See Also

See **Fourier Transforms** on page III-270 for discussion. The inverse operation is **IFFT**.

Spectral Windowing on page III-275. For 2D windowing see **ImageWindow**. Also the **Hanning** window operation.

IFFT, **DWT**, **CWT**, **STFT**, **HilbertTransform**, **WignerTransform**, **DSPPeriodogram**, **LombPeriodogram**, **Unwrap**, **MatrixOp**

References

For more information about the use of window functions see:

Harris, F.J., "On the use of windows for harmonic analysis with the discrete Fourier Transform", *Proc, IEEE*, *66*, 51-83, 1978.

Heinzel, G., Rüdiger, A., & Schilling, R. (2002). "Spectrum and spectral density estimation by the Discrete Fourier transform (DFT), including a comprehensive list of window functions and some new at-top windows", http://hdl.handle.net/11858/00-001M-0000-0013-557A-5.

FGetPos

FGetPos *refNum*

The FGetPos operation returns the file position for a file.

FGetPos is a faster alternative to FStatus if the only thing you are interested in is the file position.

The FGetPos operation was added in Igor Pro 7.00.

Parameters

refNum is a file reference number obtained from the **Open** operation.

Details

FGetPos supports very big files theoretically up to about 4.5E15 bytes in length.

FGetPos sets the following variables:

`V_flag`	Nonzero (true) if *refNum* is valid.
`V_filePos`	Current file position for the file in bytes from the start.

See Also

Open, **FSetPos**, **FStatus**

FIFO2Wave

FIFO2Wave [**/R/S**] ***FIFOName, channelName, waveName***

The FIFO2Wave operation copies FIFO data from the specified channel of the named FIFO into the named wave. FIFOs are used for data acquisition.

Flags

/R=[*startPoint*,*endPoint*]	Dumps the specified FIFO points into the wave.
/S=*s*	Controls the wave's X scaling and number type: *s*=0: Same as no /S. *s*=1: Sets the wave's X scaling x_0 value to the number of the first sample in the FIFO. *s*=2: Changes the wave's number type to match the FIFO channel's type. *s*=3: Combination of *s*=1 and *s*=2.

Details

The FIFO must be in the valid state for FIFO2Wave to work. When you create a FIFO, using NewFIFO, it is initially invalid. It becomes valid when you issue the start command via the CtrlFIFO operation. It remains valid until you change a FIFO parameter using CtrlFIFO.