Abstracts

Multipoint™: A Millimeter Wave System for Quick Access to the Information Super-Highway

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Broadband wireless service is a natural progression of wireless technology. First cellular and then Personal Communications Services (PCS) demonstrated the advantages of wireless communications for mobil users. However with the deployment of wireless technology, other advantages of wireless systems became apparent. The first advantage is the rapidity with which wireless systems can be deployed compared to wired solutions. This was demonstrated through the deployment of not one, but two cellular systems in just over ten years to provide coverage to over 800% of the U.S. population. The second advantage is the lower cost per subscriber for low take rates for the service. These advantages are independent of the mobility aspect of cellular systems. This was demonstrated by the rapid deployment of cellular systems in some countries as the preferred telephony system. The demand for broadband services such as interactive entertainment, video conferencing, high-speed data, etc., has created the need for the Information Super-Highway. The obvious transmission medium of choice is Fiber Optic networks such as Hybrid Fiber/Coax (HFC), Fiber-to-the-Curb (FTTC) and Fiber-to-the-Home (FTTH). However the time and cost to deploy a wired solution, particularly during the early stages of low take rates in a competitive environment, make the economics of a wired broadband digital solution uncertain. A broadband wireless solution provides an alternative which offers the advantages of quick deployment and good economics in low take-rate environments. This paper describes how a 27-30 Ghz system can offer a wireless alternative for broadband digital services.

❑ Return to main document.