ImageWriter

STMicroelectronics M24C32 Device Support Detail & Setup

ImageWriter Support Hierarchy

Manufacturer: STMicro

Device: M24C32

Objects for M24C32

Flow Object Name:	*Program / Execute*	*Verify*	*Load*	*Object Size (Bytes)*
EE	●	●	●	0x1000
P_I2C BusAddr[1]	●		●	0x1
p_I2C[2]	●		●	0x08

[1] Default I2C BusAddress = 0

[2] Default I2C Clock_Speed = 400KHz

Physical Layer Connector Setup for M24C32

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	WC
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 1.8-5.5 V
16*	Target V+ (7.0V max)	Supply 1.8-5.5 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.
*Different versions of the STM M26C32 support different VCC operating ranges. The voltage on Vtarget+ should match the VCC specifications of the part you are using. Reference the STMicroelectronics datasheet for the actual rating of your device.

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.