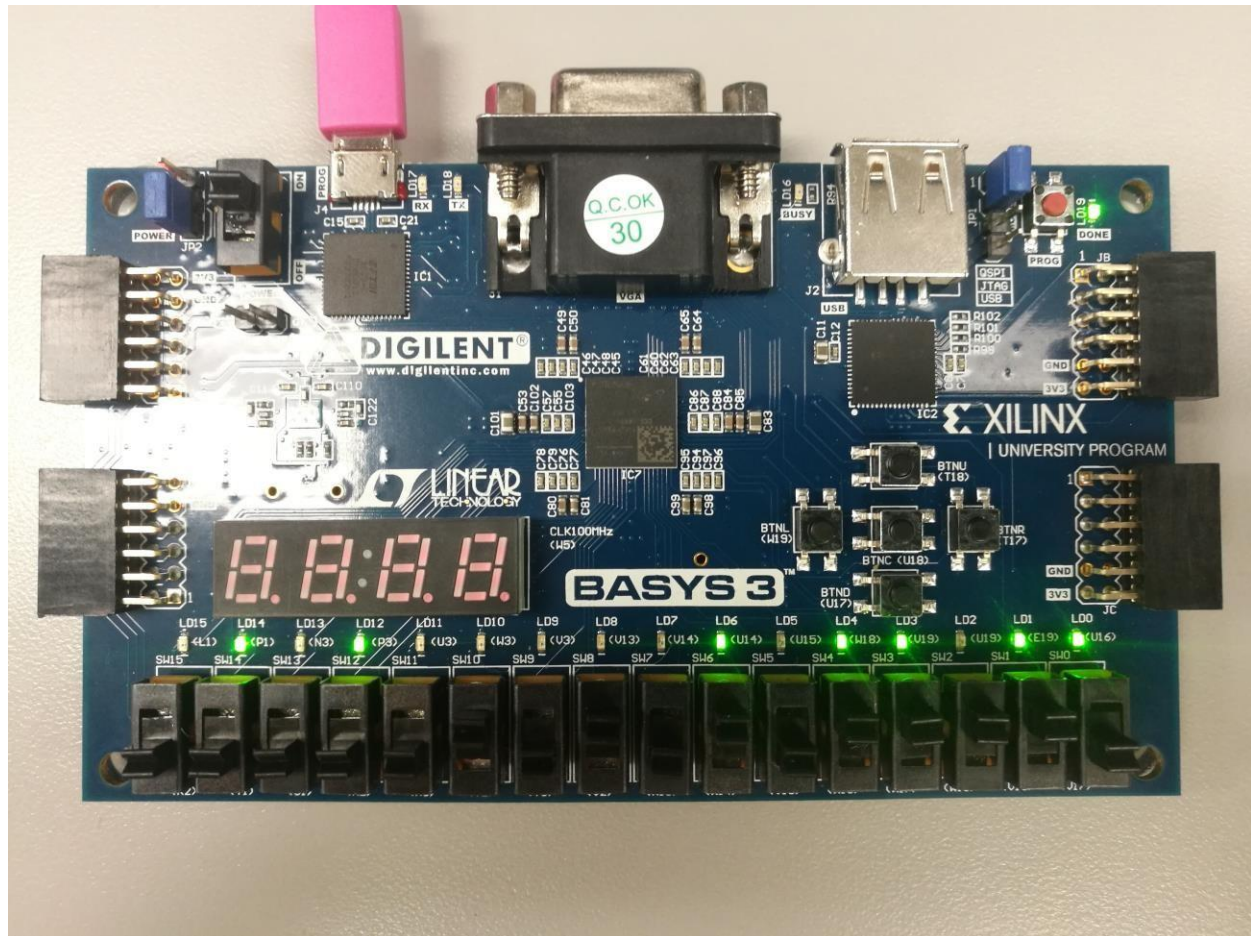Lab 7

Post-Lab Exercises

I.   Each syndrome bit is calculated based off distinct groups of bits based on their locations in the message. If the error is only one bit, then each syndrome bit narrows down the location of the error until the error can only exist in one location.

II.   We can handle more errors by adding more parity bits to the code. One way to detect two- bit errors is to have a parity bit that is the XOR of all other bits. However, because this single extra bit can't carry any location information, it only contributes to detecting a second error, not correcting it.