

# Product Certification Report

Report No : 09E010043

|  |   |
|--|---|
| Product Model  | <b>PFM-535S</b>   |
| Description  | <b>Vortex86 Soc PC/104 Board</b>  |
| Test Configuration   | <input checked="" type="checkbox"/> New product<br><input checked="" type="checkbox"/> CPU Board : PFM-535S A1.0<br><input checked="" type="checkbox"/> BIOS : PFM-535S A0.1 Rev1.0(05/14/2009)<br><input checked="" type="checkbox"/> Carrier Board : N/A<br><input checked="" type="checkbox"/> Expansion Board : N/A<br><input checked="" type="checkbox"/> Chipset :<br><input checked="" type="checkbox"/> CPU : On Board CPU Vortex86 SoC Processors A9100<br><input checked="" type="checkbox"/> North Bridge : Vortex86 Soc<br><input checked="" type="checkbox"/> South Bridge : Vortex86 Soc<br><input checked="" type="checkbox"/> VGA Chipset : Vortex86 Soc<br><input checked="" type="checkbox"/> Audio Chipset : N/A<br><input checked="" type="checkbox"/> Ethernet Chipset :<br><input checked="" type="checkbox"/> I/O Chipset : Vortex86 Soc<br><input checked="" type="checkbox"/> TV Chipset : N/A<br><input checked="" type="checkbox"/> SDVO : N/A<br><br><input checked="" type="checkbox"/> Remark : QE NPDP P5 Report for PFM-535S A1.0 |
| <input checked="" type="checkbox"/> Pass<br><br><input type="checkbox"/> Fail<br><br><input type="checkbox"/> Pass with Deviation<br><br>Comment: _____<br><br>_____ |   |

2009/09/17

Issue date

Wenyuan Yang

Manager

Jerry Tsai

Test Engineer

**Test result for certification**

| Default System Configuration |  |
|------------------------------|--|
| CPU                          | On Board CPU Vortex86 SoC Processors A9100 |
| Memory Type                  | On Board DDR2 128MB                        |
| LCD Panel                    | N/A  |
| CRT Mode                     | Viewsonic E70 17"                          |
| Primary IDE Master           | WD800BB / 80GB / 7200 / 8M / 3.5"IDE HDD   |
| Primary IDE Slave            | ASUS DVD-E818A DVD-ROM                     |
| PS/2 Keyboard                | Acer 6511-TA                               |
| PS/2 Mouse                   | Aopen O-70G (silver)                       |
| Power Supply Type            | AT Power Supply: EMACS SP2-4300F           |
| Operating System             |  |
| Microsoft® Windows® CE.NET   | Version 5.0 english version                |
| ActiveSync Version           | 3.7  |
| Free DOS Kernel Version      | 1.1.23 (Build 2023) [Mar 27 2001]          |

| Start Function Check                                  | Result |
|---|--------|
| <b>1. Programs function Check</b>                     | PASS   |
| 1-1. Command Prompt function Check                    | PASS   |
| 1-2. Internet Explorer function Check                 | PASS   |
| 1-3. Media Player function Check                      | PASS   |
| 1-4. Microsoft WordPad function Check                 | PASS   |
| 1-5. Windows Explorer function Check                  | PASS   |
| <b>2. Favorites function Check</b>                    | PASS   |
| <b>3. Documents function Check</b>                    | PASS   |
| <b>4. Settings function Check</b>                     | PASS   |
| 4-1. Control Panel Function Check                     | PASS   |
| 4-2. Network and Dial-up Connections function Check   | PASS   |
| 4-3. Taskbar and Start Menu Properties function Check | PASS   |
| <b>5. Help Contents function Check</b>                | PASS   |
| <b>6. Run Function Check</b>                          | PASS   |
| Command Prompt Function Test                          | Result |
| Write in Character                                    | PASS   |
| Copy Character  | PASS   |
| Paste Character                                       | PASS   |
| Clear Screen  | PASS   |
| Setting Screen Buffer                                 | PASS   |
| Help icon   | PASS   |
| Close icon function                                   | PASS   |
| Internet Explorer Function Test                       | Result |
| File icon function                                    | PASS   |
| Edit icon function                                    | PASS   |
| View icon function                                    | PASS   |
| Favorites function                                    | PASS   |
| Media Player Function Test                            | Result |
| File icon function                                    | PASS   |
| View icon function                                    | PASS   |
| Playback icon function                                | PASS   |
| Microsoft WordPad Function Test                       | Result |
| File icon function                                    | PASS   |
| Edit icon function                                    | PASS   |
| View icon function                                    | PASS   |

|   |         |
|---|---------|
| Format icon function  | PASS    |
| Tools icon function   | PASS    |
| Windows Explorer Function Test                                    | Result  |
| File icon function  | PASS    |
| Edit icon function  | PASS    |
| View icon function  | PASS    |
| Go icon function  | PASS    |
| Favorites icon function   | PASS    |
| Favorites Function  | Result  |
| Add to Favorites Function   | PASS    |
| Organize Favorites  | PASS    |
| Documents Function Test   | Result  |
| File icon securely  | PASS    |
| Edit icon function  | PASS    |
| View icon function  | PASS    |
| Format icon function  | PASS    |
| Tools icon function   | PASS    |
| Settings Function Test – Control Panel Function                   | Result  |
| Certificates icon function  | PASS    |
| Date/Time icon function   | PASS    |
| Dialing icon function   | PASS    |
| Display icon function   | PASS    |
| Input Panel icon function   | PASS    |
| Internet Options icon function                                    | PASS    |
| Keyboard icon function  | PASS    |
| Mouse icon function   | PASS    |
| Network and Dial-up Connections icon function                     | PASS    |
| Owner icon function   | PASS    |
| Password icon function  | PASS    |
| PC Connection icon function                                       | PASS    |
| Regional Settings icon function                                   | PASS    |
| Remove Programs icon function                                     | PASS    |
| Storage Manager icon function                                     | PASS    |
| System icon function  | PASS    |
| Settings Function Test – Network and Dial-up Connections Function |         |
| Dial-Up Connection (COM1-RS232)                                   | PASS    |
| Dial-Up Connection (COM2-RS232)                                   | PASS    |
| By Loopback (COM2-RS422)  | Remark1 |
| By ADAM (COM2-RS485)  | PASS    |
| Dial-Up Connection (COM3)   | N/A     |
| Dial-Up Connection (COM4)   | N/A     |
| Direct Connection (COM1-RS232)                                    | PASS    |
| Direct Connection (COM2-RS232)                                    | PASS    |
| By Loopback (COM2-RS422)  | Remark1 |
| By ADAM (COM2-RS485)  | PASS    |
| Direct Connection (COM3)  | N/A     |
| Direct Connection (COM4)  | N/A     |
| Activesync Function Test  | PASS    |
| Settings Function Test – Taskbar and Start Menu Properties        | Result  |
| Always on top function  | PASS    |
| Auto hide function  | PASS    |
| Show Clock function   | PASS    |
| Run Function Test   | Result  |
| IE explore Application (iesample.exe)                             | PASS    |
| Explorer Application (explorer.exe)                               | PASS    |

|                                      |      |
|--------------------------------------|------|
| Ipconfig Application (ipconfig.exe)  | PASS |
| WINCE load Application (cestart.exe) | PASS |
| Cmd Application (cmd.exe)            | PASS |
| Control Application (control.exe)    | PASS |
| Peghelp Application (peghelp.exe)    | PASS |
| Pword Application (pword.exe)        | PASS |
| Repllog Application (repllog.exe)    | PASS |
| Route Application (route)            | PASS |
| Rflush Application (rflush)          | PASS |

| Remark |  |
|--------|--|
| 1      | The test software WINSSD.exe for COM port(RS422) can not be run in WinCE environment so we can not verify if the function of RS422 is normal or not.(This version of BIOS only supports WinCE) |

**. Power Consumption Test  
Platform Information:**

|                    |   |
|--------------------|---|
| CPU Board          | PFM-535S1.0                                     |
| Carrier Board      | N/A   |
| BIOS               | PFM-535S A0.1 Rev1.0(05/14/2009)                |
| CPU                | Vortex86 SoC Processors A9100                   |
| Memory             | On Board DDR2 128MB                             |
| Operating System   | English Windows CE                              |
| CRT                | ViewSonic E70 17"                               |
| LCD                | N/A   |
| Compact Flash      | N/A   |
| Chipset Software   | Geode LX AES Crypto Driver 2.1.0.0 (10/28/2005) |
| Graphics Media     | N/A   |
| LAN Driver         | N/A   |
| Audio Driver       | N/A   |
| Touchscreen Driver | N/A   |
| Power Supply       | LEMACS SP2-4300F 300W AT POWER                  |

**Test Equipment:**

|              |   |
|--------------|---|
| Equipment    | AC/DC Clamp Meter                       |
| Manufacturer | PROVA                                   |
| Model name   | CM-01                                   |
| Standard     | Reference to CE EN 61010 Test Procedure |
|              | Reference to UL Test Procedure          |

**Equipment Certified Calibration:**

|                    |          |
|--------------------|----------|
| Calibrated Company | IPE (儀寶) |
|--------------------|----------|

|                       |                  |
|-----------------------|------------------|
| S/N                   | 00004072 (DM215) |
| Report No             | 7C21P566         |
| Calibration Date      | Jan. 14,2008     |
| Next Calibration Date | Jan. 13, 2009    |
| Test By               | Mick             |

- Test Point:**
1. Power on machine and boot into Windows environment
  2. Run test software: Prime95 to make system heavy loading in order to measure its maximum current
  3. Use Prova EN61010(set as 40A) to measure each current of system different mode

| Test Environment                      | ATX Power: N/A |   | AT Power: ZECK ZKS-300W                    |   | Note |
|---------------------------------------|----------------|---|--|---|------|
| Model                                 |                |   |  |   |      |
| CPU                                   | N/A            |   | On Board CPU Vortex86 SoC Processors A9100 |   |      |
| HDD                                   | N/A            |   | Transcend CF 4GB                           |   |      |
| RAM                                   | N/A            |   | On Board DDR2 128MB                        |   |      |
| OS Environment                        | N/A            |   | English Windows CE                         |   |      |
| Normal Mode (+5V)                     | N/A            | A | 1.82                                       | A |      |
| Suspend Mode (+5V)                    | N/A            | A | N/A  | A |      |
| 5VSB in Power Off Mode (just for ATX) | N/A            | A | -----                                      | A |      |
| 5VSB in Power On Mode (just for ATX)  | N/A            | A | -----                                      | A |      |
| Normal Mode (+12V)                    | N/A            | A | N/A  | A |      |
| Suspend Mode (+12V)                   | N/A            | A | N/A  | A |      |
| Normal Mode (+3.3V) (just for ATX)    | N/A            | A | -----                                      | A |      |
| Suspend Mode (+3.3V) (just for ATX)   | N/A            | A | -----                                      | A |      |
| Normal Mode (-12V)                    | N/A            | A | N/A  | A |      |
| Suspend Mode (-12V)                   | N/A            | A | N/A  | A |      |
| Normal Mode (-5V)                     | N/A            | A | N/A  | A |      |
| Suspend Mode (-5V)                    | N/A            | A | N/A  | A |      |