

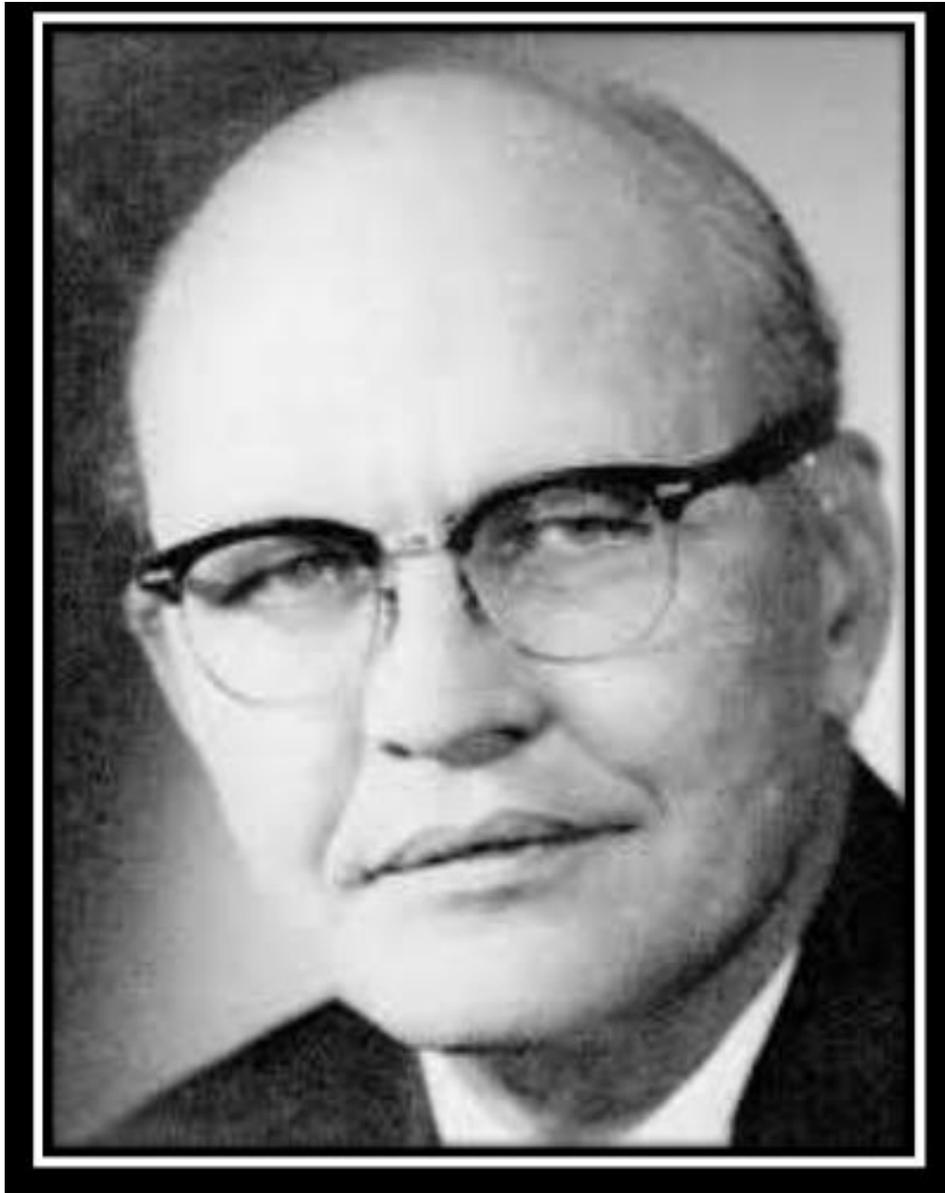
LECTURE-2

Integrated Circuit (IC)

Integrated circuit, commonly referred to as an IC, is a microscopic array of electronic circuits and components that are diffused or implanted onto the surface of a single crystal, or chip, of semiconducting material such as silicon

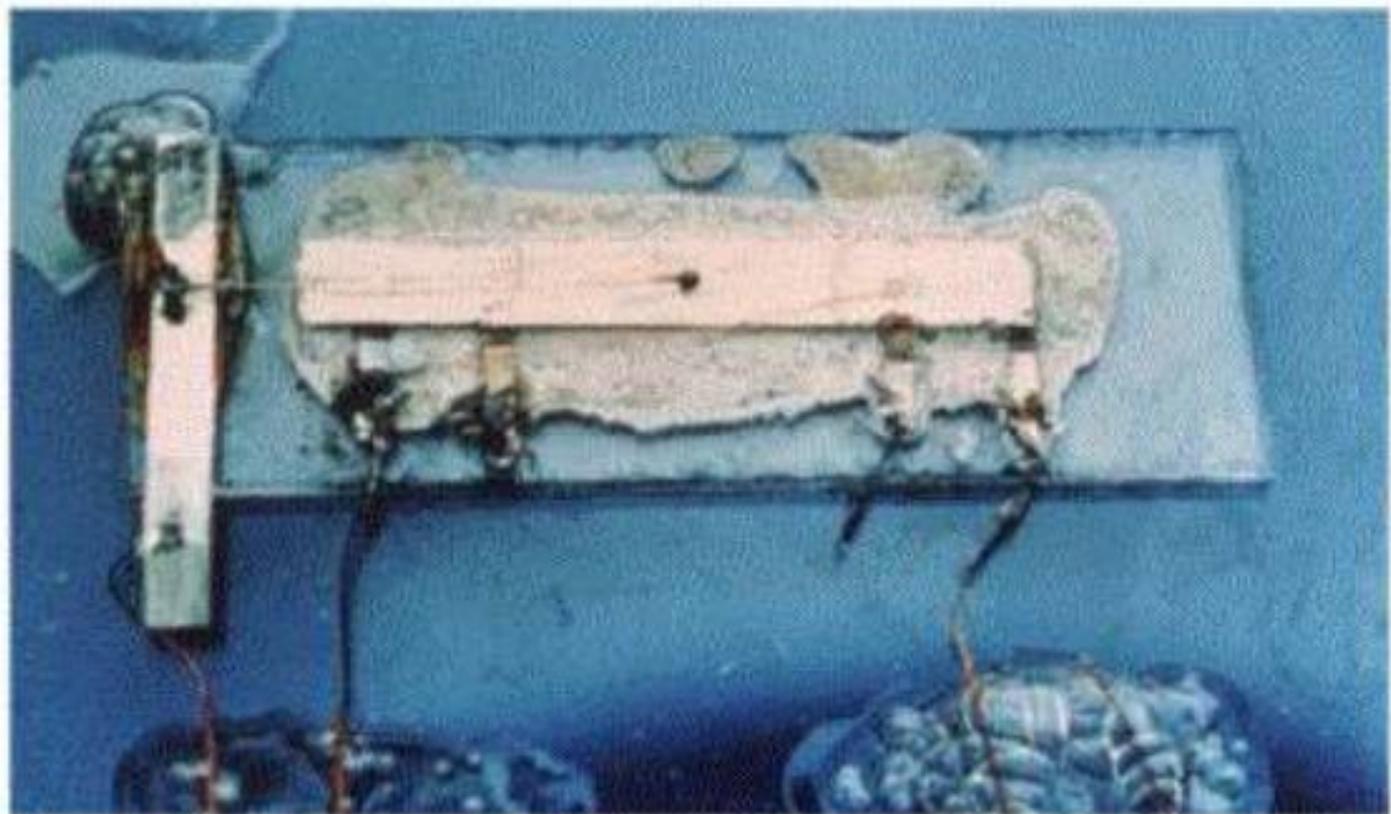
History of Integrated Circuits

In 1958 Jack Kilby an engineer of Texas instruments demonstrated successfully the first working integrated circuit device. The first customer to this new invention was the US Air Force. In the year 2000 Jack Kilby won the Nobel Prize in Physics for miniaturized electronic circuits.



Jack St. Clair Kilby (November 8, 1923 – June 20, 2005)

- was an American electrical engineer who took part (along with **Robert Noyce**) in the realization of the first **integrated circuit** while working at **Texas Instruments** (TI) in 1958. He was awarded the **Nobel Prize in physics** on December 10, 2000.



The First Integrated Circuit

First integrated circuit was proposed by G.W.A .Dummer in 1952.

First functional integrated circuit was demonstrated and patented by Jack Kilby in 1959.

Robert noyce also patented the first integrated circuit in the year 1959.

