

Homework 4: Packaging Specifications and Design					
Section	Description	Max	Poor	Good	Excellent
			0-3 / 0-5 / 0-10	3-4 / 5-8 / 10-16	5 / 9-10 / 17-20
1	Introduction (including updated PSSC)	5	Brief or no introduction of product; may have little or no thought of packaging. Little content or excessive fluff.	PSSCs listed. Introduction should still introduce the product overall. Packaging weakly discussed with appropriate length. May be slightly wordy with some fluff. 1-3 paragraphs is appropriate.	Concise introduction identifying major points of the document with critical items identified without too much length. No fluff.
2	Commercial Product Packaging	-			
2.1	Commercial Product # 1	10	Product identified but may not be quite relevant. Discussion is weak.	Product identified and relevant, but analysis is not thorough. Figures may not be present.	Product identified and relevant. Analysis is thorough and critical. Figures present.
2.2	Commercial Product # 2	10			
3	Project Packaging Specifications (Discussion Only)	20	Product's packaging needs ill-defined with minimal justification. Little content or lots of fluff.	Product's packaging needs defined but justification may be lacking, or the needs may suffer from a lack of complete forethought. (Teams will clearly acknowledge what they do not know.)	Product's packaging needs thoroughly and critically analyzed and described.
4	PCB Footprint Layout	10	Minimally analysis of footprint considerations, or minimal justification. (0-2 components analyzed)	Only some components' footprint choices analyzed, or justification is weak. (3-4 components analyzed)	Major components' footprint choices appropriately justified. 5+ major components discussed. Dimensions analyzed and appropriate.
5	Summary	5	No summary or summary may be inappropriate.	Summary lacks a few parts or may be excessively long. (Shouldn't be more than 2 medium-sized paragraphs)	Summary is complete and appropriate but not too long. Summary is concise with no fluff.
6	References	10	No use of IEEE format (MS Word has a references tab, people!). References are largely incomplete.	Must use IEEE format. A few references may be missing (1 or 2).	References for all components mentioned, both/all commercial products referenced.
App A	Project Packaging Illustrations	10	CAD drawings are not present or egregiously poor. Poor hand drawn designs.	CAD drawings exist but are very poor, or a minimal amount may be missing. Very good hand-drawn designs would be accepted.	CAD drawings for all items in part 3 are present. You are EE/CompE students, therefore the quality is not expected to be perfect. Designs are not hand-drawn.
App B	Project Packaging Specifications	10	Materials (most important) may be unidentified, along with cost, or tooling and weight are missing. Estimates are grossly inappropriate or poorly documented.	Materials are identified, cost is estimated (within reason), and one of (tooling or weight) may be missing or have no justification. Excess materials may be present, but are not marked as excess or margin.	All materials, tooling, weight, and cost are (within reason) identified. This may account for excess materials for fudge factor but are ideally labeled as such. If only large quantities of a product (e.g. - only plexiglass sheets size NxM or larger) are available, this is clearly identified.
App C	PCB Footprint Layout	10	PCB shows little forethought.	The microcontroller is present along with only a few main components, or the PCB may be inappropriately sized, or the layout may be somewhat scattered.	This is a preliminary PCB layout, and, as such, it is not expected to be perfect. At least the microcontroller and 4+ (but ideally all) major components are present. They may be unconnected by traces. PCB size is appropriate and consistent with document. If the PCB is overly large for the components (clearly inappropriate), this had better be mentioned above. In general, the layout should be generally sensical.