BS04
Rugged HMI Panel PC

Features

■ Dual core 32-bit/64-bit Intel Pineview-D (D510) x86 CPU
■ RAM: DDR2 SDRAM 667 MHz 1 GB, soldered
■ NAND Flash Drive 4 GB, soldered and connected to SATA interface
■ 10.4" display, resolution 800×600
■ 2×CAN, 2×RS-422/485, 2×Ethernet 10/100/1000 MB/s, 2×CFAST, 1×SDHS,
■ Operating temperature range: –50°C…+60°C
■ Supported OS: FREEDOS 6.22, Windows XPe, CE5.0, Linux 2.6, QNX 6.4
■ No less than IP65 – enclosure front surface; no less than IP40 – enclosure steel surface
■ EN50155 compliant

Overview

BS04 rugged HMI panel PC is developed as a replacement for PCs of the previous generation – BS03. The device is designed for use in transport and industry under conditions of adverse mechanical and electromagnetic effects in the wide range of environmental temperatures.

The structure of the device enables to flexibly adapt it to the customer's requirements.

BS04 – rugged HMI computer from Fastwel is fully configurable and can be customized according to the specific demands of your application.

Technical Specifications

System
• Dual core 32-bit/64-bit Intel Pineview-D (D510) x86 CPU
• RAM: DDR2 SDRAM 667 MHz 1 GB, soldered
• NAND Flash Drive 4GB, soldered and connected to SATA interface

Display
• 10.4" display
• Resolution 800×600
• Luminance: no less than 400 cd/m^2
• Contrast ratio: no less than 700:1
• Horizontal visibility angle: 160°, vertical visibility angle: 140° (when the contrast ratio is 10:1)
• Automatic and manual brightness adjustment
• Glare filter

Keyboard
• 26 function keys with backlight
• Special-purpose key of display operating mode control ("auto", "day", "night", "OFF")
• Programmable key codes
• Adjustable backlight brightness
• "Hint" mode (keys backlight on/off individually)

Software Support
• FDOS 6.22
• Windows XPe, CE5.0
• Linux 2.6
• QNX 6.4

Interfaces
• 2×CAN ports with galvanic isolation
• 2×RS-422/485 with galvanic isolation
• 2×Ethernet 10/100/1000 Mb/s with galvanic isolation
• 2×CFAST
• 1×SDHS
• 3×USB (one of them is routed to the front panel)
• AUDIO OUT from the 3 W amplifier

Mechanical
• Dimensions: 333×228×50 mm
• Weight: not more than 4 kg

Power
• Input power voltage: 18-72 V DC
• Max. power consumption:
  - Not more than 40 W during operation
  - Not more than 50 W in preliminary heating mode (switched on at –50°C to –30°C)

Environmental Conditions
• Operating temperature: –50°C...+60°C
• IP65 at front panel
• IP40 for the rest of the enclosure
• Shocks/vibration: 10G/1G

Adaptation to customer's requirements
• Key symbols replacement with codes reprogramming
• Functional expansion by installation of up to two expansion modules in miniPCIe format
• Installation of custom type connectors
• Changing the power voltage range: 10-36 V, 43-160 V
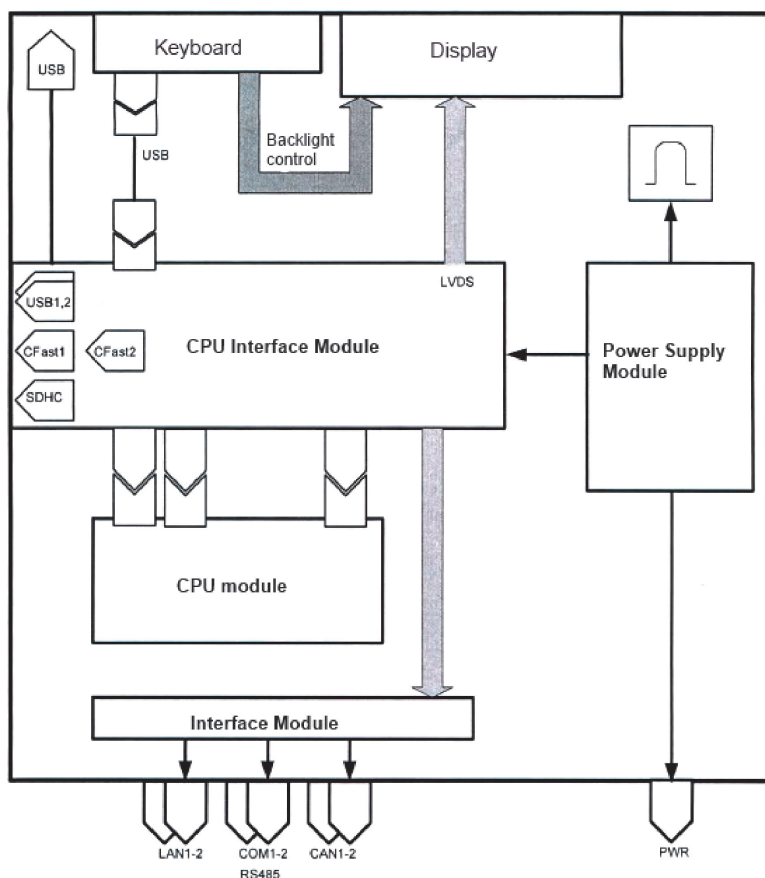• Installation of touchscreen

Warranty
• 3 years for parts and labor

Fastwel

Block Diagram

Ordering Information

BS04 Configuration

BS04 - 01

Device Type

BS04   Rugged HMI panel PC,
Intel Pineview-D (D510), 10.4" display,
800×600, 2×CAN, 2×RS-422/485,
2×Ethernet, 2×CFAST, 1×SDHS,
3×USB, Audio, 36, 72 V DC

Example

BS04-01

Rugged HMI panel PC, Intel Pineview-D (D510), 10.4" display, 800×600, 2×CAN, 2×RS422/RS485, 2×Ethernet, 2×CFAST, 1×SDHS, 3×USB, Audio, 36, 72 V DC

Delivery checklist:

1. BS04 Rugged HMI panel PC
2. Package

Corporate Offices

ISO 9001:2008
EC.C.O.02.01.000823-12

READY FOR
RoHS