

SPI Class

[This documentation is for preview only, and is subject to change in later releases. Blank topics are included as placeholders.]

Represents an instance of the Microwire/SPI interface for a Microwire/SPI device.

Inheritance Hierarchy

[System.....Object](#)

Microsoft.SPOT.Hardware.....SPI

Namespace: [Microsoft.SPOT.Hardware](#)

Assembly: Microsoft.SPOT.Hardware (in Microsoft.SPOT.Hardware.dll)

Syntax

C#

```
public sealed class SPI : IDisposable
```

The SPI type exposes the following members.

Constructors

	Name	Description
	SPI	Initializes a new instance of the SPI class.

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Properties

	Name	Description
	Config	Returns the configuration object for the current SPI object.

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Methods

	Name	Description
	Dispose	Releases the pin associated with an SPI object.
	Equals(Object)	Determines whether the specified Object is equal to the current Object . (Inherited from Object .)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object .)
	GetType	Gets the Type of the current instance. (Inherited from Object .)
	ToString	Returns a string that represents the current object. (Inherited from Object .)
	Write(array<Byte> []())	Writes an array of bytes to the interface.
	Write(array<UInt16> []())	Writes an array of unsigned short arguments to the interface.
	WriteRead(array<Byte> [](), array<Byte> []())	Writes an array of bytes to the interface, and reads an array of bytes from the interface.
	WriteRead(array<UInt16> [](), array<UInt16> []())	Writes an array of bytes to the interface, and reads an array of bytes from the interface into the read buffer.
	WriteRead(array<Byte> [](), array<Byte> [](), Int32)	Writes an array of bytes to the interface, and reads an array of bytes from the interface into a specified location in the read buffer.
	WriteRead(array<UInt16> [](), array<UInt16> [](), Int32)	Writes an array of unsigned values to the interface, and reads an array of unsigned values from the interface into a specified location in the read buffer.
	WriteRead(array<Byte> [](), Int32, Int32, array<Byte> [](), Int32, Int32, Int32)	Writes an array of bytes to the interface, and reads an array of bytes from the interface into a specified location in the read buffer.
	WriteRead(array<UInt16> [](), Int32, Int32, array<UInt16> [](), Int32, Int32, Int32)	Writes an array of unsigned values to the interface, and reads an array of unsigned values from the interface into a specified location in the read buffer.

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Remarks

The Microwire/SPI interface is a synchronous serial communications protocol in which multiple devices can be connected with one another by means of a single three-wire system. This three-wire system includes the serial data in signal, the serial data

out signal, and the serial clock. You must use an additional GPIO pin as a chip select for each device that will communicate on the Microwire/SPI interface.

There are both 8-bit and 16-bit modes of operation using the overloaded read and write methods that have byte (8-bit) arguments or unsigned short (16-bit) arguments. Note that you can configure both 8-bit and 16-bit devices and have them share the SPI interface.

Thread Safety

Any public **static** (**Shared** in Visual Basic) members of this type are thread safe. Any instance members are not guaranteed to be thread safe.

See Also

Reference

[Microsoft.SPOT.Hardware Namespace](#)

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