LDPC Decoder Implementation on NoC

Shaishav Yogeshkumar Shah (133070050)

Guides by: Prof. Sachin B. Patkar, Dept. of EE, IIT Bombay

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Introduction

- Found by Robert G. Gallager in his PhD thesis fom MIT, USA
- Linear Error Correcting Codes
- Used in Wireless Mobile Communication, Disk Drives
- Can Achieve near shannon's limit Channel Capacity

LDPC Decoding Algorithm- Sum Product Algotithm (SPA)

1. i1
2. i2
3. i3
4. i4

Modification to SPA- Min Sum Approximation

1. i1
2. i2
3. i3
4. i4

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- ▶ Point 1 (Click "Next Page" to see Point 2)
- ▶ Point 2

- ▶ Point 1 (Click "Next Page" to see Point 2)
- ▶ Point 2
- ▶ Point 3

Simple slide with three points shown in succession

▶ Point 1 (Click "Next Page" to see Point 2)

Simple slide with three points shown in succession

- Point 1 (Click "Next Page" to see Point 2)
- Point 2

Simple slide with three points shown in succession

- ▶ Point 1 (Click "Next Page" to see Point 2)
- ▶ Point 2
- ▶ Point 3

Slide with two columns: items and a graphic

- First item

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Slide with two columns: items and a graphic

- ▶ First item
- ▶ Second item

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Slide with two columns: items and a graphic

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- Second item
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