ImageWriter

STM M93C Family Device Support Detail & Setup

ImageWriter Support Hierarchy

Manufacturer: STMicroelectronics **Library:** MICROWIRE-Serial-Memory.cab

Device: M93C46, M93C56, M93C66, M93C76, M93C86

Objects for M93C

Flow Object Name:	*Program / Execute*	*Verify*	*Load*	*Object Size (Bytes)*	
EE[2]	●	●	●	M93C46	80
				M93C56	100
				M93C66	200
				M93C76	400
				M93C86	800
EE WORD[3]	●	●	●	M93C46	80
				M93C56	100
				M93C66	200
				M93C76	400
				M93C86	800
EE WRAL[2]	●	●	●	M93C46	80
				M93C56	100
				M93C66	200
				M93C76	400
				M93C86	800
EE WORD WRAL[3]	●	●	●	M93C46	80
				M93C56	100
				M93C66	200
				M93C76	400
				M93C86	800
CHIP ERASE	●			M93C46	80
				M93C56	100
				M93C66	200
				M93C76	400
				M93C86	800
p_SPI	●		●	0x8[1]	

[1] Default SPI clock frequency = 2 MHz

[2] Enabled by (ORG = 0), x8 See manufacture's documentation for more details

[3] Enabled by (ORG = 1), x16 See manufacture's documentation for more details

Physical Layer Connector Setup for M93C

ImageWriter:		Target:
Connector Pin #	***Pin Name***	***Connections***
1	GND	GND
2	GND	GND
3	TXD (MOSI/TDO)	D
4	RXD (MISO/TDI)	Q
5	RTS (TMS)	NOCONN
6	CTS	NOCONN
7	XCLK	C
8	RST	S
9	SCL	NOCONN
10	SDA	NOCONN
11	GND	GND
12	GND	GND
13	VPP/EXT_IN	NOCONN
14	VPP/EXT_OUT	NOCONN
15*	Target V+ (7.0V max)	Supply 4.5-5.5 V
16*	Target V+ (7.0V max)	Supply 4.5-5.5 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. Target V+ supply range minimum can vary depending on part. See manufacture documentation for more detail.
2. EE, and EE WORD automatically erase selection before program operation.
3. EE WRAL programs entire device with same Data. Verify for this object will return valid PASS/FAIL indication, but error messages associated with Verify are not accurate.
4. 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.