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Sommario/riassunto	Long description: The content of this book reflects the results of the work carried out during my dissertation. For the first time the functionality of a GNSS receiver has been combined with the information gathered from a time-code receiver. For high efficient signal processing the architecture given here relies on the features of the DCF77 time-code signal. The combination of time synchronization and navigation signals eliminates the main drawback of common assisted GNSS receiver architectures, its massive usage of processing power. Nevertheless the advantages are preserved, namelya short Time-to-First-Fix at low power consumption. Based on the common Single-Shot receiver architecture, the extension by the time information together with navigation message and approximate position gives the opportunity to forecast the GNSS satellite signals. Consequently a reduction of the width of the search window for the code phases of the satellite signals can be realized. Together with fundamentals of satellite based navigation and the transmission of time information via long-wave radio signals this work gives an insight into the newly developed architecture. Additionally results of complex system simulations are presented.