

TOOLS of the TRADE



HTC One

After months of on-and-off announcements about the availability of the HTC One, what some call the most beautiful smartphone now has a number of distributors in the U.S. The 5.4" × 2.7" × 0.4" aluminum body weighs only five ounces and has a large 4.7" full HD 1,080-pixel screen. The rounded back tapers from the widest center (0.4") to edges that are half that thickness. The processor is a Qualcomm quad-core Snapdragon 600 running at 1.7 GHz. The onboard memory can be 32GB or 64GB with 2GB of RAM. You can also add storage space via the microSIM card slot. The Android platform includes HTC Sense™ and BlinkFeed™. Sense Voice provides two built-in microphones that

detect loud ambient noise and then dynamically boost the in-call voice to overcome it. The BlinkFeed function lets you select the social networks, news, and feeds you want to stream live to your home screen. Along with the provider's network, there's Bluetooth 4.0, Wi-Fi, DLNA that will wirelessly stream media from the phone to a smart TV or computer, support for an infrared remote control function, and a micro-USB 2.0 connection for USB or HDMI connections. The front and rear-facing cameras feature improved optics and a smart flash that sets five levels of flash automatically depending on the subject distance. There's 1,080-pixel HD video with slow motion video recording and variable speed playback. Built-in sensors include a gyro sensor, accelerometer, proximity sensor, and ambient light sensor, along with an internal GPS antenna and digital compass. The Li-polymer battery provides up to 18 hours of talk time and up to 500 hours of standby. www.htc.com

Kudo Case 7

The Kudo Solar iPad case provides a protective case for your iPad and keyboard and movie stand configurations to make your tablet easier to use. It also charges your tablet. The case provides your tablet with a constant trickle charge, drawing energy from both natural and artificial light. That includes the low light in offices. The standard charge on the iPad can last about 10 hours, but, with the constant replenishment from any light source, the Kudo Solar case can stretch that out to 10 days. Stainless steel pegs in the back of the Kudo Case let you prop the screen in different positions from a low keyboard slant to an upright easel. There's an HDMI adapter built into the case to send content out to other screens or projectors. A USB power-out plug provides a charge for other digital de-



vices, like your cell phone or camera. The hard shell case protects your tablet and has a non-slip, rubberized coating on the back. www.kudocase.com

Polaroid Z340

The original instant-print camera has taken a second step in the digital recreation of its original iconic invention. The Polaroid Z340 has upped the output from wallet-size prints (2" × 3") to 3" × 4" prints produced at the time of taking. The latest digital Polaroid includes a 14-megapixel camera and a second generation ZINK printer. The camera has a 2.7" LCD screen for viewing images when shooting and cropping them before printing. The Z340 is microSD compatible so you can save and use digital files. ZINK stands for "Zero Ink Printing," and it does inkless printing by embedding color into the paper—there's no need to purchase ink cartridges or ribbons. Like the old Polaroids, prints ejected from the front of the camera are smudge-proof and water-resistant. You can delay the printing and

TECH FORUM

Writing on Glass

By Michael Castelluccio, Editor

The story of the birth of the iPad, as retold by the authorized biographer Walter Isaacson, includes an amusing, ironic ending. Steve Jobs was at a birthday celebration with friends, and a Microsoft developer got under his skin by extolling the virtues of Microsoft's tablet PC software. The developer even suggested that Apple might consider leasing the program. Jobs told Isaacson, "This dinner was like the tenth time he talked to me about it, and I was so sick of it that I came home and said, '[Explanatory] this, let's show him what a tablet can really be.'"

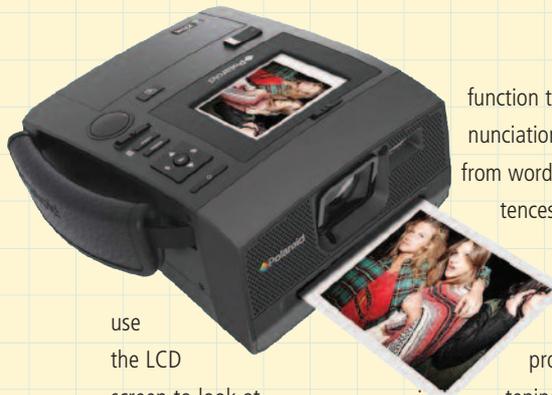
According to Isaacson, "Jobs went to the office the next day, gathered his team, and said, 'I want to make a tablet, and it can't have a keyboard or a stylus.'"

So the single, essential quality to guide the development of the Apple tablet computer was that the interface would be based on touch—fingers unimpeded by pen or keyboard. Jobs claimed that other tablets, like those from Microsoft, failed to take off because "[they] had a stylus. As soon as you have a stylus, you're dead." And why was it that an input device that goes back thousands of years was off the table? The biographer explains Jobs's reason was twofold: "[It was] because it didn't work perfectly, and because he had an aversion to stylus devices." Perhaps there was some lagging regret dating back to the failed Apple Newton, but whatever the source of Jobs's bias, he often reminded the team, "'God gave us ten styluses,' he would say, waving his fingers."

Jobs's vision materialized with an amazingly accurate touch sensitivity built into the tablet screen. Fingers worked out nicely as the mouse, pen, pointer, and zoom control on the slick Gorilla Glass surface. On the other hand, good sense prevailed against the keyboard prohibition. With the first iPad, you could type on a grayscale QWERTY keyboard.

BUT IT'S A TABLET, ISN'T IT?

The iPad began to show up at work in fine leather covers, hard protective shells, or just *continued on next page*



use the LCD screen to look at pictures saved, crop them, add a border, correct any red eye, and then print. There's enough battery life for 25 prints on a charge or to take more than 75 snapshots with flash.

www.polaroid.com

Rosetta Stone

Rosetta Stone now offers 30 languages, including all the European languages you would expect as well as Chinese (Mandarin), Dari, Hindi, Pashto, Persian (Farsi), Urdu, and Vietnamese. The basic exercises include images that accompany new vocabulary, native-speaker audio and a voice-recognition

function that checks your pronunciation, and a progression from words to phrases to sentences to conversation.

The four main language skills taught by the programs include listening, speaking, reading, and writing. To supplement the digital lessons, there are four 25-minute online coaching sessions with coaches who adjust their lessons to where you have progressed in your lessons. Mobile apps for your smartphone or iPad let you take your vocabulary, pronunciation, and speaking exercises with you. Instead of the CD-based program, you can also choose a monthly subscription accessible from any Internet-connected computer. The CD and Version 4 Download programs come with a six-month, no-risk guarantee.

Try it free at www.rosettastone.com/demo



glass and the bare curved aluminum back. Spreadsheets and presentation slides were shared on screens around conference tables, and soon the need for a few good note-taking apps emerged. With it came the desire for a functional stylus. The stylus was an important part because unless you're the recording secretary, you probably wouldn't be inclined to take notes with the glass keyboard on your screen or the one embedded in your binder case. And no one wants to see a junior exec writing with his or her finger at board meetings. So despite Jobs's best efforts, the iPad began evolving into a part-time notepad, and companies began to experiment with digital writing implements.

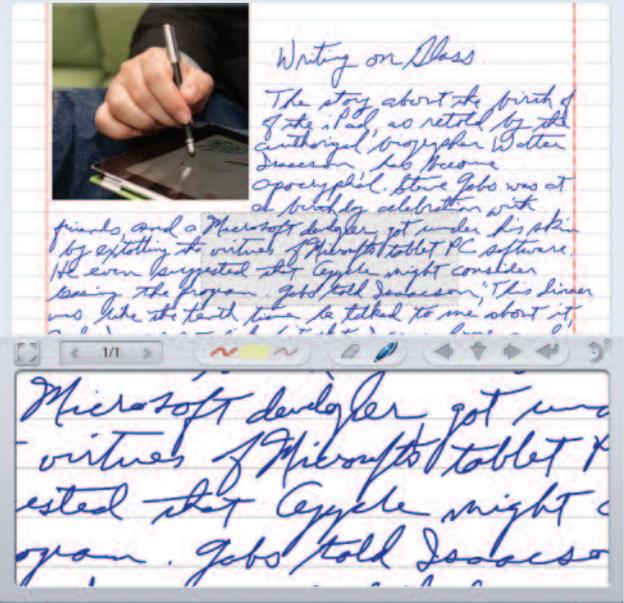
Creating handwriting apps didn't require as much effort as designing the pen. The techniques already working in the successful drawing apps could be pared down and matched with a notebook system of folders. But there were problems with the digital stylus—the hardware that Jobs thought would never “work perfectly.”

The stylus for a tablet doesn't work the same way as the old plastic-tipped PDA stylus on a pressure-sensitive screen. For touch screens like the iPad, a conductive layer in the screen responds to changes in electrical current from the static charge from your fingertip—but not from your mitten covered/insulated fingers. A stylus then has to be made of conductive material with a barrel and a tip capable of transferring your static to the screen.

The Pogo stylus, one of the earliest iPhone/tablet pens, has a conductive foam plastic tip. When you write with it, you need to hold the surface to create a line. If you let up, the line breaks. It isn't a very smooth experience, and it doesn't help that the stylus body feels about as thick as a drink stirrer. By comparison, the ballpoint pen rolls an oil and ink mix over a metal ball, creating an even line that glides on most papers. To catch up to what we're all used to, the digital stylus needs to simulate an uninterrupted flow that also requires very little pressure. The Pogo foam tip bends, leans, and drags as you write.

Next came the hollow half-sphere of the rubber-tipped stylus. The rubber tip conducts the electrical charge efficiently, but the trouble with most of these styluses is that the tip compresses with pressure, and the loops and turns of cursive writing tend to catch and drag on the glass surface. One of the best of these styluses, the Wacom Bamboo, is good but not perfect if you don't have a light and consistently even touch.

The newest material is the best so far because it won't drag, even with pressure. Made of microfiber, it looks



Viet Tran's Notes Plus

something like a scrub pad at the end of the stylus, but it glides with the smallest effort and is durable. Now the effort should be directed toward reducing the size of the tip—it looks like you're writing with the eraser end of a pencil—and increasing the size of the stylus barrel to the normal size of a conventional writing implement, like a Bic or Pilot ballpoint pen.

THE PAPER

There's a load of handwriting apps—from the very simple to suite-size research, writing, indexing, and storage apps. A nice, basic iOS app is Wacom's Bamboo Notebook. It has pen, marker, and eraser input and output to e-mail, Facebook, Twitter, Evernote, or print. You can choose from several paper types as backgrounds to create multiple notebooks, and it's free.

My favorite handwriting app for iOS is Viet Tran's Notes Plus at \$7.99. You can write, type, annotate PDFs, import photos, cut and paste Web content from a built-in Web browser, and draw accurate shapes. Each function has its own menu of choices. The way to avoid marks left by your wrist is by sliding up the wrist shield from the bottom of the page. And the handwriting is much more comfortable with a close-up box that lets you write larger than the writing recorded on the page. Managing notebooks is easy, there's a voice recording function, and add-on handwriting recognition is only \$1.99.

Get a microfiber stylus, and try the Bamboo Notebook. Then take a close look at Notes Plus. It sure beats typing on glass. **SF**