

GSM Energy Meter Debugger Systems

Aim:

This system is used to test the Energy meter and read the status from the meter, and compares the new and old data values then display on LCD and send the data to Pc using RS232 communication.

The machine having basically, the task consisted of three parts:

Part 1: Reading the data from all 8 Energy meter at same time.

Part 2: Measuring data evaluation, and send the data to remote PC.

Part 3: wireless communication of Reader and PC.

Description:

This system having reader, integrator and PC using mobile module. Reader transmit the data (petrol qty) And send to integrator IC then to RS232 to PC. If any to send the message to PC to read the data's using mobile.

The Systems Consists of Three Modules:

The First Module contains:

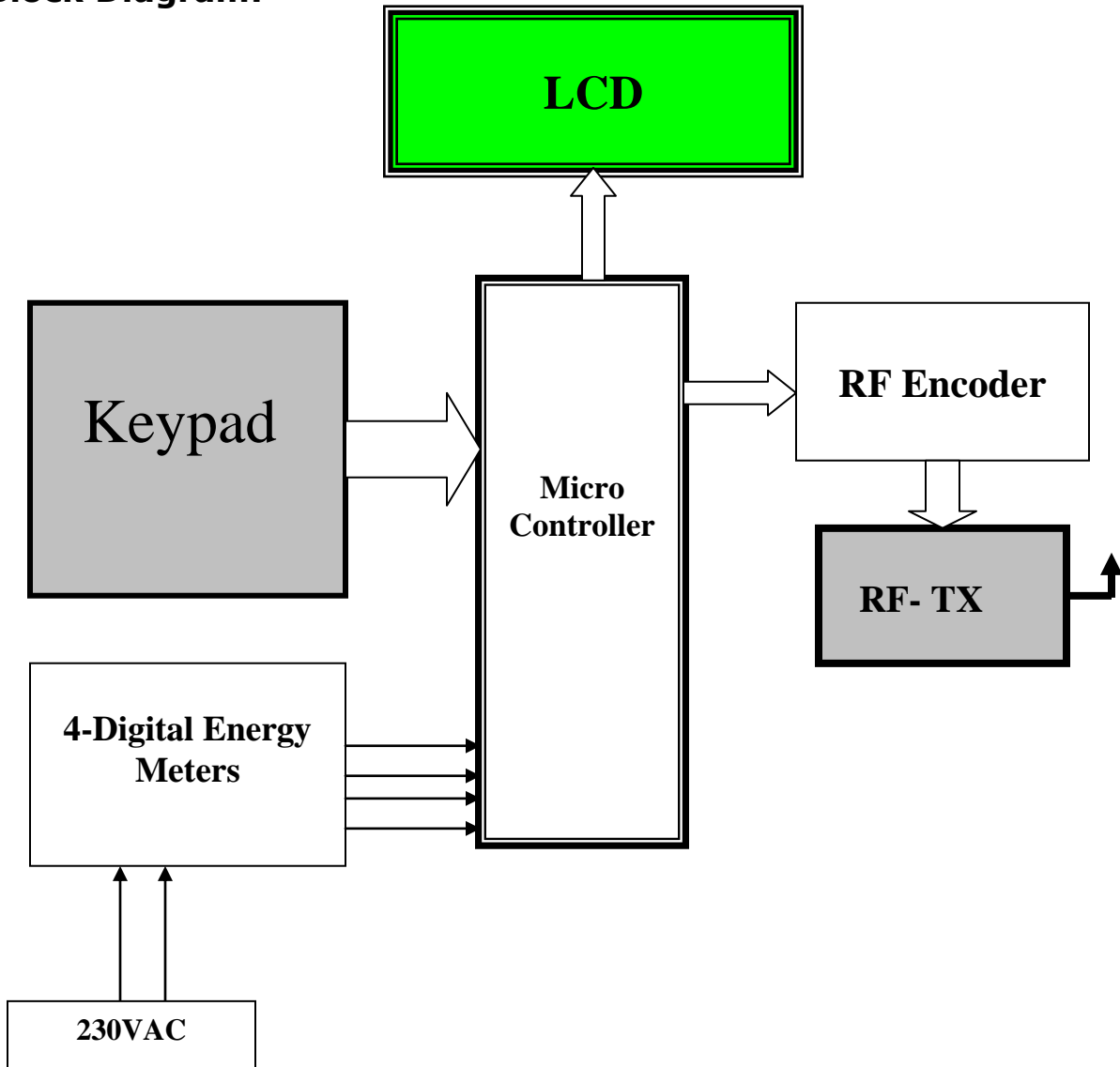
1. Embedded Reader
2. PC (driver) with mobile unit
3. GUI and Data Base in PC

1. Embedded Reader

We receive the data from the Reader Machine and store it in Embedded Reader of Data logger.

Then send to Embedded Integrator System it will send the data to PC. All the dat will stored it in data base in the PC. We can retrieve the data at any time through mobile using mobile communication protocol.

Block Diagram:



1. H/W Design of Reader
 2. S/W Design of Reader
- Linking and Testing

2. PC

It consists of RS232 communication.

- a) Driver Design
- b) GUI
- c) Database
- d) GSM protocol

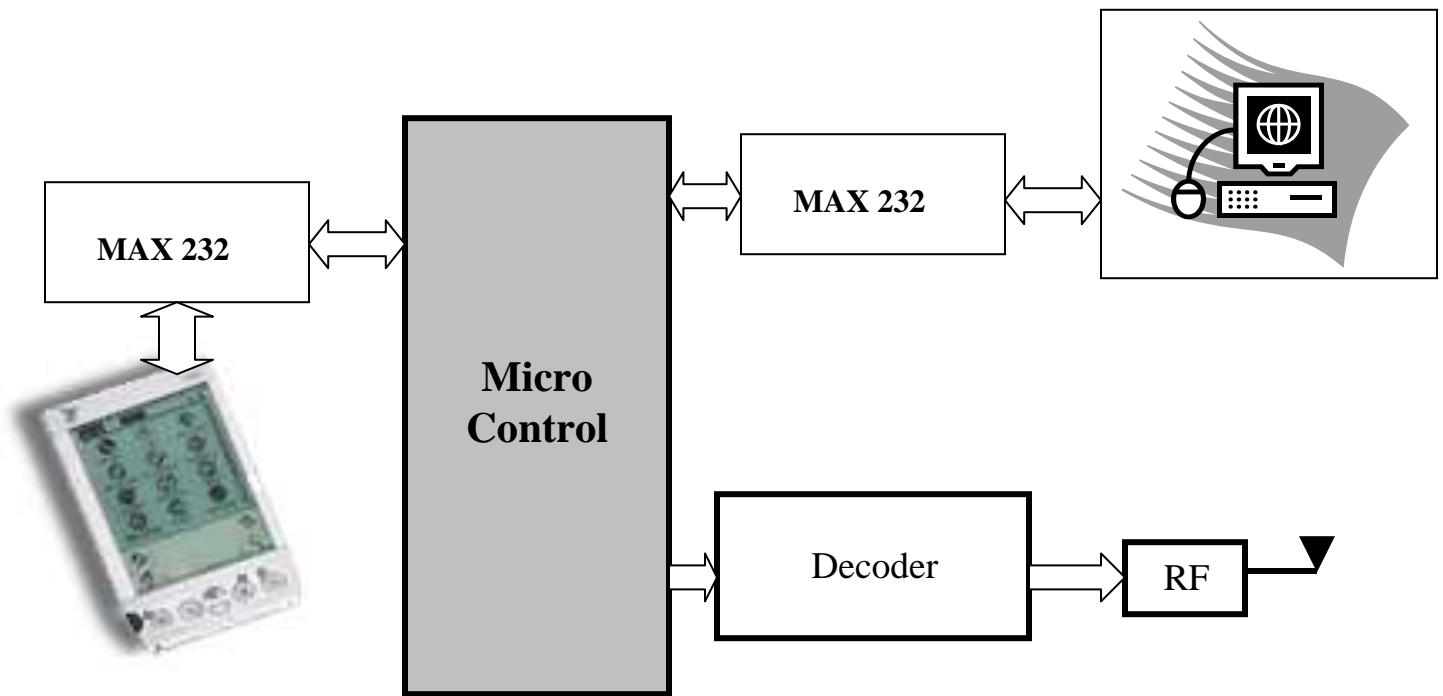
To receive the data from the Embedded Reader Machine through RF Communication using Scheduling method (RTS) to send to PC through RS232 Communication. The protocols of RS232 & mobile communication are to maintain the Serial communication of reader and PC then stored it in Database Using wireless.

3. GUI and Data Base in PC

We received the data from the Embedded Reader systems and stored it in Data base. The data base and GUI is design in Oracle and VB.

It has main form and all sub-forms to link with database.

To read and secure the all data's of reader and PC.



Data's from Embedded Reader:

Address, Motor-ON, Flash-ON, Current Data, Flash-OFF, Motor-OFF

Data's in PC:

1. Address, Motor-ON, Flash-ON, Current Data, Flash-OFF, Motor-OFF, Year, Month, Date, HR, Min, Sec.
2. Total Out Flow of Petrol, Total Stack in Tank, Old Stack, Added Stack, Current Cost, Old Cost.

We can enter the I/P like yyyy/mm/dd/hr/mn through particular mobile.
It will find the DB from the PC then it will send the SMS message to your mobile.

We can find current data of inlet/outlet of petrol.

Executed Systems : RS232 Communication through send data to PC which is not having in multi data Reader at same time and Scheduling

The next generation system which we currently are working on, LCD Display of data base Internal Printer and with Man power to automate to whole Petrol Refilling Station.
Wireless reader and petrol level digital meter.