

**Board Assembly Part Number(s)**

Part Number	Description
156210B-01L or later	cDAQ-9132 16GB, RT
156210B-02L or later	cDAQ-9132 16GB, WES7
156210B-11L or later	cDAQ-9134 32GB, RT
156210B-12L or later	cDAQ-9134 32GB, WES7

**Manufacturer:** National Instruments

**Volatile Memory**

Type <sup>i</sup>	Size	User Accessible/ System Accessible <sup>ii</sup>	Battery Backup?	Purpose	Method of Clearing <sup>iii</sup>
<b>(cDAQ-9132/9134)</b>					
DDR3L-SDRAM	2 GB	Yes/Yes	No	System Memory	Cycle Power
SoC RTC RAM	242 bytes	Yes/Yes	Yes	Battery Backed portion of RTC	Clear CMOS Button
CPLD SDRAM	51 Mb	No/Yes	No	CPLD Memory	Cycle Power
Controller SRAM	54 kB	Yes/Yes	No	Acquisition and Generation Data	Cycle Power
Controller SRAM	49 kB	No/Yes	No	Configuration & Control	Cycle Power
<b>(cDAQ-9134)</b>					
XNET SDRAM	512 Mb	Yes/No	No	Memory	Cycle Power

**Non-Volatile Memory**

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing
<b>(cDAQ-9132 RT)</b>					
Flash	16 GB				
-Firmware		No/No	No	Firmware	None available to user
-OS		No/Yes	No	Operating System	Format drive in MAX
-User Disk		Yes/Yes	No	User Data	Format drive in MAX
<b>(cDAQ-9132 Windows)</b>					
Flash	16 GB	Yes/Yes	No	Operating System	Format drive
<b>(cDAQ-9134 RT)</b>					
Flash	32 GB				
-Firmware		No/No	No	Firmware	None available to user
-OS		No/Yes	No	Operating System	Format drive in MAX
-User Disk		Yes/Yes	No	User Data	Format drive in MAX
<b>(cDAQ-9134 Windows)</b>					
Flash	32 GB	Yes/Yes	No	Operating System	Format drive
<b>(cDAQ-9134)</b>					
XNET Flash	32 Mb				
-Boot firmware		No/No	No	Firmware	None available to user
-User firmware		No/Yes	No	Firmware	None available to user

**(cDAQ-9132/9134)**

<i>System BIOS</i>	<i>8MB</i>	<i>No/Yes</i>	<i>No</i>	<i>BIOS firmware</i>	<i>BIOS update utility</i>
<i>SPD EEPROM</i>	<i>256 bytes</i>	<i>No/Yes</i>	<i>No</i>	<i>Describes DDR3L memory</i>	<i>None available to user</i>
<i>CPLD</i>	<i>0.47 Mb</i>	<i>No/Yes</i>	<i>No</i>	<i>General Logic</i>	<i>None available to user</i>
<i>Ethernet Flash</i>	<i>8 Mb</i>	<i>No/Yes</i>	<i>No</i>	<i>Firmware</i>	<i>None available to user</i>
<i>Controller Flash</i>	<i>8 Mb</i>	<i>No/Yes</i>	<i>No</i>	<i>Firmware</i>	<i>None available to user</i>

**Media Storage**

<b>Type</b>	<b>Size</b>	<b>User Accessible/ System Accessible</b>	<b>Battery Backup?</b>	<b>Purpose</b>	<b>Method of Clearing</b>
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*NONE*

**Clearing Notes:**

**SoC RTC Ram:** The Clear CMOS Button is located between slots 2 and 3. See the User Manual for more information on the Clear CMOS Button.

**BIOS Firmware:** You may use the appropriate version of the BIOS Update Utility to restore your BIOS to its original factory version.

## 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.

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<sup>i</sup> 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.

<sup>ii</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>iii</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.