

CoGS USB Mac Bridge (prototype)

Firmware 0.89 | August 2026

For A2Pico 2 Lite and A2Pico + Pico 2 boards with no radio. Mac menubar app tethers Pico USB to the Mac network. Early experiment. The main CoGS path is still the CoGS Card (in development), or a Pico 2 W with onboard Wi-Fi.

Downloads (a2cogs.com)

- cogs-0.89-lite.uf2 - A2Pico 2 Lite (no radio)
- cogs-0.89-a2pico2.uf2 - A2Pico + Pico 2 (no radio)
- CoGS-USB-Bridge-mac.zip - macOS 13+ menubar app

What you need

- Apple II / IIGS with an A2Pico carrier (full board or Lite)
- Pico 2 with no radio, flashed with the matching UF2
- Mac on the same desk, already online
- USB cable from the Pico to the Mac

Slot

- IIGS: Slot 7 with Control Panel set to Scan, or slot 5 as Your Card with Startup Slot 5
- 8-bit ([/+, //e): Slot 7 is the usual recommendation; any free slot works once you enter the ROM

Setup

1. Flash the matching UF2 (BOOTSEL once, or picotool when CDC is up). You only need that USB flash once for bring-up; after that you can flash future firmware updates directly from CoGS Config on the Apple (About / Update) when the Bridge link is up.
2. Seat the card. Connect USB to the Mac.
3. Open CoGS USB Bridge. Wait for green Connected (Firmware 0.89).
4. Power on the Apple II.

Order that works well: USB in, Bridge Connected, then power the Apple.

Enter the CoGS ROM

Right after power on, tap C or M to open the on-card config ROM (no desk accessory required). If there is no bootable volume on the card yet, the ROM often appears on its own. From GS/OS you can also use the CoGS CDA once it is installed.

One minute to running

Card in slot -> USB attached -> Mac Bridge green Connected -> power on the Apple II -> tap C or M -> Browse Disks -> pick a title -> Return to mount or Boot -> you are running.

CoGS basics in the ROM

- Card Status should show link USB-BRIDGE when the Mac app is connected
- Browse Disks is the live catalog; pick a disk then Boot or mount
- Disk Drives shows D1/D2/...; clear a bad secondary mount before GS/OS boots
- Network Tools: DNS, ping, TCP check, self-test (no traceroute / LAN share scan on Bridge yet)
- About / Update shows version and can flash updates when linked

Known limits

- Large boots slower than Wi-Fi (no L2/prefetch over USB yet)
- No traceroute on USB Bridge
- No LAN Image Manager share scan; type a catalog URL by hand
- Clear unused SmartPort units before GS/OS boot tests
- Mac sleep or quitting the Bridge drops the link

Bugs and questions

Email info@a2cogs.com with subject "CoGS USB Mac Bridge prototype". Include board, firmware version from Bridge status, and what you were doing when it failed.