



A LIGHT HAS
DAWNED ON ME



electronics



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Era of electronic valve technology

The electronic valve made the enhancement of electronic signals possible. Transmissions via long distances were made possible (telephone sets, broadcasting, and directional radio).
Connection technology: wiring via printed circuit boards "Through Hole Technology".

- 1904** electronic tube by John Ambrose Fleming
- 1923** first broadcasting station, 'Telefunken Berlin'
- 1926** Foundation of the Dralowid-plant, Berlin
- since 1934 Dralowid-plant Teltow after 1945 WBN and EBT production of electronic components
- 1930** all-electric television set, Manfred von Ardenne, Berlin
- 1938** first programmable digital computer Z1, Konrad Zuse Berlin (museum of technology Berlin)

Range of application for electronic valve:
broadcasting and televisions sets, transmission systems, medical technology, industrial electronic, telephone sets, valve amplifier technology

Era of semiconductor technology

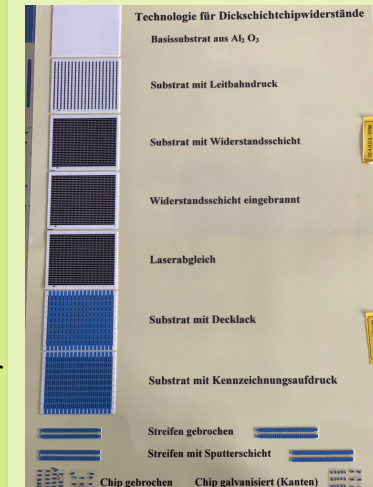
Semiconductor components do have smaller measurements and a lower energy demand. For the production of semiconductors cleanroom conditions are necessary.
Connection technology: head cards equipping via the "Surface Mounted Technology" (SMT).



- 1947** first transistor, Bell-Laboratory, USA
 - 1952** start of the production and development of semiconductor components in the plant for components of intelligence technology, Teltow (WBN)
 - 1960** foundation of the institute for semiconductor technology of the GDR in Teltow
 - 1965** production of semiconductor components in the rectifier substation, Stahnsdorf
- Range of application of the semiconductor components:**
broadcasting and television technology, household electronic, medical technology, industrial technology, telephone sets, computer technology, traffic engineering, drive technology (power electronics)

Era of micro electronics

Micro electronics/micro computer technology:
For the production of micro electronic circuits complicated production processes in cleanroom conditions are used. Degree of integration: since the 80s it is spoken of "Very Large Scale Integration" (VLSI, more than 100.000 transistors/circuit)



- 1971** first micro processor, Texas Instruments, USA
- 1985** components for micro electronic, chip and foil resistors, surface wave filters in Teltow (EBW), power semiconductors in the rectifier substation, Stahnsdorf
- 2012** successor companies like microtech electronic, Vectron International, powertron and Epcos represent the micro electronic in our region



Range of application of the micro electronic:
in every field of the economy and the every day life. The micro technology revolutionised the communication in particular.