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MOM

A Substitute to Your MOM

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Abstract— Mom is an engineering solution that is a combination of both hardware and software, it consist of a simple circuit that enables the user to search for essentialities that are misplaced in his everyday life ,consuming his morning hours. MOM plays the role of your mother and helps you search for the misplaced things by invoking the small speaker coded speaker (similar to finding your mobile phone by giving missed call).

I. INTRODUCTION

Int People always tend to find solutions for bigger problems like rocket science, power generation etc., and believe that the world will praise them for their solution which is sure to happen but they fail to realise the requirement of simple gadgets which can be used by common people to solve their daily problems such as MOM as it is a simple technology that can touch ordinary man's lives. This is a simple attempt to add comfort to those nervous moments where even the most organised person loses his punctuality. For this device we have worked on the simplest technology of embedded –c

A. About the IC-P89V51RD2(8051)

The 8051 microcontroller can be programmed in PL/M, 8051 assembly, C and a number of other high-level languages. Many compilers even have support for compiling C++ for an 8051. Program memory in the 8051 is read-only, while the data memory is considered to be Read/Write accessible. When stored on EEPROM or flash, the program memory can be rewritten when the microcontroller is in the special programmer circuit. The main reason is to use this IC is also the ease of programming as the numbers of ports are limited.

II.TECHNOLOGY

It doesn't involve any complex technology, it has a small embedded micro board with a gsm board and and a beeper circuit,P89V51RD2 is Philips version of 8051 and is coded using Mac software and is connected to the beeper circuit so when a ring is given to the microprocessor via the gsm circuit board starts the code and invokes the beeper circuit.

III. WHY GSM??

As there are so many technologies that can be implemented efficiently, WHY GSM may be a provoking question, but it has a simple reason that every one owns it and it has reliable network protocol. It also has an advantage that the user may invoke the object from any part of the world. But this may arise several security aspect questions discussed below.

A. Working

To keep it simple for usage of a common man it involves the same procedure as giving a ring to the peer cell phone.
All person has to do is to stick mom onto a his important document and forget .Because MOM will be there to the rescue. All a user has to need is some extra sim cards which he'll have to insert it to the GSM board. And once the gsm board is called it invokes the microprocessor and the beeper is switched on. As this just cost nothing it can be done as many times as required.

1) Abbreviations and Acronyms

GSM -Global System for Mobile Communications, originally *Groupe Spécial Mobile*
IC- integrated circuit or monolithic integrated circuit

2) Networking

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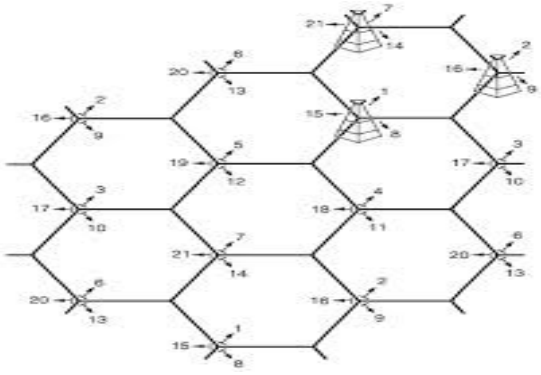

a) Though this device doesn't need manual network design but for understanding the working of MOM in depth it is an essential factor

b) In a cellular radio system, a land area to be supplied with radio service is divided into regular shaped cells, which can be hexagonal, square, circular or some other regular shapes, although hexagonal cells are conventional. Each of these cells is assigned multiple frequencies ($f_1 - f_6$) which have corresponding radio base station. The group of frequencies can be reused in other cells, provided that the same frequencies are not reused in adjacent neighboring cells as that would cause co-channel interface.

c) In the simple case of the taxi company, each radio had a manually operated channel selector knob to tune to different frequencies. As the drivers moved around, they would change from channel to channel. The drivers knew which frequency covered approximately what area. When they did not receive a signal from the transmitter, they would try other channels until they found one that worked. The taxi drivers would only speak one at a time, when invited by the base station operator (this is, in a sense, time division multiple access (TDMA)).

B. Code

```
// Program to make a quiz buzzer using seven segment

#include<reg51.h>
unsigned int digi_val[10]={0x40,0xF9,0x24,0x30,0x19,0x12,0x02,0xF8,0x00,0x10};        // Hex value corresponding to the digits 0 to 9
sbit output_on_pin = P3^0;       // Enable pin to enable the seven segment.
sbit stop_pin = P3^1;       // Stop pin to reset the buzzer.
sbit buzzer_pin=P0^0;       //  Buzzer pin to sound the buzzer.
int flag;
void delay()       // Time delay function
{
   int i,j;
   for(i=0;i<200;i++)
   for(j=0;j<1275;j++);
}
void display(unsigned int current_dig)          // Function to display the resultant digit on the seven segment and sound the buzzer.
{
   P2=digi_val[current_dig];
   output_on_pin = 1;
   buzzer_pin=0;
   delay();
   buzzer_pin=1;
   while(stop_pin != 0);
}
void buzzer() //Function to monitor the input switches
{
```


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```
    flag = 0;
    while(1)
    while (P1 == 0xFE)       //Check if switch  is pressed
      {
        flag = 1;
        display(1);
      }
       P1 = 0xFF;
      stop_pin = 1;
      output_on_pin = 0;
    }
}
void main()
{
    output_on_pin=0;
    stop_pin = 1;
    P1 = 0xFF;
    buzzer();

}
```

IV. FEATURES

Expect from invoking the speaker only when called we can also set time for speakers to prevent leaving any important stuff at the most important moment (example: hall ticket during exams) so when the speaker on the material is invoked and works like remainder. The other applications of MOM can be:

A. MOM The Mimed Friend

In huge libraries like say mostly the government libraries it is hard to find the desired books in spite of having a online guide due to the size and number books we may also fail to notice the required book, to all those here comes the mimed version of mom in which the buzzer is replaced with the led lights. And the technology can also be reduced to Bluetooth with a wider range of coverage.

B. MOM the soldier

In borders there is always a chance of stepping onto a landmine but stepping onto our landmine is the worst ever thing to happen but gladly there are many devices to keep a track on them and MOM can also be used for the purpose all you need is a water proof cover and a louder beeper.

C. MOM the reference finder

Though this feature of MOM is similar to that of mimed mom it is applied can be used in herbiologies which involves working with original parts of plants and are vulnerable to getting destroyed ,that to frequent handling may reduce its life time even more, so mom can be used in herbarium to find their reference without disturbing other exhibits.

V. VISION

The vision for mom is to develop its recycled version from our older cellphones which will reduce the cost of GSM boards and also form a nature friendly product as there at least 10 models releasing every year that makes people discard their old phone and shift to new model that makes a lot of non degradable substance onto earth's surface.

REFERENCES

[1] The 8051 Microcontroller-Keneth. J. Ayle
[2] From GSM to LTE- Wiley

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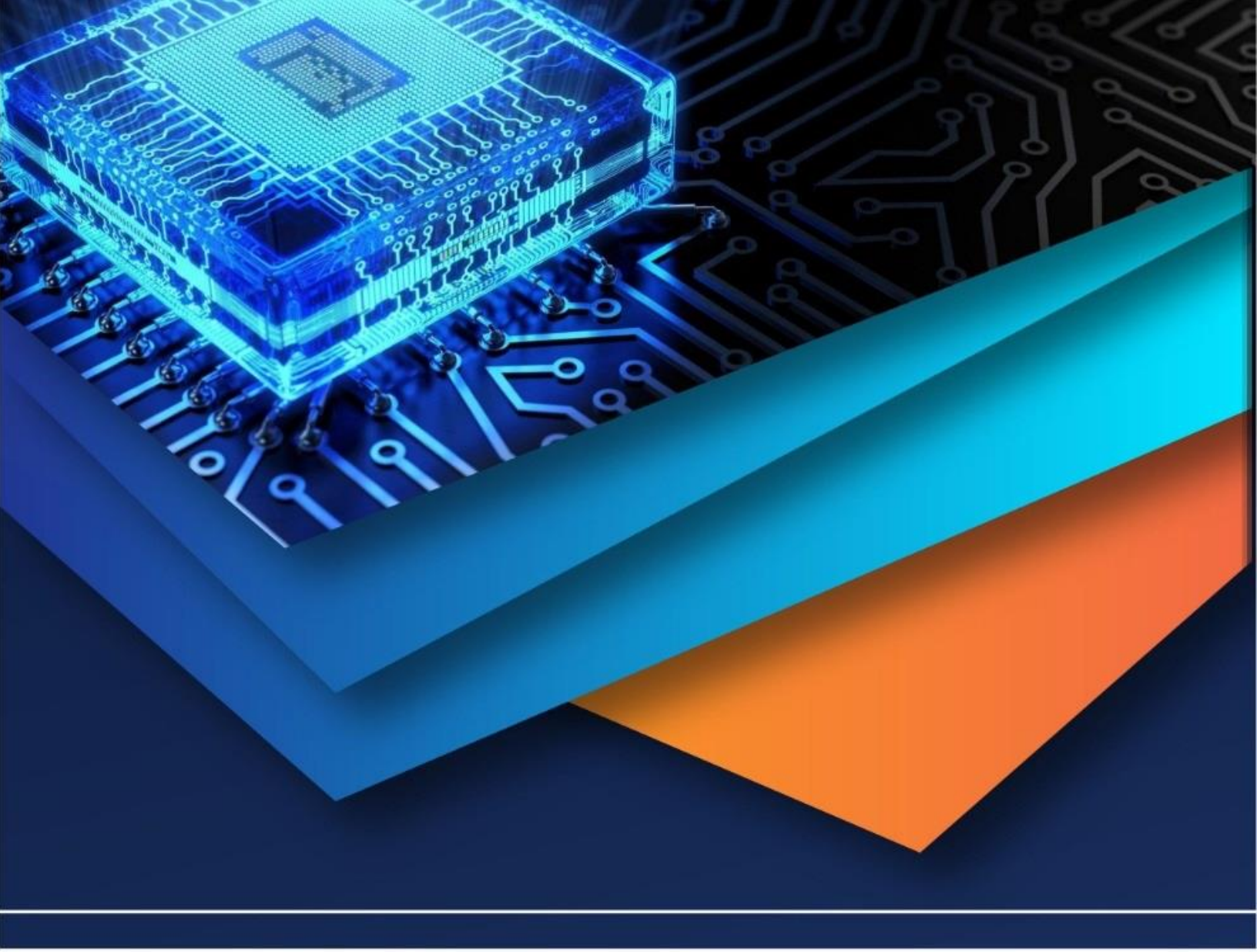

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