

Contents

1	Introduction	1
	Gary J. Sullivan	
2	HEVC High-Level Syntax	13
	Rickard Sjöberg and Jill Boyce	
3	Block Structures and Parallelism Features in HEVC	49
	Heiko Schwarz, Thomas Schierl, and Detlev Marpe	
4	Intra-Picture Prediction in HEVC	91
	Jani Lainema and Woo-Jin Han	
5	Inter-Picture Prediction in HEVC	113
	Benjamin Bross, Philipp Helle, Haricharan Lakshman, and Kemal Ugur	
6	HEVC Transform and Quantization	141
	Madhukar Budagavi, Arild Fuldseth, and Gisle Bjøntegaard	
7	In-Loop Filters in HEVC	171
	Andrey Norkin, Chih-Ming Fu, Yu-Wen Huang, and Shawmin Lei	
8	Entropy Coding in HEVC	209
	Vivienne Sze and Detlev Marpe	
9	Compression Performance Analysis in HEVC	275
	Ali Tabatabai, Teruhiko Suzuki, Philippe Hanhart, Pavel Korshunov, Touradj Ebrahimi, Michael Horowitz, Faouzi Kossentini, and Hassene Tmar	

10	Decoder Hardware Architecture for HEVC	303
	Mehul Tikekar, Chao-Tsung Huang, Chiraag Juvekar, Vivienne Sze, and Anantha Chandrakasan	
11	Encoder Hardware Architecture for HEVC	343
	Sung-Fang Tsai, Cheng-Han Tsai, and Liang-Gee Chen	