R&S®ZNBT-Z14 Handler I/O (external) for R&S®ZNBT

Customer Information

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ROHDE&SCHWARZ

Test & Measurement

Customer Information

This customer information describes the following R&S®ZNBT hardware option:

- R&S®ZNBT-Z14 "Handler I/O (external) for R&S®ZNBT" (1326.6640.02)

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1 Safety Instructions

⚠ CAUTION

General safety considerations

In order to provide safe operation, read and observe the "Basic Safety Instructions" delivered as a printed brochure with this hardware option. In addition, observe the safety instructions and regulations given in the operating manual of the R&S®ZNBT.

2 Introduction

Hardware option R&S®ZNBT-Z14 provides an external Handler I/O (Universal Interface) for R&S®ZNBT.

A network analyzer that is equipped with a Handler I/O (Universal Interface), can interact with an external part handler. The digital control signals on the interface connector indicate the possible start and the end of a measurement, as well as a global limit check result. Typically, the handler will insert the device to be tested into a test fixture, provide a trigger pulse to initiate the measurement, remove and replace the device after the measurement is complete and sort it into pass/fail bins. Furthermore other system devices, such as switchable attenuators, phase shifters etc, or the DUT itself can be controlled.

Option R&S®ZNBT-Z14 consits of an external unit, equipped with a Centronics 36 input/output connector (implementing the Handler I/O interface) at its front side. The connector provides four independent parallel data ports, nine control signal lines (e.g. trigger), one ground, and one power supply line. The query of data, and the required output pin pattern, or automated logical sequences can be programmed by the operator.

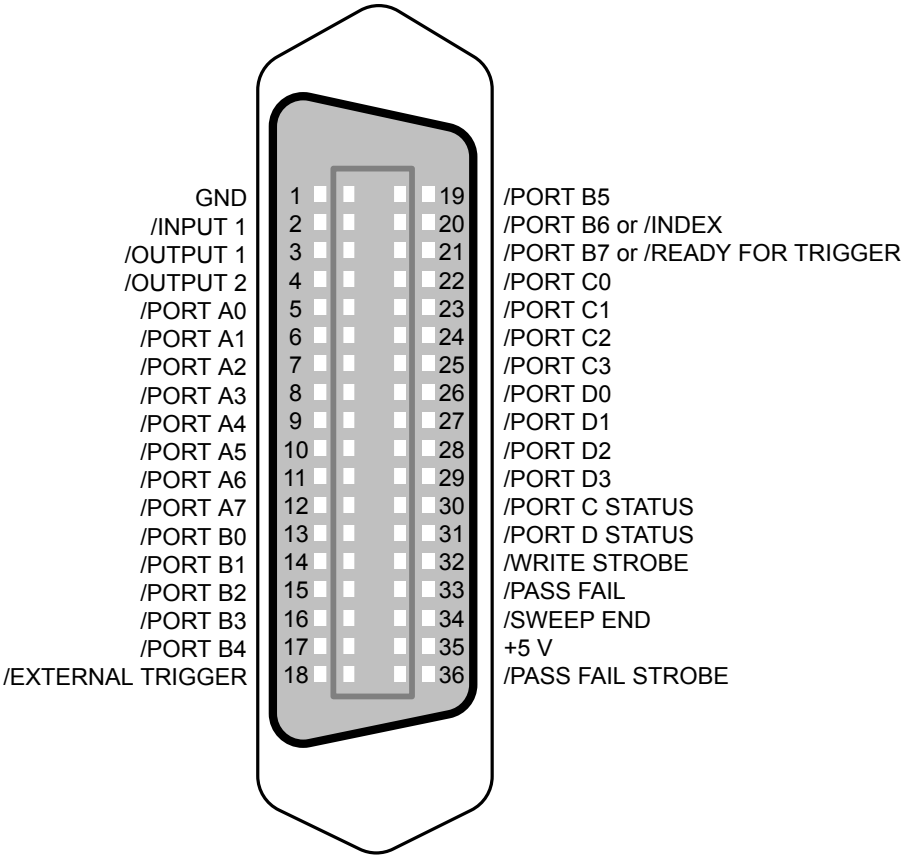

Fig. 2-1: Pin Assignment of the Handler I/O Connector

The connection to the R&S®ZNBT is established via the Digital I/O connectors at the rear sides of the extension unit and the analyzer, respectively. The required DX Digital IQ Cable (order no. 1402.4990.00) is delivered as part of the option.

- Option R&S®ZNBT-Z14 requires R&S®ZNBT firmware version 2.40 or higher
- The very first R&S®ZNBT8 models were shipped without the Handler I/O Expander (providing the Digital I/O connectors).
  If your R&S®ZNBT8 is not eqiuipped with a Handler I/O Expander (that would be located at the lower right corner of the back panel), this must first be retrofitted. In this case, please contact Rohde & Schwarz service.

3 Preparing for Use

Proceed as follows:

1. Remove the extension unit and the DX Digital IQ Cable (order no. 1402.4990.00) from the packaging.
2. Check the delivery for completeness using the enclosed delivery list.
3. Check the delivery for damages: in case of damages, immediately contact the shipping company.

Packing materials

We recommend that you retain the packaging. It is advisable to keep the original packing material in order to protect the extension unit from being damaged in case it has to be transported or shipped at a later date.

To connect the unit

1. Switch off the R&S®ZNBT.
2. Use the DX Digital IQ Cable (order no. 1402.4990.00) to connect the Digital I/O connectors at the rear sides of the extension unit and the analyzer, respectively.
3. Switch on the R&S®ZNBT.

   If properly detected by the VNA FWA, option R&S®ZNBT-Z14 should be listed in the "Hardware Option Info" of the R&S®ZNBT (select "SETUP > Options" at the VNA GUI).

4 Further Information

Refer to

- the "Universal Interface" chapter of the R&S®ZNB/ZNBT operating manual for details on the Handler I/O functionality
- the R&S®ZNBT data sheet for technical data
- the service manual of the R&S®ZNBT for service-related information