COEN-4730 Computer Architecture HW #1 Dept. of Electrical and Computer Engineering, Marquette University *Cristinel Ababei*

1. Objective

Reinforce the use of several model equations to estimate/quantify several design metrics (including yield, lifetime, power), gain further understanding of Amdahl's law and of performance aspects in processors.

2. Assignment

Problems 1.2, 1.5, 1.9, 1.15, 1.16 from textbook (Edition 6).

Each student must upload the solutions for these problems to D2L as a single PDF file. The solutions may be handwritten or typed (and then scanned), but they should be neatly written and with enough details - show all your derivations and steps in arriving at an answer. Also, the solutions for each problem should be in the order of assigned problems.

You should name your PDF file as **hw1_LastName.pdf**. If the file name does not follow this convention or if you submit different file formats (e.g., .doc, .docx, etc.) points will be deducted from your grade.