

DESIGN OF VGA (VARIABLE GAIN RESISTOR)

**Graduation Project Year 2022/2023**



2022 - 2023

Faculty of engineering

Suhag university

**Book contents**

1. **Introduction to VGA circuit**

* Brief description of VGA circuit and its components
* Importance of analog layout in VGA circuit design

1. **Analog Layout Fundamentals**

* Introduction to layout
* Fabrication process
* Matching
* Latch up

1. **VGA Circuit Layout Considerations**

* Component Placement for VGA Circuit Layout
* Routing Signals in VGA Circuit Layout

1. **Simulation and Verification of VGA Circuit Layout**

* Design Rule Checker (DRC)
* Layout Versus schematic (LVS)
* Parasitic Extraction (PEX)

1. **Conclusion and Future directions for VGA circuit design**
2. **References**