

NXP Kinetis MCUs

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NXP MCU / MPU / DSP

FREEDOM DEVELOPMENT PLATFORM

| MOUSER STOCK NO. | NXP Part No. | Description | Price Each |
|----------------------|------------------|--|------------|
| 841-FRDM-FXS-MULTI | FRDM-FXS-MULTI | 12-Axis, 3.7V Expansion Board for Multiple Xtrinsic Sensors | 53.13 |
| 841-FRDM-FXS-MULTI-B | FRDM-FXS-MULTI-B | 12-Axis, 3.7V Expansion Board for Multiple Xtrinsic Sensors with Bluetooth | 132.81 |
| 841-FRDM-K22F | FRDM-K22F | Kinetis K22 Series ARM Cortex M4 Development Board | 29.00 |
| 841-FRDM-K64F | FRDM-K64F | Kinetis K64 Series ARM Cortex M4 Development Board | 35.00 |
| 841-FRDM-KE02Z40M | FRDM-KE02Z40M | Kinetis KE02 Series ARM Cortex M0+ Development Board, 40MHz | 15.00 |
| 841-FRDM-KE04Z | FRDM-KE04Z | Kinetis KE04 Series ARM Cortex M0+ Development Board | 15.00 |
| 841-FRDM-KE06Z | FRDM-KE06Z | Kinetis KE06 Series ARM Cortex M0+ Development Board | 15.00 |
| 841-FRDM-KL03Z | FRDM-KL03Z | Kinetis KL03 Series ARM Cortex M0+ Development Board | 20.00 |
| 841-FRDM-KL02Z | FRDM-KL02Z | Kinetis KL0 Series KL02 ARM Cortex M0+ Development Board | 15.00 |
| 841-FRDM-KL05Z | FRDM-KL05Z | Kinetis KL0 Series KL05 ARM Cortex M0+ Development Board | 15.00 |
| 841-FREEDOM-KL25Z | FRDM-KL25Z | Kinetis KL2 Series KL25 ARM Cortex M0+ Development Board | 15.00 |
| 841-FRDM-KL26Z | FRDM-KL26Z | Kinetis KL2 Series KL26 ARM Cortex M0+ Development Board | 20.00 |
| 841-FRDM-KL43Z | FRDM-KL43Z | Kinetis KL17/27/33/43 Series ARM Cortex M0+ Development Board | 20.00 |
| 841-FRDM-KL46Z | FRDM-KL46Z | Kinetis KL4 Series KL46 ARM Cortex M0+ Development Board | 20.00 |

KINETIS E SERIES ARM CORTEX-M0+ MICROCONTROLLERS

Kinetis KE02 - Entry-Level MCUs

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|------------------|--------------|---------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|------|------|
| | | | | | | | | | 1 | 25 | 100 |
| 841-MKE02Z16VLC2 | MKE02Z16VLC2 | LQFP-32 | 20 | 16 | 4 | 12/16 | - | 57 | 1.25 | 1.11 | .828 |
| 841-MKE02Z16VLD2 | MKE02Z16VLD2 | LQFP-44 | 20 | 16 | 4 | 12/16 | - | 57 | 1.39 | 1.24 | .924 |
| 841-MKE02Z32VLC2 | MKE02Z32VLC2 | LQFP-32 | 20 | 32 | 4 | 12/16 | - | 57 | 1.73 | 1.54 | 1.16 |
| 841-MKE02Z32VLD2 | MKE02Z32VLD2 | LQFP-44 | 20 | 32 | 4 | 12/16 | - | 57 | 1.91 | 1.70 | 1.28 |
| 841-MKE02Z32VQH2 | MKE02Z32VQH2 | QFP-64 | 20 | 32 | 4 | 12/16 | - | 57 | 2.16 | 1.92 | 1.44 |
| 841-MKE02Z64VLC2 | MKE02Z64VLC2 | LQFP-32 | 20 | 64 | 4 | 12/16 | - | 57 | 1.95 | 1.73 | 1.30 |
| 841-MKE02Z64VLD2 | MKE02Z64VLD2 | LQFP-44 | 20 | 64 | 4 | 12/16 | - | 57 | 2.15 | 1.91 | 1.43 |
| 841-MKE02Z64VQH2 | MKE02Z64VQH2 | QFP-64 | 20 | 64 | 4 | 12/16 | - | 57 | 2.25 | 2.00 | 1.50 |
| 841-MKE02Z64VLC4 | MKE02Z64VLC4 | LQFP-32 | 40 | 64 | 4 | 12/16 | 6 | 57 | 1.95 | 1.73 | 1.30 |
| 841-MKE02Z64VLD4 | MKE02Z64VLD4 | LQFP-44 | 40 | 64 | 4 | 12/16 | 6 | 57 | 2.15 | 1.91 | 1.43 |
| 841-MKE02Z64VLH4 | MKE02Z64VLH4 | LQFP-64 | 40 | 64 | 4 | 12/16 | 6 | 57 | 2.22 | 1.97 | 1.48 |
| 841-MKE02Z64VQH4 | MKE02Z64VQH4 | QFP-64 | 40 | 64 | 4 | 12/16 | 6 | 57 | 2.25 | 2.00 | 1.50 |

Kinetis KE04 - Sub-Family MCUs

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|------------------|--------------|----------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|------|------|
| 841-MKE04Z8VFK4 | MKE04Z8VFK4 | QFN-24 | 48 | 8 | 1 | 12/12 | 6 | 22 | .95 | .848 | .636 |
| 841-MKE04Z8VTK4 | MKE04Z8VTK4 | TSSOP-16 | 48 | 8 | 1 | 12/12 | 6 | 22 | .75 | .672 | .504 |
| 841-MKE04Z8VWJ4 | MKE04Z8VWJ4 | SOIC-20 | 48 | 8 | 1 | 12/12 | 6 | 18 | .91 | .816 | .612 |

Kinetis KE06 - Sub-Family MCUs

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|-------------------|---------------|---------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|------|------|
| 841-MKE06Z128VLD4 | MKE06Z128VLD4 | LQFP-44 | 48 | 128 | 16 | 12/16 | 6 | 38 | 3.30 | 2.93 | 2.20 |
| 841-MKE06Z128VLH4 | MKE06Z128VLH4 | LQFP-64 | 48 | 128 | 16 | 12/16 | 6 | 58 | 3.37 | 3.00 | 2.25 |
| 841-MKE06Z128VLK4 | MKE06Z128VLK4 | LQFP-80 | 48 | 128 | 16 | 12/16 | 6 | 71 | 3.59 | 3.19 | 2.39 |
| 841-MKE06Z128VQH4 | MKE06Z128VQH4 | QFP-64 | 48 | 128 | 16 | 12/16 | 6 | 58 | 3.39 | 3.01 | 2.26 |

KINETIS KEA SERIES ARM CORTEX-M0+ MICROCONTROLLERS FOR AUTOMOTIVE

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|-------------------|---------------|----------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|------|------|
| 841-S9KEAZN8AMFK | S9KEAZN8AMFK | QFN-24 | 48 | 8 | 1 | 12/12 | 6 | 22 | 1.35 | 1.20 | .90 |
| 841-S9KEAZN8AMTG | S9KEAZN8AMTG | TSSOP-16 | 48 | 8 | 1 | 12/12 | 6 | 22 | 1.16 | 1.03 | .768 |
| 841-S9KEAZN64AMLC | S9KEAZN64AMLC | LQFP-32 | 40 | 64 | 4 | 12/16 | 6 | 28 | 2.11 | 1.88 | 1.41 |
| 841-S9KEAZN64AMLH | S9KEAZN64AMLH | LQFP-64 | 40 | 64 | 4 | 12/16 | 6 | 57 | 2.42 | 2.15 | 1.61 |
| 841-S9KEAZ128AMLH | S9KEAZ128AMLH | LQFP-64 | 48 | 128 | 16 | 12/16 | 6 | 58 | 3.60 | 3.20 | 2.40 |
| 841-S9KEAZ128AMLK | S9KEAZ128AMLK | LQFP-80 | 48 | 128 | 16 | 12/16 | 6 | 71 | 3.82 | 3.40 | 2.55 |

KINETIS K02 SERIES ARM CORTEX-M4 FPU MICROCONTROLLERS

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|--------------------|----------------|---------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|------|------|
| 841-MK02FN128VFM10 | MK02FN128VFM10 | QFN-32 | 100 | 128 | 16 | 16 | 12 | 26 | 2.72 | 2.42 | 1.82 |
| 841-MK02FN128VLH10 | MK02FN128VLH10 | LQFP-64 | 100 | 128 | 16 | 16 | 12 | 46 | 3.14 | 2.79 | 2.09 |
| 841-MK02FN64VFM10 | MK02FN64VFM10 | QFN-32 | 100 | 64 | 16 | 16 | 12 | 26 | 2.11 | 1.88 | 1.41 |
| 841-MK02FN64VLH10 | MK02FN64VLH10 | LQFP-64 | 100 | 64 | 16 | 16 | 12 | 46 | 2.70 | 2.40 | 1.80 |

KINETIS K SERIES ARM CORTEX-M4 MICROCONTROLLERS

Kinetis K10 - Baseline MCUs

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|---------------------|-----------------|------------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|-------|------|
| 841-MK10DN32VFM5 | MK10DN32VFM5 | QFN-32 | 50 | 32 | 8 | 16/1 | - | 24 | 2.72 | 2.42 | 1.82 |
| 841-MK10DN32VLF5 | MK10DN32VLF5 | LQFP-48 | 50 | 32 | 8 | 16/4 | - | 33 | 2.92 | 2.60 | 1.95 |
| 841-MK10DX128VFM5 | MK10DX128VFM5 | LQFN-32 | 50 | 128 | 16 | 16/1 | - | 33 | 3.91 | 3.48 | 2.61 |
| 841-MK10DX128VLF5 | MK10DX128VLF5 | LQFP-48 | 50 | 128 | 16 | 16/1 | - | 33 | 4.11 | 3.65 | 2.74 |
| 841-MK10DX128VLH5 | MK10DX128VLH5 | LQFP-64 | 50 | 128 | 16 | 16/1 | - | 44 | 4.34 | 3.86 | 2.90 |
| 841-MK10DX64VLH7 | MK10DX64VLH7 | LQFP-48 | 72 | 64 | 16 | 16/1 | 12 | 44 | 4.61 | 4.10 | 3.08 |
| 841-MK10DX128VLH7 | MK10DX128VLH7 | LQFP-64 | 72 | 128 | 16 | 16/1 | 12 | 44 | 5.53 | 4.92 | 3.69 |
| 841-MK10DX256VLL7 | MK10DX256VLL7 | LQFP-100 | 72 | 256 | 64 | 16/2 | 12 | 70 | 7.01 | 6.23 | 4.67 |
| 841-MK10DX256VLK7 | MK10DX256VLK7 | LQFP-80 | 72 | 256 | 64 | 16/2 | 12 | 56 | 6.90 | 6.13 | 4.60 |
| 841-MK10DX256VLH7 | MK10DX256VLH7 | LQFP-64 | 72 | 256 | 64 | 16/2 | 12 | 44 | 6.47 | 5.75 | 4.31 |
| 841-MK10DN512ZVMD10 | MK10DN512ZVMD10 | MAPBGA-144 | 100 | 512 | 128 | 16/1 | - | 104 | 12.33 | 10.96 | 8.22 |
| 841-MK10DN512VLK10 | MK10DN512VLK10 | LQFP-80 | 100 | 512 | 128 | 16/2 | 12 | 56 | 9.00 | 8.00 | 6.00 |

Kinetis K20 - USB MCUs

| MOUSER STOCK NO. | NXP Part No. | Package | Core Operating Freq. Max (MHz) | Internal Flash (KB) | Internal RAM (KB) | A/D Converter (bits/channels) | D/A Converter (bits) | I/O Pins | Price Each | | |
|---------------------|-----------------|------------|--------------------------------|---------------------|-------------------|-------------------------------|----------------------|----------|------------|-------|------|
| 841-MK20DX128VFM5 | MK20DX128VFM5 | QFN-32 | 50 | 128 | 16 | 16/1 | - | 20 | 4.52 | 4.02 | 3.02 |
| 841-MK20DX128VFT5 | MK20DX128VFT5 | QFN-48 | 50 | 128 | 16 | 16/1 | - | 29 | 4.77 | 4.24 | 3.18 |
| 841-MK20DX128VLF5 | MK20DX128VLF5 | LQFP-48 | 50 | 128 | 16 | 16/1 | - | 29 | 4.67 | 4.15 | 3.11 |
| 841-MK20DX128VLH5 | MK20DX128VLH5 | LQFP-64 | 50 | 128 | 16 | 16/1 | - | 40 | 4.92 | 4.37 | 3.28 |
| 841-MK20DX128VLL7 | MK20DX128VLL7 | LQFP-100 | 72 | 128 | 32 | 16/1 | 12 | 66 | 6.75 | 6.00 | 4.50 |
| 841-MK20DX256VLL7 | MK20DX256VLL7 | LQFP-100 | 72 | 256 | 64 | 16/48 | 12 | 68 | 7.67 | 6.82 | 5.12 |
| 841-MK20DX256VLH7 | MK20DX256VLH7 | LQFP-64 | 72 | 256 | 64 | 16/48 | 12 | 40 | 7.08 | 6.29 | 4.72 |
| 841-MK20DX256VLK10 | MK20DX256VLK10 | LQFP-80 | 100 | 256 | 128 | 16/2 | 12 | 52 | 7.56 | 6.72 | 5.04 |
| 841-MK20DN512VLK10 | MK20DN512VLK10 | LQFP-80 | 100 | 512 | 128 | 16/2 | 12 | 52 | 9.67 | 8.60 | 6.45 |
| 841-MK20DN512ZVLQ10 | MK20DN512ZVLQ10 | LQFP-144 | 100 | 512 | 128 | 16/44 | 12 | 100 | 12.99 | 11.55 | 8.66 |
| 841-MK20DX256ZVLK10 | MK20DX256ZVLK10 | LQFP-80 | 100 | 512 | 128 | 16/2 | 12 | 52 | 11.38 | 10.12 | 7.59 |
| 841-MK21DN512VMC5 | MK21DN512VMC5 | MAPBGA-121 | 50 | 512 | 64 | 16/1 | 12 | 64 | 8.77 | 7.80 | 5.85 |
| 841-MK21FX512VMC12 | MK21FX512VMC12 | BGA-121 | 120 | 512 | 64 | 16/2 | 12 | 81 | 10.78 | 9.59 | 7.19 |
| 841-MK21FN1M0VMD12 | MK21FN1M0VMD12 | BGA-144 | 120 | 1MB | 128 | 16/2 | 12 | 104 | 12.64 | 11.24 | 8.43 |
| 841-MK22FX512VLQ12 | MK22FX512VLQ12 | LQFP-144 | 120 | 512 | 64 | 16/2 | 12 | 86 | 10.54 | 9.37 | 7.03 |
| 841-MK22FX512VLL12 | MK22FX512VLL12 | LQFP-100 | 120 | 512 | 64 | 16/2 | 12 | 66 | 9.79 | 8.70 | 6.53 |
| 841-MK22FX512VLH12 | MK22FX512VLH12 | LQFP-64 | 120 | 512 | 64 | 16/2 | 12 | 40 | 9.28 | 8.25 | 6.19 |
| 841-MK22FX512VLK12 | MK22FX512VLK12 | LQFP-80 | 120 | 512 | 64 | 16/2 | 12 | 52 | 9.72 | 8.65 | 6.48 |
| 841-MK22FX512VMC12 | MK22FX512VMC12 | BGA-121 | 120 | 512 | 64 | 16/2 | 12 | 86 | 10.19 | 9.06 | 6.79 |
| 841-MK22FN1M0VLL12 | MK22FN1M0VLL12 | LQFP-100 | 120 | 1MB | 128 | 16/2 | 12 | 66 | 11.16 | 9.92 | 7.44 |