

Bite-Wise Wisdom : One Page Writeup

Topic : Construction of Stepper Motor

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Construction of Stepper Motor

A stepper motor is a type of brushless, synchronous electric motor that converts electrical pulses into precise mechanical movements. Here's a brief overview of its construction:

Rotor: The rotor is typically made of a permanent magnet or a soft iron core. It is the part that rotates and aligns with the magnetic fields generated by the stator.

Stator: The stator consists of multiple windings or coils arranged around the rotor. These windings are energized in a specific sequence to create a rotating magnetic field.

Electromagnets: The stator windings act as electromagnets when current flows through them. By controlling the sequence and timing of the current, the rotor can be made to move in precise steps.

Driver Circuit: An external driver circuit or microcontroller is used to control the current flow through the stator windings, ensuring the rotor moves in the desired direction and steps