

Lin, Yuan-Pei, See-May Phoong and P. P. Vaidyanathan. *Filter Bank Transceivers for OFDM and DMT Systems*. New York, NY: Cambridge University Press, 2010, 359 pp. \$88.00 (Hardbound).

Providing key background material together with advanced topics, this self-contained book is written in an easy-to-read style and is ideal for newcomers to multicarrier systems.

Early chapters provide a review of basic digital communication, starting from the equivalent discrete-time channel and including a detailed review of the MMSE receiver. Later chapters then provide extensive performance analysis of OFDM and DMT systems, with discussions of many practical issues such as implementation and power spectrum considerations. Throughout, theoretical analysis is presented alongside practical design considerations, whilst the filter bank transceiver representation of OFDM and DMT systems opens up possibilities for further optimization such as minimum bit error rate, minimum transmission power, and higher spectral efficiency.

With plenty of insightful real-world examples and carefully designed end-of-chapter problems, this is an ideal single-semester textbook for senior undergraduate and graduate students, as well as a self-study guide for researchers and professional engineers.

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