# Portable Car Dock Phone Amplifier, March 2013

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#### **Problem Definition**

- We plan to build and develop an portable car dock system for smart phones everywhere to use.
- Make the amplifier work with all brands and type of smart phone.
- Smart phones and electrical knowledge to wire the amplifier and speakers together.

## **Solution Specifications**

- You set the phone on the docking station and from there will be a built in USB charger, phone jack to plug into the phone, and external charger and jack for the phone.
- 1 inch speaker

Auxiliary Cable
USB charger
LM386 power amplifier chip
Varying resistors and capacitors

#### **Competitive Analysis**

 On the market there is a docking station for phones. Although, the docking station does not have a built in amplifier or speakers in it. Only power supply to recharge the phone

### **Potential Applications**

 Not only be used for smart phones but can be used on various MP3/MP4 devices as well.

#### **Future Improvement Ideas**

 We plan to keep improving on the idea but trying to make it more compact. Also improve on the quality on the speakers and the circuit board as well.

