

78K0/Kx2 Microcontroller

NEC ELECTRONICS AMERICA

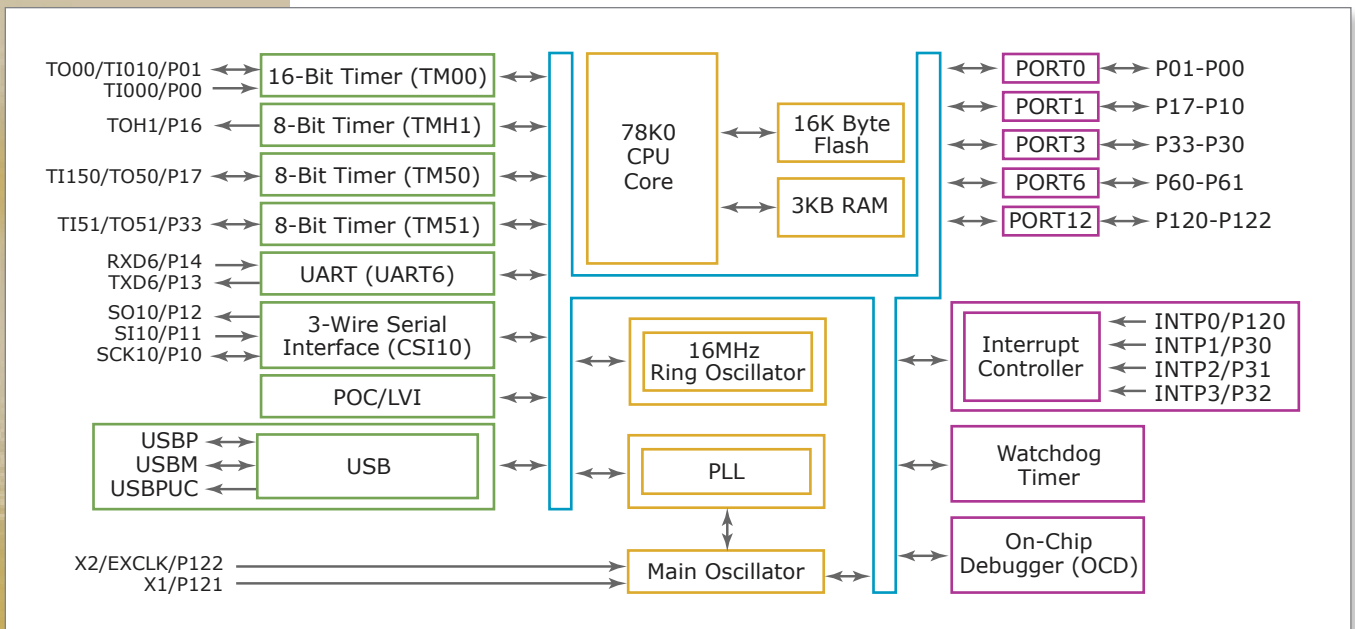
The USB microcontroller targets applications such as serial-to-USB and USB-to-serial interface applications, medical equipment, test and measurement products, data loggers, and human interface products such as mouse devices, keyboards, and game controllers.

μPD78F0730 8-Bit Microcontroller with Full-Speed USB 2.0

The 8-bit μPD78F0730 microcontroller with internal Universal Serial Bus (USB) controller is ideal for end-point USB applications that require a full-speed data transfer rate up to 12 Mbps.

Features

- › NEC Electronics 8-bit 78K0CPU core
- › 16 KB program flash memory (with self-programming capability)
- › 3 KB RAM
- › USB 2.0 interface (12 Mbps, full speed)
- › Three USB-compliant end-point buffers
 - 64-byte × 2 control read/write buffer
 - 64-byte × 2 bulk input buffer
 - 64-byte × 2 bulk output buffer
- › One-channel 16-bit timer/event counter
- › Two one-channel, 8-bit timers/event counters
- › One-channel 8-bit timer
- › One-channel watchdog timer (WDT)



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Features (continued)

- › One-channel UART
- › One-channel 3-wire serial interface
- › Nineteen general-purpose I/Os (two N-channel, open-drain)
- › Operating voltage: 4.0 to 5.5V
- › Temperature range: -40 to 85°C
- › Internal clock source of 16 MHz for the CPU
- › External clock source of 12 or 16 MHz
- › 48 MHz USB clock (12 MHz × 4 PLL or 16 MHz × 3 PLL)
- › 30-pin plastic SSOP (300 mil, 0.65 mm pin pitch)

Ordering Information

Part Number	Flash Memory	Internal High-Speed RAM	Internal Expansion RAM
μPD78F0730-MC-CAB-AX	16 KB	1 KB	2 KB

For additional information about NEC Electronics' 78K microcontrollers, visit www.am.necel.com/microcontrollers.

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Printed in U.S.A. on recycled paper using soy ink.

Document No. U19311EU1V0PB00