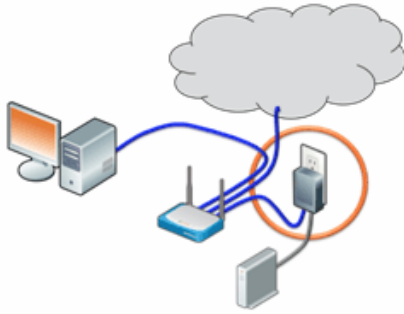




## **Ionics' Plug Computer (Sheevaplug™) Brief**

### **Cool. Compact (ultra). Compelling.**

Three Cs epitomize this year's hottest item proudly manufactured by [Ionics EMS, Inc.](http://www.ionics.com)

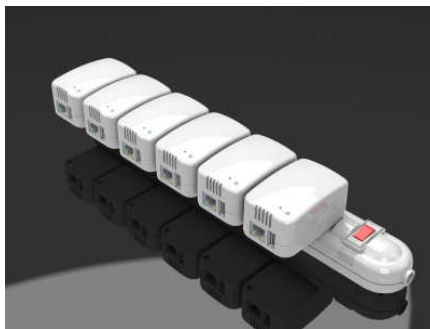


People everywhere have slowly become accustomed, even addicted to online connectivity. Modern consumer electronic devices, smart phones and social networking have made it easier than ever for people to download and share digital assets with family and friends. With this development, there is a growing need for services to secure and manage these contents easily and reliably.

In today's technology age, personal computers have become indispensable for many consumers to house, backup and share digital content. Laptops and netbooks eventually evolved from the inevitable need for a portable and compact device to run these same functions.

Now, the latest breakthrough in computing technology is here in the form of a Plug Computer, a new and innovative device for end users to secure, manage and share digital content seamlessly, conveniently and efficiently.

This small, powerful, fist-sized computer plugs into the wall socket and can run network-based services that normally require a dedicated PC. It can run 24/7 and utilizes only a small fraction (approximately 5 watts) of the energy consumed by an always-on desktop computer or laptop (approximately 25-100 watts), at a fraction of the cost.



The size is so compact you can plug two of these devices side by side or form a plug farm on an extension cord without worrying about blocking the adjacent socket space. Have the freedom to use as many Plug Computers (for varied applications) as needed without worrying about wasted space.

In a nutshell, the [Ionics Plug Computer](http://www.ionics.com) is meant to simplify the management of digital assets by offering PC-like performance at an inexpensive price.

A software service can be bundled together with the device and can be targeted at different market segments. Everyday consumers can use the plug for media sharing and backup services.

It's hard to believe that something so small and cutting edge can be so complete. It is regaled as a "game changer" in the world of modern computing. The "next" big thing is officially here, and it's brought to you by [Ionics EMS, Inc.](http://www.ionics.com)

Development kits are available at the end of July. They come in white, black or the customizable color of your choice, and are available in US, EU and UK models.



Product Specifications	
<b>General</b>	<ul style="list-style-type: none"> <li>Linux based Giga network Server with Application Software for small Business</li> </ul>
<b>Potential Applications</b>	<p><i>The application range is bounded only by the imagination of the developer community.</i></p> <ul style="list-style-type: none"> <li>Dedicated Home File Server,</li> <li>Multimedia server for DLNA-enabled players (e.g., iPhone, Sony PSP, others)</li> <li>Multimedia server for Web proxy, enabling fast, cached access to your favorite web sites,</li> <li>Storage of home video surveillance streams,</li> <li>Automate downloads and uploads to your favorite photo sharing web sites,</li> <li>Anti-virus</li> <li>Many more.....</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>Marvell Sheeva 88F6281 RISC Architecture ARM processor 1.2 GHz</li> <li>16 kilobytes of instruction cache (I-cache)</li> <li>16 kilobytes of data cache (D-cache)</li> <li>256 KB L2 cache</li> <li>Eight-channel Generic DMA controller</li> <li>RTC with battery</li> </ul>
<b>Memory and Storage</b>	<ul style="list-style-type: none"> <li>512 MB DDR2, 400 MHz</li> <li>512 MB NAND Flash</li> </ul>
<b>I/O Ports</b>	<ul style="list-style-type: none"> <li>One USB 2.0 port. Overload protection. Type-A connector</li> <li>One Giga LAN port supports 1000 Base-T, 100 Base-T, and 10 Base-T. Shielded RJ-45 connector with built-in LEDs</li> <li>Marvell 88E1118R Gbit PHY</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>Built-in AC high efficiency 13W power supply (Average power consumption ~ 5W)</li> <li>Power input: 90-240VAC, 50-60 Hz</li> <li>Recessed Reset switch</li> <li>US, EU &amp; UK models available</li> </ul>
<b>LEDs</b>	<ul style="list-style-type: none"> <li>Tri-color: Power- Green LED / Fail- Red LED/ Critical - Amber LED</li> <li>Link bi-color Green/Yellow LED integrated in LAN port</li> </ul>
<b>Software Support</b>	<ul style="list-style-type: none"> <li>Linux 2.6.23</li> <li>Boot-loader</li> <li>Custom image, MAC address, Unique ID may be loaded during production</li> </ul>
<b>Regulatory Compliance</b>	<ul style="list-style-type: none"> <li>Safety: UL (pending)</li> <li>EMI/EMC: FCC, CE (pending)</li> <li>RoHS</li> </ul>
<b>Warranty</b>	<ul style="list-style-type: none"> <li>1 year standard. (See applicable limited warranty terms and conditions*).</li> <li>Extended warranty available**</li> </ul>
<b>Physical Dimensions</b> <i>(Ultra Compact Form Factor with large memory capacity of 512 MB)</i>	<ul style="list-style-type: none"> <li>US: 55(W) x 77(L) x 41.5(D) mm / 1.97(W) x 3.03(L) x 1.63(D) inch</li> <li>EU: 55(W) x 77(L) x 41.5+20.3(D) mm / 1.97(W) x 3.03(L) x 1.63+0.8(D) inch</li> <li>UK: 55(W) x 77(L) x 41.5+7(D) mm / 1.97(W) x 3.03(L) x 1.63+0,28(D) inch</li> </ul>
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>ABS enclosure with internal heat sink</li> <li>Black or White -High Gloss Finish for high aesthetics appeal (custom ID is optional)</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>Temperature range: <ul style="list-style-type: none"> <li>- Operating: 0°C to 40°C (32°F to 104°F);</li> <li>- Storage: -25°C to 70°C (-13°F to 158°F)</li> </ul> </li> <li>Humidity: 5% to 95% non-condensing</li> </ul>
<b>Accessories (optional)</b>	<ul style="list-style-type: none"> <li>CAT6 1.5 m LAN Cable standard</li> <li>USB Cable</li> </ul>
<b>Development Kit version</b> <i>(for Software Developers)</i>	<ul style="list-style-type: none"> <li>Special version of Retail product</li> <li>Additional Development Kit extender casing with access to UART and JTAG</li> <li>Bundled Linux distribution, Developer's SDK &amp; Documentation</li> <li>Community support</li> </ul>
<b>Custom Retail Version</b> <i>(With access to UART)</i>	<ul style="list-style-type: none"> <li>Special version of Retail Kit (mass pro version) with port to that allows access to UART without disassembly of Housing</li> <li>Console cable to access the UART of Custom Retail Version of Plug Computer</li> </ul>

❖ Specifications are subjected to change without prior notice

❖ Certifications pending

❖ Customer may the use original design and/or with optional own customized Logo or optionally specify a different ID design

\*/\*\* to be advised

## Developer's Kit

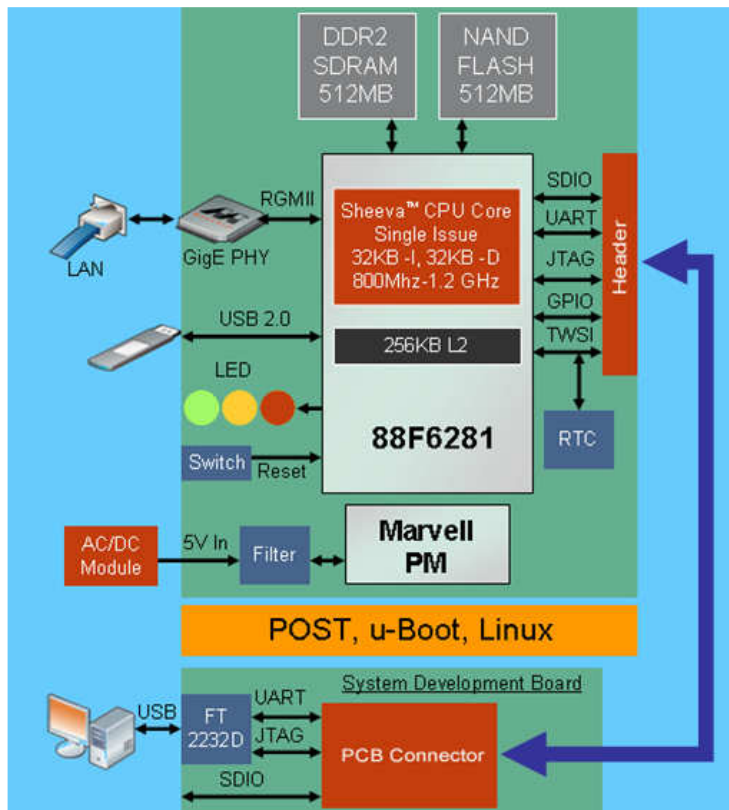
For developers, a development kit is available which comprises the Developer's version of the Plug Computer and an add-on USB-based debug connection (with access to UART and JTAG) which enables simple debugging and reprogramming.

Included with the Development Kit Hardware are:

- Bundled Linux distribution, Developer's SDK & Documentation
- Community support



## Ionics Plug Computer Block Diagram



**About Ionics:** Ionics EMS is the leading and most experienced electronics manufacturing services provider in the Philippines. It has a proven track record in a broad range of services like design, engineering, manufacturing and logistics solutions in the computing, telecommunications, consumer, automotive, industrial and medical fields, as well as ODM capabilities.

URL: [www.ionics-ems.com](http://www.ionics-ems.com)

Email: [sales@ionics-ems.com](mailto:sales@ionics-ems.com)