

*INCITS Technical Report  
for Information Technology –  
Fibre Channel –  
Methodologies for Interconnects - 2  
(FC-MI-2)*

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INCITS TR-39-2005

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INCITS TR-39-2005 (R2010)

INCITS Technical Report  
for Information Technology –  
Fibre Channel –  
Methodologies for Interconnects - 2  
(FC-MI-2)

Secretariat

**Information Technology Industry Council**

**Abstract**

This technical report specifies common methodologies for both Arbitrated Loop and Switched environments. The goal of this technical report is to facilitate interoperability between devices whether they are connected in a loop or Fabric topology.

## **INCITS' Technical Report Series**

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**Foreword** (This foreword is not part of American National Standard INCITS TR-39-2005.)

The Fibre Channel Methodologies for Interconnects -2 (FC-MI-2) Technical Report describes common methodologies for facilitating interoperability in both loop and Fabric environments.

This technical report was developed by Task Group T11 of Accredited Standards Committee T11 during 2002-2005. The approval process started in 2005.

Requests for interpretation, suggestions for improvements or addenda, or defect reports are welcome. They should be sent to the INCITS Secretariat, Information Technology Industry Council, 1250 Eye Street, NW, Suite 200, Washington, DC 20005-3922.

This technical report was processed and approved for submittal to ANSI by the International Committee for Information Technology Standards (INCITS). Committee approval of the technical report does not necessarily imply that all committee members voted for its approval. At the time it approved this technical report, INCITS had the following members:

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## **Introduction**

FC-MI-2 is a technical report that assists Fibre Channel devices in achieving interoperability by selecting a preferred implementation among the many options allowed by Fibre Channel. Fibre Channel is defined by a number of related standards developed by INCITS Technical Committee T11. The Fibre Channel family of standards and technical reports describes physical layer requirements, N\_Port requirements, and switch requirements necessary to implement Fibre Channel communication systems.

See Clause 1 for information about the scope of the technical report.

See Clause 2 for references to the relevant Fibre Channel standards.

See Clause 3 for definitions of terms, keywords, and editorial conventions used by this technical report.

See Clause 4 for overall FC-MI-2 structure and concepts.

See Clause 5 through Clause 8 for the specific interoperability requirements of this technical report.

# **INCITS Technical Report for Information Technology —**

## **Fibre Channel — Methodologies for Interconnects -2 (FC-MI-2)**

### **1 Scope**

This technical report is intended to document interoperability behavior for Fabric elements (i.e., E\_Port, F\_Port, FL\_Port). The scope of this technical report is to include a wide range of issues such as link initialization, error detection, error recovery, Fabric operation, management capabilities, and zoning.

This technical report is intended to serve as an implementation guide, the primary objective of which is to maximize the likelihood of interoperability between conforming implementations. This technical report prohibits or requires some features that are in the referenced ANSI INCITS standards (see clause 2).

A second objective of this technical report is to simplify implementations and their associated documentation, testing, and support requirements. As a result, there may be some optional features of the referenced ANSI INCITS standards that are not mutually exclusive, but are prohibited or required for the purpose of this simplification. Features that some but not all of the referenced ANSI INCITS standards require for compliance may be optional in this technical report. Each specification of such an optional feature in this technical report identifies the referenced ANSI INCITS standards for which the feature is required.

Internal characteristics of conformant implementations are not defined by this technical report. This technical report incorporates features from the standards and technical reports described in clause 2.