

Hot Chips Update

August 25, 2008

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The Computer History Museum

Mission: To preserve and present for posterity the artifacts and stories of the information age



Vision: To explore the computing revolution and its impact on the human experience

Museum Overview

- **Collection & Preservation**

- World's largest collection of computer-related artifacts
 - Objects: 20,000 artifacts
 - Software: 5,000 items representing several terabytes of historical data
 - Media: 20,000 still images & 5,000 moving images
 - Documentation: Approx. 5,000 linear feet of historical data
 - Ephemera: 1,000s of individual items
- Oral Histories: 236 personal stories from computing pioneers; 111 available on-line
- <http://www.youtube.com/computerhistory>

- **Restoration & Exhibition**

- Restoration Projects
 - IBM 1620, PDP-1, IBM 1401, RAMAC
- Visible Storage
- Innovation in the Valley
- History of Computer Chess Exhibit
- Babbage Difference Engine No. 2
- Timeline of Computing History Exhibit (late 2009)
- 5 Theme Galleries
 - Software, Storage, Semiconductors/Processors, Networking, Input/output
- Rotating Topical & Travelling Exhibits
- Cyber Museum

- **Speaker Series & Events**

- Computer History Museum Presents:
 - explores the social impact of the computing revolution and its effect on the human experience
- Semiconductor Lecture Series
 - Arthur Rock, Morris Chang, Jim Morgan
- Special Anniversary Celebrations
 - 25th Anniversary of Commodore 64, 30th Anniversary of First Three-Network Transmission, Fairchild@50
- Annual Fellow Awards Ceremony
- Rental events
 - IBM, Intuit, Google, SAP, Intel, HP, SRI, Churchill Club, ACM, Grow Awards

- **Research & Education**

- Providing students, educators, scholars and researchers access to the Museum's collection
 - Library
 - Oral Histories
 - Video Archives
 - Internship Opportunities
 - High School/College field trips
 - Research Center

- **Outside Advisors & Special Interest Groups (SIGs)**

- Board of Advisors
- Software Collection Committee, Software Industry, Semiconductor & Storage SIGs

New President and CEO

- John C. Holler
- Started July 1
- FCC, PBS, and Pearson plc in London
- Lead CHM through the next growth phase.

Here for a year! Thanks Nathan M!

- *The Victorian Computer: Charles Babbage's Difference Engine #2 (1847)* on display for one year at the CHM.
 - The Babbage Engine weighs **five tons** and has **8,000 parts**.
 - It's **an arresting spectacle** in operation!
 - Pipelined **seven 31** decimal digit adders with ripple carries, **six second** cycle.
- You can see it cranked each day Museum is open.

New Babbage Engine Exhibit

[home](#) | [directions](#) | [contact](#)



The Babbage Engine

[Welcome](#) | [Overview](#) | [History](#) | [The Engines](#) | [How it Works](#) | [Key People](#) | [A Modern Sequel](#) | [Credits](#)

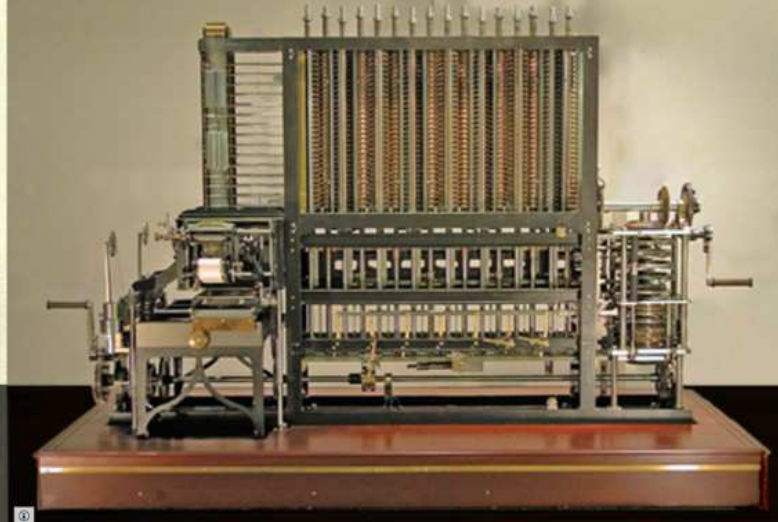
Search Exhibit



"ANOTHER AGE MUST BE THE JUDGE"

- Charles Babbage 1837

info ⓘ c. 1833 credit: Science Museum



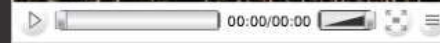
Charles Babbage (1791-1871), computer pioneer, designed the first automatic computing engines. He invented computers but failed to build them.

The first complete Babbage engine was completed in London in 2002, 153 years after it was designed. Difference Engine No. 2, built faithfully to the original drawings, consists of 8,000 parts and weighs five tons.

This vast mechanical calculating engine is on display at the Computer History Museum, Mountain View, for one year only. It is a sumptuous piece of engineering sculpture and an arresting sight in operation.

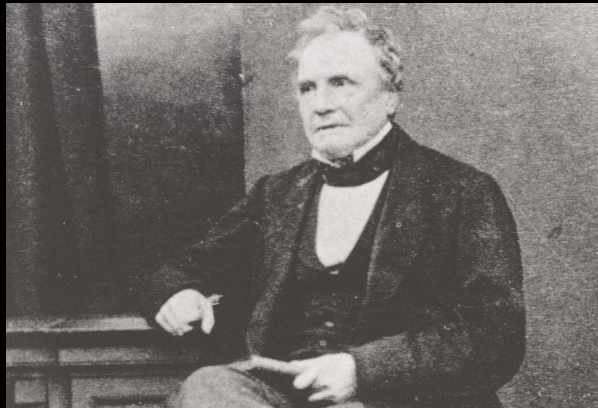
Learn more about this extraordinary object, rich in history. Discover the wonder of a future already passed. A sight no Victorian ever saw.

Website curated by Doran D. Swade



Midsection detail of Difference Engine No. 2. In operation

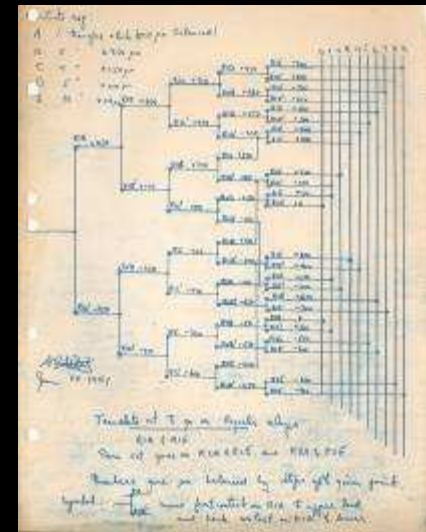
Five Collection Areas



Media



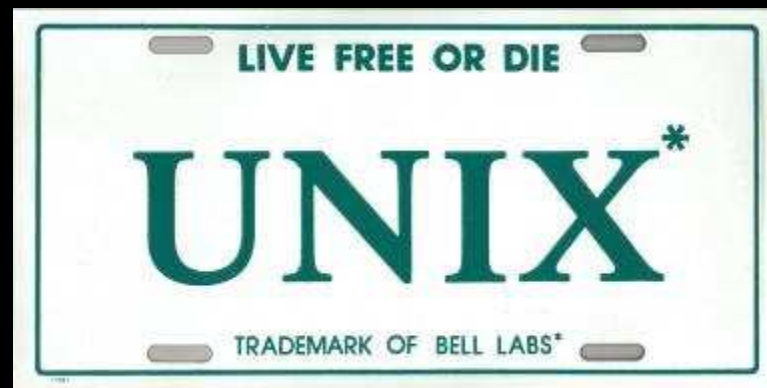
Software



Documentation



Objects



Ephemera

YouTube Channel

CHM YouTube Channel

- An agreement with Google YouTube to provide CHM with a partner level channel
- Brings our videos to a huge new audience

The screenshot shows the YouTube channel page for the Computer History Museum. At the top, the logo reads "COMPUTER HISTORY MUSEUM" with the tagline "Where Computing History Lives". Below the logo is a channel description: "The Computer History Museum" and "ComputerHistory". The channel is a "Broadcaster" joined in November 02, 2007, with 1 week of activity, 191 video watches, 1,174 subscribers, and 38,274 channel views. A video player is featured with a thumbnail of Len Shustek, Chairman of the Board of the Computer History Museum. Below the video player, there are links for "Computer History Museum Overview" (38,774 views, 5 comments) and a "Playlists" section for "Internet / Networking & Videos".

Commodore 64 - 25th Anniversary Celebration

The screenshot shows a video player with a thumbnail of a man in a suit speaking at a podium. The video player interface includes a progress bar, volume control, and playback buttons. Below the video player, there are social sharing options: "Share", "Favorite", "Add to Playlists", and "Flag". The video has a "Rate" of 4 stars (100 ratings) and "Views: 21,292". There are also "Comments: 81", "Favorited: 142 times", "Honors: 0", and "Links: 4".

The screenshot shows the "Videos" section of the Computer History Museum YouTube channel. It features a video titled "From: ComputerHistory" with a "Subscribe" button. Below the video title, there is an "About This Video" section: "[Recorded Dec 10, 2007] The Commodore 64 was an 8-bit home computer released by Commodore International in August, 1982, and during its lifetime (between 1982 and 1994), sales totaled close to 17 m... (more) Added: December 14, 2007". There is an "Embed" section with a "customize" link and "Video Owner Options: Edit Your Video". Below this, there is a "More From: ComputerHistory" section with two video thumbnails: "John Hennessy with Paul Stoff" (01:03:38, 183 views) and "Carol Bartz - CEO of AutoDesk" (01:19:21, 316 views).

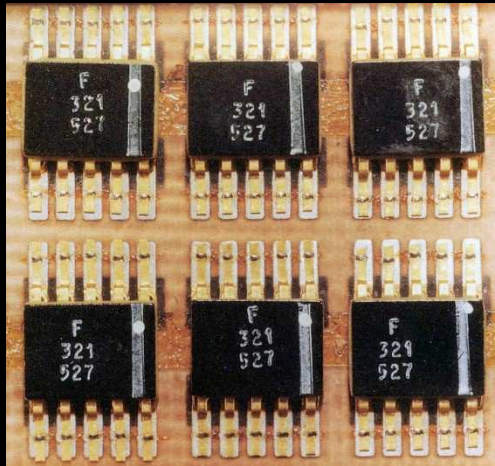
Results (since Dec 2007):

- Now offering 45 videos
- 286,000+ videos viewed
- 1,756+ subscribers
- 2,000+ visitors from YouTube brought back to the CHM website

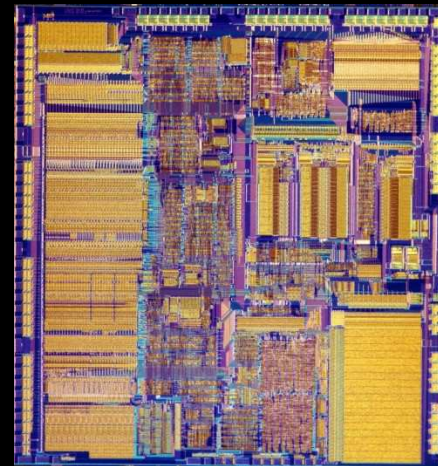
Special Projects

- Oral History Program
- IT Corporate Histories Project (ITCHP)
- Software Preservation Group (SPG)
- Storage Special Interest Group
- Computer Restorations
- **Semiconductor Special Interest Group (Semi SIG)**

Semiconductor SIG



Fairchild Micrologic



Intel 386

Organized in 2005 to augment the work of the Museum staff in identifying, collecting, documenting, and exhibiting the impact of semiconductor technology on the history of computing by engaging the services of external academic, industry, professional, and other resources.

Semi SIG Areas of Interest

- **Semiconductor Timeline**
- **Oral and Video Histories**
- **Collection Wish List**
- **Speaker Series**
- **Web Presence**
- **Development**
- **Theme Room**
- **Tour Content**







Semiconductor Timeline Website

Directions | Contact Us

COMPUTER HISTORY MUSEUM **The Silicon Engine: A Timeline of Semiconductors in Computers**

Welcome | Timeline | People | Companies | Resources | Glossary | Search | Search Exhibit GO

MOORE'S LAW "Transistor density on integrated circuits doubles about every two years." *

| 1950s | 1960s | 1970s | 1980s | 1990s | 2000s |
|---|---|---|--|---|---|
| Silicon Transistor | TTL Quad Gate | 8-bit Microprocessor | 32-bit Microprocessor | 32-bit Microprocessor | 64-bit Microprocessor |
|  |  |  |  |  |  |
| 1 Transistor | 16 Transistors | 4500 Transistors | 275,000 Transistors | 3,100,000 Transistors | 592,000,000 Transistors |

Microelectronic computer "chips" have grown in capability from a single transistor in the 1950s to hundreds of millions of transistors per chip on today's microprocessor and memory devices. From the first documented semiconductor effect in 1833 to the transition from transistors to silicon integrated circuits in the 1960s and 70s, this website explores key milestones in the development of these extraordinary engines that power the computing and communications revolution of the information age.

*Source: "Moore's Law: Raising the Bar" (Intel Corporation 2005)

Photo credits: Fairchild Camera and Instrument Corporation, Intel Corporation (Note that images are not to scale)

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Go to: <http://www.computerhistory.org/semiconductor/>

www.computerhistory.org

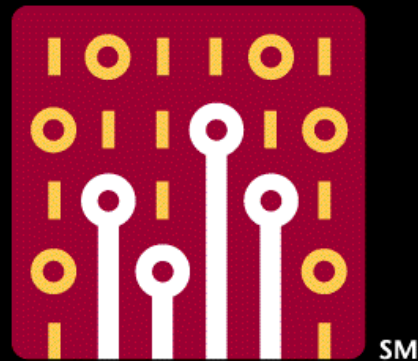
Events

- **IBM Stretch Lecture – Sept 11**
- **Jean Bartik Lecture – Oct 22**
- **Fellows Awards: October 21, 2008**
 - Jean Bartik (ENIAC programmer)
 - Bob Metcalfe (Ethernet)
 - Linus Torvalds (Linux)

How You Can Help Us

- Support our ongoing fundraising efforts
- Get your name on Museum's mailing list
(if you give me your business card, I'll make sure you are placed on the list...)
- Spread the word to your associates
- Become a Museum member
- Volunteer!
- Donate the history that you have!

Thank You Very Much!



SM

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HISTORY
MUSEUM**

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www.computerhistory.org

