



Linear Circuit Analysis II

EECE 202

Why do we need Linear Circuit Analysis ?

There are many challenges that the world is facing to ensure sustainable and enhanced quality of life in the following industries:

- **Transportation**
- **Energy**
- **Communication**
- **Medicine**
- **Housing**
- *Other (any suggestions)?*

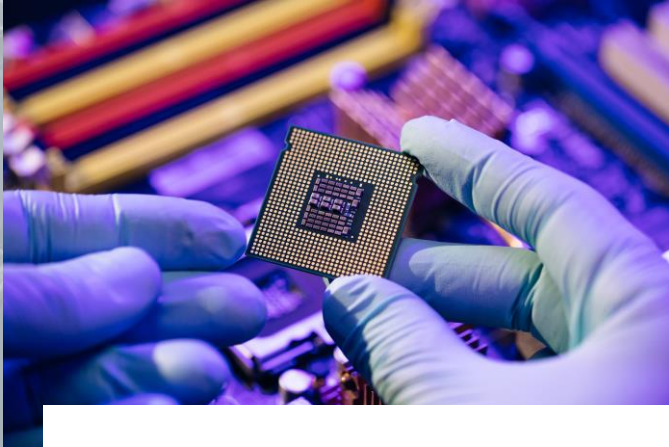


Why do we need Linear Circuit Analysis ?

Linear Circuit Analysis is required for creating electrical and electronic solutions to these challenges!

For example.....

Transportation



***Power Semiconductors
and energy storage
technology – Plug-in
Hybrid Electric Vehicles***



Energy: Photovoltaic Materials



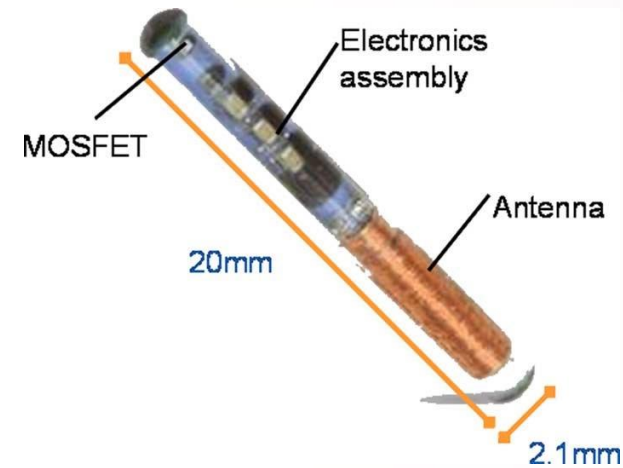
***Renewable Energy –
Solar Power from Photovoltaic Materials
Wind Power from Generators***

Communication



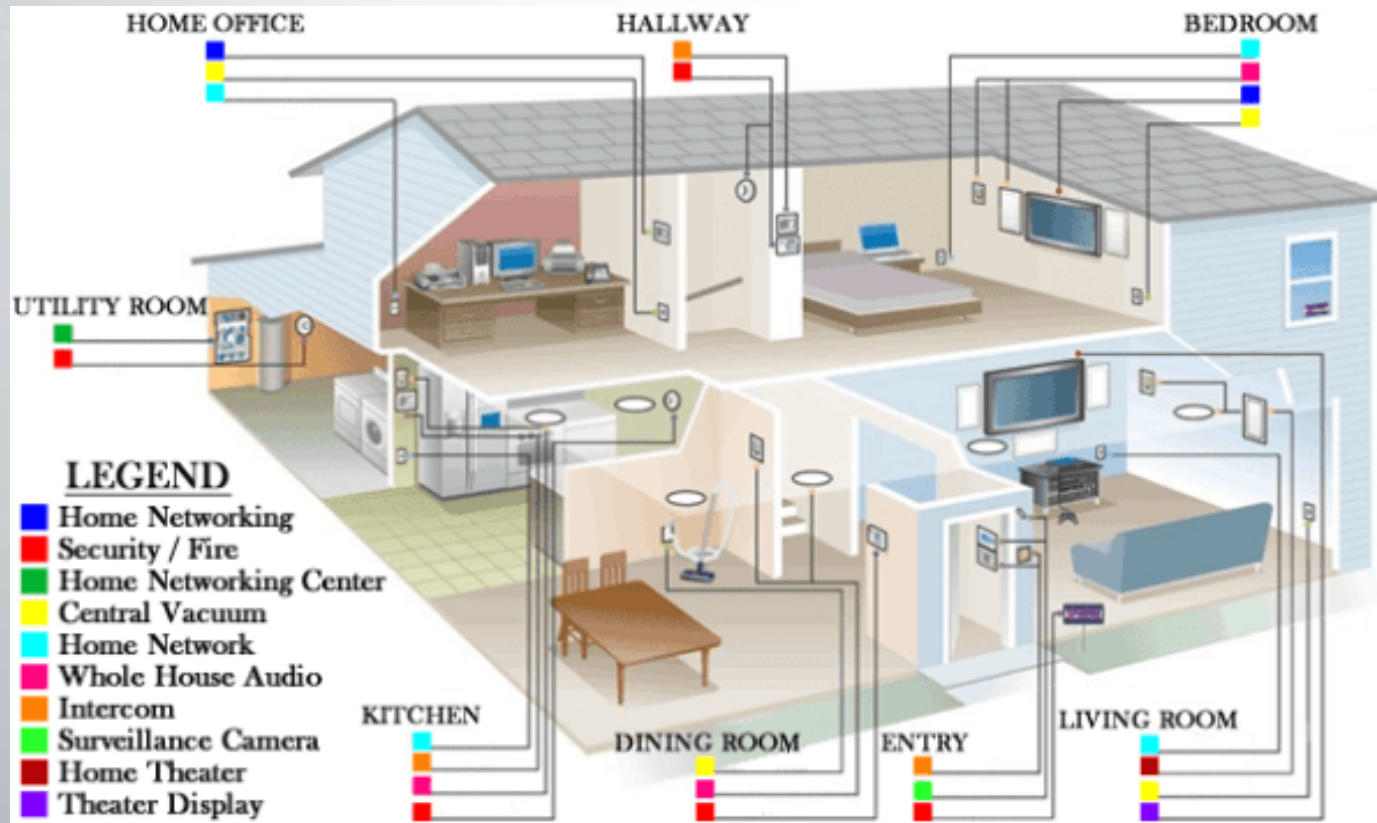
***Integrated Circuits and
RF/Microwave Electronics
Apple - Samsung***

Medical Technologies



***Implantable radiation
sensors to improve
cancer therapy
Electromagnetic imaging***

Housing



- Electronic Systems:**
- *energy management*
 - *Telecommunications*
 - *security*
 - *entertainment*