





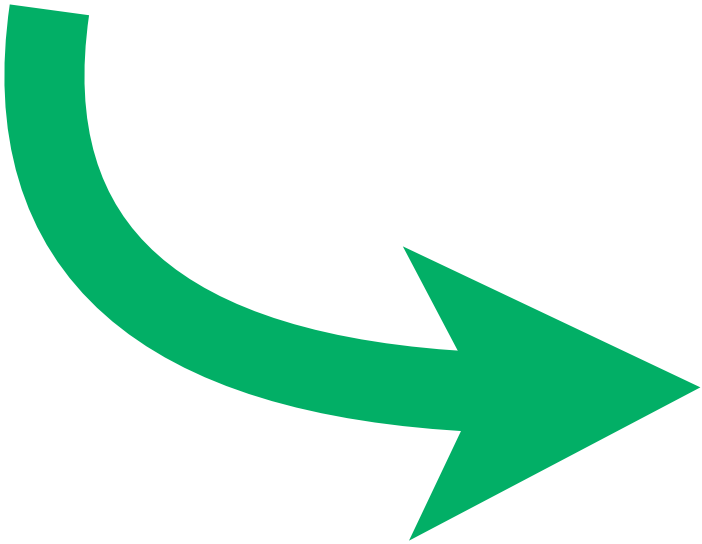




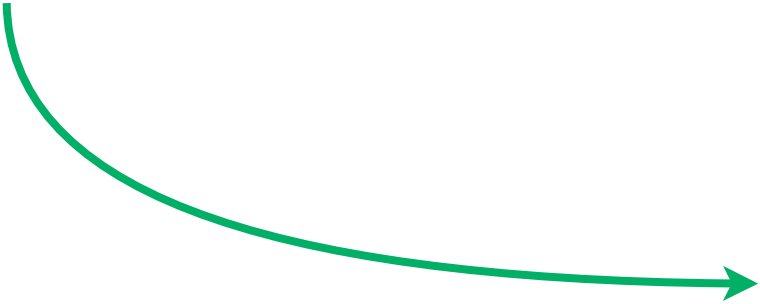


Reset









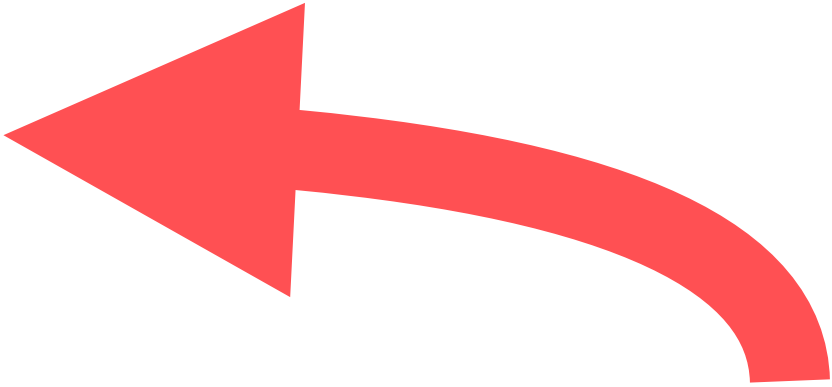








Run/Test Idle



Shift-IR



Shift-DR



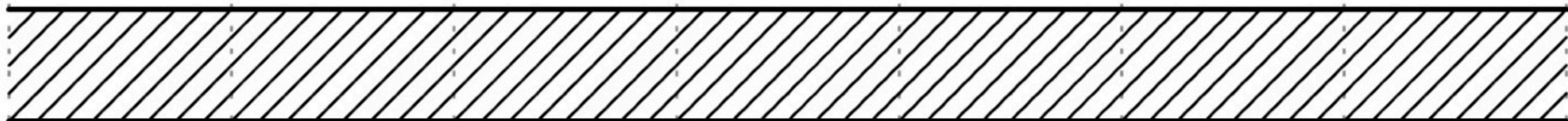
TCK



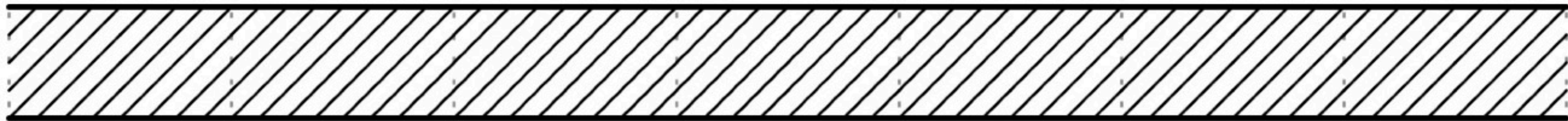
TMS



TDI



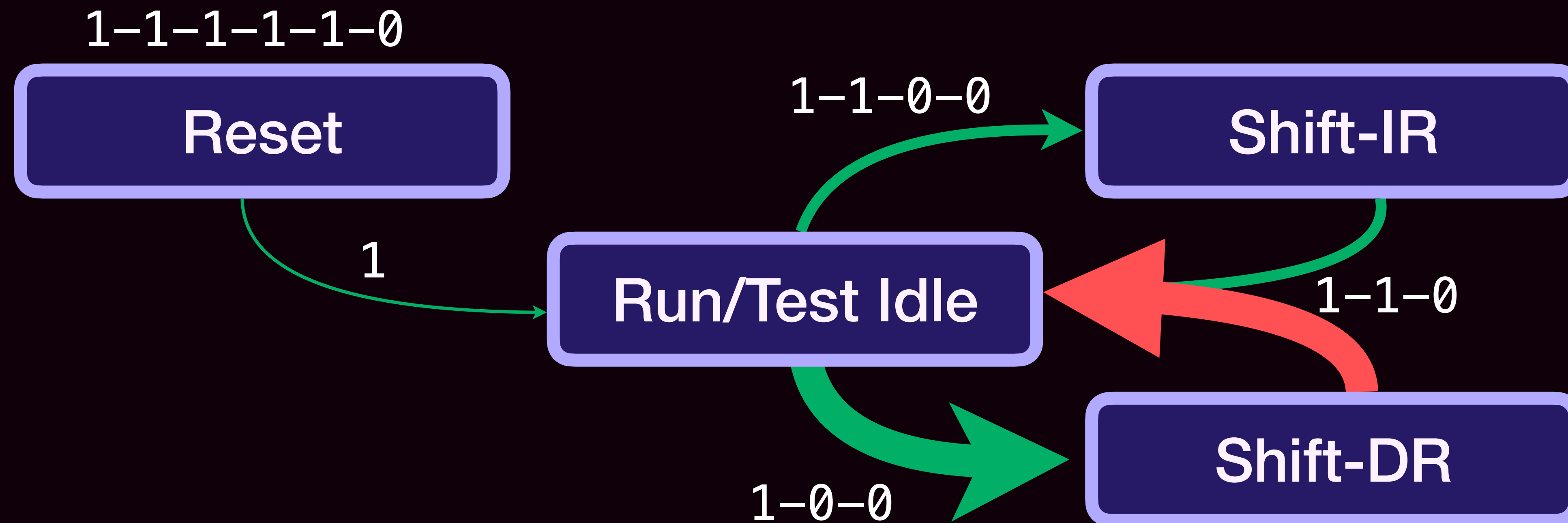
TDO



# JTAG (abridged)

## Four states of operation

1. Two registers: IR (Instruction Register) and DR (Data Register)
2. Change states with a sequence of TMS patterns



# Peek and Poke

## Accessing devices over JTAG

1. Set the Instruction Register **IR** (if it's changed)
  - If not, just leave it as it is
2. Write the Data Register **DR**
  - Get the value of the previous operation in response
  - No way to write without reading