

**PROJECT COMPLETION REPORT FOR
RPS PROGRAMMES**

(Please include sufficient details in sections 8-10 so as to facilitate proper evaluation of your project.)

File No. : 8023/BOR/RID/RPS-40/2008-09
(as mentioned in sanction letter)

Date of Sanction : 06.01.2008

Subject Area : Electronics and Communication and related subjects

1. Principal Investigator
(Name & address) : DR. PARTHA PRATIM SAHU
Professor
Dept. of Electronics & Comm. Engg.
School of Engineering,
Tezpur University
Napaam, Tezpur, Assam
Pin – 784028
2. Project Title : Design and Implementation of
Multichannel Frequency Hopping Spread
Spectrum Signaling for Wireless
Communication Applications
3. Total Cost of the Project : ` 12.60 Lakhs only
4. Date of Commencement of the Project : 16.03.09.
5. Duration of the Project : 2 (Two) years.
6. Date of Completion : 23-09-2011
7. Objectives of the Project :

The general objectives of the proposed work are -

- Step 1:** To design and simulate multi channel frequency hopping spread spectrum transmitter consisting of multiplexer, PN sequence generator, High frequency voltage controlled oscillator etc.
- Step 2:** To design multi channel frequency hopping Spread spectrum receiver consisting of Frequency to voltage converter, ADC, PISO, Correlator, Decoder etc.
- Step 3:** To implement at PCB level and performance analysis of the above circuits and systems developed.

8. Salient Research Achievements :

8.1 New Findings/Achievements/IPR Potential : N/A

8.2 Product/Process Developed : N/A

8.3 Patent(s) Applied for/Taken, if any : N/A

8.4 B. Tech. Project / M. Tech Thesis /
Ph.D., if any Consultancy :

Level	Qty.
M. Tech. Thesis	Three completed
Ph. D	Two Registration (One thesis will be submit recently)

9. Conclusions Summarizing the Achievements Indicating the Scope for Future Work.

Please see the Appendix-I

10. List of Publications Arising from the Project (please give Author (s), Title, Journal and Year)

Please see the Appendix-II

Dated:



Principal Investigator

Professor & Head
Department of Electronics & Comm.Engg
Tezpur University



Registrar/Director/Principal
(Signature & Seal)

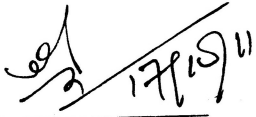
Tezpur University

(Investigators may please note that sections 8-10 of the report will serve as essential inputs for experts to judge the success of the project. These must therefore be included in sufficient detail.)

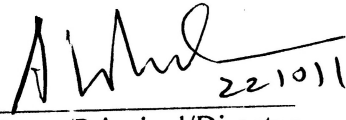
AUDITED UTILISATION CERTIFICATE

Certified that out of Rs. 12,60,000.00 (Rupees Twelve Lakh Sixty Thousand) of Grant-in-aid sanctioned during the year 2009-2011 sanction letter no. 8023/BOR/RID/RPS-40/2008-09 dated 06-01-2008 Rs. 12,59,787.00 (Rupees Twelve Lakh Fifty Nine Thousand Seven Hundred Eighty Seven) only has been utilized for the purpose of recurring and non-recurring heads for which it was sanctioned and the balance of Rs. 213.00 (Rupees Two Hundred Thirteen only) remaining unutilized at the end of the year has been surrendered to All India Council For Technical Education (vide DD No. 456949 dated 18-11-2011).

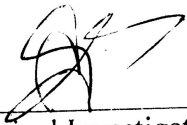
Certified that the grant has been utilized as per laid down terms and conditions for which it was sanctioned.



Finance Officer
(Signature and Seal)


22/10/11

Registrar/Principal/Director
(Signature and Seal)



Principal Investigator
(Signature and Seal)

Professor & Head
Department of Electronics & Comm. Engg
Tezpur University

Chartered Accountant
(Signature and Seal)

Dated:

EXPENDITURE STATEMENT

Sanction Letter No. : 8023/BOR/RID/RPS-40/2008-09

Date of Sanction : 06-01-2008

Project Name : Design and Implementation of Multichannel Frequency Hopping Spread Spectrum Signaling for Wireless Communication Applications

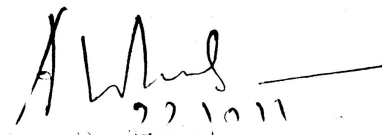
A. NON-RECURRING

Sl. No	Name of the equipment procured	Amount Sanctioned (Rs.)	Amount Utilized (Rs.)			Total Expenditure (Rs.)	Unspent Balance (Rs.)
			2009-2010	2010-2011	2011-2012		
01	Microwave office	12,00,000.00	5,20,000.00	2,39,787.00	4,40,000.00	11,99,787.00	213.00
02	Spectrum analyzer						
03	Bit error rate measurement set up						

B. RECURRING

Sl. No	Name of the equipment procured	Amount Sanctioned (Rs.)	Amount Utilized (Rs.)			Total Expenditure (Rs.)	Unspent Balance (Rs.)
			2009-2010	2010-2011	2011-2012		
01	disc	60,000.00	9,462.00	39,593.00	10,945.00	60,000.00	0.00
02	512 MB DDR1 RAM						
03	Key pad						
04	Membership Renewal fees (OSA)						
05	Cartridge (ML 2151)						
06	Consumable/ components						
07	IEEE Membership						
08	Components						
09	Tender Call in newspaper						
10	Printer Cartridge						
11	Xerox						
12	Membership Renewal fees (OSA)						
13	Stationary Consumable						


Finance Officer
(Signature & Seal)


Registrar
(Signature & Seal)