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Department of ECE, Adhiyamaan College of Engineering, Hosur, Tamilnadu, India

Advanced Mobile Phone Signal Jammer for CDMA & 3G Networks with Prescheduled Time Duration

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ABSTRACT: This Paper is designed and implemented for Mobile phone signal jammer for 3G networks with prescheduled time duration using Mobile jammer and ARM7. The jamming device broadcasts an RF signal in the frequency range reserved for cell phones that interferes with the cell phone signal, which results in a "no network available" display on the cell phone screen. All phones within the effective radius of the jammer are silenced. The activation and deactivation time schedules can be programmed in microcontroller

KEYWORDS: Mobile jammer, ARM7, LCD, RTC, KEIL **ARM software**.

I. INTRODUCTION

Mobile phone jamming devices are originally developed for law enforcement and military to interrupt communication by criminals and terrorists. Some were also designed to foil the use of certain remotely detonated explosives

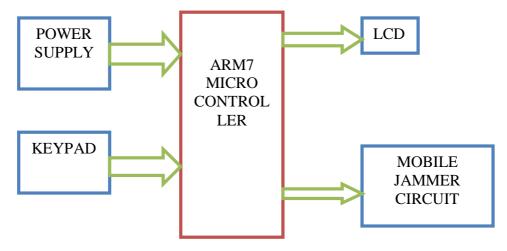


Fig 1 Block diagram showing the mobile phone jammer with pre-scheduled timer using ARM7

POWER SUPPLY: This section is meant for supplying Power to all the sections mentioned above. It basically consists of a Transformer to step down the 230V ac to 9V ac followed by diodes. Here diodes are used to rectify the ac to dc. After rectification the obtained rippled dc is filtered using a capacitor Filter. A positive voltage regulator is used to regulate the obtained dc voltage.

ARM7 Microcontroller: ARM stands for Advanced RISC Machines. It is a 32 bit processor core, used for high end application. It is widely used in Advanced Robotic Applications.



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Figure 2- ARM7 Microcontroller.

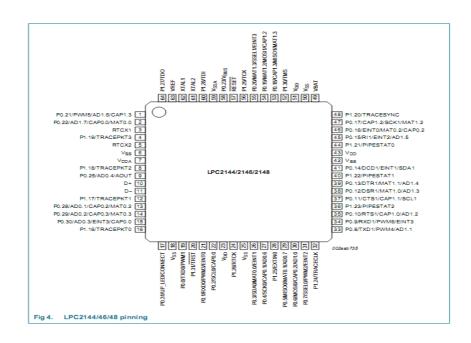


Figure 3- ARM Pin diagram



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LCD Interfacing: Liquid crystal displays (LCDs) have materials, which combine the properties of both liquids and crystals.

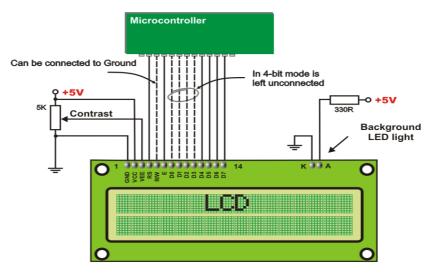


Figure 4- Interfacing of LCD to a microcontroller

To send any command to the LCD, make pin RS=0. For data, make RS=1. Then sends a high -to-low pulse to the E pin to enable the internal latch of the LCD.

Linear Keypad: In electronics, a switch is an electrical component that can break an electrical circuit, interrupting the current or diverting it from one conductor to another. The most familiar form of switch is a manually operated electromechanical device with one or more sets of electrical contacts. Each set of contacts can be in one of two states: either 'closed' meaning the contacts are touching and electricity can flow between them, or 'open', meaning the contacts are separated and non-conducting.

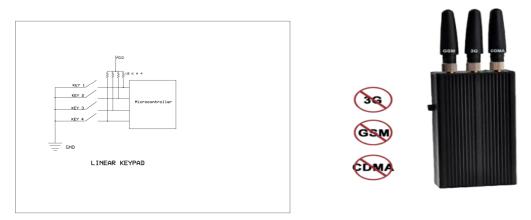


Figure 5 Figure 6- Mobile Jammer

Mobile jammer: The Room Cell Phone Jammer is an instrument to prevent cellular phone receiving and transmitting signals from the base station .Specially for personal usage anywhere. These can prevent secret information leakage through your mobile phone. It only shields the signals of mobile phone and does not effect the normal operation of other electronic devices .These also helps in the prevention of noise pollution generated by mobile phones.



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Features:

1) LED power indicator immediate results when activated.

- 2) Automatic restoration of service.
- 3) Easy to carry anywhere.
- 4) Safe and harmless Ready to work in minutes.
- 5) Three Omni directional antennas are included.

Specifications:

Jamming Area : 2-5 Meters

Cellular Systems: CDMA: 860-885MHz,

GSM: 925-965MHz,

DCS, PHS: 1800-1950MHz

Output Power : 450 Mw

Power Supply : DC 5V / 1500m A / H

Dimension : 95x45x18 M

Antenna : External Omni directional

Types of jammers:

Туре	Emergency call	Efficiency	Regularity approval	Implementation
"A"	Blocked	Low	Not allowed	Very simple
"B"	Allowed	Medium	Required	Complex
"С"	Allowed	High	Required	Complex
"D"	Allowed	Medium	Required	Simple
"E"	Blocked	High	Allowed	Simple

Figure 7-Types of jammers

II. SOFTWARE DESCRIPTION

The user of KEIL centres on "projects". A project is a list of all the source files required to build a single application, all the tool options which specify exactly how to build the application, and if required how the application should be simulated. A project contains enough information to take a set of source files and generate exactly the binary code required for the application. Because of the high degree of flexibility required from the tools, there are many options that can be set to configure the tools to operate in a specific manner. It would be tedious to have to set these options up every time the application is being built; therefore they are stored in a project file. Loading the project file into KEIL informs KEIL which source files are required, where they are, and how to configure the tools in the correct way. KEIL can then execute each tool with the correct options. It is also possible to create new projects in KEIL. Source files are added to the project and the tool options are set as required. The project can then be saved to preserve the settings. The project is reloaded and the simulator or debugger started, all the desired windows opened KEIL project files have the extension

About Keil ARM:

Click on the Keil u Vision3 Icon on Desktop

Click on the Project menu from the title bar

Then Click on New Project

Save the Project by typing suitable project name with no extension in your own folder sited in either C:\ or D:\

Then Click on Save button above.

Select the component for u r project.

Click on the + Symbol beside of NXP.

Select LPC2148 as shown below.

Then Click on "OK".

The Following figure.a will appear.



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Then Click YES.

Now your project is ready to USE.

Now double click on the Target1, you would get another option "Source group 1" as shown in next page. Click on the file option from menu bar and select "new".

The next screen will be as shown in next page, and just maximize it by double clicking on its blue boarder. Now start writing program in either in "C" or "ASM".

For program written in Assembly, then save it with extension ".asm" and for "c" with extension ".C".

Now right click on Source group 1 and click on "Add files to Group Source"

Now you will get another window, on which by default "C" files will appear.

Now select as per your file extension given while saving the file.

Click only one time on option "ADD".

Now Press function key F7 to compile. Any error will appear if so happen figure.a.

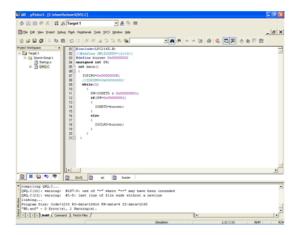


Figure 7a

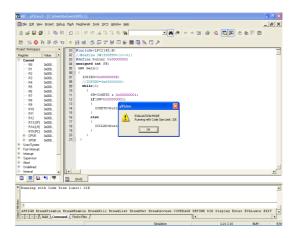


Figure 7b

If the file contains no error, then press Control+F5 simultaneously.

The new window is as follow figure. b. Then Click "OK"

Now Click on the Peripherals from menu bar, and check your required port as shown in figure. c.



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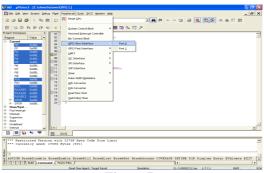


Figure 7c

Drag the port a side and click in the program file

Now keep Pressing function key "F11" slowly and observe. You are running your program successfully.

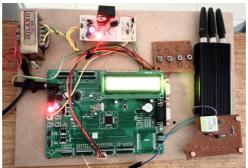


Figure 8-Activation of mobile jammer

III. CONCLUSION

The paper "Advanced Mobile Phone Signal Jammer For GSM, CDMA And 3G Networks With Prescheduled Time Duration" has been successfully designed and tested. Integrating features of all the hardware components used have developed it. Presence of every module has been reasoned out and placed carefully thus contributing to the best working of the unit. Secondly, using highly advanced IC's and with the help of growing technology the project has been successfully implemented.

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