

Embedded Computers mitePC-35



mitePC-35E



Manual

1 Introduction

1.1 Document

While we have made every attempt to ensure all information in this document accurate, the information contained is supplied „as-is“, and is subject to change without notice

1.2 Warranty

This MITE Hradec Kralove, Ltd. Product is warranted against defects in material and workmanship for warranty period from the date of shipment. Within warranty period, the repair of products is free of charge as long as warranty conditions are observed.

1.3 Technical Support

Before contacting MITE Hradec Kralove, Ltd. Technical support, please consult our Web site at www.mite.cz, for latest product documentation, utilities, drivers and application notes. If the information does not help solve the problem contact us by mail support@mite.cz.

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2 Computer description

Embedded computer mitePC-35 (-35E) Construction is pragmatically made to a plastic housing for very easy placement modification/mounting.

2.1 Main parts

- Plastic housing within:
 - standard connectors at front panel
 - power supply connector
- External power supply (option)
- Memory Card within operating system

2.2 Basic versions

	mitePC-35 (-35E)-C	mitePC-35 (-35E)-C2	mitePC-35 (-35E)-CH	mitePC-35 (-35E)-H
CPU	Celeron M Pentium M	Celeron M Pentium M	Celeron M Pentium M	Celeron M Pentium M
Chipset/Graphics	ICH4 855/815	ICH4 855/815	ICH4 855/815	ICH4 855/815
RAM	512 MB	512 MB	512 MB	512 MB
CF	CF1	CF1	CF1	-
CF/HDD	-	CF2	HDD 40 GB	HDD 40 GB

2.3 mitePC-35 (-35E) Benefits

All the mitePC-35 (-35E) Embedded computers include common personal computer (PC) peripheral function such as Graphics, Parallel, Serial, USB, Keyboard/mouse, Ethernet, Sound, IDE.

The mitePC-35 computer brings very compact housing, small dimensions, and low-power consumption features.

Technical features of all integrated parts, for example CF, HDD etc. are described in technical documents of their own.

The delivered mitePC-35 (-35E) Embedded computer specification can be found in delivery note. It does not need to have all here described parts and on other side it can be extended in line of customer requirements.

3 Connectors

3.1 Front panel

There are standard connectors on the Front Panel

3.1.1 mitePC-35

From left

LED	USB 2.0	Ethernet	PS/2	VGA	CF	COM1
Power HDD active	2 x HOST	1 x RJ45	1 x M/K	1 x DB15	1 x CF Socket	1 x DB9

3.1.2 mitePC-35E

From left

LED	USB 2.0	Ethernet	PS/2	COM1	CF	LPT	VGA	Audio
Power HDD active	4 x HOST	2 x RJ45	1 x M 1 x K	1 x DB9	1 x CF Socket	1x DB25	1 x DB15	Line In Line Out MIC

3.2 Internal Interfaces

Internal Connectors are available for customized design, only.

3.2.1 mitePC-35

Connectors Inside

IDE	FDD	LPT	RESET	LCD	COM2	JFLEX
40 pin 2.54	1 x	1 x PH	1	1 x JILI	1 x	1x

3.2.2 mitePC-35E

Connectors Inside

IDE	USB 2.0	COM	GPIO	LCD	DVO	FDD	PC/104	PC/104plus
40 pin 2.54	2 x	3 x	21	1 x JILI	1 x	1x	1 x	1x

4 Operating system

Some Embedded Operating systems like Windows XE Embedded, Windows CE, Windows Embedded for Point of Service (WEPOS), Windows Server, LINUX and other are available for mitePC-35 (-35E) Embedded computer.

The significant advantage of mitePC-35 (-35E) Embedded computer is FREE TRIAL version of Embedded Operating system that allows you to test your Application without any additional costs. You can find TRIAL version at www.mite.cz

4.1 Windows XP Embedded

There are basic „embedded“ features added in:

4.1.1 Enhanced Write Filter (EWF)

Enhanced Write Filter (EWF) provides the ability to write-protect a run-time image. Default settings of EWF allows the temporary placing of data to an Overlay. After you switch OFF the mitePC-35 (-35E) Embedded computer all data are lost.

To save data to Flash memory you must use command
ewfmgr c: -commit

4.1.2 Computer Name and Workgroup Name

The unique Computer Name is created during FBA Process and has form MITE-xxxxx, where xxxxx are groups of characters. Workgroup Name is MITE.

4.1.3 Automatic logon

The *Administrator* logging is automatically with password MITE. The same ID and PASSW are used by Remote Desktop, if included.

4.2 Windows CE

There are basic features added in:

4.2.1 TBD

TBD



Warning:

There is no technical support to any TRIAL version of Operating system.

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5 Electrical Specification

Supply Voltage is indicated by yellow LED.

5.1 Input Voltage 12 V DC

Input Power Supply Connector Polarity Label: pin 1 = GND
pin 2 = +12 V DC

Power consumption of mitePC-35 (-35E) (without any save modes) with named Computer Board, RAM 512 MB and CF Card 512 MB is typ. 1 A @ 12 V DC.

External Power Supply 90 – 264 V AC, 47 – 63 Hz is included

5.2 Input Voltage 230 V AC

The power Supply 230 V AC / 12 V DC is mounted inside the housing.



Warning:

In case you use another Power Supply be very careful. Wrong Voltage Level or Voltage Polarity can damage of mitePC-35 (-35E) Embedded computer.

6 Options

The mitePC-35 (-35E) Embedded computer Specification can be extended with some options:

Option	Description/Remark
CF1	CF Card 1 GB is Standard, „any capacity“ allowed
CF2	CF Card 1 GB is Standard, „any capacity“ allowed
HDD	Seagate Momentus 5400, 40 GB (or compatible)
USB Memory	USB Memory for Operating system Boot
BAT1	Battery pack, portable modification
BAT2	Battery pack, portable modification

6.1 mitePC-35

The mitePC-35 Embedded computer internal interface (chapter 3.2.1), or built in JFLEX Module can be used to expand capability, learn more about JFLEX at www.mite.cz. The Front panel modification is required.

	JFLEX	Popis
1	JFLEX-DUALDVI-PM	2xUSB. Sound, 2xDVI
2	JFLEX-SERIALGPIO1	4xCOM as 3xRS232, 1xRS422/485 (DSUB and Pinrow), 3xTTL, 4x8bit GPIO, second LPT (Optional SJA1000 CAN Controller)
3	JFLEX-4COMGPIOPCcard	4xCOM (RS232, RS422/485, TTL), 4x8bit GPIO, 32-bit PCMCIA
4	JFLEX-3COMGPIOPCcard USB	3xCOM (RS232, TTL), 4x8bit GPIO, 32-bit PCMCIA, 2x USB
5	JFLEX-Communication1	2xLAN, 2xUSB and Firewire
6	JFLEX-PCMCIA1	16/32Bit PCMCIA drive for WLAN or hot swap mass storage driven solution
7	JFLEX-miniPCI	miniPCI Type III socket for limitless IO expansion
8	JFLEX-Sound1	Sound AC97

6.2 *mitePC-35E*

The mitePC-35E Embedded computer internal interface (chapter 3.2.2), or built in PC/104, PC/104plus Module can be used to expand capability. The Front panel modification is required.

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7 Assembly



Warning:

There are ESD (Electrostatic Discharge) sensitive parts in mitePC-35 (-35E) Embedded computer, follow conventions.

7.1 Mechanical Specifications

	mitePC-35 (-35E)		
Dimension [mm] (w x h x d)	260 x 180 x 64		
Weight [kg]	~ 0,5		

7.2 *Front View Connectors*

7.2.1 mitePC-35

TBD

7.2.2 mitePC-35E

TBD

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8 Environmental Specification

8.1 Temperature

Operating: 0°C to 50°C

Non operating: -40°C to 85°C (w/o HDD)



Warning:

By locality of mitePC-35 (-35E) Embedded computer is necessary to allow sufficient air flow.

8.2 Humidity

Operating: 10% to 90% (non condensing)

Non operating: 5% to 95% (non condensing, w/o HDD)

9 Revision History

Revision	Date	Edited by	Changes
0.01	12.3.2007	VP	Initial Release – DRAFT

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