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BSI Standards Publication

Roadmap of optical circuit boards and their related packaging technologies

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee GEL/86, Fibre optics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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FOREWORD

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IEC 62658, which is a technical report, has been prepared by IEC technical committee 86: Fibre optics.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
86/442/DTR	86/453/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
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ROADMAP OF OPTICAL CIRCUIT BOARDS AND THEIR RELATED PACKAGING TECHNOLOGIES

1 Scope

This Technical Report covers the roadmap of optical circuit boards, and its related packaging technologies including optical circuit board connectors and optical modules on boards.

2 General

2.1 Background of optical packaging technology road map

The volume of network traffic is dramatically increasing due to the amount of data being captured, processed, conveyed and stored as digital information. This information is generated from many sources, including critical business applications, email communications, the Internet and multimedia applications which have collectively fuelled an increase in demand for data networking and storage capacity. In addition, the proliferation of media rich applications, such as digital music and video sharing services is fuelling a concurrent increase in data processing in data centres [1][1]. The growth in network traffic attributed to personalized content is 20 % per month, giving rise to a doubling of network traffic every 1,5 years. However, this is out of step with the input/output (I/O) performance or I/O throughput of servers, which doubles every 2 years. Therefore, there is an increasing gap between the performance evolution of network equipment such as servers, and the growth in network traffic (Figure 1) [2].

1 Figures in square brackets refer to the Bibliography.