

Chasing LEDs

Signature and Grading Sheet

Group #:_____ **Name(s):**_____.

Signature

Section 3.1(c): _____.

Section 3.2(c): _____.

Grading

- Section 3.1(a): C code (60 points):_____.
Attach code printout (the code must be properly formatted and commented to get full credit)
- Section 3.1(b): code size (10 points) _____.
Attach screen capture of file size (similar to Figure A.17)
- Section 3.1(c): demo (30 points):_____.
- Section 3.2: C code and demo (20 points):_____.

Total points: _____.

Experiment

Chasing LEDs

1 Purpose

To learn basic low-level I/O programming

2 Reading

- Chapters 8 and 9 of *FPGA Prototyping b VHDL Examples 2nd edition: Xilinx MicroBlaze MCS SoC*.

3 Design Procedures

3.1 Chasing LED function

Implement the chasing LED function in Experiment 9.10.1 in book. The vanilla FPro system derived in previous experiment can be used.

- (a) Derive application software.
- (b) Check the software code size.
- (c) Demonstrate the circuit to instructor and get signature.

3.2 (Bonus) Collision LED function

Implement the collision LED function in Experiment 9.10.2 in book. The vanilla FPro system derived in previous experiment can be used.

- (a) Derive application software.
- (b) Check the software code size.
- (c) Demonstrate the circuit to instructor and get signature.