

REVISION 1.0 / ORIGINAL STERN ARCADE HARDWARE

BERZERK | FRENZY

MULTIGAME FREE PLAY + HIGH SCORE SAVE KIT

ORIGINAL STERN ZPU / ZZPU HARDWARE • Z80 PROCESSOR



STANDARD + WI-FI EDITIONS

PCB identification • Z80 removal • Pin 1 orientation • ROM Saver • Setup and support

Before you begin

ONE KIT - TWO SUPPORTED PROCESSOR BOARDS

The same Z80 daughter card installation is documented for compatible Stern ZPU and ZZPU processor boards. Identify your board first; the photographs for each are different.

SAFETY FIRST

Turn the cabinet off and unplug it before working on the PCB stack. Follow static-safe handling practices. CRT monitor circuitry can retain hazardous voltage - this guide covers the game boards only.

PREPARATION CHECKLIST

- Confirm Berzerk or Frenzy works properly before installing the kit.
- Photograph your PCB stack and document the location and orientation of every cable.
- Identify whether the installed processor board is the original ZPU or a ZZPU.
- Find the socketed 40-pin Z80 processor before handling the daughter card.
- Keep the removed Z80 and any original program ROMs protected from static.

WHAT'S INCLUDED

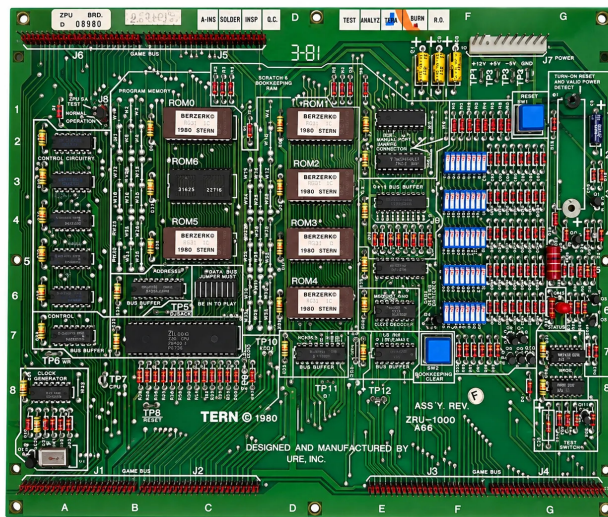
1 x HighScoreSaves Z80 daughter PCB. A compatible Z80 CPU is also required; transfer the socketed original or use a compatible replacement selected when ordering.

If the original Z80 is soldered directly to the processor PCB, a qualified technician must install a suitable socket before continuing.

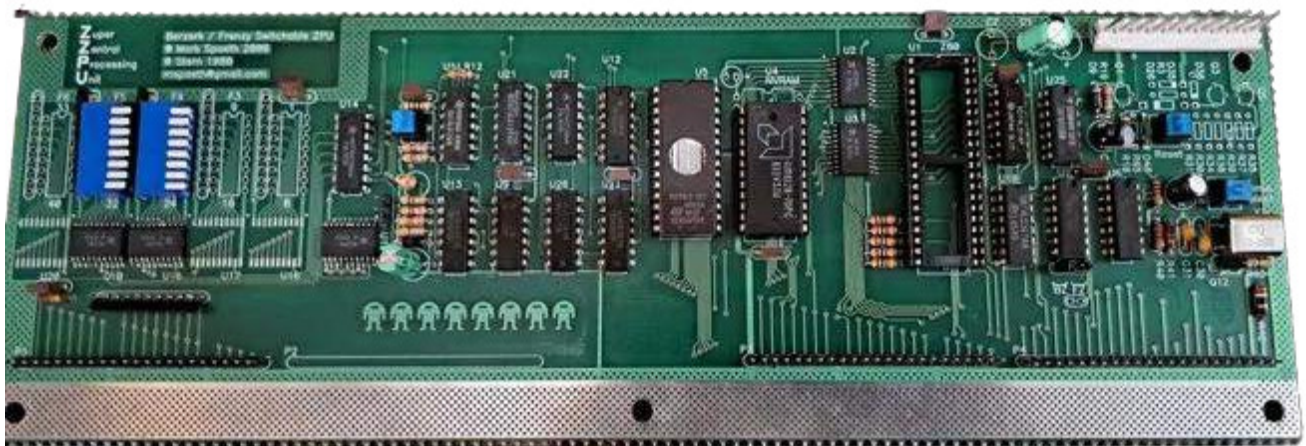
Identify your Stern ZPU or ZZPU

The Berzerk | Frenzy Multigame kit is documented for compatible original Stern ZPU and ZZPU processor PCBs. Compare your board with these authentic source photographs before removing the Z80.

ORIGINAL STERN ZPU PROCESSOR BOARD



ZZPU PROCESSOR BOARD



CONFIRM THE CORRECT BOARD

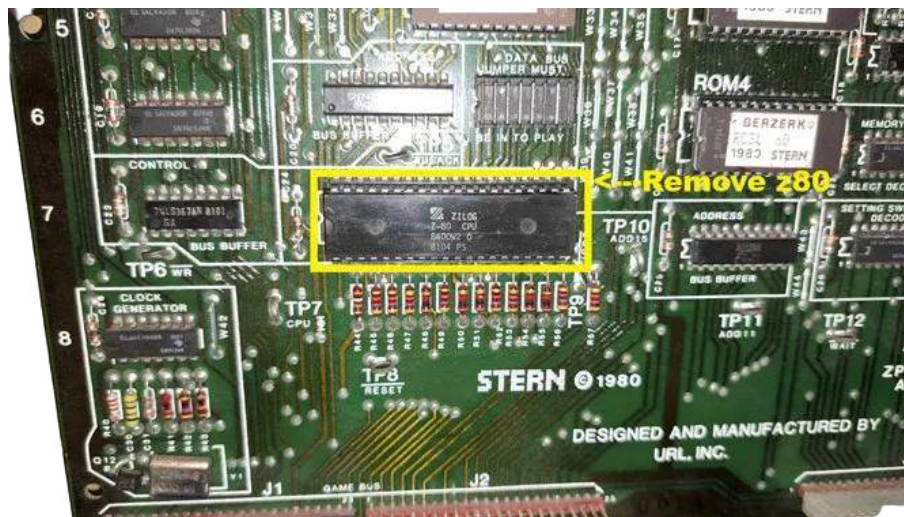
The Z80 installs on the identified ZPU or ZZPU processor board, not on an unrelated PCB in the Stern arcade stack. If your board differs, verify compatibility before proceeding.

STEP 1 / REMOVE THE Z80

Locate and remove the original Z80

The Z80 is shown inside the yellow markings in both photographs. With the cabinet unplugged, note the chip notch and Pin 1 direction, then lift the processor evenly from its 40-pin socket.

ORIGINAL ZPU - Z80 LOCATION



Z2PU - Z80 LOCATION



AVOID DAMAGING THE CPU OR SOCKET

Use a proper IC puller or other suitable method and work evenly. Do not pry against nearby chips or components. Stop if the Z80 is soldered or cannot be removed cleanly.

Fit the Z80 to the daughter card

PIN 1 ORIENTATION IS CRITICAL

Install the original compatible Z80 into the HighScoreSaves daughter-card socket. Align the notch and Pin 1 markers, check all 40 pins for straight alignment, and never force the processor.

ORIGINAL ZPU - DAUGHTER CARD WITH PIN 1 MARKER



ZZPU - DAUGHTER CARD WITH PIN 1 MARKER



The two boards have different layouts. Use the photograph matching your actual hardware, and confirm Pin 1 from the physical chip and socket markings before applying power.

Install and inspect the daughter card

After the Z80 is seated correctly in the daughter card, insert the complete assembly into the original vacated Z80 socket. Ensure each header pin is aligned and there is no contact beneath the card.

INSTALLED ASSEMBLY - ORIGINAL ZPU



INSTALLED ASSEMBLY - ZZPU



BEFORE RECONNECTING THE PCB STACK

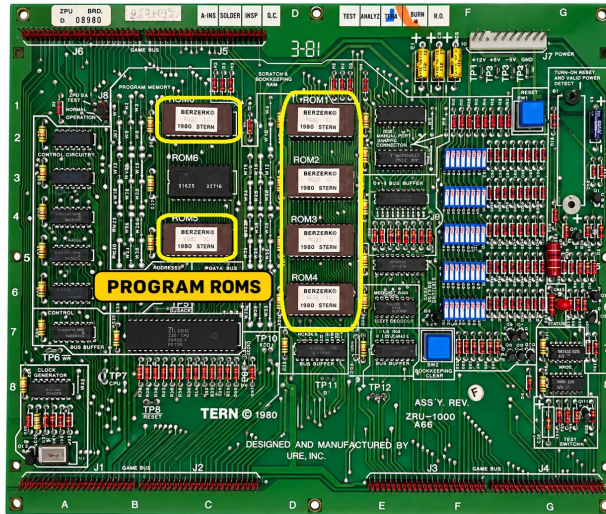
- Verify Pin 1 matches the original board socket.
- Check complete seating, pin alignment, and underside clearance.
- Reconnect the original PCB stack and cables in their photographed orientation.

Optional program ROM removal

OPTIONAL - NOT REQUIRED TO PLAY

Original program ROM removal is optional. The Berzerk | Frenzy kit can be installed and tested while the original program ROMs remain in place.

ILLUSTRATION: ORIGINAL ZPU ASSEMBLY



WHEN USING ROM SAVER

- Leave all program ROMs installed unless a specific supported ROM Saver configuration is required.
- If choosing optional removal, confirm exact program ROM socket positions for your own ZPU or ZZPU revision before taking out any chips.
- Mark and store removed original ROMs in anti-static packaging. Never remove chips only because they look similar.

DO NOT GUESS ROM LOCATIONS

Exact program ROM counts and removal positions vary by board configuration and are not specified here. Contact HighScoreSaves to verify the correct socket locations before removing any chips.

Final inspection and first power-on

BEFORE POWERING ON

- Z80 fitted to the daughter card with the original correct Pin 1 orientation.
- Daughter card seated straight in the vacated original Z80 socket.
- No bent pins or other components touching the underside of the daughter card.
- Any optional program ROM changes documented and verified.
- All stack cables, power and connectors returned to their original locations.

FIRST POWER-ON

Install the PCB stack back into the cabinet, reconnect every cable, and power on. Confirm Berzerk / Frenzy selection, Free Play, gameplay, and that a qualifying score survives turning the cabinet off and back on.

ENTER THE SETTINGS MENU

With the cabinet powered off, hold Player 1 Start while turning the game on. Release Start when the on-screen instructions prompt you. The kit also supports a configurable startup menu-entry period.

BERZERK / FRENZY GAME SELECTION

From attract mode, the documented multigame interface allows holding Player 1 Start for approximately four seconds to access game selection. Check the kit settings-menu video for the specific controls.

IF THE GAME DOES NOT START

Turn the cabinet off immediately. Recheck Z80/daughter-card orientation, seating, clearance and all recorded connections. Never adjust PCB connectors with the cabinet powered.

Wi-Fi-enabled kit setup

SAME PHYSICAL INSTALLATION

The Wi-Fi edition uses the same Z80 daughter card mounting location. It additionally includes a Wi-Fi module; network configuration is performed after the arcade hardware operates correctly.

AFTER THE ARCADE KIT IS WORKING

1

Obtain your PK and SK account keys

Use the setup email and instructions supplied by HighScoreSaves for your private Wi-Fi leaderboard account.

2

Enter online settings in the kit menu

Enter both supplied keys exactly, enable online scoring as instructed, and save the menu settings.

3

Connect the module to Wi-Fi

Use the module's temporary wireless network and setup page to connect it to a compatible 2.4 GHz home network.

4

Test an online score

After Wi-Fi setup, play and submit a qualifying score. Check the linked score/account pages for confirmation.

KEEP YOUR PK / SK KEYS PRIVATE

These keys identify and authorize your kit account. Do not share them in photos, public messages, screenshots or support posts. Contact HighScoreSaves if keys need to be changed.



Open the official Wi-Fi setup instructions

PK/SK keys, temporary module network and 2.4 GHz setup

Helpful resources and support

These links are clickable in the PDF. Use the live HighScoreSaves pages for current product options, verified settings instructions, original Stern board references, and support.



Berzerk | Frenzy multigame product page

Kit versions, requirements and ordering



Berzerk | Frenzy PCB compatibility

Identify Stern ZPU / ZZPU and original Z80 requirements



Berzerk | Frenzy settings video

Verified HighScoreSaves kit settings demonstration



Original Stern Berzerk manual

Installation, operation, service and original schematics



Original Berzerk PCB schematics

Original Stern diagrams for reference and diagnostics



Wi-Fi setup and Standard comparison

Official PK/SK and 2.4 GHz wireless setup information



HighScoreSaves kit tips

Settings, backups, score support and troubleshooting



Installation guide library

Other HighScoreSaves arcade kit instruction PDFs



Contact HighScoreSaves

Technical support - describe issue and include photos