

DALLAS SEMICONDUCTOR

DS5000FP Micro Chip

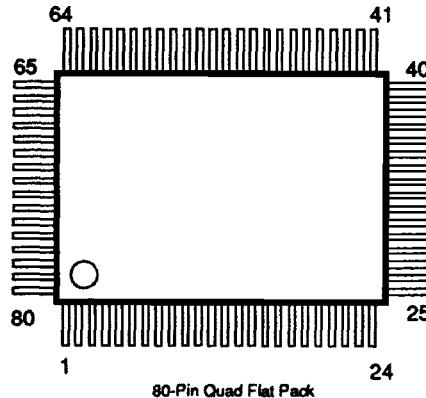
FEATURES

- Offers the microcontroller die used in the DS5000 Soft Microcontroller DIP packaged in an 80-pin Quad Flat Pack (QFP)
- Provides access to byte-wide address/data bus, not available on the DS5000 DIP
- Byte-wide address/data bus frees up port pins for I/O use
- Direct interface to byte-wide memories
- Supports up to 64 Kbytes of program/data memory
- Incorporates battery switching/monitoring circuitry for powering external memory devices in the absence of V_{cc}
- Ultra-low standby current—less than 75 nA
- Watchdog timer ensures program control
- Fully compatible with 8051 instruction set

DESCRIPTION

The DS5000FP Micro Chip is an 80-pin Quad Flat Pack (QFP) containing a standalone DS5000 Soft Microcontroller die which normally resides in a 40-pin DS5000 DIP package. It retains all the hardware features of a DS5000 DIP and can be used much like ROM-less versions of the 8051, except that all four ports of the DS5000FP are freed up for general-purpose I/O. An external lithium energy cell can be attached to this chip to power external SRAM(s) in the absence of V_{cc} . This gives the user the flexibility of using his own lithium cells and memories to implement a nonvolatile microcontroller solution with the

PACKAGE DESCRIPTION



ORDERING INFORMATION

DS5000FP-XX	-08	08 MHz
	-12	12 MHz
	-16	16MHz

soft features inherent in the DS5000 DIP. EPROM devices can be used for program memory in applications not requiring reloadable software.

Of the 80 pins on the package, only 68 are actually tied to pads on the die. The rest of the pins are no-connects. 40 pins of the 68 signal pins are identical in function to the 40 pins of a standard DS5000. The other 28 pins are normally used to interface to the embedded RAM and the lithium source on the standard DS5000 DIP products.

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