

Here is a trip report I shared with the team that I thought I would share here as well. Note Microsoft Confidential.

I love to see other reports so feel free to share..

From: Steven Sinofsky

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Subject: CES 2010 Observations

Sensitivity: Confidential

MICROSOFT CONFIDENTIAL

The following is a set of CES observations. You may share but it would be great if people respected the confidential nature of the report.

Thank you!

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CES 2010 was a very interesting show with a lot of very innovative technologies and some innovative products. The show was definitely “thinner” this year and the exhibit space continues to shrink, cab lines are shorter, though moving around the show continues to be a challenge (as many booths are getting smaller). From a computing perspective, the show was both bigger and smaller than in past years. It was smaller because several of the largest PC and peripheral makers did not have booths for the general public (Dell, HP, Fujitsu, Lenovo was off the main path, Epson, and others). This can be explained by any number of possible reasons, but most likely the normal tradeoff of cost/benefit. The show was larger than ever for Windows, in my view, as Windows 7 was by just about any measure part of the fiber of the show. It was exciting to see, just 12 months after releasing a beta at this same venue, Windows 7 on just about every single PC whether that was a PC for sale, a PC used to show off a peripheral, or a PC just being used as part of the demonstration in the booth. This report is about looking at some of the things that I personally noticed or found interesting for some reason (good/bad, competitive, or just technically neat). Feel free to grab me for any further questions or discussions of course.

Writing a trip report (see <http://my/sites/stevesi/Blog/Lists/Posts/ViewPost.aspx?ID=315>) for CES is increasingly more difficult as by the time I get home and finish typing, most everyone has had just about enough of the show. The flow of information in the most mainstream of media (CNN), the business news (CNBC, Bloomberg), and the instant and continuous coverage by a number of tech enthusiast blogs (Gizmodo, Crunchgear, Engadget) means that it is impossible to share anything neat or new, so what I focus on is not being complete or first, but just a point of view. Because vendors have a tough time breaking through, there has been an increasing tendency to “leak” or “pre-brief without an embargo” the mainstream press and that generated a number of pre-CES trend stories (3D, tablets) which also tend to drive the instant coverage. As a word of caution, this year as I walked the floor I kept track of the feeds from the tech enthusiast sites. My opinion is that the way that these outlets “cover” the show does not do the possible learning justice. Their focus is just on spotting the something first and making a snap judgment as to how cool or trend-setting something is. I guess I’m not sure it is useful to look at things that way, especially when at the top-line there are a few things that are repeated from different perspectives and different vendors.

Note: I don’t include URLs, but [bing](#) works pretty well for just about all of these :-)

Windows 7

From a Windows 7 “selfish” point of view, something that is very clear is that even without several of the vendors represented, there was an amazing assortment of Windows 7 PCs. ASUS, Sony, Lenovo, Samsung, Acer, Toshiba, and others all had new models in all shapes and sizes. The most excitement and broadest new selection was in three places:

- **10" laptops**—Needless to say there was an incredible variety of 10" laptops running the Intel Atom chips (N and Z series). These machines are for the most part running the same motherboard and so differentiate on peripherals (WWAN, Camera, card readers). Touch is making its way to these machines (comments on that below)
- **13" laptops**—the sweetspot for the mainstream laptop is showing an incredible range of choices. From ultra-thin to eco-friendly (ASUS showed an eco-friendly concept made from bamboo). The clear goal with all of these machines is to be competitive with MacBook in design and manufacturing. I believe these all give the current generation of unibody Macbooks a run for the money (literally because they are substantially cheaper). All are running the Core series just announced by Intel and all have great battery life, bright screens, and tons of connectivity. HDMI is becoming standard which will make for interesting hookups to presentations soon. WWAN is becoming increasingly common as well (as we had in the PDC tablet).
- **All-In-One desktops** – There was a clear explosion in the variety of all-in-one (AIO) desktops. The category was one that only Sony had been doing up until HP came out with their TouchSmart line 2 years ago, even though Apple had been doing these forever. It is really fantastic to see these as I think this is an incredibly important category to get right for consumers. The "baseline" AIO machine is a 24" full HD resolution machine running Core i5/i7 with a full complement of ports. Cameras are standard. Optical drives are present, and often BRD. Touch is mainstream on these. In fact, touch or not, all the desktops and monitors had fingerprints on them which shows the amount of touching going on!! There are a selection of smaller AIO PCs based on ATOM chipsets as well, but these are primarily being done by Acer and ASUS.
- **Others**—of course there is a full range of PC hardware. Many PC makers are showing the mini-ITX formfactor, running the nVidia ION in particular. There are many larger laptops and of course there are gamer tower machines to be seen. More on slates below.
- **64-bit** – I think nearly every non-ATOM machine was running 64-bit with no mention of 32-bit. The ATOM machines are all 32-bit of course.
- **SKUs** – Home Premium was ever-present which is great to see. Many of the 10" laptops were being shown with Home Premium because that is available at purchase, but most continue to ship with Starter in the developed markets. Given the scenarios and the amount the peripherals are driving differentiation in the category, there is work here for us to do on the sales front with Windows 7. I saw almost no XP except on a few of the very weird form factors (like the ones with 4" screens or just showing old models).

Compared to previous years, the quality of design and the differentiation is significantly up. I think many were excited to show off Windows 7. The CEO of ASUS did a widely covered presentation where he called for PC makers to focus on design much more. ASUS is working hard to have that polished level of design that people will find attractive.

Despite a ton of press, the number of PCs not running Windows was smaller than past years. Last year because of netbook introductions there were a ton of Linux based PCs. This year the PCs that were not running Windows were generally running a distro of Moblin (from Intel). There was a massive amount of talk about the new category of PCs called "smartbooks" which are laptops running Android (mostly) or (to a lesser extent) ChromeOS (or anything but Moblin or Windows) on ARM processors (Snapdragon) but there were only a couple of these you could find and most were not easily touched or played with. The Lenovo probably generated the most excitement and ironically it is a laptop that has both Snapdragon and an Intel motherboard on it in a sort of Star Trek "saucer separation" mode of working (the Snapdragon is a slate attached to the screen and the Intel PC is under the keyboard).

One observation is that there was an opportunity for even more Windows 7 branding on partners that have Windows 7 PCs. Maybe something we could think about for next year.

Observations

Below are some general observations across the show.

Return of TV. By far the most noticeable thing when you walk in is the return of the TV, and to some degree the continued growth of the Korean manufactures (particularly Samsung) as well as the strength of Panasonic (though in fairness, Sharp had a diminished

presence this year). Many of the CE industry were proud to point out the traffic and excitement around television. There are probably two main reasons, aside from the obvious “everyone can look at a tv and understand it”. First, there is still a lot of improvement going on in the basics of LED/LCD panels and the improvements are easy to see (refresh rates, black levels, color, device thickness). When you see last year’s panel compared to this year the difference is remarkable. A device from last year refreshed at 120hz so had motion blur, was likely an LCD tube instead of an LED so was not bright or black, and was at best 2.5” thick. This year 240hz, LED, and sub-centimeter displays were everywhere. It is really exciting to see and especially at reasonable prices. The second reason for the level of excitement would have to be 3D. Although many are super confused over which part of a system needs to be 3D and what is compatible with what, there were 3D TVs at every manufacturer. More on 3D below.

Readers. The number of eBook readers was simply astounding. There was even a pavilion with about a half-dozen very small companies with their own eReader. All of them use the same eInk as the Kindle reader. They are being presented in varying form factors with a variety of differentiation (SD cards, wireless, waterproof, etc.) It is even to the point where there were two (that I saw) services for getting books that are tailored to the eBook makers (they are not direct to consumer). All are taking advantage of Google books. Sony had a lot of space devoted to their reader. The ASUS two screen color reader was on the floor (behind glass). There were several new screen technologies with the Qualcomm technology getting a lot of attention because it is color and consumes very little power (in a 5” screen). The most interesting reader was from Que from PlasticLogic (photo below). It uses eInk but the whole device is thought through as a scenario primarily aimed at businesses. Even the case is really a business portfolio. None of the readers could compare to the Kindle service for sure. The undertone was a degree of defensiveness since people who don’t use these but attend CES have presumably decided already not to have a Kindle. And with the “Apple Tablet” *on the way* some are even thinking that this category is “dead” the way that people think stand-alone MP3 players are dead viz. iPhones.

3D. By most estimates 3D was the biggest news of the show. The speed and breadth of 3D is pretty impressive. There’s clearly a platform “war” going on around 3D technology—the cameras and format. There is some good news in that Blu-Ray has agreed on a 3D format for discs. But the tv technology and eyeglasses (and when you need to match these) is still going crazy. It was hard to compare 3D technology because frankly in a world of 100K disease vectors about the last thing I was going to do was wear a pair of glasses worn by everyone without a sani-wipe to be spotted anywhere (ditto on the touch screens). A lot of this was clearly driven by Avatar which might have been one of the first movies most attendees saw in 3D and wore the glasses (though all the demos were for *monsters v. aliens* I think). When you see 3D on a tv versus seeing it in Avatar IMAX the impact is much less pronounced and you start to think about the realities of watching tv in the home—reclined on a sofa, probably texting, running to the kitchen and so on it starts to have a different appeal. The primary challenge is that the physical world still surrounds your field of vision which isn’t the case in the theater. It might be that 3D home tv is going to be more like THX in the home? On the other hand, the world if 3D and saying it won’t be here in some form sounds like the people who said no one would like color tv because the ponderosa on Bonanza looked fake. 3D will be mainstream. It is just time. A lot of people are talking about Sports and how cool that would be and several cable/sat companies are talking about having 3D packages like they did for HD. For PCs, nVidia has a clear lead and had a booth set up in the main entrance just to prove it. Below you can see last year’s 3D technology combined with a high power cards showing 3D for legacy (no coding changes) DX games. It is really cool!

Touch. You could touch everything. What you couldn’t touch was still being touched. Things that you couldn’t touch were named touch (Panasonic’s LED TVs have “Clear Touch” which actually means the bezel does not get fingerprints). It is fair to say that for anything “scenario” based touch is it. There was a router with a touchscreen on it to configure it. Printers all have touch screens on them. The bummer is that there is a lot of software in there and so we’re all probably in for some hard to use products as the expertise to do a good job, have calibrated screens, and so on is not that easy to scale this quickly. On a serious note, there were tons of touch Windows 7 PCs which was great to see. In fact the result of touch on so many PCs was that everywhere you looked you could see the TouchPack Surface Globe running (which is better than seeing Spiderman and Shrek). There is one area we need to look at here which is that a number of new ATOM based machines are getting multi-touch and the GMA500 cannot really handle the touchpack – it isn’t clear we should license it for ATOM based touch machines. And there were lots of grumbles about smudgy screens. One thing on every PC is that the trackpads support a bunch of Multitouch gestures. We missed this in Windows 7. nLighten was showing wall sized multi-touch displays based on putting touch panels in front of DLP TVs.

Touch Shells. There are touch shells from each of the PC makers that are selling touch machines. These shells all basically do the same thing, which looks a lot like media center + browsing the web + some app. Browsing the web is always done by hosting the IE

browser OC. And the “some app” is something like a sticky note application or calendar. Some do a little bit of widget like stuff. Samsung had the most developed of these known as “PlayTouch” (photo of the browser below). This is definitely an area of concern for us in planning Windows and something we always knew would be a feature request. The value these provide is really minimal and so it is more of a confusing user experience now. The slates machines will all have these as well, which is a double concern because those machines all will have relatively low end hardware. In the near term just helping reduce redundancy via “advice” is about all we can do.

TV w/ code or Widgets. This is the third year I’m writing about TV and building browsers into TVs so I do feel I’m not helping here like I should—we’re falling behind in this area and probably need to get clearer about what we’re doing. Widgets (based on the Yahoo widget platform, which was Konfabulator) are in everyone one of the cool tvs described above and being used as a differentiator (though everyone has them). In all honesty as these get more and more developed the scenario seems to be getting a little weaker. For example, there is a twitter widget. But in reality seeing a twitter stream is only marginally interesting and isn’t long before you click on a shortened URL, want to tweet or retweet. The ability to read mail is neat but replying is hard and I am not sure how many people want to read mail on the living room tv. Weather, news, quotes, all seem cool. One of the things being shown quite a bit was a Picture In Picture functionality. For example, VIZIO has a widget bar that takes up the side / bottom. Every single widget or smart display device showed Facebook, Twitter, Netflix, Vudu, Yahoo!, Weather.com, Flickr, and Skype. Panasonic has Skype built into their panels with a camera. The scenario at first seems interesting – sit on the sofa and talk to family. Then you realize how tricky that can be for all sorts of reasons (just like people have always talked about with respect to video conferencing) and more importantly Skype is so much more than video now—they are a leading IM service. The Netflix service is always shown off by folks as well and some TVs do as Panasonic did for Skype which is to provide that specific service. The thing that is clear is that TVs will all soon just have browsers and an OS for at least the high end ones. It means we need to figure out how to get extenders back in TVs or more Windows code running on PCs. Nothing new here.

Screens everywhere. About three years ago all the printed signs got replaced with digital frames. That is still the case and makes for much more informative displays. This seems to be the year where every device is getting a touch screen in place of either buttons of an old monochrome LCD. This is interesting. There was even an oven (photo below) with a touch screen. There’s no doubt that the additional information and dynamic nature has the potential to make a lot of devices much easier to use. There’s no doubt that the additional information and dynamic nature has the potential to make a lot of devices way more painful to use. I think there is a neat opportunity for common devices to differentiate not just on having a touch screen but on who does better with a touch screen.

Slates. The Slate form factor for PCs made a little news primarily because of HP’s announcement that we discussed during the SteveB keynote. There were several on display. It is still early in this type of formfactor and everyone is anxious about what Apple will do and how it will be different from past experiences with the formfactor. I think things will be interesting.

App Stores. Everyone has an app store. Every UI looks like the iPhone app home screen. This is a metaphor that is sticking. The app store is something we need to continue to work on of course. The biggest announcement came from Intel which is doing an App Store called AppUp. It is specifically for ATOM and netbooks, and also done cross-platform for Moblin-based laptops. The AppUp store is so netbook centric that the size of the app’s window is fixed for <10” screens. Of course Android has a store. Every store comes with the first question “how many apps?” Even the widget galleries are now positioned as a store.

Green. Everything and everywhere was about being green. Green manufacturing. Green products. Products to help you be green. There were things to help you be green that used electricity to show you how green you were. There were crazy things you don’t need like cell phone cases made of plastic telling you how green they were. Sony had a concept laptop made out of recycled plastic that actually looked pretty cool. This has been an increasing trend for the past 3 years or so and was expected.

China manufacturers. There are a number of giant CE manufacturers in China, some of which export to the US, such as Haier, TCL, HiSense, Chong Hong. These companies initially made home appliances and branched to tube tv and then LCD. In past years they had massive display and sort of sent a shockwave through the industry out of fear of low prices. The innovations in LED, 3D, widgets, and so on has created an environment where none of these manufacturers are keeping up. I think the same could be said regarding mobile phones as well. I sort of felt this year these booths got left in the dust.

Wireless sharing. Wireless networking is everywhere and ubiquitous...almost. People are now realizing there is an opportunity in sharing the one available internet connection. This shows up as either femtocells to repeat the 3G signal or as wifi sharing. Some of you might have tried connectify.me which is a Windows 7 app that allows a laptop to share either the wifi or 3G network connections—that is it creates a new access point using your wifi radio. Intel was showing off a download that does that. This is really neat and I have been using it on my Nokia Booklet 3G for when we travel (hotel rooms that are only wireless help you to save one connect fee, or airports).

The following are just a few notes on company-specific booths.

Intel. Intel's booth is always interesting because they so clearly place the important things in the front and the things they know they have to show but de-emphasize in the back. This year the whole front was the new Core series. It shows a lot of neat PCs doing neat things—video, games, etc. All of the PCs in this booth were from other parts of the show. Around the corner by the outside door was the section on ATOM. There were all the small form factors. It was a place to see the Archos 9 as well as the viliv N5 (available from dynamism—this is a 4.8" ATOM based clamshell running Windows 7 HP). They had a giant touch display showing the real time CES twitter feed which many found quite mesmerizing.

Samsung. Samsung's booth is just impressive (see photo below). They have a lot of products—just about every "category". One thing they were focused on was "sharing" and basically getting anything you are looking at on one screen to show up on your big screen or somewhere else. One scenario was *Screen Print*. Using DLNA if you have a DLNA (yep, Windows 7) PC they can take a frame from a TV and print it on the printer attached to the DLNA TV (they share a "photo" with the PC and have a PC app that prints). They had Screen Share which took a picture or "file" (PDF) from your phone and showed it on TV, again using DLNA and client app on the Windows Mobile phone. This used RUI—remote user interface. This isn't something supported in any Microsoft devices today and is built off the DLNA work—being supported in Windows Mobile, XBOX would be interesting for these scenarios. Samsung had a lot of ATOM based laptops running Windows 7 and a couple running other OS platforms. They had some very nice AIO Multitouch machines. The PlayTouch shell is something we need to understand better.

Panasonic. Panasonic's booth is also always really impressive. It starts with the largest tv anywhere. This year it was 152" plasma (not really Green for sure). WOW! Panasonic's booth had a lot of space devoted to the Skype demo mentioned before. They also still have plasma which still have nicer screens. There's a lot of blu-ray in this booth including a lot of 3D blu-ray for the home.

Sony. Sony's booth was all about 3D for the most part. I felt that the booth lacked a coherency that it had in previous years, but it might just be me. There was a lot of gear. As far as PCs they had a good display and the X series was one people liked as well as the L series (AIO desktop touch). The X has become my primary machine and I just finished setting up the L this weekend. Seeing the machines on the floor is interesting because some of the challenges with the software load are present and you can see people struggle with some of the built-in apps. There's work to do here. But the hardware still surpasses what else is out there. Sony had a very odd device the "Sony Dash" which was like a nightstand clock but was a 5" touch screen that showed...widgets. It actually won a CES innovation award. Digging into this it appears to be licensed from Chumby or just uses the Linux code. The UI was overly complex for something next to your bed—it was a lot of clicks to turn off the alarm. Sony announced they would officially support SD in devices though no word on if they would change their cameras.

ASUS. There were a ton of PCs at the ASUS booth. Their 13" laptop is really nice and probably one of the stronger mainstream macbook competitors. They had a lot of AIO and of course a lot of innovation around the eeePC line. This was one of the OEMs showing off an ATOM-based multi-touch machine where the Surface Globe didn't work very well.

LG. LG had a ton of TVs as well. There were also a lot of laptops but we don't generally see these in the US. Their thinnest tv was 6.9MM and showed at 480hz. The neatest thing they had was a remote control that wasn't totally deviceless but worked like a wii controller. Sort of bizarre they had a whole videowall showing off nComputing.

FloTV. This is a new mobile tv service—sort of like Sirius but tv. They make a small 3" pocket sized receiver as well as OEM in-dash and in-seat (and in-roof) TV. There was a special section on the broadcast technology required since it turns out mobile tv is a standard type of compression and signal. The service is currently \$10/month. It is neat. I think you have to sit in the back seat a lot to benefit. It isn't clear to me why local stations or local cable providers would not just broadcast this and add it to your

bill. Obviously this is what is coming to mobile phones—in fact one company had a mobile tv receiver that then sent the signal to a free iPhone app over wifi.

Toshiba. Toshiba TV had a good “vision” called Cell TV which is all about their new CELL Imaging Engine. It brings together a lot of their developments in a good presentation. It was a lot like what Sony did last year for Sony.HD. Toshiba also had 4K displays. They were showing 3D motion control where you could change channels with a gesture.

Sharp. Sharp had some high density pixel displays that looked really cool and even a 4K display. They have what they call “quad pixel” which is some detail for how the pixels are made that does make a big difference. Sharp always seems really good at showing off the improvements in side-by-side year-over-year. They have a lot of 240hz tvs. Sharp also showed a lot of tvs with Netflix in there.

Sling Media. Sling was showing off the deal with did with DISH to have the DISH DVR come with a built in slingbox. This is pretty neat. This is also another scenario where extender would be helpful. I think we all would like our primary work at home PC to have a little bit of TV in the corner. This is called “slingloaded”.

USB 3.0. The USB consortium had an area devoted to USB 3.0. The whole discussion is about speed. There’s also a lot of digs on Apple here because Macs can’t support it, but at least on Windows you can use third party drivers if you have the hardware. It is faster for sure. It isn’t clear where the bottleneck really is for most people. See a photo of Displaylink below.

Polaroid. Polaroid doesn’t really do first party manufacturing or much product design these days. But they did hire Lady Gaga as their spokesperson. She spent some time in the booth. I got caught in the wrong place at the wrong time! Though po-po-poker face is at least the right song for las vegas.

Celestron. In the “add a touch screen” department, Celestron’s consumer optical microscope that had an LCD last year now has a touch screen. It is really nice. My birthday is soon.

PhotoSimile. At first this looked like a lightbox, but what it actually is is a lightbox connected to a PC. You put your camera on the downward facing mount and plug the USB video out into the PC. Their software can then be used to drive the lighting and construction of a product shot inside the lightbox. It was a really neat use of a PC.

Sennheiser. The headphone company has some new sports earphones that promise not to fall off. They grip the scapha of your ear (look it up - [http://en.wikipedia.org/wiki/Pinna_\(anatomy\)](http://en.wikipedia.org/wiki/Pinna_(anatomy))). We’ll test these out with my Zune and get back to you when they are available.

More or Less?

One of the first things I do when walking the floor is sort of do a quick (well an hour) survey of the main (Central+South) convention center. The goal of this sweep is to get a sense for what there is more of or less of compared to previous years. This is sort of a fun part because it is a good check over what took hold and where people are placing bets. I’m not necessarily looking for the really big things, but really the accessory or places where a whole bunch of companies seem to be betting the whole company or production line on something.

More

3D

Readers

iPhone accessories

Less

Media streaming boxes

VOIP

USB 5v gadgets

Wireless charging	Linux PCs
Extra power from a rechargeable USB battery	Wired networking and Wireless hardware/access points
Google Android	Digital frames
SmartBooks	Security cameras
Slate/Tablet form factors	Wireless HDMI
Power line networking	NAS boxes
Microsoft Surface Globe	Spiderman, Shrek
	Paper

A few words on some of these with the rest covered above:

- Google Android – While there wasn't a lot to see for Android the talk of it was deafening. The Moto booth was one gigantic Droid booth. There is a lot of energy behind this. There's a lot of confusion as well given the Nexus One announcement before the show. Everyone seemed a bit worried about what Google would be doing down the road and how they would balance fair/equal footing with their partners. Open Source gives them some air cover here.
- iPhone accessories – The dock is definitely solidified in the world of automobiles and home theater. I can't think of a device that can take audio/video input that does not offer an iPhone dock option (note it is almost always an option you pay more for). There were of course a plethora of leather cases. The most crazy ridiculous accessory I saw was an iPhone steadicam—imagine using a steadicam for such a cruddy image capture device!.
- Wireless charging – lots of activity among smaller companies who are taking the patents and trying to build charging stations. They all have lots of ideas for how to get the right battery in the device including cases or replacement batteries (that are smaller in amp/hrs). This one still seems to need another few cycles.
- USB Batteries – on the other hand, everywhere you looked there were different form factors of Li+ batteries that have mini USB in to charge the battery and a USB A to power anything you plug into it. I use these all the time (a member of the MSKK Windows 7 launch team gave me a great one). There are some that are dedicated to the iPhone as well. A new wave of innovation here is that some have flip out US AC prongs so they double as both a wall charger for the attached device and the battery. Gone are the versions of these that use batteries (Energizer, Duracel, APC). As an aside, the third party makers of laptop power supplies all have USB A plugs as well now (iGo for example). I love that. Just convenience.
- Media streaming boxes—The past couple of years saw dozens of these boxes that you connect to your network and a display or tv and streamed media. These are all essentially gone except for D-Line and the Boxxee box which turns out to have one best of show innovation from CEA. I am a bit surprised and I think this is more about the idea of "free tv" than the execution of the box. The software for boxxee can be downloaded now and is essentially a "programmed" site that picks up any commercial sources of video that have the ability to be played out of frame somehow. At the show a box was introduced that runs Linux and this software, so you can get the same functionality by attaching the box (via HDMI) to your

tv. The main thing that this brings up for me is that we just need to do better on extenders. This is something we all know needs to be better but we're having trouble moving forward here. The notion of "widgets" above raise this to a higher level.

- VOIP – VOIP has moved to two places. There is ubiquity in business phones running commercial VOIP and then there is Skype. Everything else seems to have vanished in terms of hardware or software. Skype is definitely everywhere (more on this above as well).
- Wired and Wireless networking – Perhaps due more to cost of having a booth or maybe just saturation, but there was little to be seen in networking hardware and accessories (no access points, routers, switches, NAS, etc.). As above, powerline networking seems to be making a little bit of a surge.
- Paper consumption is way down. Very few booths were giving away brochures. The CEA printed far less of the Show Daily. None of the print magazines were doing free issues. I think this is good. It made it more important to take good notes at booths. Free stuff was way down as well. This is all good!

Some Pictures



This is Intel's AppUp beta running on Windows. There's not a ton of content and the size of the store window can't be resized (or made bigger).



This is Panasonic's 152" plasma!



This is Samsung's show-winning thin tv. The display is rotating but I have circled the tv from the side.



The is the Plastic Logic Que eReader.



This is the iPhone steadicam.



This is the LG tv being controlled by the Wii-like remote. Note that is not a cable, just an anti-theft device.



This is the ASUS eeePC keyboard. It is another product with an extra display. This display is an ARM powered "PC" that does widgets and more. I'm not sure about plugging in my keyboard.



Screens everywhere continue – this is an oven with a screen. The neat thing is that this isn't for widgets, but for setting all the options to cook.



USB 3 DisplayLink. This setup shows a single PC connected to a USB-based dock, and several aux displays. This is neat and with USB 3 there is enough bandwidth to do something more than 1280x1024 I think.




The nVidia 3D gamer booth. There was no alcohol wipe available for those glasses.

NETBOOK PERFORMANCE GOT YOU FEELING DOWN?

Doctors recommend a netbook diet full of streaming videos, games, and apps.

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Flip over to learn the facts.

NETBOOK NUTRITION FACTS

	Netbook with ION	Netbook
CPU	Atom	Atom
GPU Servings Per Container	16 CUDA Cores	0
Amount Per Serving		
Calories	Energized	Empty
% Daily Value*		
Total Performance	100%	10%
Battery Life	100%	100%
3D Game Performance	100%	0%
Media Performance	100%	0%
Internet Browsing	100%	40%
YouTube HD, Hulu HD, and More	Flawless	No
Media App Acceleration	5X and Beyond	No
Mainstream 3D Games	Fluid	No
Blu-Ray	Full 1080p	No
Premium Windows 7	All Features	No
HDMI Output to Home Theater	Of Course	No

*Percent Daily Values are based on a typical computing diet. Your daily values may be higher or lower depending on your meal plan.

It seems nVidia likes to compare the ION to a straight ATOM. This is their way of doing that this year. This is a small business card sized handout.



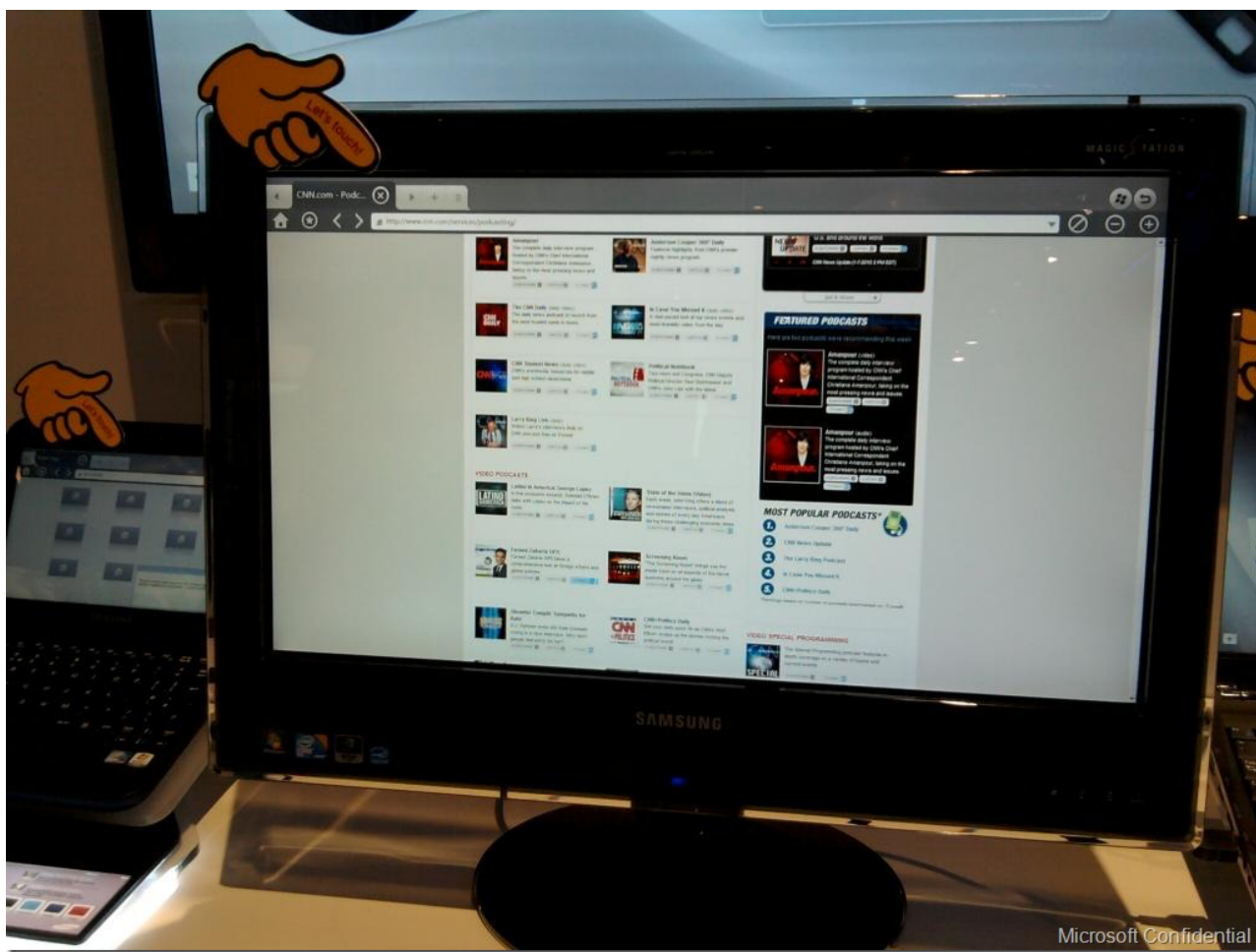
nLighten takes off the shelf DLP TVs and adds multitouch. Here is one running the Surface Globe.



While we showed Natal for controllerless games, there continues to be a lot of accessories for the Wii to make the controller more like the physical world. Here is a Wii bowling ball.



A Lenovo concept All-In-One desktop that I thought was really nice. I hope they make this!



Samsung's all-in-one touch screen (note the hand's on the screen saying "Touch"—this was a common sight). The screen shot is just showing browsing as the browser OC. This has a lot of challenges in browsing safety and privacy – protections that get lost not using the IE frame.



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CES is a gathering of a multi-\$100B industry. It takes a village for sure. I love seeing booths for innovations in even the most “basic” of getting consumer electronics to everyone around the world. Pictured here are the *world’s best* sealers to wrap all those printed circuit boards for shipping.