GSM: Global System for Mobile Communication

This tutorial describes the way to interface GSM modem with a microcontroller (Atmega16/32).

COMPUTER INTERFACE
Hyperterminal, a terminal emulation program is used to connect GSM. The above program can be found on the following link:
http://www.hilgraeve.com/hyperterminal/

GSM modem is controlled using AT commands.

AT COMMANDS
These AT commands have the format of “AT<x><n>”, where “<x>” is the command, and “<n>” is/are the argument(s) for that command.

e.g.
ATD 1234567890; //calls a number

Entire AT command set can be accessed from:
http://www.developer.nokia.com/Community/Wiki/AT_Commands
GSM ATMEGA INTERFACE

CONNECTIONS

GSM is connected to Atmega via MAX 232.

PIN Arrangement
SMS: Using AT Commands

- Two message modes: PDU and Text
- AT+CMGF=1   //Text Mode
OK
AT+CMGS="9559753551"
> Hello World<Ctrl>+<Z>

+CMGS: 44
OK

SAMPLE CODE FOR SENDING AN SMS

```c
void sendmessage(char msg[], char num[]);
{
    int i=0,j=0;
    puts("AT+CMGF=");
    putchar(49); // sends the ASCII value of '1'
    puts("AT+CMGS=");
    putchar('\');
    while(num[i]!="\0")
    {
        j=(int)num[i];
```
putchar(j);  //sends the ASCII values of the numbers
i++;
}
puts("Hello World");
putchar('26');  //sends the ASCII value of <Ctrl>+<Z>