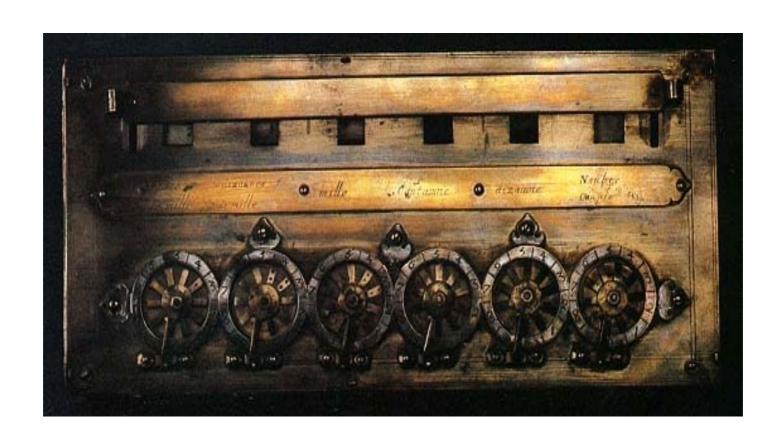
### Histórico dos Computadores

Fonte: https://tvcrit.org/Classes/Jbutler/T389/ITHistoryOutline.htm

#### Máquina de calcular Pascal (frente) - 1642



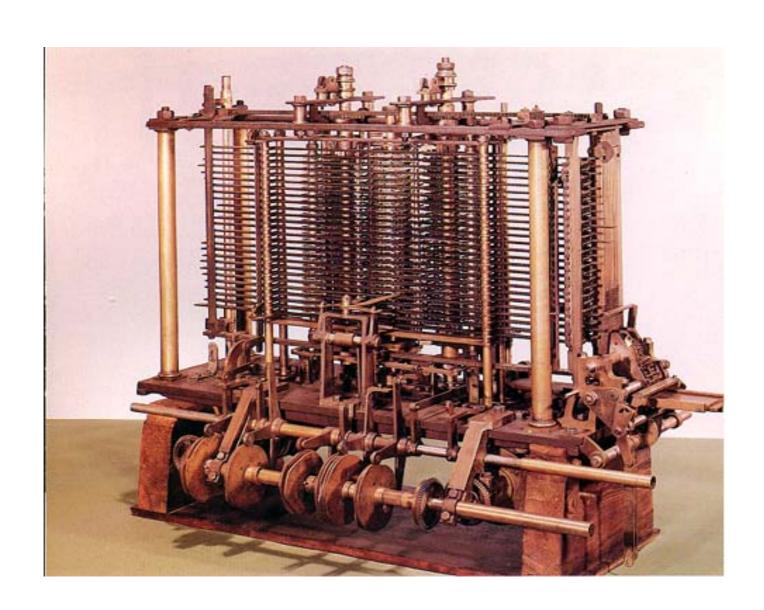
#### Máquina de calcular Pascal (interior) - 1642



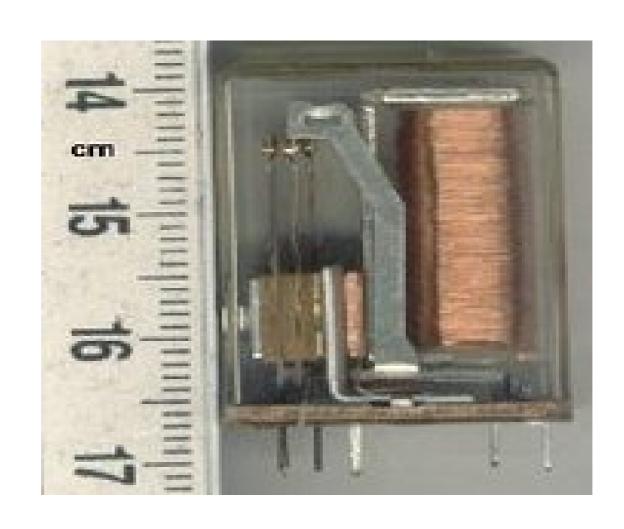
#### Máquina de diferenças Babbage - 1834



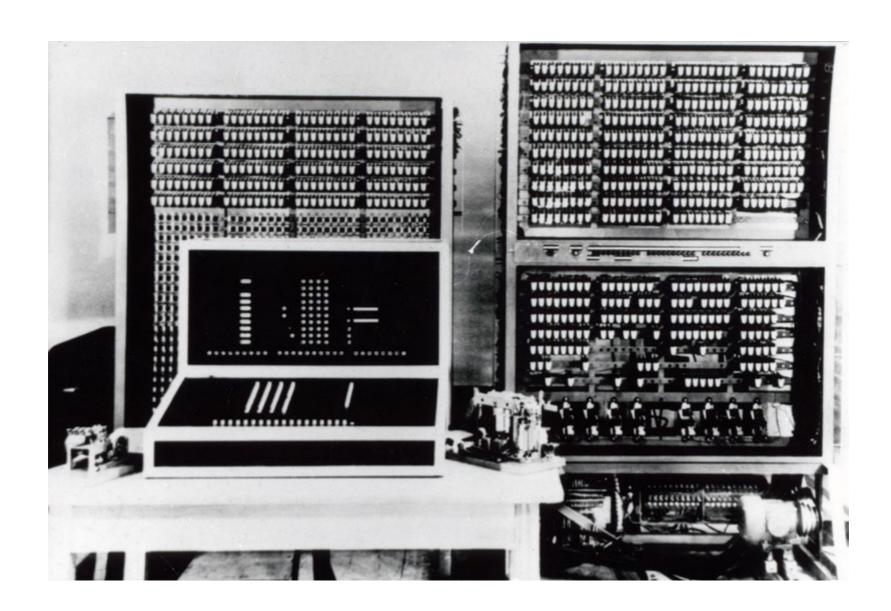
#### Máquina analítica Babbage - 1834



### Relay eletromecânico



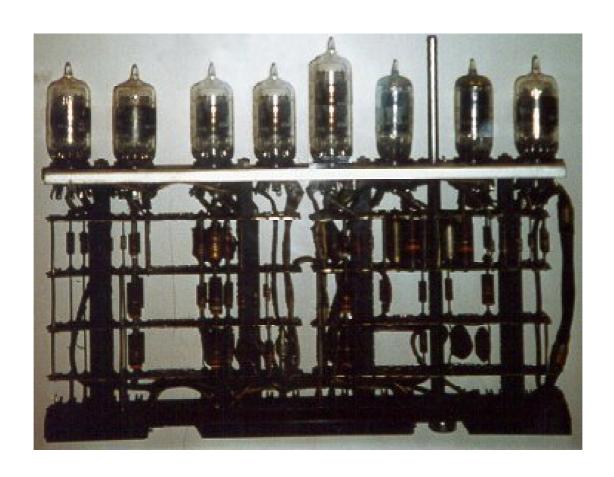
#### Máquina Z3 Zuse - 1941



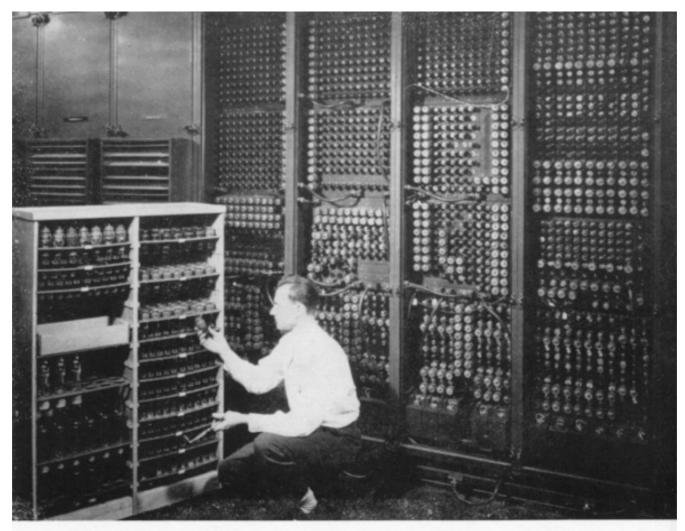
#### Válvula - 1906



#### Circuito com válvula

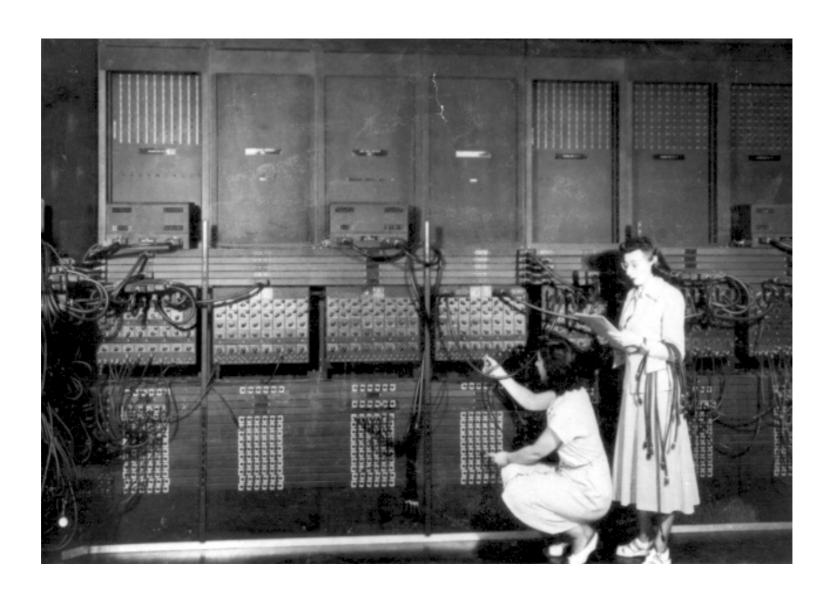


#### **ENIAC - 1946**



Replacing a bad tube meant checking among ENIAC's 19,000 possibilities.

#### **ENIAC - 1946**



#### Arquitetura de Von Neumann

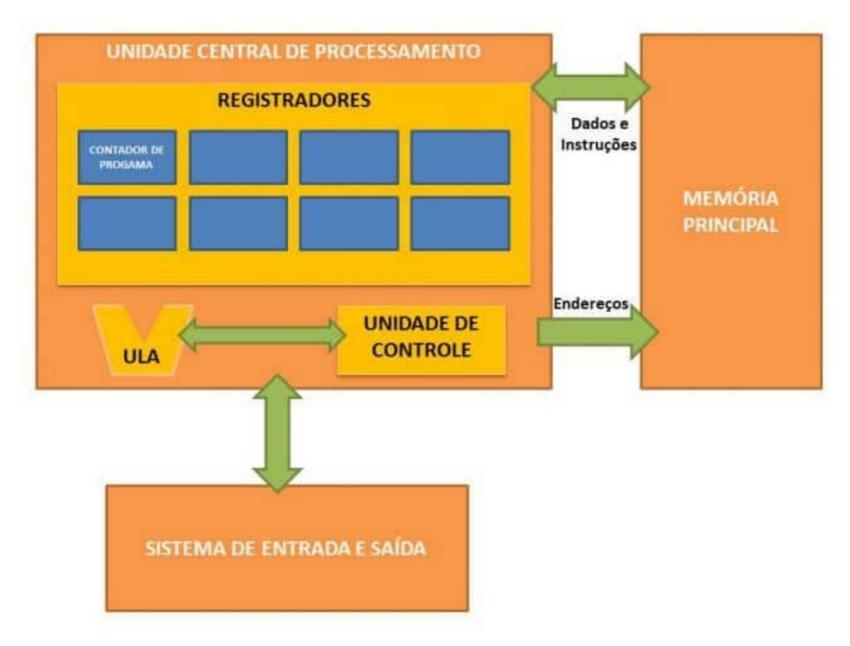
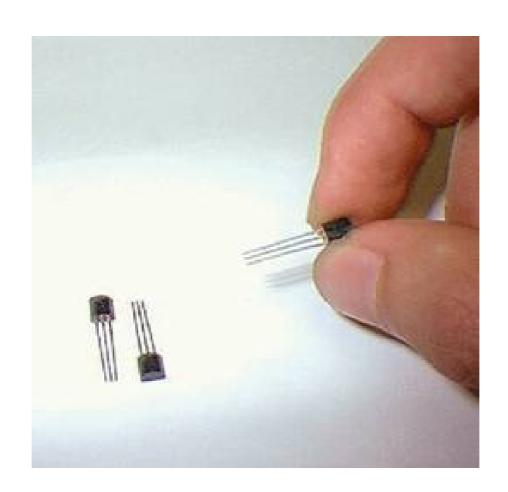
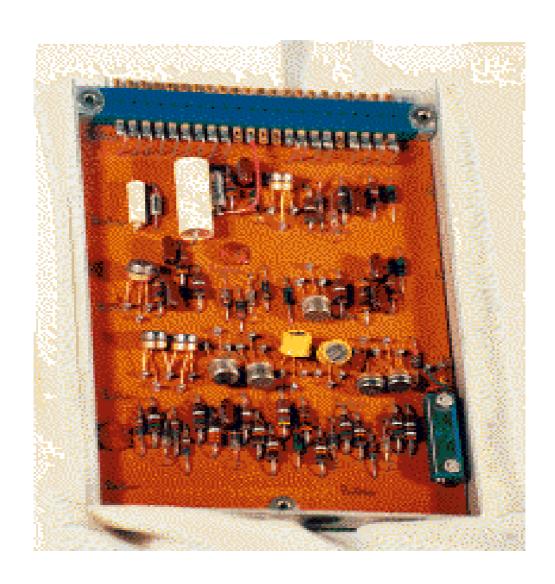


Figura retirada de https://medium.com/trainingcenter/a-arquitetura-de-von-neumann-121489873fd4

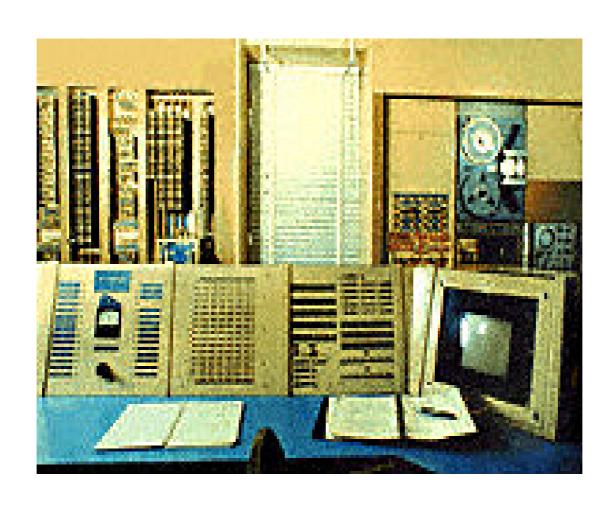
#### **Transistor - 1947**



#### **Circuito transistorizado**



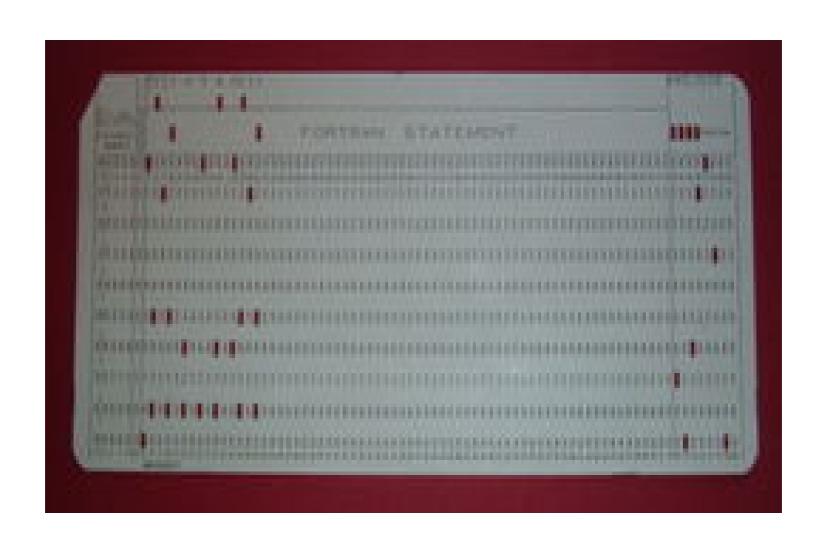
#### TX-0: Primeiro computador transistorizado - 1956



#### IBM 360 - 1964

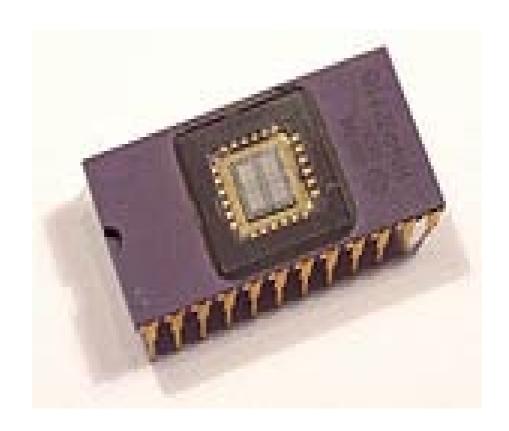


#### Cartão perfurado – FORTRAN - 1957

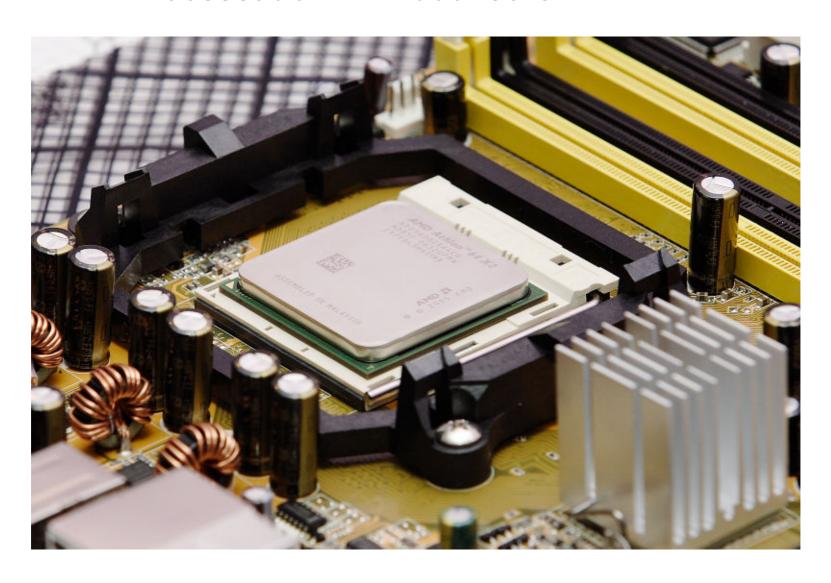


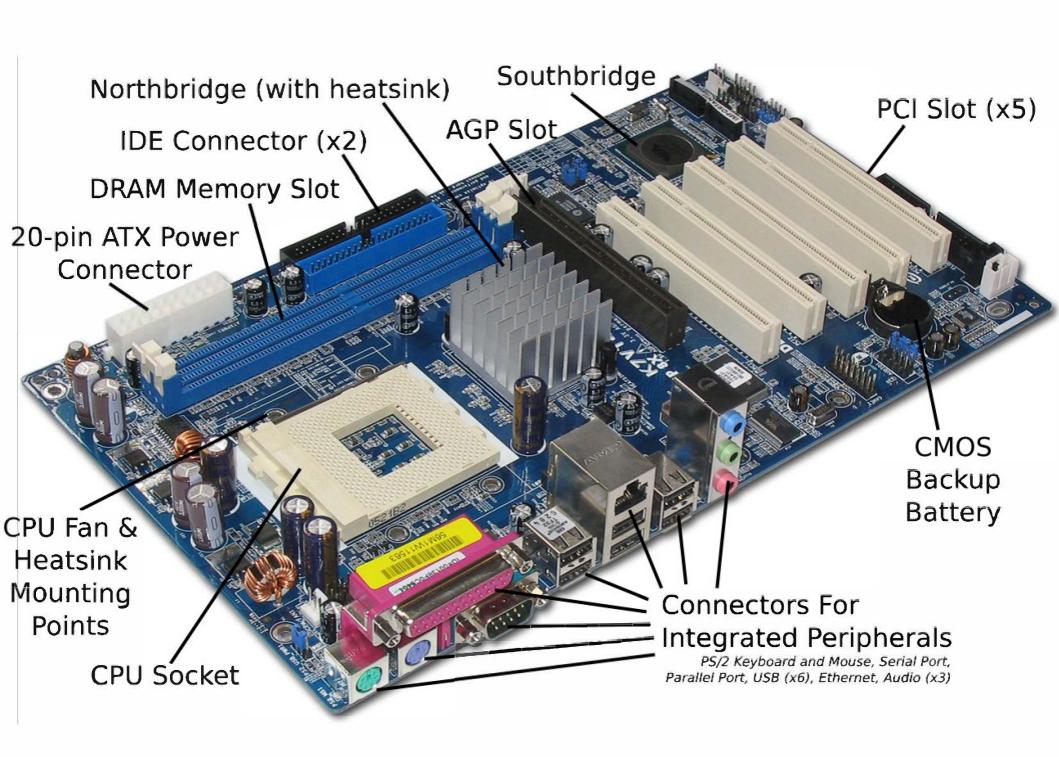


### **Circuito integrado**

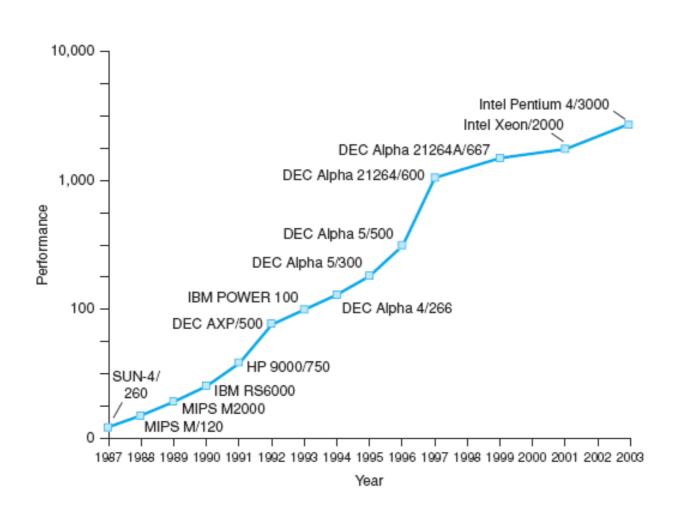


#### **Processador AMD dual core**





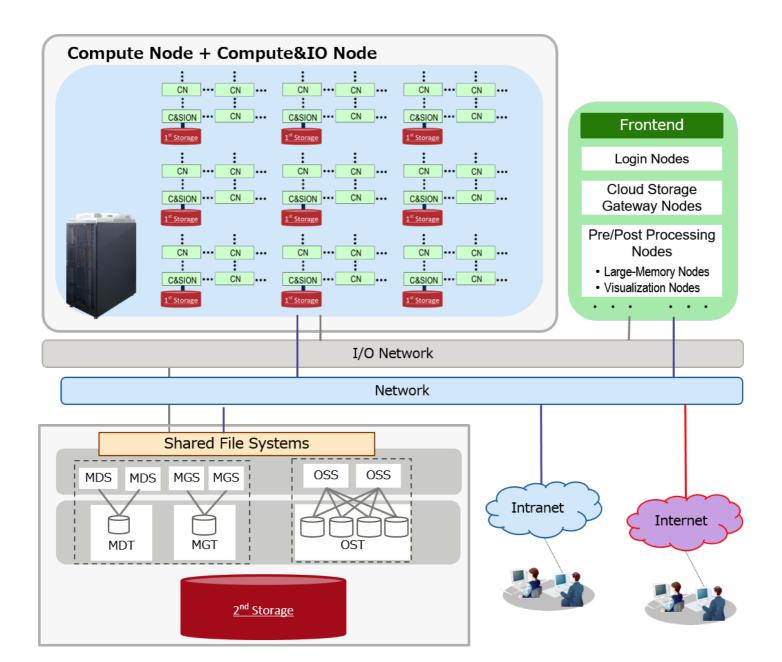
## Histórico do Desempenho das Estações de Trabalho



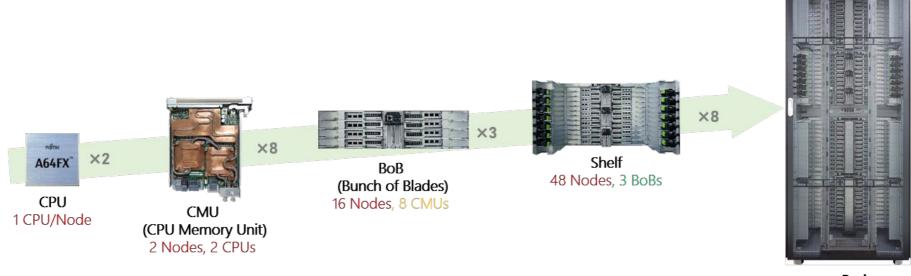
### Top500.org

- Supercomputador Fugaku, A64FX 48C 2.2GHz
  - Tofu interconnect D, Fujitsu
  - RIKEN Center for Computational Science
  - Japão
  - Número de cores: 7,299,072
  - Máx Tflops/s: 415,530
  - Potência (kW): 28,335

### Arquitetura



## Arquitetura



Rack 384 Nodes, 8 Shelves

Courtesy of FUJITSU LIMITED

# Fugaku

