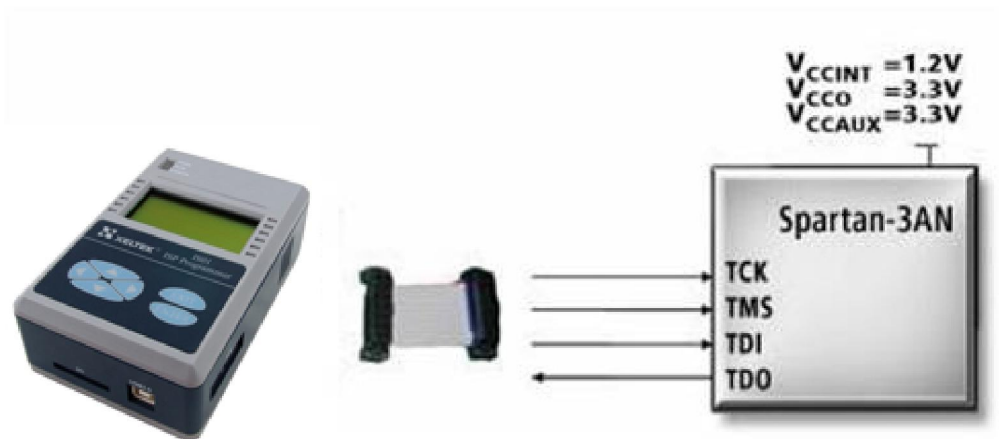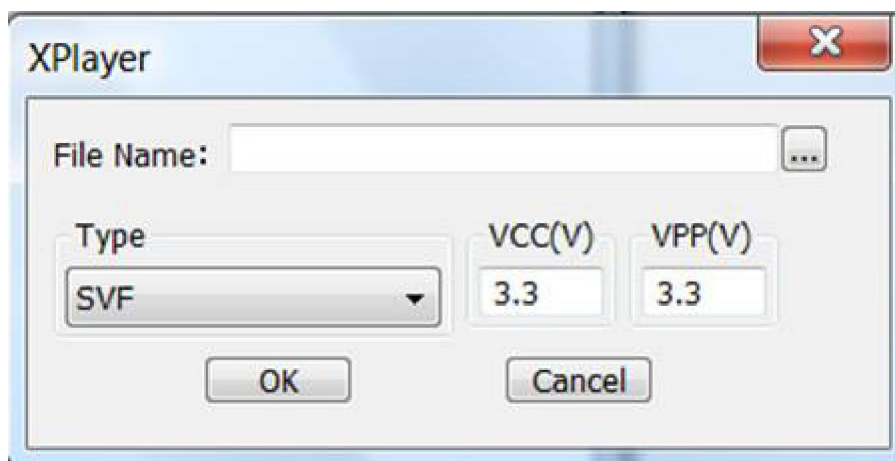# SuperPro IS01 Supports Xilinx Spartan 3AN FPGA

Programming a Xilinx Spartan 3AN FPGA **device** requires running an SVF player, and generating a programmable data file with *.svf extension.

XPlayer is a special programming tool which resides within SuperPro IS01 and can be used for programming Xilinx FPGA devices. As long as the customer provides corresponding SVF file (similar files can be generated using design tools such as iMPACT), the device can be programmed.
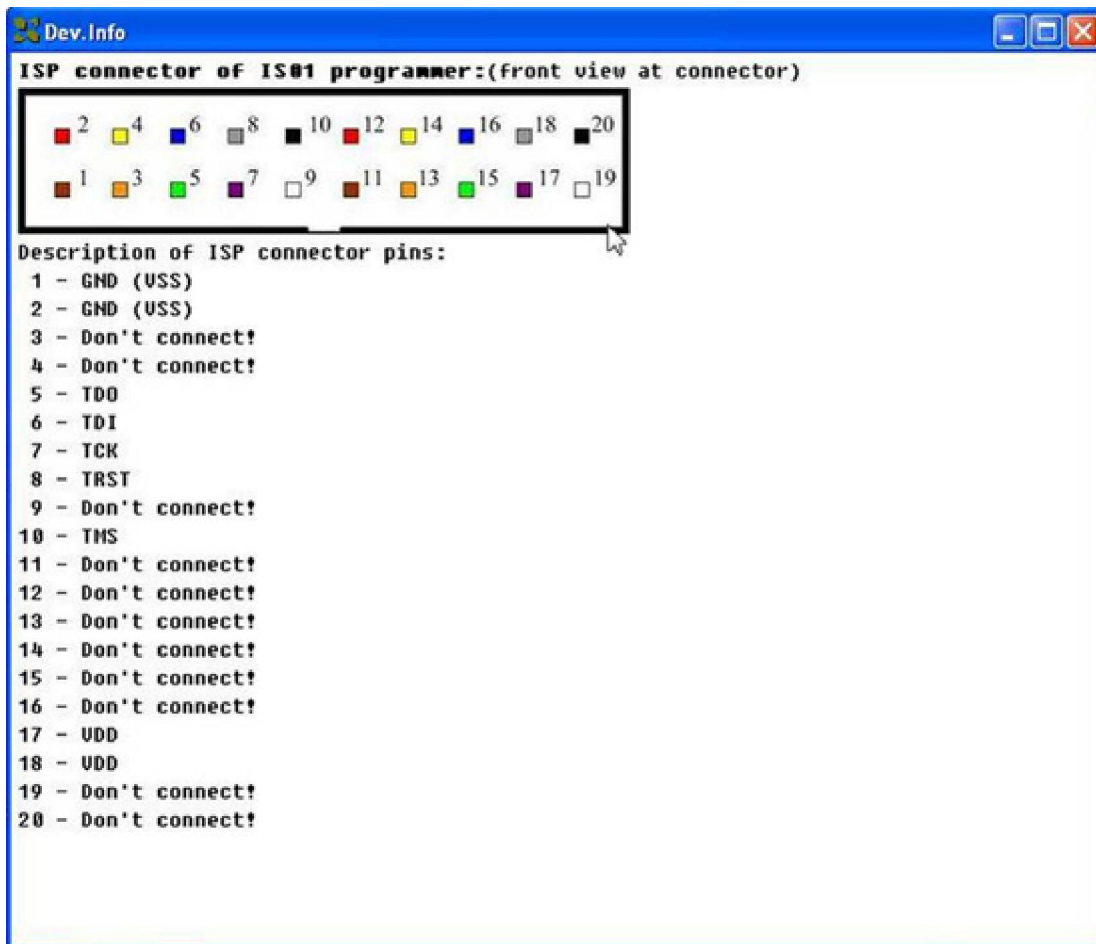

The dialogue box displayed below, appears in SPIS01 software when "XPlayer" is selected on the "Device" menu bar.

Device related information is already included within SVF file; therefore there is no need to select any device for programming.

When "device information" in tool bar or in the menu of SuperPro IS01 software is opened, the cable connection (JTAG signals) can be seen as follows:

```
Dev.Info                                                    [_][□][X]
ISP connector of IS01 programmer:(front view at connector)

    ■2  □4  ■6  ▣8  ■10 ■12 □14 ■16 ▣18 ■20
    ■1  □3  ■5  ■7  □9  ■11 ■13 ■15 ■17 □19

Description of ISP connector pins:
 1 - GND (VSS)
 2 - GND (VSS)
 3 - Don't connect!
 4 - Don't connect!
 5 - TDO
 6 - TDI
 7 - TCK
 8 - TRST
 9 - Don't connect!
10 - TMS
11 - Don't connect!
12 - Don't connect!
13 - Don't connect!
14 - Don't connect!
15 - Don't connect!
16 - Don't connect!
17 - VDD
18 - VDD
19 - Don't connect!
20 - Don't connect!
```

Internal supply voltage (VCCint) of Spartan family of Xilinx FPGA is 1.2V, and VCCaux, VCCo are 3.3V.

SuperPro IS01 can supply 3.3V, however 1.2V is not supported. Users need external power supply to support internal supply voltage (VCCint).

Therefore, connect VCC or VPP (3.3V) of SuperPro IS01 to VCCaux, VCCo, Vref of Xilinx FPGA; and supply VCCint (core work VCC=1.2V) via an external source. Also connect GND (ground) of external power supply (1.2V) to GND of SuperPro IS01.

Supported devices are:

Xilinx CPLD: XC9500 / XC9500XL / XC9500XV / CoolRunner / CoolRunner-II
Xilinx PROM: XC18V00 / XCF00S / XCF00P
Xilinx FPGA: Virtex Families, Spartan Families, and JTAG-configurable XC4000 Families

If you need to search other programmable Xilinx devices, please check the device search tool. And for questions you may have, please feel free to contact us at techsupport@xeltek.com