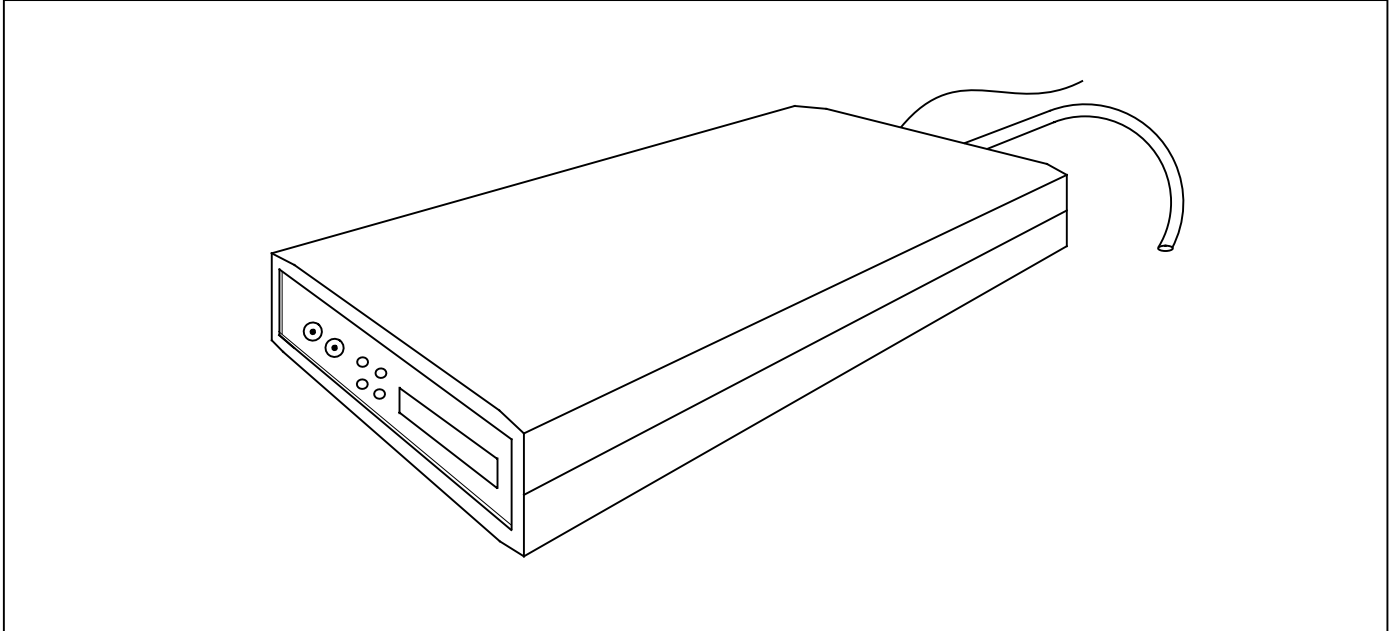


PC PARALLEL PORT TO JTAG INTERFACE**PRODUCT INFORMATION****FEATURES**

- Desktop mounted parallel port to JTAG interface
- Standard 25 way D-type parallel port connection
- Standard 26 way D-type differential OS-Link port for connection to a B300.
- Standard 20 way IDC cable for JTAG connection.
- Plug top power supply
- Supports nibble, byte and EPP mode parallel port standards

DESCRIPTION

The ST20-JPI parallel port to JTAG interface is a host interface to allow connection from a PC parallel port to any JTAG diagnostic controller based ST20 development board. The interface plugs into any standard PC 25 way D-type parallel port. Supported parallel port modes are:

- Nibble mode
- Byte mode
- EPP mode

depending on which mode the host PC can support. Connection to the development target is via a 20 way IDC JTAG connector. Once connected, the development target can be accessed using the MS Windows drivers supplied with the standard ST20 toolset.

Contents

1	Introduction	3
2	Installation	4
2.1	Hardware Installation - PC	4
2.2	Hardware Installation - B300	5
2.3	Software Installation	5
3	Connectors	6
3.1	The ST20-JPI front panel	6
3.2	The ST20-JPI rear panel	6
3.3	Differential Link Connection	7
3.4	JTAG Connection	7
3.5	TrigIn/TrigOut SMB Coaxial Connectors	8
3.6	Power Supply Connector	8
4	Recommended Target Circuitry	8
5	Field Support	9
6	Ordering information	9

1 Introduction

The ST20-JPI parallel port to JTAG interface is a host interface to allow connection from a PC parallel port to any JTAG based ST20 development board. The interface plugs into any standard PC 25 way D-type parallel port. Supported parallel port modes are:

- Nibble mode
- Byte mode
- EPP mode

depending on which mode the host PC can support. Connection to the development target is via a JTAG connector. Once connected, the development target can be accessed using the MS Windows drivers supplied with the standard ST20 toolset.

2 Installation

2.1 Hardware Installation - PC

The ST20-JPI has six connections: Parallel port; Differential OS-Link, JTAG, TrigIn, TrigOut and Power supply. To install the hardware connecting to a PC, the following steps should be followed:

- Plug the 25-way D-type of the parallel port cable built into the interface, into the parallel port of the PC.
- Plug the target development system into the 20-way IDC connector using a 20 way IDC cable.
- Plug power supply cable into PSU socket of the interface.
- Plug the power supply into the mains socket.
- Switch on the PC.
- Switch on the power supply. The LEDs on the interface should illuminate once the software is running. For a description of the meaning of the LEDs, see the ST20 toolset documentation.

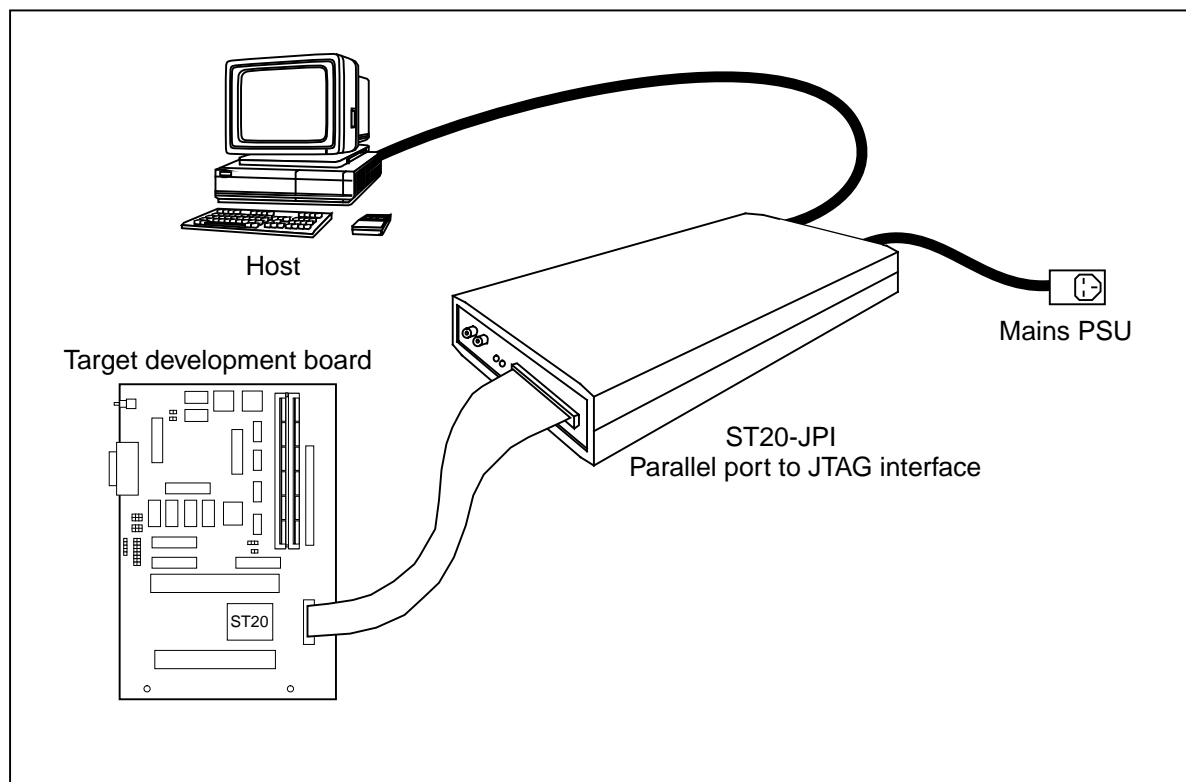


Figure 2.1 ST20-JPI connections basic configuration

2.2 Hardware Installation - B300

The ST20-JPI can also be attached to the Ethernet via a B300. To install the hardware connecting to a B300, the following steps should be followed:

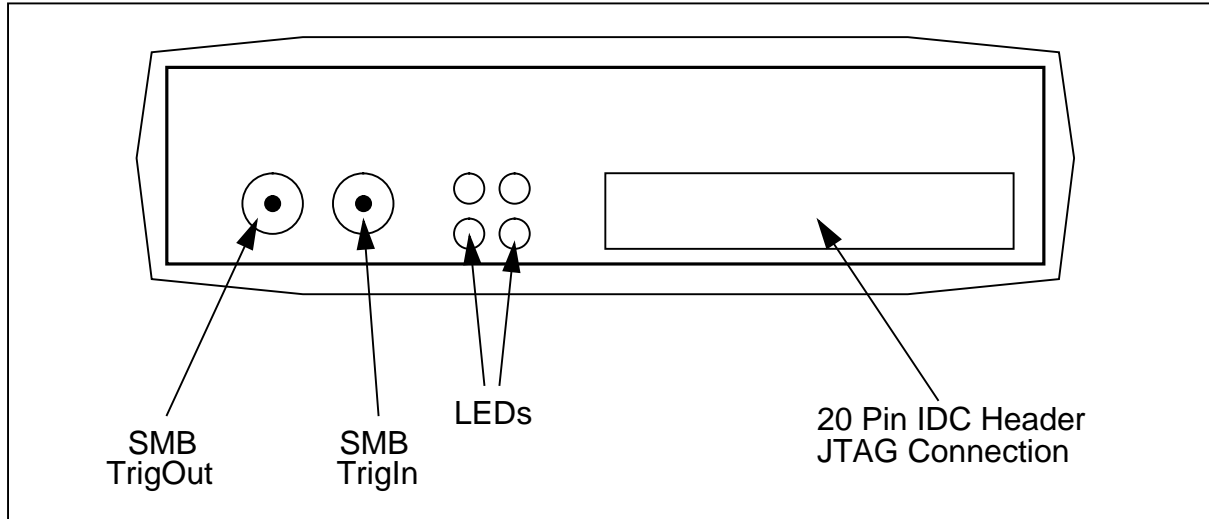
- Connect the B300 to the ST20-JPI using a Differential OS-Link cable supplied with the B300.
- Plug the target development system into the 20-way IDC connector using a 20 way IDC cable.
- Plug power supply cable into PSU socket of the interface.
- Plug the power supply into the mains socket.
- Switch on the B300.
- Switch on the power supply to the ST20-JPI. The LEDs on the interface should illuminate once the software is running. For a description of the meaning of the LEDs, see the ST20 toolset documentation.
- Switch on the Target power supply.

2.3 Software Installation

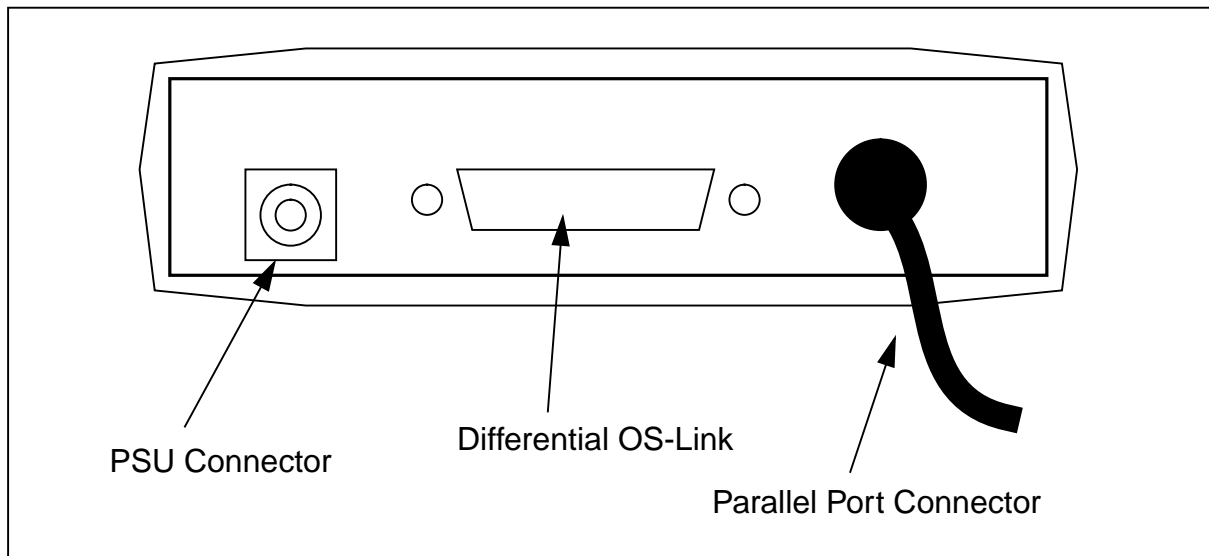
For installation of the DLL and VxD drivers, please refer to the ST20 Toolset software installation documentation.

3 Connectors

3.1 The ST20-JPI front panel



3.2 The ST20-JPI rear panel



3.3 Differential Link Connection

The Differential OS-Link connector is used to connect the ST20-JPI to a B300 instead of a Parallel port.

Pin	Description	Pin	Description
1	+notSSDownReset	14	GND
2	+notSSDownAnalyse	15	GND
3	+notSSDownError	16	GND
4	+notSSUpReset	17	GND
5	+notSSUpAnalyse	18	GND
6	+notSSUpError	19	-notSSDownReset
7	+LinkOut	20	-notSSDownAnalyse
8	+LinkIn	21	-notSSDownError
9	GND	22	-notSSUpReset
10	GND	23	-notSSUpAnalyse
11	GND	24	-notSSUpError
12	GND	25	-LinkOut
13	GND	26	-LinkIn

Table 3.1 26 way D-type connector

3.4 JTAG Connection

The JTAG connector is a 20 pin male IDC header. The following table shows the pinout of the ST20-JPI and the pinout required for the target board:

Pin Number	Host Connection	Target Connection
Even Numbers	GROUND	GROUND
1	Reserved	Do Not Wire
3	TrigIn	TrigOut
5	TrigOut	TrigIn
7	Reserved	Do Not Wire
9	TMS (Out)	TMS (In)
11	TCK (Out)	TCK (In)
13	TDO	TDI
15	TDI	TDO
17	notRST (Out)	notRST (In)
19	notTRST (Out)	notTRST (In)

Table 3.2 JTAG connector pinout

5 Field Support

SGS-THOMSON Microelectronics Limited products are supported worldwide through Sales Offices and authorized distributors.

6 Ordering information


Description	Order Number
ST20-JPI Parallel Port to JTAG Interface (US)	ST20-JPI/110
ST20-JPI Parallel Port to JTAG Interface (European)	ST20-JPI/220
ST20-JPI Parallel Port to JTAG Interface (UK)	ST20-JPI/UK

Table 6.1 Ordering information

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