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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21547.2-2008

**VMEbus Extensions for instrumentation -- Part 2: TCP/IP-VXIbus
Interface specification**

VME总线对仪器的扩展 第2部分：TCP/IP-VXI总线接口规范
(English Translation)

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Foreword

GB/T 21547 "VME1) bus expansion instrument" is divided into the following parts.

--- Part 1. TCP/IP2) protocol specification instrument;

Part --- Article 2. TCP/IP-VXI bus interface specification;

Part --- Section 3. TCP/IP-IEEE488.1 Interface Specification;

Part --- Chapter 4. TCP/IP-IEEE488.2 instrument interface specification.

This section GB/T Part of 221,547.

Structure and technical content and VXI3 this section) -11.1.1995 (Rev1.0) consistent editorial modifications only made in the following ways.

--- Increasing the standard name "Part 2";

--- The section numbers A, B, C to 2,3;

--- Acronyms given comments.

This part is proposed by China Machinery Industry Federation.

This part of the measurement and control of Standardization Technical Committee of the Fourth Technical Committee under the jurisdiction of the national industrial processes.

This section is drafted. Harbin Polytechnic University, Harbin Institute of Electrical Instrument.

1 Introduction

In the test and measurement industry in VXI bus instrument connected to the growing demand for computer networks, this connection can be either wide area Network may be a local area network. Consequent need for a standard to TCP/IP-VXI bus devices. This specification is VXI total Part of the line series specifications, it shows how the VXI bus instrument can be connected to a standard industry online. Communication and

programming support this specification. Similar examples of technical nature and VXI bus instrument and VXI bus IEEE-488.2 on the instrument support. Protocol described in this specification allows ASCII messages via TCP/IP network passed between controllers and devices. Readers should network, the Internet protocol suite, ONCRPC, IEEE488.2 VXI bus and other aspects of knowledge.

1.1 Scope

This specification is part of the series of VXI bus specification and defines a TCP/IP-VXI bus interface devices.

The only direct reference network of the present specification is to support the Internet Protocol network group. This specification defines the art may be on other networks Use (such as support OSI protocol standard network), this section does not address the relevant conversion. The upper specification using open Internet Protocol Suite Network Computing (ONC) remote procedure call (RPC).

TCP/IP-VXI bus interface device can also support other network protocols.

1.2 Text Structure

The text is divided into two parts.

Part 1. Introduction, the purpose is to make the reader familiar with the intent and scope of this article;

Part 2. TCP/IP-VXI bus interface that defines TCP/IP-VXI bus interface device operations, including by the GB/T 21547.1-Transform 2008 defined network handling and VXI bus line agreement between the strings.

Objective 1.3 specification in addition to the purpose of those listed in 21547.1-2008 GB/T , this specification has the following purposes.

- a) the definition of TCP/IP-VXI bus interface operation of the device.
- b) the definition of network processing to convert from a string VXI bus line protocol processing.

1.4 Terms and Definitions

Except that in this part of 21547.1-2008 GB/T terms and definitions, but also it includes the following terms and definitions.

1.4.1

The IEEEStd. 1155.1992, VME bus extension instrument that VXI bus instrument defined.

Like other as VXI bus specification, the following terms are used to identify the contents of

each paragraph. These definitions and those in IEEE the same as in 1992. 1155.

1.4.2

We should abide by the rules in order to ensure compatibility within the systems of various cards. Rule is the wording "should" (SHALL) and "should not" (SHALL NOT) representation. These words only for the stated rules, not for other purposes.

1.4.3

Advised by a number of executives of the composition, this advice may affect the use of the final device. Discussion of specific hardware to increase throughput