**ELE3001: Project Current Draw Investigation**

**Theoretically:**

From looking at the component datasheets, device should draw 464.5 mA in normal operation. During startup the current draw peaks to 746.5 mA.

**Practically:**

A multimeter in current measuring mode was connected in series from the Arduino 5 V supply to the breadboard of connections. This conducted to see the practical current draw of the SPS30, IRM-AT, LCDs, SEN0466, SEN0467, rtc, and Micro SD Card module. The result was that from the Arduino’s 5 V pin 165 mA was normally drawn which would spike periodically to 180 mA. Presumably that rise is due to the Micro SD card module drawing more current during data writing, this occurs in 5 second intervals.

From the Arduino’s 3.3 V pin, the idle current draw was only 27 mA, which then pulses to 76 mA during data reading, again in 5 s intervals.