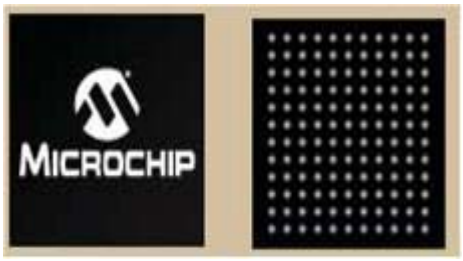
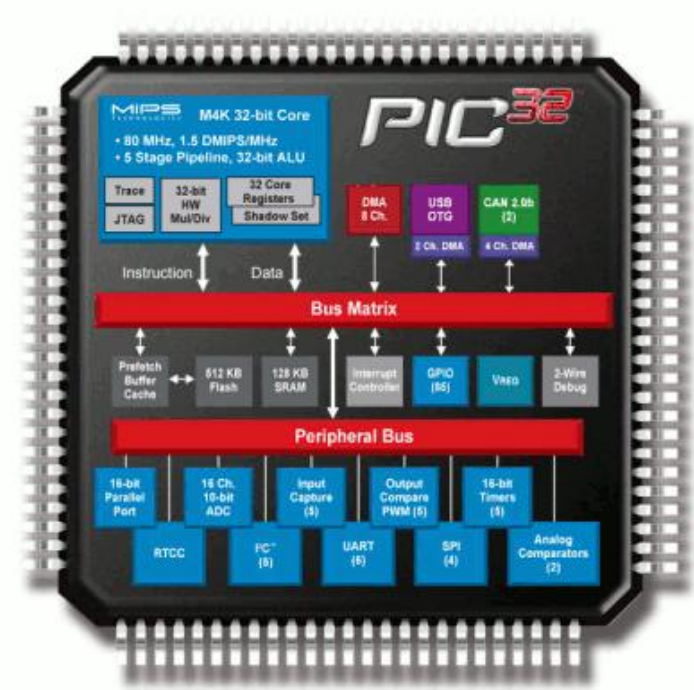
PIC32MX6XXFXXXX USB, CAN and Ethernet 32-bit Flash Microcontroller

General Description:



The PIC32MX family processors are complex systems-on-a-chip that contains many features. PICMX32MX is a high-performance RISC CPU, which can be programmed in 32-bit and 16-bit modes, and even mixed modes. The PIC32MX MCU contains a high-performance interrupt controller, DMA controller, USB controller, in-circuit debugger, high performance switching matrix for high-speed data accesses to the peripherals, on-chip data RAM memory, which hides the latency of the Flash, gives zero Wait state equivalent performance.

Key Features:



MCU System Features

- 512K Flash (plus 12K boot Flash)
- 64K RAM (can execute from RAM)
- 8 Channel General Hardware DMA Controller
- Flash prefetch module with 256 Byte cache
- Lock instructions or data in cache for fast access
- Programmable vector interrupt controller

Analog Features

- Fast and Accurate 16 channel 10-bit ADC,
- Max 1 Mega sample per second at +/- 1LSB, conversion available during SLEEP & IDLE

Power Management Modes

- RUN, IDLE, and SLEEP modes
- Multiple switchable clock modes for each power mode, enables optimum power settings

Debug Features

- 8 hardware breakpoints (6 Instruction and 2 Data)
- 2 wire programming and debugging interface
- JTAG interface supporting Programming, Debugging and Boundary scan

Other MCU Features

- Fail-Safe Clock Monitor - allows safe shutdown if clock fails
- 2 Internal oscillators (8MHz & 31KHz)
- Hardware RTCC (Real-Time Clock and Calendar with Alarms)
- Watchdog Timer with separate RC oscillator
- Pin compatible with 16-bit PIC® MCUs
- Serial Communication Modules allow flexible UART/SPI/I2C™ configuration

Applications:

- Audio & Speech
- Graphics
- CAN
- Ethernet
- Automobile

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
PIC32MX695F512H-80I/MR	1778974	53R0316	MCU, 32BIT, 512K FLASH, USB, 64QFN
PIC32MX695F512H-80I/PT	1778975	53R0317	MCU, 32BIT, 512K FLASH, USB, 64TQFP
PIC32MX695F512L-80I/BG	1778976	53R0320	MCU, 32BIT, 512K FLASH, USB, 121BGA
PIC32MX695F512L-80I/PF	1778489	53R0321	MCU, 32BIT, 512K FLASH, USB, 100TQFP
PIC32MX695F512L-80I/PT	1778490	53R0322	MCU, 32BIT, 512K FLASH, USB, 100TQFP
PIC32MX675F256H-80I/MR	1778963	53R0308	MCU, 32BIT, 256K FLASH, USB, 64QFN
PIC32MX675F256H-80I/PT	1778964	25R8394	MCU, 32BIT, 256K FLASH, USB, 64TQFP
PIC32MX675F256L-80I/BG	1778965	53R0310	MCU, 32BIT, 256K FLASH, USB, 121BGA
PIC32MX675F256L-80I/PF	1778966	53R0311	MCU, 32BIT, 256K FLASH, USB, 100TQFP
PIC32MX675F256L-80I/PT	1778967	25R8396	MCU, 32BIT, 256K FLASH, USB, 100TQFP
PIC32MX675F512H-80I/MR	1778968	25R8398	MCU, 32BIT, 512K FLASH, USB, 64QFN

PIC32MX675F512H-80I/PT	1778969	25R8399	MCU, 32BIT, 512K FLASH, USB, 64TQFP
PIC32MX675F512L-80I/BG	1778970	25R8402	MCU, 32BIT, 512K FLASH, USB, 121BGA
PIC32MX675F512L-80I/PF	1778971	53R0314	MCU, 32BIT, 512K FLASH, USB, 100TQFP
PIC32MX675F512L-80I/PT	1778972	25R8403	MCU, 32BIT, 512K FLASH, USB, 100TQFP