



ACEX 1K Device Thermal Resistance

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Data Sheet

Table 1 in this data sheet provides θ_{JA} (junction-to-ambient thermal resistance) and θ_{JC} (junction-to-case thermal resistance) values for Altera® ACEX® 1K devices available in FineLine® Ball-Grid Array (FBGA), Thin Quad Flat Pack (TQFP), and Plastic Quad Flat Pack (PQFP).



For additional packaging information, refer to the *Altera Device Packaging Data Sheet*.

Device	Pin Count	Package	θ_{JC} (° C/W)	θ_{JA} (° C/W) Still Air	θ_{JA} (° C/W) 100 ft./min.	θ_{JA} (° C/W) 200 ft./min.	θ_{JA} (° C/W) 400 ft./min.
EP1K10	100	TQFP	11.0	37.0	35.0	33.0	29.0
	144	TQFP	8.0	31.0	29.0	28.0	25.0
	208	PQFP	6.0	30.0	29.0	27.0	22.0
	256	FBGA	12.0	37.0	35.0	33.0	30.0
EP1K30	144	TQFP	8.0	28.0	27.0	26.0	24.0
	208	PQFP	5.0	30.0	28.0	26.0	21.0
	256	FBGA	9.0	31.0	29.0	28.0	25.0
EP1K50	144	TQFP	7.0	26.0	25.0	24.0	23.0
	208	PQFP	5.0	29.0	28.0	25.0	20.0
	256	FBGA	7.0	30.0	28.0	27.0	24.0
	484	FBGA	5.0	25.0	24.0	23.0	22.0
EP1K100	208	PQFP	5.0	28.0	26.0	23.0	18.0
	256	FBGA	6.0	28.0	26.0	25.0	23.0
	484	FBGA	5.0	24.0	23.0	22.0	21.0



101 Innovation Drive
San Jose, CA 95134
(408) 544-7000
<http://www.altera.com>

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