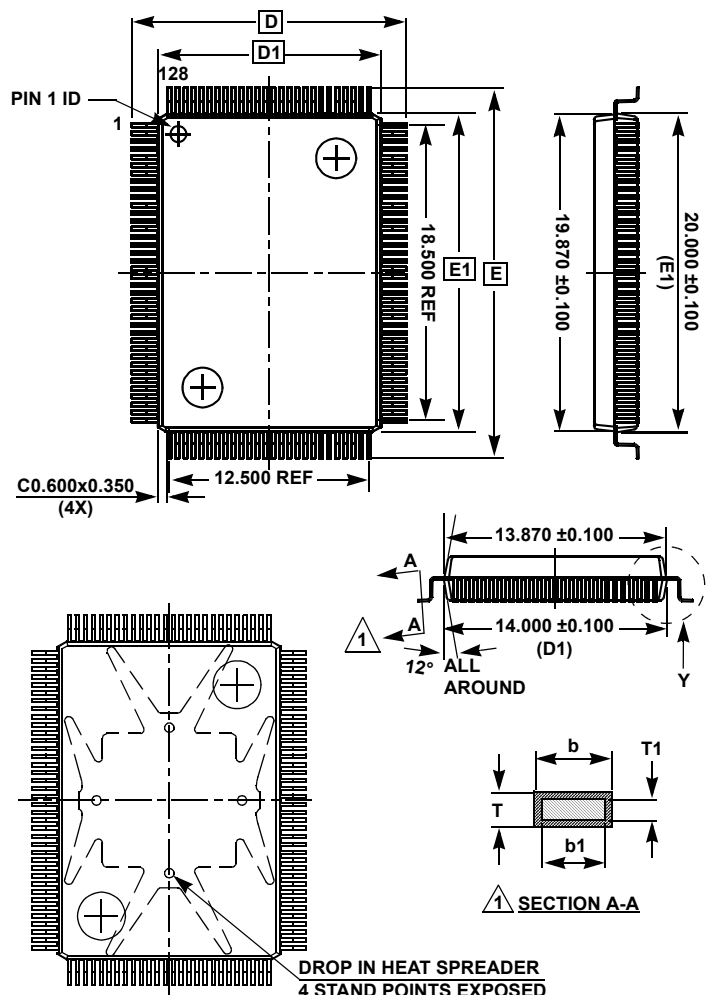


# Plastic Packages for Integrated Circuits

## Metric Plastic Quad Flatpack Packages (MQFP)



### MDP0055

14x20mm 128 LEAD MQFP (WITH AND WITHOUT HEAT SPREADER) 3.2mm FOOTPRINT

SYMBOL	DIMENSIONS (MILLIMETERS)	REMARKS
A	Max 3.40	Overall height
A1	0.250~0.500	Standoff
A2	2.750 ± 0.250	Package thickness
$\alpha$	0°~7°	Foot angle
b	0.220 ± 0.050	Lead width $\triangle 1$
b1	0.200 ± 0.030	Lead base metal width $\triangle 1$
D	17.200 ± 0.250	Lead tip to tip
D1	14.000 ± 0.100	Package length
E	23.200 ± 0.250	Lead tip to tip
E1	20.000 ± 0.100	Package width
e	0.500 Base	Lead pitch
L	0.880 ± 0.150	Foot length
L1	1.600 Ref.	Lead length
T	0.170 ± 0.060	Frame thickness $\triangle 1$
T1	0.152 ± 0.040	Frame base metal thickness $\triangle 1$
ccc	0.100	Foot coplanarity
ddd	0.100	Foot position

Rev. 2 2/07

#### NOTES:

- General tolerance: Distance  $\pm 0.100$ , Angle  $+2.5^\circ$ .
- $\triangle 1$  Matte finish on package body surface except ejection and pin 1 marking (Ra 0.8~2.0um).
- All molded body sharp corner RADII unless otherwise specified (Max RO.200).
- Package/Leadframe misalignment (X, Y): Max. 0.127
- Top/Bottom misalignment (X, Y): Max. 0.127
- Drawing does not include plastic or metal protrusion or cutting burr.
- $\triangle 2$  Compliant to JEDEC MS-022.

