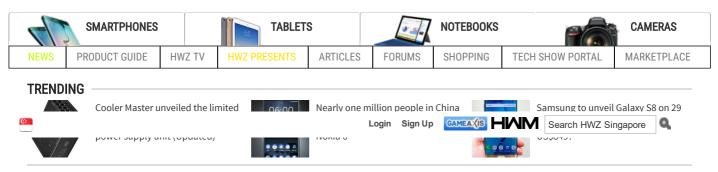
SINGAPORE





NTU and NXP Semiconductors launch Smart Mobility Consortium to test and develop smart mobility technologies

By Wong Chung Wee on 18 Jan 2017, 16 hours 2 min ago



NTU and NXP Semiconductors have launched the **Smart Mobility Consortium**. The **NTU-NXP Smart Mobility Consortium** currently includes 12 industry partners, with the common aim of testing and developing smart mobility technologies.



ALL NEWS CATEGORIES

CHOOSE A CATEGORY

NEWS FOR PAST 12 MONTHS

JANUARY 2017

SUBSCRIBE TO HWZ HERE!

Subscribe now to receive latest tech news, articles and promotions straight to your inbox!

Enter your email address

SUBSCRIBE

By signing up, you indicate that you have read and agreed to the Terms of Service and Privacy Policy.

SUGGESTED READS

» View More



Cisco and NXP Announce Investment in Cohda Wireless

07 Jan 2013 / By Kenny Yeo



There's a sickness predicting app for Fitbit devices

19 Jan 2017 / By Cookie Monster



LG has a patent for a foldable smartphone

19 Jan 2017 / By Cookie Monster





Cooler Master unveiled the limited edition MasterWatt Maker 1200 MIJ power supply unit (Updated)

18 Jan 2017 / By Wong Chung Wee



U.S. trade commission sues Qualcomm for anticompetitive policies

18 Jan 2017 / By Liu Hongzuo

FROM GAMEAXIS

» View More



Fire Emblem Direct:





10 exclusives to consider for the PlayStation 4 Pro

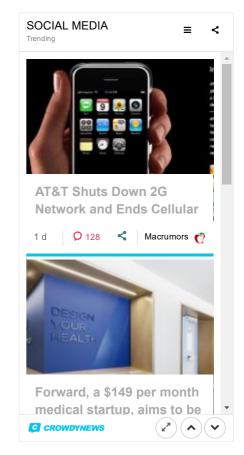


Halo Wars 2 Blitz beta dated for Jan. 20–30



NTU Assoc Prof Guan Yong Liang holding a smart on-board unit with a display of the NTU-NXP smart mobility test bed. (Image source: NTU, Singapore)

The consortium makes use of the NTU campus as a test bed; for a start, the campus plays host to an exclusive wireless wide area network (WAN), which is based on *vehicle-to-everything* (V2X) communication technology. This special wireless WAN "runs on the IEEE 802.11p and 1609 standard", and according to Associate Professor Guan Yong Liang, this specialized Wi-Fi standard is very similar to our consumer Wi-Fi ones; however, the former is tailored for high throughput communication for moving vehicles, even when the vehicles are traveling at high speeds. In a nutshell, the V2X communication technology makes use of a specialized Wi-Fi signal that is robust and reliable.











One of the 35 roadside units of the Smart Mobility Test Bed, which are installed campus-wide.

With the use of 35 roadside units, equipped with video cameras, the entire NTU campus is blanketed by this Wi-Fi signal. The entire wireless communication backbone is built and secured by NXP Semiconductors. The V2X network provides vital communication link among cars, traffic lights and other infrastructure components throughout the NTU campus. One of the large-scale test projects, the NTU-NXP Smart Mobility Test Bed, comprises 50 vehicles that are equipped with a "smart on-board unit", linking them to the ${\bf V2X}$ network.









The smart on-board unit.

The smart on-board unit can be thought of as a "modem" that allows the vehicle to communicate with the network; in some instances, it can also communicate directly with other network nodes.



The tablet, attached to the test vehicle's smart on-board unit, displays landmark information. The V2X-linked vehicle can receive such messages from the V2X communication system. (Image source: NTU, Singapore)

One of the main applications of the **Smart Mobility Test Bed** is to enhance traffic management. With accurate real-time information, the test bed's command center can broadcast information to connected vehicles, as well as control attached nodes, like traffic lights, to ensure smooth traffic flow. In one of its use cases, a V2X-linked emergency vehicle can be given priority to move ahead at a similarly-linked traffic light. On a larger scale, the NTU-NXP Smart Consortium wants to garner more partners, and avail like-minded companies to the current test bed for developing their smart mobility systems. At the same time, those companies will be able to enjoy cost-sharing benefits on the test bed, "which is funded and supported by the Singapore Economic Development Board."

(Source: Nanyang Technological University, Singapore)