[**Instruction Register**](https://www.youtube.com/watch?v=ychcl_FOTmM&list=PLk4sSigu0N0W4v755N_O6Jk1WWrfWIGgm&index=7)**:**

Instruction register has 12 inputs and 8 outputs where the output is divided into 2 nibbles.Upper 4 nibble goes to the controller sequence where the lower 4 nibble goes to the lsb of the bus.Inside the instruction register there are 8 D-flip flops.

A computer circuit board with numbers and symbols

Description automatically generated with medium confidenceA diagram of a computer chip

Description automatically generated

It regulates the flow of information to different locations when needed.