

References

- [1] T. Starr, J. M. Cioffi and P. Silverman, *Understanding Digital Subscriber Line Technology*, Prentice Hall, 1999.
- [2] Binham, John A. C., *ADSL, VDSL, and Multicarrier Modulation*, Wiley, California, 2000.
- [3] ANSI T1E1.4, "Very-high-bit-rate Digital Subscriber Lines (VDSL) Metallic Interface Part 1: Functional Requirements and Common Specification," 2000.
- [4] ANSI T1E1.4, "Very-high-bit-rate Digital Subscriber Lines (VDSL) Metallic Interface Part 3: Technical Specification of a Muti-Carrier Modulation Transceiver," Working Group T1E1(DSL Access) Savannah, GA, 2000.
- [5] Walter Y. Chen, *Simulation Techniques and Standards Development for Digital Subscriber Line Systems*, Wiley, 1998.
- [6] Chiao-Chih Chang, Min-Shu Wang and Tzi-Dar Chiueh, "Design of a DMT-based baseband transceiver for very-high-speed digital subscriber lines," 2002 IEEE Asia-Pacific Conference on ASIC, 2002. Proceedings, pp. 367-370, Aug. 2002.
- [7] M. Speth, S. Fechtel, G. Fock and H. Meyr, "Optimum receiver design for OFDM-based broadband transmission .II. A case study," IEEE Transactions on Communications, Vol: 49 Issue: 4, pp. 571 -578, April 2001
- [8] N. P. Sands and K. S. Jacobsen, "Pilotless timing recovery for baseband multicarrier modulation," IEEE Journal on Selected Areas in Communications, Volume: 20, Issue: 5, pp. 1047 – 1054, June 2002.
- [9] Y. R. Shayan and T. Le-Ngoc, "All digital phase-locked loop: concepts, design and application," IEEE Proc., Vol. 136(1), pp. 53-56, Feb. 1989.
- [10] C. Stimming, *Frequency Offset Tracking in MCMA Systems*, Technical report, Berkeley Wireless Research Center, May 2001.
- [11] F. Classen, H. Meyr, "Frequency synchronization algorithms for OFDM systems suitable for communication over frequency selective fading channels," Vehicular Technology Conference, 1994 IEEE 44th, vol.3, pp. 1655 - 1659, June 1994.
- [12] D. K. Kim, S. H. Do., H. B. Cho., H. J. Choi and K. B. Kim, "A new joint algorithm of symbol timing recovery and sampling clock adjustment for OFDM systems," IEEE Transactions on Consumer Electronics, Vol. 44, No. 3,

pp.1142-1149, Aug. 1998.

- [13] T. Pollet, P. Spruyt and M. Moeneclaey, "The BER performance of OFDM systems using non-synchronized sampling," IEEE Global Telecommunications Conference, pp. 253-257, 1994.
- [14] T. Pollet and M. Peeters, "Synchronization with DMT modulation," IEEE Communications Magazine, Volume: 37 Issue: 4, pp. 80 -86, April 1999
- [15] S. A. Fechtel, "OFDM carrier and sampling frequency synchronization and its performance on stationary and mobile channels," IEEE Transactions on Consumer Electronics, Vol. 46, No. 3, pp. 438-441, Aug 2000.
- [16] M. Speth, D. Daecke and H. Meyr, "Minimum overhead burst synchronization for OFDM based broadband transmission," Global Telecommunications Conference, 1998. GLOBECOM 98. The Bridge to Global Integration. IEEE, Volume: 5 , pp. 2777 – 2782, Nov. 1998.
- [17] F. M. Gardner, "Interpolation in Digital Modems-Part I: Fundamentals," IEEE Transactions on Communication, vol. 41, pp. 502-508, Mar 1993.
- [18] L. Erup, F. M. Gardner, R. A. Harris, "Interpolation in Digital Modems-Part II: Implementation and Performance," IEEE Transactions on Communications, vol. 41, pp. 502-508, Jun 1993.
- [19] T. Pollet and M. Peeters, "A new digital timing correction scheme for DMT systems combining temporal and frequential signal properties," 2000 IEEE International Conference on Communications, ICC 2000, Volume: 3, pp. 1805 -1808, June 2000.
- [20] E. Martos-Naya, J. Lopez-Fernandez, L. D. del Rio, M.C. Aguayo-Torres and J. T. E. Munoz, "Optimized interpolator filters for timing error correction in DMT systems for xDSL applications," IEEE Journal on Selected Areas in Communications, Volume: 19, Issue: 12, pp. 2477 –2485, Dec. 2001.
- [21] T. I. Laakso, V. Valimaki, Matti Karjalainen and U. K. Laine, "Splitting the Unit Delay," IEEE Signal Processing Magazine, pp. 30-60, Jan 1996.
- [22] V. Valimaki and T. I. Laakso, "Principles of fractional delay filters," IEEE International Conference on Acoustics, Speech, and Signal Processing, 2000. ICASSP '00, Proceedings., Volume: 6 , pp. 3870 – 3873, June 2000.
- [23] T. W. Parks and C. S. Burrus, Digital Filter Design. New York: John Wiley & Sons, 1987.

- [24] A. V. Oppenheim and R. W. Schafer, Discrete-Time Signal Processing, Prentice-Hall, p. 453, 1989.
- [25] J.F. Kaiser, “Nonrecursive digital filter design using the - sinh window function,” Proc. 1974 IEEE Symp. Circuits and Systems, pp. 20-23., April 1974.
- [26] G. S. Liu and C. H. Wei, “Programmable fractional sample delay filter with Lagrange interpolation,” Electronics Letters, Volume: 26, Issue: 19, pp. 1608 - 1610, 13th Sept. 1990.
- [27] R. D. Harding and D. A. Quinney, A Simple Introduction to Numerical Analysis Volume 2: Interpolation and Approximation, Adam Hilger, 1949.
- [28] C. W. Farrow, “A Continuously Variable Digital Delay Element,” in Proc. IEEE Int. Symp. Circuit and System, pp. 2641-2645, Jun 1988.
- [29] N. J. Fliege, Multirate Digital Signal Processing: Multirate Systems, Filter banks, Wavelets, Chichester, John Wiley, 1994.



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