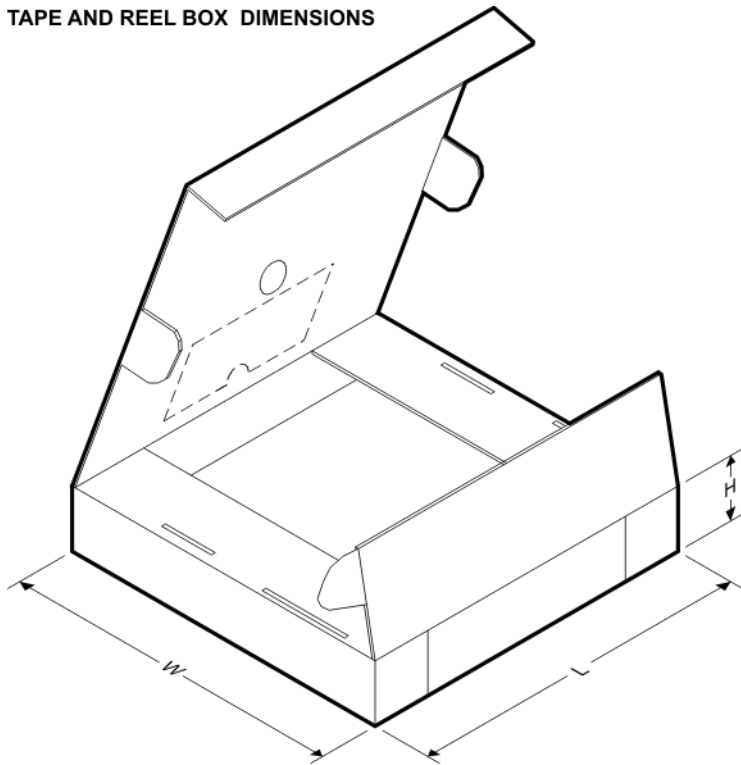


TAPE AND REEL INFORMATION

QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE


*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
MSP430FG437IPNR	LQFP	PN	80	1000	330.0	24.4	15.0	15.0	2.1	20.0	24.0	Q2
MSP430FG437IZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG437IZCAT	NFBGA	ZCA	113	250	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG438IPNR	LQFP	PN	80	1000	330.0	24.4	15.0	15.0	2.1	20.0	24.0	Q2
MSP430FG438IZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG438IZCAT	NFBGA	ZCA	113	250	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG439IPNR	LQFP	PN	80	1000	330.0	24.4	15.0	15.0	2.1	20.0	24.0	Q2
MSP430FG439IZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG439IZCAT	NFBGA	ZCA	113	250	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1

TAPE AND REEL BOX DIMENSIONS


*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
MSP430FG437IPNR	LQFP	PN	80	1000	367.0	367.0	45.0
MSP430FG437IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8
MSP430FG437IZCAT	NFBGA	ZCA	113	250	341.0	336.6	31.8
MSP430FG438IPNR	LQFP	PN	80	1000	367.0	367.0	45.0
MSP430FG438IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8
MSP430FG438IZCAT	NFBGA	ZCA	113	250	341.0	336.6	31.8
MSP430FG439IPNR	LQFP	PN	80	1000	367.0	367.0	45.0
MSP430FG439IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8
MSP430FG439IZCAT	NFBGA	ZCA	113	250	341.0	336.6	31.8