# ImageWriter

## *Microchip 24LC01B Device Support Detail & Setup*

**ImageWriter Support Hierarchy**

**Manufacturer:** Microchip

**Device:** 24LC01B

## Objects for 24LC01B

| Flow Object Name: | *Program / Execute* | *Verify* | *Load* | *Object Size (Bytes)* |
|---|---|---|---|---|
| EE | ● | ● | ● | 0x80 |
| p_I2C BusAddr | ● | | ● | 0x1 |
| P_I2C | ● | | ● | 0x8[1] |

[1] Default I2C Bus Address = 0
[2] Default I2C Clock Frequency = 400KHz

## Physical Layer Connector Setup for 24LC01B

| ImageWriter: | | Target: |
|---|---|---|
| ***Connector Pin #*** | ***Pin Name*** | ***Connections*** |
| 1 | GND | GND |
| 2 | GND | GND |
| 3 | TXD (MOSI/TDO) | NOCONN |
| 4 | RXD (MISO/TDI) | NOCONN |
| 5 | RTS (TMS) | NOCONN |
| 6 | CTS | NOCONN |
| 7 | XCLK | NOCONN |
| 8 | RST | WP |
| 9 | SCL | SCL |
| 10 | SDA | SDA |
| 11 | GND | GND |
| 12 | GND | GND |
| 13 | VPP/EXT_IN | NOCONN |
| 14 | VPP/EXT_OUT | NOCONN |
| 15* | Target V+ (7.0V max) | Supply 2.5-5.5 V |
| 16* | Target V+ (7.0V max) | Supply 2.5-5.5 V |
| 17 | GND | GND |
| 18 | GND | GND |
| 19 | ImageWriter Power | Supply 9-24 VDC |
| 20 | ImageWriter Power | Supply 9-24 VDC |

*Maximum Pin-Driver output voltage = 4.2V.

## Support Notes:

1. I2C connection must have pull-up resistors provided. If your target board does not provide pull-ups, ImageWriter can be configured to do so. See your integration guide on how to change the ImageWriter I2C pull-up resistors.
2. A post-programming EE Verify operation is highly recommended to ensure data integrity.
3. The I2C BusAddr object allows you to set the I2C 3-bit bus address. Power-up Default is '000'. To change the address, load a byte('xxxx xAAA') with the desired 3-bit bus-address and Program/Execute the I2C BusAddr object referencing that byte in memory. All subsequent I2C operations will use the provided BusAddr until either an ImageWriter

reset or a new BusAddr is provided. If you wish to inspect the current I2C BusAddr, you can do so by loading the object.

## Disclaimer

Typical implementation of **ImageWriter** includes but is not limited to external power provision to **ImageWriter**, device access restrictions on the target board, external hardware on the target board, or software changes created by the user affecting timing, device erasure, programming, or verification. Data I/O warranty coverage applies only when the product is used in conformance with technical specifications put forth by Data I/O and by the semiconductor device manufacturer.

In the interest of achieving the highest levels of safety and quality, Data I/O recommends that all programming processes be tested and documented in a prototype project prior to transition to volume manufacturing. For additional information see In-System Programming Design Guidelines (http://www.dataio.com/isp).

**ImageWriter** programs semiconductor devices through the use of circuits designed precisely to operate in accordance with specifications outlined by the device manufacturer. Provision and calibration of power supplies are critical for proper operation. **ImageWriter** has been fully tested by Data I/O Corporation for quality performance.