



Micrel / Microchip Technology



Image may be representation. See specifications for product details.

## DSPIC30F4013-20E/ML

|                     |                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| Part Number:        | DSPIC30F4013-20E/ML                                                                                                  |
| Manufacturer/Brand: | Micrel / Microchip Technology                                                                                        |
| Product description | IC MCU 16BIT 48KB FLASH 44QFN                                                                                        |
|                     | <a href="#">PDF</a> 1.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 2.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 3.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 4.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 5.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 6.DSPIC30F4013-20E/ML.pdf                                                                        |
|                     | <a href="#">PDF</a> 7.DSPIC30F4013-20E/ML.pdf                                                                        |
| Datasheets:         |                                                                                                                      |
| RoHs Status         |  Contains lead / RoHS non-compliant |
| Ship From           | Hong Kong                                                                                                            |
| Shipment Way        | DHL/Fedex/TNT/UPS/EMS                                                                                                |

REQUEST FOR QUOTATION

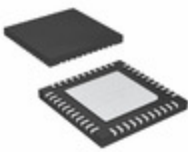
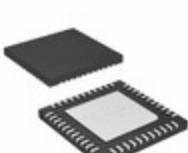
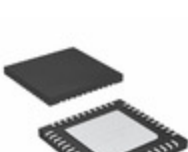
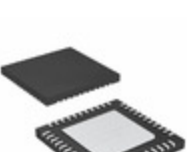
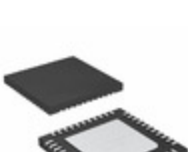
### Specifications of DSPIC30F4013-20E/ML

|                                  |                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PART NUMBER                      | DSPIC30F4013-20E/ML                                                                                                                                                                                                                                                                                                                                 |
| MANUFACTURER                     | Micrel / Microchip Technology                                                                                                                                                                                                                                                                                                                       |
| DESCRIPTION                      | IC MCU 16BIT 48KB FLASH 44QFN                                                                                                                                                                                                                                                                                                                       |
| LEAD FREE STATUS / ROHS STATUS   | Contains lead / RoHS non-compliant                                                                                                                                                                                                                                                                                                                  |
| DATA SHEET                       | <a href="#">PDF</a> 1.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 2.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 3.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 4.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 5.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 6.DSPIC30F4013-20E/ML.pdf<br><a href="#">PDF</a> 7.DSPIC30F4013-20E/ML.pdf |
| VOLTAGE - SUPPLY (VCC/VDD)       | 2.5 V ~ 5.5 V                                                                                                                                                                                                                                                                                                                                       |
| SUPPLIER DEVICE PACKAGE          | 44-QFN (8x8)                                                                                                                                                                                                                                                                                                                                        |
| SPEED                            | 20 MIPS                                                                                                                                                                                                                                                                                                                                             |
| SERIES                           | dsPIC™ 30F                                                                                                                                                                                                                                                                                                                                          |
| RAM SIZE                         | 2K x 8                                                                                                                                                                                                                                                                                                                                              |
| PROGRAM MEMORY TYPE              | FLASH                                                                                                                                                                                                                                                                                                                                               |
| PROGRAM MEMORY SIZE              | 48KB (16K x 24)                                                                                                                                                                                                                                                                                                                                     |
| PERIPHERALS                      | AC'97, Brown-out Detect/Reset, I²S, POR, PWM, WDT                                                                                                                                                                                                                                                                                                   |
| PACKAGING                        | Tube                                                                                                                                                                                                                                                                                                                                                |
| PACKAGE / CASE                   | 44-VQFN Exposed Pad                                                                                                                                                                                                                                                                                                                                 |
| OTHER NAMES                      | DSPIC30F401320EML                                                                                                                                                                                                                                                                                                                                   |
| OSCILLATOR TYPE                  | Internal                                                                                                                                                                                                                                                                                                                                            |
| OPERATING TEMPERATURE            | -40°C ~ 125°C (TA)                                                                                                                                                                                                                                                                                                                                  |
| NUMBER OF I/O                    | 30                                                                                                                                                                                                                                                                                                                                                  |
| MOISTURE SENSITIVITY LEVEL (MSL) | 1 (Unlimited)                                                                                                                                                                                                                                                                                                                                       |
| MANUFACTURER STANDARD LEAD TIME  | 10 Weeks                                                                                                                                                                                                                                                                                                                                            |
| LEAD FREE STATUS / ROHS STATUS   | Contains lead / RoHS non-compliant                                                                                                                                                                                                                                                                                                                  |
| EEPROM SIZE                      | 1K x 8                                                                                                                                                                                                                                                                                                                                              |
| DETAILED DESCRIPTION             | dsPIC dsPIC™ 30F Microcontroller IC 16-Bit 20 MIPS 48KB (16K x 24) FLASH 44-QFN (8x8)                                                                                                                                                                                                                                                               |
| DATA CONVERTERS                  | A/D 13x12b                                                                                                                                                                                                                                                                                                                                          |
| CORE SIZE                        | 16-Bit                                                                                                                                                                                                                                                                                                                                              |
| CORE PROCESSOR                   | dsPIC                                                                                                                                                                                                                                                                                                                                               |
| CONNECTIVITY                     | CANbus, I²C, SPI, UART/USART                                                                                                                                                                                                                                                                                                                        |
| BASE PART NUMBER                 | DSPIC30F4013                                                                                                                                                                                                                                                                                                                                        |

### Related Tags

|                                                   |                                          |                                                            |
|---------------------------------------------------|------------------------------------------|------------------------------------------------------------|
| Micrel / Microchip Technology DSPIC30F4013-20E/ML | DSPIC30F4013-20E/ML Distributor          | DSPIC30F4013-20E/ML Supplier                               |
| DSPIC30F4013-20E/ML Price                         | DSPIC30F4013-20E/ML Pictures             | DSPIC30F4013-20E/ML Image                                  |
| DSPIC30F4013-20E/ML PDF Datasheet                 | DSPIC30F4013-20E/ML Download Datasheet   | DSPIC30F4013-20E/ML Datasheet                              |
| DSPIC30F4013-20E/ML Stock                         | Buy DSPIC30F4013-20E/ML                  | Buy Micrel / Microchip Technology DSPIC30F4013-20E/ML      |
| Micrel / Microchip Technology DSPIC30F4013-20E/ML | Micrel / Microchip Technology Supplier   | Micrel / Microchip Technology Distributor                  |
| Micrel / Microchip Technology DSPIC30F4013-20E/ML | Microchip Technology DSPIC30F4013-20E/ML | Roving Networks / Microchip Technology DSPIC30F4013-20E/ML |

### Related Products

|                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <div><b>DSPIC30F4013-20I/ML</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 44QFN<br/>In stock: 726 pcs<br/><a href="#">RFQ</a></div>     |  <div><b>DSPIC30F4012T-20E/SO</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 28SOIC<br/>In stock: Out stock<br/><a href="#">RFQ</a></div> |
|  <div><b>DSPIC30F4013-20I/PT</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 44TQFP<br/>In stock: 525 pcs<br/><a href="#">RFQ</a></div>    |  <div><b>DSPIC30F4012T-30I/SO</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 28SOIC<br/>In stock: Out stock<br/><a href="#">RFQ</a></div> |
|  <div><b>DSPIC30F4012T-20E/ML</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 44QFN<br/>In stock: Out stock<br/><a href="#">RFQ</a></div>  |  <div><b>DSPIC30F4013-20I/P</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 40DIP<br/>In stock: 30 pcs<br/><a href="#">RFQ</a></div>       |
|  <div><b>DSPIC30F4012T-20I/SO</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 28SOIC<br/>In stock: Out stock<br/><a href="#">RFQ</a></div> |  <div><b>DSPIC30F4013-20E/P</b><br/>Manufacturers: Micrel / Microchip Technology<br/>Description: IC MCU 16BIT 48KB FLASH 40DIP<br/>In stock: Out stock<br/><a href="#">RFQ</a></div>    |
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