NVIDIA Tegra FAQ

Q. What have you announced at Computex 2008?
A. Today, NVIDIA® launched Tegra™, a family of highly integrated computers on a chip. In addition to Mobile Internet Devices, the NVIDIA Tegra 650 and 600 processors will be used in a wide range of innovative platforms such as netbooks, web tablets and more.

Q. Are there other products in the Tegra family?
A. The NVIDIA Tegra 650 processor is the second product in the Tegra line, the first being the NVIDIA Tegra APX 2500 processor, which is enabling the next generation of Windows Mobile smart phones.

The Tegra 650 model adds support for more display, performance, storage and connectivity options for systems rivaling current notebook video and internet capabilities at new low price points.

Q. What does NVIDIA bring to this market?
A. How we interact with and use technology is changing and devices across many platforms are becoming increasingly visual. NVIDIA's intense focus on visual computing, combined with performance/watt has enabled us to handle the most visually intensive applications within the constraints of the given platform

NVIDIA is not alone in this effort. We've enlisted the help of ARM, Microsoft and other players in this industry to help us change the way MIDs are designed and used.

NVIDIA's mobile internet experience is based on Microsoft Windows CE which is defined with long battery life and a full suite of capabilities.

NVIDIA is working with the industry standard ARM processor architecture with decades of experience in building ultra-small, extremely low power computers.

NVIDIA is also working with the world's finest mobile OEMs and ODMs to deliver compelling designs with high volume manufacturing and sales channels. Our customers share our excitement over the new capabilities only Tegra can deliver.

Q. What features do you think will drive the adoption of this market?
A. Battery life is the most important, closely followed by user experience. Notebooks have become a reliable and trusty travelling companion for many, but you still can't be far away from a power socket – a couple of hours of video and you need to charge again. If you had a device that could run over, say, 50 hours of audio, and maybe 4 hours of HD video and still have enough battery life left to browse the web or do email for 10's more hours, that starts to sound like a device that would get a lot more use.

The Tegra family of computers on chip have been designed from the ground up to deliver stunning HD video, imaging capabilities, desktop class 3D graphics and more in a tightly integrated solution that burns less than a watt during even the most demanding of uses.

We believe it is this balance of functionality and power will drive the market forward.

Product Specific Questions

Q. What is the difference between the Tegra APX 2500, Tegra 650 and the Tegra 600?
A. The main differences between the product lines and the individual SKUs depends on their target platform. The APX products for example, targeted at the smartphone space, drive lower resolution displays than the Tegra MID targeted products – by comparison Tegra MID targeted products drive larger displays and support higher HD standards that are desirable in the MID and embedded PC space – for full comparative specs, see table below:

	Tegra APX 2500	Tegra 600	Tegra 650
CPU Speed (MHz)	600	700	800
Primary LCD max resolution	FWVGA (854x480)	SXGA (1280x1024)	WSXGA+ (1680x1050)
Video Decode (H.264, WMV9/VC-1)	720p @ 30fps	720p @ 30fps	1080p@ 24fps
Video Encode	720p	720p	720p
IDE Support	No	Yes	Yes
USB OTG	Yes	Yes	Yes
Memory Speed (MHz, LP-DDR)	166	166	200

Q. Can you go into any more detail on the specifications?
A. NVIDIA Tegra offers:

- "All-day media processing" - for 130 hours audio, 30 [thought this was 26] hours HD video playback
- HD image processing for advanced digital still camera and HD camcorder functions
- Optimized hardware support for Web 2.0 applications for a true desktop-class internet experience
- Display support for 1080p HDMI, WSXGA+ LCD and CRT, and NTSC/PAL TV-Out
- Direct support for WiFi, disk drives, keyboard, mouse, and other peripherals
- A complete Board Support Package (BSP) to enable fast times to market for Windows Mobile-based designs

Q. What core does it use?
A. The Tegra products use an ARM11™ MPCore™ multicore CPU running at 700MHz on the Tegra 600 and 800MHz on the Tegra 650. The ARM MPCore multicore processor technology is designed to provide an unprecedented level of flexibility, performance, power efficiency and functionality, making it especially suited for smartphone and MID applications

Q. What OS do you support?
A. The Tegra products support Windows CE and Windows Mobile

Q. When will you announce customers?
A. We have designs in process and expect to see first products before the end of year.