

MK150-02

Baikal-T1 1.2 GHz MIPS32 (Dual Core) Based Modular Computer



Features

- CPU Baikal-T1 1.2 GHz MIPS32 (Dual Core);
- RAM: soldered DDR3-800 MHz, 4 GB;
- Integrated SSD for 4GB;
- VGA with max resolution up to 1920×1080;
- Dimensions: 204.1x149x110 mm (with mounting to the DIN-rail);
- Power supply voltage: 10 – 36 V;
- Power consumption: Max. 30 W (exclusive of the peripherals);
- Software compatibility: Windows 10, Linux Debian 10;
- MTBF: 175,600 hours.

Overview

The MK150-02 is based on the CPC313 CPU Module and is designed for being used as a standalone computing device in Process Automation Systems. The device offers power supply voltage of 10 – 36V and has no moving parts. The computer is mounted on a DIN-rail or a mounting panel and has an operating temperature range from - 40 to +50°C.

Technical Specifications

CPU

- Baikal-T1 1.2 GHz MIPS32 (Dual Core)
- 2 x cores
- 32-bit memory bus with ECC support
- L1 cache – 64 KB for program region, 64 KB for data region
- L2 cache – 1 MB
- support of the modular acceleration unit

RAM

- soldered DDR3-800 MHz: 4 GB

Integrated SSD

- 8GB

VGA interface

- availability of connecting RGB (VGA) monitors with resolution of no more than – 1920×1080
- video memory volume (allocated from the system memory) no more – 16 MB

Ethernet

- 2 x Ethernet 10/100/1000 Mb channels

USB

- 6 x USB 2.0 ports

2 x serial ports RS232

- up to 115.2 Kb/sec

4 x serial ports RS422/485

- galvanic isolation 500 V
- rate – up to 921 Kb/sec

FBUS

- 2 x FBUS connectors

DISCRETE I/O port

Two SDCard Type I or II connectors

Possibility of mounting to DIN-rail or panel

Weight, max

- 1.7 kg (exclusive of clamping devices)

Dimensions

- 204.1x149x110 mm (with mounting to the DIN-rail)

Operating temperature range

- from -40 to +50 °C

Power consumption

- Max. 30 W (exclusive of the peripherals)

Power supply voltage

- 10 – 36 V

Resistance to single shocks

- 50 g.

Resistance to multiple shocks

- 25 g.

Software compatibility

- QNX 6.x
- Linux Debian 10 (kernel 5.4)

MTBF

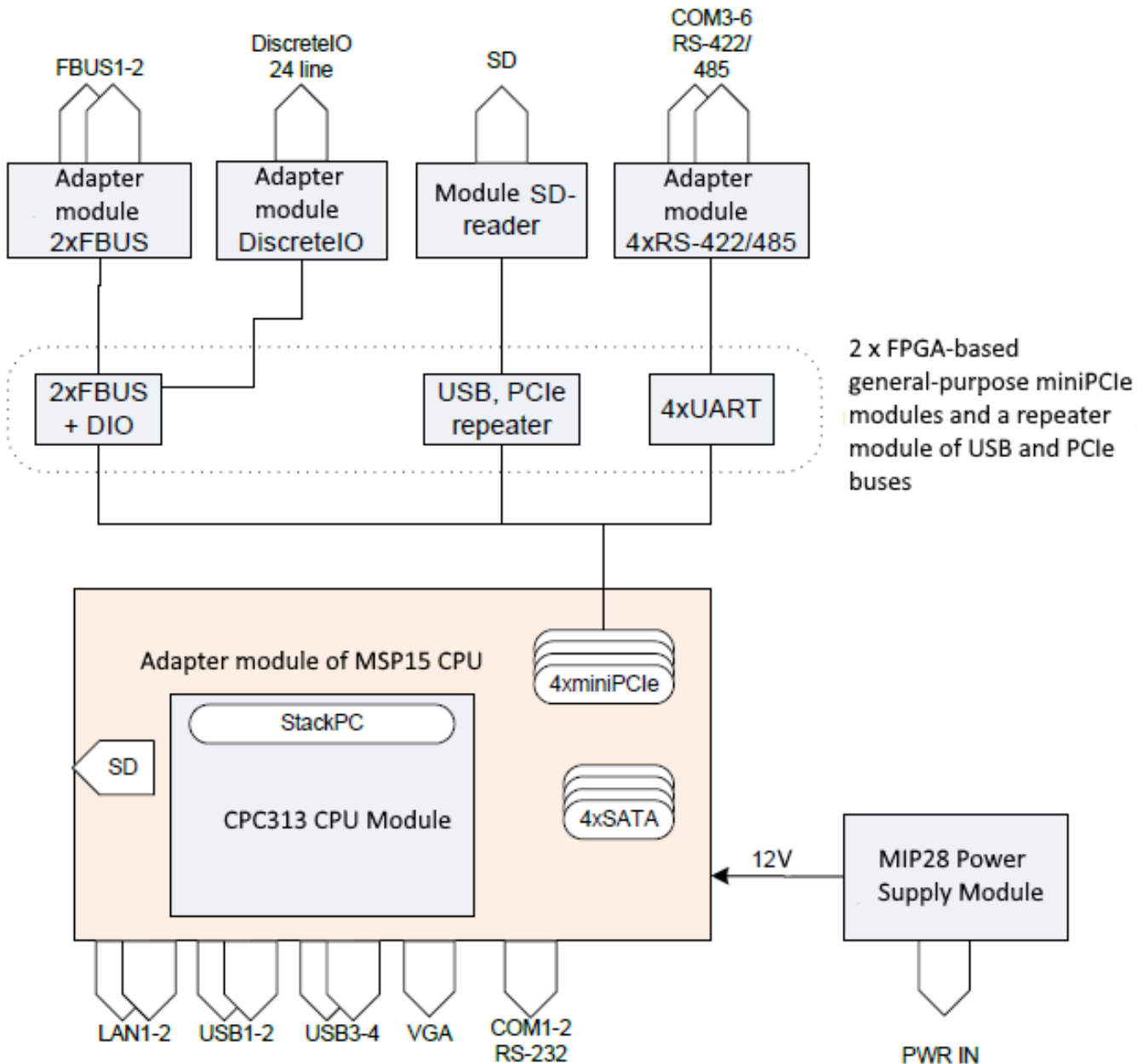
- 175,600 hours



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Block Diagram



Fastwel



Fastwel



Fastwel

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Ordering Information

MK150 Configuration

MK150 / Options

Configurations

MK150-02 Baikal-T1 MIPS32 P5600 1.2 GHz, 4 GB DDR3 SDRAM; SSD 8 GB; 2 x Ethernet 10/100/1000 Mb; 6 x USB 2.0; 2 x RS232; 4 x RS422/485; DISCRETE I/O; 2 x FBUS; VGA; from -40 to +50°C.

Delivery checklist

MK150-02 delivery checklist contains:

1. MK150-02 Modular Computer
2. Installation kit for rail mounting (mounting to the DIN-rail or mounting panel)
3. Installation kit with (mating parts of the connectors)
4. Packaging.

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Product specifications are subject to change without notice

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