UMass Amherst SDP21 MDR – Evaluation Sheet

	Team Number:	15	Team Name:	Active Windows	Advisor:	Yao
	Evaluators:	Jackson	Tessier			

Weight	Team Members:	Michael Chan	Dingbang Chen	Nathan Johnson	Tien Shen
	Overall Score (out of 4.0)	*2.58*	*2.30*	*2.69*	*2.30*
5%	Presentation			2	
5%	Problem Statement & System Specifications			3	
15%	Updated System Design (Software & Hardware)			2	
55%	MDR Accomplishments (Individually Graded)	2.5	2	2.7	2
5%	Hardware Plan for FPR			3	
5%	List of Hardware and Software			3	
5%	Project Expenditures (Current and Projected)			4	
5%	Project Management			3	

Above section is a summary only; enter grades in highlighted (yellow) sections below

Presentation

5%	Rubric
• Begins on time	**(4.0)** A professional presentation that demonstrates knowledge and practice.
• Rehearsed	**(3.0)** The presentation should have been practiced more.
• Teamliness	**(2.0)** The presentation was confusing.
	(1.0) The presentation was unsatisfactory.
Score:	2
Written comments:	Presentation could have been clearer. Overall end product unclear. Block diagram needs more details. All team members spoke. Team clearly practiced. Many acroyms used.

Problem Statement & System Specifications

5%	Rubric
• Updated problem statement	**(4.0)** The problem statement is described concisely and in layperson's terms. System specifications are clear, complete, quantitative, and design-
• Updated system specifications	**(3.0)** The problem statement is a little confusing or overly technical. One or two system specifications are unclear and/or missing.
	(2.0) The problem statement is confusing. More than two system specifications are unclear and/or missing.
	(1.0) The problem statement and system specifications are unsatisfactory.
Score:	3
Written comments:	Problem statement regarding bus was clear. Components explained is limited detail. Problem statement slide OK.

Updated System Design (Software & Hardware)

15%	Rubric
• Updated system block diagram and descriptions	**(4.0)** A clear and compelling updated design was presented via the diagrams and descriptions.
• Updated software diagram(s) and descriptions	**(3.0)** One major aspect of the updated design is unclear or missing.
	(2.0) More than one major aspect of the updated design is unclear or missing.
	(1.0) Updated design is unsatisfactory.
Score:	2
Written comments:	Application-level packetizing and protocol was unclear. What specific new challenges need to be addressed? Physical layer demo was not clear since communication channel was overly simplied. Selection of 16V for communication voltage was unclear. Phototransistor experiment is a little simplistic.

MDR Accomplishments (Individually Graded)

55%	Rubric
• Demonstration of essential portions of project	**(4.0)** MDR deliverables are successfully accomplished with a clear and compelling demonstration.
• Fulfills PDR commitments	**(3.0)** MDR deliverables are mostly accomplished and demonstrated.
• Individually graded	**(2.0)** MDR deliverables are only partially complete. Significant aspects were not demonstrated.
• Represents significant accomplishment	**(1.0)** MDR accomplishments are unsatisfactory.

Team Members:	Michael Chan	Dingbang Chen	Nathan Johnson	Tien Shen	
Scores (Individual):	2.5	2	2.7	2	

Written comments:	More aspects of the demo should have been completed and analyzed. Project needs a more substantial input and output mechanism to show benefit of communication protocol. One team member didn't do part of the demo. Communication was successfully shown. It wasn't clear if the bus was shared or point-to-point in the demo. This issue should be clarified in the slides.

Hardware Plan for FPR

5%	Rubric
• Updated plan for the custom PCB	**(4.0)** The updated plan for the custom hardware design is meaningful to the project and is of appropriate complexity.
• List any single board computers/breakout boards the team plans to use at FPR	**(3.0)** The proposed hardware design is not appropriately complex.
	(2.0) The proposed hardware design is not meaningful to the project.
	(1.0) The proposed hardware design is unsatisfactory.
Score:	3
Written comments:	Proposed hardware explained

List of Hardware and Software

5%	Rubric
	(4.0) A comprehensive list of all hardware and software modules used to date and proposed for the next stages of the project
	(3.0) A partially complete list; a list lacking in detail
	(2.0) A largely incomplete list
	(1.0) An unsatisfactory list
Score:	3
Written comments:	Various tools and boards are described. Use of some of the tools was a little vague.

Project Expenditures (Current and Projected)

5%	Rubric
• List all expenditures so far	**(4.0)** The project expenditures (current and projected) are well-described and complete.
• Estimate all future expenditures	**(3.0)** The project expenditures (current and projected) are missing some detail.
	(2.0) The project expenditures (current and projected) are missing significant detail.
	(1.0) The project expenditures (current and projected) are unsatisfactory.
Score:	4
Written comments:	

Project Management

5%	Rubric
• Gantt Chart for spring semester	**(4.0)** The team has created a comprehensive plan specifying milestones and primary responsibilities.
• Team Responsibilities: Coordinator, Altium Lead, Budget Management Lead	**(3.0)** The team's plan is missing some detail on milestones and/or responsibilities.
	(2.0) The team's plan is missing significant details on milestones and/or responsibilities.

• Technical responsibilities	**(1.0)** The team's plan is unsatisfactory.
Score:	3
Written comments:	Some team members seemed to participate more fully than others.

Other comments:	Team needs input sensors that track temperature, light, humidity, etc. The sensors could be connected to a transmitter connected to multiple receivers with motors or other actuators that can take some action in response to sensor input. Motor should show movement (doesn't have to be a window opening). The team should redefine which work each team member should do for the project before leaving for winter break. One team member should be assigned to work on the sensors and another on the motor/actuator. The demonstration should show a realistic channel that models what might occur in a large building including noise effects and attenuation.