



Micro SVR Owner's Manual



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For more information and to obtain the latest revision of this document, please visit

www.compulab.co.il

Introduction

Package contents

1. Micro SVR computer
2. 12V DC power supply
3. AC cord. Standard North-American plug *
4. HDMI to DVI adapter
5. 3.5mm to RCA cable for S/PDIF
6. Mini serial to DB9 RS232 cable adapter
7. Four drives handles (internal)
8. 16** screws to mount the hard drives to their handle
9. 2/3 WiFi antennas (in some models)

To use Micro SVR, you will need:

- A display with DVI, HDMI or DisplayPort input + DVI, HDMI or DisplayPort cable
- USB keyboard and mouse

Hardware specifications

CPU	Intel Core CPU i7-3517UE 1.7GHz / i7-3555LE 2.5GHz
Chipset	Intel 7 Series System Controller Hub QM77
RAM	2x ECC-DDR3 1333 SO-DIMM sockets (up to 16 GB)
Storage	Internal bay for 2.5" (thickness 9.5mm max) SATA-II HDD, RAID mSATA slot eSATA port
Display	HDMI / DVI + DisplayPort in dual head configuration
Audio	S/PDIF in/out 7.1 channels Stereo line-out and stereo line-in
Wireless	802.11b/g/n 2 antennas BT 3.0
LAN	2x 1000BaseT RJ45
USB	2x USB 3.0 5 Gbps 2x USB 2.0 480 Mbps 4x USB 2.0 in front (optional)
Serial	RS232 full UART (mini connector, cable sold separately)
Input Voltage	Unregulated 10V-15V, Nominal 12V DC
Power Consumption	8W-35W (depends on system configuration and load)
Operating temperature	0 - 50°C (HDD) 0 - 70°C (SSD)
Dimensions	26 x 16 x 6 cm

* Local resellers may supply Micro SVR with other AC cord types.

Micro SVR features

Front panel

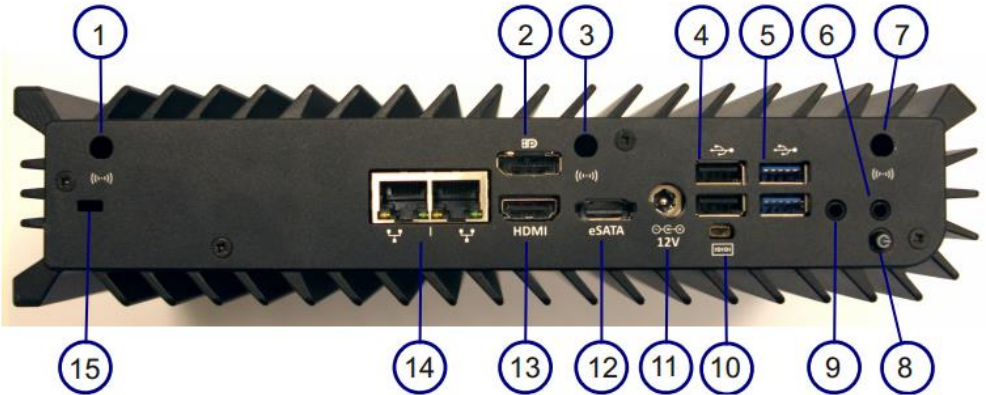
The front panel include 5 LEDs:



- Power - dual function green/yellow LED:
 - Green lit after uSVR turned on and CPU/Chipset initialization sequence completed successfully.
 - Yellow lit during HDD access time (internal or external – eSATA).
- Driver Activity 1..4 – The drive activity LEDs operate according to SFF8489 IBPI (International Blinking Pattern Interpretation):
 - At power up, the LED controller will lit all drive activity LEDs as part of its wake up self-test.

Additional features of the front panel depends on FACE Module used and are documented separately.

Back panel



<ol style="list-style-type: none">1. WiFi Antenna connector (RP-SMA)2. Display Port (DP)3. WiFi Antenna connector (RP-SMA)4. Dual port USB 2.0 (1A per port).5. Dual port USB 3.0 (1A per port).6. Audio / SPDIF 7.1 in7. WiFi Antenna connector (RP-SMA)8. Power button. On/Off and standby/resume.	<ol style="list-style-type: none">9. Audio / SPDIF 7.1 Out10. Mini Serial (RS-232)11. 12VDC Power12. eSATA port (SATA 2 device)13. HDMI14. Dual GbE LAN15. Kensington-lock hole
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Power

Micro SVR has a tactile power push-button. It is used for turning on/off the PC and for standby/resume when supported by the operating system.

A push of at least 5 seconds will always turn off the Micro SVR.

Display

Micro SVR has dual display interface with support for dual head.

1. Standard HDMI with audio support
2. DisplayPort

To connect Micro SVR to a DVI display, use the provided HDMI to DVI-D adapter. Use a DVI cable to connect the adapter to the display.

To connect Micro SVR to a VGA display use fit-VGA (sold separately).

Audio

There are 2 standard 3.5mm jacks on the back panel.

Right:

- Stereo line-in using a standard 3.5mm plug
- S/PDIF 7.1 in using provided cable

Left:

- Stereo line-out using a standard 3.5mm plug
- S/PDIF 7.1 out using provided cable

LAN

Micro SVR features two 10/100/1000BaseT Ethernet ports using standard RJ45 connectors. Use a standard Ethernet cables to connect.

The connectors feature built-in LEDs that are lit when a connection is detected.

WLAN

2 WLAN antennas are supplied in models with integrated WiFi and should be screwed into the standard SMA connectors.

USB

There are 2 USB 3.0 ports (5 Gbps) and 2 USB 2.0 ports on the back panel.

All USB ports support current up to 1A.

Ports on the back are upside down – note when connecting USB plugs.

Depending on the FACE Module used - some models incorporate additional 4 USB 2.0 ports in the front.

Serial port

The RS232 mini-serial port is located on the back panel.

Mini-serial to DB9 cable to connect to standard serial devices is sold separately.

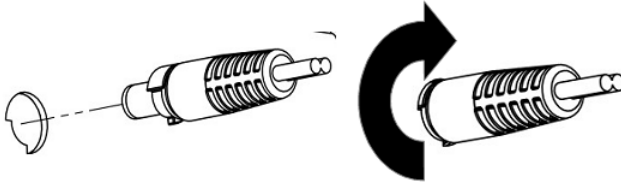
eSATA

Micro SVR features one eSATA port. Ports are located on the back panel.

Quick start guide

Connecting Micro SVR

- Turn off the display and connect it to the Micro SVR display connectors, HDMI or DP (use the HDMI to DVI adapter if needed).
- Connect the USB keyboard and mouse to USB2.0 ports.
- Plug the Ethernet cable into the Ethernet connector.
- In Micro SVR models with WiFi: Mount the WiFi Antennas on the RP-SMA connector by turning it clockwise repeatedly until the antenna holds firm.
- Insert the DC plug into the Micro SVR DC jack. Rotate clockwise 90° to secure.



- Plug the speakers into the line-out jack.
- Connect the power supply to the AC cord and plug the cord into AC outlet. The front panel power LED should light up as the Micro SVR boots.

Booting Linux

Linux loads automatically on power up. Upon boot you will be guided through the Linux Mint first-boot setup procedure.

Booting Windows 7

Upon first power-up, you will be guided through the Windows Welcome procedure which is self-explanatory. The Windows 7 serial number is printed on the Windows 7 label on the bottom of your Micro SVR.

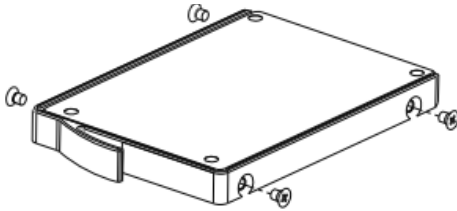
Maintenance

Micro SVR requires no maintenance. You should not take the Micro SVR apart other than opening the front panel to install/remove disks. Taking Micro SVR apart will void its warranty.

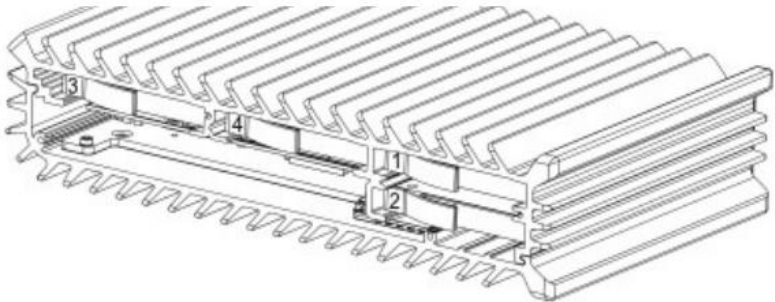
The following operations can be conducted by the user:

Installing the Hard Drives

1. Unscrew the 4 front panel screws and remove it.
2. Slide out the drives handles.
3. Mount each disk to a handle with the supplied mounting screws. Note the drive direction according to the drawing (metal side up).



4. Slide the disks into their position, note the drive numbering.



5. Re-assemble the front panel.

The service-bay provides easy access to hard-disk, RAM, and mini-PCIe sockets incl. WLAN module.

Storage drives are 2.5", thickness 7mm or 9.5mm with SATA interface. It is recommended to use 5400 RPM hard disk or SSD. 7200 RPM or higher is not recommended due to higher power consumption and risk of overheating.

RAM – use ECC DDR3-1333 SO-DIMM modules.

Mini-PCIe – the half-size mini-PCIe is normally used for WLAN. If you remove the WLAN module make sure to isolate the ends of antenna cables with some tape to avoid short-circuit. The full-size mini PCIe is available for any use.

RAID Configuration Utility

The RAID option must be enabled in BIOS before the system can load the Intel® RAID Option ROM code.

1. During boot, enter the BIOS setup by pressing F2.
2. Go to Advanced → Drive Configuration.
3. Set Configure SATA as to RAID.
4. Press F10 to save setting and exit the BIOS Setup program.

At boot time the RAID configuration utility can be invoked by pressing <CTRL-I> (Control I) key combination. The Raid configuration utility is made by Intel. It is documented in: "Intel® Rapid Storage Technology (Intel® RST) user guide" which can be downloaded from the Intel web site.

BIOS Setup Utility

Entering BIOS Setup Utility

Turn off the Micro SVR.

Turn on while holding down the F2 key.

Bios Features

See http://www.fit-pc.com/wiki/index.php/Fit-PC_Product_Line:_Micro_Server

Warranty and RMA

Warranty

- CompuLab guarantees products against defects in workmanship and material for a period of 24 months from the date of shipment.
- Your sole remedy and CompuLab's sole liability shall be for CompuLab, at its sole discretion, to either repair or replace the defective product at no charge.
- This warranty is void if the product has been altered or damaged by accident, misuse or abuse.

RMA

Keep the original package for shipping in case of hardware failure.

In case of HW failure of Micro SVR under warranty, please contact the seller of that Micro SVR.

Please provide the following required information:

- Micro SVR serial number
- Name of purchaser
- Address
- Problem description

If the Micro SVR was purchased directly from CompuLab, please email rma@fit-pc.com.

Tips for saving power

General

- Working without a connected display automatically disables the graphics controller – saving power.
- Disconnect external USB devices when not in use.

In Operating System

Use power scheme as follows

- Turn off monitor after several minutes not in use
- Turn off hard disk after several minutes not in use
- System standby after an hour not in use



Micro SVR

Manufacturer: CompuLab Ltd.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Statement

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (CompuLab Ltd.) could void the user's authority to operate the equipment.

Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.