Abstract

This work is focused on realization of DWDM system of 1.6 Tb/s ultra high capacity using duobinary return to zero modulation scheme with EDFA and dispersion compensation scheme. Duobinary format is used as it is suitable for high spectral efficiency at large transmission distance. 40 channels having capacity of 40 Gbps data rate each are multiplexed with channel spacing of 100 GHz to realize 1.6 Tbps as total transmission over optical span of 60 Km by using pre and post compensation technique. The comparison of parameters is observed in terms of Q value and eye opening keeping BER in acceptable range Moreover, the role of laser line-width is also investigated to minimize the non linearity and four wave mixing effect.

References

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Role of Laser Linewidth in High Speed DWDM System by Incorporating Duobinary Modulation Scheme


Index Terms

Computer Science
Communications

Keywords
Role of Laser Linewidth in High Speed DWDM System by Incorporating Duobinary Modulation Scheme

DWDM Laser Line-width Duobinary Modulation scheme Pre and Post compensation techniques.