SIEMENS

QUICK REFERENCE GUIDE
GEO CONFIGURATION AND FILE
OPERATIONS (PART 1)
Document No. SIG-QG-08-04-002A.1

GEO - Loading Boot Code to CPU II+ Card

1) First connect the ICD Interface Cable to the parallel port on the computer and an RS232 cable to the Comm port.

2) With the CPU II card out of the GEO, connect the ICD cable to J2 (pin 1 on top right corner) on the CPU II card as indicated below (red wire on ICD interface indicates pin 1) and the RS232 cable to the CP (Communication port) on the CPU II.
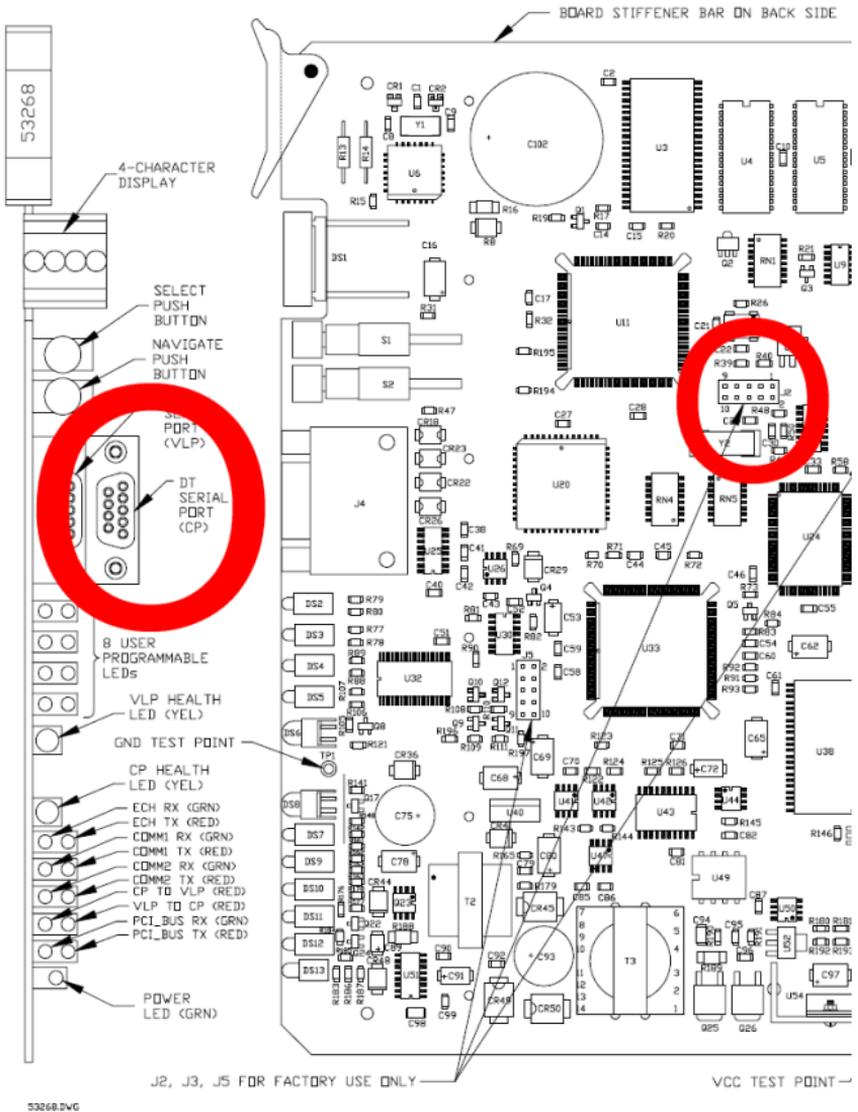
3) Insert the CPU II into the GEO (remove the adjacent card to prevent pinching the cable).

4) To install the Parallel Port Drivers for the BDM Interface (ICD Cable) so it will work properly go to:
   - Start > All Programs > P&E 683xx BDM Debugger,
   - Select 'Install NT Drivers'.
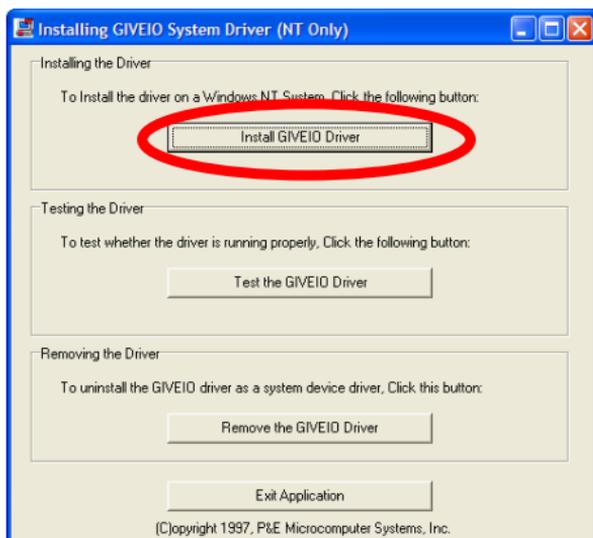
5) Select 'Install GIVEIO Driver'.
6) Once it indicates that the driver has been installed, click on 'Test the GIVEIO Driver'. If you get the following error you may need to use another computer, otherwise continue.
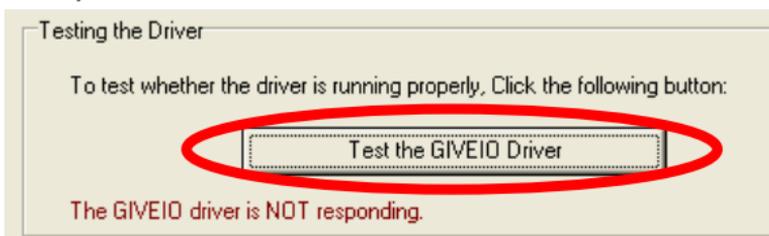
7) Exit the installation Application.
8) To open the Debugger Program used to load the Boot Code to the card go to:
   - Start > All Programs > P&E 683xx BDM Debugger,
   - Select ' ICD32W - 683xx In Circuit Debugger'.
9) Click on **Play Macro** button to select and run the macro that automatically loads the boot code.
10) Now select the 'cpfra.icd' file from wherever you saved it and the Boot Code should automatically start loading.
11) Once the Boot Code has finished loading, you should see a screen indicating 'Flash programming done'.
12) Click **Stop Execution (F1)** button to complete the installation.
13) Close the debugger program.
14) Now remove the CPU II from the GEO unit and disconnect the ICD cable from J2.
15) Seat the CPU II card back in the GEO.

GEO - Uploading Communication Processor MEF to CPU II+ (NCA01_XX.MEF)

Requires PC running DT software:
1) Connect serial cable from the PC to the DIAG (CP) port of the CPU II+ module.

2) Click the **COMM** button or menu, and then select **Install Software**. Click **Yes** button on the 'Reset module' prompt.
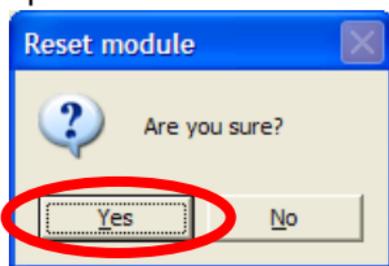
3) A text box appears displaying boot messages until the Setup Program menu is displayed.

4) Press the F4 function key on the PC keyboard or click the **F4** button on the display to start the MEF change process.

5) Select the correct MEF file for the module (e.g., nca01_00.mef). It should reside in the CPU II + APPLIANCE MODEL directory (e.g., GEO\Test box\MEFs\CPU II + APPLIANCE MODEL).

6) Once the new MEF starts to load, the bar at the base of the text box shows progress.

7) When the new MEF is completely loaded the text box will return to the Setup Program menu.

> **NOTE:** If the module fails to reboot, or reboots and re-enters the Setup Program, check the boot messages to see if the correct MEF is listed. If not, repeat the MEF upload process by clicking the MEF button or pressing F4.

8) Select **EXIT** to reboot the module and exit the Setup Program.

9) After observing that the module is rebooting, select **EXIT** again to close the text box.

10) Wait until the GEO reboot is complete. Move the DB9 serial cable to the CPU module DIAG port if needed and reconnect DT.

11) Use the **Module Information** function (see below) to check that the new MEF installation was successful.
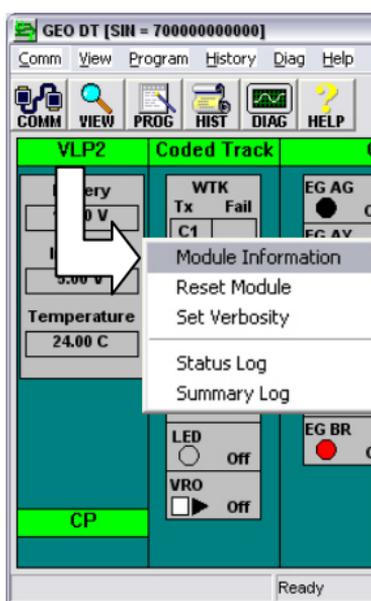
1. On the Main Display, right-click on the module label.
2. Select **Module**

3
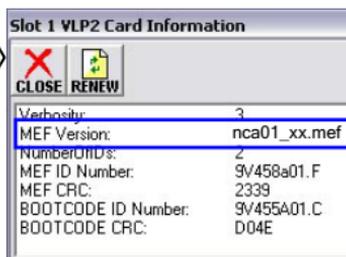
GEO - Uploading VLP MEF to CPU II+ (VPA01_XX.MEF)

Requires PC running DT software:
1) Connect serial cable from PC to the VLP port of the CPU II+.
2) Click the **COMM** button or menu, and then select **Install Software**. Click **Yes** button on the 'Reset module' prompt.
3) A text box appears displaying boot messages until the Setup Program menu is displayed.
4) Press the F4 function key on the PC keyboard or click the **F4** button on the display to start the MEF change process.
5) Select the correct MEF file for the module (e.g., VPA01_10.MEF). It should reside in the CPU II + APPLIANCE MODEL directory (e.g., GEO\Test box\MEFs\CPU II + APPLIANCE MODEL).
6) Once the new MEF starts to load, the bar at the base of the text box shows progress.
7) When the new MEF is completely loaded the text box will return to the Setup Program menu.

> **NOTE:** If the module fails to reboot, or reboots and re-enters the Setup Program, check the boot messages to see if the correct MEF is listed. If not, repeat the MEF upload process by clicking the **MEF** button or pressing F4.

8) Select **EXIT** to reboot the module and exit the Setup Program.
9) After observing that the module is rebooting, select **EXIT** again to close the text box.
10) Wait until the GEO reboot is complete. Move the DB9 serial cable to the CPU module DIAG port if needed and reconnect DT.
11) Use the **Module Information** function (see previous page) to check that the new MEF installation was successful.

GEO - Uploading MEF to Modules.

Requires PC running DT software:
1) Connect serial cable to the DIAG port of the card to be updated.
2) Click the **COMM** button or menu, and then select **Install Software**. Click Yes button on the 'Reset module' prompt.
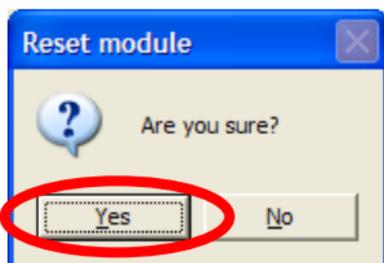
3) A text box appears displaying boot messages until the Setup Program menu is displayed.

4) Press the F4 function key on the PC keyboard or click the **F4** button on the display to start the MEF change process.

5) At the prompt 'Erase the MEF (Y/N)', type Y.

6) Select the correct MEF file for the module (e.g., trk01_11.mef) that resides in the proper directory (e.g., GEO\Test box\MEFs\TRK).

7) Once the new MEF starts to load, the bar at the base of the text box shows progress.

8) When the new MEF is completely loaded the text box will return to the Setup Program menu.

> **NOTE:** If module fails to reboot, or reboots and re-enters the Setup Program, check the boot messages to see if the correct MEF is listed. If not, repeat the MEF upload process by clicking the MEF button or pressing F4.

9) Select **EXIT** to reboot the module and exit the Setup Program.

10) After observing that the module is rebooting, select **EXIT** again to close the text box.

11) Wait until the GEO reboot is complete. Move the DB9 serial cable to the CPU module DIAG port if needed and reconnect DT.

12) Use the **Module Information** function (see above) to check that the new MEF installation was successful.

GEO - Uploading GEO MCF

Requires PC running DT software:
1) Connect serial cable to the DIAG (CP) port of the CPU II+.

2) Click the **COMM** button or menu, and then select **Install Software**. Click **Yes** button on the 'Reset module' prompt.

3) After the text box displays the boot messages and the Setup Program menu is displayed, click the **MORE** button at the top of the display.

5
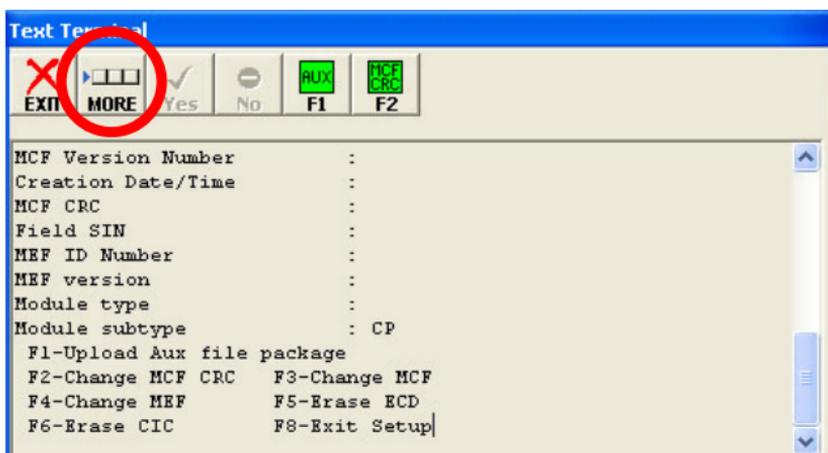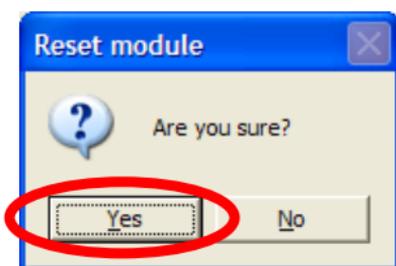
4) Next, press the F5 function key on the PC keyboard or click the **ERASE ECD – F5** button on the display.
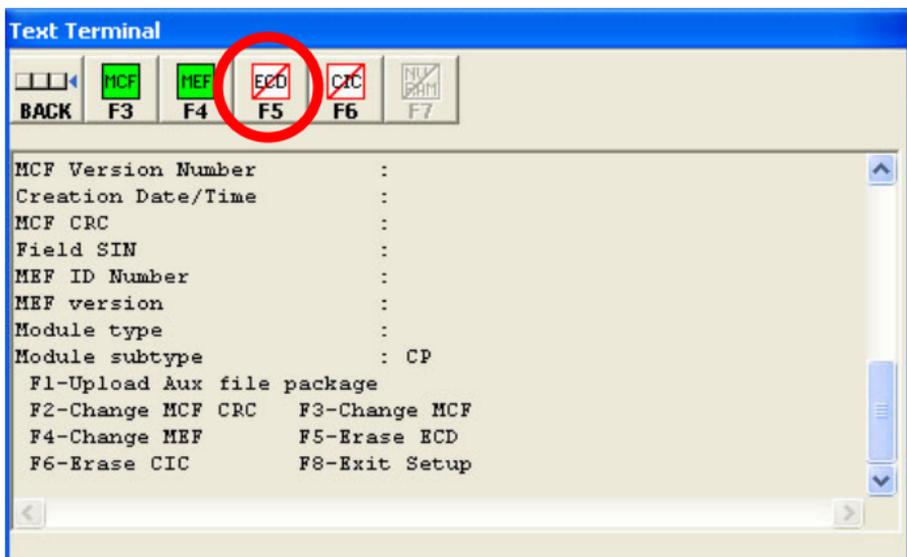
5) At the prompt 'Erase the ECD (Y/N)?', type Y.

> **NOTE:** It will take a few minutes to erase the ECD and verify that it is cleared.

6) At the prompt 'Erase the Flash MCF Area (Y/N)?' type Y.

7) After the Flash area is cleared, press the F6 function key on the PC keyboard or click the **ERASE CIC – F6** button on the display.
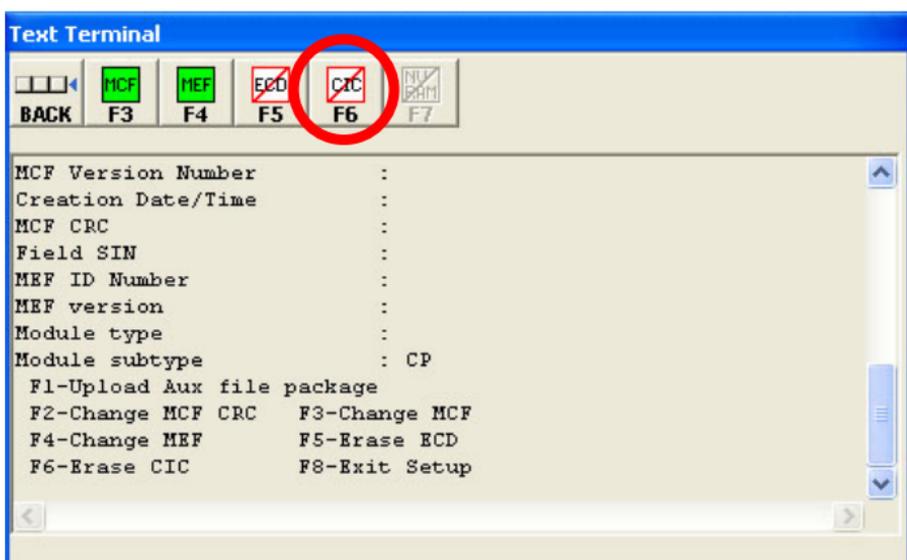
8) At the prompt 'Erase the CIC (Y/N)?', type Y.

9) After the CIC is cleared, press the F3 function key on the PC keyboard or click the **CHANGE MCF – F3** button on the display.

6
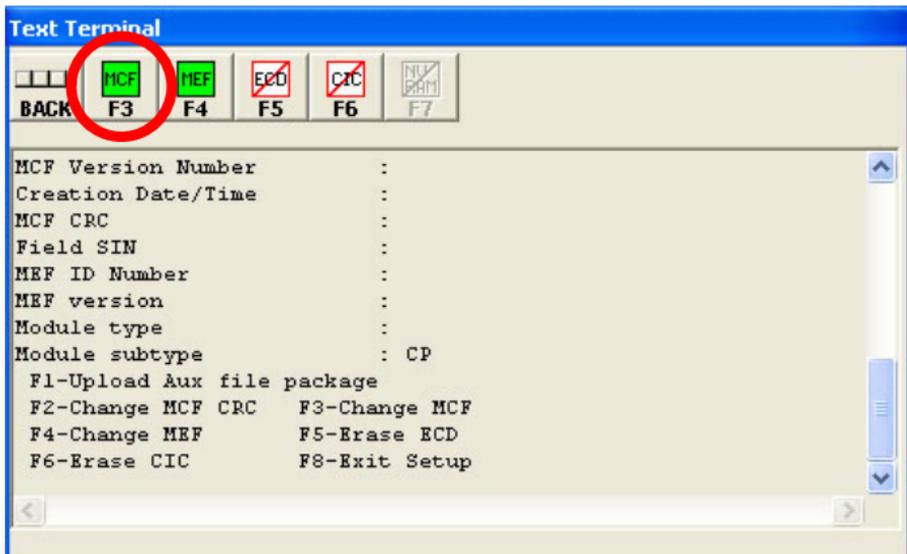
10) At the prompt 'Erase MCF Flash (Y/N)?', type Y.

11) Select the correct MCF file for the module (e.g., SNAKE_1E001.mcf). In this example they reside in the C:\safetran\GCS2\workspace\Snake\MCF_Dir directory. Click **OPEN**.

12) When the MCF upload is completed and the 'copy from FLASH to ECD' is successful, press the F2 function key on the PC keyboard or click the **MCF CRC – F2** button on the display.
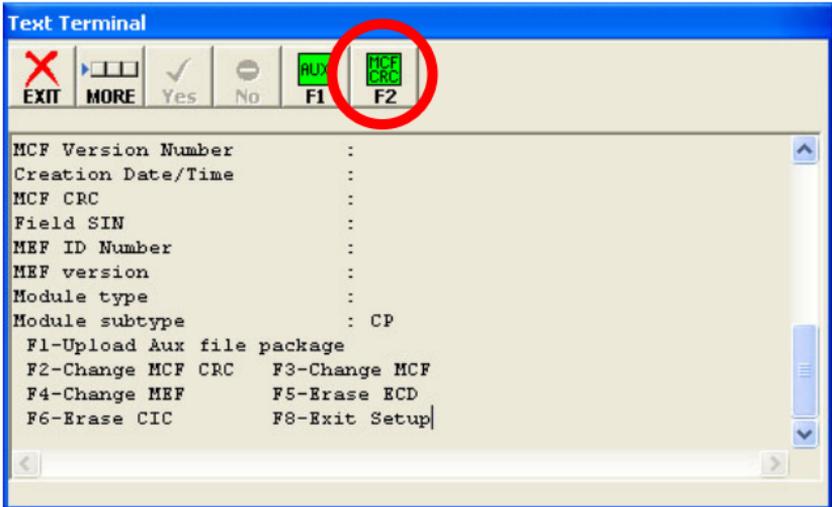
13) When the MCF CRC query box comes up, refer to the documentation supplied with the upgrade instructions for the 8-digit CRC number to enter.

- MCF Version
- -----------
- MCF Name: AMEOSTEST002
- MCF Revision: 2
- MCFCRC: 9511C82F
- Geo Unit UCN: 42C8555C
- Config Check Number: 4BD8024B

14) Enter the CRC number and then click the **OK** button.

15) Click **Exit** or press **F8** to reboot the GEO.

    IMPORTANT: If the module fails to reboot, or reboots and re-enters the Setup Program, check the boot messages or check the character display on the CPU module for MCF or MCF CRC problems. In the event of problems, repeat steps 2 through 9 above.

16) Once the GEO reboots, click the DT **COMM** button and then select **Connect** to bring up the module assignment display.

17) Click the **PROG** button and select **Unique Check Number (UCN)** to bring up the UCN dialog box. MCF.

18) MCF Version

- -----------
- MCF Name: AMEOSTEST002
- MCF Revision: 2
- MCFCRC: 9511C82F
- Calculated UCN: 42C8555C
- Config Check Number: 4BD8024B

Setting Unique Check Number (UCN):

> **NOTE**: The Unique Check Number process ensures that the maintainer is at the GEO location and is authorized to modify the GEO configuration. The new UCN is provided by the office. Verify that GEO parameter settings agree with the supplied configuration sheet prior to entering the new UCN.
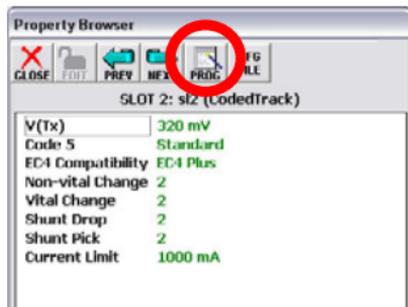
1. Click the **PROG** button (**PROG** button is available on the main display and on the Property Browser screen).
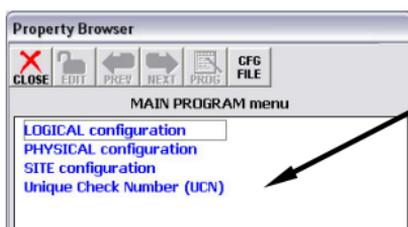
2. Select **Unique Check Number (UCN)**.
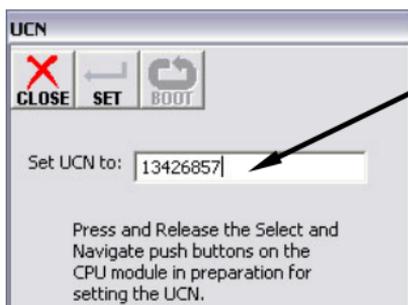
3. Enter the new 8-digit UCN (UCN is not case sensitive).

4. Simultaneously press **NAV** and **SEL** push buttons on CPU module.
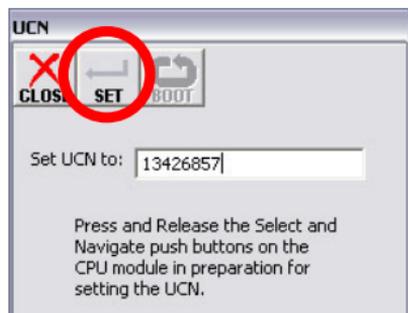
5. Within 1 minute after pressing CPU module buttons, click **SET**.
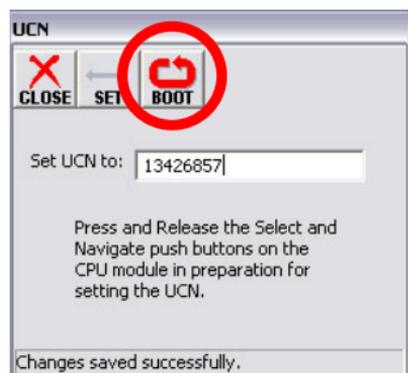
6. When the UCN screen displays 'Changes saved successfully', click **BOOT** to restart GEO. If BOOT is not pressed, GEO will restart automatically in 5 minutes.

19) Boot GEO and finish any necessary changes in operating parameters or timers.

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