# Port Mobile Empower Hardware

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**ABSTRACT -** The ultimate aim of Port-Mobile is to reduce e-wastages which are increasing a lot due to technology innovations. Port-Mobile allows the user to replace any component of the phone which he/she is uncomfortable with. For example, a user can replace a better camera with a highly performing lens if required. Similarly, Port-Mobile lets a user to replace Speakers, Microphone, Display Screen, Bluetooth or a Wi-Fi. A user may change a single component instead of replacing the entire phone with lot of bucks.

**KEYWORDS -** Mobile, E-wastages, Hardware,

I.INTRODUCTION

Imagine a situation where you have the freedom to choose the functionality's of your own mobile phone. Fight it all you want; now users have the flexibility of choosing their own mobile upgrades as their wish and need. So it's time to stop resisting and start preparing for the revolution about to happen in the mobile industry .Most of the mobile manufacturer's in current market impose strict rules about their technology. They keep tight control over the hardware and software they manufacture, believing it would be easier to secure and manage their privacy. Some even went so far as to lock down their technologies, meaning users couldn't do things like change functionalities according to their Preference. Our Goal was only one thing, to give freedom and power to users to choose the functionalities of their mobile phone. For E.g., currently a user is holding mobile phone which has a configuration of 5mp camera, 1 GB of RAM, Dual core processor; of course the above mentioned Configured mobile phone will be outdated with less than two year. So the user has got no other option other than replacing the mobile phone. Our novel method brings solution to overcome this problem as a revolutionary mobile phone which gives the user the freedom to choose the functionality of their own mobile phone whether it should be a camera or RAM or whatever it may be it's the entire wish of the user who is going to use it. One big innovation is that the mobile will never be outdated; it remains updated all the time. People who is going to get benefited is the ones who hope for better Smartphone ,hereafter which they will hope for better upgrades rather than entire mobile phone.
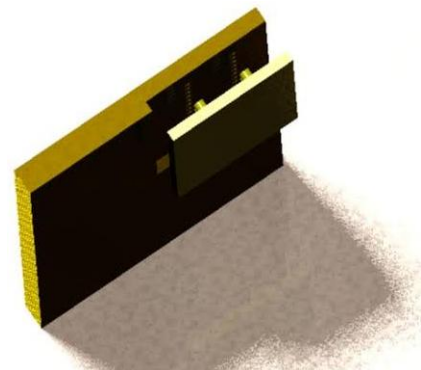


II OS FOR PORT MOBILE

Combination of Android and Linux, Port –Droid The operating system which can make such a Smartphone isn't directly available in the market. So it's a basic

need to modify an operating system in order to keep track of devices connected to it. Whenever a part is connected or removed from the device, the operating system should quickly respond to the change that the device experience to provide the necessary modules to work. There are lots of OS already in field and we planned to customize Android and Linux with more user friendly interface and also with lots of customizable option. We use android for friendly interface and Linux for secured operating. As the hardware components are with inbuilt kernels, The OS can work more effectively and also with high performance. The OS is loaded with many new kernel libraries which have the information about many processes (Pre defined function) this effect in enhances performance of the mobile and also increases touch interface, Battery backup, and reduce the consumption of RAM.



The OS is designed to have two types of mode and a user can change their mode any time as they wish.

1. Developer Mode ( For Developers)
2. User Mode (For Normal Users)

### III. DEVELOPER MODE

It has advanced engineering mode. In developer mode one can customize any part of the operating system like customizing OS, Performance tweaks. A developer can extract and view the files of any apps, Command line editor options, customizing the performance of hardware components like changing the changing camera performance and quality, Tuning audio and more. Changing Graphical user interface, Swap Memory, and also in provides the way for accessing ROOT of the operating system. This will provide 'n' numbers of customizable options for a developer.

### IV. USER MODE

User Mode will be friendlier user interface. Anyone who doesn't have any knowledge about mobiles can easily use this OS. The User interface will be with very basic backend which helps to access their mobile easily. As Empowering Hardware components, OS also will be with full accessible by a user and one can work with this OS as they wish and also customize it to any extent. A user can find more than android in Port-droid.

### V. HARDWARE MODEL

The current smart phones works based on System on chip concept ,a combination chipset that features things such as the actual processor cores, the graphics chipset, the RAM and possibly ROM as well, interface controllers for things such as USB and wireless tech, voltage regulators and more.

The idea behind a system-on-a-chip, or SOC, is that all the critical components of a device are located in a relatively small area on the device. This reduces the size of the component board needed inside and also can help make the device itself faster and more battery efficient. They also help reduce costs for assembling the product and can also be cheaper than an equivalent multi-chip set-up
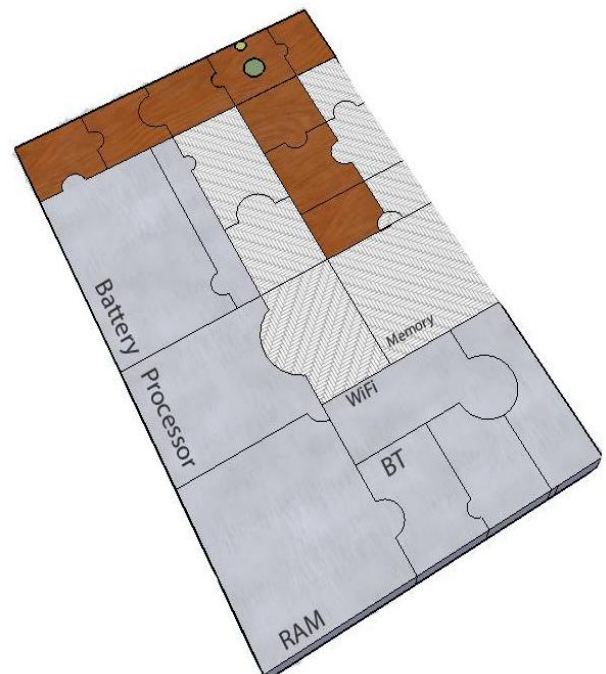


A.Coming to action part:

Step1: Creation of base layer which is the system on chipset concept.
Step2: The second layer being soldered to the base layer.

Step3: the second layer works on the basis of plug and play device concept .It's been incorporated with abilities to store the kernel instructions so as it fetches the kernel instructions from the removable blocks.
Step4: On the other hand, blocks are also being incorporated with the facility to store kernel instructions so as to communicate with the second layer which in turn communicates with the base layer.

## VI. CONCLUSION

Our main objective is to give freedom and power to users to choose the functionalities of their mobile phone. Our novel method brings solution to overcome this problem as a revolutionary mobile phone which gives the user the freedom to choose the functionality of their own mobile phone whether it should be a camera or RAM or whatever it may be it's the entire wish of the user who is going to use it. One big innovation is that the mobile will never be outdated; it remains updated all the time. People who is going to get benefited is the ones who hope for better Smartphone ,hereafter which they will hope for better upgrades rather than entire mobile phone.

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