

Identifying and Installing Processors

PGA (Pin Grid Array) processors hold pins that fit into holes of a motherboard's socket. LGA (Land Grid Array) processors have contacts that touch the pins of a socket. Processors have small notches and an arrow in the corner that will match with the socket, ensuring correct alignment. Some designs feature a single lever that holds a plate down. Other designs may have a lock that requires a small flathead. Intel has used the LGA design for decades, more recent AMD sockets are both LGA and PGA.

It is essential to check compatibility before installation. Updating the BIOS could be necessary. Processors are usually only changeable in desktops and are soldered onto the motherboard in most modern laptops.

Underneath any fans or heat-sinks, the top of the processor will have a paste to assist with cooling. It is recommended to change the paste occasionally. Systems can go decades without a replacement, although the paste will not be as effective or reliant. Depending on the system and design, some have pads instead of paste. When applying new paste, make a pea-sized dot in the center. It will spread out when the cooling system is secure.