**Board Assembly Part Number(s)**

| Part Number | Description |
|---|---|
| **154321A-01L or later** | **Module Assembly, NI VB-8012** |

**Manufacturer:** National Instruments

**Volatile Memory**

| Type[1] | Size | User Accessible/ System Accessible[2] | Battery Backup? | Purpose | Method of Clearing[3] |
|---|---|---|---|---|---|
| DRAM | 256 MB | No/Yes | No | Stores waveform data and operating system | Remove AC power |
| Microcontroller | 512 B | No/No | No | Stores operating data for initialization. | Remove AC power |
| Power supply SRAM | 24.25 kb | No/Yes | No | Stores power supply state | Remove AC power |
| DMM SRAM | 76.34 kb | No/Yes | No | Stores DMM sample data and state | Remove AC power |
| Scope Configuration | 22 B | No/Yes | No | Stores MSO configuration information | Remove AC power |
| Wireless transceiver | Not published by vendor | No/Yes | No | Stores and runs radio firmware and data | Remove AC power |
| FPGA SRAM | 1456 kB | No/Yes | No | Instruction and data caches, operating system, configuration and instrument data. | Remove AC power |

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[1] Calibration constants that are stored in device EEPROMs include information for the device's full operating range. Calibration constants do not maintain any unique data for specific configurations at which the device is used unless otherwise specified.

[2] 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.

[3] 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.

**Non-volatile Memory**

| Type | Size | User Accessible/ System Accessible | Battery Backup? | Purpose | Method of Clearing |
|---|---|---|---|---|---|
| NAND Flash | 256 MB | No/Yes | N/A | Stores operating system, firmware, user settings, and calibration constants | None available to user |
| Microcontroller Flash | 8 kB | No/No | N/A | Stores initialization firmware and data | None available to user |
| CPLD Flash | 0.17 Mb | No/Yes | N/A | Stores firmware | None available to user |
| CPLD Flash | 0.33 Mb | No/Yes | N/A | Stores firmware and calibration constants | None available to user |

**Media Storage**

| Type | Size | User Accessible/ System Accessible | Battery Backup? | Purpose | Method of Clearing |
|---|---|---|---|---|---|
| None | | | | | |

**Clearing Notes:**

It is not currently possible to permanently clear any of the non-volatile memory on the device.

**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.