

```
1 module MDDR(  
2     input clk,write_ins,write_data,write_bus,  
3     input [15:0] instr_iram_mddr,  
4     input [15:0] data_dram_mddr,  
5     input [15:0] data_bus_mddr,  
6     output reg [15:0] data_out  
7 );  
8     always @(negedge clk)  
9         begin  
10             if (write_ins) data_out <= instr_iram_mddr;  
11             if (write_bus) data_out <= data_bus_mddr;  
12             if (write_data) data_out <= data_dram_mddr;  
13         end  
14 endmodule
```