

Performance Comparison of Energy-Saving and Alternative Solutions for Optical Multiplexers





Overview

Abstract: Extensive numerical investigations are undertaken to analyze and compare, for the first time, the performance, techno-economy, and power consumption of three-level electrical Duobinary, optical Duobinary, and PAM-4 modulation formats as candidates for. The most important energy management and power-saving methods for Optical Line Terminals (OLTs) and Optical Network. Abstract—This paper discusses novel approaches to improve energy efficiency of different optical access technologies, including time division multiplexing passive optical network (TDM-PON), time and wavelength division multiplexing PON (TWDM-PON), point-to-point (PTP) access network, wavelength. Akademisk avhandling som med tillstånd av Kungl Tekniska Högskolan framlägges till offentlig granskning för avläggande av doktorsexamen i Informations- och Kommunikationsteknik, måndag, den 30 maj 2016, klockan 13. Lou, "HolyLight: A Nanophotonic Accelerator for Deep Learning in Data Centers," in Design, Automation & Test in Europe Conference & Exhibition (DATE), pp. The authors use a hybrid ONU (H-ONU) equipped with a low-cost, low-energy IEEE 802.



Performance Comparison of Energy-Saving and Alternative Solution

Optical and Electrical Computing Energy Use Comparison

D. Baran, M. Aktan, and V. Oklobdzija, "Energy Efficient Implementation of Parallel CMOS Multipliers with Improved Compressors," in ACM/IEEE International Symposium on Low-Power Electronics and

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ENERGY

Section IV describes the model used to quantitatively compare different optical access technologies and analyzes the energy savings of the proposed approaches. Section V concludes the paper with a

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The results are given in terms of power, delay, and area, where duplex logic gives a better trade-off for speed versus area when compared to other 2:1 multiplexers, and it is far more energy efficient than

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Comparison of cost



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Comparison of cost

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