

**Board Assembly Part Number(s)**

Part Number	Description
199027B-03L	32 CH 5V/TTL DIGITAL INPUT AND OUTPUT
199027B-01L	32 CH 5V/TTL DIGITAL INPUT AND OUTPUT WITH CONFORMAL COATING
199027B-02L	BOARD ONLY 32 CH 5V/TTL DIGITAL INPUT AND OUTPUT

**Manufacturer:** National Instruments

**Volatile Memory**

Type	Size	User Accessible/ System Accessible <sup>1</sup>	Battery Backup?	Purpose	Method of Clearing
CPLD RAM	8 bytes	Yes/Yes	No	Channel Data/Direction	Cycle Power
ASIC RAM	8 bytes	Yes/Yes	No	Channel Data/Direction	Cycle Power

**Non-Volatile Memory**

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing <sup>2</sup>
CPLD	440 macrocells	No/Yes	No	Module Operation	None available to user
EEPROM	1 KB	No/Yes	No	Module ID	None available to user

**Media Storage**

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing
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NONE

<sup>1</sup> Items are designated **No** for the following reason(s):

- a) Hardware changes or a unique software tool from National Instruments are required to modify contents of the memory listed.
- b) Hardware-modifying software tools are not distributed to customers for any personal access or customization, also known as non-normal use.

<sup>2</sup> The designation *None Available to User* indicates that the ability to clear this memory is not available to the user under normal operation. The utilities required to clear the memory are not distributed by National Instruments to customers for normal use.

**Terms and Definitions**

**User Accessible** Allows the user to directly write or modify the contents of the memory during normal instrument operation.

**System Accessible** Does not allow the user to access or modify the memory during normal instrument operation. However, system accessible memory may be accessed or modified by background processes. This can be something that is not deliberate by the user and can be a background driver implementation, such as storing application information in RAM to increase speed of use.

**Cycle Power** The process of completely removing power from the device and its components. This process includes a complete shutdown of the PC and/or chassis containing the device; a reboot is not sufficient for the completion of this process.

**Volatile Memory** Requires power to maintain the stored information. When power is removed from this memory, its contents are lost.

**Non-Volatile** Retains its contents when power is removed. This type of memory typically contains calibration or chip configuration information, such as power up states.