BRIAN X. CHEN   GEAR   12.06.10   7:00 AM

STEVE WOZNIAK'S 9 FAVORITE GADGETS

WITH NEW SMARTPHONES, laptops and tablets whizzing into the industry every day, it's easy to lose sight of how we got here in the first place.

Steve Wozniak, co-founder of Apple, led a press tour Thursday morning highlighting some key gadgets that deeply influenced his engineering work.

"We've gone through more change in a single lifetime than probably any other time in history," the Woz said.

He should know. As a kid, Wozniak fiddled with minicomputer circuit boards at home, when the idea of having a computer in your own house was little more than a wild-eyed fantasy.

Everything from punch-card machines to old-school supercomputers, and from disk stacks to transistor radios, inspired an ambitious geek who would eventually create the Apple I computer that launched a PC revolution.

And while Woz eventually left Apple, his hometown hasn't forgotten him: There's a street in San Jose named Woz Way, after the town's favorite ultranerd.

See Also:

- Gallery: Low-Tech Computers From Prehistory to Today

IBM 026 PUNCH-CARD MACHINE

1949

Back when computers still weighed more than 100 pounds, they read punched cards whose holes represented digital information for computer programs. Introduced in 1949, IBM's 026 punch-card machine became a standard device in offices that relied on punch cards.

Steve Wozniak, who led a tour through the Computer History Museum's collection of ancient gadgets, reminisced about working with punch-card machines when he was studying computer science in Berkeley. Back then, students would have to wait 40 minutes just to get their turn to punch cards for their programs.
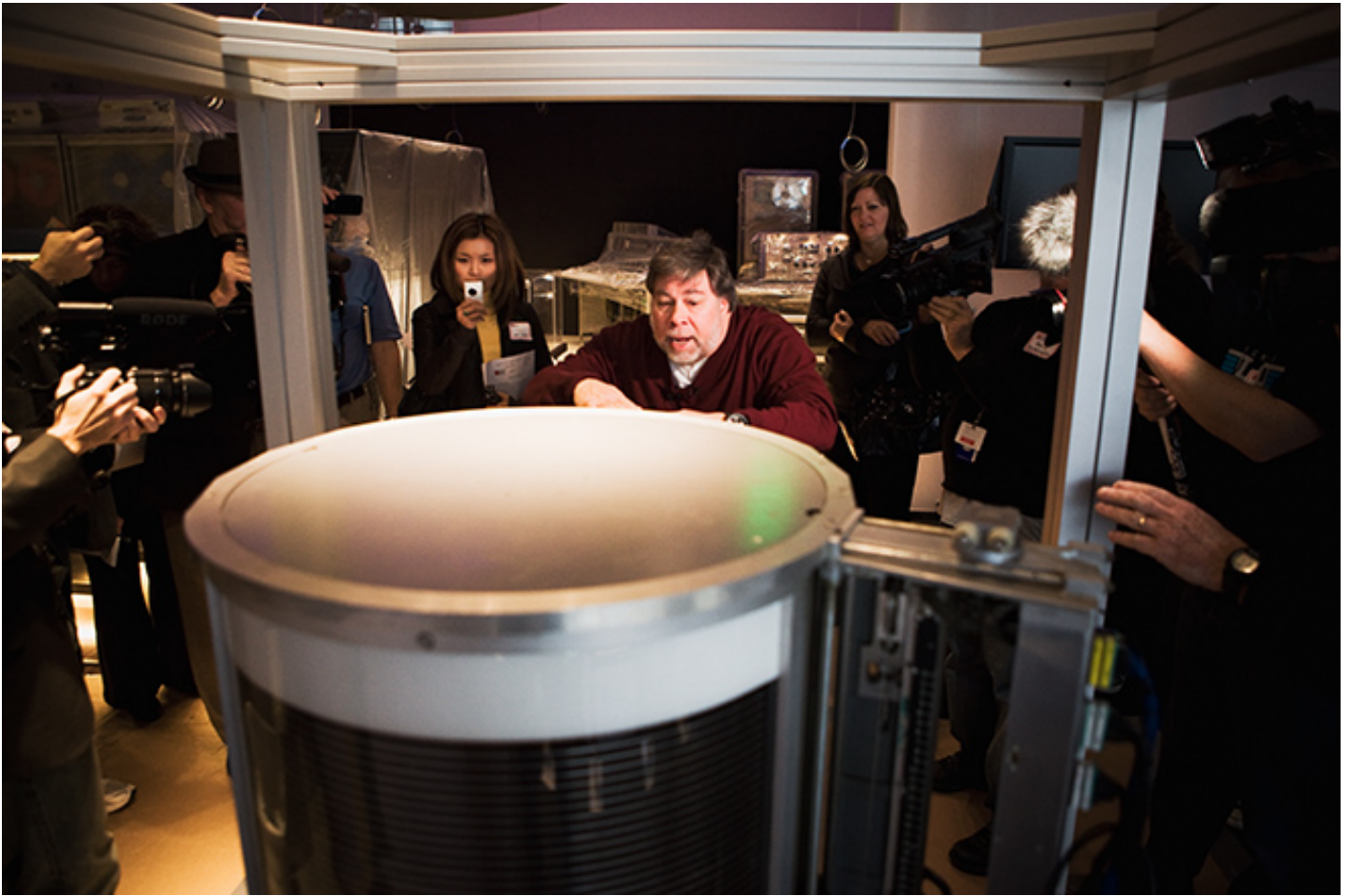
STIBITZ 1-BIT MODEL K ADDER

1980 (replica)

Bell Labs researcher George Stibitz assembled a calculator in 1936 out of scrapped relays, capable of adding two binary digits. He made it on his kitchen table, hence the name Model K.

"We wouldn't have our iPhones today, if we didn't start out with stuff like this," Steve Wozniak said.

IBM RAMAC ACTUATOR AND DISK STACK

1956

It looks like a giant air purifier, but the contraption shown here was the heart of the world's first disk drive. It contains 50 24-inch disks stacked parallel, spinning at 1,200 rpm. It can hold 5 megabytes of information. The disk stack was made in San Jose, Steve Wozniak's hometown.

CONTROL DATA CORP. 6600 SUPERCOMPUTER

1964

Computer designer Seymour Cray harvested a career out of building the world's fastest computers. The CDC 6600 supercomputer, pictured above, was 10 times faster than any computer at the time. Steve Wozniak said U.C. Berkeley owned a CDC 6600 while he was studying there, and at the time it was also the world's most expensive computer — about $100 million in today's money.
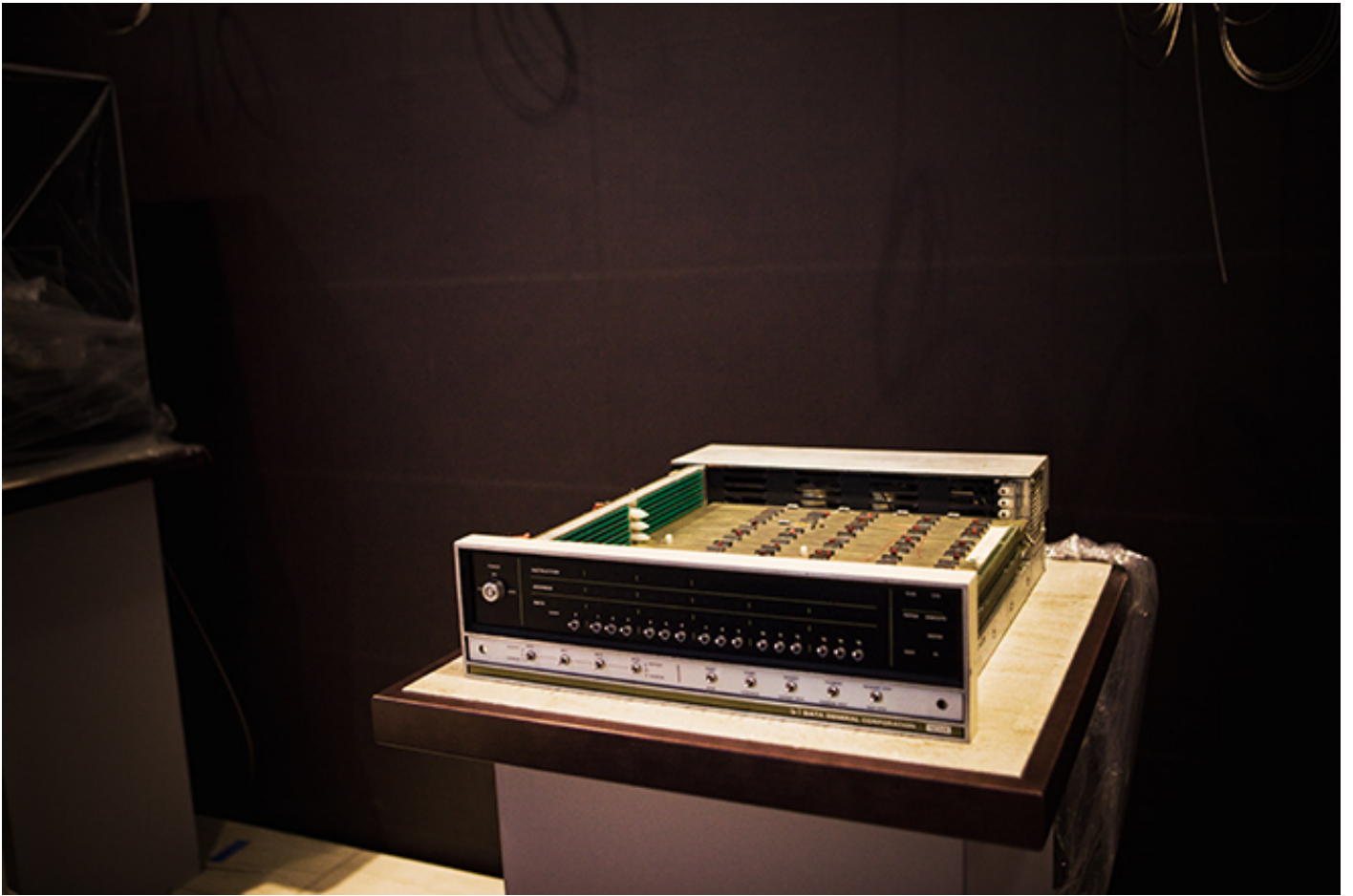
DATA GENERAL NOVA, SERIAL NO. 1

1969

The Nova was one of the first minicomputers, unlocking the dream of having a computer small enough to fit in our own homes. Digital Equipment Corporation was a business selling minicomputers, and some engineers who were unhappy at the company resigned to form a competing firm, Data General. The engineers believed they could do a better computer based on a 16-bit design, and their resulting creation was the Nova.

Steve Wozniak remembered that as a kid, he found a manual on assembling a minicomputer, which inspired him to try to create one of his own. He began tinkering with making circuit boards with as few chips as possible.

"My dad asked, how are you going to do that? One of those [computers] costs as much as a house," Wozniak said. "I said, 'I'll live in an apartment.'"

HONEYWELL KITCHEN COMPUTER

1969

Weighing over 100 pounds, the Honeywell Kitchen Computer's primary purpose was storing recipes.

It may look like a joke — and there's no evidence that Honeywell sold any of these machines, despite a prime listing in the Nieman Marcus catalog. But living inside the swooping lines of the cabinet was a Honeywell 316 minicomputer.

That's the predecessor of the Honeywell 516 minicomputer that powered the first node of Arpanet, predecessor to the internet.

So in a way, it all goes back to the kitchen after all.
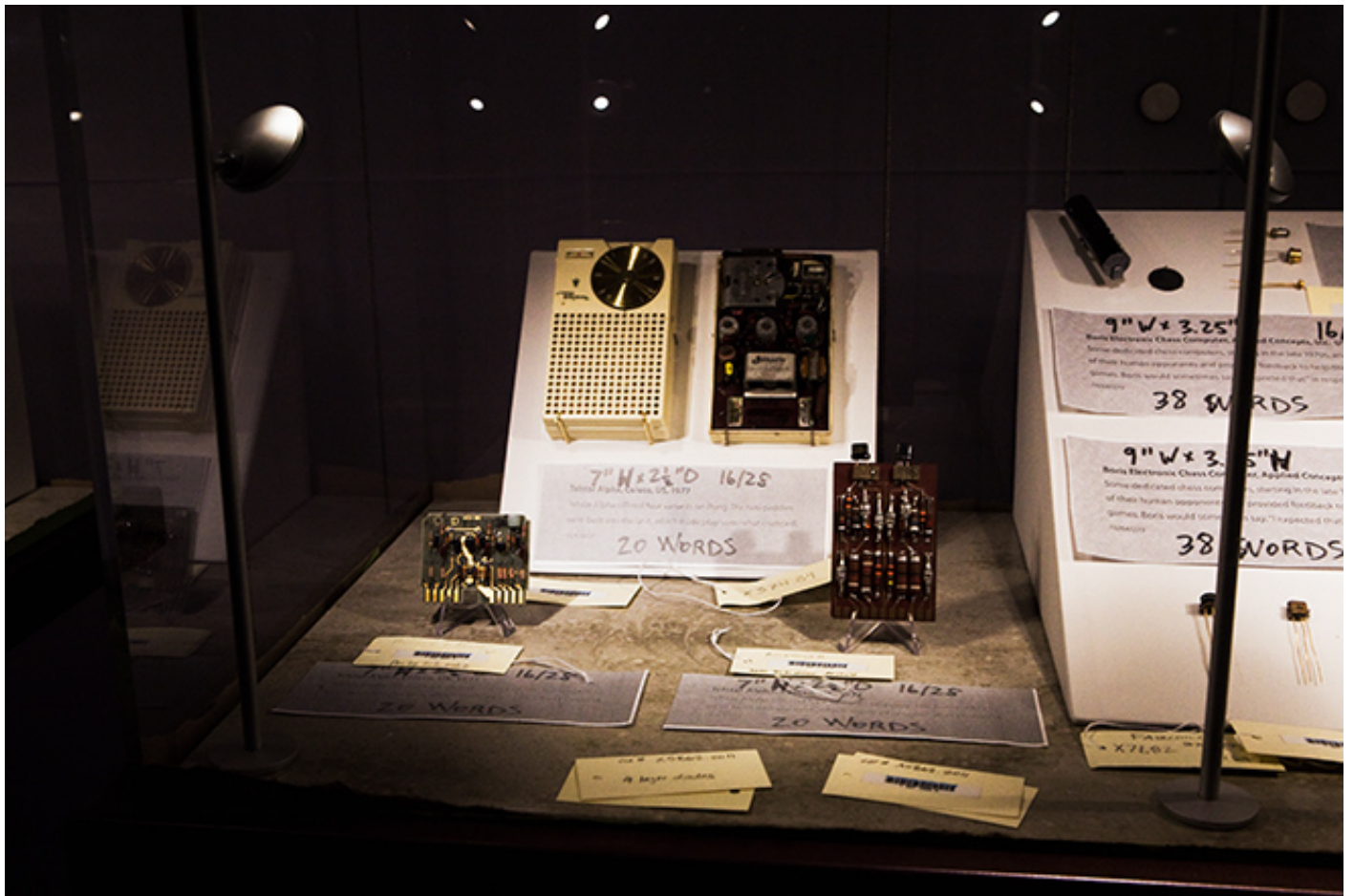
REGENCY TR-1 TRANSISTOR RADIO

1954

The Regency TR-1 was one of the first transistor radios to go mainstream. It sold 100,000 units and introduced the word "transistor" to the public.

Repeating a phrase that he used several times during the tour, Steve Wozniak said without this technology, portable media players would never have come into existence — and without that, we wouldn't have iPhones today.

PONG

1972

Steve Wozniak saw a crude version of the game *Pong* in a bowling alley and said he had to have something like it. He spent five nonstop days to make his own version of the classic game.

When he was done, Steve Jobs showed Woz's version of Pong to Atari to get himself a job there.

Woz was working at Hewlett-Packard and had no interest in leaving his dream job. But Atari hired him as a contractor to develop the game *Breakout*.