RuggedPCReview.com
If it's rugged, we review it and write about it

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Greetings!

Spring time is here! While the media concentrates on economic doom and gloom, we're actually seeing a lot of positive developments in the rugged computing industry. President Obama's Economic Stimulus Act mandates electronic patient records for all Americans by 2014 and makes funds available. That should be an interesting opportunity for those medical computing equipment vendors. Overall, spending on trendy, fragile, short-lived technology is out and investment in durable, well-supported field solutions is in. Think rugged, quality, low failure rates, and Total Cost of Ownership!

In this issue we're welcoming Samwell with its Ruggedbook line as a new premier sponsor, joining Motion Computing, Advantech, DT Research, Datalogic, General Dynamics Itronix, Getac, Juniper Systems, MobileDemand, RAM Mounts, Winmate Communications and RMT. They are the movers and shakers in the rugged industry.

Tablet PC pioneer Motion Computing releases the J3400, a powerful, versatile new machine

Moving the state-of-the-art in tablets several steps forward, Motion Computing released the Motion J3400, a powerful, versatile semi-rugged Tablet PC with a terrific outdoor-viewable 12.1-inch wide-format display. Performance and battery life are significantly improved over the prior generation platform. The J3400 can automatically geo-tag images with its integrated camera and GPS, use worldwide wireless services via GOBI Mobile Broadband, and is rugged enough to survive true point of service usage. [Read full review and specs of the Motion Computing J3400 Tablet PC]

Winmate's Atom-powered rugged Tablet PCs

RMT
Ruggedbook
Winmate

Intel's ultra low power Atom processors continue to gather momentum, and we're starting to see them in rugged mobile computers. One example is Winmate's line of IA80 rugged tablet computers, available in versions with 8.4, 10.4 and 12.1-inch displays. The IA80 is based on the same Atom N270 processor used in millions of netbooks. It's a tough, no-nonsense tool for demanding jobs. [Read about the Atom-powered Winmate IA80 rugged Tablet PC]

Juniper Systems Allegro MX

When you work out there in the field, your gear must be absolutely 100% reliable and able to handle whatever comes its way. Even bears. Juniper Systems' Windows Mobile 6.1-based ultra-rugged Allegro MX Field PC is a tough tool for the job. Based on proven technology, it's large enough to be operated with gloves, has excellent connectivity and expansion potential, both keyboard and keypad, and it's waterproof (we checked). [Read about the Juniper Systems Allegro MX]

RMT Duros 1214 fixed-mount computer

The Duros 1214 is the latest addition to RMT Inc.'s line of exceedingly rugged and highly configurable vehicle-mount and fixed-mount computers. Equipped with a bright 12.1-inch SVGA resistive touch screen and a low-power processor, the Duros 1214 comes with up to 64GB of CompactFlash. Built to run a variety of different operating systems, this rugged fixed-mount PC is primarily geared towards use in warehousing and shipping environments, but certainly has application in a variety of other areas. [Read about the RMT Duros 1214]

The Panasonic Toughbook H1 Mobile Clinical Assistant

The Toughbook CF-H1 is Panasonic's entry into the potentially very lucrative medical patient record market. The cleanly designed and executed Atom-powered tablet benefits from Panasonic's expertise in rugged and semi-rugged mobile computing equipment, has excellent battery life, a sunlight-viewable display with dual digitizers, and a wealth of data capture features (RFID, barcode, camera). [Read about the Panasonic Toughbook H1 Mobile Clinical Assistant]

GETAC releases powerful hi-res rugged GPS PDA

The PS535F handheld computer is GETAC's next generation, fully rugged GPS-enabled PDA with a 3-megapixel camera, e-compass, full 480 x 640 pixel VGA display and altimeter. The PS535F is a significant technology and upgrade to the PS535E model that has been on duty at the RuggedPCReview.com offices for a few months. [See description and specs of the GETAC PS535F rugged GPS PDA]

General Dynamics Itronix GD6000 -- Vehicle-Rugged

General Dynamics Itronix released its next generation vehicle-rugged notebook computer, the GD6000. Evolved from the company's GoBook VR2, the GD6000 offers full compatibility with first and second generation VR models, but superior performance thanks to a 2.56GHz Intel Core 2 Duo T9400 processor and the Mobile Intel GM45 chipset. DynaVue technology provides excellent outdoor and direct sunlight viewability. [Read all about the General Dynamics Itronix GD6000]

Advantech ARK-3399: Not all rugged solutions are mobile

There are situations that require a specially configured PC hardware solution in a compact, rugged enclosure that fits into the tightest spaces. That's the market for systems like the fanless, all-aluminum Advantech ARK-3399 Box PC. It can supply Core 2 Duo computing power, digital IO, speedy SATA disks, LVDS and run either conventional or embedded operating systems. [Read about the Advantech ARK-3399 rugged Box PC]

Quicker customer service with handheld POS devices

DT Research's new line of ruggedized handheld computers specialize on Point-of-Service applications. The WebDT 400 Series has a fully integrated magnetic card reader as well as an RFID reader and barcode scanner. There are two versions of the device, one with a large 4.3-inch screen and one with a 3.5-inch full VGA screen and a 21-key numeric keypad. The hot-swappable battery lasts a full shift and the devices run Windows CE 5.0 on a 533MHz Samsung processor. Pricing starts at US$999. [Read about the DT Research WebDT 400 Series]
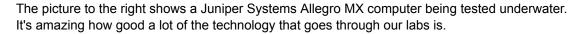
What else is going on in the Rugged World?

Everyone's doing Atom these days. Is the chip really that good? Read our contemplations on The Intel Atom processor phenomenon. One of the more interesting peripherals we've seen recently? That would be the Handheld U.S. Kenaz R100, a DGPS add-on for the super-rugged TDS Recon. In need of a rugged UMPC? Check out the Trimble Yuma. Wanna know what Dell's been up to in the rugged space, now that the Latitude D-Series is sort of end-of-life? Check the Latitude E6400 XFR. Motorola's troubles nothwithstanding, Symbol's cranking out interesting new products for them. Check out the multi-function Motorola MC55 "Enterprise Digital Assistant". Some of us here at RuggedPCReview are divers, too. So we took a General Dynamics Itronix MR-1 rugged UMPC to Honduras to see how it'd work as a dive support computer. One of the best rugged handheld makers you rarely hear of? Check Two Technologies

[Safari](#) and [Hydrus](#)! Interested in wearable computing? There's the [Parvuz Zypad](#). On our most-improved list: the [Panasonic Toughbook 52](#) after its latest tech update.

In closing, here are some of the current trends and directions in the rugged computing industry we're observing:

- Intel does a great job pitching the Atom, but the chip/chipset is not a universal answer
- The drive for the best sunlight viewable display is heating up
- SSD is becoming standard in some devices, and costs are way down
- GOBI seems to be making inroads
- We're seeing more dual-mode touch/digitizers
- With US$20 billion up for electronic patient record grabs, who will win the MCA race?
- Rugged terminology is as confusing as ever

The picture to the right shows a Juniper Systems Allegro MX computer being tested underwater. It's amazing how good a lot of the technology that goes through our labs is.

Sincerely,

Conrad H. Blickenstorfer
Editor-in-Chief, RuggedPCReview

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