

OFDM SIMULATION BY MATLAB

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Simulation Block Diagram

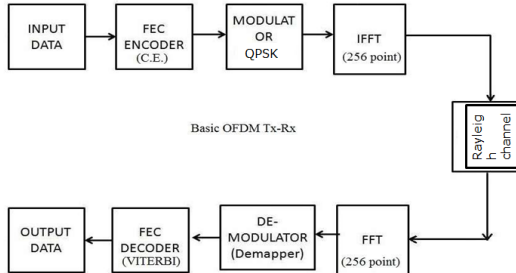


Figure: Simulation diagram

Results:Original Data

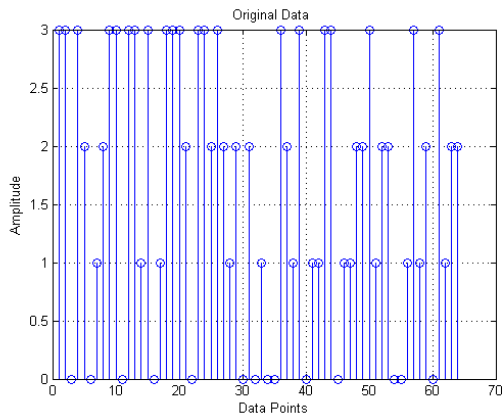


Figure: Original Data

Results: Modulated Data Signal

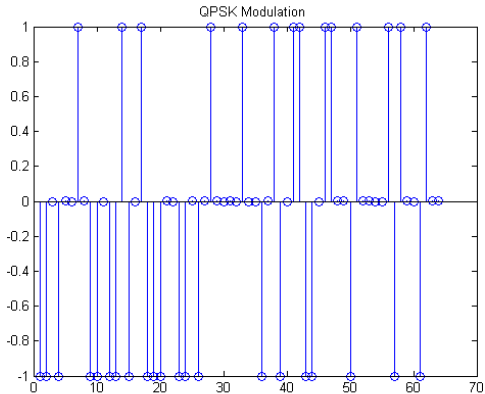


Figure: Modulated Data

Results: IFFT Sub Carriers

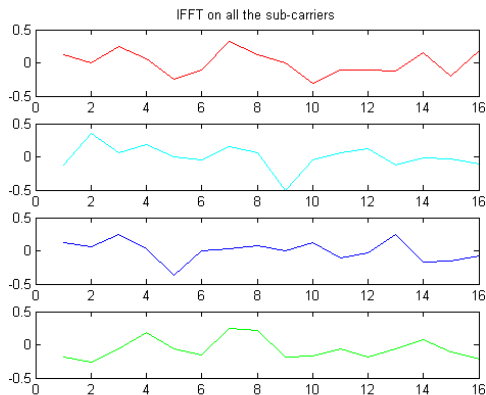


Figure: IFFT Sub carriers

Results: Cyclic Prefix Added to Remove ISI

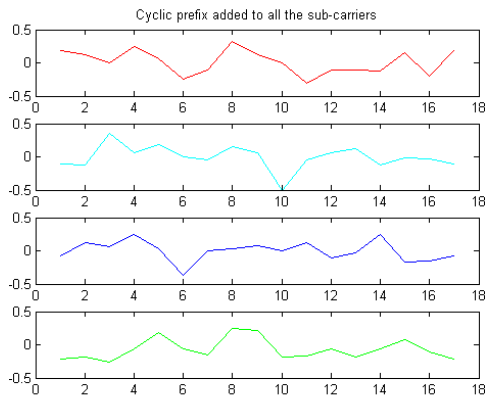


Figure: Prefix Adding

Results: Sub Carrier Orthogonality

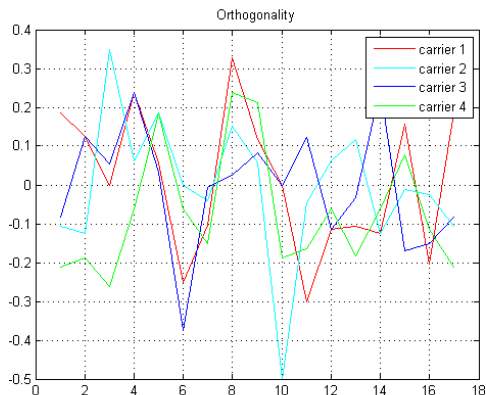


Figure:

Results: OFDM Signal Entering the Channel

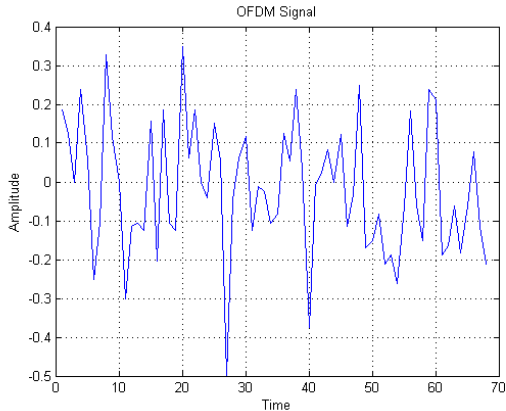


Figure: OFDM Signal

Results:OFDM Signal out of Channel(after passing)

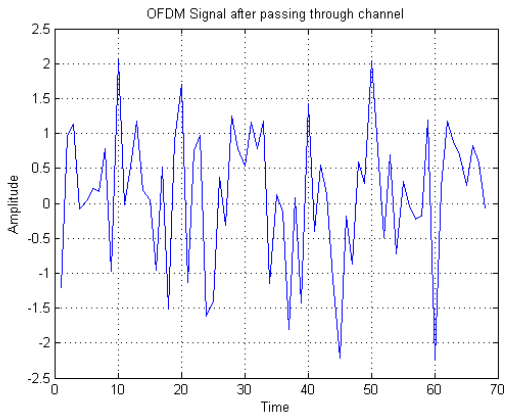


Figure: OFDM Signal from the Channel

Results: Prefix Removed

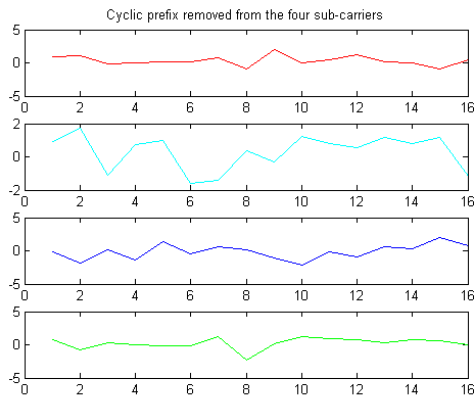


Figure: Prefix Removed

Results:FTT all Sub Carriers

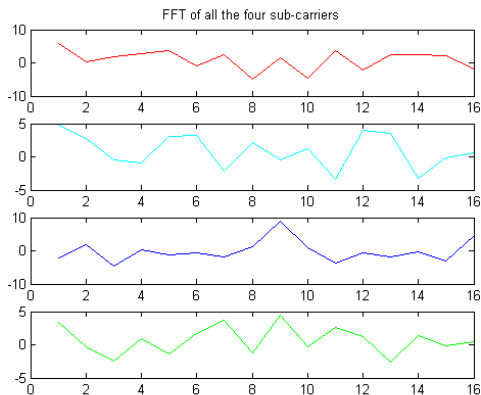


Figure: FTT Action

Results:Received Signal with Error

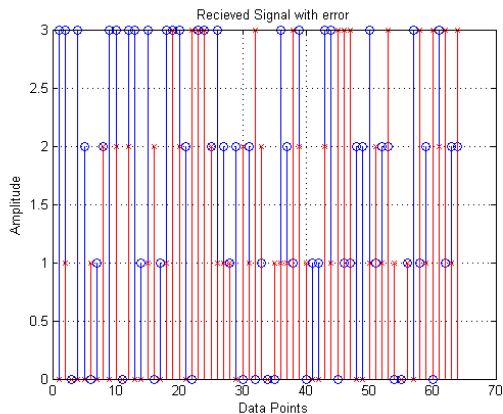


Figure: Received Signal