# BOSCONIAN

## FREE PLAY + HIGH SCORE SAVE KIT

ORIGINAL MIDWAY ARCADE HARDWARE




### STANDARD + WI-FI EDITIONS

PCB identification • Z80 installation • Settings • Support

OVERVIEW AND PREPARATION

# Before you begin

### ONE INSTALLATION - TWO KIT VERSIONS

The Standard and Wi-Fi editions use the same Z80 daughterboard installation. The Wi-Fi edition adds a Wi-Fi module; network setup is covered on page 9.

### SAFETY FIRST

Power off and unplug the cabinet before handling the PCB.
Use ESD-safe handling and a grounded work area.
Stay clear of monitor power circuitry. This guide addresses the game PCB, not the monitor. If unsure, consult a qualified arcade technician.

## PREPARATION CHECKLIST

- Confirm the game works: Verify normal operation before installing the kit.
- Document connections: Photograph and label connectors and cable orientation.
- Disconnect carefully: Remove only the connections needed, with power removed.
- Use a clean bench: Set the PCB on an ESD-safe, well-lit work surface.
- Check the socket: The main Z80 location must have a compatible 40-pin socket.

### WHAT'S INCLUDED

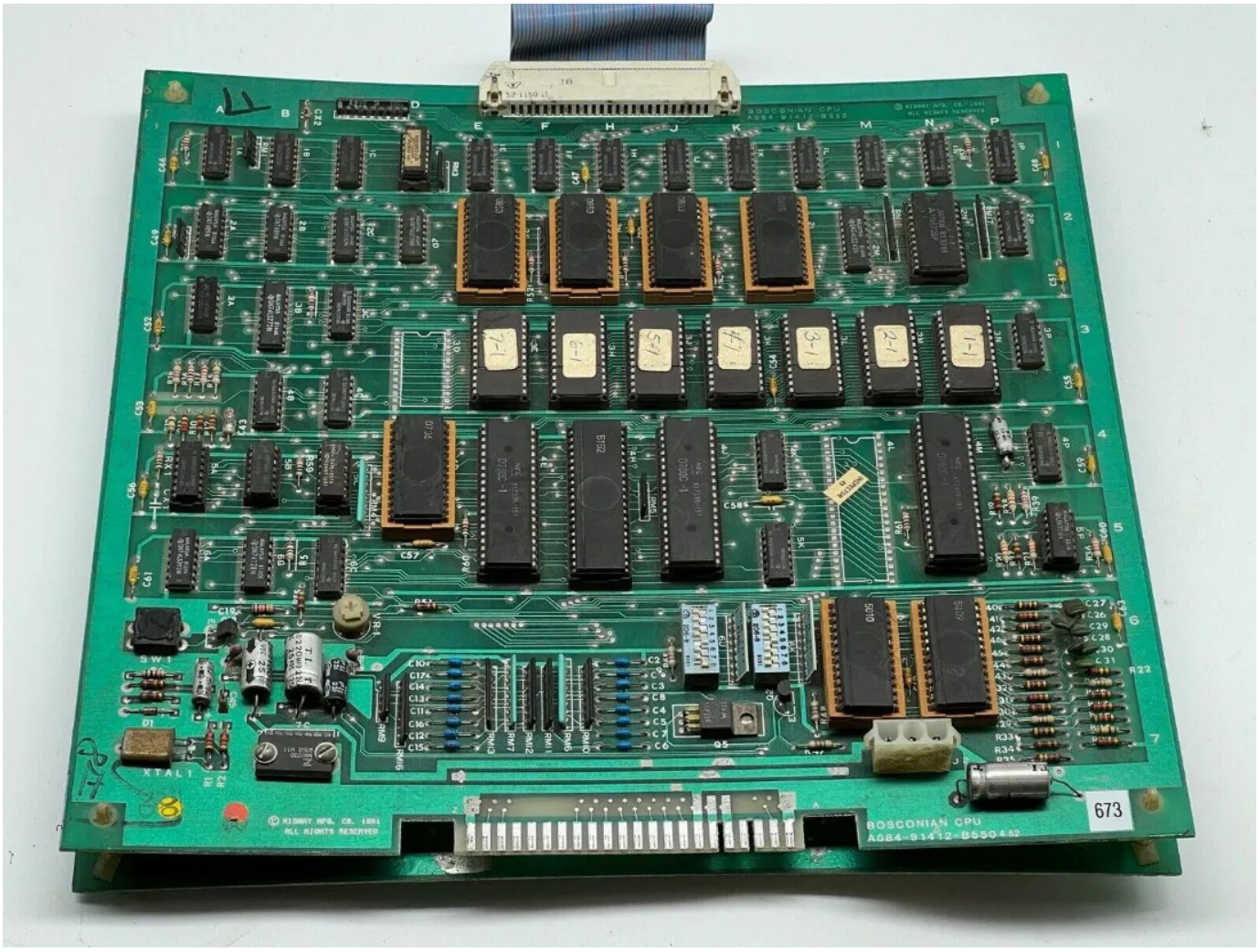
1 × HighScoreSaves Z80 daughterboard. A Z80 CPU is required: reuse your compatible original processor or use a compatible replacement selected with your order. The Wi-Fi edition includes the optional Wi-Fi module.

Hardware reference: original Midway Bosconian CPU PCB shown in this guide. Do not use these photos to identify unrelated or converted boards.

STEP 0 / BOARD IDENTIFICATION

# Identify the correct Bosconian PCB

Identify the original Midway Bosconian CPU board. The photograph below shows the component side of the CPU PCB. Locate the main Z80 using the marked reference on the next page; do not substitute another CPU or socket on the board.




Original Midway Bosconian CPU board, component-side overview.

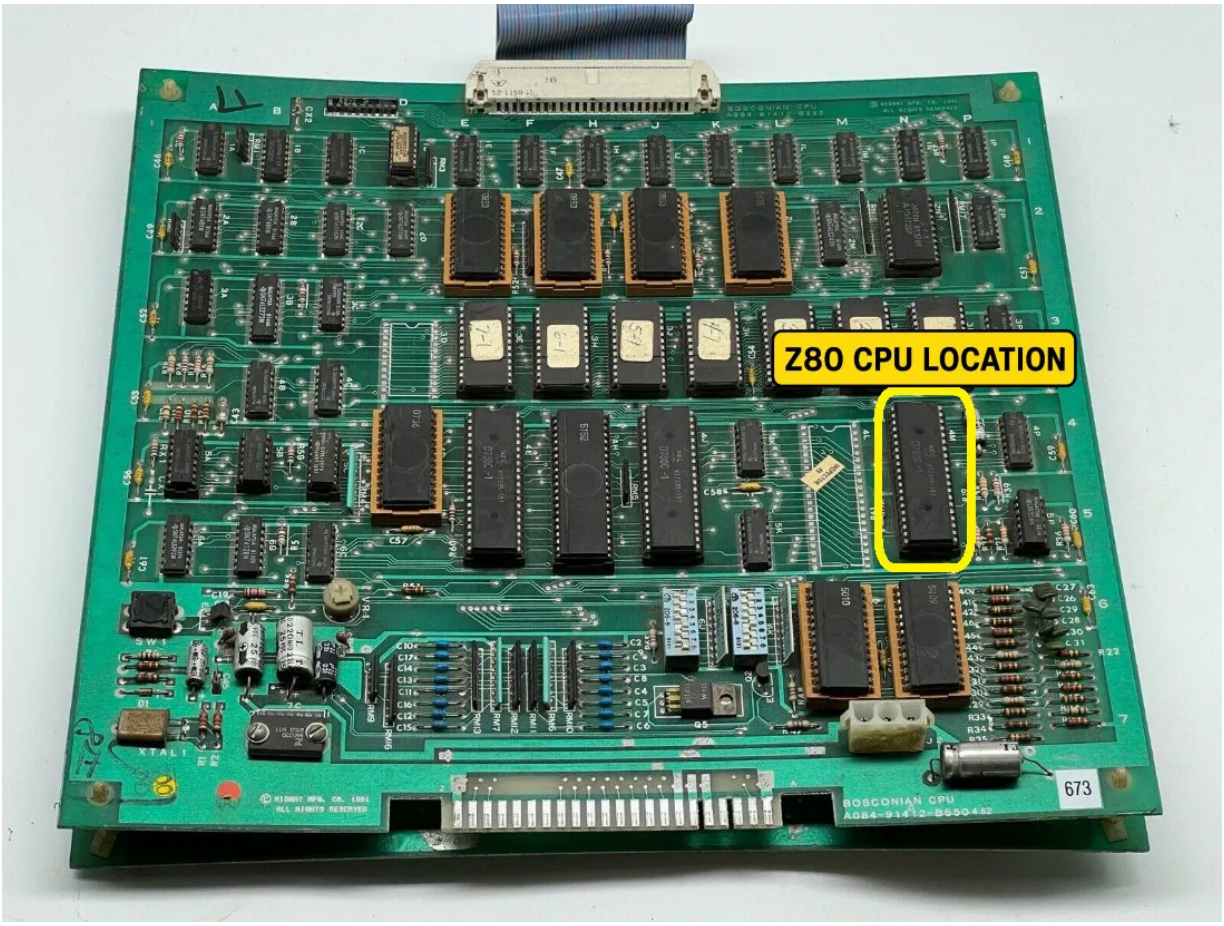
**DO NOT GUESS AT THE CPU LOCATION**

If your board does not match these photographs, or the required Z80 is soldered in place, stop and verify the hardware before proceeding.

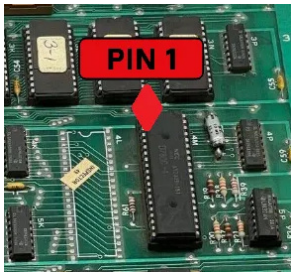
STEP 1 / REMOVE THE CPU

# Remove the original Z80 processor

Locate the Z80 outlined in yellow. With the cabinet unplugged and the board fully accessible, carefully remove this processor from its socket. Record its orientation before removal; the red Pin 1 reference shows the correct end.




The required Z80 is outlined in yellow on the original Midway CPU board.



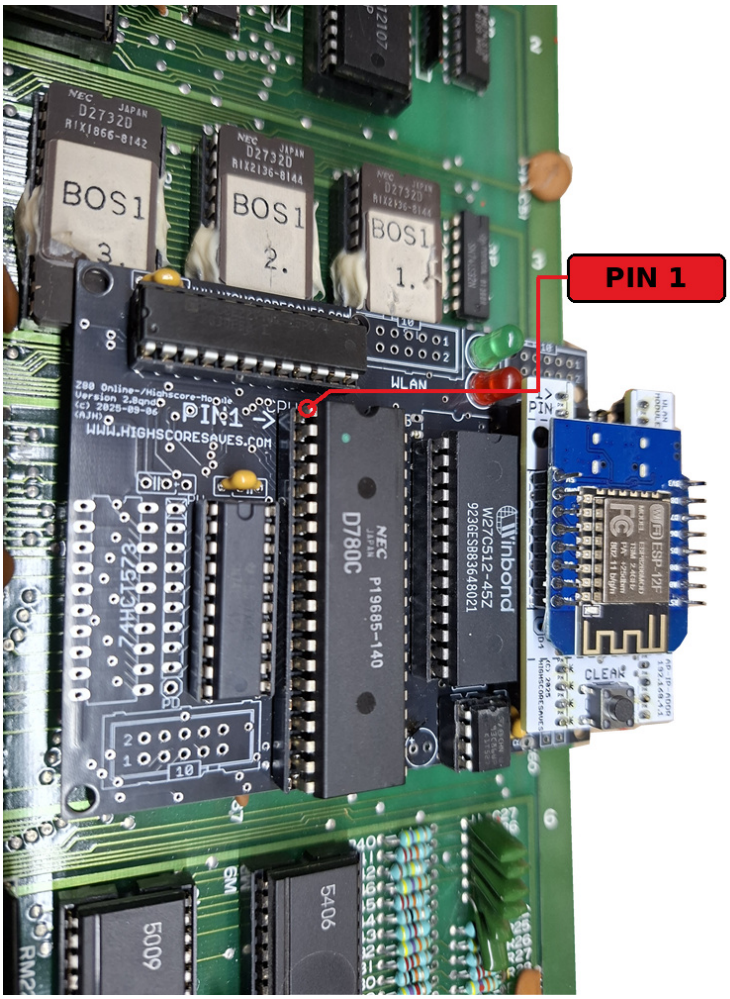

Removal notes
Lift the CPU evenly from both ends using a suitable chip puller. Avoid bending pins or levering against nearby components. Do not proceed if the CPU is soldered in place.

STEP 2 / CPU ORIENTATION

# Fit the Z80 to the daughterboard

**CRITICAL: PIN 1 ORIENTATION**

Align Pin 1 of the Z80 CPU with Pin 1 of the HighScoreSaves daughterboard socket. Check the notch and the board’s printed PIN1 marking before insertion.




Installed assembly shown for reference. Pin 1 is at the upper-left end of the Z80 in this photograph.

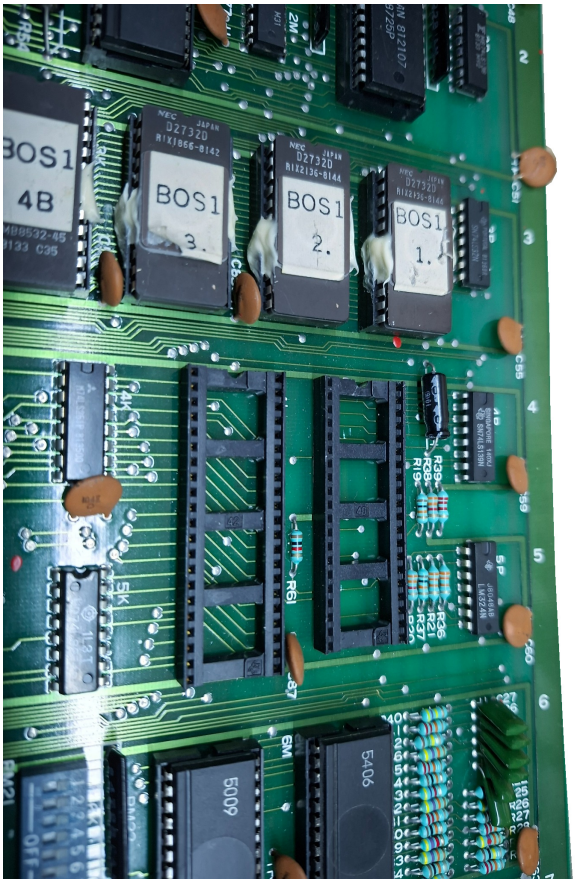
**CHECK ALL 40 PINS**

Inspect the CPU pins before inserting the processor. Align both rows and press evenly. Never force a bent or misaligned pin.

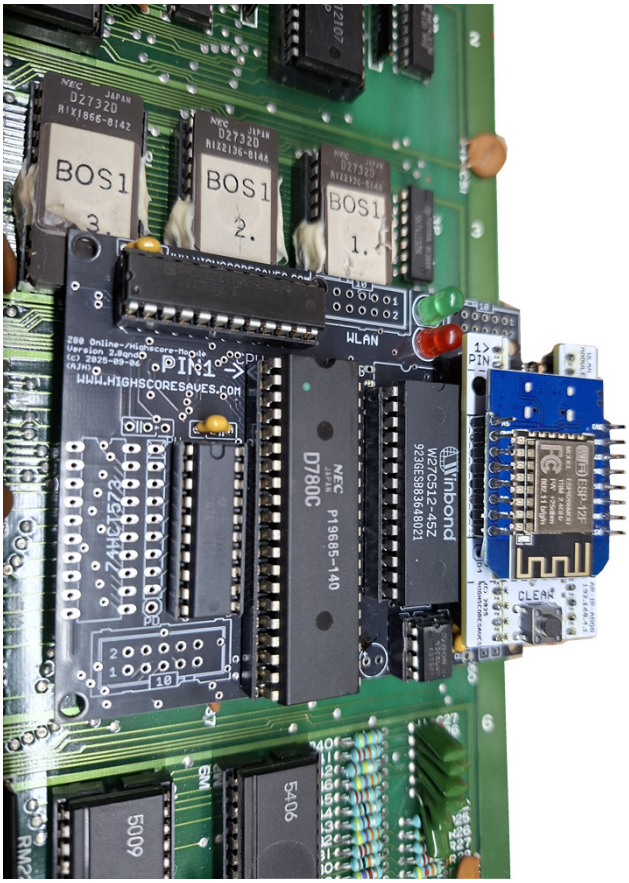
STEP 3 / SEAT DAUGHTERBOARD

# Install the assembled daughterboard

With the Z80 fitted to the daughterboard and correctly oriented, align the assembled kit with the original 40-pin Z80 socket on the Midway CPU board. Press evenly until fully seated; do not force the assembly.




Empty Z80 socket: the narrower 40-pin socket at right. The adjacent 42-pin socket is not the kit location.




Completed daughterboard installation. Wi-Fi edition shown.

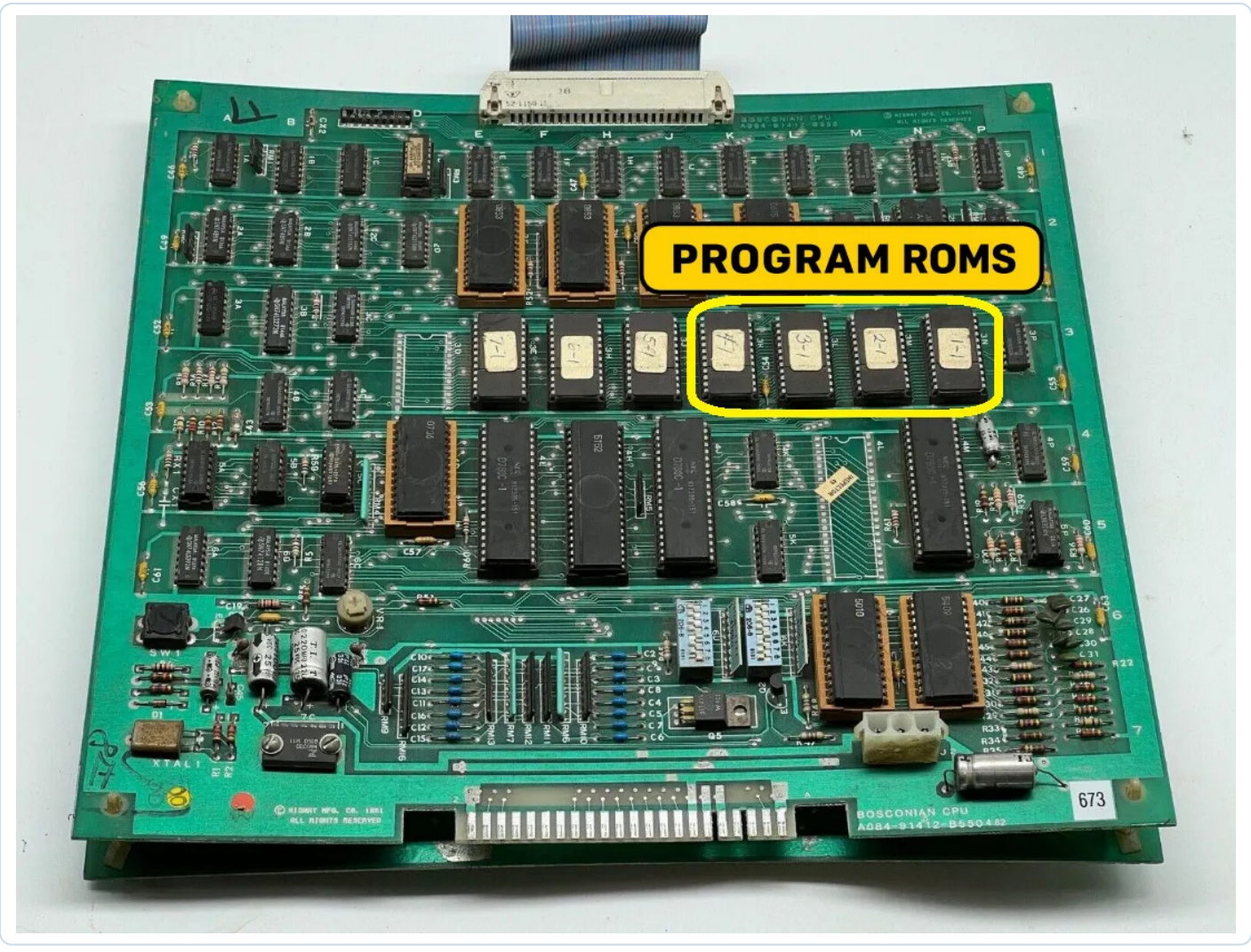
**CLEARANCE CHECK**

Check the underside of the daughterboard and surrounding components. Verify correct orientation, pin alignment and clearance before restoring cabinet power.

STEP 4 / ROM SAVER

# Optional: remove program ROMs

Removing the original program ROMs is optional for Bosconian. It is not required for normal kit operation. Leave them installed unless you choose to remove them.



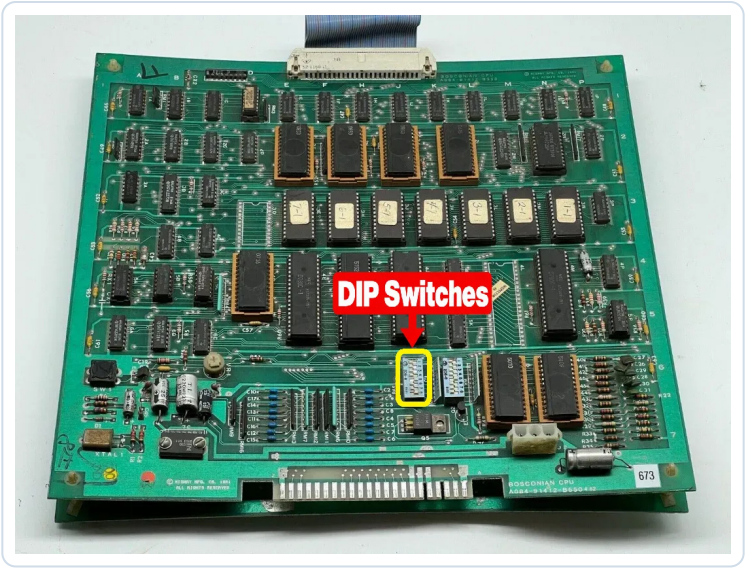

Only the four program ROMs outlined together in yellow are identified for optional removal.

**REMOVE ONLY THE IDENTIFIED ROMs**

If you choose to remove the ROMs, power off and unplug the cabinet. Remove only the four highlighted original program ROMs, label them by location, and store them safely. Do not remove other chips.

STEP 5 / VERIFY INSTALLATION

# Final inspection and first test




DIP switch bank 6J on the original Midway PCB.

## BEFORE POWERING ON

- Z80 installed on daughterboard with correct Pin 1 orientation.
- Daughterboard seated in the original 40-pin Z80 socket; no bent or missed pins.
- No components contacting the underside of the daughterboard.
- All PCB connectors restored in their documented orientation.

### DIP SWITCH SETTINGS — BANK 6J

**Required: DIP switches 6 and 7 on bank 6J must be set to OFF.**

Optional: Set DIP switch 1 on bank 6J to OFF to skip the RAM test at startup.

## POWER-ON TEST

Reinstall the PCB assembly and reconnect cables using your reference photos. Power on and confirm normal boot. Test gameplay, Free Play and saving a qualifying score.

### HOW TO ENTER THE SETTINGS MENU

With the cabinet off, hold Player 1 Start while powering on. Hold for approximately 4 seconds and release when prompted. Use the menu to review kit settings.

### IF THE GAME DOES NOT START

Turn the cabinet off immediately. Recheck CPU and kit orientation, pins, clearance and connections. Contact HighScoreSaves if the issue persists.

FOR WI-FI EDITIONS ONLY

# Wi-Fi-enabled kit setup

**SAME PHYSICAL INSTALLATION**

The Wi-Fi edition uses the same daughterboard and Z80 socket installation as the Standard edition. It additionally carries a Wi-Fi module. Complete the physical installation before setting up Wi-Fi.

## AFTER THE ARCADE KIT IS WORKING

1 **Obtain your PK and SK account keys**

Follow the setup emails and instructions from 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 settings.

3 **Connect the module to Wi-Fi**

Use the module’s temporary Wi-Fi network and setup page to select a compatible 2.4 GHz home network.

4 **Test an online score**

Play and submit a qualifying score; check the Bosconian online leaderboard.

**KEEP YOUR PK / SK KEYS PRIVATE**

Wi-Fi procedures can change. Use the current HighScoreSaves online setup instructions for the full connection process.

↗ **Open complete Wi-Fi setup instructions**

Current Wi-Fi instructions, PK/SK keys, network setup and online scoring

LINKS / REFERENCE

# Helpful resources and support

These links are clickable in the PDF. Visit the live HighScoreSaves pages for current kit information, setup instructions, documentation and support.

### Bosconian kit product page
Kit versions, supported features and parts options

### Bosconian online high scores
View the Bosconian global leaderboard

### HighScoreSaves kit tips
Menu access, score features and troubleshooting

### Wi-Fi setup and Standard comparison
Current Wi-Fi instructions, PK/SK keys and network setup

### Installation guide library
Find PDF guides for other HighScoreSaves kits

### Contact HighScoreSaves
Support requests and contact information