

# RuggedPCReview.com

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

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## The Year of the Tablet, and more

It's supposed to have been "The Year of the Tablet" for the last 15 years or so. Now it looks like it is. The iPad seems a huge hit, and it'll most likely redefine everyone's speed, interface and functionality expectations. Combine that with a booming smartphone market, all those new Intel chips (both on the Core and on the Atom side), HP picking up Palm, and lots of rugged gear switching over to the Core i3/i5/i7 chips, and you have lots of activity. Throw in the Android factor at a time when Microsoft seems uncertain where to go in the mobile space, and we live in interesting times indeed. Here at RuggedPCReview.com we follow and interpret it all for you!



Leaders like [Advantech](#), [Motion Computing](#), [DLI](#), [DRS Tactical Systems](#), [General Dynamics Itronix](#), [Getac](#), the [Handheld Group](#), [Juniper Systems](#), [Logic Instrument](#), [MobileDemand](#), [RAM Mounts](#), [Samwell](#), [Winmate Communications](#) and [RMT](#) are at the forefront of exploring these new trend and technologies, much to the benefit of existing and potential new customers worldwide.

## DLI 8400 -- A rugged Intel Atom-powered ultra-mobile tablet

The DLI 8400 is a rugged ultra-mobile tablet with an integrated keyboard suitable for a wide variety of field service, mobile payment, first responder, fleet management and similar applications.



Measuring about 10 x 8 x 2 inches and weighing a bit over three pounds, the Atom Z530-powered DLI 8400 with its 7-inch WSVGA touchscreen and integrated magcard reader is significantly smaller and lighter than full-size rugged tablets but it is still large enough to serve as a full-function computer. In a detailed analysis, RuggedPCReview.com found the DLI 8400 a very competent and highly configurable ultra-mobile tablet

- [Handheld Group](#)
- [Juniper Systems](#)
- [Logic Instrument USA](#)
- [MobileDemand](#)
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- [Winmate](#)

that can run Windows 7 or several other operating systems. [See the [DLI 8400](#)]

### **Panasonic Toughbook 31: Next generation of the rugged notebook that started it all**



With their toughbooks, Panasonic was an early pioneer in the rugged notebook market. Now they released the Panasonic Toughbook 31 that replaces the Toughbook 30 with a variety of technology updates and

enhancements that brings the platform technologically up-to-date without obsoleting existing customers' investment in Toughbook 30 docks and peripherals. Standard voltage Intel Core i3 and Core i5 processors provide high performance while still yielding exceptional battery life, LED backlighting makes for an even brighter 1,100 nits display, touch is now standard, optional Gobi 2000 supports 4G wireless, and the new model is more rugged than ever [Read about the [Panasonic Toughbook 31](#)]

### **Motion Computing F5v -- Motion brings Core i5/i7 power to enhanced rugged tablet**



Motion Computing released a major update to its rugged Motion F5 tablet. The new Motion F5v gets a substantial performance boost by switching to Intel Core i5/i7 processors. In RuggedPCReview's benchmark testing, the new Motion F5v has roughly 2.2x performance compared to the 2009 Core 2 Duo machine while improving on battery life. The new F5v also benefits from additional enhancements such as

onboard USB, dual cameras, larger hard disk, Gobi 2000, and standard Corning "Gorilla glass" for a nearly unbreakable display.. [Read about the [Motion Computing F5v](#)]

### **"Moorestown" -- Intel's new Z6xx Atom platform and how it fits in**

On May 4th, Intel introduced the next generation of its initial family of Z5xx Atom processor. Codenamed "Moorestown," the Z6xx family, together with a new I/O controller and signal processing chip are meant to make Intel competitive in the booming smartphone and internet access device market. On paper at least, the new processor family looks very good and may yet help Intel establish itself in the device market (which, interestingly, they abandoned when they sold the XSCALE application processor business to Marvell a couple of years ago). But before we go into details of Moorestown, let's backtrack and see how Intel's whole Atom venture began and developed [ [...more](#)]

### **Full review: General Dynamics Tadpole Topaz**



The Tadpole Topaz by General Dynamics Itronix is a rugged 12-pound notebook computer designed to provide functionality and performance that exceeds what is commonly available in the mobile computing space. Featuring a high-res 15.1-inch touch display, it is overall the fastest rugged machine we have ever tested, and its 3D/OGL performance is phenomenal. And since the Topaz is based entirely on COTS (commercial-off-the-shelf) technology, the Topaz is a veritable bargain. [ [... more](#) ]

#### Full review: Logic Instrument FieldBook



In a phenomenon that caught the computer industry by surprise, consumers have been buying tens of millions of "netbooks." They did that because netbooks are smaller, lighter, handier and less expensive than full-size notebooks. We're starting to see a similar trend in the mobile rugged computing industry with the introduction of smaller, lighter and handier tablet computers that weigh three pounds or less, yet provide performance that's more than adequate for

many jobs. RuggedPCReview.com has just completed a full review of the Logic Instrument FieldBook. [... [read more](#) ]

#### Full review: Juniper Systems TK 6000



The Juniper Systems TK6000 represents another ultra-rugged, no-nonsense handheld computer from the Logan, Utah based company that specializes in field computing solutions for rugged applications such as land survey, natural resources, industrial, agriculture and the like. Initially designed for a Juniper Systems business partner (Carlson Surveyor), the ultra-rugged TK6000 is a product as much as a mobile platform for OEM solution providers. We had a TK6000 in the

RuggedPCReview lab for a couple of months and here's our full report and review. Read our description of the [Juniper Systems TK6000 Field PC](#).

#### The Apple iPad

It's not a rugged or industrial computing device, but the Apple iPad will nevertheless change our industry. That's because the iPad redefines what is possible with a tablet, and it also redefines how elegantly and effortlessly it can all be done. Everyone else will struggle to recreate the iPad experience and there will be many similar slates and tablets. Sooner, rather than later, this will spill over into the rugged/vertical space. David MacNeill, executive editor of Pen Computing Magazine and contributor to RuggedPCReview takes a detailed look at the iPad in what is perhaps the definite review of the platform. Read [an assessment of the Apple iPad](#).



#### RAM Mount for the Apple iPad



The Apple iPad transcends conventional computing boundaries and classifications. While it is not a rugged or vertical market device, many will use an iPad in addition to their current mobile computing gear, and in quite a few cases, iPads will replace older technology. That's probably why RAM-Mounts has introduced RAM Mounts for the Apple iPad, a series of mounting products designed to mount and take the iPad anywhere. We took a look at RAM's new iPad cradle and mounting solutions for you. [... [read more](#)]

### **Waterproofing rugged computing equipment**

During the course of testing here at RuggedPCReview.com, we examine ruggedness specs and claims. For the most part, while we report and comment on those specs, we do not put them to the test. That's because ruggedness testing is pretty involved business, and checking how much punishment a device can take before it fails makes about as much sense as a car magazine running a test vehicle into a concrete wall to see if it is indeed as safe as the manufacturer says. There are, however, exceptions. If a manufacturer claims their product can be dropped from four feet without damage, we may try that. And if a product is advertised as being waterproof, we may check that claim out as well. And this is where it gets interesting. [... [read more](#)]

### **Advantech ARK-DS303 -- Rugged Intel Atom-based digital signage player**



Digital signage players are essentially specialized computers that display customized information in a variety of settings and locations. Since those locations are not always easily accessible they are usually remotely controlled and managed via wired or wireless IP connections. This makes it possible to easily program, schedule and update playlists; remotely monitor player status; and issue remote commands no matter where the player is located. RuggedPCReview.com took a detailed look at the tiny, but rugged and powerful Advantech ARK-DS303 that can even run 1080p video. [...[more](#)]

### **What else is going on in the Rugged World?**

These past few months have been hectic. Now that the iPad is here and a success, everyone is trying to figure out how to react (see "[Will industrial tablets benefit from the iPad?](#)"). We're also seeing a lot of product upgrade announcements with rugged manufacturers upgrading their notebooks and tablets to the Intel Core i3/i5/i7. Based on our benchmark tests, that's a very good move.

With Android coming on strong, we've been wondering about [Windows Mobile and the vertical markets](#). Microsoft simply has to react as the current uncertainty and fragmentation cannot continue for long.

With Intel pushing all those new technologies and acronyms, and some manufacturers using them in their marketing materials, we contemplated [Intel vPro technology and what is it all about?](#)

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

- The jury is now in: Yes, the new Intel Core i3/i5/i7 chips are good, very good. You get much more power at roughly the same battery life, or better.
- Watch the Apple iPad, or better yet, get one. It's redefining customer expectations for performance, interface, and ease-of-use.
- Also watch the Google Android mobile OS platform. It's still mainly on smartphones, but we expect Android-based rugged devices any week now.
- Auuugh... more Atoms. You're not the only one confused about all those flavors of Atom processors. For now: N270/280/450: mostly cheap netbooks. Z530, etc., mostly vertical and industrial. The new "Moorestown" Z6xx? No one knows.
- Speaking of Atom: It IS possible to get the ever more important high-def playback on Atom devices. But you need either discrete graphics or a [Broadcom add-on module](#) (N-Series) or the right codecs and hooks (Z-Series).

Best of luck for the second half of 2010!

Conrad

PS: We're proud to be #1 for "rugged PC" both on Google and on Bing. To get details on our Sponsorship Program, [click here](#).

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