Port names need for the exercise (UCF file)			
Port name	Bus	CP132 package	Description
CLK	-	NET "clk" LOC = "C11";	Clock signal for the counter, BTN0 push button
SW(7:0)	8 bit	NET "SW<7>" LOC = "N3; NET "SW<6>" LOC = "E2"; NET "SW<5>" LOC = "F3; NET "SW<4>" LOC = "G3"; NET "SW<3>" LOC = "B4; NET "SW<2>" LOC = "K3; NET "SW<1>" LOC = "L3"; NET "SW<0>" LOC = "P11";	Inputs of multiplexer
LED0, LED1, LED2, LED3	-	NET "LED3" LOC = "P6"; NET "LED2" LOC = "P7"; NET "LED1" LOC = "M11"; NET "LED0" LOC = "M5";	Status feedback LEDs for the counter: LED0, LED1,LED2 Multiplexer output: LED3

First, create the schematic of the multiplexer. Give the name mplx.sch for this schematic. Create the 8 bit multiplexer on the figure below and generate the macro file from it.

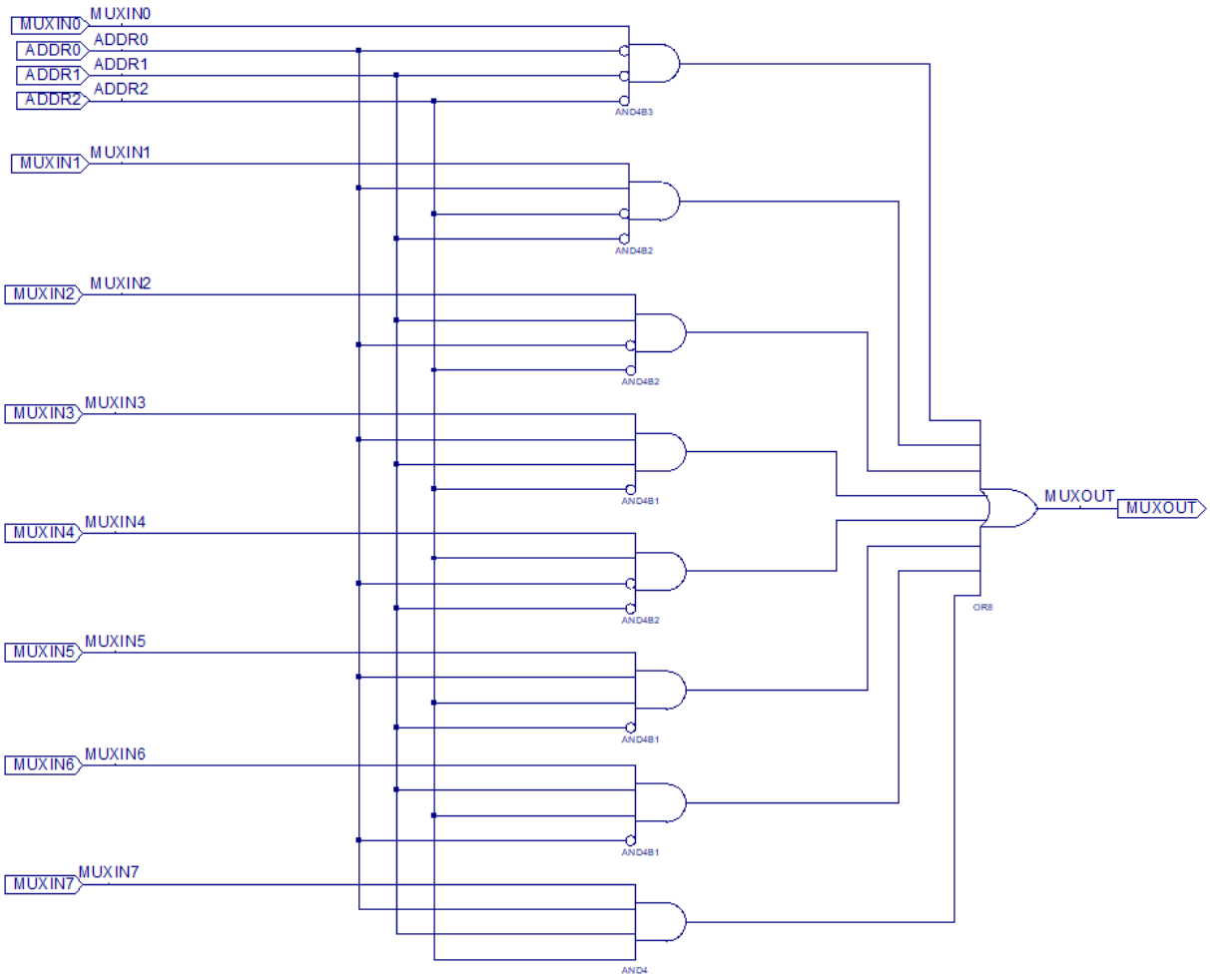

Figure 8. – 8 bit multiplexer (MACRO)