**ECE 2504: Introduction to Computer Engineering**

**Project 0 Validation Sheet**

*You do not have to go the CEL to have your implementation validated in person.*

*Upload a copy of this validation sheet with your project submission.*

Part III: The XNOR Circuit

The student used a Quartus circuit diagram to implement a two-input XNOR gate. Use Quartus to review the student’s implementation. Use the DE0 Nano Board to verify the operation of the student’s implementation.

*Circuit Verification*

**Did the student implement the XNOR circuit in Quartus using an XNOR gate?** If the answer is YES, stop the validation and assign a score of 0 for the validation.

**Did the student implement the XNOR circuit using no more than three NAND gates and two inverters?**

*Circuit Operation*

**Complete the table to verify the operation of the circuit.** Review the layout and labeling on the printed circuit board to ensure that you are using the correct switches and LED in the correct manner.

|  |  |  |
| --- | --- | --- |
| Input A  (DIP Switch 1) | Input B  (DIP Switch 0) | Output X  (LED0) |
| 0 | 0 |  |
| 0 | 1 |  |
| 1 | 0 |  |
| 1 | 1 |  |

Validated by:

GTA: **Print** your name. GTA: **Sign** your name**.**

Date and Time: