FAST FREDDIE

FREE PLAY + HIGH SCORE SAVE KIT

ORIGINAL KANEKO / ATARI ARCADE HARDWARE



STANDARD + WI-FI EDITIONS

PCB identification • Z80 installation • Settings • Support

OVERVIEW AND PREPARATION

Before you begin

ONE INSTALLATION - TWO KIT VERSIONS

Standard and Wi-Fi editions use the same physical Z80 daughter-card installation. Wi-Fi versions also require network setup, described on page 9.

SAFETY FIRST

Power off and unplug the cabinet before touching the PCB. Use ESD-safe handling and keep clear of the monitor and high-voltage circuitry. If any hardware or orientation is uncertain, contact a qualified arcade technician.

PREPARATION CHECKLIST

- **Confirm board health:** Verify Fast Freddie plays normally before installation.
- **Document connections:** Photograph the PCB and cable routing.
- **Label disconnected cables:** Mark each connector and its orientation.
- **Prepare a workspace:** Use a clean, well-lit, ESD-safe surface.
- **Inspect the Z80 socket:** A compatible 40-pin CPU socket is required.

WHAT'S INCLUDED

1 x HighScoreSaves Fast Freddie Z80 daughter card. A compatible Z80 processor is required: transfer the original socketed CPU or select the processor option when ordering. Wi-Fi models include a Wi-Fi module.

Compatibility: For documented compatible original Kaneko Fast Freddie arcade PCBs. Not intended for unrelated Atari or conversion hardware; verify the original board and socket before installation.

STEP 0 / BOARD IDENTIFICATION

Identify the original Fast Freddie PCB

Confirm the original Fast Freddie arcade PCB matches the photograph. The HighScoreSaves kit replaces the Z80 at its original 40-pin CPU socket. Do not install it into a different socket or board.



Original Fast Freddie arcade PCB; verify the entire board and connector layout.

VERIFY ORIGINAL HARDWARE

If the original PCB differs or the Z80 is soldered in place, stop. The kit requires a compatible socketed Z80 location.

STEP 1 / REMOVE THE CPU

Remove the original Z80 processor

With cabinet power disconnected, locate the Z80 processor indicated by the yellow outline. Note its orientation before lifting the chip from the original socket.



Z80 processor is identified by the yellow outline in the photograph.

REMOVE THE Z80 EVENLY

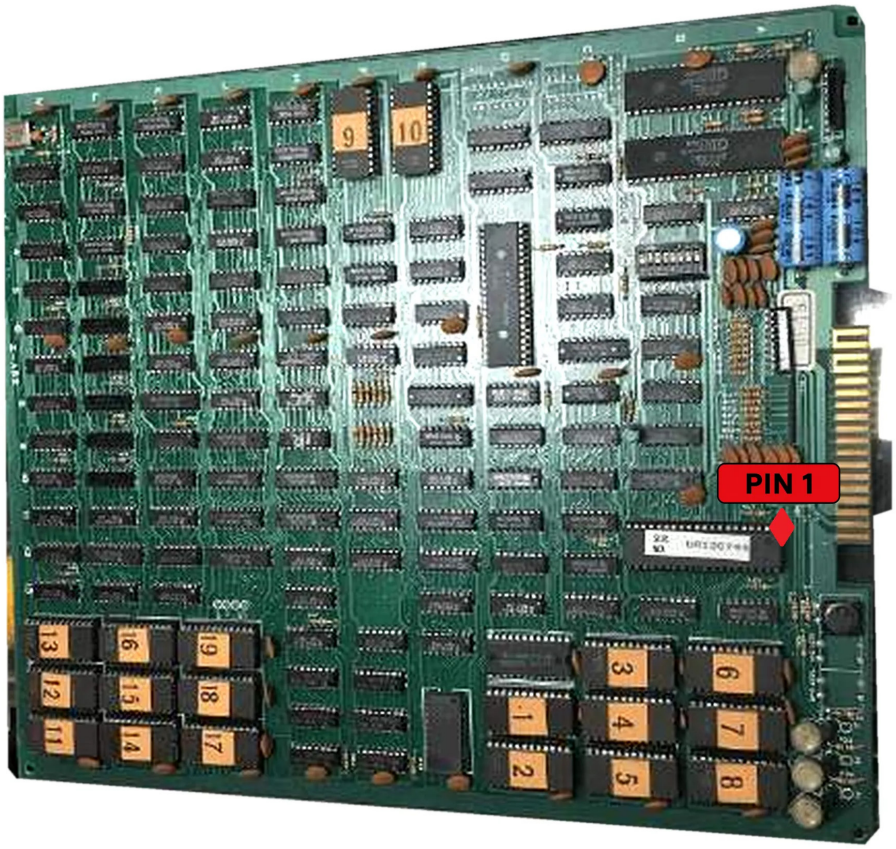
Use an IC extractor or carefully lift both ends a little at a time. Do not bend the 40 pins or lever against nearby components. Do not force or desolder a CPU that is not socketed.

STEP 2 / CPU ORIENTATION

Fit the Z80 to the daughter card

CRITICAL: PIN 1 ORIENTATION

Transfer the Z80 into the HighScoreSaves daughter-card socket. The CPU Pin 1 must match the daughter-card socket Pin 1 marking. Use the red Pin 1 indicator for original PCB orientation.



Original Fast Freddie Z80 Pin 1 is indicated in red.

Before inserting: inspect all 40 pins. Seat the processor evenly with no bent, offset, or missed pins. Never force a misaligned processor.

STOP IF PIN 1 ON EITHER SOCKET IS UNCLEAR.

STEP 3 / SEAT DAUGHTER CARD

Install the assembled daughter card

After installing the Z80 on the daughter card with matching Pin 1, insert the assembled kit into the original Fast Freddie Z80 socket. Align all daughter-card pins and press down evenly.



The marked Z80 position is the original socket used for the new daughter card.

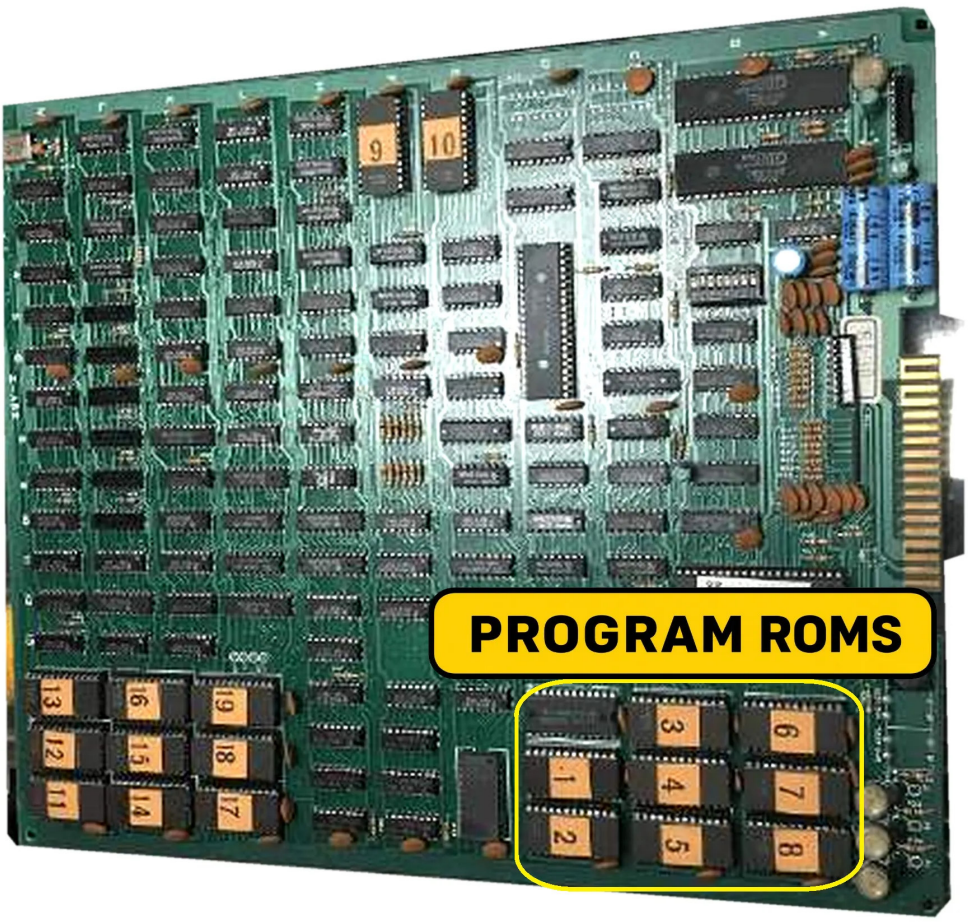
CHECK PIN ALIGNMENT AND CLEARANCE

Confirm full socket seating, no bent or offset pins, and no component touching the underside of the installed kit before reconnecting power.

STEP 4 / ROM SAVER

Optional: remove program ROMs

The Fast Freddie kit supports optional ROM Saver operation. Removing the designated original program ROMs is not required for basic installation. Leave them installed unless you are using this feature.



Optional program ROM locations are shown inside the yellow outline.

REMOVE ONLY IDENTIFIED PROGRAM ROMs

If choosing ROM Saver, disconnect power and remove only the program ROMs marked together in the photograph. Label and save each original chip. Do not remove the Z80 or unrelated ICs.

STEP 5 / VERIFY INSTALLATION

Final inspection and first test



Original PCB for final connector checks.

BEFORE POWERING ON

- **CPU:** Z80 on daughter card with Pin 1 correct.
- **Socket:** Card seated at original Z80 location.
- **Pins:** None bent, offset, or missing the socket.
- **Clearance:** No contact with adjacent components.
- **Cables:** All connectors restored correctly.

POWER-ON TEST

Reinstall the original PCB and reconnect every cable according to your reference photos. Turn on the cabinet. Confirm normal Fast Freddie startup and gameplay, test Free Play, and verify that a qualifying high score is retained after a power cycle.

HOW TO ENTER THE SETTINGS MENU

Hold **Player 1 Start** for approximately **4 seconds while turning on the cabinet**. Release when prompted, then use the on-screen menu to configure supported settings.

IF THE GAME DOES NOT START

Power off immediately. Check Z80 Pin 1, daughter-card seating, clearance, original connectors, and any moved program ROMs.

FOR WI-FI EDITIONS ONLY

Wi-Fi-enabled kit setup

SAME PHYSICAL INSTALLATION

The Wi-Fi edition uses the same Z80 daughter-card installation as the Standard version. Finish installing and testing the arcade kit before configuring network access.

AFTER THE ARCADE KIT IS WORKING

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

   Use account information provided by HighScoreSaves for your online leaderboard.

2. **Enter online settings in the kit menu**

   Enter the PK and SK keys exactly, enable the supported online option, and save.

3. **Connect to your 2.4 GHz Wi-Fi network**

   Follow current setup instructions to join your compatible home network.

4. **Test a qualifying online high score**

   Save a score, then verify its appearance in your assigned online leaderboard.

KEEP YOUR PK / SK KEYS PRIVATE

PK/SK keys connect the kit to your leaderboard account. Never publish or share these keys. Local scores still save if network service is unavailable.

↗ **OPEN COMPLETE WI-FI SETUP INSTRUCTIONS**

Wi-Fi network, PK/SK keys, and online score setup

LINKS / REFERENCE

Helpful resources and support

These clickable links provide current Fast Freddie compatibility information, kit settings, Wi-Fi setup, and support.

Fast Freddie kit product page

Current kit versions, included items, and ordering options

Fast Freddie PCB compatibility

Original Kaneko board identification and socket requirements

Fast Freddie settings-menu video guides

Find the Fast Freddie settings video, not a physical installation tutorial

HighScoreSaves kit tips

Menu access, score features, backups, and troubleshooting

Wi-Fi setup and Standard comparison

Current Wi-Fi kit guidance, PK/SK information, and network setup

Installation guide library

Browse installation PDFs for other HighScoreSaves arcade kits

Contact HighScoreSaves

Installation questions: sales@highscoresaves.com

HighScoreSaves.com • Original arcade PCB upgrades since 2015