VASAVI COLLEGE OF ENGINEERING

(AUTONOMOUS)

ACCREDITED BY NAAC WITH 'A++' GRADE

Ibrahim Bagh, Hyderabad-31

B.E (E.C.E) – V SEMESTER

POGIL: Process Oriented Guided Inquiry Learning Activity

S.no	Name	Roll No	Role	Sign	Remarks
1.	Dheeraj	1602-21-735-011	Manager		
2.	Sahithya	1602-21-735-036	Presenter		
3.	Chanikya	1602-21-735-009	Critic		
4.	Samhitha	1602-21-735-018	Technician		
5.	Ronith	1602-21-735-032	Recorder		
6.	Anoohya	1602-21-735-005	Spy		
7.	Paavandeep	1602-21-735-024	Reader		
8.	Preetham	1602-21-735-029	Reader		
9.	Sai Praveen	1602-21-735-039	Reader		

SUMMARY:

- The flash ADC is a high-speed ADC that is widely used in real-time applications that require fast data conversion.
- It offers numerous advantages over other types of ADCS, such as speed and simplicity of design.
- However, it also has some limitations, such as power consumption and limited resolution.
- Despite its limitations, the flash ADC remains a popular choice for high-speed applications where speed is a top priority.
- It's simple architecture and fast conversion time make it an excellent choice for applications such as video processing, radar systems, and high-speed data acquisition systems.

KEY POINTS:

FUTURE DEVELOPMENTS AND TRENDS IN FLASH ADC

- The demand for higher-speed, higher-resolution, and lower-power ADCs continues to drive advancements in flash converter technology.
- Ongoing research focuses on improving noise immunity, reducing power consumption, and increasing integration levels using advanced nanoscale semiconductor technologies.
- Furthermore, the emergence of machine learning and artificial intelligence applications emphasizes the need for efficient and high-performance flash converters in processing analog sensor data in real-time.