Realization of Long Reach High speed Optical System by Incorporating Optical Phase Conjugation (OPC)

Foundation of Computer Science (FCS), NY, USA

Volume 130

Number 6

Year of Publication: 2015

Authors:

Vishal Sharma, Ruchi Sharma

10.5120/ijca2015907028

Abstract

This work reports the lessening of optical signal distortion due to group velocity dispersion by incorporating the optical phase conjugation (OPC) scheme in order to meet the requirement of high speed signals with better performance. The work reports a comparative discussion of with-and without- incorporating OPC at varied values of its efficiency based on various performance measures such as BER, eye opening, Q-factor. Furthermore, along with the impact of OPC efficiency, the influence of laser line-width is also deliberated to realize a high speed optical system.

References

Realization of Long Reach High speed Optical System by Incorporating Optical Phase Conjugation (OPC) 

pages:1-14, Volume 116 No. 15, April 2015.


Index Terms
Keywords

Optical Phase Conjugation technique (OPC), BER, eye diagram, Q-factor.