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Lab Report
ECE 2031 L12
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Use a simple cover page like this.

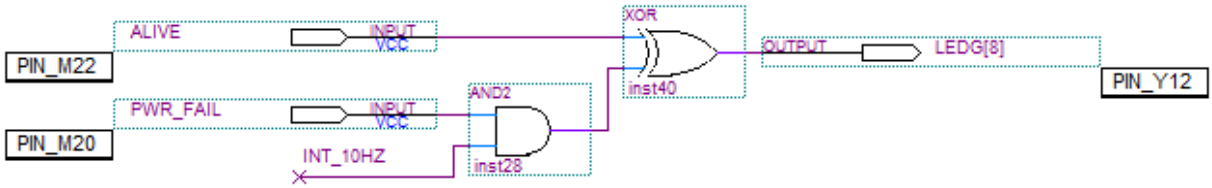

Figure 1. Circuit to light LED G8 when robot motors are enabled, and flash it at 10Hz when robot battery voltage is below minimum threshold.

```
-- DIG_IN.VHD (a peripheral module for SCOMP)
-- This module reads digital inputs directly, without debouncing
```

The rest of the document is results, formatted according to guidelines provided on Canvas.

(note: these examples are NOT actual lab 1 results)

```
                                    IC;
                                    IC_VECTOR(15 DOWNTO 0);
                                    _LOGIC_VECTOR(15 DOWNTO 0)
);
END DIG_IN;

ARCHITECTURE a OF DIG_IN IS
  SIGNAL B_DI : STD_LOGIC_VECTOR(15 DOWNTO 0);
  BEGIN
  -- Use LPM function to create bidirectional
  IO_BUS: lpm_bustri
  GENERIC MAP (
    lpm_width => 16
  )
  PORT MAP (
    data     => B_DI,
    enabledt => CS,
    tridata  => IO_DATA
  );
  B_DI <= DI;
END a;
```

Notice that the figure titles are detailed and self-contained. Be sure to check the figure title tips on Canvas.

Figure 2. VHDL code to interface general-purpose digital inputs to SCOMP's I/O bus.