

# RFIC TECHNOLOGIES

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by

**SUCHITAV KHADANGA**

**BUSINESS PRESENTATION**



# RFIC TECHNOLOGIES- ABOUT US

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INDIAN COMPANY IN BANGALORE

LOW COST HIGH PERFORMANCE WIRELESS PRODUCT  
COMPANY

- IOT-PRODUCT-WIRELESS EMBEDDED SYSTEM
  - SMART CITY PRODUCT-IOT BASED
    - SMART SCHOOL, HOSPITAL, HOTEL, LIBRARY...
    - SOFTWARE+HARDWARE
    - [WWW.GARUDSMS.COM](http://WWW.GARUDSMS.COM)
  
- WIRELESS IC
  - RFIC CHIP : RF FRONT END CHIP
  - DESIGN SERVICE FOR WIRELESS IC

# SMART WIRELESS PRODUCT CAMERA + RFID + GARUDSMS

## CLOUD COMPUTING

### BIG DATA



GATE-1  
RFID READER +  
WIRELESS CAMERA



GATE-2  
RFID READER +  
WIRELESS CAMERA



SCHOOL  
PRINCIPAL'S  
OFFICE



GATE-4  
RFID READER +  
WIRELESS CAMERA



GATE-3  
RFID READER +  
WIRELESS CAMERA

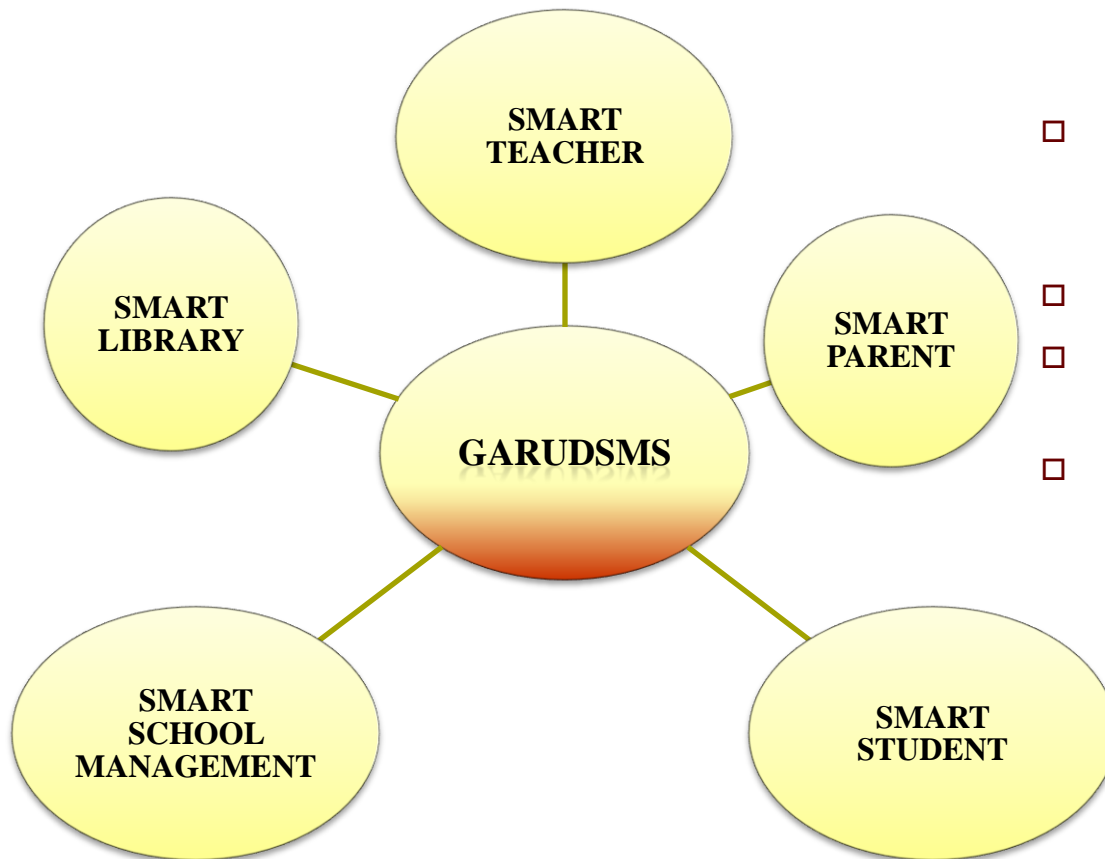


USERS  
OUTSIDE  
SCHOOL



# GARUDSMS-MAKE EVERYBODY SMART FAST AND EFFICIENT

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- ❑ PARENTS WILL GET EMAIL/SMS ON ENTRY/EXIT OF STUDENT
- ❑ STUDENTS WILL USE ALL FACILITIES THROUGH THIS SMART CARD
- ❑ AUTOMATIC ATTENADNCE
- ❑ AUTOMATIC BOOK TRANSACTION
- ❑ INFORM PARENTS ABOUT PAYMENT, ASSIGNMENT, MEETINGS

# RFID SCHOOL MANAGEMENT SYSTEM

School Management System

GARUD INTERNATIONAL SCHOOL

Main | Students | Employees | Attendance | Messaging | Payment | Examination | Admin | Transport | Assets | Library | Support | Help | About

Name	Entry	Exit

Date: 3-6-2015

Name:  
Entry Time:  
Exit Time:

Start Attendance Recording   Stop Attendance Recording

Timesheet Editor

Identification No.  Date: 6/3/2015

Entry: 6/3/2015 8:27:29 PM

Exit: 6/3/2015 8:27:29 PM

Message (for admins)



[WWW.GARUDSMS.COM](http://WWW.GARUDSMS.COM)

# WEB BASED SOFTWARE

localhost/SchoolManagementSystem/

## School Management System

Hello, admin!

[Home](#) [Student](#) [Employee](#) [Attendance](#) [Settings](#)

Select Language ▼

### Home Page. OF SCHOOL MANAGEMENT SYSTEM

The best embedded product for school management system. We had taken all the steps for zero error. Best wishes from the team. Contact us for any problem through support ticket, or drop a mail to [admin@rficdesign.com](mailto:admin@rficdesign.com) for anything you wish.

#### SECTIONS:

- 1 STUDENTS
- 2 EMPLOYEE
- 3 ATTENDANCE
- 3 SETTINGS

# ADVANTAGES

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- ❑ STUDENT SECURITY
- ❑ MORE THAN 30000 STUDENTS ARE USING SINCE JAN 2014
- ❑ AUTOMATICALLY INFORM PARENTS ON ENTRY/EXIT OF STUDENTS
- ❑ AUTOMATIC PAYMENT AND ACCOUNT
- ❑ USES EMAIL/SMS SERVICE TO COMMUNICATE TO STUDENTS/PARENTS
- ❑ WIRELESS CAMERAS NEED NO COMPLEX WIRING
- ❑ NO EXTRA RECORDER FOR CCTV RECORDING
- ❑ LOW COST

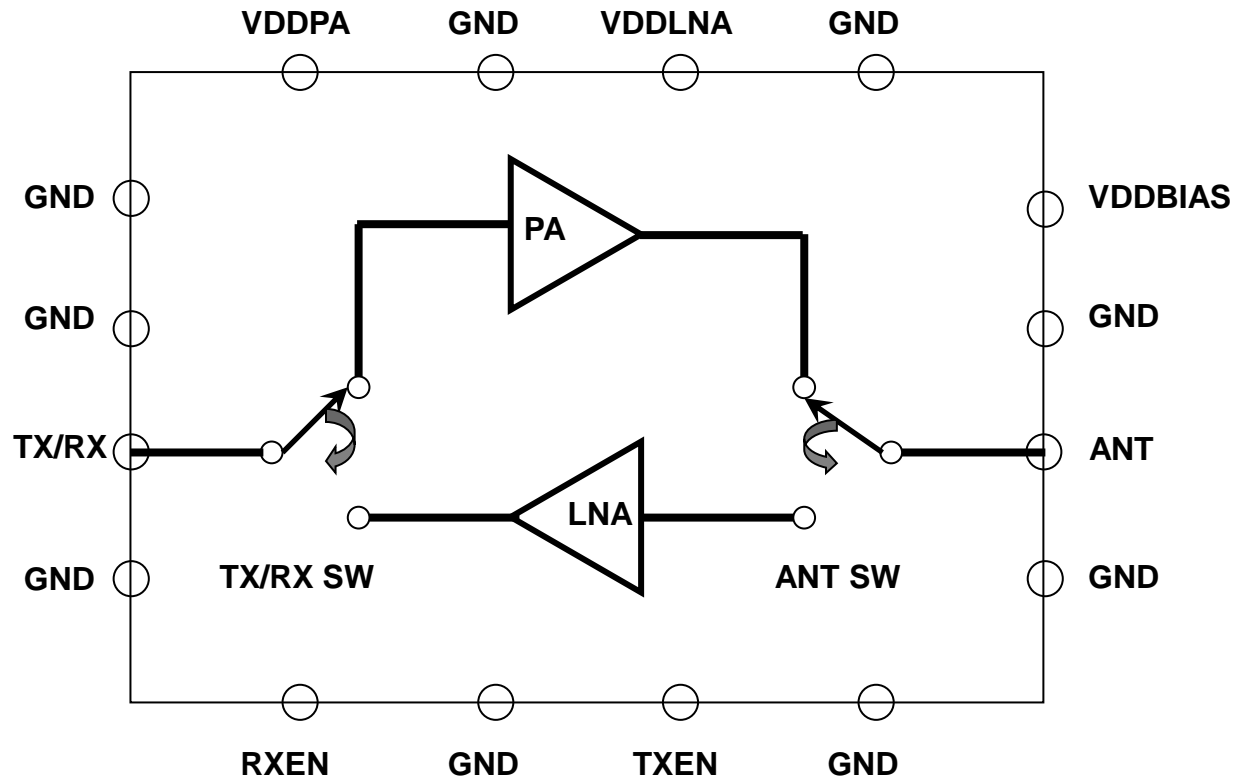
# RFIC FRONT END CHIP

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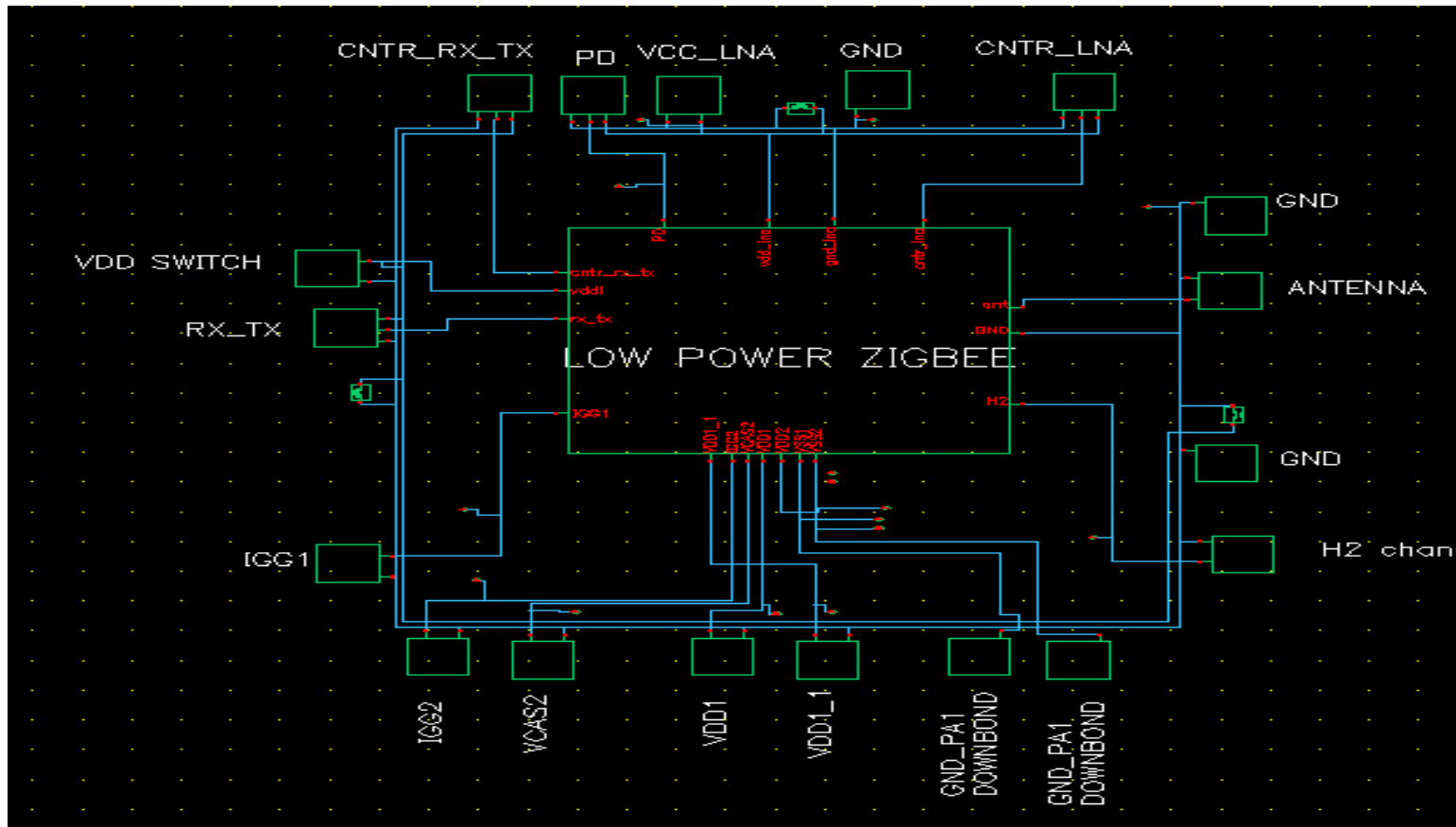
- RFF-1001:ZIGBEE FRONT END
  - ZIGBEE 2.4GHZ OPERATION
  - LNA SWITCH PA IN ONE CHIP
  - TOWER 180nm CMOS RF PROCESS
- RFS-1003 :SWITCH MATRIX
  - FREQUENCY 400 MHZ TO 4000 MHZ
  - LTE SMARTPHONE USE
  - INSERTION LOSS 0.7 dB OVER THE RANGE
- MORE RFICS-VCO, TX, RX BLOCKS
  - visit <http://www.rficdesign.com>



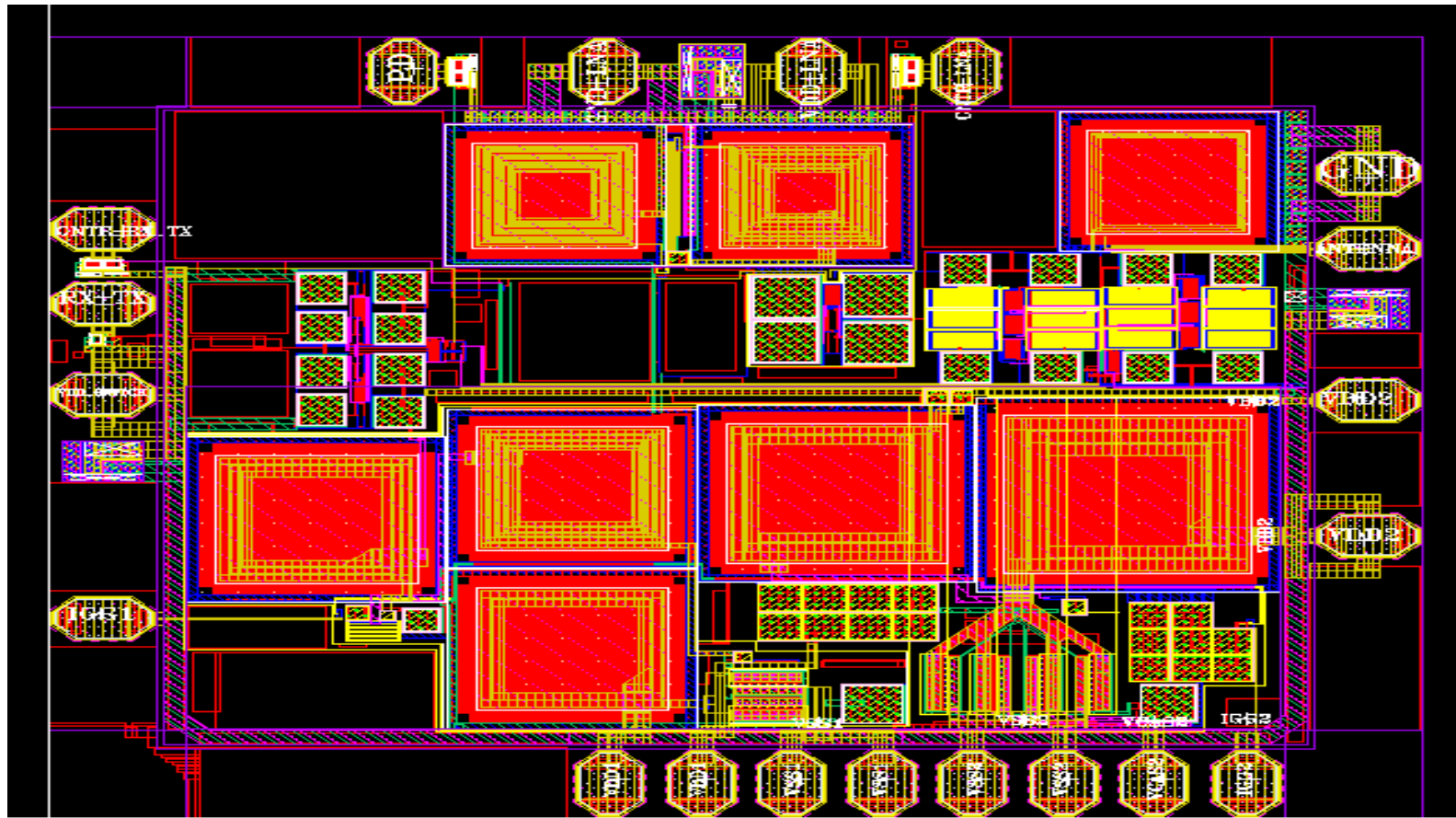
# RF FRONT END CHIP



# RFF-1001: RF FRONT END ZIGBEE-PA, LNA AND SWITCH



# RFF-1001 : THE FULL CHIP LAYOUT



# RFF-1001: RESULTS

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- PA
  - GAIN: 25dB
  - POUT : 20dBm @130mA
- LNA
  - GAIN : 15DB @6mA CURRENT
  - NOISE FIGURE : 1.5 dB
- SWITCH
  - INSERTION LOSS : 0.6dB
  - POWER HANDLING : 30dBm

## RESEARCH OPPORTUNITY-MAKE IN INDIA

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- WE BELIEVE EDUCATION AND RESEARCH IS BASIC FOR MAKE IN INDIA
- CONTRIBUTING FOR RESEARCH FREE
  - VLSI , WIRELESS
- Helping you for achieving the goal faster and it is free of cost.
- Free design tool to use for your research. You can login from your college and use the software.
- guidance from us and 1 hour per week for the discussion.
- Interested ? send your bio data to [suchitav@rficdesign.com](mailto:suchitav@rficdesign.com) for the discussion.
  - <http://www.rficdesign.com/research-opportunity.htm>

# RFID LIBRARY MANAGEMENT



# REFERENCE

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- [WWW.RFICDESIGN.COM](http://WWW.RFICDESIGN.COM)
- [WWW.GARUDSMS.COM](http://WWW.GARUDSMS.COM)
- [SUCHITAV@RFICDESIGN.COM](mailto:SUCHITAV@RFICDESIGN.COM)
  - DROP ME A MAIL, I WILL BE HAPPY TO ANSWER YOUR QUESTIONS

# THANKS A LOT

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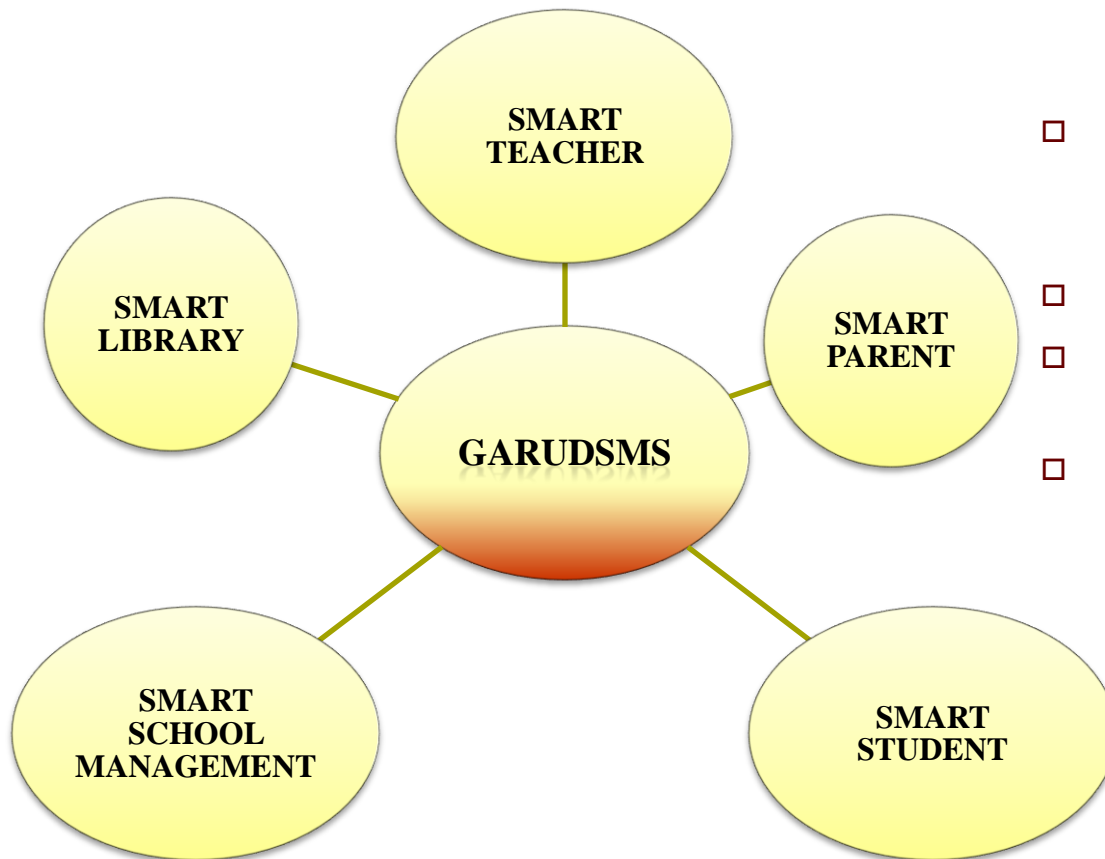


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