



# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

[Sponsored by Lavu Educational Society]

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



## Department of Electronics and Communication Engineering

For the academic year 2021-22, the students of Electronics and Communication Engineering have undergone Mini Projects with Hardware Development as well as software implementation in their M.Tech as prescribed by JNTUH, Hyderabad in the Curriculum.

S.No	Description	No. of Students	Page No.
1	Mini Projects	8	2-10
	Total Number of Students:	8	--

PRINCIPAL

Vignans Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(D)-501301  
Telangana State





# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

[Sponsored by Lavu Educational Society]

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



## Department of Electronics and Communication Engineering

Admitted Batch: 2021

A.Y. 2021-2022

### M.TECH-II SEM- MINI PROJECT LIST

S.No	Batch No	Roll Number	Student Name	Title Name	Guide Name
1	A1	21UP1D5703	K.AKSHITHA	Design and Simulation of Low Power Wilson Current Mirror And Single Supply Cmos Level Shifter	Dr. SK. Masthan Basha
2	A2	21UP1D5702	KASARAGADDA PRAVALLIKA	Implementation of Low Power 1-bit Hybrid Full Adder using 16nm CMOS Technology	Mr.E.Nagaraju
3	A3	21UP1D5704	K. ANITHA DEVI	High-Speed Hybrid-Logic Full Adder Using High-Performance 10-T Xor-Xnor Cell	Mr. T Pullaish
4	A4	21UP1D5706	S. MANIDEEPA	The three stage comparator and its modified version with fast speed and low kick back	Dr. SK. Masthan Basha
5	A5	21UP1D5707	A. JHANSI RANI	Design and Implementation of low power high performance mixed logic line Decoders	Mrs. S Shilpa
6	A6	21UP1D5705	PUNEM SANGEETHA	Study Of Different Adders Usingfull Swing Gate Diffusion Input	Dr. Vijaykumar R Urkude
7	A7	21UP1D5708	MAHARAJA SANGEETHA	Area Optimization Of Cmos Full Adder Design Using 3txor	Mrs. G Swathi
8	A8	21UP1D5701	B.USHA	Relpee: Resistive RAM-sedlinear first order partial differential equationsolver	Mrs. G Susmitha



*Principal*  
Principal  
Vignani's Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301  
Telangana State

*HOD-ECE*  
HOD-ECE

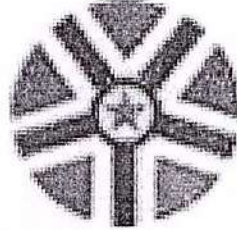
Head of the Department  
Electronics and Communication Engineering  
Vignani's Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501 30

**VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V),Ghatkesar (M),Medchal – Malkajgiri Dist-501301**

**2021-22**



**CERTIFICATE**

This is to certify that the thesis work titled “DESIGN AND SIMULATION OF LOW POWER WILSON CURRENT MIRROR AND SINGLE SUPPLY CMOS LEVEL SHIFTER” Submitted by Miss KAKSHITHA (RegdNo.21UP1D5703) in partial fulfillment of the requirements for the award of the degree of Master of Technology in VLSI Design to the Vignans Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

**Mr. P Hari Krishna**

**Head of the Department**

Head of the Department  
Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501 301

**Dr.SK Masthan Basha**

**Associate Professor**



**PRINCIPAL**

Vignans Institute of Management & Technology For Women  
Kondapur(V),Ghatkesar(M),Medchal-Malkajgiri(Dt)-501301  
Telangana State

VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V), Ghatkesar (M), Medchal – Malkajgiri Dist-501301

2021-22



CERTIFICATE

This is to certify that the thesis work titled "IMPLEMENTATION OF LOW POWER 1-BIT HYBRID FULL ADDER USING 16 NM CMOS TECHNOLOGY" submitted by Ms. Kasaragadda Pravallika (Regd No. 21UP1D5702) in partial fulfillment of the requirements for the award of the degree of Master of Technology in VLSI DESIGN to the Vignans Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

  
Mr. P. Hari Krishna

Head of the Department  
Head of the Department  
Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501301

  
Mr. E. Nagaraju

Assistant Professor



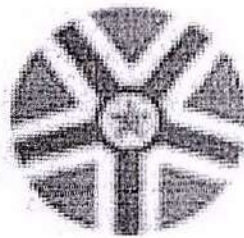
  
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301  
Telangana State

VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V), Ghatkesar (M), Medchal – Malkajgiri Dist-501301

2021-22



**CERTIFICATE**

This is to certify that the thesis work titled “HIGH-SPEED HYBRID-LOGIC FULL ADDER USING HIGH-PERFORMANCE 10-T XOR-XNOR CELL” submitted by Ms K.ANITHADEVI(Regd No. 21UP1D5704) in partial fulfilment of the requirements for the award of the degree of Master of Technology in VLSI DESIGN to the Vignan's Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

Mr.P Hari Krishna

Head of the Department

Head of the Department

Electronics and Communication Engineering

Vignans Institute of Management and Technology for Women

Kondapur (V), Ghatkesar (M), R.R. Dist-501301

Mr. T. Pullaraj

Associate Professor



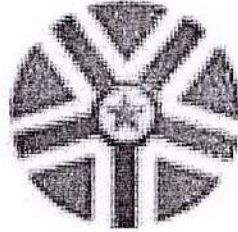
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(Dt)-501301  
Telangana State

VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi. Affiliated to JNTUH, Hyderabad)  
Kondapur (V), Ghatkesar (M), Medchal – Malkajgiri Dist-501301

2021-22



**CERTIFICATE**

This is to certify that the thesis work titled “**THE THREE-STAGE COMPARATOR AND ITS MODIFIED VERSION WITH FAST SPEED AND LOW KICKBACK**” submitted by Ms S.Manideepa (Regd No. 21UP1D5706) in partial fulfilment of the requirements for the award of the degree of **Master of Technology in VLSI DESIGN** to the Vignan’s Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

  
Mr. P Hari Krishna

Head of the Department

Head of the Department  
Electronics and Communication Engineering  
Vignan's Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501 301



  
Dr. Shaik Masthan Basha

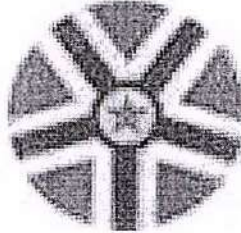
Associate Professor

  
**PRINCIPAL**  
Vignan's Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(Dt)-501301  
Telangana State

VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V), Ghatkesar (M), Medchal -- Malkajgiri Dist-501301

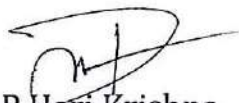
2021-22



CERTIFICATE

This is to certify that the thesis work titled "DESIGN AND IMPLEMENTATION OF LOW POWER HIGH PERFORMANCE MIXED LOGIC LINE DECODERS" Submitted by A.Jhansi Rani (RegdNo.21UP1D5707) in partial fulfillment of the requirements for the award of the degree of **Master of Technology in VLSI Design** to the Vignan's Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

  
Mr. P Hari Krishna

Head of the Department  
Department of Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501301

Mrs. S Shilpa

  
Assistant Professor

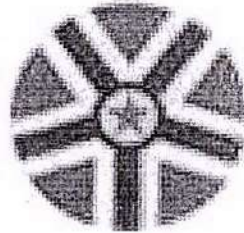


  
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(Dt)-501301  
Telangana State

VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V),Ghatkesar (M),Medchal – Malkajgiri Dist-501301

2021-22



CERTIFICATE

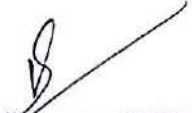
This is to certify that the thesis work titled “STUDY OF DIFFERENT ADDERS USINGFULL SWING GATE DIFFUSION INPUT” Submitted by Punem Sangeetha (RegdNo.21UP1D5705) in partial fulfillment of the requirements for the award of the degree of Master of Technology in VLSI Design to the Vignan’s Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

  
Mr. P Hari Krishna

**Head of the Department**

Head of the Department  
Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501 301

  
Dr. Vijay Kumar R Urkude

**AssociateProfessor**



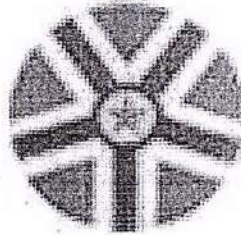
  
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur(V),Ghatkesar(M),Medchal-Malkajgiri(Dt)-501301  
Telangana State



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)  
Kondapur (V), Ghatkesar (M), Medchal – Malkajgiri Dist-501301

2021-22



CERTIFICATE

This is to certify that the thesis work titled “AREA OPTIMIZATION OF CMOS FULL ADDER DESIGN USING 3TXOR” Submitted by Maharaja Sangeetha (RegdNo.21UP1D5708) in partial fulfillment of the requirements for the award of the degree of Master of Technology in VLSI Design to the Vignan’s Institute of Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University for the award of any degree and the results are achieved satisfactorily.

  
Mr. P Hari Krishna

Head of the Department

Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), R.R. Dist-501 301

Mrs. G Swathi

  
Assistant Professor



  
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(Dt)-501301  
Telangana State

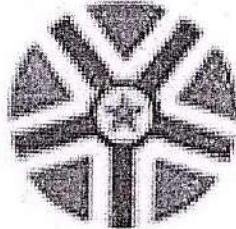
VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Approved By AICTE, New Delhi, Affiliated to JNTUH, Hyderabad)

Kondapur (V), Ghatkesar (M), Medchal – Malkajgiri Dist-501301

2021-22



**CERTIFICATE**

This is to certify that the thesis work titled “RELOPE:RESISTIVE RAM-  
SEDLINER FIRST-ORDER PARTIAL DIFFERENTIAL EQUATIONS OLVER”  
submitted by Ms B.USHA (Regd No. 21UP1D5701) in partial fulfillment of the requirements for  
the award of the degree of Master of Technology in VLSI DESIGN to the Vignan's Institute of  
Management and Technology for Women, Ghatkesar is a record of bonafide work carried out by her  
under my guidance and supervision.

The results embodied in this mini project report have not been submitted in any University  
for the award of any degree and the results are achieved satisfactorily.

Mr. P Hari Krishna

Head of the Department

Head of the Department  
Electronics and Communication Engineering  
Vignans Institute of Management and Technology for Women  
Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri Dist-501301



Mrs. G. Susmitha

Assistant Professor

  
PRINCIPAL  
Vignans Institute of Management & Technology For Women  
Kondapur(V), Ghatkesar(M), Medchal-Malkajgiri(Dt)-501301  
Telangana State