

IBM 604 Electronic Calculating Punch

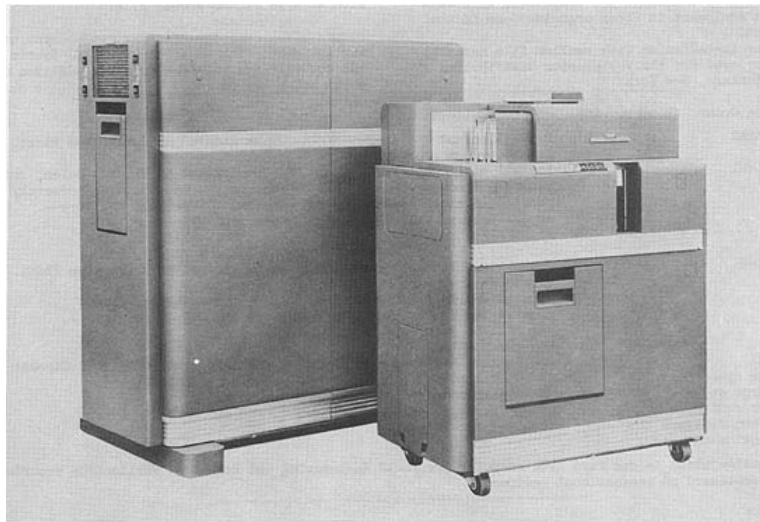
Ralph Palmer returned to IBM after World War II and helped push the company from the electromechanical age into the electronics age. He led a team of engineers with backgrounds in electronics to redesign the IBM 603 Electronic Multiplier. The result was the IBM 604 Electronic Calculating Punch.

The 604 could execute up to 40 (later 60) plugboard-controlled program steps for each card read by the attached reader-punch. It could skip steps based on input data or calculated results, and it could even divide! The machine had 32 digits of internal memory.

By itself, it still wasn't quite a stored-program computer, but the IBM 604 pioneered some manufacturing innovations, such as the use of pluggable circuit units. Applications were from accounting, statistics, science, engineering, and government.

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| Manufacturer: IBM | Memory technology: plugboard and vacuum tube |
| First introduced: 1948 | Memory size: 40 (later 60) program steps |
| CPU technology: vacuum tube | Machine cycle time: 50 KHz (0.05 MHz) |

Sources: Emerson Pugh, et al. *IBM's Early Computers*. Cambridge, MA: MIT Press, 1986. pp. 60-63
BRL Report, 1961



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