

BATTLEZONE

FREE PLAY + HIGH SCORE SAVE KIT

ORIGINAL ATARI VECTOR ARCADE HARDWARE / 6502



STANDARD + WI-FI EDITIONS

6502 • CPU board • Pin 1 • ROM Saver • Testing

Before you begin

ONE DAUGHTER CARD FOR THE CPU BOARD

The Battlezone kit includes 1 HighScoreSaves 6502 daughter PCB. You need a compatible 6502 processor: reuse your socketed original CPU or select a compatible replacement option.

SAFETY FIRST

Power off and unplug the cabinet before touching either Battlezone board. The vector monitor contains dangerous high-voltage circuitry that may retain charge after shutdown. Avoid the monitor and use basic ESD precautions.

PRE-INSTALL CHECKLIST

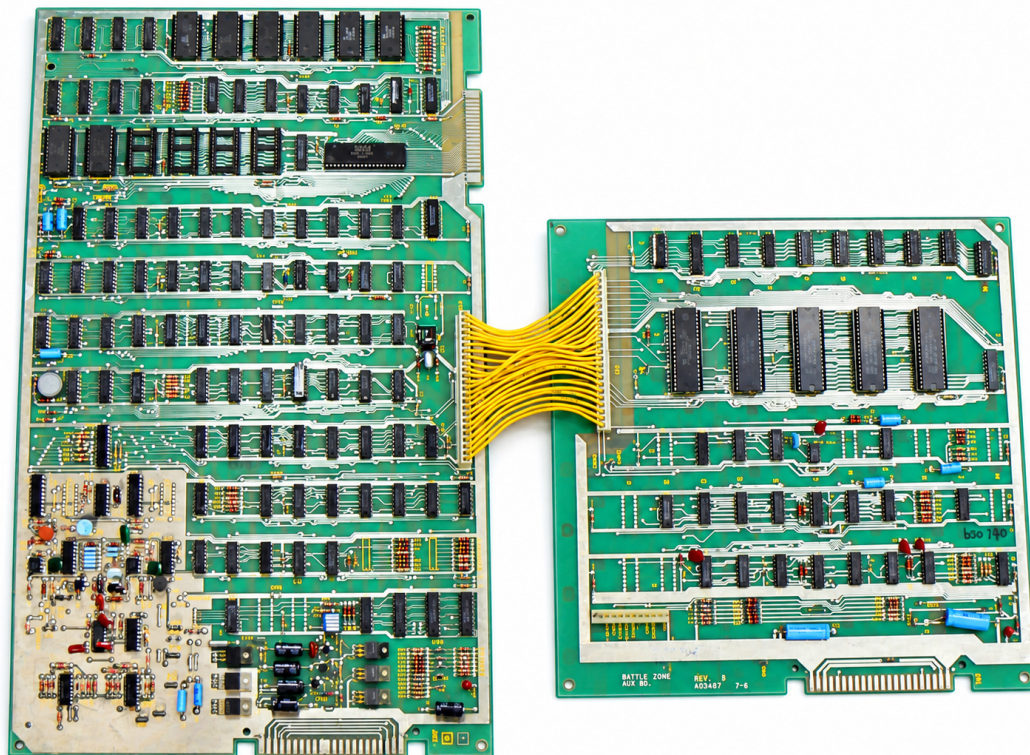
- Confirm Battlezone operates correctly on its original Atari PCB set before installing the kit.
- Photograph and label every disconnected connector, including the inter-board cable.
- Identify the main CPU board and the separate smaller auxiliary board.
- Confirm that the original 6502 CPU has a 40-pin socket; if soldered, consult a qualified technician.
- Use a nonconductive, well-lit work area and a proper IC extraction tool.
- Keep all removed original hardware and optional ROMs in labeled antistatic storage.

INSTALLATION OVERVIEW

Only the main CPU board receives the 6502 daughter card. Leave the separate auxiliary board intact and reconnect the original inter-board cable afterward. The physical installation is the same for Standard and Wi-Fi editions.

Identify the original Battlezone PCB

Battlezone uses a two-board Atari vector PCB assembly. The main CPU board is the larger board that receives the kit; the smaller auxiliary board connects to it by ribbon/inter-board cable and is not modified for this installation.



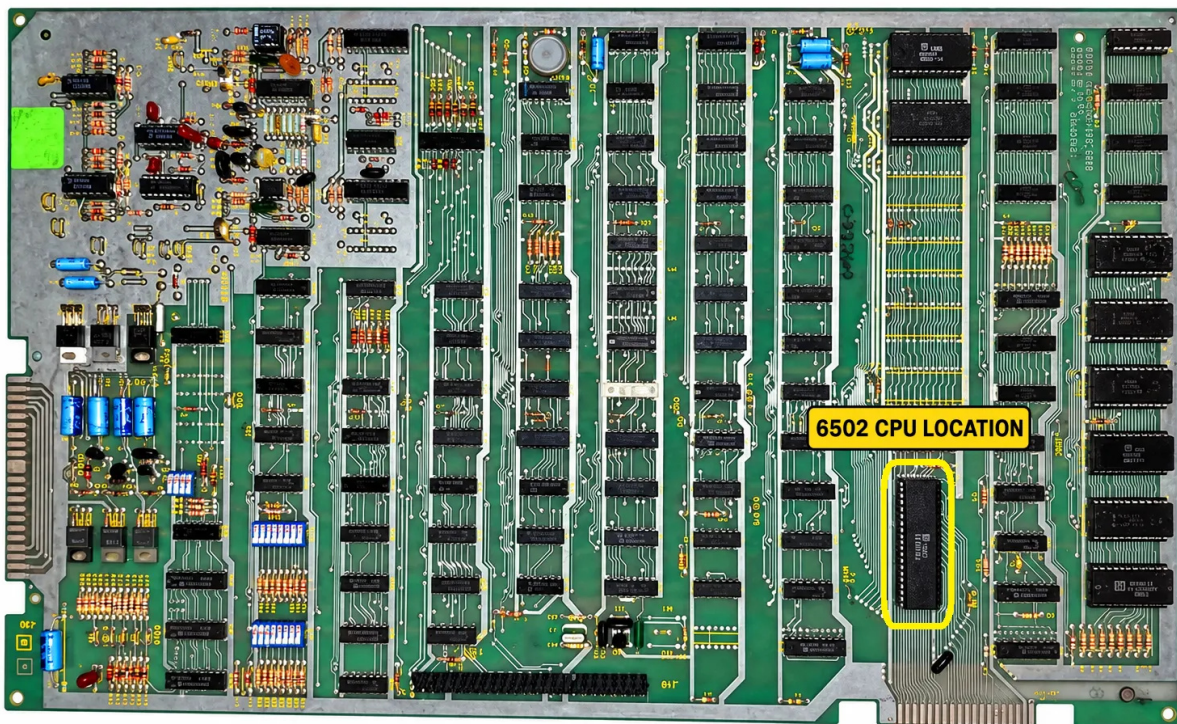
CORRECT TARGET: THE MAIN CPU PCB

The original guide explicitly says the auxiliary board is not used for kit installation. Do not remove or relocate chips on the smaller board. Use the annotated original guide photograph on the following pages for CPU location and Pin 1 orientation.

Use this board identification overview together with the annotated CPU photographs and the markings on your actual PCB to confirm component placement.

Locate and remove the 6502 CPU

On the main CPU board, find the 6502 at the location marked in the original installation photo. With power disconnected, note its notch and Pin 1 before gently lifting the socketed processor straight up.



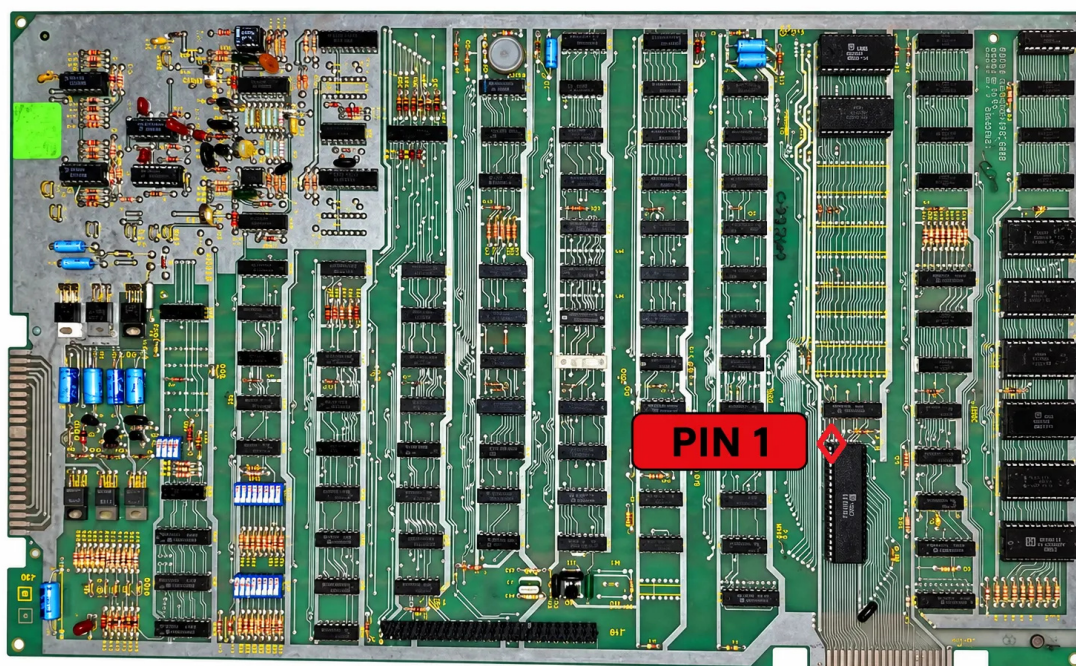
PROTECT THE ORIGINAL PROCESSOR

Work evenly from both ends with a chip puller or suitable IC-removal tool; do not bend pins, crack the socket, or pry against nearby components. If the CPU is soldered rather than socketed, stop and have a qualified technician install a compatible socket.

The processor must be fully removed before the new daughter-card pins are inserted into the original CPU socket.

Locate Pin 1 of the 6502

Before transferring the original compatible 6502 CPU to the HighScoreSaves save kit, identify Pin 1 and the notch orientation on the original main CPU board. Align the chip with the matching Pin 1 marker on the daughter-card socket before pressing the CPU into place.



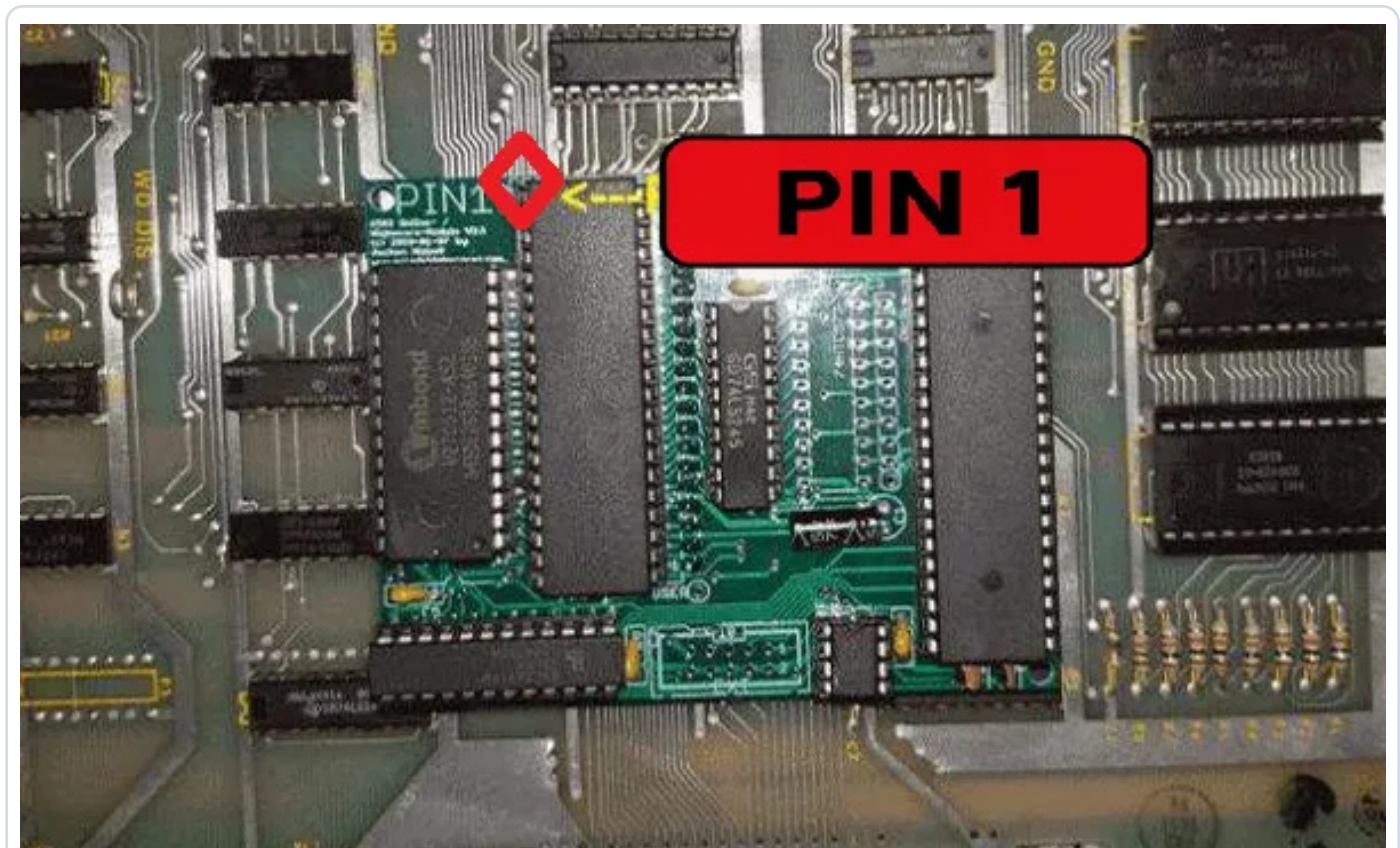
CPU ORIENTATION IS CRITICAL

The annotated photograph identifies the Pin 1 end of the original 6502 CPU on the main PCB. Once removed, place the compatible CPU into the save-kit socket with the same Pin 1 orientation. Do not rotate or force the processor; check that all 40 pins align.

If your processor or daughter-card markings are unclear, do not guess about orientation. Contact HighScoreSaves before applying power.

Install and inspect the daughter card

Fit the assembled 6502 daughter card into the vacated CPU socket on the main Battlezone PCB. Keep the original 6502 orientation, align all 40 pins, press evenly, and verify no components touch the underside of the kit.



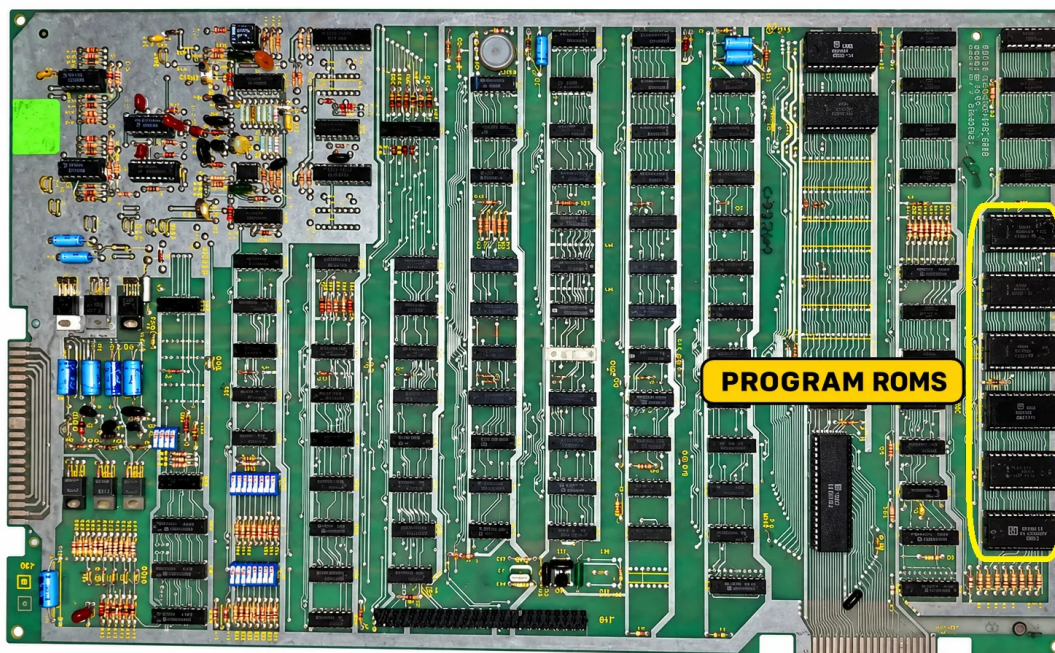
BEFORE RECONNECTING THE TWO BOARDS

- Confirm daughter-card Pin 1 matches the original CPU socket.
- Inspect all 40 pins for a complete straight insertion.
- Ensure underside clearance; a compatible riser/socket may be used if required.
- Reconnect the auxiliary board and original cable in their recorded orientation.

Optional program ROM removal

OPTIONAL - NOT REQUIRED TO PLAY

The original Battlezone guide marks a column of program ROMs on the main CPU board as optionally removable with ROM Saver. The original PDF does not clearly specify all individual chip identifiers. You may leave the original ROMs installed.



IMPORTANT: REMOVE ONLY VERIFIED CHIPS

Do not identify or remove ROMs solely by appearance. Confirm that your original board matches the marked source photograph and obtain exact socket positions from HighScoreSaves before taking out any chips.

Final inspection and first test

BEFORE POWERING ON

- Compatible 6502 installed correctly in daughter-card socket.
- Pin 1 and notch oriented as shown by original markings.
- Daughter card fully seated in original main-board CPU socket, with adequate clearance.
- Both original boards and inter-board ribbon cable correctly reconnected.
- Cabinet harnesses restored according to your pre-install photographs.

POWER-ON TEST

Reinstall the original two-board assembly. Connect the cabinet harnesses, power on, and confirm normal Battlezone vector display, controls, game operation, Free Play, and local score saving. Cycle power and check that a qualifying score remains.

HOW TO ENTER THE SETTINGS MENU

With cabinet power off, hold Player 1 Start while turning on the game. Hold approximately four seconds and release when prompted. Set and save the desired options in the kit menu.

IF THE BOARD DOES NOT START

Turn off immediately. Recheck orientation, socket seating, clearance, connections and both original board cables.

Wi-Fi-enabled kit setup

SAME PHYSICAL INSTALLATION

The Wi-Fi edition uses the same 6502 daughter-card installation as the Standard kit and includes Wi-Fi hardware. No additional connection to the auxiliary PCB is required.

AFTER THE ARCADE KIT IS WORKING

- 1 Obtain your PK and SK account keys**
Follow the setup emails and instructions sent by HighScoreSaves for your Wi-Fi leaderboard account.
- 2 Enter online settings in the kit menu**
Enter the supplied PK and SK keys exactly; enable online scoring as instructed and save the menu settings.
- 3 Connect the module to Wi-Fi**
Use the module temporary Wi-Fi network and setup page to select a compatible 2.4 GHz home network.
- 4 Test an online score**
After Wi-Fi setup, play and submit a qualifying score; check your personal online high score page.

KEEP PK AND SK KEYS PRIVATE

The Wi-Fi module setup procedure depends on its hardware revision. Always use the latest HighScoreSaves Wi-Fi instructions if the on-screen flow or the module setup page differs.

- > Open complete Wi-Fi setup instructions**
Current PK/SK, 2.4 GHz setup and troubleshooting

Helpful resources and support

Use these clickable HighScoreSaves links for current hardware compatibility, kit options, Standard/Wi-Fi setup, and support. Do not rely on outdated instructions for different Battlezone upgrades.



Battlezone kit product page

Compatible original Atari 6502 hardware and kit options



Battlezone PCB compatibility

Compare the HighScoreSaves kit with the separate Braze kit



Atari Battlezone operator manual

Original service and cabinet hardware reference, TM-156



Atari Battlezone schematics

Original CPU and auxiliary-board drawing reference, DP-156-01



HighScoreSaves kit tips

Settings access, score features, backup and troubleshooting



Wi-Fi-enabled kit information

Current PK/SK, 2.4 GHz module configuration instructions



HighScoreSaves installation guides

Find up-to-date PDF guides for other kits



Contact HighScoreSaves support

Check ROM removal and hardware questions with support