

## Section 20.8 Virtual interfaces

The example in this section has several typos in it.

```
interface SBus; // A Simple bus interface
    logic req, grant;
    logic [7:0] addr, data;
endinterface

class SBusTransactorTransactor; // SBus transactor class
    virtual SBus bus; // virtual interface of type SbusSBus

    function new( virtual SBus s );
        bus = s; // initialize the virtual interface
    endfunction

    task request(); // request the bus
        bus.req <= 1'b1;
    endtask

    task wait_for_bus(); // wait for the bus to be granted
        @(posedge bus.grant);
    endtask

endclass

module devA( SbusSBus s ); /*...*/ endmodule // devices that use SBus
module devB( SbusSBus s ); /*...*/ endmodule

module top;
    SBus s[1:4] (); // instantiate 4 interfaces
    devA a1( s[1] ); // instantiate 4 devices
    devB b1( s[2] );
    devA a2( s[3] );
    devB b2( s[4] );
    initial begin
        SbusSBusTransactor t[1:4]; // create 4 bus-transactors and bind
        t[1] = new( s[1] );
        t[2] = new( s[2] );
        t[3] = new( s[3] );
        t[4] = new( s[4] );
    end
endmodule
```