

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



## Acceptance Test Procedure

### And Results (ATP + ATR)

for

### Single Board Computer

Manufacture model: ROCKY-3702EV-R4V8

Serial Number: C010004840

#	Name	Date	signature
Written by	Dan Gilboa	9 March 2012	DG
Checked by	Dan Gilboa	9 March 2012	DG
<b>Customer</b>			
<b>Order no.</b>			
<b>Tested Date</b>	25 February 2013		
Gilboa Engineering Consulting LTD			

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



1. The Single Board Computer (SBC) is assembled from:
  - a. SBC of IEI, model "Rocky-3702EV-R4V8"
  - b. CPU of Intel, Pentium III, 1000MHz, Spec: SL52R or similar
  - c. Memory of Kingston, Micron Tech or similar: 1 x 128MB, or 2 x 128MB, or 1 x 256MB, or 2 x 256MB
  - d. CPU Cooling Fan for Socket 7: Dynatron DC1206BM
  
2. The following Assembly and Test procedure are conducts:
  - a. Verifying of the correct PN of SBC, CPU, Memory and Fan.
  - b. Written of SBC SN, CPU SN, Memory SN and Fan SN.
  - c. Assembly of CPU, FAN and Memory.
  - d. Apply CPU Fan thermal paste.
  - e. Adding SBC part number and Serial number (that will be of the ROCKY-3702EV board) to the Assembled SBC.
  - f. Visual inspection of the assembled SBC.
  - g. Installing the SBC in a PC with backplane type PCIMG, part number: PCI-14S2.
  - h. Connecting: Display, Keyboard & Mouse, Ethernet cable, HDD-IDE (primary), CD-IDE (secondary), Floppy, RS232-COM1, RS232-COM2.
  - i. Powering the PC.
  - j. Entering the BIOS menu, and setting the time & Date, Auto-detect IDE devices (HDD and CD), Setting booting sequence (HDD, CD, Floppy). Checking PC-Health menu (voltages and CPU temperature)
  - k. Verifying general operation of the PC (Windows NT or XP is booting, Keyboard and mouse functioning).
  - l. Testing CPU – speed and ID number
  - m. Testing memory – size
  - n. Testing VGA output
  - o. Testing mouse
  - p. Testing Keyboard
  - q. Testing the Ethernet connection
  - r. Testing COM1 and COM2 connections
  - s. Testing CD interface
  - t. Testing FDD interface
  - u. Verifying operation of the CPU Cooling Fan
  - v. Testing Parallel Port (in DOS with "CheckIt" software)

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



3.

## Acceptance Test Results

1. SBC PN: ROCKY-3702EV-R4V8
2. SBC Serial Number: C010004840
3. Visual identification of components

#	Item	PN	Status	SN	Notes
1	SBC	ROCY-3702EV-R4	OK	C010004840	
2	CPU	Intel, Pentium III, 1000 MHz, spec: SL52R or similar	OK	Q112A753-0220 01 MALAY	SN is copied from the CPU
3	Memory	Kingston or Micron Tech or similar: 1 x 128MB or 2 x 128 MB or 1 x 256MB	OK	1 x 256MB KINGSTON 32MX64PC133CL3168	SN from HWINFO software (in XP OS): 294725377
4	FAN	Dynatron DC1206BM	OK	NA	SN is from the sealed package.
5	SBC	ROCY-3702EV- R4V8	OK	C010004840	Assembled from the 4 above items

4. Visual inspection of assembled SBC

#	Item	PN	Assembly status	Notes
1	SBC	ROCY-3702EV- R4V8	YES	
2	Identification label	-	YES	

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



## 5. SBC installation and basic connection

#	Item	Connected / Installed	Status	Notes
1.	Jumper 3	Short 1-3 Short 2-4	OK	
2.	Jumper 4	Open	OK	
3.	Jumper 5	Short 2-3	OK	
4.	Jumper 7	Short 1-2	OK	
5.	Jumper 8	Short 1-2	OK	
6.	Jumper 11	Short 3-4	OK	
7.	Jumper 12	Short 3-4	OK	
8.	CPU FAN	CPU Cooling FAN: CN13	OK	
9.	SBC	Installed in PC	OK	PC with backplane PCIMG, part number: PCI-14S2. <b>PSU IS OFF</b>
10.	Display	Connected (J1)	OK	
11.	Keyboard PS/2	Connected (CN18)	OK	Connected to Y cable
12.	Mouse – PS/2	Connected (CN18)	OK	Connected to Y cable
13.	Ethernet	100MB connection (CN10)	OK	
14.	HDD IDE	Connected to Primary IDE (CN1)	OK	Installed with Windows NT4 SP6 OS and Windows XP OS
15.	CD/DVD IDE	CD – Connected to Secondary IDE (CN3)	OK	
16.	COM1 COM2	Connect COM1 and COM2 cables	OK	Com1 – the SBC rear bracket (CN12), Com2 – flat cable connected to SBC CN11 connector
17.	FDD	Connected (CN2)	OK	
18.	HDD LED	Connected (CN7)	OK	CN7: pin 15 (+), pin 13 (-)
19.	USB cable	Connect USB1 and USB2 cables to CN9	OK	<b>CN9 Pin 1 is USB 1 (+)</b> <b>CN9 Pin 2 is USB 2 (-)</b>
20.	SW Reset	Connected (CN7)	OK	CN7: pin 11 and pin 9

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



## 6. Operation of SBC

#	Item	Test	Status	Notes
1.	PC PSU	Connect to Power and turn ON	-	PC is powering up, showing power up displays
2.	BIOS version	Check BIOS version while booting: <b>2.2</b>	OK	Bios was 1.6. Updated to 2.2
3.	Hit "DEL" and enter BIOS	Setting BIOS values:	-	
4.		Select Optimal setting	SET	
5.		Set Date & Time to current Israel setting	SET	Set to Israel Time
6.		Set FDD to 1.44MB	SET	
7.		Set IDE Auto-detect to detect HDD and CD	SET	
8.		Set "Wait for "F1" if error to: DISABLE	SET	
9.		Set quick boot to: ENABLE	SET	
10.		Set boot sequence as follow: First – IDE0 (HDD) Second – CD Third – Floppy Try other boot devices - NO	SET	
11.		Set Floppy drive swap to: DISABLE	SET	
12.		Set Floppy drive seek to: DISABLE	SET	
13.		Verify "PC Health Status" Vcore +5VDC +12VDC -5VDC -12VDC Vio CPU temperature	OK	+1.7 to +1.8 V +4.7 to +5.3 V +10.5 to +13.5 V -5.3 to -4.7 V -13 to -11 V +3.3.0 to 3.50 V Less 55 deg C
14.		USB Passive Release: ENABLE	SET	
15.		USB Function: ENABLE	SET	
16.		Save setting and Exit BIOS	SET	

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



#	Item	Test	Status	Notes
		menu: YES		
17.	SW Reset	While the computer boot, before OS is booting, press SW Reset and verify that the computer is reset	OK	
18.	OS	Select <u>Windows XP</u> from the boot menu.  PS – in Windows XP OS - update video refresh rate to 75Hz to avoid video flickering.	OK	Windows XP is booting up
19.	Keyboard PS/2	Press WINDOWS key, verify opening of windows. Use other keys to verify proper operation	OK	
20.	Mouse PS/2	Move mouse	OK	
21.	Ethernet – 100MB connection	Perform CMD – IPCONFIG test. Verify display IP properties. Open browser and surf the web.	OK	
22.	Floppy	Put Floppy diskette in the FDD. Open My computer and navigate to the FDD.	OK	
23.	CD/DVD IDE	Put CD in the DVD. Open My computer and navigate to the CD.	OK	
24.	COM1 and COM2	Perform communication test between COM 1 and COM2	OK	Use RS232 D9 F-F cross cable
25.	Reboot the computer	Reboot the computer from windows menu.	-	-
26.	CPU type and speed	While computer is booting verify: CPU: Pentium III, 750E MHz, spec: SL52R or similar	OK	While booting, according to the configuration. <b>Multiplier 7.5</b>
27.	Run HWINFO32 software	Select the following parameters to be tested:	OK	
28.	CPU type	CPU type: Pentium III-1000MHz CPU S-Spec: SL52R	OK	According to the configuration <b>Multiplier 7.5</b>
29.	Memory type and size	Memory size and type: According to configuration: 1 x 256MB	256 MB OK	SN: 294725377
30.	MAC address	Identification of the board by the Ethernet MAC address	info	00-E0-4C-4B-0B-5F

# Tested Obsolete Computer Parts

[www.Obsolete-pc.com](http://www.Obsolete-pc.com) , [www.gilboa-ltd.com](http://www.gilboa-ltd.com)

ATP\_ATR\_SBC\_ROCY-3702EVR4V8\_SN\_C010004840.docx



#	Item	Test	Status	Notes
31.	CPU temperature	Verify that the CPU temperature after 1 hour is less than 75 deg.	OK	
32.	CPU Cooling Fan	Verify that the FAN is rotating and there is air blow	OK	
33.	USB 1	Connect USB mouse to USB1 and check proper operation	OK	
34.	USB 2	Connect USB mouse to USB2 and check proper operation	OK	
35.	Parallel Port	Boot in DOS OS. Run "CheckIt" program. Select Test -> Parallel.	OK	Use Parallel Port Loopback adapter, "CheckIt" configuration (1-13, 2-15, 10-16, 11-17, 12-14)

Checked by: Dan Gilboa, [dan@gilboa-ltd.com](mailto:dan@gilboa-ltd.com)

Date: 25 February 2013