

APPLICATION NOTE 1

Reprogramming SMT377v2 - CPLD/FPGA Firmware

SMT377v2

SUNDANCE MULTIPROCESSOR TECHNOLOGY LTD.

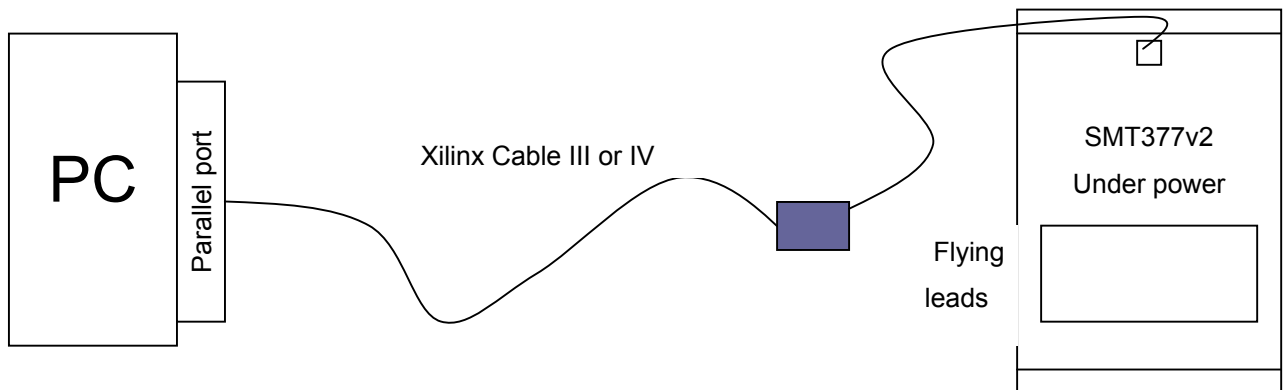
| Date | Comments / Changes | Author | Revision |
|----------|--------------------|--------|----------|
| 08/11/03 | Original version | PSR | 1.0 |
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The *SMT377* is populated with a Xilinx FPGA (XC2V1000-6FG456) and a CPLD (XC9536XL-CS48). Both devices are in the same JTAG chain, which means that they can be reprogrammed independently using the on-board JTAG connector (**J2** – see next page for location on the board and pinout)

Equipment needed.

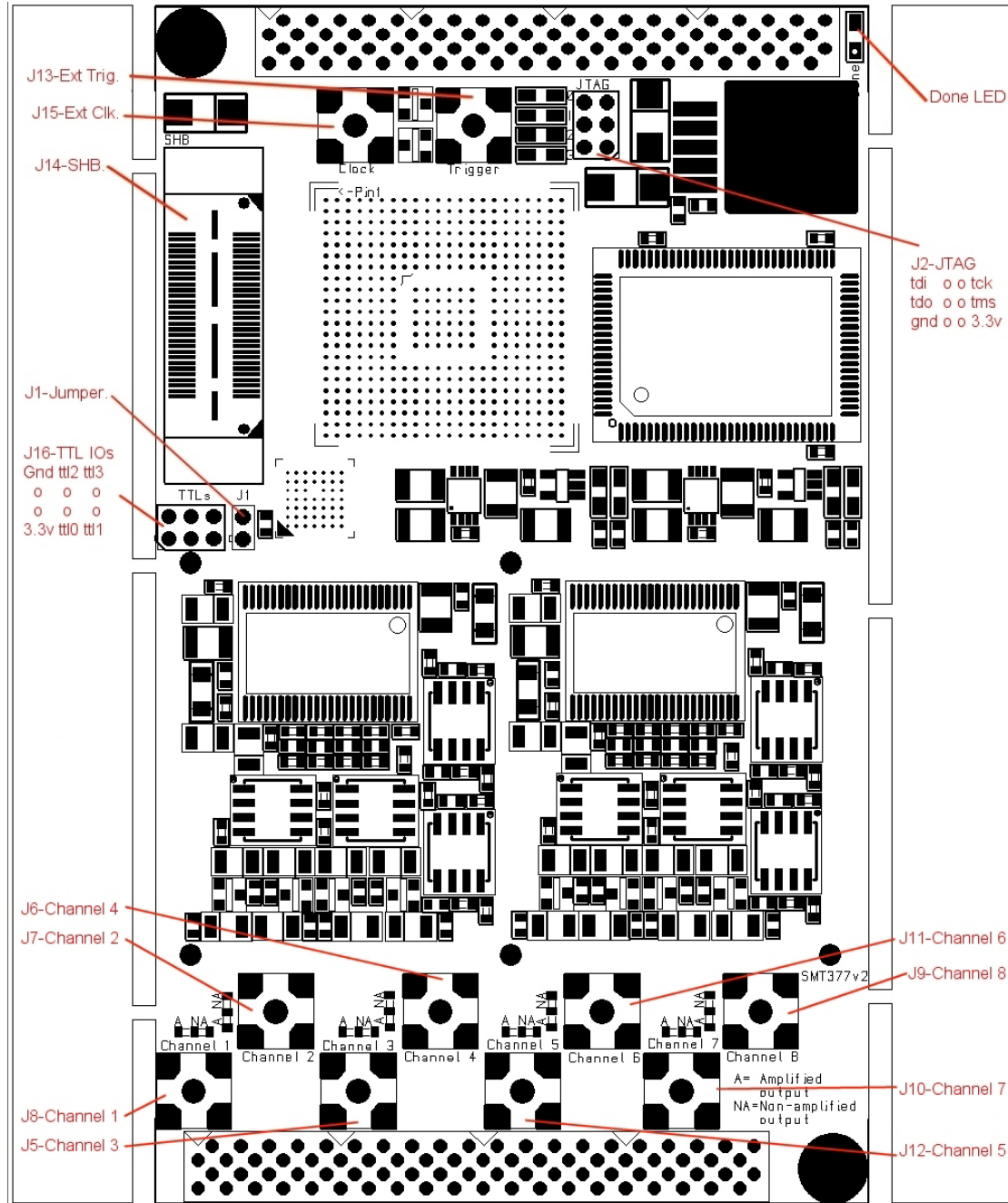
- Xilinx iMPACT software (Free version available from [Xilinx Website](http://www.xilinx.com)).
- Xilinx Parallel Cable III or IV + flying leads:



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JTAG Connector on SMT377v2.

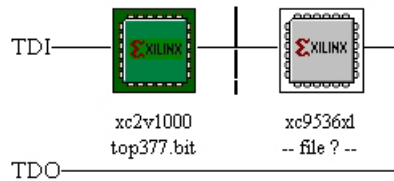
The following diagram shows the location and the pinout of the JTAG connector on the SMT377v2.



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Procedure to follow.

- Connect both Xilinx cables to the PC and the SMT377v2. Both ends of the cables must be powered.
- Launch iMPACT and '*Initialize the chain*' (File -> Initialize Chain). It should detect two devices XC2V1000 first in the chain and then XC9536XL. The following picture shows what you should get:



- Select either a BIT file (XC2V1000 - FPGA) by double-clicking the first device **OR** an Jedec file (XC9536XL - PROM) file by double-clicking the second device depending on the way reprogramming operation is carried out.
- Right-click one of the device and select '*Program*'
- The operation should end up successfully.

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