**ECE 4740 Final Project**

**GROUP / DESIGNATOR:**

DIFFICULTY (display of time and effort spent) :

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Is FULL CUSTOM layout DRC clean? | 0 | 1 | 2 | 3 | 4 | 5 | | |
| Is FULL CUSTOM layout LVS clean? | 0 | 2 | 2 | 3 | 4 | 5 | | |
| Estimated Transistor count: | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Estimated difficulty of project: | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

/ 5

COMPLEXITY (demonstration of fluency with course content) :

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| understanding of metrics / trade-offs: | 0 | 1 | 2 | 3 | 4 | 5 | | |
| how many types of logic were used? | | | | 3 | | 5 | | 7 |
| hierarchical design methodology/optimization | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |
| back-of-envelope analysis | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |

/ 5

CREATIVITY (how well did they use course content and go beyond) :

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Used sub-blocks beyond “basic” / lecture | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |
| Demonstration of problem-solving /opt | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |
| Creativity of overall endeavor | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |
| Creativity of demonstration | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |

/ 5

PERFORMANCE :

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Exhaustive simulation/proof of function | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Rigor of presented comparison | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Awareness of approximations/inaccuracies | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |
| wow factor | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |

/ 10

/25

PRESENTATION (10 pts)

**(4 pts)** Completeness (-1 for each missing element)

Literature review

FoM

Full system architecture block diagram

Critical sub-block function/performance

Full system function/performance

Overview of member contributions

**(6 pts)** Presentation Quality

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Clarity of communication | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Quality of slides | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Effective/efficient use of allotted time | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

REPORT (15 pts)

**(10 pts)** Completeness (-2 for missing element; -1 for incomplete element)

Introduction to trade-offs and metrics

Hierarchy

Design methodology

Comparison

Functionality

Troubleshooting

**(5 pts)** Report Quality

| | | | | | | |
|---|---|---|---|---|---|---|
| Clarity, organization, and formatting | 0 | 1 | 2 | 3 | 4 | 5 |
| Quality of diagrams and data | 0 | 1 | 2 | 3 | 4 | 5 |
| Technical correctness | 0 | 1 | 2 | 3 | 4 | 5 |

/25