CardCounter

Final Presentation
Project Overview

- Card recognition machine
- Architecture and Interface (Chris)
- Software (Nate)
- Physical Issues (Hugh)
- Lessons Learned (All)
Architecture
Interface

- Avalon Fabric
- Separate Communication Peripheral
Timing

- Two Separate System Clocks
- Nios system at 50 MHZ
- CCD at ~ 25 MHZ
Software

- Allocates Memory
- Sets threshold for data acquisition limits
- User controlled system load
- Dynamic card assessments
Physical

- Stable System Luminescence
- Fixed Sample Position
Experience

- Time Management
- Systematic Design Approach
- Proactive Team Communication