# ImageWriter

## *STM 24C Family Device Support Detail & Setup*

**ImageWriter Support Hierarchy**

**Manufacturer:** STMicroelectronics **Library:** I2C-24C-Memory.cab

**Device:** M24C128, M24C256, M24C512, M24C01, M24C02, M24C04, M24C08, M24C16, M24C32, M24C64

## Objects for M24C

| Flow Object Name: | *Program / Execute* | *Verify* | *Load* | *Object Size (Bytes)* | |
|---|---|---|---|---|---|
| EE | ● | ● | ● | M24C128 | 0X4000 |
| | | | | M24C256 | 0X8000 |
| | | | | M24C512 | 0X10000 |
| | | | | M24C01 | 0X80 |
| | | | | M24C02 | 0X100 |
| | | | | M24C04 | 0X200 |
| | | | | M24C08 | 0X400 |
| | | | | M24C16 | 0X800 |
| | | | | M24C32 | 0X1000 |
| | | | | M24C64 | 0X2000 |
| p_I2C | ● | | ● | 0x8[1] | |

[1] Default I2C Clock Frequency = 400KHz

## Physical Layer Connector Setup for M24C

| 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 2.6-5.5 V |
| 16* | Target V+ (7.0V max) | Supply 2.6-5.5 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.

## 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.