```
module memory_mapping(
    input wire [15:0] address_virtual,
    output reg [1:0] block_select,
    output reg [15:0] address_phisical
);

// Definición de direcciones virtuales
parameter DATA_ADDRESS = 16'h2000;
parameter STACK_ADDRESS = 16'h3ffc;
parameter MMIO_ADDRESS = 16'h7f00;

// Definición de tamaño de bloque (32 registros de 32 bits)
parameter BLOCK_SIZE = 32;

// Mapeo de direcciones virtuales a bloques de datos
always @(*) begin
    block_select = 2'b00;

    if (address_virtual >= DATA_ADDRESS && address_virtual < DATA_ADDRESS + BLOCK_SIZE)
              begin
        // Acceso al bloque .data
        block_select = 2'b00;
        address_phisical = address_virtual - DATA_ADDRESS;
              end
         else if (address_virtual <= STACK_ADDRESS && address_virtual > STACK_ADDRESS - BLOCK_SIZE) begin
        // Acceso al bloque .stack
        block_select = 2'b01;
        address_phisical = STACK_ADDRESS - address_virtual;
    end
         else if (address_virtual >= MMIO_ADDRESS && address_virtual < MMIO_ADDRESS + BLOCK_SIZE) begin
        // Acceso al bloque .MMIO
        block_select = 2'b10;
        address_phisical = address_virtual - MMIO_ADDRESS;
    end
end

endmodule
```