Record Nr. UNINA9910483288803321 Autore Avtin Igor Viktorovich Titolo Principles of integrated airborne avionics / / Igot Victorovich Avtin [et al.] Singapore:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 981-16-0897-0 Edizione [1st edition 2021.] Descrizione fisica 1 online resource (XXVI, 395 p. 92 illus.) Collana Springer aerospace technology Disciplina 629.135 Soggetti Avionics - Equipment and supplies Avionics - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Introduction -- 1. Place of aircraft on-board radio electronic equipment Nota di contenuto in composition of complexes and systems -- 2. Concepts and programs for creating on-board integrated avionics -- 3. Functional problems of the integrated avionics -- 4. Principles of integration of on-board radio electronic equipment -- 5. Functions of integrated onboard navigation equipment, landing, data exchange and atc -- 6. Joint processing of information in integrated on-board radio electronic equipment -- 7. Examples of implementation of integrated breo navigation, landing, data exchange and atc -- conclusion --References. Sommario/riassunto This book discusses the principles, approaches, concepts and development programs for integrated aircraft avionics. The functional tasks of integrated on-board radio electronic equipment (avionics) of navigation, landing, data exchange and air traffic control are formulated that meet the modern requirements of civil and military aviation, and the principles of avionics integration are proposed. The modern approaches to the joint processing of information in navigation

and landing complexes are analyzed. Algorithms of multichannel information processing in integrated avionics are considered, and examples of its implementation are presented. This book is intended for scientists and professionals in the field of aviation equipment,

students and graduate students of relevant specialties. .