OBJECTIVES:

- To introduce the concept of 3D NOC.
- To study the architectures and protocols of 3D NOC.
- To identify the types of fault and study the testing methods for fault rectification.
- To learn DimDE router for 3D NOC.

UNIT I  INTRODUCTION TO THREE DIMENSIONAL NOC


UNIT II  TEST AND FAULT TOLERANCE OF NOC

Design-Security in Networks-on-Chips-Formal Verification of Communications in Networks-on-Chips-Test and Fault Tolerance for Networks-on-Chip Infrastructures-Monitoring Services for Networks-on-Chips.

UNIT III  ENERGY AND POWER ISSUES OF NOC

Energy and Power Issues in Networks-on-Chips-The CHAIN works Tool Suite: AComplete Industrial Design Flow for Networks-on-Chips

UNIT IV  MICRO-ARCHITECTURE OF NOC ROUTER


UNIT V  DIMDE ROUTER FOR 3D NOC

A Novel Dimensionally-Decomposed Router for On-Chip Communication in 3D Architectures-Digest of Additional NoC MACRO-Architectural Research.

REFERENCES:
