

Innovative Ana - Digi Multifarious Mobile Supported Platform for New Edge Industries

Swapnadip Barman¹ Avali Banerjee² Suparna Biswas³ Antara Ghosal⁴ Anurima Majumdar⁵

^{1,2,3,4,5}Department of Electronics and Communication Engineering

^{1,2,3,4,5}Guru Nanak Institute of Technology, Kolkata, WB, India

Abstract — This paper shows the connectivity to actuate different types of application including robotic, photonics automated machines etc. The whole system consist of important communication protocol like embedded analog portfolio smart modules, complementary symmetry circuits, fully professional ISM (Industrial Scientific Medical radio frequency band) based 27MHz digital trans-receiving portfolio. Fully mobile interactive base with GSM search engine optimization facility is also introduced.

Keywords: Component; Formatting; Style; Styling; Insert (Key Words)

3	PROFESSIONAL WIFI LINK	45MHz SUPPORTED	+9V DUAL
4	MOBILE LINK GSM	PIC-SIM 2 CHANNEL BASED	USB SMPS SUPPORTED
5	ROBOTICS ANDAPPS.	INDUSTRIAL MECHANICS ANNOUNCIAT ORDIGITAL READOUT	2 AXIAL WB 220VOLT A/C

Table I: Components Required

I. INTRODUCTION

Since the system is totally hi-tech based and includes a set of important functional blocks to execute operations correctly one after another depending upon selection of specific protocol needs to be controlled for a given time of operation. Some of the blocks are an unique analog tiny module composite with ASIIC chips, here the normal audio phonic signals can be trans-recvie through SSB facility. The simplex nature of the analogy can be transformed into full duplexnetwork by adding up an additional module.

A more advanced full digital smart communication spatial based has been planted in the project for quick exchanging of data with high sampling rate.

Totally professional industry grade encoder decoder interactive network with fast changing buffing facility and output conversion is also incorporate.

Finally the mechanism of communication can either be established by full private link managed total security and confidentiality allocation.

Here the international standard GSM Mobile supported handshaking facility with speciality modem followed by required microchip or peripheral controller pic to execute task from the signal to support and command.

The application can cover consumer, industrial, biomedicaland defence sectors with the help of an app.

II. PROJECT DETAILS

A. Components Used In Project

First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 paper size. If you are using US letter-sized paper, please close this file and download the file "MSW_USltr_format".

Sl. No.	Protocol	Style	Voltage
1	ANALOG LINK AUDIO	EMBEDDED 20K/S 20-	+9V
2	SMART ISM LINK	27MHz SUPPORTED ASIC	+9V/2V

B. Flow Chart of Architecture

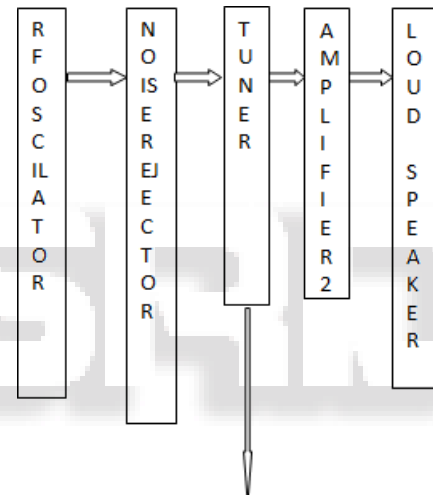


Fig. 1: Audio Communication link

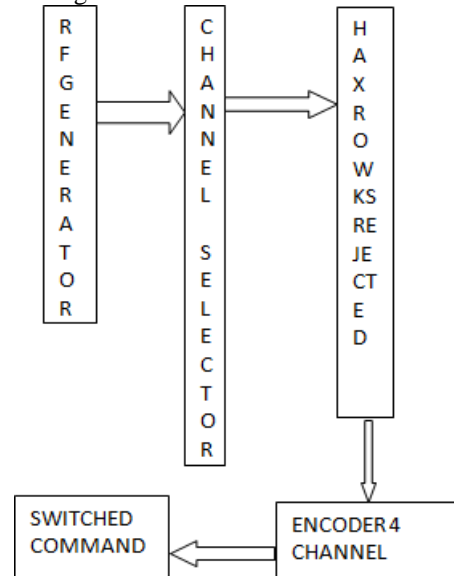


Fig. 2: Smart Communication Link

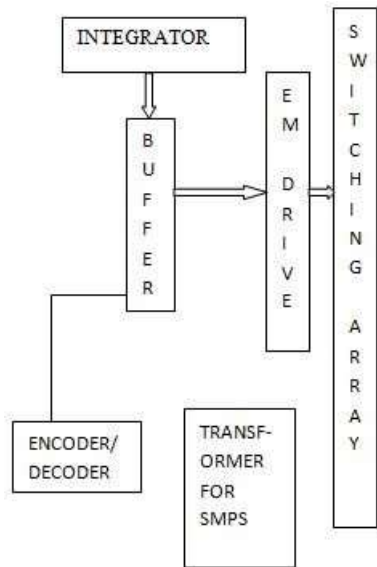


Fig. 3: Professional Link

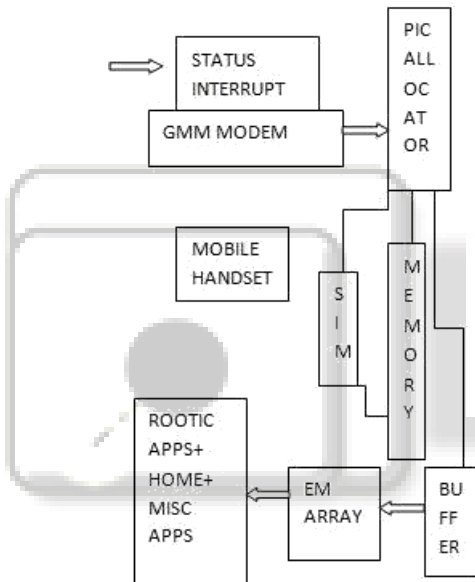


Fig. 4: Mobile Connectivity



Fig. 5: Receiver Side

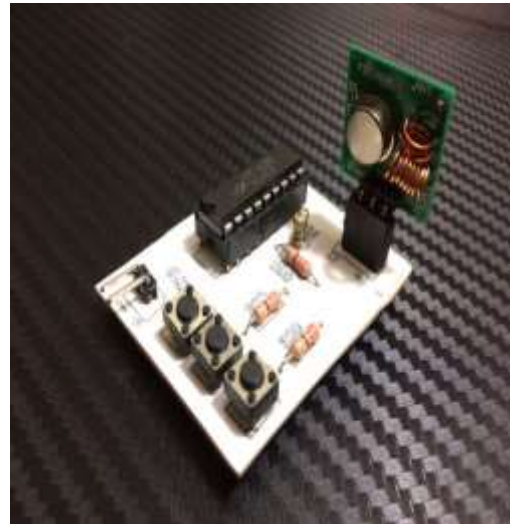


Fig. 6: Transmitter Side

III. WORKING PRINCIPLE

All the communication networking paradigm reasons are governed by internationally branded custom tailor microcircuits, the attention is being given to set in a systematic manner and operational sequence including router through various search engine needs to be formed as per the data sets and instruction sets.

The messaging of the signal can be actuated from the mobile key with upper lower case variation and after successful acceptance of encoded sample. A counter message will be displayed in the message form to come in the command in the mobile set. So the sequence and a spatial timing of acceptance will be established. A spatial timing indicator will show the status of the network availability by duty cycle variation of the signal.

The other operating sequence which includes PLAC, supported microchip and antenna whose settings has been done through attenuation of gain and directivity control. The software has been loaded in an advanced PIC chip where debugging facility through PIC 3 kit debugger has been employed for on spot random loading of data. A set of buffering elements along with channel isolation facility and indicator array is also added. SMPS and linear voltage regulator circuitry is used for providing smooth and continuous power and voltage of the system.

IV. COMMUNICATION PROTOCOL

At present age many advanced protocol are on operation and it is found that most of these protocols are digital in nature. In contrast it is obvious that without the electromagnetic signal propagation with full linearity and it is not at all in between any given transmission and receiving circuitry. In this paper a set of most advanced communication protocol is given to show the resultant offset and used for the comparative study.

A. Analog Embedded Links

RF generator is used to provide carrier frequency and combined with the sample signal in order to modulate. The frequency is propagated through the antenna considering the specific directivity and gain. The demodulation link should

be there and after detecting the signal and required frequency is made available to the users.

Nowadays the advanced linearity controlled filter waveform regulates signal condition. Power managed facilities in a single platform through embedding approach are in use to control and provide command audio face and pictorial with zero failure condition.

B. Digital Smart Module

Tiny placement of interactive transceiver with duplex condition is under industrial demand. So through allocation of frequency response and bandwidth strictly digitised objectly to DSP has been done through apps. ASCII chips and all the discrete elements has been assembled.

C. Professional Digital Paradox

The link used is totally professional type in nature and consist of contemporary symmetry type receiver and transmitter embedded module with full confidentiality. Reported by all the parametric control circuitry with go in under this paradox, the logic called the purpose of controlling. Initially the total number of four channels can be efficiently architecture by engineering design and related excellence.

The output of the channel is in the order of 1.8 v against respective ports. Therefore it meets the buffering at the level. A set of em blocks is added to take care of signed command of various app including robotics, photonics etc. And can be controlled.

D. Specialty Antenna

Log period of simple dipole, yagi uda, horn, covering different band like C,X,Q band etc. are conventionally used. In this paper it is designed to control efficiency and directivity gain under the importance syndrome of communicators to be known specialty antenna.

E. Tunable Property

The best level of tunable approach is obtained through a topical radder link because the detection and ranging both the parameters are under this application antenna. So, the rang of an object and related transmission and reception facility provides and locate the stationary and dynamic movement of the object. In the small research paper the tunable facility to detect an object in the novel way to come under cumulative claim.

F. Cost Reduction

Recurring cost and the initial cost over any project is the basic criteria in an electronic engineering design. So ours will be of no exception. We shall consider both the parameters with the above mentioned parameters and confident to proof our ability through planting to the project.

V. COMPARATIVE ANALYSIS

Quiet obvious of this, that more the investment over the VLSI structure generalisation. The needed effect will be more advantage. But, if there is any compromise lies in between the technological alliance and cost reduction, the resultant output of the optimum limit can be obtained from the app. Under various environment all the limits will be of the optimum limit.

VI. WIDE SPREAD APPLICATION AREA

All the communication system in the GSM will cover a varied nature of app (domestic, consumers, industries, biomedical, aeronautical, difference based area). As per the bandwidth and location of the receiver concerned, the specific operation, sequence and types of the system is selected. We can further update all the portfolio with incorporation of high power buffing facilities, filtration, noise ratio, switching devices where the co-facilities comes from 2co,3co EM drivers.

VII. CONCLUSION

All the robotics, photonics apps, private manage of protocol along with GSM protocol will definitely mate the user to connect any device for performing operational snaps

ACKNOWLEDGMENT

We would like to express our special thanks of gratitude to Dr. Sunipa Roy, Head of the Department for her support.

REFERENCES

- [1] .IEE transactions on antenna and propagation on machine intelligence
- [2] Hilburn and Zorich –microprocessor
- [3] .lebenthel –digital
- [4] .Sanjit k mishra-DSP