



2014 Intel Solutions Summit

**MOBILITY  
INNOVATION  
AWARD**



## MAINGEAR delivers the speed and power of a fully-packed laptop in a thin form factor with long battery life

MAINGEAR wins the 2014 Intel Mobility Innovation Award for delivering a top-of-line gaming rig in a thin, power-efficient laptop.

**MAINGEAR** ™

### CHALLENGE >

Gamers and power users need computers with the processing power and speed to keep up with today's graphics-rich games, videos, and creativity applications. Many of these users select desktop or tower computers, or fully-loaded laptops that are large, heavy, and tend to run out of battery power just when the game is getting good. Users looking for truly mobile solutions look for a laptop that is easy to move around and has a battery that will last through a long gaming session, but that doesn't compromise on quality and performance.

## SOLUTION >

MAINGEAR developed the Pulse 17 laptop for the serious mobile gamer. These are among the thinnest fully-packed laptops available on the market today; yet they boast tremendous power, speed, innovative cooling, and a battery life in excess of six hours. But to understand the Pulse, you need to know the background.

The story of MAINGEAR is one of a successful garage-based startup. In 2002, founder and CEO Wallace Santos combined his love of tuning high-performance cars with his passion for computer gaming, starting MAINGEAR in Newark, New Jersey.

Santos knew that he would need to innovate in order to avoid being just another custom-laptop company. He drew inspiration from the world of competitive automotive racing, where you're always fighting for more power and to be the fastest in the pack. When Santos launched the company, MAINGEAR had one of the fastest gaming PCs available at the time. The company was among the first to offer a commercially available, water-cooled PC, and in 2009 they drew industry attention with the MAINGEAR Vertex, the world's first desktop computer with vertical heat dissipation.

"We took the bigger players by surprise," Santos said. "We built our company on the principle of always being on the bleeding edge, being among the first to market with the latest technologies, and topping it off by always making sure our products are aesthetically pleasing. Our computers are put together by true enthusiasts."

To Santos and the other enthusiasts at MAINGEAR, the aesthetics really matter, and it shows. "We want to be known for being the best, but we also stand out because our computers look like a hot-rod," Santos said. The company has a full on-site down-draft spray booth where they add automotive paint finish to all their computers in one of six standard colors, or in any custom color the client chooses.

Which brings us back to the Intel Mobility Innovation Award. In 2013, Santos brought the company's knack for innovation to the mobile market, catching the world's attention with the release of the MAINGEAR Pulse 17. This is a 17-inch 1080p laptop built out of a metal alloy, featuring a fourth generation Intel® Core™ i7 processor, is less than an inch thick, and weighs under six pounds. It sips power when running on the integrated Intel HD graphics for surfing the web and watching movies, yet it also has a powerful discrete graphics solution to deliver the punch necessary for the latest games. And it does all of this while delivering on battery life, surpassing six hours in certain usage scenarios.

The MAINGEAR engineers designed the Pulse 17 for speed. To avoid network bottlenecks, the system includes both wired Ethernet and wireless 802.11n, with upgrade options to 802.11ac. To address disk I/O concerns, they have two mSATA drives in RAID as well as a standard 2.5-inch hard disk. By loading applications on the faster mSATA drives and using the standard drive for data storage, users get fast, responsive game play and processing speed from their applications.

"The PULSE 17 has the Intel Core processor and Intel chipset at the heart of the machine," said Santos. "If it wasn't for the thermal advantage, graphics, WiFi, and other Intel technologies, we wouldn't have been able to make it as thin or as powerful, and it wouldn't have the amazing battery life that it does. The PULSE was our game-changer in the mobile space: it's fast, power efficient, ultra-thin, and light—and it's also beautiful to look at."

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MAINGEAR



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