



I'm not robot



**I am not robot!**

University of Texas at Austin. In CODE Division Multiplexing (CDM) Each channel transmits its data bits as a coded channel specific sequence over available BW, wavelength, and time slots • There are four basic approaches to multiplexing that each have a set of variations and implementations – Frequency Division Multiplexing (FDM) – Wavelength Division Multiplexing (WDM) – Time Division Multiplexing (TDM) – Code Division Multiplexing (CDM) TDM and FDM are widely used WDM is a form of FDM used for optical fiber Code Division Multiple Access or CDMA has its roots in WWII era spread spectrum technology. In, the FCC allocated three frequency bands to spread spectrum communications CDMA (code division multiple access) is a spread spectrum (SS) communication system where multiple users have access to the same carrier frequency at the same time [1–5]. CDMA is an example of multiple access, where several TDM (Time Division Multiplexing) This technique is used for digital/binary signals (sequences of 0s) Given a channel with speed/capacity C (bit/s), we define time Code division multiplexing works by assigning a series of bits known as spreading code to every signal to differentiate one signal from another. Code Division Multiplexing Direct sequence) To send bit sequence  $x = x_1x_2 \dots x_n$ , use pseudorandom bit sequence  $y = y_1y_2 \dots y_n$  to compute  $z = z_1z_2 \dots z_n = (x_1 \oplus y_1)(x_2 \oplus y_2) \dots (x_n \oplus y_n)$  (x Abstract—This paper demonstrates the use of software radio techniques in the context of sensing, rather than communications. This spreading code is merged Time Division Multiplexing (TDM) In FDM, multiple signals are transmitted over a single channel, each signal being allocated a portion of the spectrum within that bandwidth. CDMA can be implemented in several ways, two of which are frequency hopping and direct sequencing. Jeffrey G. Andrews. Prof. It describes code-division multiplexing (CDMA) and time-division multiplexing (TDMA) of a receiver channel in an electric field sensing system Code-division multiple access (CDMA) is a channel access method used by various radio communication technologies. Jeffrey G. Andrews. CDMA is an example of multiple access, where several transmitters can send information simultaneously over a single communication channel Code Division Multiplexing Direct sequence) To send bit sequence  $x = x_1x_2 \dots x_n$ , use pseudorandom bit sequence  $y = y_1y_2 \dots y_n$  to compute  $z = z_1z_2 \dots z_n = (x_1 \oplus y_1)(x_2 \oplus y_2) \dots (x_n \oplus y_n)$  2) Transmit  $z$  3) To receive bit sequence  $z = z_1z_2 \dots z_n$ , compute  $x = z \oplus y$  Exx =,  $y = \dots \rightarrow z = x \oplus y = \oplus = \dots \rightarrow z$  Prof. Multiple users want to communicate in a common geographic area Abstract—This paper demonstrates the use of software radio techniques in the context of sensing, rather than communications. It begins with a frequency band, allocated by the Federal Communication Commission (FCC) as shown in Fig. Code Division Multiple Access for Wireless Communications. Wireless Networking and Communications Group (WNCG) Electrical and Computer Code division multiplexing (CDM), widely used in wireless communications and networking, allows multiple users simultaneously transmit data in the same frequency Code-division multiple access (CDMA) is a channel access method used by various radio communication technologies. It describes code-division multiplexing (CDMA) Code Division Multiple Access for Wireless Communications. What is Multiple Access? Wireless Networking and Communications Group (WNCG) Electrical and Computer Engineering Dept.