

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science
6.111 - Introductory Digital Systems Laboratory

Final Project Check Off Sheet

Project Title: Local Decoding of Walsh Codes to Reduce CDA Despreading Computation

Student Names: Matthew Doherty

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TA Signature/Date:

Design

State transition diagrams, Block Diagrams, Code

Functionality

VGA interface displays graphs showing SNR/BER/power estimates

Controller steps through decoders and dynamically updates SNR/BER

Push buttons adjust SNR and (dis)enables feedback loop

(Static) Power estimates are performed for each algorithm using XPower

Decoding algorithm steps through test vectors stored in memory

3 decoding algorithms use FHT with an optional feedback loop