

EXHIBIT 167

Samsung Galaxy S II Epic 4G Touch (Sprint)

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- Pros

Fast processor. Terrific screen. Great battery life.

- Cons Voice performance doesn't stand out. HDMI out requires an adapter.
- Bottom Line

The Samsung Galaxy S II Epic 4G Touch packs a rich, gorgeous screen and a speedy dual-core processor making it a top Android choice for Sprint.

It has a long, awkward name, but the Samsung Galaxy S II Epic 4G Touch for Sprint (\$149.99) is one of the most eye-catching phones you'll see this year, sporting a gorgeous screen with colors so deep you feel you could swim in them. This big, handsome, powerful smartphone is one of the finest Android phones on the market today. We slightly prefer the Motorola Photon 4G (\$199.99, 4.5 stars) on Sprint, but the Epic 4G Touch is still a top choice.

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Physical

Features, Phone Calls and Internet

This is a very pretty phone, but at 5.1 by 2.7 by 0.4 inches (HWD) and 4.6 ounces, it's for people with big hands. The Epic 4G Touch uses the standard black-slab design; it's mostly made of plastic, but it's not cheap-feeling plastic. It's slim, with a textured back. The front is dominated by a gigantic 4.5-inch, 800-by-480 Super AMOLED Plus screen. This is technically lower-resolution than the Photon's 960-by-640 screen, but Super AMOLED Plus is a superior technology: blacks are deeper, colors richer, and lines lack the stippled effect you see on Motorola's PenTile screens. The big screen has another unexpected advantage: it makes touch targets a bit bigger, so it's easier to tap on links than on the Motorola Photon at its default zoom level.



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The Epic Touch is a decent voice phone, but it doesn't stand out. Reception was average in my tests. The earpiece can get loud, but it's a bit muddy. The speakerphone is of medium volume and somewhat thready. Transmissions through the phone sounded tinny and scratchy, but at least background noise cancellation was solid. Battery life, on the other hand, was just spectacular; I got 8 hours, 48 minutes of talk time on the Epic Touch's whopping 1800 mAh battery.

The phone connected to our Aliph Jawbone Era Bluetooth headset (\$129.99, 4.5 stars) without a problem for voice, music, video and gaming audio. Voice dialing, though, is odd. Samsung swapped out the usual Android voice dialing for the much more powerful Vlingo app, which should let you dictate text messages and issue other commands by voice. I found Vlingo had a big problem recognizing the names of my friends and family, though, which was a downer.

A CDMA/WiMAX phone, the Epic Touch runs on Sprint's 3G and 4G networks. It isn't a world phone, although it will work in countries like India and China where Sprint has CDMA roaming agreements. Internet performance was on par with other Sprint phones—that is, dependent on Clearwire's extremely shaky network. I got up to 6Mbps down with good coverage near my house, but couldn't top 2Mbps in our offices. The phone works as a tethered modem and a Wi-Fi hotspot, as well.

Processor and Apps

Like its cousin, the unlocked Samsung Galaxy S II (\$699, 4.5 stars), the Epic 4G Touch uses Samsung's new 1.2GHz dual-core Exynos processor. The Exynos benchmarks better than any other

processor we've seen so far. System benchmarks, browser benchmarks, you name it—this thing is on fire. (The only exception is pure Flash benchmarks, where Nvidia's Tegra 2 comes out on top.)

The difference between the four major dual-core chipsets (from Samsung, Nvidia, Qualcomm, and TI) shows up mostly on benchmarks, though. On tasks like Web page load times and games, it's hard to tell the difference between a range of dual-core, 4G phones. Testing the Epic Touch against the Photon side by side, there wasn't a meaningful difference in Web page load times, and games were actually better on the Photon because high-end Tegra Zone games aren't available for the Epic Touch.

That's not to deride the Epic Touch's performance—just to say that it's similar to other top-of-the-line phones. The Epic Touch runs Google Android 2.3.4 with Samsung's TouchWiz extensions, which are less bothersome than Motorola's social networking widgets. Add-on apps include Kies Air, which lets you view your phone's contacts, messages, and media through a PC's Web browser; Media Hub, a downloadable music and video store; photo and video editors; and Social Hub, a combination Facebook/Twitter client. The usual Sprint bloatware is on here too, including the Sprint ID theming client, Sprint Music, Sprint Radio and Sprint TV and Movies.

Everything I could throw at this phone ran copacetically. Netflix was smooth, as was the NOVA 2 HD first-person shooter. The Epic 4G Touch won't let you down with even the toughest apps.

Multimedia and Conclusions

The big, bright screen is ideal for video. The phone comes with 16GB of storage, and there's an empty MicroSD card slot under the back cover that takes cards up to 32GB. Videos in H.264, DIVX and XVID formats at up to 1080p resolution played well using the internal speaker or wired headphones; I saw just a bit of lost lip sync with a Bluetooth headset. Music, in all of our test formats, also sounded good.

The 8-megapixel camera is very fast, taking decent shots for a camera phone in 0.5 seconds or less in my tests. Test images were sharp with 1,700 lines of resolution, and had good white balance. But colors were a bit less saturated than in shots taken with the Motorola Photon's camera. The video camera mode captures 1080p HD videos at 24 frames per second indoors and 30 frames per second outdoors, and 720p videos at 30 frames per second indoors and out; as with most phones like this, I recommend sticking to the 720p mode. There's also a 2-megapixel camera on the front for self shots. That's higher quality than most front-facing cameras.

Docking options are a bit of a letdown. Rather than a true HDMI port, the Epic 4G Touch uses an MHL port to connect to TVs, requiring a hard-to-find adapter. My MHL adapter didn't work with this phone. The Photon also has Motorola's innovative webtop mode, which turns the phone into a desktop PC; the Epic 4G Touch has nothing similar.

The Samsung Galaxy S II Epic 4G Touch has an intangible lusciousness to it. With its beautiful screen and top-of-the-line performance, it's going to fly off of shelves. This is one of the best Android phones on the market, so why doesn't the Epic 4G Touch get our Editors' Choice? The Motorola Photon is slightly better in our view, although we'd agree that's debatable. But the Photon is a world phone, it has webtop, it has a kickstand for easy video viewing, its camera has slightly better color saturation and its HDMI support is better.

Still, this is a terrific choice for Sprint users to have to make. Combined with Sprint's truly unlimited data plans, it gives Sprint customers two powerful Internet and multimedia phones that can easily hold their own with the best on other carriers.

Benchmarks

Continuous talk time: 8 hours 48 minutes



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Lead Analyst, Mobile

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Segan has reviewed hundreds of cell phones, PDAs, and ancillary gadgets in nearly five years with the

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