WMS GAMING

INSTALLATION BULLETIN

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LOCAL CUSTOMER SERVICE (800) 378-7741

PARTS AND TOOLS NEEDED	☒ CPU-NXT Board (A-006182-*xx*) ☒ NXT Software & EPROMs ☒ ESD wrist strap ☒ ESD mat

MODEL(S) AFFECTED	55*x*, 36*x*
UNIT AFFECTED	Software/CPU
THEME	N/A
ESTIMATED TIME	20 min. per game

Installing CPU-NXT (A-006182)

Overview

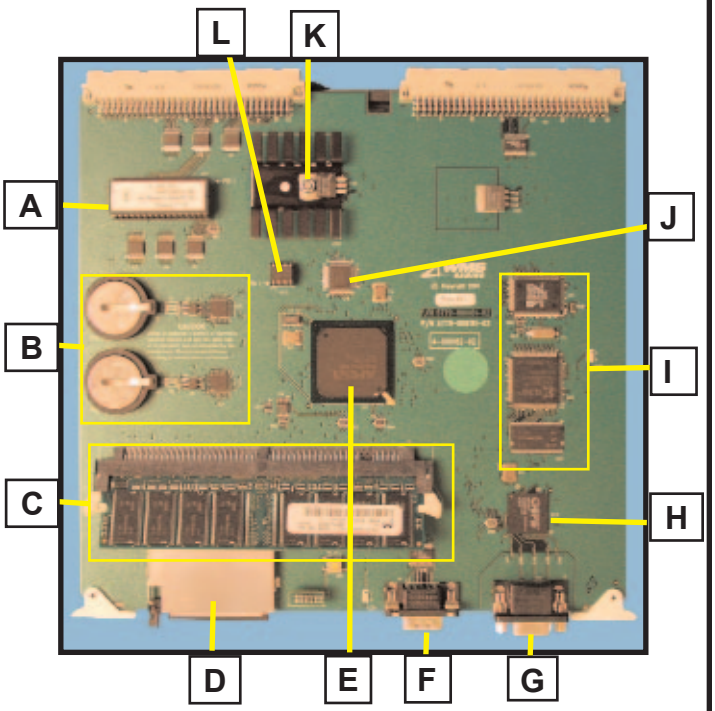
WMS Gaming Inc. is introducing a new upgrade to the electronic hardware and software for the Upright (55*x*) and Slant Top (36*x*) models. WMS designed and built a custom electronic circuit board, CPU-NXT™. The CPU board mates with the existing cabinet backplanes and support most existing peripherals, such as the coin acceptor, bill acceptor, and coin hopper.

The CPU-NXT board also supports the original complement of existing I/O such as lamps, player panel buttons, bell, knocker, and key switches.

The NXT upgrade approach allows games currently in the field to utilize the new hardware and software, which offers casino operators the opportunity to enhance an existing product without having to incur the cost of a new game.

This document details the installation of the NXT™ Operating System on the Upright (55*x*) and Slant Top (36*x*) models, which utilize the new CPU-NXT board.

The EMI In-Line Power Filter Kit (A-010368) must also be installed to utilize CPU-NXT. For installation instructions, reference *16-010367-01 Installing the EMI In-Line Power Filter Kit*.



CPU-NXT board.

A *- Boot EPROM*
B *- Battery-backed SRAM subsystem*
C *- SDRAM*
D *- CompactFlash® (CF) drive*
E *- AMD Elan SC 520 CPU*
F *- Serial port*
G *-Video port*
H *-Video controller*
I *- Audio subsystem*
J *- Custom Logic Device*
K *- Power supply*
L *- Jurisdictional EPROM*

Part Number Information

WMS Part Number	Description
A-006182-*xx*	CPU-NXT Board
vary by theme, version, coin mechanism, game denomination, and jurisdiction	RAM Clear CF Card
	NXT OS and Game CF Card
	Boot EPROM
	Jurisdictional ID Chip

Preparing for Procedure

ELECTROSTATIC DISCHARGE (ESD) WARNING

Electrostatic discharge (ESD) damage causes complete and/or intermittent failures to video game components. Take all necessary precautions to avoid damage.

Use the following anti-static steps before proceeding.

1. Fasten the ESD wrist strap on arm and ensure that it makes good skin contact, ***Image 1***.
2. Connect the clip end of the strap to a ground point.
3. Remove the CPU-NXT board from anti-static packaging and place directly on ESD mat.
4. Install the Boot EPROM on the CPU-NXT board at location XU1, ensuring the notch in the EPROM is properly aligned, ***Image 2***.
5. Install the jurisdictional identification chip at XU12, ensuring the notch for the SPI is properly aligned.
6. Insert the RAM Clear CF card into the CF drive, ***Image 3***. Use the direction indicator on the CF card to ensure proper insertion.

END PREPARING FOR PROCEDURE

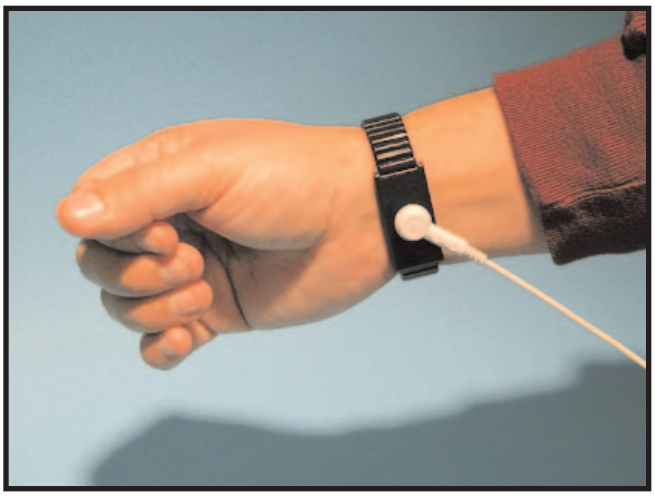


Image 1. *ESD strap on arm.*

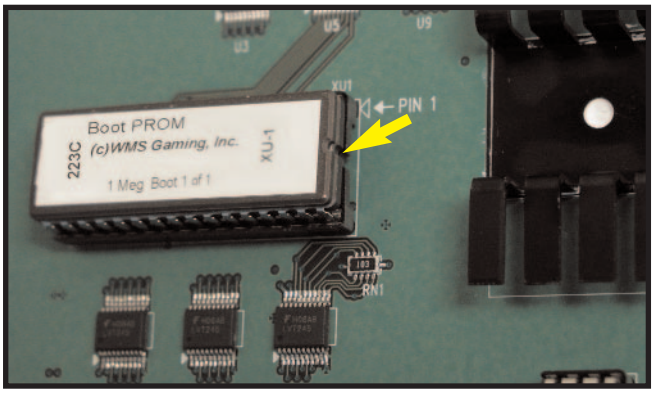


Image 2. *Boot EPROM installed, notch called out.*

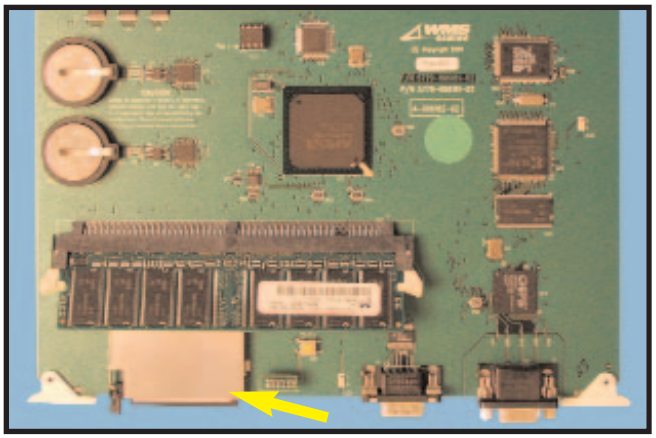


Image 3. *CPU-NXT board, compact flash drive called out.*

Installing CPU-NXT

1. Unlock and open the Main Door.
2. Turn the game power to Off at the PDU.
3. On the 55*x*, remove the Coin Tray and Hopper. On the 36*x*, lift the slide the coin chute towards you, ***Image 4***.
4. Disconnect the video cable, ***Image 5***.
5. Unlock and open the Card Cage.
6. Optional: remove the Card Cage door.
7. Pulling on the white board ejector tabs, remove the existing CPU board.
8. On the 55*x*, install the CPU-NXT board securely in the left-most slot in the Card Cage, ***Image 6a***.
9. On the 36*x*, install the CPU-NXT board in the bottom slot in the Card Cage, ***Image 6b***.
10. If removed, replace the Card Cage (logic) door.
11. Reconnect the video cable to the CPU board.

END INSTALLING CPU BOARD

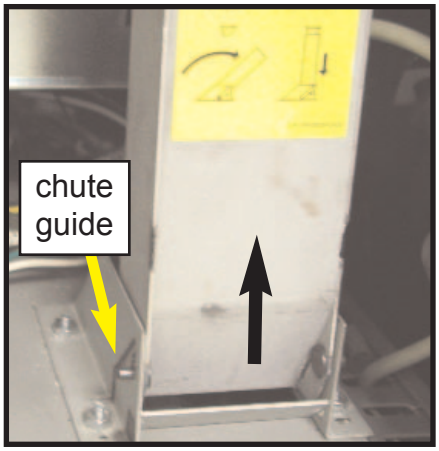
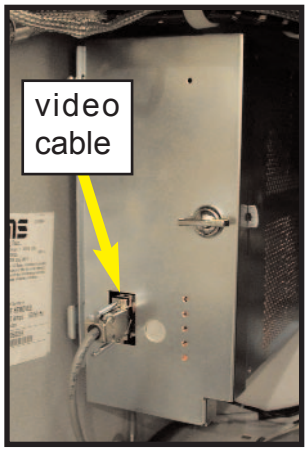


Image 4*. Lift and slide the coin chute down the guide, leaning the chute towards you as shown on the label.*



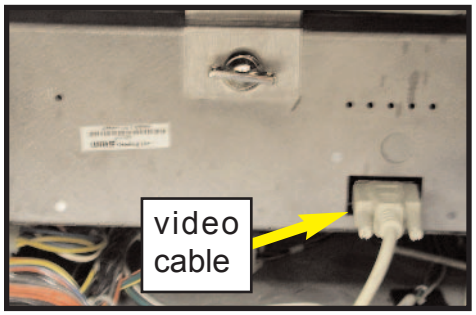
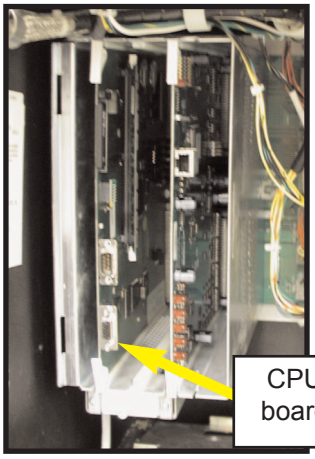


Image 5a *(left) and* ***5b****. Card Cage and video cable, 55x (left), and 36x.*



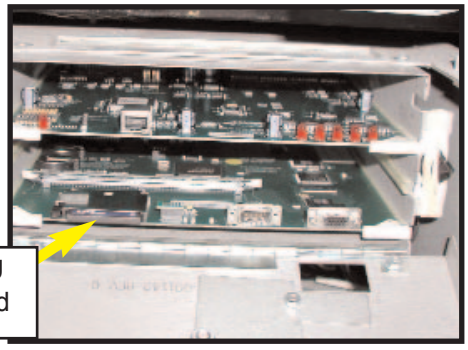


Image 6a *(left) and* ***6b****. CPU board installed, 55x (left), and 36x.*

Performing a RAM Clear

1. Turn the game power to On. The monitor displays POST (Power ON Self Test) information and then displays the files being loaded onto the system. Once completed, one “Bong!” indicates that the sound system is functioning properly.
2. Ensure the top (55*x*) or left-most (36*x*) LED light on the I/O board turns on and then stays off. Otherwise, if it stays lit, the CPU board is not properly engaged. If this is the case, power off the game and remove the CPU board. Then, reinstall the CPU board ensuring that it is installed securely.
3. The monitor displays a menu allowing selection of the monitor, ***Image 7***.
4. Select the correct monitor model option and press the green Monitor Test button, ***Image 8***. To identify the monitor type, check the manufacturer’s monitor label.
5. The monitor displays a test configuration screen, ***Image 9***. If the image displays clearly, you have selected the correct monitor type. Touch the screen to return to the monitor selection screen. If the image does not display clearly, touch the screen to return to the previous menu. Then, correct the monitor selection and retest.
6. Once the test completes properly, select the Monitor Tested Good button.

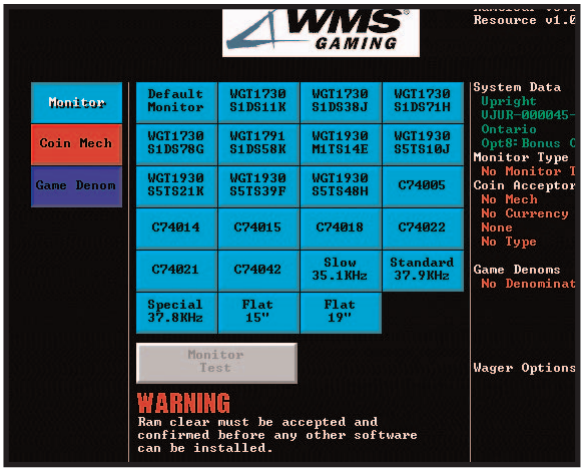


***Image 7**. Selecting a monitor type.*

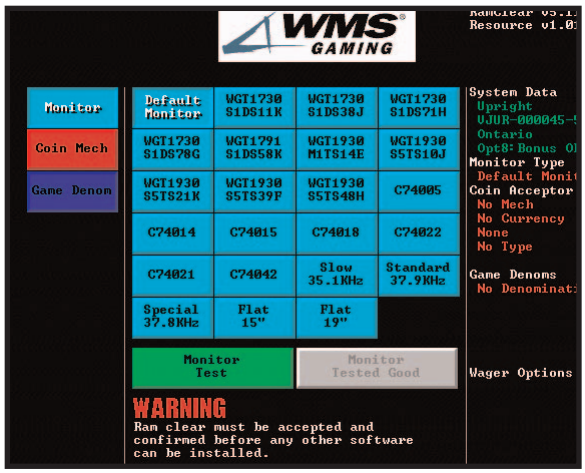


***Image 8**. Selecting the Monitor Test button.*

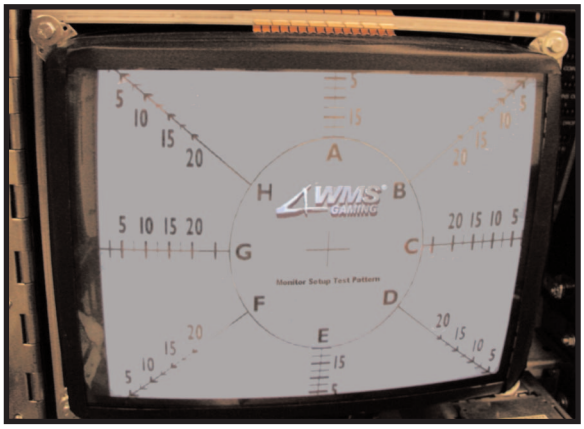


***Image 9**. Selecting a monitor type.*

Performing a RAM Clear, *cont.*

7. The monitor displays a menu allowing selection of coin validator, country, denomination, and type, ***Image 10***.
8. Select **Coin Mech** and the correct coin mechanism in this game.
9. Select the country in which this game will be played.
   a. Select the denomination of each coin.
   b. If more than one type is available for this denomination, select the correct Coin or Token option.
10. If applicable, select the denomination of this game:
    a. Select the correct **Coin** or **Token** option for this game.
    b. Select **Game Denom**.
11. Select all available denominations accepted by this game, ***Image 11***.

Notice: The Sub-Coin Handpay option is available only if your jurisdiction allows multi-denomination or tokenization.

12. If applicable, select **Sub-Coin Wager Game** and/or **Sub-Coin Handpay** as needed. If applicable, select **Sub-Coin Handpay Cancel.**
13. Review System Settings on the right edge of the display to verify correct entries, ***Image 8***.
14. Select **Accept**, ***Image 12***.
15. Select **Confirm**, ***Image 12***.
16. The following monitor message displays: "RAM Cleared. Turn off power and replace CF card," ***Image 13***.
17. Turn the game power to Off at the PDU.

Image 13. *RAM Cleared message.*

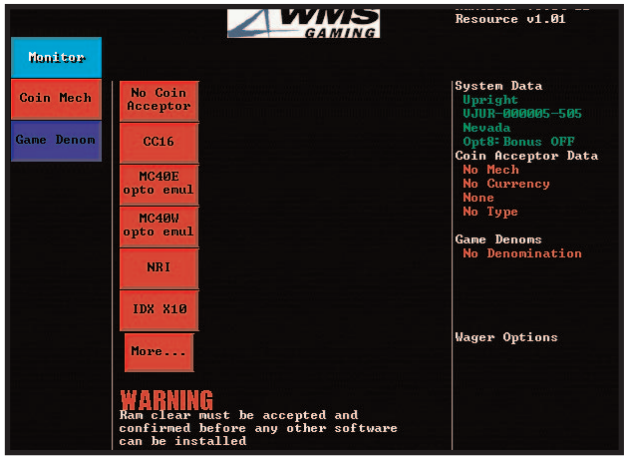


Image 10. *Coin mech, country, and denomination selected.*

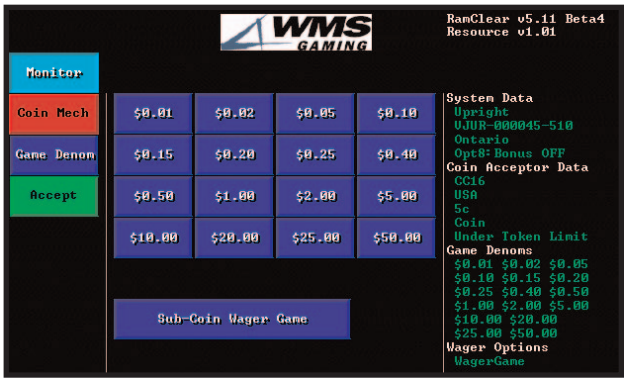


Image 11. *Selecting the Coin Mech and Game Denom.*

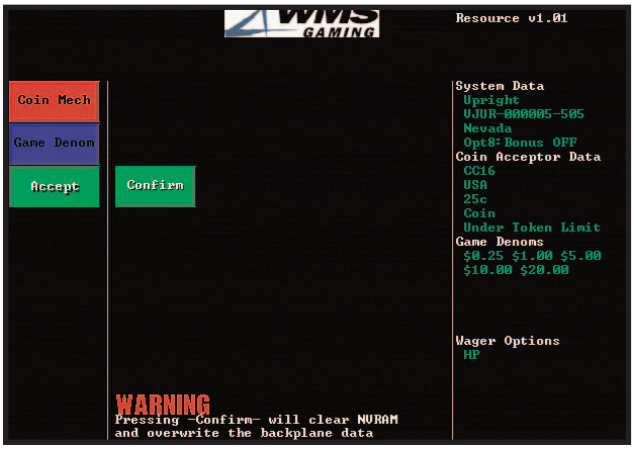


Image 12. *Accepting and confirming the Coin Mech and Game Denom.*

END PERFORMING A RAM CLEAR

Configuring NXT

1. Eject the RAM Clear CF card using the eject button and insert the NXT OS and game CF card.
2. Replace the Card Cage/Logic Door, if applicable.
3. Reconnect the video cable.
4. On the 55*x*, replace the Hopper and Coin Tray.
5. On the 36*x*, lift and slide the coin chute to its initial position.
6. Turn the game power to On. The display will show a POST (Power On Self Test) information and then show the files being loaded into the system. Once completed, one “Bong!” indicates that the sound system is functioning properly.
7. The following monitor message displays: “Clearing RAM. Use DIAGNOSTIC switch to complete RAM Clear.” Press the DIAGNOSTIC button. A progress indicator displays in the upper left corner of the monitor until it reaches 100%.
8. The following monitor message displays: “Percentages not configured. Please enter administration mode to set game percentages.”
9. Press the DIAGNOSTIC button. This displays the *Administration Menu*, ***Image 14***.

Notice: The option to adjust the game percentage by denomination is not available in all jurisdictions.

10. Select **Config/Test**.
11. Select **Game**.
12. Select **Game Percentage**.
13. You may change the game percentage for each denomination accepted by the game. For instance, you might set the percentage for $0.25 to 95% and that for $20.00 to 93%. Select the appropriate game percentage(s) by pressing the denomination button and cycling through the percentage options until your percentage is displayed, ***Image 15***.

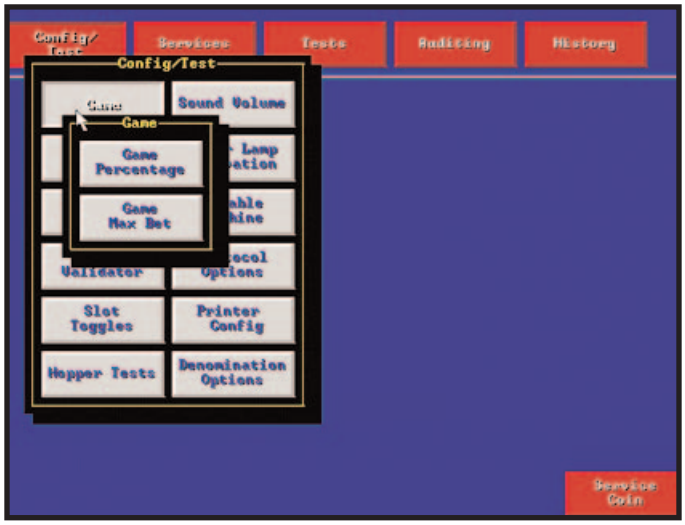


***Image 14**. Administration Menu.*

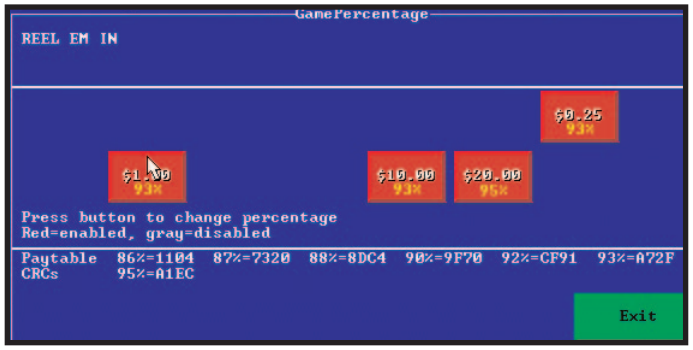


***Image 15**. Game Percentage Screen.*

CAUTION: Select the game percentage **carefully**. Once set, game percentages may only be changed by performing a RAM clear and repeating these steps.

Configuring NXT, cont.

14. Select **Exit**. The *Administration Menu* displays.
15. Select **Services**.
16. Select **Set Clock**.
17. Select **Date**.
18. Enter each character of the date using the number pad in DD-MMM-YYYY format. Select the month using the month selection screen, ***Image 16***.
19. Select **Ok**.
20. Select **Time**.
21. Enter the time using the number pad in 24-hour format, HH:MM:SS, ***Image 17***.
22. Select **Ok**.
23. Configure any additional options using the *Administration Menu*. When completed, press the DIAGNOSTIC button and close and lock the Main Door.

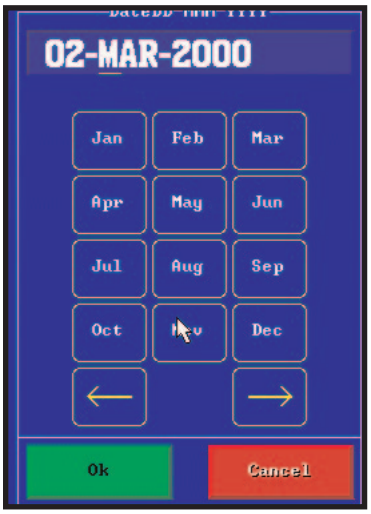


***Image 16**. Date screen.*

***Image 17**. Time screen.*

END OF DOCUMENT