



What is HSDPA?

HSDPA (High Speed Downlink Packet Access) is mobile communications protocol, based on, and leveraging technologies from the existing W-CDMA protocol (one of the 3G protocols used in mobile telecommunications today). HSDPA aims to bring high-speed data communication speeds more inline with those of standard consumer broadband services (ADSL). HSDPA (sometimes referred to as 3.5G) will be able to offer theoretical download speeds of approximately 1.8Mbps (although 1.2Mbps is more likely due to the sharing of bandwidth with other users), and upload speeds of 384Mbps according to Sierra Wireless. Higher communication speeds will soon be possible with advances in technology.

Comparable 3G data communications devices, such as the Vodafone Mobile Connect card support only 384Kbps download speeds, and 64Kbps upload speeds. HSDPA provides a significant increase in high speed mobile communications from its predecessor.

HSDPA modules can now be easily implemented in mobile computers, using either a PC-Card or internal mini-card device. So designing the technology into a mobile computer is not difficult for the manufacturer.

Some manufacturers, including Sierra Wireless are designing software consoles for the user to connect with, and control their HSDPA modules. Sierra Wireless offer a customizable console which can be branded with the OEMs logos and colour schemes.

What can HSDPA be used for?

The high speed communications of HSDPA allows for a much richer Internet experience for the mobile user. Video and voice can be transmitted at higher speeds and reduce loss of quality. This also opens up mobile Voice Over IP (VoIP) to the consumer. Sending Voice over an Internet connection is certainly cheaper than making a long distance call, and is sure to be the future method of mobile communications as service providers look to implement these solutions for their customers.

Who can benefit from HSDPA in a Mobile Computer?

The mobile workforce (traveling sales people, international business executives) is the obvious beneficiary of such technologies, but HSDPA can have significant benefits for other users too. Those in more remote locations who may not have access to good broadband services can take advantage of the high-speed communications offered by HSDPA (providing there is a cell within range).

Samsung and HSDPA

Samsung are already designing prototype chassis for incorporating HSDPA modules and SIM card readers into the design of their forthcoming releases. The Q1 is expected to have a HSDPA module to be included soon, and the Q40 chassis has already been designed to house the additional space needed for the SIM card reader.