***GSM***

***1.GSM AT COMMANDS***

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **AT Command** | **DESC** | **Response** |
| 1 | ATE<val> | Echo  Val = 1 (on)  Val = 0 (off) | OK |
| 2 | AT+CICCID | SIM Number | +ICCID: 8991000904222715265  OK |
| 3 | AT+CGSN | IMEI Number | 861123052577077  OK |
| 4 | AT+CIMI | IMSI Number | 404100525065898  OK |
| 5 | AT+CSQ | Signal Strength | +CSQ: 17,99  OK |
| 6 | AT+CSPN? | Service provider  Name | +CSPN: "airtel",1  OK |
| 7 | AT+CCLK? | Real Time  (Read cmd) | +CCLK: "22/02/08,14:42:13+32"  OK |
| 8 | AT+CCLK=<time> | Real Time  (Write cmd) | OK  Or  ERROR |

***2.GSM SMS Commands***

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **AT Command** | **DESC** | **Response** |
| 1 | AT+CPMS? | To check storage | +CPMS: "SM",1,20,"SM",1,20,"SM",1,20  OK |
| 2 | AT+CMGL=? | List msg using status | +CMGL: ("REC UNREAD","REC READ","STO UNSENT","STO SENT","ALL")  OK |
| 3 | AT+CMGR=<i>  AT+CMGR=0 | Read msg at specified index | +CMGR: "REC READ","+91931523XXXX","","22/02/15,11:35:55+22"  Hi dear Hariom  Kaise ho  OK |
| 4 | AT+CMGD=<index>  ,[<delflag>] | Deletes a msg at specified index | OK |
| 5 | **If text mode (AT+CMGF=1):**  **AT+CMGS=<da>[,<toda>]**  **< CR>Text is entered**  **<CTRL-Z/ESC>** | Send msg from  TE | If sending successfully: +CMGS:**<mr>**  OK |
| 6 | AT+CMGW=<da>  <CTRL-Z/ESC> | write msg to sim  strorage | +CMGW: <index>  OK |
| 7 | AT+CMSS=  <index>  [,<da>[,<toda>]] | Send msg from  storage | +CMSS:<mr>  OK  If sending fails:  +CMS ERROR:<er> |
| 8 | AT+CMGRD=  <index> | Read and  Del msg  At same time | +CMGRD: "REC UNREAD","+91870816XXXX","","22/02/15,14:16:24+22"  Hariom Dagar  OK |

***2. Protocol:-***

* **UART3 (Rx** Interrupt**)**
* **Baud\_Rate:- 115200**

***3. MCU :-***

* **STM32F407DISC1**
* **RX\_PIN:- PB11**
* **TX\_PIN:- PD8**