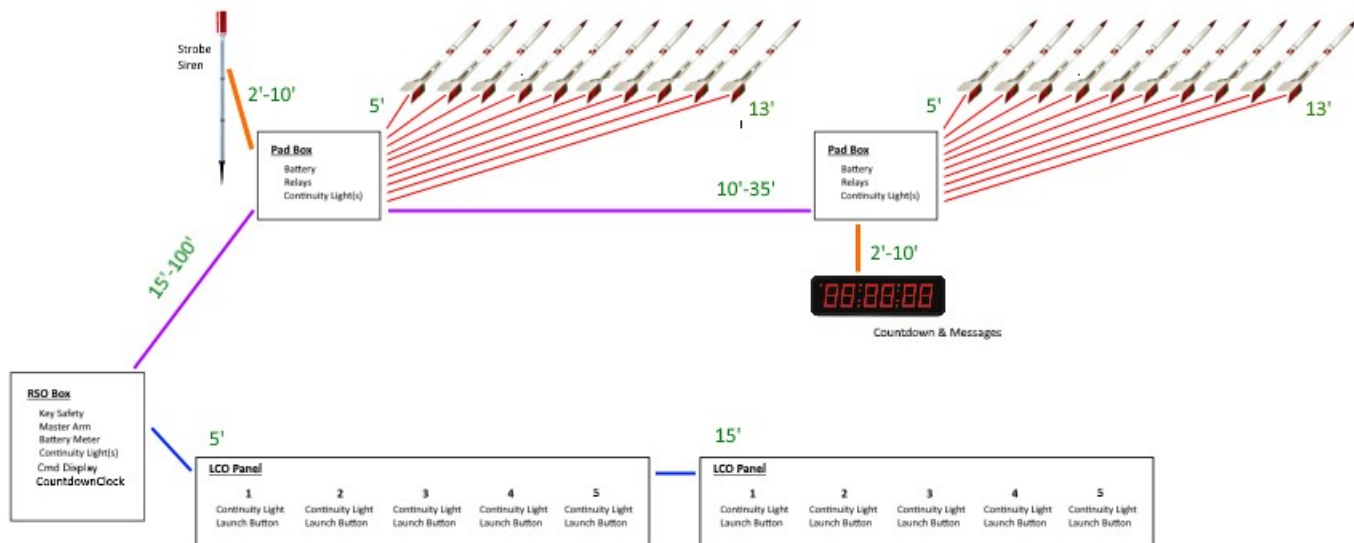
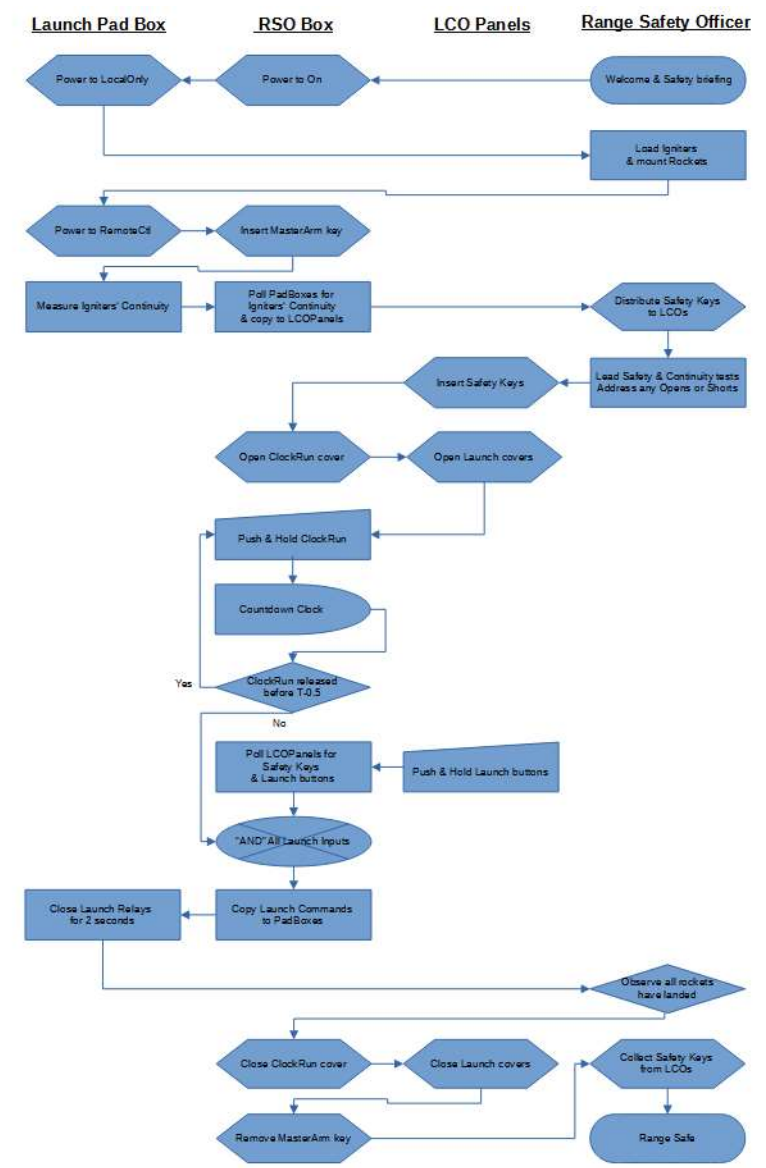


System Overview



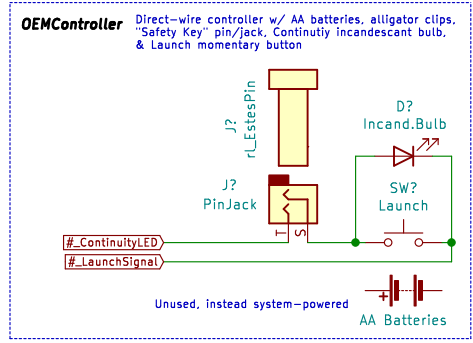
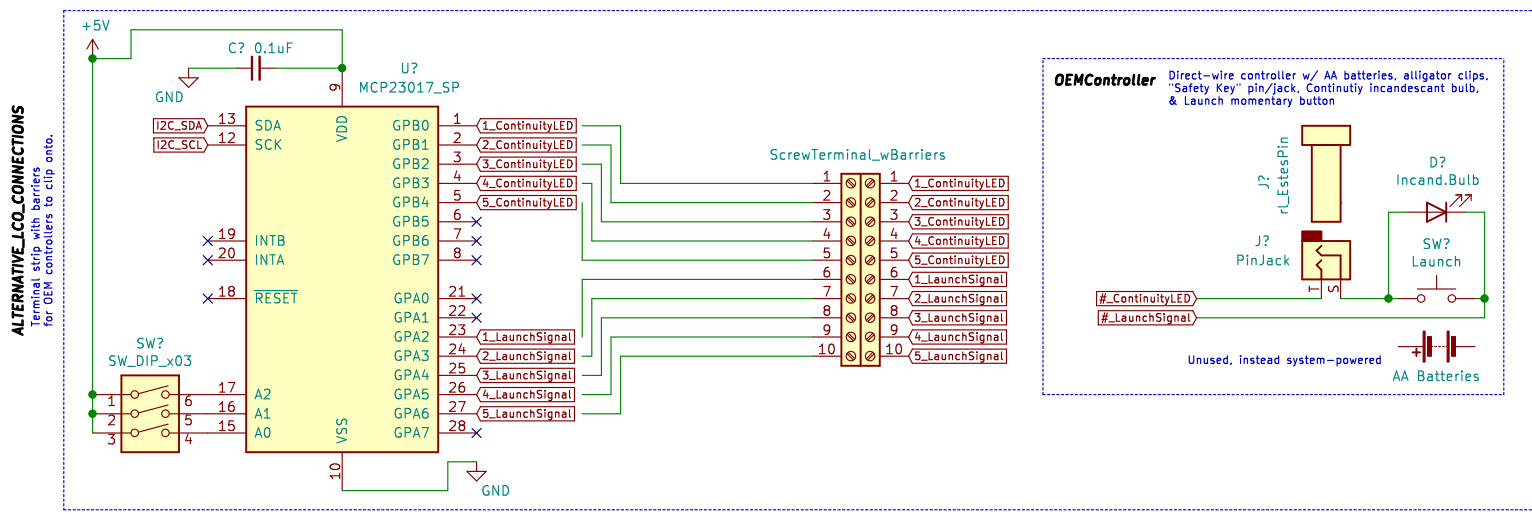
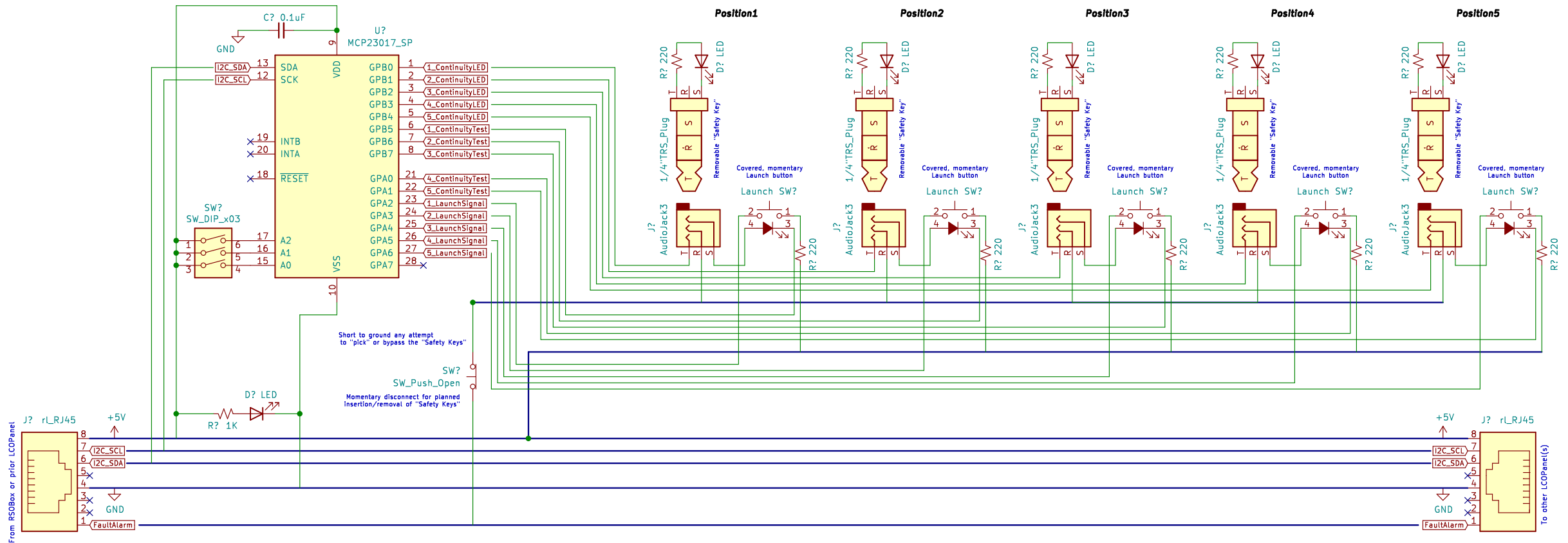
Signal Lines
 Igniter Current
 Safety Warnings
 Command Bus
 Individual Continuity, Launch Command

Flowchart for Rocket Range operations



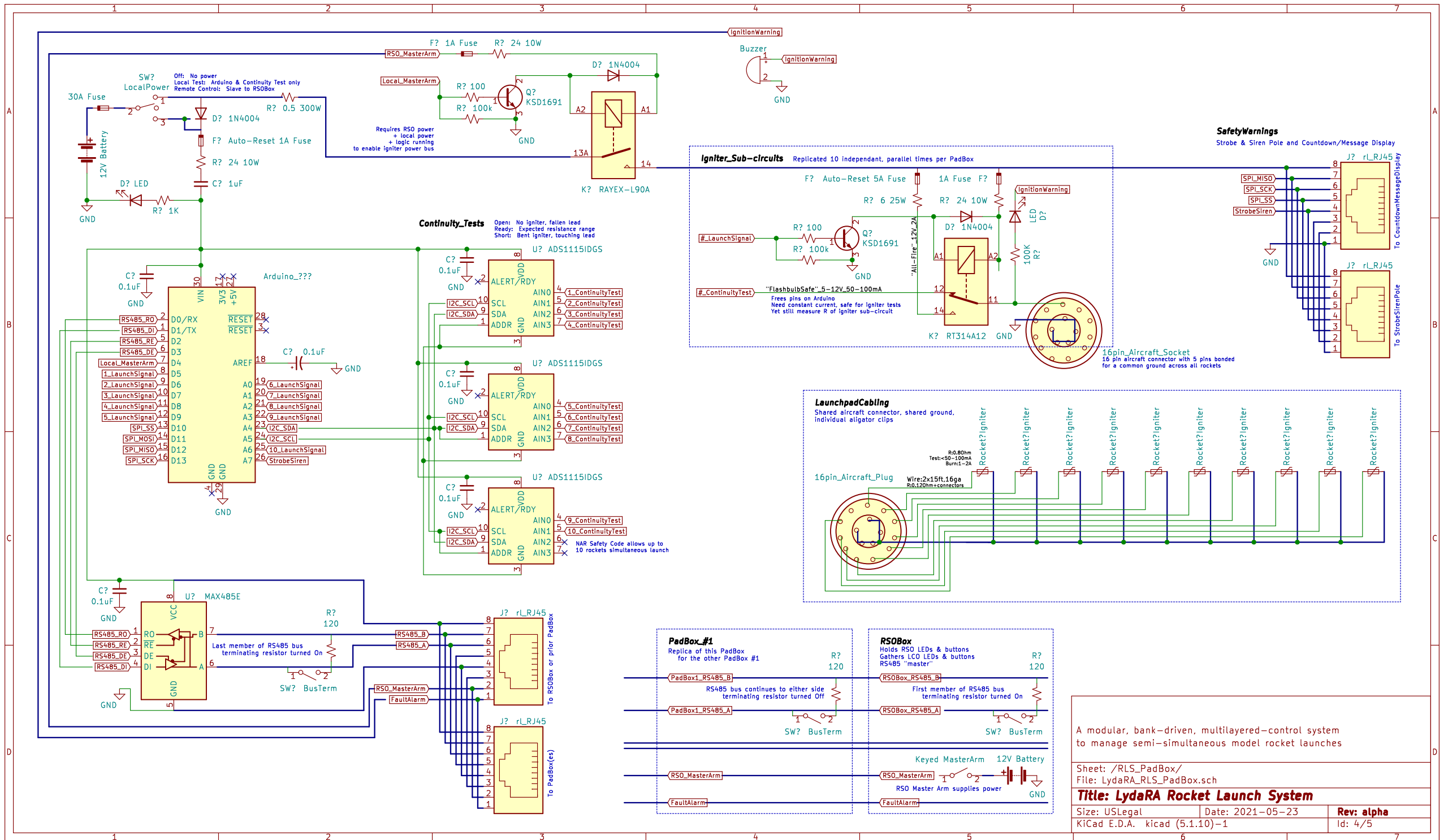
A modular, bank-driven, multilayered-control system to manage semi-simultaneous model rocket launches

Sheet: /		
File: LydaRA_RocketLaunchSystem.sch		
Title: LydaRA Rocket Launch System		
Size: USLegal	Date: 2021-05-23	Rev: alpha
KiCad E.D.A. kicad (5.1.10)-1		Id: 1/5



A modular, bank-driven, multilayered-control system to manage semi-simultaneous model rocket launches

Sheet: /RLS_LCOPanel/		Date: 2021-05-23		Rev: alpha	
File: LydaRA_RLS_LCOPanel.sch		Size: USLegal		KiCad E.D.A. kicad (5.1.10)-1	
Title: LydaRA Rocket Launch System		Id: 3/5			



SafetyWarnings
Strobe & Siren Pole and Countdown/Message Display

Igniter_Sub-circuits Replicated 10 independent, parallel times per PadBox

LaunchpadCabling
Shared aircraft connector, shared ground. Individual alligator clips

PadBox #1
Replica of this PadBox for the other PadBox #1

RS0Box
Holds RSO LEDs & buttons
Gethers LCO LEDs & buttons
RS485 "master"

A modular, bank-driven, multilayered-control system to manage semi-simultaneous model rocket launches

Sheet: /RLS_PadBox/
File: LydaRA_RLS_PadBox.sch

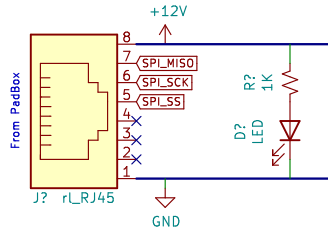
Title: LydaRA Rocket Launch System

Size: USLegal	Date: 2021-05-23	Rev: alpha
KiCad E.D.A. kicad (5.1.10)-1		Id: 4/5

CountdownMessageDisplay 6-12" High, (SETUP, HOLD, T-SS.d, LAUNCH, T+SS.d)

8 x 38 dot matrix

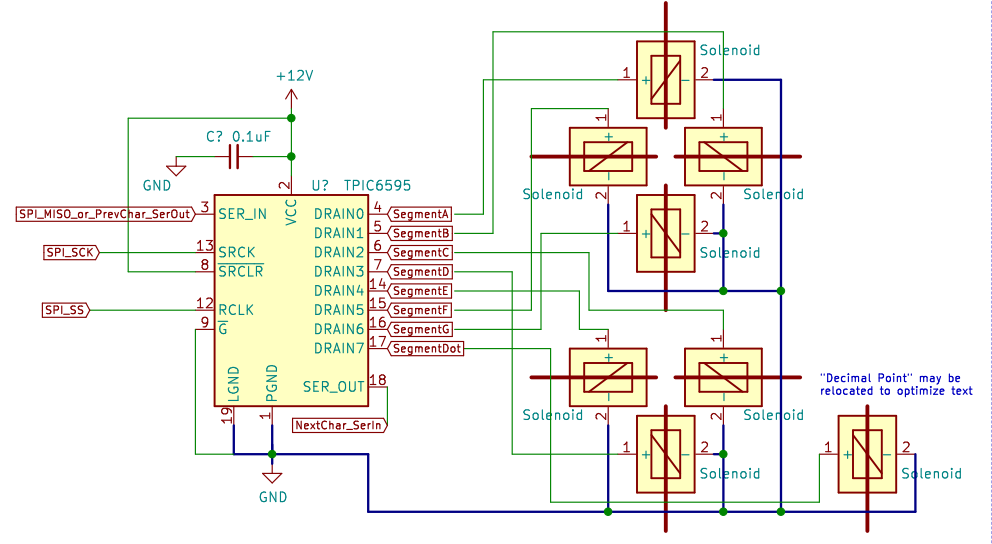
7-segment vs 14-segment



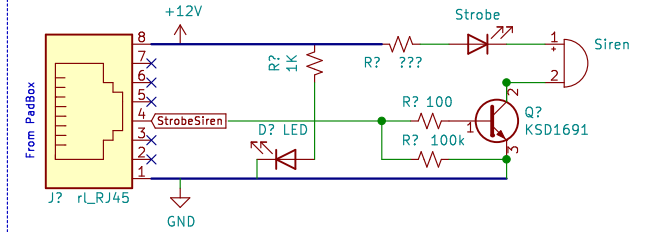
7-segment + custom "dots"



MechanicalCharacter_Sub-circuits Replicated 6 independent, parallel times per CountdownMessageDisplay



StrobeSirenPole



A modular, bank-driven, multilayered-control system to manage semi-simultaneous model rocket launches

Sheet: /RLS_SafetyWarnings/
File: LydaRA_RLS_SafetyWarnings.sch

Title: LydaRA Rocket Launch System

Size: USLegal	Date: 2021-05-23	Rev: alpha
KiCad E.D.A. kicad (5.1.10)-1		Id: 5/5