

SOLDERING, BREADBOARDS, & CIRCUIT DESIGN THROUGH-HOLE SOLDERING

CONCEPT Through-hole soldering is a specific type of soldering that involves inserting electronic components through holes in a circuit board and soldering them to the board on the other side. This technique is commonly used for prototyping and building electronic circuits and requires precision and attention to detail.

BACKGROUND

Through-hole soldering became popular in the 1960s with the advent of printed circuit boards, and it remains a common method for assembling electronic circuits today. Circuit design has been a part of electrical engineering since the late 1800s, with advancements in technology leading to the development of more complex and efficient electronic circuits over time.

APPLICATION

Many makers and hobbyists use these techniques to build custom electronic projects, such as digital clocks, audio amplifiers, and even robots. One specific example of this is the "Arduino" platform, which is a popular open-source electronics platform based on a microcontroller and a development environment for writing and uploading code to the board. To create a custom Arduino project, one must use soldering techniques to connect electronic components to the board and breadboarding to prototype and test the circuitry before finalizing the design. Through-hole soldering is commonly used in this process because it provides a reliable and sturdy connection between the components and the board.

Through-Hole Soldering







