

```

module registro_salida_incondicional(
    input wire clk,
    input wire write,
    input wire [7:0] dato_entrada,
    output wire [7:0] dato_salida
);

    reg [7:0] valor;

    always @( posedge clk )
        if ( write )
            valor <= dato_entrada;

    assign dato_salida = valor;

endmodule

```

```

module registro_salida_triestado(
    input wire clk,
    input wire write, read,
    input wire [7:0] dato_entrada,
    output wire [7:0] dato_salida
);

    reg [7:0] valor;

    always @( posedge clk )
        if ( write )
            valor <= dato_entrada;

    assign dato_salida = read ? valor : 'bZ;

endmodule

```

```

module registro_bus_bidireccional(
    input wire clk,
    input wire write, read,
    inout wire [7:0] dato
);

    reg [7:0] valor;

    always @( posedge clk )
        if ( write )
            valor <= dato;

    assign dato = read ? valor : 'bZ;

endmodule

```

```

module ram_sincrona_bus_datos_bidireccional(
    input wire clk,
    input wire write, read,
    inout wire [7:0] dato,
    input wire [9:0] direccion
);

    reg [7:0] valor [1023:0];

    always @( posedge clk )
        if ( write )
            valor[direccion] <= dato;

    assign dato = read ? valor[direccion] : 'bZ;

endmodule

// 'bZ en este contexto equivale a 8'bZZZZZZZZ,
// que son 8 bits a HI (alta impedancia)

```