



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

01-06-2020

Webinar on ""Analog ICs: Design Prospective and Applications""

Circular:

4/3/24, 3:17 PM

Mail - HOD-ECE - Outlook

ECE Webinar (10) on "Analog ICs: Design Prospective and Applications" on 1-June-2020 & 2-June-2020-Reg.

HOD-Department of Electronics and Communication Engineering <hod.ece@kluniversity.in>

Sun 31-05-2020 16:56

To: ECE Faculty <ecefaculty@kluniversity.in>; ECSEFACULTY14 <ECSEFACULTY14@kluniversity.in>; koteswararao@klh.edu.in <koteswararao@klh.edu.in>; KLH Director <director@klh.edu.in>; eceteaching@klh.edu.in <eceteaching@klh.edu.in>; All Deans <deans@kluniversity.in>; ALL HODS <hods@kluniversity.in>
Cc: Suman Maloji <suman.maloji@kluniversity.in>; PRINCIPAL - COE <principal.coe@kluniversity.in>; Vice Chancellor - KLU <vc@kluniversity.in>; PRESIDENT <president@kluniversity.in>

1 attachments (541 KB)

ECE-Webinar-10.jpeg

Respected Sir/Madam,

In the series of webinars, the tenth webinar is scheduled, and the details are as follows.

Webinar: "Analog ICs: Design Prospective and Applications"

Speaker: Dr. Shruti Suman, Associate Professor, Department of ECE, KLEF

Expert Talk Series: 10

Date: 1-June-2020 & 2-June-2020

Time: 10 AM

Register Here: <https://forms.gle/C4snRFX1VVCNFR1f9>



Interested faculty are requested to register using the above-mentioned link. All HODs are requested to share the details in the respective departments.

Thank You,

Dr. Suman Maloji M.Tech., Ph.D

Professor and Head

Department of Electronics and Communication Engineering

(DST -FIST Sponsored Department)

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Poster:

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KL UNIVERSITY (DEEMED TO BE UNIVERSITY)

Recognized as CATEGORY 1 UNIVERSITY

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING
ECE

WEBINAR
ON
**Analog ICs:
Design Prospective & Applications**

Speaker:
Dr. Shruti Suman
Associate Professor,
ECE Department

<https://forms.gle/C4snRFX1VVCNFR1f9>

www.kluniversity.in/ece

1 & 2, June 20
10 AM
Register Here ↓

Fig. Poster of webinar

1. Objective and discussions:

Analog integrated circuits (ICs) play a crucial role in modern electronics, enabling the processing, amplification, and conditioning of analog signals. Here's an overview of their design perspective and applications:



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1. Design Perspective:

- **Performance Optimization:** Analog IC design focuses on achieving optimal performance in terms of parameters like gain, bandwidth, linearity, noise, and power consumption.
- **Layout and Matching:** Layout techniques are critical for achieving precise matching of components, minimizing parasitic effects, and optimizing area and power consumption.
- **Process Variability:** Analog ICs are sensitive to process variations, so designers must account for manufacturing variations to ensure consistent performance across different ICs.
- **Noise and Sensitivity:** Analog IC design involves managing noise sources and minimizing sensitivity to external factors to maintain signal integrity and accuracy.
- **Power Management:** Efficient power management techniques are essential to minimize power consumption and extend battery life in portable devices.
- **Simulation and Verification:** Extensive simulation and verification are performed at various design stages to ensure the functionality, performance, and reliability of the analog IC.

2. Applications:

- **Amplifiers:** Analog ICs are commonly used for amplification of signals in various applications such as audio amplifiers, operational amplifiers (op-amps), and instrumentation amplifiers.
- **Filters:** Analog ICs are used to implement various types of filters like low-pass, high-pass, band-pass, and band-stop filters in communication systems, audio processing, and signal conditioning.
- **Data Conversion:** Analog ICs are integral to data conversion processes, including analog-to-digital converters (ADCs) and digital-to-analog converters (DACs), used in digital communication systems, audio processing, and sensor interfaces.



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- **Sensor Interfaces:** Analog ICs interface with sensors to condition and process analog signals from sensors such as temperature sensors, pressure sensors, accelerometers, and gyroscopes.
- **Power Management:** Analog ICs are used in power management applications, including voltage regulators, switching regulators, and power amplifiers, to efficiently regulate and control power distribution in electronic systems.
- **Communication Systems:** Analog ICs are essential components in communication systems, including modulators, demodulators, mixers, and frequency synthesizers, enabling signal modulation, demodulation, and frequency conversion.
- **Audio Processing:** Analog ICs are used in audio processing applications such as audio amplifiers, equalizers, audio codecs, and audio filters for processing and enhancing audio signals in consumer electronics and professional audio equipment.

In summary, analog ICs play a vital role in a wide range of applications, from audio processing and communication systems to sensor interfaces and power management. Their design perspective focuses on achieving optimal performance, managing noise and sensitivity, and ensuring reliability through extensive simulation and verification.

Online Link

[https://us02web.zoom.us/j/?pwd=egjkfWQWERDSCVrdd"tttt432](https://us02web.zoom.us/j/?pwd=egjkfWQWERDSCVrdd)

Number of participants: 66



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Close **Participants (66)**

- MK Mohan KN
- Mona Mudaliar
- MP Muzammil Parvez
- NA N AJAY NAGENDRA(5133)
- NS N Siddaiah
- NV N V V N J SRI LAKSHMI
- NI N.Durga Indira
- N N.L.PRATAP
- N NageswaraRao
- PS P SALEEM AKRAM
- PS P. Syam Sundar
- DK Damarthy Kanakareja

Chats Invite Mute All Unmute All

Fig. List of participants

List of the Participated Students: 28

S. No.	Roll No	Name
1	190040466	SHAIK FAIZALRAHAMATH
2	190040216	KARUMURI DHANESH
3	190040411	POTHANI PRABHUKIRAN
4	190040006	ADUSUMALLI SAI PAVAN
5	190040372	NUKALA AKSHAY KUMAR
6	190040060	BOINA MONISHA SAI
7	190040056	BHAGAVATHULA SATHWIK
8	190040149	GUNA KOUSHIK REDDY GOLUGURI
9	190040172	GURRALA JAHNAVI



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10	190040577	SAIKEERTHI YADLA
11	190040509	SOHAIL AHMMED SYED
12	190040324	MAVURU SAMPATH REDDY
13	190040392	PALREDDY NANDHINI
14	190040666	KOTIPALLI JAHNA PRAVALLIKA
15	190040186	JANGA VINAY KUMAR REDDY
16	190040111	SAI SATYA SIVA VAMSI KRISHNA DASARI
17	190040394	PAMURU VISHAL REDDY
18	190040268	KUCHIMANCHI SATYA NAGARAJ GANESH
19	190040241	KOMMA JASMITHA
20	190040287	MADALA NIHARIKA
21	190040674	KOTTAKOTA CHAITANYA
22	190040424	PUPPALA MOHAN KRISHNA
23	190040152	GORRE SAHITHI
24	190040173	GURRAM RISHITHA
25	190040041	BANDI NAGA DIVYA SREE
26	190040276	LAKSHMI DURGA ANUHYA SREERAM
27	190040501	SURAGAM GNANENDRA
28	190040197	KALVALA KUSHAL SAI KARTHIKEYA

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