## Frequently asked questions in VLSI:

1. **What is VLSI?**

   - Very Large-Scale Integration (VLSI) is a field of electronics engineering that deals with designing and fabrication of compact and high-performing chips.
   - It is an Integrated circuit (IC) with millions of transistors on a single chip.

2. **Is VLSI an allied branch of electronics engineering?**

   Yes, it is an allied branch of electronics engineering.

3. **Is the VLSI branch a core branch?**

   Yes, it is a core electronics branch.

4. **Is semiconductor is related with VLSI?**

   - Semiconductor is a material used for manufacturing VLSI Chips. Hence VLSI chips are also called semiconductor chips.
   - Semiconductor Chips are heart of all devices from phones to drones to gadget.

5. **What subjects are covered in the VLSI curriculum?**

   VLSI curriculum consist of subjects such as Electronics devices and circuit, digital electronics, Microprocessor and Microcontrollers, Computer Architecture, Digital VLSI design, Analog VLSI design, Mixed VLSI design and CAD tools for VLSI design.

6. **What are the career opportunities after completing Bachelors in VLSI?**

   - After completing bachelors, you can work in industries related to domains such as semiconductors, electronics, telecommunications, and embedded systems.
   - You can work as VLSI engineers, ASIC (Application-Specific Integrated Circuit) designers, FPGA (Field-Programmable Gate Array) engineers, hardware design engineers, verification engineers, and more.

7. **What are the top companies hiring VLSI engineers?**

Top semiconductor companies like

- Intel
- Qualcomm
- NVIDIA
- Texas Instruments
- Advanced Micro Devices (AMD)
- Broadcom
- Cadence

8. **What is the scope of VLSI in India?**

- Many semiconductor companies have set up design and research centres in India to leverage the skilled VLSI talent pool, offer excellent career growth opportunities.
- Indian government is providing financial assistance for setting up semiconductor manufacturing facility for promoting India's plan to achieve Atma Nirbharta in manufacturing semiconductors.
- These schemes are appealing investment in the semiconductor sector, hence companies like AMD, Vedanta are investing on massive level in India which opens more opportunities for VLSI Engineer.
- VLSI engineer can do Projects based on Industry standard protocols such as AXI, AHB and USB etc.

9. **Is an advanced degree required for a career in VLSI?**

While a bachelor's degree in VLSI is sufficient to start a career in VLSI, pursuing a master's or Ph.D. in VLSI or related fields can initiate more openings in more specialized and advanced roles and research positions.

10. **How to acquire hands on knowledge in VLSI Design?**
- Through lab courses, workshop, hands-on training
- Through internship, online courses and design contents to enhance your practical knowledge.
- Through certificate courses in VLSI design by CDAC /NIT's/IIT's.