

## Acceptance Test Procedure

### And Results (ATP + ATR)

for

### Single Board Computer (SBC)

Part Number: IEI SAGP-865EV or EVG

Serial Number: SC0630082

| #           | Name        | Date       | signature |
|-------------|-------------|------------|-----------|
| Written by  | Dan Gilboa  | 7 Nov 2011 | DG        |
| Checked by  | Dan Gilboa  | 7 Nov 2011 | DG        |
| Customer    | -           |            |           |
| Order no.   | -           |            |           |
| Tested Date | 28 Feb 2012 |            |           |

1. The Single Board Computer (SBC) is assembled from:
  - a. SBC of IEI, model SAGP-865EVG, SAGP-865EV or SAGP-8650EVG
  - b. CPU of Intel, Pentium 4, type SL6WJ
  - c. Memory of Kingston, 1GB, model KVR400X64C3A/1G
  - d. CPU Cooling Fan – “COLDLAST” – model P405V03 or similar.
  
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 and Memory.
  - d. Applying of thermal grease on the entire of the CPU.
  - e. Assembly of FAN on the CPU.
  - f. Adding SBC part number and Serial number (that will be of the SAGP-865EVG board) to the Assembled SBC.
  - g. Visual inspection of the assembled SBC.
  - h. Installing the SBC in a PC with backplane type PXAGP-13S-RS or similar.
  - i. Connecting: Display, Keyboard, Mouse, 12VDC power, HDD, CD/DVD to the SBC.
  - j. Powering the PC (from 220VAC).
  - k. Verifying general operation of the PC (Windows 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 4 USB connections
  - r. Testing 100MB/sec Ethernet connection
  - s. Testing COM1 and COM2 connections
  - t. Testing FDD interface
  - u. Verifying operation of the CPU Cooling Fan

**Acceptance Test Results**

1. SBC PN: 503847544
2. SBC Serial Number: SC0630082
3. Visual identification of components

| # | Item   | PN  | Status | SN                           | Notes                                    |
|---|--------|---|--------|------------------------------|--|
| 1 | SBC    | SAGP-865EVG or<br>SAGP-865EV or<br>SAGP-8650EVG or<br>SAGP-8650EV | OK     | SC0630082                    | SAGP-865EV                               |
| 2 | CPU    | Intel, Pentium 4,<br>type SL6WJ                                   | OK     | SL6WJ CHINA<br>9424B272-0620 | SN is copied from<br>the CPU             |
| 3 | Memory | Kingston, 1GB,<br>model<br>KVR400X64C3A/1G                        | OK     | 2028941934                   | SN is analyzed by<br>HWINFO<br>software. |
| 4 | FAN    | COLDLAST – model<br>P405V03                                       | OK     | 23-231                       | SN is from the<br>sealed package.        |
| 5 | SBC    | 503847544   | OK     | SC0630082                    | Assembled from<br>the 4 above items      |

4. Visual inspection of assembled SBC

| # | Item                    | PN        | Assembly status | Notes |
|---|-------------------------|-----------|-----------------|-------|
| 1 | SBC                     | 503847544 | OK              |       |
| 2 | Identification<br>label | -         | OK              |       |

## 5. SBC installation and basic connection

| #  | Item             | Connected / Installed   | Status | Notes   |
|----|------------------|---|--------|---|
| 1  | SBC              | Installed in PC   | OK     | PC with backplane PXAGP-13S-RS or similar.<br><br><b>PSU IS OFF</b> |
| 2  | Display          | Connected   | OK     |   |
| 3  | Keyboard<br>PS/2 | Connected   | OK     |   |
| 4  | Mouse -<br>USB   | Connected   | OK     | Connected to the USB on the<br>SBC rear panel (USB1)                |
| 5  | Ethernet         | 100MB connection (the<br>lower SBC connection, or<br>the single one on 865EV) | OK     |   |
| 6  | HDD<br>IDED      | Connected   | OK     | HDD installed with Windows XP<br>OS                                 |
| 7  | CD/DVD<br>IDE    | DVD   | OK     |   |
| 8  | Power            | 12VDC form PC PSU   | OK     | <b>Verify before PSU is OFF</b>                                     |
| 9  | COM1<br>COM2     | Connect COM1 and COM2<br>cables   | OK     |   |
| 10 | FDD              | Connected   | OK     |   |

## 6. Operation of SBC

| # | Item                        | Test   | Status   | Notes   |
|---|-----------------------------|--|--|---|
| 1 | PC PSU                      | Connect power cable to 220VAC and turn ON the PSU.   | OK   | PC is powering up, showing power up displays  |
| 2 | Hit "DEL" and enter BIOS    | Verify "PC Health Status"<br><br>+5VDC<br><br>+12VDC<br><br>-5VDC<br><br>-12VDC<br><br>Vbat +3.3V<br><br>System Temperature<br><br>CPU temperature | OK<br><br><br><br><br><br><br><br>33 deg<br><br>24 deg | +4.7 to +5.3<br><br>+10.5 to +13.5<br><br>-5.2 to -4.8<br><br>-14 to -10<br><br>+3.15 to 3.40<br><br>Less 60 deg<br><br>Less 55 deg |
| 3 | OS                          | Windows XP is powered up   | OK   |   |
| 4 | Keyboard PS/2               | Press WINDOWS key, verify opening of windows. Use other keys to verify proper operation  | OK   |   |
| 5 | Mouse – PS/2                | Move mouse   | OK   |   |
| 6 | Ethernet – 100MB connection | Perform CMD – IPCONFIG test.<br><br>Verify display IP properties   | OK   | MAC address:<br><br>00-08-9B-84-3A-F6   |
| 7 | Floppy                      | Put Floppy diskette in the FDD.<br><br>Open My computer and navigate to the FDD.   | OK   |   |
| 8 | CD/DVD IDE                  | Put CD in the DVD. Open My computer and navigate to the  | OK   |   |

| #  | Item               | Test  | Status | Notes                                 |
|----|--------------------|---|--------|---------------------------------------|
|    |                    | CD.   |        |                                       |
| 9  | Memory type        | DDR 400MHz  | OK     | While booting                         |
| 10 | Memory size        | Right click on My computer.<br><br>Select properties.<br><br>Memory size: 0.98GB    | OK     | 10007.48MB                            |
| 11 | CPU type and speed | Right click on My computer.<br><br>Select properties.<br><br>CPU: Pentium 4, 2.8GHz | OK     | Processor ID:<br><br>00000F29         |
| 12 | USB on SBC panel   | Use USB mouse to check.   | OK     | USB1 on the SBC rear panel            |
| 13 | USB 2              | Use USB mouse to check.   | OK     | USB2 on SBC board                     |
| 14 | USB 3              | Use USB mouse to check.   | OK     | USB3 on SBC board                     |
| 15 | USB 4              | Use USB mouse to check.   | OK     | USB4 on SBC board                     |
| 16 | COM1 and COM2      | Perform communication test between COM 1 and COM2                                   | OK     | Use RS232 D9<br><br>F-F crossed cable |
| 17 | CPU Cooling Fan    | Verify that the FAN is rotating and there is air blow                               | OK     |                                       |

**Checked by: Dan Gilboa****Date: 28 Feb 2012**