



**MADANAPALLE INSTITUTE OF
TECHNOLOGY & SCIENCE**
(UGC-AUTONOMOUS)

Affiliated to JNTUA, Anantapur & Approved by AICTE, New Delhi
Recognised Research Center
Accredited by NBA for CSE, ECE, EEE & ME
World Bank funded Institute
Recognised by UGC under the sections 2(f) and 12(B) of the UGC act 1956
Recognised as Scientific & Industrial Research Organization by DSIR of DST

Circular Dated: 03-09-2017

B. Tech -ECE Students are here by informed that A Guest Lecture on Analog VLSI Design and its Applications is going Introduction to ICs, recent trends and applications of ICs, Small signal model and design of Analog ICs for future developments. He started the lecture from invention of the ICs, introduced how Moore's law satisfied the present scenario of IC fabrications. On 05-09- 2017 in seminar hall.


PRINCIPAL
Madanapalle Institute of Technology & Science
P.O. Box No. 9, Kotha Road, Angali
MADANAPALLE-517 325, A.P.

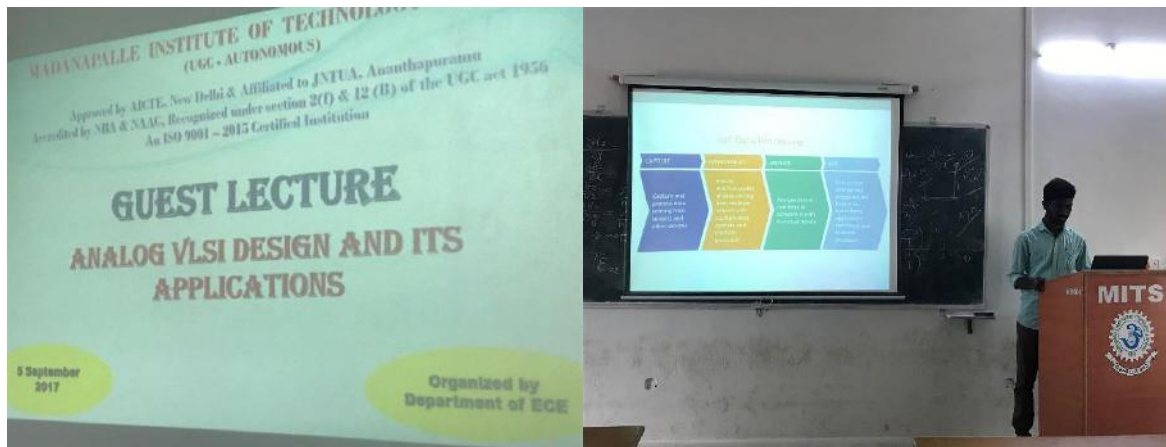
Copy to: 1. B. Tech -ECE Class rooms.

2. Circular to Notice Board

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE
(UGC - AUTONOMOUS)

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu
Accredited by NBA & NAAC, Recognized under section 2(f) & 12 (B) of the UGC act 1956
An ISO 9001 – 2015 Certified Institution

Report on
One day Guest lecture on
Analog VLSI Design and its Applications
05 September 2017



Submitted by: Dr. R. Sitharthan, Sr. Assistant Professor, Department of Electronics and Communication Engineering

No. of Students participated-240

The lecture started at 10.00 AM in MBA Seminar hall by Dr. Rajasekaran, Associate Professor, and Head, Department of ECE addressing the participants about the importance of the event. The participants for the expert lecture were 240 Undergraduate students of ECE in SVEC. The Resource person Dr. Arun Jees, Associate Professor, Department of Electrical and Electronics, School of Electronics Engineering, Sree Sastha, Chennai. The resource person took over the session at 10:05 AM discussing overview, Introduction to ICs, recent trends and applications of ICs, Small signal model and design of

Analog ICs for future developments. He started the lecture from invention of the ICs, introduced how Moore's law satisfied the present scenario of IC fabrications. He discussed briefly about advancements in microelectronics towards Analog IC design and its modeling. He briefly discussed the different examples for analog integrated circuit designs such as power management circuits, operational amplifiers, and sensors that are used with continuous signals for performing the functions such as active filtering, power distributing for components with in chip, mixing, and so on.

He focused on circuit design and the techniques used to minimize capacitive and inductive noise. He also introduced how to integrate analog circuits on large digital chips presents significant challenges, primarily due to substrate noise coupling. He differentiated a strategy for making analog circuits less sensitive to substrate bounce.

He also summarized that CMOS processes move into the nanoscale—that is, less-than-100-nm—range, it becomes increasingly difficult to maintain the energy efficiency for medium- to high-accuracy analog circuits, Accuracies may decrease as the technology scales down. Analog-chip designers can improve energy efficiency using different approaches, from selecting the optimum CMOS technology to clever system-level design.

Finally he focused on data-converter performance has been steadily increasing over the years. Advancements in scaling and design techniques exploit the high density and speed of modern process technology. More intelligence is being put into data converters. Managing more system functions, converters will simplify programming software, shrink, and become less complex and more cost-effective with digital enhancement. Adaptive power management and sensor integration and enhancement are here, with more to come, eliminating the analog-circuit designer's messy task of signal

conditioning the sensor and keeping the sensor, conditioning, and data-conversion chips as close as possible.

He also discussed ADC converters employing pipeline architecture were the most appropriate for processing wideband signals with the required resolution. He suggested the recent advances in oversampling-data-converter technology have enabled new alternatives for the definition of baseband analog front ends for wireless broadband communication systems. The technology for ADCs using oversampling sigma-delta architectures has evolved to the point that the devices can effectively convert signals with bandwidths of 10 MHz or more. This achievement is significant because it allows for the use of this ADC architecture in the receiver channel of broadband communication interfaces, such as LTE (long-term evolution), WiMax, or 802.11abg.

His current research interest is analog CMOS circuits for transceivers. He also suggested the future scope and research avenues availed in this domain.



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

UGC - AUTONOMOUS

(Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi)

P.B. No:14, Angallu (Village), MADANAPALLE - 517 325. (A.P)

Website: www.mits.ac.in

Department of Electronics and Communication Engineering

Subject: Guest Lecture on "Analog VLSI Design and its Applications"

Resource Person : Dr. Arun Jees, Associate Professor, Department of Electrical and Electronics,
School of Electronics Engineering, Sree Sastha, Chennai

Date: 05-09-2017, 11:00 AM onwards

Venue: Seminar Hall

LIST OF ATTENDEES

S. No	Name	Designation/Roll No.	Signature
1	DATTATREYA REDDY. N. V	15691A0430	Dattu Reddy
2	DEEKSHITHA. N	15691A0431	Deekshitha N.
3	DEVI PRASAD. C	15691A0432	Devi Prasad
4	DHANESWAR NAIDU. K	15691A0433	Dhaneswar Naidu
5	DHARANI. M	15691A0434	Dharani M.
6	DILIP. C. G	15691A0435	Dilip C. G.
7	DIVYA RUPA. P	15691A0436	P. Divya Rupa
8	DIVYA SHANTHI. V	15691A0437	Divya Shanthi
9	DIVYA SREE. B	15691A0438	B. Divya Sree
10	DIVYA SUDHA. P	15691A0439	Divya Sudha
11	DIVYA. K	15691A0440	K. Divya
12	GANESH. T	15691A0441	Ganesh T.
13	GEETHANJALI. S	15691A0442	S. Geethanjali
14	GIRISH. M	15691A0443	M. Girish
15	GNANESHWARACHARI. V	15691A0444	V. Gnaneshwarachari
16	HANUMA VENKATA SAI.S	15691A0445	Hanuma Sai
17	HARATHI. V	15691A0446	V. Harathi
18	HARI SUDHARSHAN. S	15691A0447	Hari Sudharshan
19	HARISH CHANDRA REDDY. C (I Shift)	15691A0449	Harish Chandra Reddy
20	HARISH KUMAR REDDY . K	15691A0450	Harish Kumar Reddy
21	HARITHA. U	15691A0451	Haritha U.
22	HARSHAD KUMAR REDDY. N	15691A0452	N. Harshad
23	HEMANTH KUMAR. A	15691A0453	A. Hemant
24	HEMANTH KUMAR. V	15691A0454	Hemant Kumar
25	IJAJ AHAMMAD. S	15691A0455	S. Ijaj Ahmad
26	JAFAR BASHA. D. M	15691A0456	D. M. Jafar Basha

Electronics & Communication Engineering
Madanapalle Institute of Technology & Science
Angallu, MADANAPALLE - 517 325
Chittoor (Dist.) A.P

S. No	Name	Designation/Roll No.	Signature
27	JAHNAVI. B	15691A0457	B. Jahnavi
28	JAHNAVI. Y	15691A0458	Jahnavi. Y
29	JASHWANTH CHOWDARY. P	15691A0459	Jashwanth chow
30	JASWANTH. K	15691A0460	Jaswanth
31	BALAJI.E	16695A0402	B. Balaji
32	DEVENDRA REDDY.A	16695A0403	Devendra
33	HARIPRASAD.G	16695A0404	G. Hariprasad
34	KESAVA REDDY.A	16695A0405	A. Kesava Reddy
35	MANJUNATH.B	16695A0406	Manjunath
36	NAVYA PAVANI.B	16695A0407	Navya
37	PRAVALLIKA.B	16695A0408	Pravalli
38	RAMESH.C	16695A0409	C. Ramesh
39	YASWANTH PRASAD .D	16695A0410	Yaswanth. Prasad
40	LAVANYA. M	15691A0482	Lavanya
41	LEELABHISHEK REDDY . T	15691A0483	Leela Reddy
42	LEELADHAR REDDY . N	15691A0484	Leeladhar Reddy
43	LEELAVATHI. C (I Shift)	15691A0485	C. leelavathi.
44	LIKITHA SWARAJ. T	15691A0486	Likitha Swaraj
45	KEERTHI SHARAN. Y	15691A0487	Keerthi. Sharan.
46	LOKESH. K	15691A0488	K. Lokesh
47	MADHAVI. C	15691A0489	C. Madhavi.
48	MADHU RUPA . P	15691A0490	P. Madhu Rupa
49	MAHESH REDDY. Y	15691A0491	Y. Mahesh
50	MAHESWARI. K	15691A0492	K. Maheshwari
51	MANEESH. A	15691A0493	A. Maneesh
52	MANIKANTESWARA. M	15691A0494	M. Manikanteswara
53	MANISHA REDDY A S	15691A0495	A. S. Manisha Reddy
54	MANUSHA. M	15691A0496	Manusha
55	MD SHAHID HUSSAIN. P	15691A0497	Md. Shahid
56	MITHIN KUMAR REDDY. D	15691A0498	Mithin Kumar
57	MOHAMMAD NIHAD. S	15691A0499	Nihad
58	MOHAMMED ALI KHAN. P	15691A04A0	Ali Khan
59	MOHIT. N	15691A04A1	N. Mohit.
60	MOUNIKA. P	15691A04A2	Mounika
61	MURALI. A	15691A04A3	Murali
62	NAGA MUNESWAR REDDY. A	15691A04A4	A. Naga Muneswar
63	NAGA PRUDHVI. T	15691A04A5	T. Naga Prudhvi

S. No	Name	Designation/Roll No.	Signature
64	NAGA TANMAYEE. B	15691A04A6	Naga Tanmayee. B.
65	NAGASAI BHARGAVI. C	15691A04A7	Nagai Sai
66	NAGASRI. C	15691A04A8	C. Nagasri
67	NAGENDRA. P	15691A04A9	Nagendra.
68	NARENDRA. D	15691A04B0	Narendra
69	NARESH KUMAR. N	15691A04B1	Naresh
70	NAVEEN KUMAR REDDY. M	15691A04B2	Naveen Kumar Reddy
71	NAVYA. N	15691A04B3	Navya
72	NAVYASREE. V	15691A04B4	Navya Sree.
73	NIKILESWAR. T	15691A04B5	Nikileshwar. T
74	NISHA RANI. S	15691A04B6	Nisha Rani
75	NITHIN. K	15691A04B7	K. Nithin.
76	OBUL REDDY. Y	15691A04B8	Y. OBUL Reddy.
77	PADMAJA. C	15691A04B9	C. Padma
78	PARIMALA. S	15691A04C0	Parimala
79	DILEEP.K	16695A0411	K. Dileep.
80	RAVI KUMAR. N	15691A04E2	Ravi
81	RAVINDRA REDDY. P	15691A04E3	P. Ravindra
82	REDDI SEKHAR. N	15691A04E4	Reddy Sekhar
83	REDDY LAHARISHA. V	15691A04E5	Laharish
84	REDDY TANUJA. U	15691A04E6	Tanuja
85	RIZWANA. S	15691A04E7	S. Rizwana
86	ROHITH KUMAR. K	15691A04E8	Rohith.
87	ROHITH KUMAR. M P	15691A04E9	Rohith.
88	ROHITH. A	15691A04F0	A. Rohith.
89	ROHITH. K	15691A04F1	Rohith k
90	ROJA KAMBALA	15691A04F2	Roja Kambala
91	ROJA. K	15691A04F3	Roja
92	ROOHINA. S	15691A04F4	S. Roohina
93	ROSHANTAJ. S	15691A04F5	Roshan Taj
94	SAGAR. P V	15691A04F6	Sagar
95	SAI BHARADWAJ. C	15691A04F7	Blavarduj
96	SAI LAKSHMI. P	15691A04F8	P. Sai Lakshmi.
97	SAI NAVEEN. A	15691A04F9	Naveen
98	SAI NEERAJ. G	15691A04G0	Neeraj.
99	SAI NIKHIL. S	15691A04G1	Sai
100	SAI PRAHARSH BHAGAVAN . K V N	15691A04G2	Sai


 Electronics & Communication Engineering
 Madanapalle Institute of Technology & Science
 Angali, MADANAPALLE - 517 325
 Chittoor (Dist.: A.P)


S. No	Name	Designation/Roll No.	Signature
101	SAI PRASAD. P V	15691A04G3	Sai Prasad
102	SAI PRIYA. D	15691A04G4	Sai Priya
103	SAI SANDEEP. S	15691A04G5	Sai Sandeep
104	SAI SARANYA. G	15691A04G6	Sai Saranya
105	SAI SRI MONA. C	15691A04G8	Moni
106	SAI TEJA. P	15691A04G9	Sai Teja
107	SAI VAMSI KRISHNA . S	15691A04H0	Vamsi Krishna
108	SANDHYA. G	15691A04H1	Sandhya
109	SANJEEVA NARASIMHA. B	15691A04H2	Sanjeeva
110	SANTHOSH KUMAR. T	15691A04H3	Santhosh Kumar
111	SARADA. B	15691A04H4	Sarada
112	SASIDHAR REDDY . C	15691A04H5	Sasidhar
113	SHAHEER. S	15691A04H6	Shaheer
114	SAI SRIDHAR. E	15691A04H7	Sai Sridhar
115	SHANMUKHA. B	15691A04H8	Shanmukha
116	SHIVA KRISHNA . G	15691A04H9	Shiva Krishna
117	SILPA. G	15691A04I0	G. Silpa
118	CHARAN KUMAR . Y	16695A0421	Charan
119	DILEEP KUMAR.T	16695A0422	Dileep Kumar
120	SWAPNA MADHURI . K	15691A04K2	Swapna Madhuri
121	TABRAIZ HUSSAIN. S	15691A04K3	Tabraiz Hussain
122	TEJA SREE. T	15691A04K4	Teja Sree
123	THRIVIKRAM NAIDU. R	15691A04K5	Thrivikram Naidu
124	TEJASWI. D	15691A04K6	Tejaswi
125	UDAYA BHASAKARA REDDY. M	15691A04K7	Udaya Bhasakara Reddy
126	VARSHIKA. P	15691A04K8	Varshika
127	VARSHINI REDDY. P	15691A04K9	Varshini Reddy
128	VASUDA. M	15691A04L0	Vasuda
129	VEERA VENKATA RAMANARAYANA P	15691A04L1	Veera Venkata Ramanarayana
130	VEERENDRA PRASAD. M	15691A04L2	Veerendra Prasad
131	VENI. K	15691A04L3	Veni
132	VENKATA HARIKA. A	15691A04L4	Venkata Harika
133	VENKATA LALITHA REDDY. L	15691A04L5	Venkata Lalitha Reddy
134	VENKATA SAI. K	15691A04L6	Venkata Sai
135	VENKATASUBBASAI DHEERAJ. A	15691A04L7	Venkatasubbasai Dheeraj
136	VENKATESH. A	15691A04L8	Venkatesh
137	VENKATESWARLU. V	15691A04L9	Venkateswarlu

S. No	Name	Designation/Roll No.	Signature
138	venu sree. y	15691A04M0	Venu sree . y
139	VIDYA SREE. B	15691A04M1	Vidya sree
140	VIJAY KRISHNA. V	15691A04M2	Vijay krishna
141	VINOD KUMAR. C	15691A04M3	Vinod Kumar
142	VINOD KUMAR. L	15691A04M4	L. Vinod
143	VISHNU SAI. S	15691A04M5	Vishnu
144	VISHNU THEJA. A	15691A04M6	Vishnu Theja
145	VISHNUVARDHAN REDDY. C V	15691A04M7	Vishnuvardhan
146	WAHEEDA REHMAN. S	15691A04M8	Waheda Rehman
147	YAMUNA. B	15691A04M9	Yamuna
148	YASHASWINI. M	15691A04N0	Yashaswini
149	YASHWANTHRAMROYAL. N. G	15691A04N1	Yashwanth
150	YASWANTH BABU. R	15691A04N2	Yaswanth Babu
151	YESHWANTH. K	15691A04N3	Yeshwanth
152	YOGITHA PRIYANKA. T	15691A04N4	Yogitha
153	YUVA MANJUNATH REDDY. S	15691A04N5	Manjunath
154	LAKSHMI PRANEETH.M	15691A04N6	Lakshmi Praneeth
155	JAYAPALACHARI KAMMAR	15691A04N7	Kammar
156	ARJUN CHAKRAVATHI.P	15691A04N8	P. Arjun
157	BHANU PRAKASH REDDY.D	16695A0432	Bhanu Prakash Reddy
158	BHARATH KUMAR VSM	16695A0433	Bharath
159	JYOTHI.D	16695A0434	D. Jyothi
160	GOWTHAMI. G	15699A0422	Gowthami
161	GURURAGHAVENDRA. V	15699A0423	Gururaghavendra
162	HARICHANDANA. T	15699A0424	Harichandana
163	HARIPRASAD. V	15699A0425	Hariprasad
164	HARSHA SREE. D	15699A0426	Harsha
165	JAYASREE. K V	15699A0427	KV Jayasree
166	JEEVAN KUMAR. C	15699A0428	Jeevan
167	GANESH.B	15699A0429	Ganesh
168	JYOTHI. D	15699A0430	Jyothi . D
169	JYOTHSNA. M	15699A0431	Jyothsna
170	KARIMULLA SHA. S	15699A0432	Karimulla
171	KARISHMA. S	15699A0433	Karishma
172	KARTHIK. G	15699A0434	Karthik
173	KARTHIK. M	15699A0435	Karthik
174	KEERTHI. K	15699A0436	Keerthi

S. No	Name	Designation/Roll No.	Signature
175	KIRAN KUMAR. B	15699A0437	Kiran kumar.
176	KISHORE. B	15699A0438	Kishore
177	KUMAR. K N	15699A0439	Kumar
178	RAKESH KUMAR REDDY KUNUTHURU	15699A0440	Rakesh
179	LIKHITHA. G	15699A0441	Likhitha
180	LIKHITHA. M	15699A0442	M. Likhitha
181	LOKESH. P	15699A0443	Lokesh
182	MADHAN MOHAN REDDY. G	15699A0444	Moham reddy
183	MADHURI. G	15699A0446	Madhuri
184	MADHURI. S	15699A0447	S. Madhuri
185	MAHIDHAR. B	15699A0448	mahidhar
186	MANJUSRI. R	15699A0449	Manjusri - R
187	MADHUSUDHANA RAJU. S	15699A0450	Madhusudh Raju
188	MOHSIN INAYATH. M	15699A0452	Inayath
189	MOUNIKA. M	15699A0453	Mounika
190	MUNEERAH BATHOOL. D	15699A0454	Muneerah
191	NAVEEN KUMAR REDDY. A	15699A0455	Naveen Kumar Reddy
192	NAVEEN KUMAR. G	15699A0456	Naveen Kumar
193	NAVEEN. D S	15699A0457	Naveen
194	NAVITHA. N	15699A0458	Navitha
195	NIKHITHA. K	15699A0459	Nikhitha
196	NITHEESHA. G	15699A0460	Nitheesha
197	SADIQ BASHA. S	15699A0481	Sadiq Basha
198	SAI CHANDANA. K	15699A0482	K. Sai Chandana
199	SAI KIRAN REDDY. G	15699A0483	Sai Kiran Reddy
200	SAI KUSUMA. C	15699A0484	Sai Kusuma. C
201	SAI MADHAVI. T	15699A0485	T. Madhavi
202	SAI PRANEETH. Y	15699A0486	Sai Praneeth.
203	SAI PRATHAP RAJU. K	15699A0487	Santhosh
204	SAI SANTHOSH. D	15699A0488	Sai Santhosh
205	SAI SWAPNA. K	15699A0489	Sai Swapna - K
206	SANDEEP. A	15699A0490	Shandeep
207	SANDHYA. P	15699A0491	Sandhya
208	SHAHAWAR. S	15699A0492	Shahawar
209	SHASHIBHUSHAN. M	15699A0493	Shashi Bhushan
210	SIVAREDDY. Y	15699A0494	Siva Reddy
211	SRAVANI. POTHUPETA	15699A0495	Sravani

Electronics & Communication Engineering
 Madanapalle Institute of Technology & Science
 Angali, MADANAPALLE - 517 325
 Chittoor (Dist.) A.P.

S. No	Name	Designation/Roll No.	Signature
212	SRAVANI. PALURU	15699A0496	Sravani
213	SRAVANI. V	15699A0497	Sravani-V
214	SRINATH SAI SAPHAL. V	15699A0498	V. Srinath Saphal
215	SUBRAMANYAM. B	15699A0499	B. Subramanyam
216	SUCHARITHA. C	15699A04A0	Sucharitha
217	SUDHEER. R	15699A04A1	SUDHEER.R
218	SUGURESH. N	15699A04A2	N. Suguresh
219	SUMIYA. V	15699A04A3	V. Sumiya
220	SUPRIYA. M	15699A04A4	Supriya
221	SWARNA LEKHA. S	15699A04A5	S. Swarna Lekha
222	TEJASWINI. P	15699A04A6	P. Tejaswini
223	THULASI RAM. P	15699A04A7	P. Thulasi
224	UMESHWAR REDDY N	15699A04A8	N. Umeshwar
225	VENKATESWARLU. D	15699A04B0	D. Venkateswarlu
226	VINOD KUMAR. M	15699A04B1	M. Vinod
227	HIMAJA YEDDULA	15699A04B2	Himaja
228	VARUN.G.N	15699A04B3	Varun
229	RAHUL REDDY.S.V	15699A04B4	S.V. Rahul
230	ARUNDHATHI.A	16690A0401	Arundhati
231	UMA MAHESWARI.K	16690A0402	Uma Maheswari. K
232	R.CHARAN KUMAR	14691A0431	Charan
233	JAYASREE. D	15691A0461	Jayasree
234	JHANSI. T	15691A0462	Jhansi
235	JOHN NELSON ENOCK. G	15691A0463	John Nelson
236	JYOTHSNA. K	15691A0464	Jyothsna
237	KARTHIK. B	15691A0465	Karthik
238	KAVYASREE. A	15691A0466	A. Kavya Sree
239	KEERTHANA. M	15691A0467	M. Keerthana
240	KEERTHY. C	15691A0468	Keerthy


 Electronics & Communication Engineering
 Madanapalle Institute of Technology & Science
 Angallu, MADANAPALLE - 517 325
 Chittoor (Dist.) A.P.