

**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
MSP430FG4616IPZR	LQFP	PZ	100	1000	330.0	24.4	17.0	17.0	2.1	20.0	24.0	Q2
MSP430FG4616IZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG4617IZCAR	NFBGA	ZCA	113	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG4618IPZR	LQFP	PZ	100	1000	330.0	24.4	17.0	17.0	2.1	20.0	24.0	Q2
MSP430FG4618IZCAT	NFBGA	ZCA	113	250	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q1
MSP430FG4619IPZR	LQFP	PZ	100	1000	330.0	24.4	17.0	17.0	2.1	20.0	24.0	Q2
MSP430FG4619IZCAR	NFBGA	ZCA	113	2500	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)
MSP430FG4616IPZR	LQFP	PZ	100	1000	367.0	367.0	45.0
MSP430FG4616IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8
MSP430FG4617IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8
MSP430FG4618IPZR	LQFP	PZ	100	1000	367.0	367.0	45.0
MSP430FG4618IZCAT	NFBGA	ZCA	113	250	341.0	336.6	31.8
MSP430FG4619IPZR	LQFP	PZ	100	1000	367.0	367.0	45.0
MSP430FG4619IZCAR	NFBGA	ZCA	113	2500	341.0	336.6	31.8

**TRAY**


Chamfer on Tray corner indicates Pin 1 orientation of packed units.

\*All dimensions are nominal

Device	Package Name	Package Type	Pins	SPQ	Unit array matrix	Max temperature (°C)	L (mm)	W (mm)	K0 (µm)	P1 (mm)	CL (mm)	CW (mm)
MSP430FG4616IZCA	ZCA	NFBGA	113	260	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4616IZCAR	ZCA	NFBGA	113	2500	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4617IZCAR	ZCA	NFBGA	113	2500	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4618IZCA	ZCA	NFBGA	113	260	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4618IZCAR	ZCA	NFBGA	113	2500	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4618IZCAR	ZCA	NFBGA	113	2500	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4618IZCAT	ZCA	NFBGA	113	250	10 x 26	150	315	135.9	7620	11.8	10	10.35
MSP430FG4619IZCAR	ZCA	NFBGA	113	2500	10 x 26	150	315	135.9	7620	11.8	10	10.35