

Assignment 2

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2. Let W be the bisection bandwidth
Let b be the bandwidth of an individual link

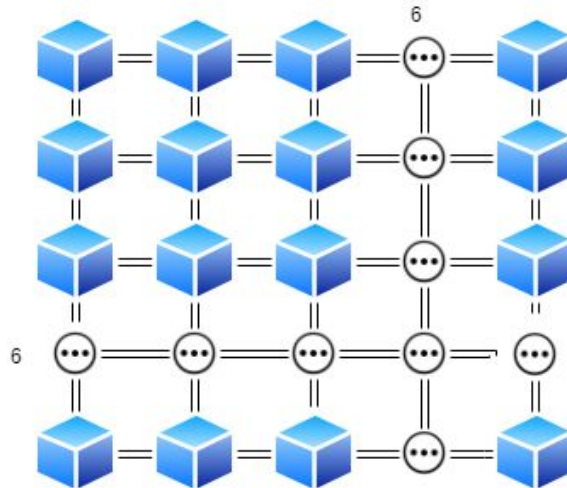
$$\text{Bisection Bandwidth} = b \cdot W$$

The Bisection bandwidth of the fat-tree is

$$48 \cdot b = 48b$$

3.

A.



- B. Let W be the bisection bandwidth
Let b be the bandwidth of an individual link

$$\text{Bisection Bandwidth} = b \cdot W$$

The Bisection bandwidth of the 2D-mesh is

$$10 \cdot b = 10b$$

- C. The maximum hop count is 18

D. 3 cases

Middle nodes, 4 connections each

Edge nodes, 3 connections each

Corner nodes, 2 connections each

4 Corners = 8 connections

32 Edges = 96 connections

64 Middle = 256 connections

$8 + 96 + 256 = 360$ connections