

PIC24FJ64GB002-I/ML

Data Sheet

16-bit PIC® MCUs & dsPIC® DSC; Package: 28-QFN; Temperature Range: -40C to +85C; Container: Tube, Microcontrollers (MCU) 16-bit 16MIPS 64KB Flash 8KB RAM

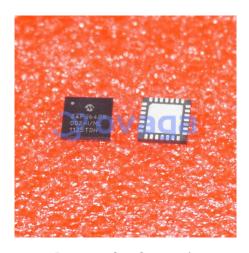
Manufacturers <u>Microchip Technology, Inc</u>

Package/Case QFN-28

Product Type Embedded Processors & Controllers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for PIC24FJ64GB002-I/ML or <u>Emailto-us:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

PIC24 16-bit low power microcontroller with Full-Speed USB, 64 KB Flash memory, 8 KB RAM, and advanced peripherals, 28-pin package

Features

CPU

Up to 16 MIPS performance

16 x 16 Hardware Multiply, Single Cycle Execution

32-bit x 16-bit Hardware Divider

C Compiler Optimized Instruction Set

System

Internal oscillator support - 31 kHz to 8 MHz, up to 32 MHz with 4X PLL

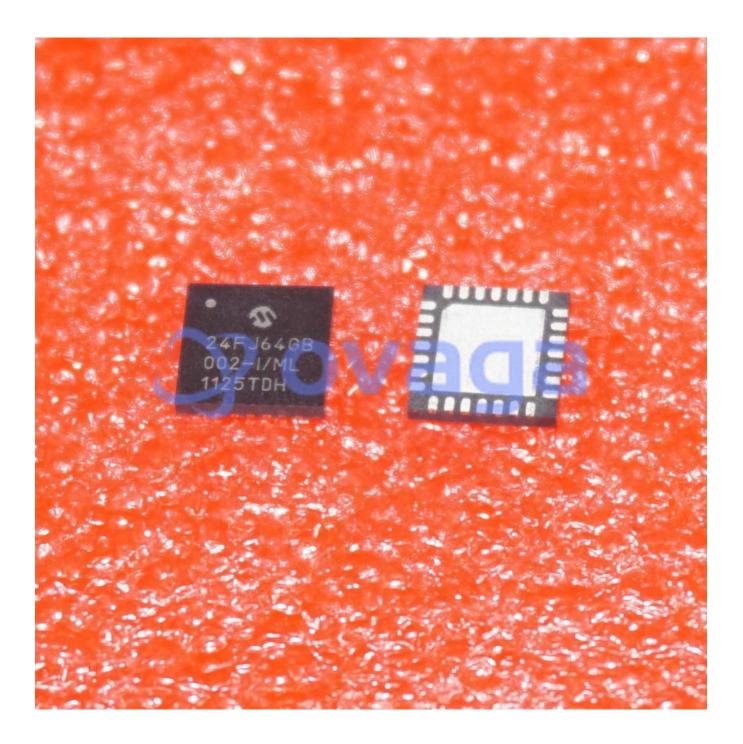
On-chip LDO Voltage Regulator

JTAG Boundary Scan and Flash Memory Program Support

Fail-Safe Clock Monitor – allows safe shutdown if clock fails

Watchdog Timer with separate RC oscillator

eXtreme Low Power Managed Modes Run, Idle and Sleep modes Deep sleep mode for lowest current consumption Multiple, Switchable Clock Modes for Optimum Performance and Power Management Analog Features 10-bit ADC, 13 channels, 500k samples per second 3 Analog comparators Other Peripherals 2 UART Modules with LIN and IrDA® support, 4 Deep FIFO 2 SPI TM Modules with 8 Deep FIFO 2 I2CTM Modules with Master and Slave Modes Five 16-bit Timer Modules Up to 5 Input Capture and 5 Output Compare / PWM, all with dedicated timers Hardware RTCC, Real-Time Clock Calendar with Alarms PMP, Parallel Master Port, with 16 Address Lines, and 8/16-bit Data Peripheral Pin Select for remapping digital peripherals to I/O Charge Time Measurement Unit (CTMU) for capacitive touch interface Universal Serial Bus Features USB v2.0 On-the-Go compliant Dual role capable, can act as either Host or Device Low speed(1.5Mb/s) and full speed(12 Mb/s) operation in host mode Full speed USB operaton in Device mode Supports 32 endpoints On-chip USB transceiver



Pin Diagrams PGEC3ANI C3ND/N8F-JASCLI ^(A)RP 6PAID8/CTEDI /NBUSYLDWGAPSTJCN2/RAI PGED3ANGC3NC/N8F-JASDA (^(A)RP 8PAID7/CTEDI /NBUSYLDWGAPSTJCN2/PAQ NGC R VSS NSS ANI OCSINB/CHGRPI 8/VBUSSTACHI /RBI 5 ANI OCSINB/CHGF/VCPCOH/VBUS ONRP14/CN 12/RB 14 28-Pin QFN(1,3) PGED1/AN2/C2INB/DPH/RP0/PMD0/CN4/RB0 PGEC1/AN3/C2INA/DMH/RP1/PMD1/CN5/RB1 VUSB PGEC2/D-/VMIO/RP11/CN15/RB11 AN4/C1INB/DPLN/SDA2/RP2/PMD2/CN6/RB2 PIC24FJXXGB002₁₈ AN5/C1INA/DMLN/RTCC/SCL2/RP3/PMWR/CN7/RB3 PGED2/D+/VPIO/RP10/CN16/RB10 17 VCAPA/DDCORE 16 DISVREG OSCI/CLKI/C1IND/PMCS1/CN30/RA2 OSCO/CLKO/PMA0/CN29/RA3 15 9 10 11 12 13 14 SOSCO/SQLKI/TICK/C2INC/PMA1/ON0/RA4

Legend: RPn represents remappable peripheral pins.

Note 1: Gray shading indicates 5.5V tolerant input pins.

2: Alternative multiplexing for SDA1 and SCL1 when the I2C1SEL bit is set.

3: The back pad on QFN devices should be connected to Vss.

Related Products



PIC24F16KA101-I/SS

Microchip Technology, Inc SSOP-20



PIC16F1938-I/SP

Microchip Technology, Inc PDIP-28



PIC16F1936-I/SS

Microchip Technology, Inc SSOP-28



PIC18F23K22-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F6520-I/PT

Microchip Technology, Inc TQFP-64



PIC18F2620-I/SO

Microchip Technology, Inc SOIC-28



PIC18F2620-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F97J60T-I/PT

Microchip Technology, Inc TQFP-100