

## **Features**

- System Bus: 8-bit ISA bus
- LED: Indication of I/O queries (references)
- Power supply and power consumption: Module is supplied from an external DC source with a voltage of: +5 V ±0,25%, consumption current: NIM151-01 no more than 200 mA, NIM151-02 - no more than 250 mA
- Moisture: up to 80%, non-condensing; up to 98%, noncondensing, for the /COATED option
- Operating temperature range: -40 to +85°C
- Software compatibility: FDOS, FreeDOS, Windows XP (Embedded); Linux 2.6
- Weight: no more than 0.08 kg
- MTBF: no less than 540,000 hours

**Technical Specifications** 

# **Overview**

NIM151 Multiport Module is carried out in the MicroPC standard and is designed for arranging RS232/RS422/RS485 serial interfaces.

The module uses a single slot of the MicroPC mounting frame. The device can be used with any module of CPU or microcontroller unit in the MicroPC standard.

The module is intended for the use in applications that prescribe an intensive data exchange through serial communication channel.

## **PCI System Bus**

• 8-bit ISA Bus

#### Serial ports

- 4x (Quad NIM151-01) or 8x (Octal NIM151-02) UART channels with signals logic levels (CMOS, TTL)
- · Possibility of using COM1-COM8
- All RS-232 ports are nine-wire (full), with the data exchange rate of no more than - 115.2 Kb/sec
- Two RS-422/485 ports (COM3 and COM4) galvanically isolated, with optoisolation breakdown voltage of no more than 500 V, with the data exchange rate no more than - 115.2 Kb/sec; 64 bytes of FIFO
- 5, 6, 7, 8 bits of data, 1, 1.5 or 2 stop bits
- Data exchange rate up to 115,200 bauds
- 10-pin contacts for RS-232
- · Sockets with Wago terminal blocks for the connection of RS 422/485 interfaces (COM3, COM4)

#### LEDs

· Indication of I/O queries (references)

## **Core control capabilities**

- · Setting the base address by switches
- · Setting interruptions by switches or jumpers
- Setting operation of RS 422/485 interfaces in COM3 and COM4 ports by jumpers

## **Additional features**

- · Six dividable lines of IRQx hardware interrupts (where x = 3, 4, 5, 6, 7, 9
- · Address selector and ISP controller

#### **Power supply and current** consumption

- · Module is supplied from an external DC source with a voltage of: +5 V ±0,25%
- · Consumption current: NIM151-01 no more than 200 mA, NIM151-02 - no more than 250 mA

#### Weight

No more than 0.08 kg

#### Humidity

- up to 80%, non-condensing
- up to 98%, non-condensing, for the /COATED option

## **Resistance to mechanical stress**

- · Sinusoidal vibrations for the frequencies from 10 to 500 Hz, with acceleration of 5 g
- Single shocks with peak acceleration of 100 g
- Multiple shocks with peak acceleration of 50 g, number of shocks: 1000

## Software compatibility

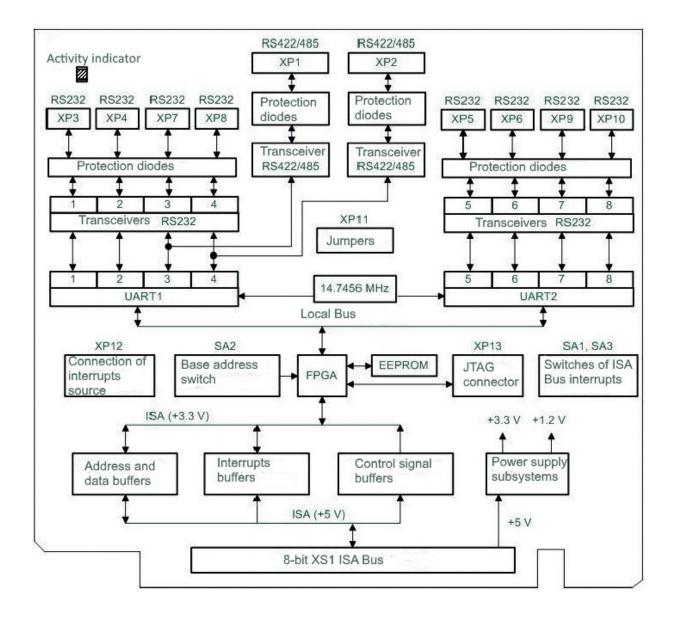
- FDOS, FreeDOS
- Windows XP (Embedded)
- Linux 2.6

## **MTBF**

• No less than 540.000 hours.



# **Block Diagram**



# **Ordering Information**

# **NIM151 Multiport Module Configurations**

## NIM151 - 01 \ Option

#### **Configurations**

NIM151-01 Multiport Module, 4x UART channels NIM355-02<sup>1</sup> Multiport Module, 8x UART channels

- <sup>1</sup> The module contains a complete set of built-in interfaces and functional elements (COM1-COM8).
- \* Conformal coating is available, the \COATED option is added to the order.

#### **Delivery checklist**

1. NIM151 Multiport Module

- 2. Installation kit: 733-105 sockets with WAGO terminal blocks for connecting RS 422/485 interfaces,
- set of jumpers 2 mm 3. Packaging

#### Additional accessories (to be purchase separately)

Ordering name: ACS00023-04 - Cable adapter for the connection to COM1-COM8 (DB9F - IDC10)

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Product specifications are subject to change without notice





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