

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 |
|-------------------|--------------|-----------------|------|------|--------------------|--------------------|---------|---------|---------|---------|--------|---------------|
| MSP430FR2153TDBTR | TSSOP | DBT | 38 | 2000 | 330.0 | 16.4 | 6.9 | 10.2 | 1.8 | 12.0 | 16.0 | Q1 |
| MSP430FR2153TPTR | LQFP | PT | 48 | 1000 | 330.0 | 16.4 | 9.6 | 9.6 | 1.9 | 12.0 | 16.0 | Q2 |
| MSP430FR2153TRHAR | VQFN | RHA | 40 | 2500 | 330.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2153TRHAT | VQFN | RHA | 40 | 250 | 180.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2153TRSMR | VQFN | RSM | 32 | 3000 | 330.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2153TRSMT | VQFN | RSM | 32 | 250 | 180.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2155TDBTR | TSSOP | DBT | 38 | 2000 | 330.0 | 16.4 | 6.9 | 10.2 | 1.8 | 12.0 | 16.0 | Q1 |
| MSP430FR2155TPTR | LQFP | PT | 48 | 1000 | 330.0 | 16.4 | 9.6 | 9.6 | 1.9 | 12.0 | 16.0 | Q2 |
| MSP430FR2155TRHAR | VQFN | RHA | 40 | 2500 | 330.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2155TRHAT | VQFN | RHA | 40 | 250 | 180.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2155TRSMR | VQFN | RSM | 32 | 3000 | 330.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2155TRSMT | VQFN | RSM | 32 | 250 | 180.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2353TDBTR | TSSOP | DBT | 38 | 2000 | 330.0 | 16.4 | 6.9 | 10.2 | 1.8 | 12.0 | 16.0 | Q1 |
| MSP430FR2353TPTR | LQFP | PT | 48 | 1000 | 330.0 | 16.4 | 9.6 | 9.6 | 1.9 | 12.0 | 16.0 | Q2 |
| MSP430FR2353TRHAR | VQFN | RHA | 40 | 2500 | 330.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2353TRHAT | VQFN | RHA | 40 | 250 | 180.0 | 16.4 | 6.3 | 6.3 | 1.1 | 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 |
|-------------------|--------------|-----------------|------|------|--------------------|--------------------|---------|---------|---------|---------|--------|---------------|
| MSP430FR2353TRSMR | VQFN | RSM | 32 | 3000 | 330.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2353TRSMT | VQFN | RSM | 32 | 250 | 180.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2355TDBTR | TSSOP | DBT | 38 | 2000 | 330.0 | 16.4 | 6.9 | 10.2 | 1.8 | 12.0 | 16.0 | Q1 |
| MSP430FR2355TPTR | LQFP | PT | 48 | 1000 | 330.0 | 16.4 | 9.6 | 9.6 | 1.9 | 12.0 | 16.0 | Q2 |
| MSP430FR2355TRHAR | VQFN | RHA | 40 | 2500 | 330.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2355TRHAT | VQFN | RHA | 40 | 250 | 180.0 | 16.4 | 6.3 | 6.3 | 1.1 | 12.0 | 16.0 | Q2 |
| MSP430FR2355TRSMR | VQFN | RSM | 32 | 3000 | 330.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |
| MSP430FR2355TRSMT | VQFN | RSM | 32 | 250 | 180.0 | 12.4 | 4.25 | 4.25 | 1.15 | 8.0 | 12.0 | Q2 |

TAPE AND REEL BOX DIMENSIONS


*All dimensions are nominal

| Device | Package Type | Package Drawing | Pins | SPQ | Length (mm) | Width (mm) | Height (mm) |
|-------------------|--------------|-----------------|------|------|-------------|------------|-------------|
| MSP430FR2153TDBTR | TSSOP | DBT | 38 | 2000 | 350.0 | 350.0 | 43.0 |
| MSP430FR2153TPTR | LQFP | PT | 48 | 1000 | 336.6 | 336.6 | 31.8 |
| MSP430FR2153TRHAR | VQFN | RHA | 40 | 2500 | 367.0 | 367.0 | 35.0 |
| MSP430FR2153TRHAT | VQFN | RHA | 40 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2153TRSMR | VQFN | RSM | 32 | 3000 | 367.0 | 367.0 | 35.0 |
| MSP430FR2153TRSMT | VQFN | RSM | 32 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2155TDBTR | TSSOP | DBT | 38 | 2000 | 350.0 | 350.0 | 43.0 |
| MSP430FR2155TPTR | LQFP | PT | 48 | 1000 | 336.6 | 336.6 | 31.8 |
| MSP430FR2155TRHAR | VQFN | RHA | 40 | 2500 | 367.0 | 367.0 | 35.0 |
| MSP430FR2155TRHAT | VQFN | RHA | 40 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2155TRSMR | VQFN | RSM | 32 | 3000 | 367.0 | 367.0 | 35.0 |
| MSP430FR2155TRSMT | VQFN | RSM | 32 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2353TDBTR | TSSOP | DBT | 38 | 2000 | 350.0 | 350.0 | 43.0 |
| MSP430FR2353TPTR | LQFP | PT | 48 | 1000 | 336.6 | 336.6 | 31.8 |
| MSP430FR2353TRHAR | VQFN | RHA | 40 | 2500 | 367.0 | 367.0 | 35.0 |
| MSP430FR2353TRHAT | VQFN | RHA | 40 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2353TRSMR | VQFN | RSM | 32 | 3000 | 367.0 | 367.0 | 35.0 |
| MSP430FR2353TRSMT | VQFN | RSM | 32 | 250 | 210.0 | 185.0 | 35.0 |

| Device | Package Type | Package Drawing | Pins | SPQ | Length (mm) | Width (mm) | Height (mm) |
|-------------------|--------------|-----------------|------|------|-------------|------------|-------------|
| MSP430FR2355TDBTR | TSSOP | DBT | 38 | 2000 | 350.0 | 350.0 | 43.0 |
| MSP430FR2355TPTR | LQFP | PT | 48 | 1000 | 336.6 | 336.6 | 31.8 |
| MSP430FR2355TRHAR | VQFN | RHA | 40 | 2500 | 367.0 | 367.0 | 35.0 |
| MSP430FR2355TRHAT | VQFN | RHA | 40 | 250 | 210.0 | 185.0 | 35.0 |
| MSP430FR2355TRSMR | VQFN | RSM | 32 | 3000 | 367.0 | 367.0 | 35.0 |
| MSP430FR2355TRSMT | VQFN | RSM | 32 | 250 | 210.0 | 185.0 | 35.0 |

TUBE


*All dimensions are nominal

| Device | Package Name | Package Type | Pins | SPQ | L (mm) | W (mm) | T (μm) | B (mm) |
|------------------|--------------|--------------|------|-----|--------|--------|--------|--------|
| MSP430FR2153TDBT | DBT | TSSOP | 38 | 50 | 530 | 10.2 | 3600 | 3.5 |
| MSP430FR2155TDBT | DBT | TSSOP | 38 | 50 | 530 | 10.2 | 3600 | 3.5 |
| MSP430FR2353TDBT | DBT | TSSOP | 38 | 50 | 530 | 10.2 | 3600 | 3.5 |
| MSP430FR2355TDBT | DBT | TSSOP | 38 | 50 | 530 | 10.2 | 3600 | 3.5 |

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) |
|-----------------|--------------|--------------|------|-----|-------------------|----------------------|--------|--------|---------|---------|---------|---------|
| MSP430FR2153TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2153TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2155TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2155TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2353TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2353TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2355TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |
| MSP430FR2355TPT | PT | LQFP | 48 | 250 | 10 x 25 | 150 | 315 | 135.9 | 7620 | 12.2 | 11.1 | 11.25 |