

Project 1: Logic Gates

Student name(s): _____

Grading method: The implementation of some chips was described in the book, and some chips are simpler than others. The different weights assigned to the chips below reflect this variance. If the chip passes *all* the tests specified in the supplied test script, it receives two thirds of its allotted points. The remaining third reflects our evaluation of the way the chip is implemented.

Generally speaking, you should prefer implementations that use *as few chip-parts as possible*, even if it implies using high-level and seemingly less efficient chip-parts. For example, it is better to use a Mux chip instead of more primitive chip-parts that deliver the same Mux functionality.

| <i>Chip</i> | <i>Working?</i> | <i>Well built?</i> | <i>Comments</i> |
|-------------|-----------------|--------------------|-----------------|
| Not | / 3 | / 1 | |
| And | / 3 | / 1 | |
| Or | / 4 | / 2 | |
| Xor | / 4 | / 2 | |
| Mux | / 5 | / 3 | |
| DMux | / 5 | / 3 | |
| Not16 | / 3 | / 2 | |
| And16 | / 3 | / 2 | |
| Or16 | / 3 | / 2 | |
| Mux16 | / 3 | / 2 | |
| Or8Way | / 5 | / 3 | |
| Mux4Way16 | / 6 | / 3 | |
| Mux8Way16 | / 6 | / 3 | |
| DMux4Way | / 6 | / 3 | |
| DMux8Way | / 6 | / 3 | |
| Total | / 65 | / 35 | |

Total grade: _____