

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 |
|------------------|--------------|-----------------|------|------|--------------------|--------------------|---------|---------|---------|---------|--------|---------------|
| MSP430F5358IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |
| MSP430F5359IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |
| MSP430F5658IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |
| MSP430F5659IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |
| MSP430F5659IZCAR | NFBGA | ZCA | 113 | 2500 | 330.0 | 16.4 | 7.3 | 7.3 | 1.5 | 12.0 | 16.0 | Q1 |
| MSP430F6459IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |
| MSP430F6659IPZR | LQFP | PZ | 100 | 1000 | 330.0 | 24.4 | 17.0 | 17.0 | 2.1 | 20.0 | 24.0 | Q2 |

TAPE AND REEL BOX DIMENSIONS


*All dimensions are nominal

| Device | Package Type | Package Drawing | Pins | SPQ | Length (mm) | Width (mm) | Height (mm) |
|------------------|--------------|-----------------|------|------|-------------|------------|-------------|
| MSP430F5358IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |
| MSP430F5359IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |
| MSP430F5658IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |
| MSP430F5659IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |
| MSP430F5659IZCAR | NFBGA | ZCA | 113 | 2500 | 336.6 | 336.6 | 31.8 |
| MSP430F6459IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |
| MSP430F6659IPZR | LQFP | PZ | 100 | 1000 | 350.0 | 350.0 | 43.0 |

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) |
|------------------|--------------|--------------|------|-----|-------------------|----------------------|--------|--------|---------|---------|---------|---------|
| MSP430F5358IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F5358IZCAT | ZCA | NFBGA | 113 | 250 | 10 x 26 | 150 | 315 | 135.9 | 7620 | 11.8 | 10 | 10.35 |
| MSP430F5359IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F5658IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F5659IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F5659IZCAT | ZCA | NFBGA | 113 | 250 | 10 x 26 | 150 | 315 | 135.9 | 7620 | 11.8 | 10 | 10.35 |
| MSP430F6458IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F6459IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F6658IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F6659IPZ | PZ | LQFP | 100 | 90 | 6 x 15 | 150 | 315 | 135.9 | 7620 | 20.3 | 15.4 | 15.45 |
| MSP430F6659IZCAT | ZCA | NFBGA | 113 | 250 | 10 x 26 | 150 | 315 | 135.9 | 7620 | 11.8 | 10 | 10.35 |