# ImageWriter

## *SPI Driver Parameter Module*

**ImageWriter Supports a configurable SPI driver for devices that use the SPI (3-Wire Serial) interface. In certain circumstances you may wish to modify the parameters, especially the clock-frequency, to enhance system throughput or improve compatibility. Driver parameters are always reset and initialized to defaults when you select the Manufacuter:Device via a CIL command or in Terminal Mode.**

**If your device selection contains a p_SPI device object, you may load(examine) or program these parameters to non-default values. After programming new values, a load operation may return different values depending on driver capability (for example, the clock speed may be set slower than the programmed requested speed). The mapping of the p_SPI object is detailed below.**

**You should not modify SPI drive parameters from their defaults without due reason and understanding of the target devices programming specifications. Modification of parameters may cause indeterministic algorithm or system behavior and prevent proper device programming.**

## Object for p_SPI

| *Object Name:* | *Program / Execute* | *Verify* | *Load* | *Object Size (Bytes)* |
|---|---|---|---|---|
| p_SPI | ● | | ● | 0x08 |

## Object Memory Map:

| Byte 0 | Byte 1 | Byte 2 | Byte3 |
|---|---|---|---|
| **CLK Delay (MSB)** | **CLK Delay (LSB)** | **CLK POLARITY** | **CLK PHASE** |

| Byte 4 | Byte 5 | Byte 6 | Byte7 |
|---|---|---|---|
| **DATA ORDER** | **Reserved** | **Reserved** | **Reserved** |

CLK Delay is a 16-bit value expressed in nS. SPI frequency can be calculated as 1/CLK Delay.

CLK Polarity = 0, or CLK Polarity = 1. If CLK_Polarity = 1, the clock is high when idle. If CLK_Polairity = 0, the clock is low when idle (default).

If CLK Phase = 0, data is sampled on the leading edge of the clock (default). If CLK Phase = 1, data is sampled on the trailing edge of the clock.

If Data Order = 0, data is transmitted LSB first (default). If Data Order = 1, data is transmitted MSB first.

Reserved Bytes, these bytes are reserved for future use.