RuggedPCReview.com

If it's rugged, we review it and write about it

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What's the future of rugged systems?

Mobile computing has never been like this. With hundreds of millions using smartphones and tens of millions using tablets, computing and communicating anywhere, anytime has become a reality no longer just for the few, but for most. And many of those millions need something a bit more rugged, something they can use on the job. This presents an unprecedented opportunity for manufacturers and vendors of ruggedized computing equipment. The big question is how to go about it. Android? Windows? Big tablet or small? And how rugged, and at what price point? Those are the questions of the day. At RuggedPCReview.com, we keep track of every detail and every trend. So that you can, too.

A big thanks to our sponsors Advantech, Motion Computing, DRS Tactical Systems, General Dynamics Itronix, Getac, the Handheld Group, Juniper Systems, MobileDemand, Panasonic, RAM Mounts, Samwell, and Winmate Communications for making RuggedPCReview.com possible!

Rugged Computing Industry Discussion: Opportunities in the rugged tablet market as a result of the iPad's popularity

Tablets have been around for over 20 years, mostly as niche market products, with brief periods of heightened interest such as the early 1990s (the original IBM ThinkPad was a tablet) and Microsoft's 2002 push with the Tablet PC. Over the past two years, the Apple iPad legitimized the form factor with an elegant multi-touch interface first popularized on the iPhone, and now used on hundreds of millions of smartphones. There is unprecedented opportunity for the tablet form factor, but on the rugged size few products that seek to take advantage of that need. We asked a number of industry executives why that is and how they view the situation. [ReadQ&A about opportunities in the rugged and semi-rugged tablet market as a result of the iPad's popularity]

Getac Z710: Android tablet coming to America?

Getac's European operations have issued press releases inviting Getac customers to try out their new rugged and Android-based Getac Z710 tablet. The ruggedized Z710 has a 7-inch capacitive touch screen, measures 8.8 x 5.75 inches, runs up to 10 hours on a charge, has dual cameras and 16GB of onboard storage (expandable via microSD), and can be equipped with RFID, scanners and WWLAN. A 10-inch Android model will also be available. [See description and specs of the Getac Z710 tablet]

Advantech DLoG XMT 5/7: tough vehicle mount computer

When you operate forklifts and similar vehicles, a regular computer won't do. For that you need a compact, super-tough vehicle mount device that's as invulnerable as the vehicle itself. RuggedPCReview.com takes a detailed look at (and inside) the Advantech-DLoG XMT 5/7, a Windows CE-based industrial-strength terminal with a bright 7-inch 800 x 480 pixel touch screen, exemplary wired and wireless connectivity, IP67 sealing, and an extremely wide operating temperature range. And note the RAM Mount in the picture! [See what we thought of the Advantech-DLoG XMT 5/7]

DT Research -- The DT410/415: no-nonsense POS handhelds

We added product pages on the DT410 and DT415 handhelds by DTResearch. DTResearch designed them as point-of-sale/point-of-service handheld terminals weighing about ten ounces. Both models run either Windows CE or Windows Mobile on a 533MHz Samsung processor and 3.5-inch resistive touch screen. Both are rugged enough for POS jobs and both have an integrated magnetic stripe reader. The DT415 adds a 1D/2D imager. [Read description and specs of the DTResearch DT410 and DT415]

Bluebird Pidion: A whole lineup of rugged and semi-rugged handhelds

RuggedPCReview.com has added the complete lineup of Bluebird's Pidion rugged and semi-rugged mobile computers. These include the BIP-5000 and BIP-6000

enterprise handhelds, the
flashlight-style BIP-7000 industrial handheld, and the BM-170 enterprise PDA/smartphone. All are based on the 806MHz Marvel PXA320 processor and run either versions of Windows CE or Windows Mobile, with the BIP-6000 and BM-170 also announced as capable of running Android.

Winmate S430T -- Rugged industrial capacitive-touch PDA can run Android

We're seeing the beginnings of a fundamental shift in industrial handhelds, one that is beginning to explore the newer technology and interface models that have taken the world of consumer smartphones by storm. The S430T is still an inbetweener with a foot in the old, traditional camp (design, Windows CE/Mobile capable, VGA res) and another foot in usage model employed by tens of millions of smartphones (capacitive touch, Android, etc.). We cannot offer an opinion as to how well it all works as we have not yet had hands-on with the S430T, but Winmate's willingness to pioneer and explore the new technologies in vertical/industrial market handhelds and tablets is laudable and refreshing.[See description of the Winmate E430T]

GD-Itronix GD4000: Itronix adds semi-rugged, wide-format 14-inch notebook to growing lineup

General Dynamics Itronix quietly added the GD4000 to its expanding lineup of ruggedized tablets and notebooks. It's described as a "Go-Anywhere Semi-Rugged Notebook" on the GD-Itronix website, and it'll fill the role of a modern, durable laptop with all the Itronix rugged computing DNA, but not taking it to the fully-rugged extreme of, say, the GD8200 or the vehicle-rugged GD6000. Instead, you get a General Dynamics notebook computer that's undergone much of the same testing, but that's built for everyday use, and is available at a much lower price. [See description and specs of the GD-Itronix GD4000]

Tough little 1080p HD video camera for any job: **the GoPro Hero2**

No sooner did we publish a big feature on the tiny high definition GoPro Hero camera that's taken the world by storm than GoPro released the Hero2 that's supposed to be twice as fast and twice as sharp. And since the GoPro comes with a nearly indestructible housing and can be used in a thousand ways out there in the field with all of its mounting options, we did a full review of the latest version of this amazingly affordable tough little camera. [See The GoPro phenomenon: how much better is the new GoPro Hero2?]

Blog: The new iPad -- both challenge and opportunity for rugged market manufacturers

If you want to sell tablets it's tough not to be Apple. And on March 7, 2012, it got that much tougher. For that's when Apple introduced the next version of the iPad, setting the bar even higher for anyone else. But we are convinced that there's a large and growing demand for a more rugged tablet, and that whoever comes out with a product that doesn't just approximate but match and exceed expectations will win big. [See The new iPad -- both challenge and opportunity for rugged market manufacturers]

Other cool stuff we reviewed:

RuggedPCReview also examined and described the Getac S400, the Motorola MC2100, the GD-Itronix GD3080 tablet, the Winmate G570Z, the Getac B300, the ADLINK TIOT, the Psion Omnii RT15, the Opticon H22, and the Harris RF-3590 .

And... the status and outlook for ruggedized Android devices

As far as rugged tablets and handhelds go, it's the best of times and it's the worst of times: no one is quite sure where things are headed in terms of operating systems and the rugged mobile computing industry is in a bit of a holding pattern these days. We're looking at the current status and the outlook for rugged Android devices. [See Ruggedized Android devices -- status and outlook]]

In closing, here's the benefit of what we learned in the past few months here at the RuggedPCReview lab:

- Intel's Atom family just keeps growing and growing! And the latest chips are starting to offer serious performance.
- In rugged systems, Android is still in a holding pattern. No one wants to be the first!
- It's tough to keep up with Intel's Core chips, but definitely worth it.
- The rugged industry is still undecided on capacitive multi-touch.
- We installed Windows 8 on a number of systems, but still can't quite see Microsoft's focus with the new OS.
- Every smartphone now has a high-res camera and 720 or 1080p HD video. It's definitely time to include that in rugged handhelds and tablets!

Stay rugged!

Conrad

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