Integrated Circuit (IC) Socket Adapters

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Electronics & Prototyping

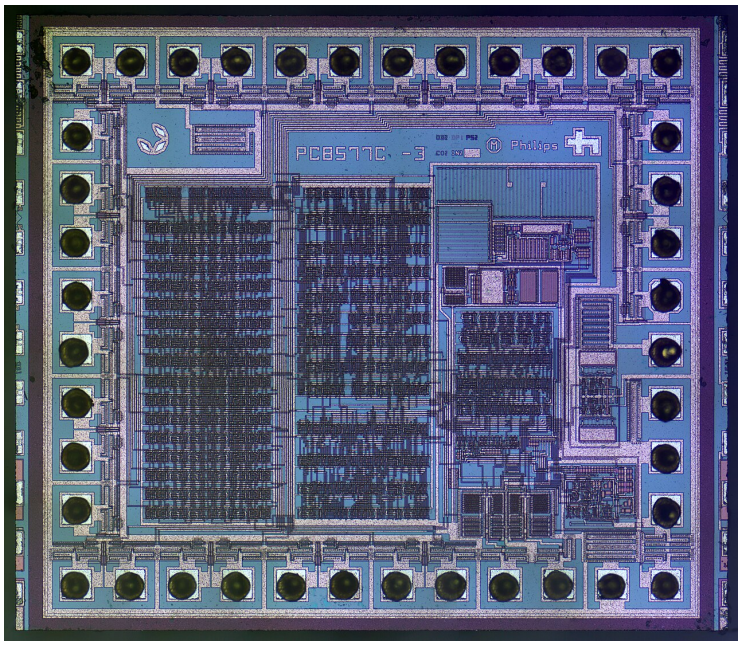

Photo: cole8888, https://flickr.com/photos/187597251@N05/ (aka Cole L) — CC BY-SA 2.0 — via Wikimedia Commons (NXP PCF8577C LCD driver with I?C (Colour Corrected).jpg)

IC sockets mount dual-inline chips on boards without soldering the chip itself, letting students swap and replace ICs easily and safely. Sockets protect heat-sensitive chips during soldering and speed up troubleshooting.

Key Features

- DIP sockets 4-40 pins
- Single and double wipe contacts
- Snap or machined types
- Breadboard-friendly spacing
- Zero-insertion-force versions

Typical Uses in the Workshop

- Mount op-amps, logic and timer ICs
- Protect chips during soldering
- Swap ICs during debugging
- Upgrade chip choices without desoldering

Safe Operation

1. Solder the socket to the board first
2. Align the chip notch to the socket notch
3. Press the chip in evenly with a tool
4. Check pin 1 alignment
5. Lift with a chip extractor for removal

SAFETY NOTES

- Handle ICs by the body, not the pins
- Wear a wrist strap for sensitive chips
- Check the chip orientation before insertion
- Do not force a misaligned chip
- Store chips in antistatic foam

Maintenance & Consumables

- Keep sockets free of flux and solder
- Replace damaged sockets
- Store sockets sorted by pin count
- Keep a chip extractor with the kit
- Clean contacts with IPA

Specification & Buying Notes

A selection of DIP sockets from 6 to 40 pins covers class IC work. Quality sockets grip firmly; cheap ones lose contact after a few swaps.