

BUBBLE BOBBLE

FREE PLAY + HIGH SCORE SAVE KIT

ORIGINAL TAITO ARCADE HARDWARE

REVISION 1.0 / STANDARD + WI-FI EDITIONS



STANDARD + WI-FI EDITIONS

Original PCB identification • Required IC51 / IC52 / IC53 ROM removal • Z80B CPU • Replacement IC52 EEPROM • Wi-Fi

OVERVIEW AND PREPARATION

Before you begin

ONE HARDWARE PROCEDURE - TWO EDITIONS

Standard and Wi-Fi editions share the same Z80B daughter-card and programmed IC52 EEPROM installation. Network setup is completed after the arcade board starts normally.

SAFETY FIRST

Switch off and unplug the cabinet. Use antistatic handling for the PCB, Z80B, and EPROMs. Do not work near exposed CRT/high-voltage assemblies.

PREPARATION CHECKLIST

- Confirm that the original Taito Bubble Bobble PCB boots and plays correctly before installing the kit.
- Photograph and label each disconnected connector before removing the board from the cabinet.
- Work on a clean, well-lit, static-safe surface; keep removed components organized and protected.
- Locate IC50 (Z80B CPU), IC51 (27C256 EPROM), IC52 (27C512 or 27C256 EPROM), and IC53 (27C256 or an empty socket).
- Photograph the IC50 and IC52 Pin 1 orientations before removing any component.

WHAT'S INCLUDED

1 × HighScoreSaves Z80 daughter PCB; 1 × programmed replacement EEPROM labeled IC52. The compatible Z80B processor from your original game PCB is required.

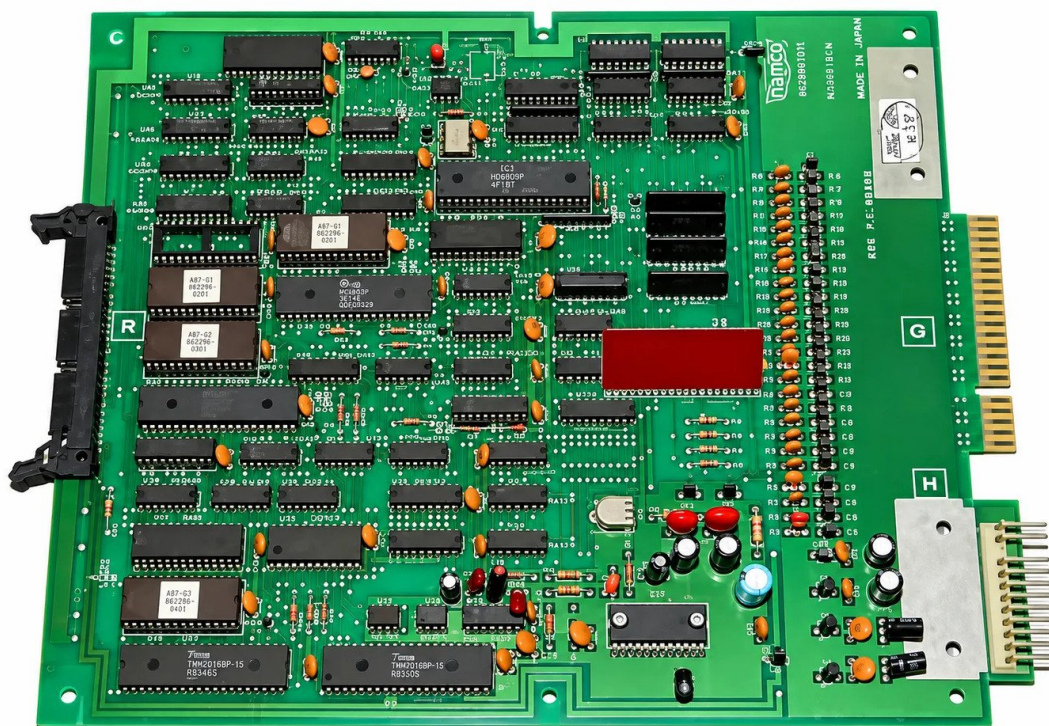
Important: this installation requires removal of the original program ROMs from IC51, IC52 and IC53 when populated. The included programmed chip goes into IC52.

STEP 0 / IDENTIFY YOUR BOARD

Identify the original Taito Bubble Bobble PCB

Use the annotated source photograph and verify the physical PCB, original chip locations, and socket condition before beginning.

IDENTIFY THE FOUR RELEVANT IC LOCATIONS



Original kit instruction photo with IC50 Z80B and IC51, IC52, IC53 program ROM positions identified.

CONFIRM THE IC DESIGNATORS ON YOUR BOARD

IC50 must have a suitable 40-pin socket for the Z80B daughter card. The original ROM positions are IC51, IC52, and IC53; IC53 may already be empty.

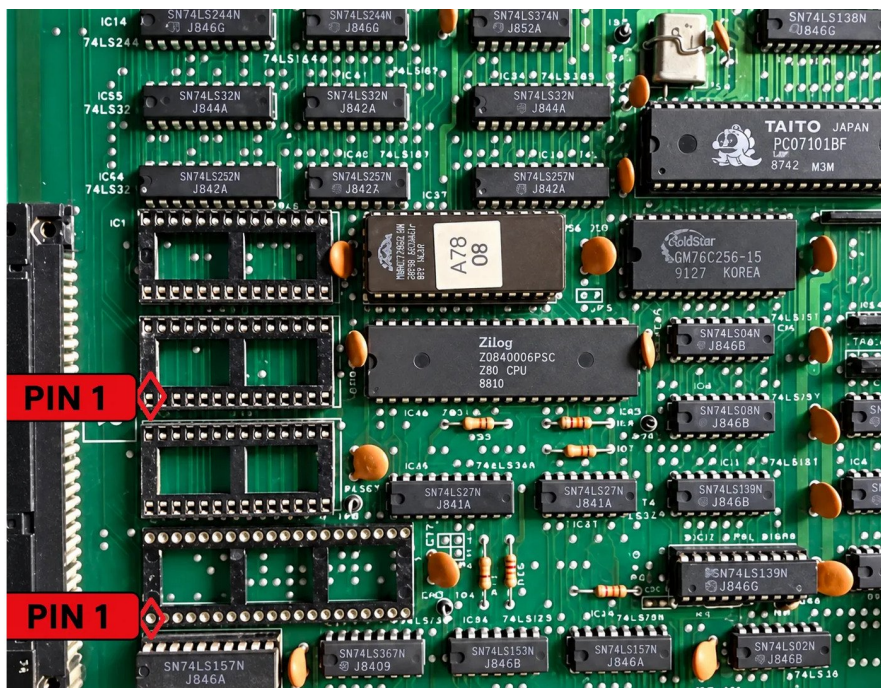
STEP 1 / REMOVE THE ORIGINAL DEVICES

Remove the Z80B and original program ROMs

All removal work must be performed with the cabinet disconnected from power.

REMOVE THE FOUR ORIGINAL POSITIONS AS APPLICABLE

- IC50: carefully remove the original socketed Z80B CPU; retain it for the daughter card.
- IC51: remove the original 27C256 EPROM.
- IC52: remove the original 27C512 or 27C256 EPROM.
- IC53: remove the original 27C256 EPROM, if this socket is populated; leave it empty if already empty.



Unaltered original instruction photo showing the vacated sockets and the marked Pin 1 locations.

ALL ORIGINAL PROGRAM ROMS MUST BE REMOVED

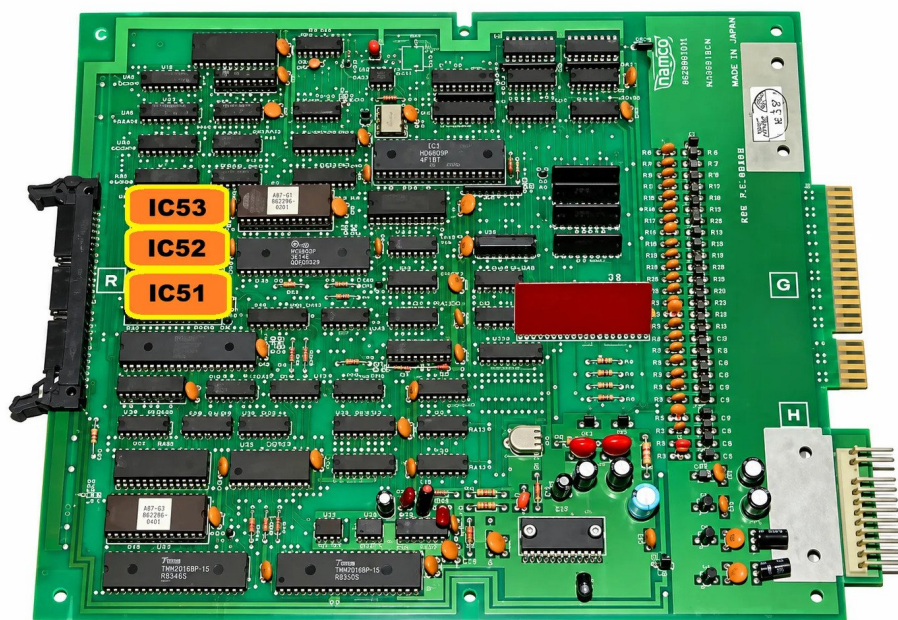
Remove the original EPROMs at IC51, IC52, and IC53 (where fitted). Keep each original ROM labeled and safely stored. Do not remove other ICs.

STEP 2 / REPLACEMENT IC52 CHIP

Install the supplied programmed IC52 EEPROM

The kit includes a new programmed EEPROM labeled IC52. This is not one of the original program ROMs removed in Step 1.

CHECK PIN 1 BEFORE INSERTION



Original instruction photo: IC52 position and Pin 1 reference are shown before the replacement is installed.

- Locate the socket marked IC52 on the original Bubble Bobble PCB.
- Confirm the replacement chip is the programmed EEPROM supplied with the kit and marked IC52.
- Align Pin 1 on that chip to Pin 1 of the IC52 socket, as shown in the original guide.
- Seat it evenly, checking that no pins bend beneath the package.

DO NOT REINSTALL THE ORIGINAL ROMS

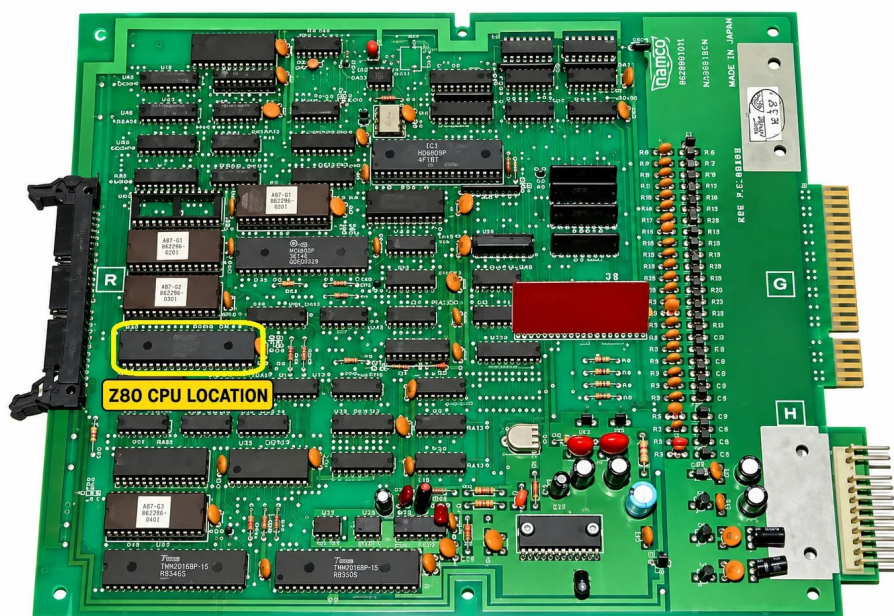
After this step, the original ROMs from IC51 and IC53 remain out, and IC52 contains only the programmed replacement chip supplied with the kit.

STEP 3 / Z80B PROCESSOR

Transfer the Z80B to the daughter card

The original Z80B from IC50 is installed into the CPU socket on the HighScoreSaves daughter card before fitting the assembly onto the main PCB.

THE CPU AND DAUGHTER-CARD ASSEMBLY



Original source photo of the Bubble Bobble daughter-card assembly with the transferred Z80B.

CRITICAL: Z80B PIN 1

Align Pin 1 of the transferred Z80B with the daughter-card CPU socket. Inspect every leg for bent pins and verify the notch/orientation before pressing into the socket.

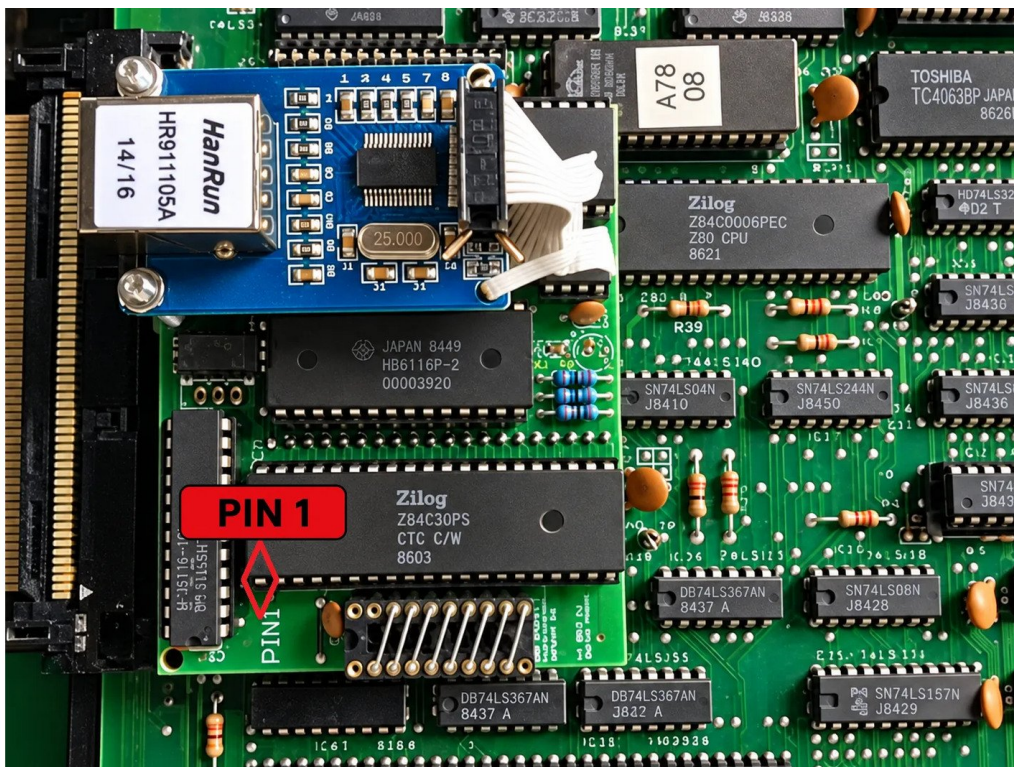
If the processor is soldered rather than socketed at IC50, stop and have a qualified arcade technician install an appropriate socket before continuing.

STEP 4 / FIT THE ASSEMBLY

Install the daughter card at IC50

Use the original IC50 40-pin socket vacated by the Z80B. Do not force or offset the daughter card relative to the socket pins.

VERIFY POSITIONING AND CLEARANCE



Original installation-guide photo showing the daughter-card assembly seated on the Bubble Bobble game PCB.

- Align daughter-card Pin 1 with the original IC50 Pin 1 location.
- Seat the card header squarely and check for any pins outside the original socket.
- Verify that test points and components cannot touch the underside of the daughter card.

UNDERSIDE CLEARANCE IS ESSENTIAL

The source guide warns that exposed test points may interfere with the daughter card. If clearance is insufficient, stop and have the obstruction safely addressed; do not force the kit into place.

STEP 5 / FINISH AND VERIFY

Final installation and first test

POWER-OFF CHECKLIST

- IC50: original Z80B transferred onto kit, daughter card aligned to Pin 1 and seated squarely.
- IC51: original program EPROM removed and safely stored.
- IC52: original EPROM removed; supplied programmed IC52 EEPROM installed with correct Pin 1 orientation.
- IC53: original program EPROM removed if fitted; socket left empty.
- No bent pins, underside contact, forgotten wiring, or misaligned connectors.

FIRST POWER-ON

Reinstall the PCB in the cabinet and reconnect the documented cables. Power on and check normal Bubble Bobble startup, game controls, Free Play/coin behavior, and whether a qualifying high score persists across power cycles.

ACCESS THE SETTINGS MENU

With power off, hold Player 1 Start while switching on the cabinet. Release P1 when the on-screen prompt tells you to. Review the configuration before allowing regular play.

IF THE GAME FAILS TO START

Turn the cabinet off immediately. Recheck Z80B orientation and seating, the included IC52 EEPROM orientation, empty IC51/IC53 positions, daughter-card clearance, and connections. Seek support before repeated testing.

Wi-Fi-enabled kit setup

SAME PHYSICAL INSTALLATION

The Wi-Fi edition uses the same Z80B daughter card and IC52 replacement as the Standard kit. Complete the hardware installation and test the game first; configure Wi-Fi afterward.

AFTER THE ARCADE KIT IS WORKING

- 1 Obtain your PK and SK account keys**
Follow the account setup emails and instructions provided by HighScoreSaves.
- 2 Enter online settings in the kit menu**
Enter the supplied PK and SK keys exactly; enable online scoring and save the settings.
- 3 Connect the module to Wi-Fi**
Use the module's temporary Wi-Fi network and setup page to join a compatible 2.4 GHz network.
- 4 Test an online score**
Submit a qualifying score after Wi-Fi setup, then check your linked online score page.

KEEP YOUR PK / SK KEYS PRIVATE

Wi-Fi configuration is version-specific. Keep your PK and SK private and use the current HighScoreSaves setup instructions for detailed connection steps and troubleshooting.



Open complete Wi-Fi setup instructions

Wi-Fi kit information, network setup, PK/SK keys, and online scoring

LINKS / REFERENCES

Helpful resources and support

These links are clickable in the PDF. For the most current documentation, setup instructions, and kit-specific information, use the live HighScoreSaves pages below.



Bubble Bobble kit product page

Original Taito hardware, kit features and ordering



Bubble Bobble PCB compatibility

Check Taito board and Z80B requirements



Bubble Bobble settings-menu video

HighScoreSaves kit settings walkthrough



Bubble Bobble arcade service manual

Romstar/Taito-licensed conversion manual



Bubble Bobble original schematics

Taito CPU and video board schematics



Wi-Fi setup and Standard comparison

Official 2.4 GHz setup and Wi-Fi overview



Installation guide library

Other HighScoreSaves arcade-kit installation guides



Contact HighScoreSaves

Technical support and product questions