CLAIMS

1. A method of low density parity check (LDPC) decoding, the method comprising:

maintaining a plurality of LDPC base graphs, the plurality of LDPC base graphs comprising at least a first LDPC base graph associated with a first information block length range and a first code rate range, and a second LDPC base graph associated with a second information block length range and a second code rate range, wherein the second information block length range comprises a subset of the first information block length range;

receiving a codeword over a wireless air interface from a transmitter;

selecting a select LDPC base graph from the plurality of LDPC base graphs for an information block based, at least in part, on an information block length and a code rate; and

decoding the codeword utilizing the select LDPC base graph to produce an information block comprising the information block length.

2. The method of claim 1, wherein selecting the select LDPC base graph for decoding the codeword based, at least in part, on the information block length or the code rate further comprises:

selecting the first LDPC base graph as the select LDPC base graph if only the first LDPC base graph supports the information block length of the information block.

3. The method of claim 1, wherein selecting the select LDPC base graph for decoding the codeword based, at least in part, on the information block length or the code rate further comprises:

selecting the select LDPC base graph based on the information block length and a lift size applied to the select LDPC base graph.

4. The method of claim 3, wherein selecting the select LDPC base graph based on the information block length and the lift size further comprises:

selecting the first LDPC base graph as the select LDPC base graph if a first lift size applied to the first LDPC base graph to produce the information block length is greater

than a second lift size applied to the second LDPC base graph to produce the information block length.

5. The method of claim 1, wherein selecting the select LDPC base graph for decoding the codeword based, at least in part, on the information block length or the code rate further comprises:

selecting the select LDPC base graph based on the information block length and the code rate utilized to encode the information block to produce the codeword.

6. The method of claim 1, wherein the second code rate range comprises a subset of the first code rate range.

7. The method of claim 6, wherein the second code rate range overlaps the first code rate range and comprises additional code rates outside of the first code rate range.

8. The method of claim 6, wherein selecting the select LDPC base graph further based, at least in part, on the information block length or the code rate further comprises:

selecting the first LDPC base graph as the select LDPC base graph if only the first code rate range comprises the code rate utilized to encode the information block.

9. The method of claim 8, wherein selecting the select LDPC base graph further based, at least in part, on the information block length or the code rate further comprises:

selecting the select LDPC base graph furher base, at least in part, on a lift size.

10. The method of claim 1, wherein the second information block length range overlaps the first information block length range and comprises additional information block lengths outside of the first information block length range.

11. An apparatus configured for low density parity check (LDPC) coding, comprising:

a transceiver;

a memory; and

a processor communicatively coupled to the transceiver and the memory, the processor configured to:

maintain, within the memory, a plurality of LDPC base graphs, the plurality of LDPC base graphs comprising at least a first LDPC base graph associated with a first information block length range and a first code rate range and a second LDPC base graph associated with a second information block length range and a second code rate range, wherein the second information block length range comprises a subset of the first information block length range;

receive a codeword over a wireless air interface from a transmitter via the transceiver;

select a select LDPC base graph from the plurality of LDPC base graphs for an information block based, at least in part, on an information block length and a code rate; and

decode the codeword utilizing the select LDPC base graph to produce an information block comprising the information block length.

12. The apparatus of claim 11, wherein the processor is further configured to:

select the first LDPC base graph as the select LDPC base graph if only the first LDPC base graph supports the information block length of the information block.

13. The apparatus of claim 11, wherein the processor is further configured to:

select the select LDPC base graph further based, at least in part, on a lift size applied to the select LDPC base graph.

14. The apparatus of claim 13, wherein the processor is further configured to:

select the first LDPC base graph as the select LDPC base graph if a first lift size applied to the first LDPC base graph to produce the information block length is greater than a second lift size applied to the second LDPC base graph to produce the information block length.

15. The apparatus of claim 11, wherein the processor is further configured to:

select the select LDPC base graph based on the information block length and the code rate utilized to encode the information block to produce the codeword.

16. The apparatus of claim 11, wherein the first LDPC base graph is associated with a first code rate range and the second LDPC base graph is associated with a second code rate range.

17. The apparatus of claim 16, wherein the second code rate range overlaps the first code rate range and comprises additional code rates outside of the first code rate range.

18. The apparatus of claim 16, wherein the processor is further configured to:

select the first LDPC base graph as the select LDPC base graph if only the first code rate range comprises the code rate utilized to encode the information block to produce the codeword.

19. The apparatus of claim 11, wherein the second information block length range overlaps the first information block length range and comprises additional information block lengths outside of the first information block length range.

20. The apparatus of claim 11, wherein the second LDPC base graph is associated with the second information block length range and the code rate range.

21. A wireless communication device, comprising:

means for maintaining a plurality of LDPC base graphs, the plurality of LDPC base graphs comprising at least a first LDPC base graph associated with a first information block length range and a first code rate range and a second LDPC base graph associated a second information block length range and a second code rate range;

means for receiving a codeword over a wireless air interface from a transmitter;

means for selecting a select LDPC base graph from the plurality of LDPC base graphs for an information block based, at least in part, on an information block length and a code rate; and

means for decoding the codeword utilizing the select LDPC base graph to produce an information block comprising the information block length.

22. The wireless communication device of claim 21, wherein the means for selecting the select LDPC base graph further comprises:

means for selecting the first LDPC base graph as the select LDPC base graph if only the first LDPC base graph supports the information block length of the information block.

23. The wireless communication device of claim 21, wherein the means for selecting the select LDPC base graph further comprises:

means for selecting the select LDPC base graph based on the information block length and the code rate utilized to encode the information block to produce the codeword.

24. The wireless communication device of claim 21, wherein the first LDPC base graph is associated with a first code rate range and the second LDPC base graph is associated with a second code rate range, and wherein the means for selecting the select LDPC base graph further comprises:

means for selecting the first LDPC base graph as the select LDPC base graph if only the first code rate range comprises the code rate utilized to encode the information block to produce the codeword.

25. The wireless communication device of claim 24, wherein the second code rate range overlaps the first code rate range and comprises additional code rates outside of the first code rate range.

26. The wireless communication device of claim 21, wherein the second information block length range overlaps the first information block length range and comprises additional information block lengths outside of the first information block length range.

27. A non-transitory computer-readable medium storing computer executable code, comprising code for causing a computer to:

maintain a plurality of LDPC base graphs, the plurality of LDPC base graphs comprising at least a first LDPC base graph associated with a first information block length range and a first code rate range and a second LDPC base graph associated with a second information block length range and a second code rate range;

receive a codeword over a wireless air interface from a transmitter;

select a select LDPC base graph from the plurality of LDPC base graphs for an information block based, at least in part, on an information block length and a code rate; and

decode the codeword utilizing the select LDPC base graph to produce an information block comprising the information block length.

28. The non-transitory computer-readable medium of claim 27, further comprising code for causing the computer to:

select the first LDPC base graph as the select LDPC base graph if only the first LDPC base graph supports the information block length of the information block.

29. The non-transitory computer-readable medium of claim 27, further comprising code for causing the computer to:

select the select LDPC base graph based on the information block length and the code rate utilized to encode the information block to produce the codeword.

30. The non-transitory computer-readable medium of claim 27, wherein the first LDPC base graph is associated with a first code rate range and the second LDPC base graph is associated with a second code rate range, and further comprising code for causing the computer to:

select the first LDPC base graph as the select LDPC base graph if only the first code rate range comprises the code rate utilized to encode the information block to produce the codeword.