

Datapath & Two-piece (CU-DP) System Block Diagram

What is a datapath?

A datapath is a collection of functional units such as arithmetic logic units or multipliers that perform data processing operations, registers, and buses.

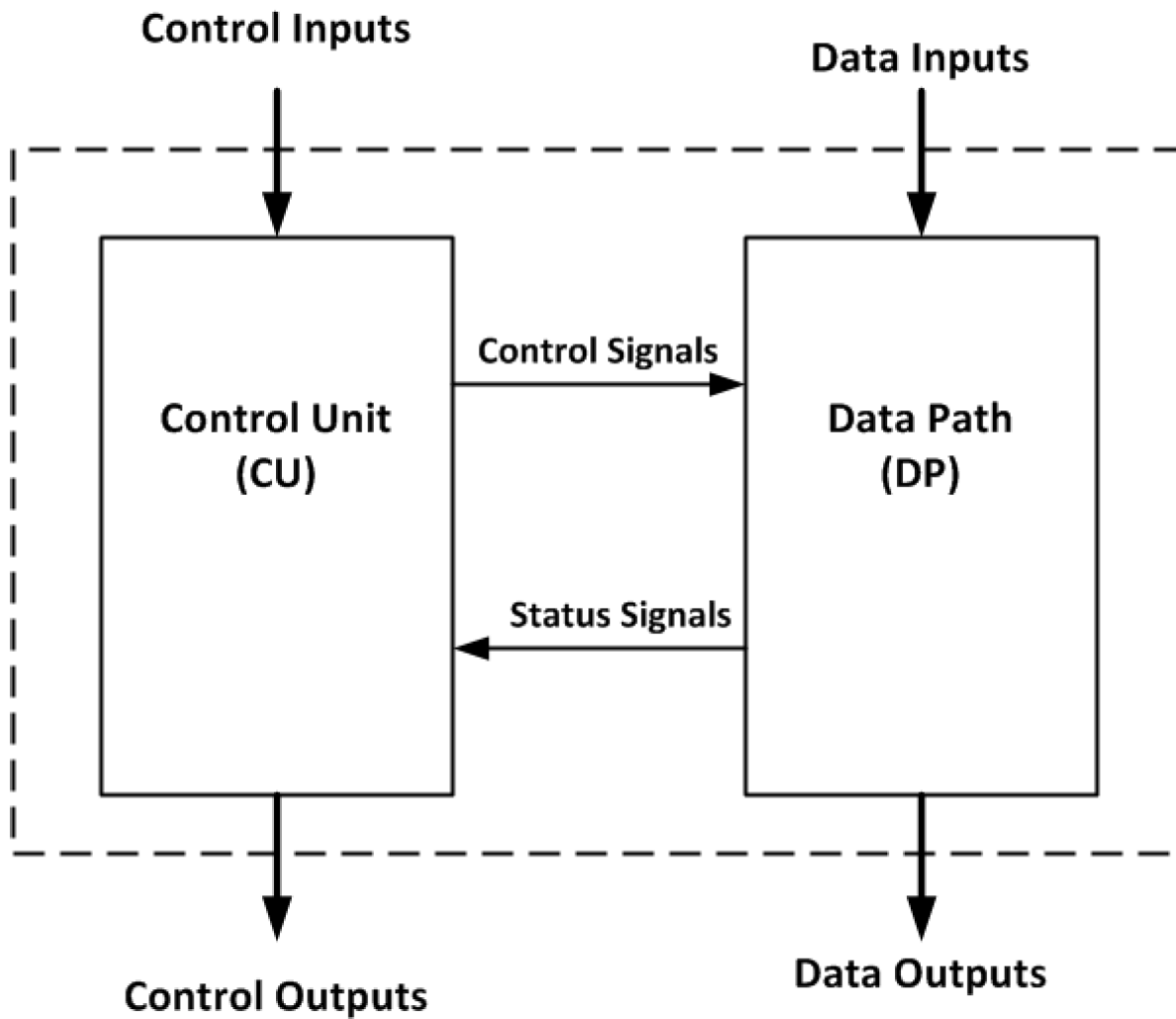
<https://en.wikipedia.org/wiki/Datapath> [_ \(https://en.wikipedia.org/wiki/Datapath\)](https://en.wikipedia.org/wiki/Datapath)

What is a block diagram?

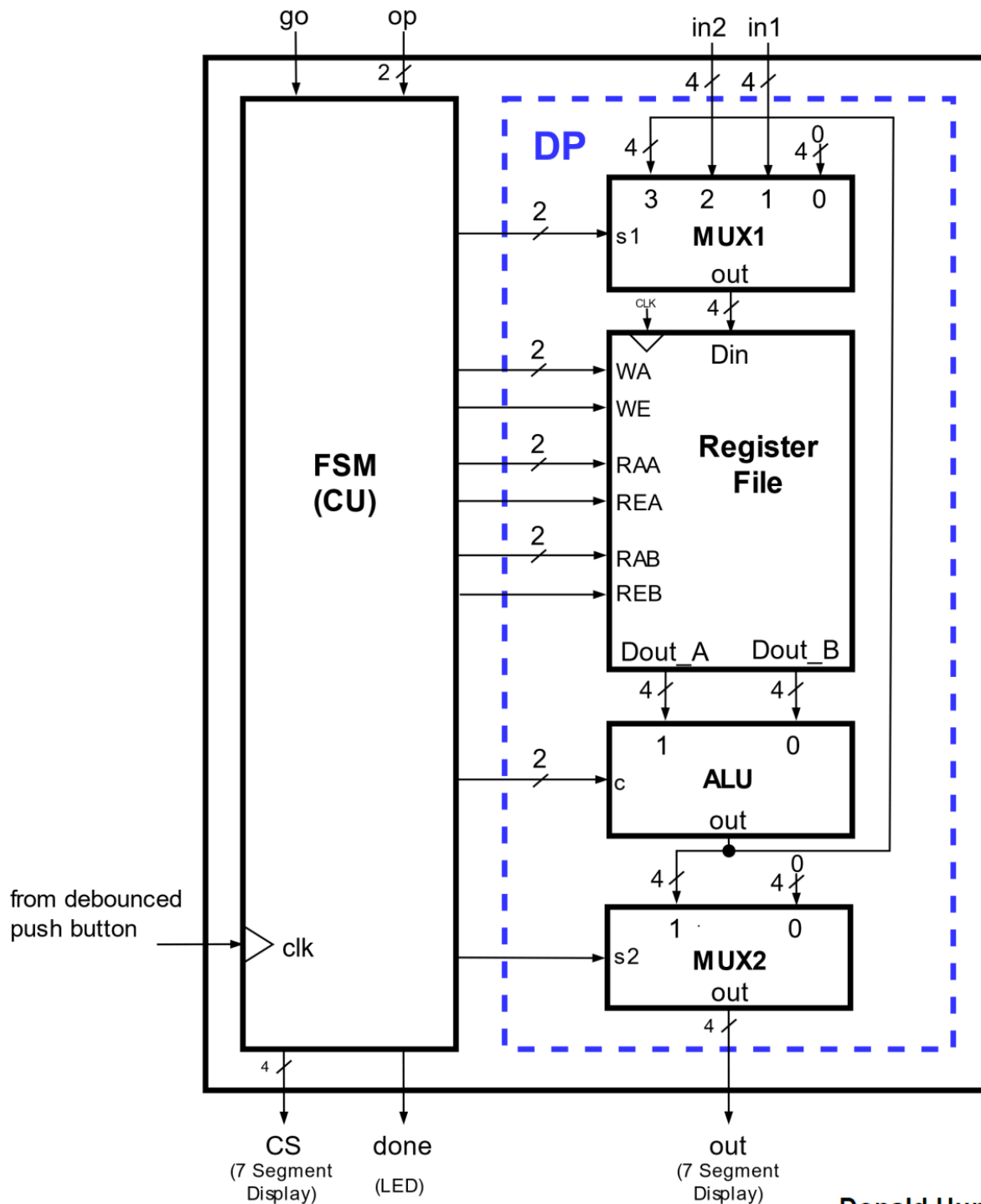
A block diagram is a diagram of a system in which the principal parts or functions are represented by blocks connected by lines that show the relationships of the blocks.

https://en.wikipedia.org/wiki/Block_diagram [_ \(https://en.wikipedia.org/wiki/Block_diagram\)](https://en.wikipedia.org/wiki/Block_diagram)

For the CU-DP block diagram, here is an image to show what kinds of signals should be included for each block:



And here is an actual diagram for a system design (the highlighted DP part is the datapath diagram):



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