

XPLORE XSlate B10

XPLORE ADDS A MUCH MORE POWERFUL VERSION OF ITS COMPACT, LIGHTWEIGHT, AND WELL-CONNECTED RUGGED WINDOWS TABLET PLATFORM TO ITS GROWING LINEUP OF MOBILE SOLUTIONS FOR THE ROAD

by Conrad H. Blickenstorfer; photography by Carol Cotton

Xplore Technologies Corp. of Austin, Texas has been making rugged tablet computers for a couple of decades and they have sold hundreds of thousands of them. It all started with the GeneSys line of ultra-rugged. In 2003 came the iX104 family that is now in its 6th generation. In 2013 Xplore introduced the Android-based RangerX tablet, followed by the Bobcat, a Windows version of the same platform. In early 2015 Xplore took over Motion Computing. And now there's the XSlate B10, an updated and much more powerful version of the Bobcat.

The reason for this new product is the emergence of the tablet form factor as a true productivity tool rather than one primarily for data lookup and media consumption. That trend is evident in Microsoft's push into the professional realm with their Surface tablets and, more recently, Apple's launch of the larger and pen-enabled iPad Pro. Professional and business use require more power and additional functionality, and that is exactly what the new XSlate B10 delivers.

But doesn't the iX104 already have all the power and functionality one could possibly need? And why not pump up the Android version of the tablet first? Because the iX104 is an ultra-rugged with the size, cost and weight to go with it, and not everyone needs one of those. And because Android is still new in vertical market tablets whereas Windows tablets are charging ahead and many users expect them to be full-function, full-power members of the Wintel universe.

What's different from the Bobcat?

For those familiar with the Xplore Bobcat rugged tablet computer, the XSlate B10 looks almost the same, but it has been upgraded in several areas:

- **Design:** The Bobcat and the XSlate B10 are virtually identical, except that the B10 has a carbon fiber bezel and the Bobcat a solid color dark-gray one. Both have roughly the same footprint as Xplore's ultra-rugged iX104 Windows tablets, but they are only half as thick and weigh less than half as much.
- **Performance:** Big difference here. As much as Intel has been fixing their Atom processors' reputation for being agonizingly slow, some customers simply didn't want to have any part of it, not even if the chip was as competent as the "Bay Trail" Atom E3845 in the Bobcat. The XSlate B10 has no such problems. It's powered by a true Intel Core processor, and a very powerful one at that — the "Broadwell" 5th generation Core i5-5350U.
- **Graphics:** While the graphics cores integrated into Bay Trail systems, including the E3845, use the same Intel HD Graphics architecture as those in Intel Core processors, they are of an older variety and have far fewer EUs (execution units) than what is



- found in Core chips. The Intel HD Graphics 6000 graphics integrated in the XSlate B10, on the other hand, are of the Intel Processor Graphics Gen 8 generation and include no fewer than 48 EUs.
- **Memory and storage:** The Xplore XSlate B10 comes with 8GB of DDR3L RAM. That's twice as much as the Bobcat, and it's faster, too. Solid state disk capacity is 128GB, with up to 256GB available. There is also an external microSDXC slot.
- **USB 3.0:** Broadwell supports USB 3.0 for fast transfer speeds. The XSlate B10 takes advantage of that with two external USB 3.0 ports.
- **Wireless:** It's state-of-the-art with 802.11ac WiFi, Bluetooth 4.0, higher accuracy 2.0 meter GPS, and optional integrated LTE mobile broadband.
- **Camera:** The XSlate B10 has a higher resolution 8-megapixel camera in the rear, and a front-facing 720p webcam for conferencing and video calls.
- **Display:** The 10.1-inch wide-format IPS display is unchanged. It uses direct bonding and a 500-nits backlight for excellent outdoor viewability. It also has perfect horizontal and vertical viewing angles.
- **Touch:** The XSlate B10 uses projected capacitive 10-finger multi-touch. But whereas the Bobcat could only switch from finger to glove mode, there are now four modes: touch, glove, wet, and pen only. There is also a Wacom active pen for anything that needs more precision than finger touch.
- **Battery:** The user-replaceable main battery remains at a capacity of 39 watt-hours and a battery life claim up to 8 hours. But there's now a significantly more powerful (59 vs 31 watt-hour) optional ex-

ternal add-on battery that allows hot-swapping and boosts battery life to a full 20 hours.

- **Ruggedness:** The XSlate B10 is very rugged for a light tablet. It handles 5-foot drops, carries IP65 sealing, and has been tested to various MIL-STD-810G procedures. The four most often used ports are now sealed on the inside, too. This means water won't leak in even if those ports are left open.
- **HDMI:** The tablet has a micro-HDMI-out port, can now also be ordered with an optional HDMI input.
- **Legacy ports:** The XSlate B10 has a dedicated RS232 port that links via supplied adapter cable to a standard DB9 RS232 connector.
- **Security:** The Trusted Platform Module secure cryptoprocessor is now version 2.0 instead of version 1.2. This adds additional levels of policy authorization and thus extra security.

Design and implementation

As far as physical specifications go, the XSlate B10, like the earlier Bobcat, measures 11.1 x 7.2 inches (281 x 180 mm) and is 0.85 inches (22 mm) thick. That's a bit larger and quite a bit thicker than consumer media tablets in this class, but much more compact than fully-rugged tablets. With a weight of 2.55 pounds as tested, the new Xplore tablet is significantly heavier than a consumer media tablet but weighs much less than traditional rugged tablets. The XSlate B10 has a magnesium alloy frame with elastomer edge and corner protection for an elegant and distinctive look that's now enhanced by the high tech carbon fiber bezel.

Rugged computers must be sealed against dust and liquids. That generally means as few external ports as possible. The Xplore XSlate B10, however, offers excellent connectivity. There are two USB ports of the fast 3.0 kind, gigabit LAN, micro-HDMI, and since there are still a lot of field peripherals using a serial



interface, the XSLate B10 also has that native RS232 port. Below you can see the Xplore XSLate B10 from the front and all four sides:



The front shows that the machine was designed to be used in landscape mode, but it quickly snaps into landscape or upside down mode if the tablet is turned. For hardware controls, there's a physical Windows button in the bottom center of the face. Above the display is the camera as well as dual microphones (the Bobcat only had one). To the right of the screen is a small indicator light that shows battery status.

On the right side is the on/off switch, a small button that locks and unlocks auto screen rotation, and a volume rocker. On the bottom right is a protective cover for the power and RJ45 LAN jacks. Also visible is a dock for the tethered 3.5-inch Wacom pen.

The Bobcat's Kensington lock slot on the bottom gave way to an expanded 19-pin docking connector (the lock slot is now optional with a top carry handle).

The XSLate B10's design uses a PCS bottom pan on which is mounted a magnesium alloy midframe for extra rigidity. On top of that is the LCD assembly, and finally a rubber protective guard that slightly rises above the display plane along the sides and more on all four corners to provide extra protection.

The main battery (Li-Polymer 7.4V, 5,300mAh, 39.22 watt-hours) is accessible upon removal of a large polymer compartment door on the backside of the tablet. The door is securely held in place by 14 small Philips screws and two larger ones. It has a plastic lip that



pushes against a rubber seal, thus making a tight seal.

The replaceable battery is screwed onto the tablet's frame. The battery compartment cover has a small cutout under which are the battery contacts for the optional external battery that now packs 59.2 watt-hours (7.4V, 8,000mAh) for a massive combined 98.4 watt-hours. The new optional battery is somewhat taller and heavier than the old 31 watt-hour piggyback battery. If an external battery isn't used, the battery contact cutout is covered with a small door with a seal.

Like the Bobcat, the XSLate B10 has a small 1.5-inch diameter fan as part of internal thermal management that presumably also includes heat piping to regulate heating and cooling in extreme temperatures. The fan hardly ever comes on, but its presence can be disconcerting as it looks like liquids can go right into the tablet's interior. That's not so, as the fan compartment is actually outside of the case. Xplore commented that the fan enables the XSLate B10 to maintain full performance over the entire operating temperature range. Given that we've witnessed performance of some fanless designs to drop dramatically when the system gets hot, including a fan makes sense.

Intel "Broadwell" 5th gen Core CPU

While the Xplore Bobcat was/is a good performer, some customers were suspect of its "Atom"-branded chip. The XSLate B10, on the other hand, has a genuine Intel 5th generation "Broadwell" Core processor.

CPU comparison	XSLate B10 Intel Core i5-5350U	Bobcat Intel Atom E3845
Code name	Broadwell	Bay Trail
Lithography	14nm	22nm
Cores/threads	2/4	4/4
Base clock speed	1.80GHz	1.91GHz
Turbo speed	2.90GHz	no turbo
Thermal design power	15 watts	10 watts
L2 cache	3MB	6 watts
Smart cache	3mb	2mb
Instruction set	64-bit	64-bit
Graphics	HD 6000 (48 EUs)	HD (6 EUs)
Graphics base speed	300MHz	542MHz
Graphics max speed	1,000MHz	792MHz
USB 3.0	yes	yes
Intel vPro	no	no

With Broadwell, Intel took its impressive "Haswell" 4th generation Core processor and miniaturized it further, reducing manufacturing technology from 22nm to 14nm. That meant room for even more transistors, and Intel used some of those to enhance integrated graphics yet again, now supporting DirectX 11.2, OpenGL 4.3 and OpenCL 2.0. The Core i5-5350U processor Xplore chose includes HD Graphics 6000, which means 48 graphics execution units, twice the number present in lesser Broadwell processors, and thus potentially doubling the gigaflop performance for certain graphics operations.

This means serious firepower (and Intel charges six times as much for the i5-5350U than for the Atom E3845). To see how the Xplore XSLate B10 performs compared to the Bobcat, we ran our standard PassMark Software PerformanceTest 6.1, a suite of about 30 tests covering CPU, 2D graphics, 3D graphics, memory, and disk and then computes scores for each category and an overall PassMark score. And we also ran our secondary benchmark suite, CrystalMark, to cross-check results and get a better idea of single core performance. The benchmark numbers are as follows:

PERFORMANCE	XSLate B10	Bobcat
CPU Mark	3,845.5	1,924.9
2D Graphics Mark	416.9	149.2
Memory Mark	1,241.2	397.1
Disk Mark	4,946.9	2,513.9
3D Graphics Mark	460.1	158.0
PassMark	2,364.7	1,133.8
ALU	45,380	25,808
FPU	43,737	21,815
MEM	48,348	25,613
HDD	44,328	36,177
GDI	15,505	4,931
D2D	5,395	2,616
OGL	5,414	3,305
CrystalMark	208,107	121,265

The results are impressive. After all is said and done, Xplore XSLate B10 is overall roughly twice as fast as the already quick Bobcat. The XSLate B10 is actually even a processing performance match for the top-of-the-line iX104 XC6. The latter's overall edge in the PassMark benchmark suite is solely based on its dual-disk RAID test numbers. And the XSLate B10 is also more than twice as fast overall than the last-gen iX104 C5. Whatever performance concerns anyone might have had about the Bobcat platform are certainly gone now.

What that means is that the XSLate B10 is a high-performance tablet for virtually any job, even complex, demanding ones. On the computing power front it can do almost anything what the no-holds-barred iX104 C6 can do, albeit at a lower level of ruggedness (and at a considerably lower cost).

What if it gets hot?

Oh, and one more thing. The XSLate B10's operating temperature range is a very wide -30° to 140° Fahrenheit. Having seen more than our share of rugged devices that performed like champs in the lab just to wilt outside in the summer sun, we decided to see what the XSLate B10 can do when it gets hot. On a scorching NorCal summer day it can get up to 110 or more. In Arizona we've seen close to 120, and if you let a unit sit around in the sun, it can easily reach temperatures that are 10 to 20 degrees higher than ambient air.

But what if the temperature gets to a system's upper operating limit, and beyond? Would it still perform at or near the levels observed in the lab? And if so, how close?

To find out we cranked a General Electric oven up to 170 degrees Fahrenheit (77 degrees Centigrade), waited until we had a steady temperature, then put the XSLate B10 in the oven and let it bake for 15 minutes. Then we started our CrystalMark benchmark suite and ran it with the XSLate B10 inside the oven at 170F.

The best result at room tempera-



ture was an overall 208,107 CrystalMark score. At 170F, the XSLate B10 scored a 203,466. That's a full 97.8% of its room temperature benchmark score, and well within the +/- 2.5% deviation we usually see when we run the same benchmarks multiple times.

When we took the XSLate B10 out of the oven, everything worked as it should. The (very quiet) fan had been running full speed at 170F, and it instantly slowed down to an almost inaudible level as soon as we removed the tablet from the oven. Impressive indeed.

Battery power and power draw

Our XSLate B10 test unit came with the standard 37 watt-hour battery, the same that powers the Bobcat. Xplore claims the same 8 hour battery life for both the Bobcat and the new XSLate B10. Given that the XSLate B10 has twice the performance, can this be possible?

As always with Windows devices, we used PassMark's BatteryMon utility to measure power draw. Using the Windows 8.1 "Power Saver" setting and the backlight at its lowest setting, we saw draws low as 4.5 watts in a dark office. That translates into a theoretical battery life of 8.2 hours with the standard internal battery. With brightness cranked up to maximum, power draw rose to 5.7 watts (theoretical 6.5 hours).

In high performance mode, with the backlight at its lowest setting, we saw as low as 6.4 watts, which means about 5.8 hours. With brightness cranked up to maximum, it was around 8.3 watts, still good for a theoretical 4.5 hours.

Do note that the XSLate B10 comes with a special Windows-based BIOS Setup Utility that allows setting the startup configuration (things on or off when the system boots), the boot sequence, security settings, quiet mode (audio, display, radios, etc.), and also LCD. In the LCD tab screen brightness can be set to manual or ambient light sensor control, and also low and high night vision mode. These settings are all important as they can also set the brightness *range* that's available to a particular LCD illumination scheme.

Overall, despite its impressive performance, the XSLate B10 is also very power-efficient. The minimum observed power draw is actually less than what we had found in the original Bobcat tablet. That's due both to the Broadwell platform's sophisticated power conservation technologies and also due to the proper drivers, utilities and system integration.

The usual qualifier: battery life is as relative as gas mileage in a car. In power saver mode and with the computer quickly going into stand-by, a modern computer running Windows 8.1 and using a Broadwell-class processor with all sorts of power savings technologies can easily last a shift or probably much more.

Superb sunlight-viewable display

Rugged tablets are used outdoors and that means bright, direct sunlight. Standard transmissive LCD displays, however, wash out in daylight, and that's why over the past years, sunlight-readability has become a major selling point in the rugged computing market.

The current standard as far as outdoor-viewable display technology goes is a combination of a bright backlight, anti-reflective coatings, linear and circular polarizers, and—to reduce the number of reflecting surfaces—direct bonding of as many of the LCD assembly's layers as possible. All the major players in the rugged/outdoor arena use those technologies. The difference between approaches boils down to the presence and extent of those expensive optical coatings, how they are applied, how the various layers are bonded, and backlight brightness.

Xplore had a good sunlight-viewable display when no one else did, and used the best available displays in its tablets. The XSLate B10 continues that tradition with a truly terrific display that measures 10.1 inches diagonally, has 1366 x 768 pixel resolution (16 : 9 aspect ratio), and a bright 500 nit backlight. 1366 x 768, to many known as 720p, is more than the original iPad and works fine with Windows 8.1 on this size screen. The display uses IPS LCD technology, which means perfect viewing angles from all sides. Direct-bonding of layers and special optical coatings minimize reflectivity, making the screen quite sunlight-readable and thus suitable for work both indoors and outdoors.

Xplore often invokes the iPad as an example of how many companies have fully adopted the tablet PC form factor, but require a far greater degree of ruggedness than consumer media tablets can provide. We took some pictures comparing the XSLate B10 with an Apple iPad Air 2. The iPad's display is excellent, quite bright, and both the iPad and the XSLate B10 have glossy display surfaces.

The picture below was taken outdoors on an overcast Eastern Tennessee mid-afternoon, with the devices placed in a partially shaded area. This is where effective anti-reflective treatment comes into play. Both displays remain bright and vibrant.



Current display technology, however, remains a compromise. Glossy screen surfaces make for a pleasant viewing experience with great contrast, vibrant colors, and have none of the murky diffusion of "matte" display surfaces. Unfortunately, even with the best current anti-reflection measures primarily reduce internal reflection. The display surface itself remains very prone to near mirror-like reflections in high contrast settings. There's only that much that can be done.



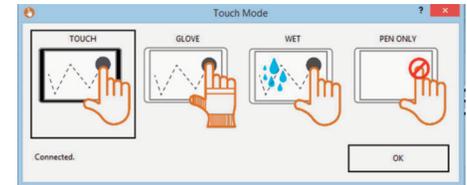
Overall, the XSLate B10's display gets very good to excellent marks. Xplore had a head start in offering outdoor-viewable displays in their rugged tablets, and they've improved it with every generation of their tablets. The 500-nits brightness, while no match for the iX104's 1,300 nits, is quite adequate, there's good internal reflection control, and the near perfect viewing angle is something that always makes a display pleasant to use. And while we detected a yellowish hue on Xplore's iX104 XC6, the XSLate B10 has none.

Multi-touch vs. gloves and rain

Like the Xplore Bobcat, the XSLate B10 uses projected capacitive touch, or "procap," the same touch technology hundreds of millions love on their smartphones and tablets. Procap enables that effortless, smooth tapping, panning, pinching and zooming pioneered by the iPhone and iPad, something tablet users today instinctively expect from a tablet.

Unfortunately, using fingers to tap and zoom on apps specifically developed for capacitive multi-touch is one thing, but doing work on a Windows PC is another. Almost all Windows software was developed for use with a mouse and doesn't work well with finger tapping. Microsoft found that out the hard way with Windows 8, and making the still giant Windows universe suitable for touch remains a work in progress.

And there are other issues. While capacitive touch works very well when finger-tapping on a clean, dry screen, using it outdoors on the job with gloves on or in the rain is generally a no-go. Since most XSLate B10 customers will use their tablets outdoors, Xplore provides their newest tablet with special "glove" and "wet" modes via the control utility shown below.



Getting procap to work with gloves and in wetness isn't easy. That's because the technology is based on measuring the capacitance between two electrodes. If a glove gets between the finger and the display surface, the touch controller can't sense the finger and thus can't measure the capacitance. This can, to a degree, be fixed by increasing the sensitivity of the touch controller. That way, the finger can be sensed even if it's the thickness of the glove material away from the touch surface. We think that's what Xplore did with the "glove" mode. Xplore spent considerable time getting this to work right, and once we had installed the latest version of their Mode Switcher app, operating the tablet with gloves on (the ones shown in the picture below) worked just fine. You don't have the same dexterity with gloves as you have with your bare fingers, but the B10 did respond to touch and multi-touch.



But what about "wet" touch? That's more tricky because you can't measure touch capacitance between two electrodes when it rains onto the surface. Water is an excellent conductor, and water sprayed or falling onto a touch screen makes accurately detecting capacitance between electrodes impossible. One approach, at the cost of losing multi-touch and just having touch, is self-capacitance where the capacitance between one electrode and the ground is measured.



So how does Xplore's "wet" mode work? We don't think it's self capacitance. Instead, we think wet mode provides touch functionality by significantly decreasing the sensitivity of the touch controller and using a special screen protector that makes water pearl and bead enough so that there isn't uncontrolled conduction between different parts of the display surface. We could be wrong, but that's how it felt.

The Mode Switcher's "pen" mode comes in handy when all else fails. It disables touch and is immune to false signals from liquids. Instead, the tablet only reads the electromagnetic signals of the Wacom pen. The pen doesn't need batteries and is about 3.5 inches long.



The Wacom system adds cost and a bit of weight because it needs a sensor board behind the display. Why didn't Xplore get a narrow tip capacitive pen instead, a technology that has vastly improved and seems destined to replace active electromagnetic digitizers? Because, said Xplore, even improved capacitive pens still can't handle rain, and they also do not have pressure sensitivity, which the Wacom pen has.

Remarkable ruggedness

Unlike consumer electronics that are designed for style, low weight and lowest possible cost, rugged equipment is conceived and built around ruggedness. And that may mean more bulk and weight and less style.

The XSlate B10, however, is a thin and elegant device. The industry has pretty much converged around a style that borrows the general size and form factor of consumer tablets, with attention to good looks and

as slender a profile as is possible. That makes achieving ruggedness more difficult.

As is, the XSlate B10 passed the MIL-STD-810G transit drop test of 26 5-foot drops while operating. The tablet can stand up in temperatures as low as -4 degrees, and operate in temperatures as low as -30 and as high as 140 degrees Fahrenheit (-20 to +60 Celsius), enough for virtually any deployment. And in our tests it retained full performance even at 170F.

Sealing is crucial in a rugged machine as dust can gum up the works, and water can render a computer inoperable. Xplore claims an IP65 rating for the XSlate B10, where the "6" stands for being dustproof and the "5" for the ability to handle low pressure water jets from all directions. Our test XSlate B10 easily survived a good hosing.

The XSlate B10 has a number of exterior openings for its slots, ports, connectors, and batteries. That means seals that must be in perfect condition, and protective doors that must be closed carefully. Some of the unit's ports are sealed from the inside, so frequently used protective doors can remain open and allow cabling while still providing full sealing.

The ability to pass some of those tests is either vital or meaningless, depending on customer applications. Xplore provides more, and more thorough, ruggedness testing specs than most, so anyone interested in the XSlate B10 should examine them closely and check with Xplore for additional test results.

Accessories

Unlike consumer electronics where you buy a product and that's that, vertical market computers are part of a system and entire infrastructure. That means ac-



cessories that optimized specifically for the product. Xplore's catalog of accessories for the XSlate B10 includes an office dock, a charger that can handle six batteries at once, and a handy kickstand.

Xplore XSlate B10 Specifications

- Type:** Rugged Windows tablet
- Introduced:** October 2015
- Processor:** Dual-core Intel "Broadwell" Core i5-5350U 1.8/2.9GHz, TDP 15 watts
- OS:** Windows 7 Professional (64 bit) or Windows 8.1 Professional (64 bit), Windows 10
- Memory:** 8GB DDR3L 1600MHz SDRAM
- Graphics:** Intel HD Graphics 6000 (Mobile G8 with 48 EU)
- Display:** 10.1" 1366 x 768 pixel sunlight-viewable (500 nits) direct-bonded TFT, 178-degree viewing angle all sides, automatic light sensor, NVIS compatible
- Digitizer:** Projected capacitive multi-touch with glove and wet touch modes, Wacom active pen
- Keyboard:** Onscreen; optional external
- Storage:** 128GB to 256GB SSD SATA 6Gbp/s drive
- Expansion slots:** 1 x Micro SDXC card, 1 x MicroSIM, optional CAC reader
- Housing:** Lightweight magnesium alloy frame, polycarbonate housing, contoured bumper protection and rubber door protection for ports
- Operating temperature:** -30° to 140°F (-34° to 60°C)
- Ingress protection:** IP65 (IEC 60529)
- Humidity:** 95% - non-condensing, operating
- Drop:** Operating: 5 foot (152cm) drop 26 times onto plywood over concrete
- Vibration:** Est. Minimum integrity testing, non-operating: MIL-STD-810G, Method 514.6, Procedure I: Figure 514.6 E-1, Category 24
- Altitude:** 40,000 feet for 1 hour, operating. MIL-STD-810G, Method 500.5, Procedure II
- Intrinsic safety:** ATEX, ANSI/ISA 12.12.01 Class 1 Div 2, A, B, C, D
- Size:** 11.1 x 7.1 x 0.86 inches (281 x 180 x 22 mm) base unit without rubber bumpers
- Weight:** 2.55 lbs as tested w/o handle or pen
- Power:** Li-Polymer 7.4V, 5,300mAh, 39.22 watt-hours ("up to 8 hours"), optional external battery Li-Polymer 7.4V, 8,000mAh, 59.2 watt-hours ("combined up to 20 hours")
- Cameras:** Integrated 8 megapixel camera with flash (rear), integrated 720p HD camera (front)
- Communication:** Intel Dual Band Wireless-AC 7260 + Bluetooth V4.0, 2-meter GPS, optional: 4G LTE, NFC, CAC, 1D/2D barcode scanner, fingerprint scanner
- Interface:** 2 x USB 3.0, 1 x RJ45 gigabit LAN, 1 x Micro HDMI-out, 1 x native serial RS232 port, dock, audio in/out, optional HDMI input
- Price:** Starting at US\$2,799
- ESD/EMC:** MIL-STD-461F
- Warranty:** Standard 3-year warranty, 4 and 5 year options, optional xDefend program
- Contact:**
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Xplore XSlate B10: Summary

With the light and handy Windows-based XSlate B10, Xplore complements its line of ultra-rugged iX104 Windows tablets, and provides an enhanced and more powerful version of its existing Bobcat tablet. With this Intel Core processor-powered version the company adds a formerly missing piece that further broadens and expands Xplore's reach in the rugged market.

Though visually close to the Android-based RangerX and the Windows-based Bobcat, the XSlate B10 is a far more powerful device. Its Intel 5th generation "Broadwell" Core processor provides the kind of performance many field professional need for complex work. It does so without giving up the platform's handy 2.5 pound design with a tough magnesium alloy frame, polycarbonate housing, and elastomer corner and edge protection. Barely larger than an iPad, the XSlate B10 fits virtually anywhere.

The tablet's 10.1-inch 1366 x 768 pixel sunlight-viewable IPS display is bright and easy on the eyes, indoors and out. It has near perfect viewing angle from all directions, and does a decent job controlling reflections. Its popular capacitive multi-touch technology is enhanced with glove, wet, and pen modes. The included active Wacom pen does not need batteries and

has the precision needed for certain applications.

Thanks to the powerful Intel Core processor with advanced integrated HD 6000 graphics, 8GB of fast DDR3L memory, solid state disk, and USB 3.0, the XSlate B10 is roughly twice as fast as the Bobcat tablet and can handle complex tasks. Wireless communication is state-of-the-art with 802.11ac WiFi, Bluetooth 4.0, uBlox GPS, and available 4G LTE mobile broadband.

With the XSlate B10, Xplore now offers not only the choice between Windows (Bobcat) and Android (RangerX) in the same elegant and lightweight form factor, but also a high-end Windows version for those who need the extra performance of a Core processor-based device.

