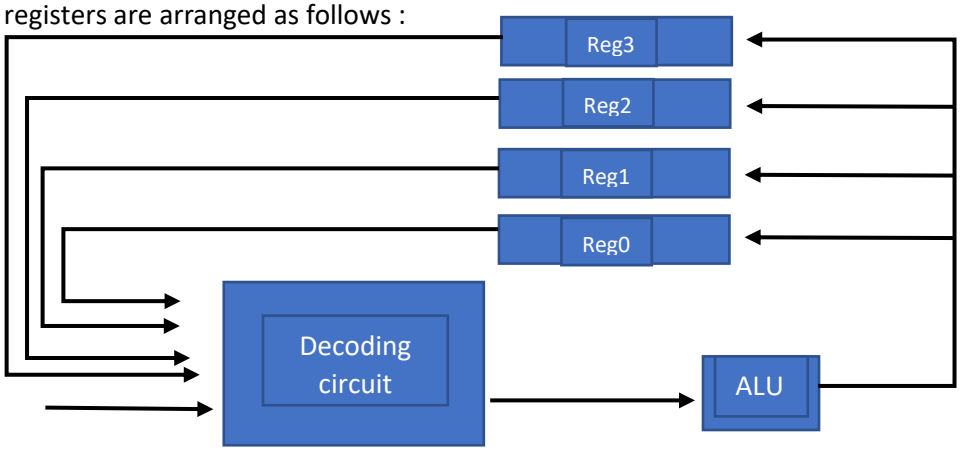
Data sheet

In this small EU , we have four registers and for forbidden input command is 00 for the most two bits from the left but if the user entered 00 then it will operate as MOV instruction but it can't MOV value to reg but it will move reg to reg. where the 4 registers are arranged as follows :



The input command will be 9 bits and they are arranged from left to right as follows :

- first two is for operation selection : (01 : move) , (10 : ADD) , (11 : AND)
- third & fourth are for Destination register selected : (00 : reg0) , (01 : reg1) , (10 : reg2) , (11 : reg 3)
- fifth to choose whether operating on a register or a value : (0 : reg) , (1 : value)
- from sixth -> eighth to enter the value of number or which register where if fifth bit was 1 then the 4 bits will represent the value user wants to operate whereas if fifth bit was 0 then the last two bits will represent which register to be the source , the following text will resembles this function.

01 **01** **0** **0011**

this is move command

00 : reserved

01 : MOV

10 : ADD

11 : AND

This is the destination register which is reg1

00 : reg0

01 : reg1

10 : reg2

11 : reg3

This determines that source will be register not value

0 : reg

1 : number

Since the fifth bit was one then the source will be reg3 because last two bits 11 corresponds to 3 but if the fifth bit was 1 then we will read four bits as source number

depends on fifth bit.