

## TAPE AND REEL INFORMATION



### QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



\*All dimensions are nominal

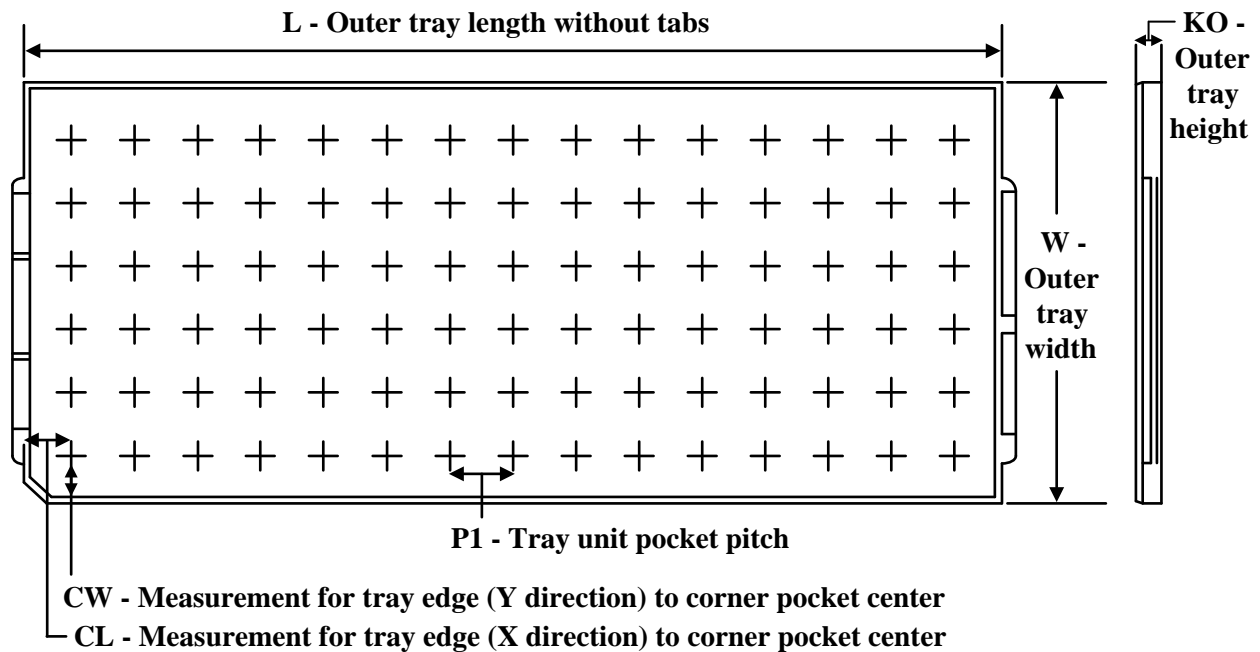
Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
MSP430F5304IPTR	LQFP	PT	48	1000	330.0	16.4	9.6	9.6	1.9	12.0	16.0	Q2
MSP430F5304IRGZR	VQFN	RGZ	48	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5304IRGZT	VQFN	RGZ	48	250	180.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5308IPTR	LQFP	PT	48	1000	330.0	16.4	9.6	9.6	1.9	12.0	16.0	Q2
MSP430F5308IRGCR	VQFN	RGC	64	2000	330.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2
MSP430F5308IRGCT	VQFN	RGC	64	250	180.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2
MSP430F5308IRGZR	VQFN	RGZ	48	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5308IRGZT	VQFN	RGZ	48	250	180.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5308IZXHR	NFBGA	ZXH	80	2500	330.0	12.4	5.3	5.3	1.5	8.0	12.0	Q1
MSP430F5309IRGCR	VQFN	RGC	64	2000	330.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2
MSP430F5309IRGCT	VQFN	RGC	64	250	180.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2
MSP430F5309IRGZR	VQFN	RGZ	48	2500	330.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5309IRGZT	VQFN	RGZ	48	250	180.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2
MSP430F5309IZXHR	NFBGA	ZXH	80	2500	330.0	12.4	5.3	5.3	1.5	8.0	12.0	Q1
MSP430F5310IPTR	LQFP	PT	48	1000	330.0	16.4	9.6	9.6	1.9	12.0	16.0	Q2
MSP430F5310IRGCR	VQFN	RGC	64	2000	330.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2

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
MSP430F5310IRGCT	VQFN	RGC	64	250	180.0	16.4	9.3	9.3	1.5	12.0	16.0	Q2
MSP430F5310IRGZT	VQFN	RGZ	48	250	180.0	16.4	7.3	7.3	1.5	12.0	16.0	Q2

**TAPE AND REEL BOX DIMENSIONS**


\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
MSP430F5304IPTR	LQFP	PT	48	1000	350.0	350.0	43.0
MSP430F5304IRGZR	VQFN	RGZ	48	2500	356.0	356.0	35.0
MSP430F5304IRGZT	VQFN	RGZ	48	250	210.0	185.0	35.0
MSP430F5308IPTR	LQFP	PT	48	1000	350.0	350.0	43.0
MSP430F5308IRGCR	VQFN	RGC	64	2000	356.0	356.0	35.0
MSP430F5308IRGCT	VQFN	RGC	64	250	210.0	185.0	35.0
MSP430F5308IRGZR	VQFN	RGZ	48	2500	356.0	356.0	35.0
MSP430F5308IRGZT	VQFN	RGZ	48	250	210.0	185.0	35.0
MSP430F5308IZXHR	NFBGA	ZXH	80	2500	350.0	350.0	43.0
MSP430F5309IRGCR	VQFN	RGC	64	2000	356.0	356.0	35.0
MSP430F5309IRGCT	VQFN	RGC	64	250	210.0	185.0	35.0
MSP430F5309IRGZR	VQFN	RGZ	48	2500	356.0	356.0	35.0
MSP430F5309IRGZT	VQFN	RGZ	48	250	210.0	185.0	35.0
MSP430F5309IZXHR	NFBGA	ZXH	80	2500	350.0	350.0	43.0
MSP430F5310IPTR	LQFP	PT	48	1000	350.0	350.0	43.0
MSP430F5310IRGCR	VQFN	RGC	64	2000	356.0	356.0	35.0
MSP430F5310IRGCT	VQFN	RGC	64	250	210.0	185.0	35.0
MSP430F5310IRGZT	VQFN	RGZ	48	250	210.0	185.0	35.0

**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)
MSP430F5304IPT	PT	LQFP	48	250	10 x 25	150	315	135.9	7620	12.2	11.1	11.25
MSP430F5308IPT	PT	LQFP	48	250	10 x 25	150	315	135.9	7620	12.2	11.1	11.25
MSP430F5308IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5308IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5308IZXHR	ZXH	NFBGA	80	2500	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5309IPT	PT	LQFP	48	250	10 x 25	150	315	135.9	7620	12.2	11.1	11.25
MSP430F5309IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5309IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5309IZXHR	ZXH	NFBGA	80	2500	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5310IPT	PT	LQFP	48	250	10 x 25	150	315	135.9	7620	12.2	11.1	11.25
MSP430F5310IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7
MSP430F5310IZXH	ZXH	NFBGA	80	576	16 x 36	150	315	135.9	7620	8.5	8.75	8.7