SNS COLLEGE OF TECHNOLOGY

COIMBATORE

AN AUTONOMOUS INSTITUTION

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade

Approved by AICTE New Delhi & affiliated to the Anna University, Chennai

DEPARTMENT OF MCA

Course Name : 19CAE725- INTERNET OF HINGS

Class : I Year / II Semester

Unit I – Fundamentals of IOT

Topic 3 – Physical Designs of IOT

Physical Design of IoT

Physical Design of IoT

"Things" refers to IoT devices which have unique identities and can perform remote sensing, actuating and monitoring capabilities

Physical Design of IoT

IoT devices can perform the following

- Exchange data with other connected devices and software applications directly or indirectly
- Collect data from other devices /applications
- Send the data to web servers in cloud for back end process
- Perform some tasks based on input data constraints

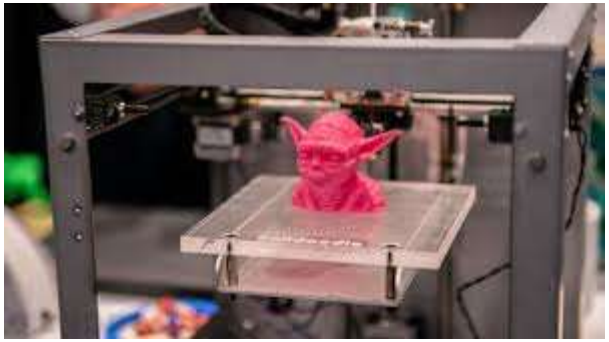
Physical Design of IoT

An IoT device consists of several interfaces for connections to other devices

- I/O interfaces for sensors
- Interfaces for Internet connectivity
- Memory and storage interfaces
- Audio/video interfaces.

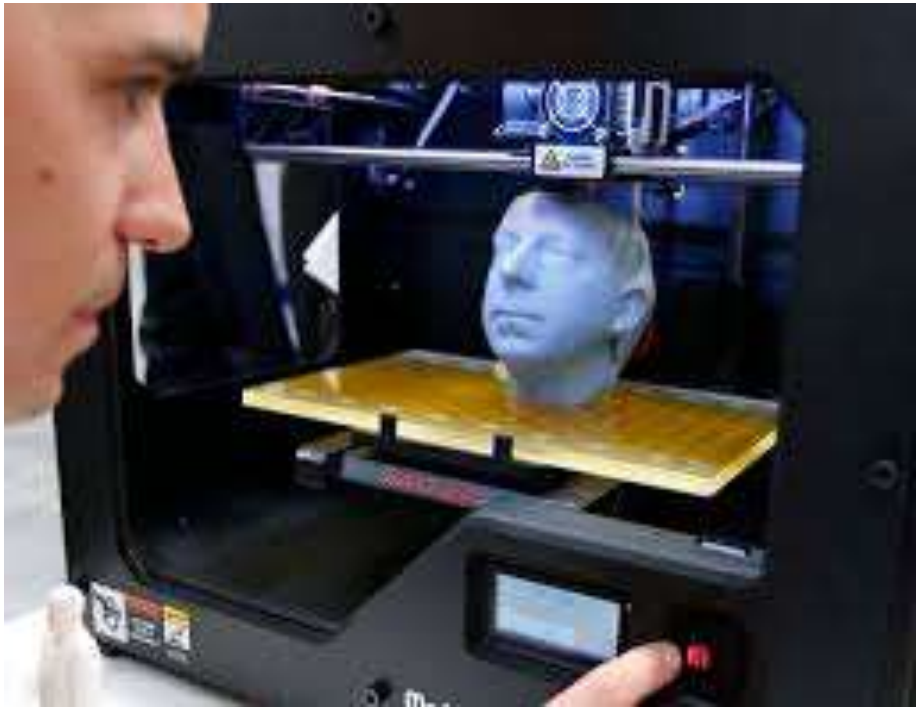
Physical Design of IoT

- Capabilities of IoT devices to be considered
  - Sensor capacity
  - IoT communication protocol to use
- Apply design thinking approach
- Example : Additive manufacturing/3D printing

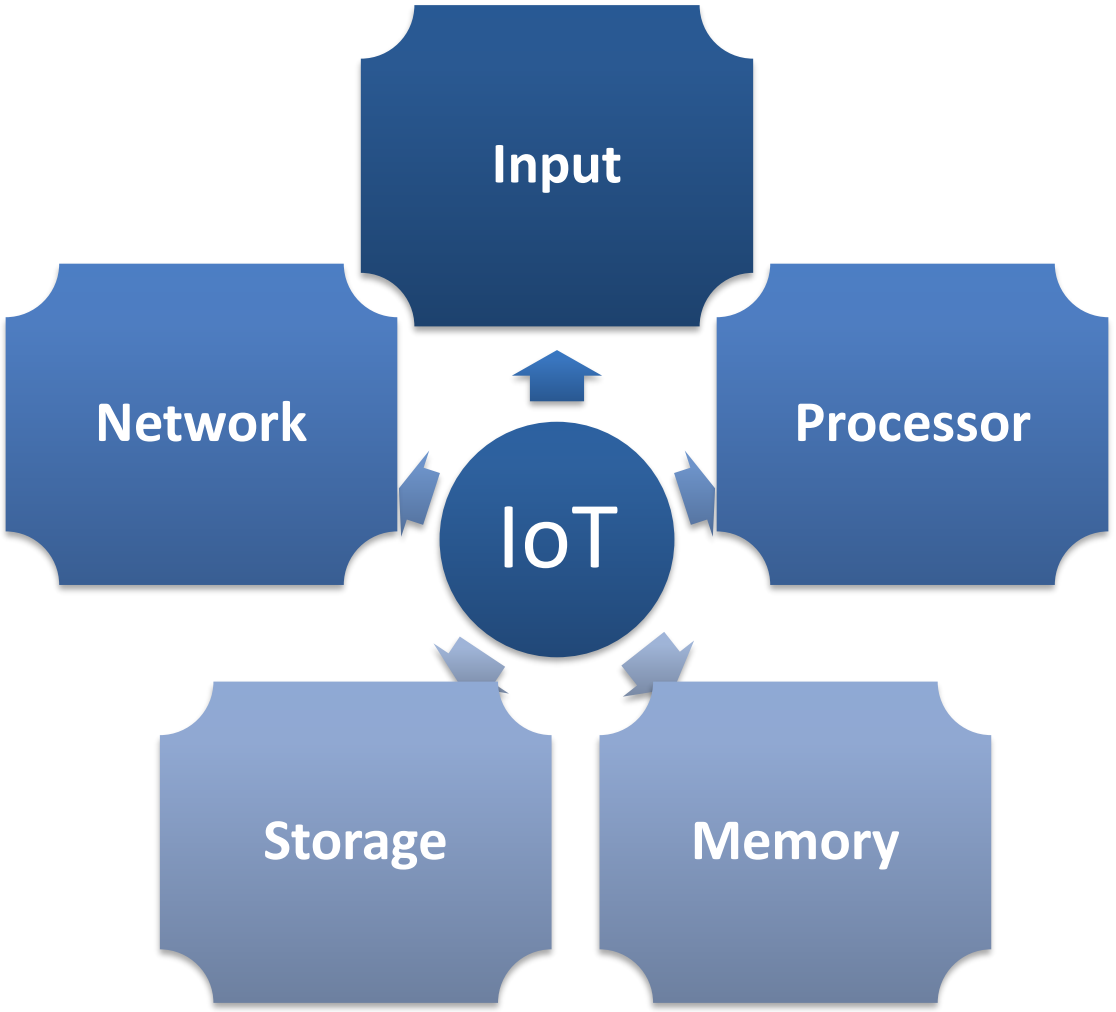
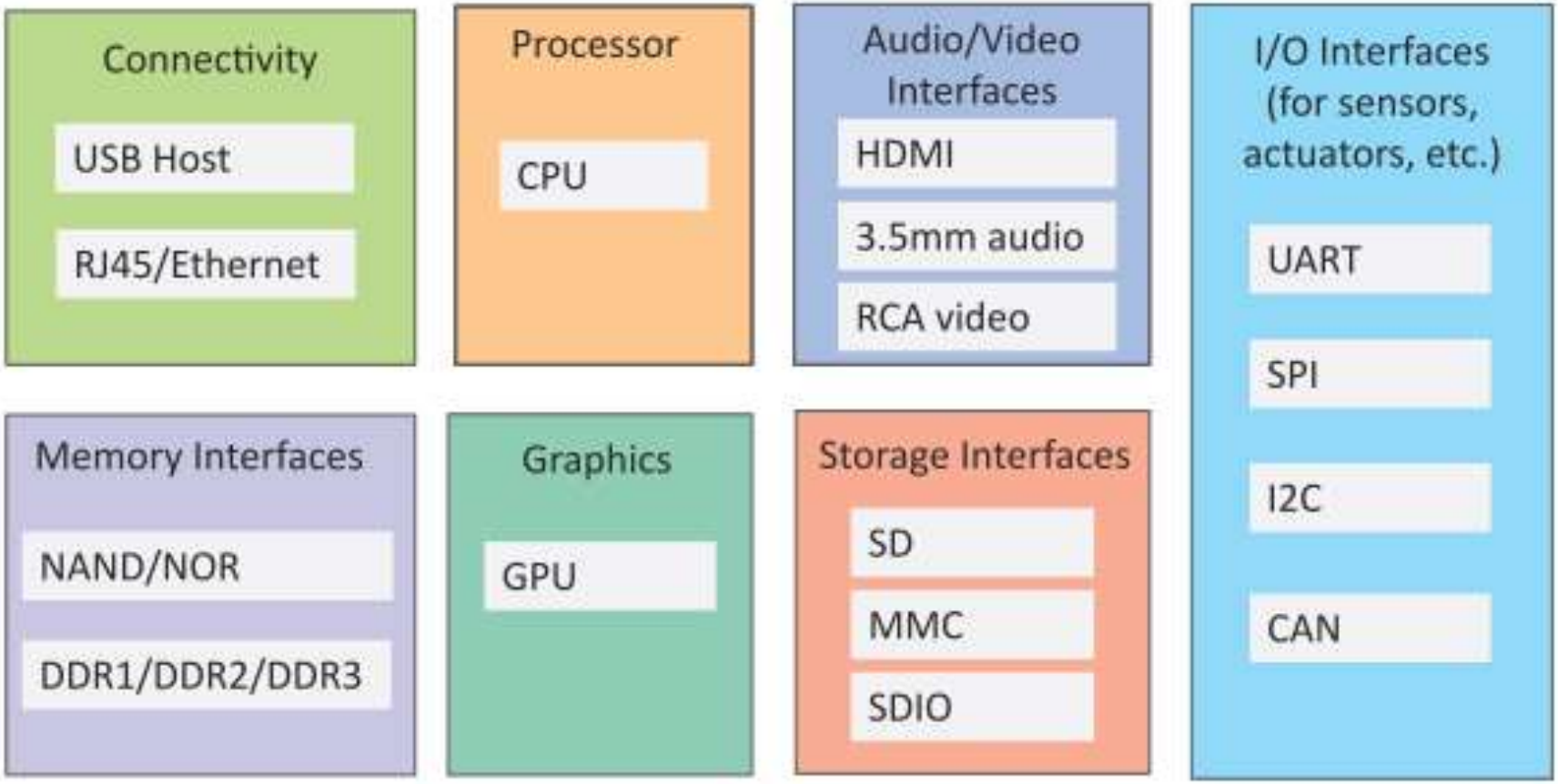


3D Printing

3D Printing



Physical Design of IoT



Black diagram of IoT