MEMSDuino System Elements

* Rack Mount Wood Board
  + Main photo
  + Abstract
  + Drawings
  + Bill of materials
  + Assembly photo sequence
  + List of tools and consumables
  + Step by step instructions
  + Templates for tracings
  + Conclusions
* Custom Metal Box
  + Main photo
  + Abstract
  + Drawings
  + Bill of Materials
  + Assembly photo sequence
  + Step by step instructions
  + List of tools and consumables
  + Conclusions
* 5 V to 90 V boost
  + Main photo
  + Bill of materials
  + abstract
  + Tools and consumables
  + Step by step assembly instructions
  + Assembly photo sequence
  + conclusions
* 3d printed parts
  + Main photo
  + .STL files
  + Bill of materials
  + Solidworks files
  + Dimensioned Drawings
  + Assembly step by step instructions
  + Assembly photo sequence
* DB 25 Relay Board
  + Main photo
  + abstract
  + Bill of materials
  + Tools and consumables
  + Assembly photo sequence
  + Altium files: board, and schematic
  + .zip with Gerber files
  + Dimensioned Mechanical drawing
  + Step by step assembly and testing instructions
  + Conclusions and future work
* Arduino Shield Circuit Board
  + Main photo
  + Abstract
  + Bill of materials
  + Tools and consumables
  + Assembly photo sequence
  + Dimensioned mechanical drawing
  + Altium schematic and pcb and project
  + .zip of all gerbers
  + Arduino Code:
    - 9 port switch control
    - 8 port + SOLT switch control
    - 6 port switch control
  + Step by step assembly and programming instructions
  + Conclusion
* Control Panel Circuit Board
  + Main photo
  + Abstract
  + Bill of materials
  + Tools and consumables
  + Assembly photo sequence
  + Step by step assembly instructions
  + Dimensioned mechanical drawing
  + .zip of gerber files
  + Altium schematic and pcb file
  + Conclusion
* SP6T control system
  + Main photo
  + Abstract
  + Bill of materials
  + Tools and consumables
  + Step by step assembly instructions
  + Dimensioned mechanical drawing of pcb
  + Photo assembly sequence
  + .zip of gerbers for 6 port control panel board
  + Altium files, schematic and pcb for 6 port control panel board
  + Arduino code for 6 port switch control
  + Conclusion
* SP8T + E-Cal system
  + Main photo
  + Abstract
  + Bill of materials, assembly notes, gerber files, pick and place, stack up information, order information all together in a zip for the RF PCB
  + .zip of gerber files for front panel for SP8T
  + Altium schematic and pcb and project for front panel boards
  + Step by step instructions assembly
  + Conclusion
* Micro D to Header Cryogenic Adapter Board
  + Main photo
  + Abstract
  + Bill of materials
  + Consumables and tools
  + Step by step instructions for assembly
  + Assembly photo sequence
  + Altium files of schematic and pcb and project
  + .zip of gerber files
  + Mechanical drawing with dimensions
  + Conclusion
* Cryogenic mounting Hardware
  + Abstract
  + Main photo
  + Solidworks Assembly of whole system
  + Bill of materials for whole system
  + H bracket
    - Drawing pdf
    - Drawing image
    - Photo of part
    - cost to have outsourced
    - .STEP file
    - Solidworks part file
    - Solidworks drawing file
  + T Stand
    - Drawing pdf
    - Drawing image
    - Solidworks part
    - Solidworks drawing
    - Step file
    - Photo of part
    - Cost to have outsourced
  + Outer block
    - Drawing pdf
    - Drawing image
    - Photo of part
    - Solidworks part file
    - Solidworks drawing file
    - Step file
    - Cost to have outsourced
  + Center Block
    - Photo of part
    - Drawing pdf
    - Drawing image
    - Solidworks part file
    - Solidworks drawing file
    - Step file
    - Cost to have outsourced
  + Conclusions
* Rectangle 11 Cryogenic MEMS SP9T Switch Board
  + Abstract
  + Main photo
  + Bill of materials
  + Mechanical drawing with dimensions of board
  + Mechanical drawings with dimensions of MEMs chip
  + Mechanical drawings with dimensions of SMP connector
  + Control line pin number diagram
  + Arduino control code
  + Manufacturing notes
  + Altium pcb file, schematic file and project file
  + .zip of gerber files
  + Conclusion
* Calibration Circuit Boards
  + Abstract
  + Main photo
  + Bill of materials
  + Panel pcb file
  + Short, open, load, thru, pogo pin 2, pogo pin 6, chip boards pcb files
  + Panel .zip of gerber files
  + Pick and place file
  + Mechanical drawing with dimensions
  + conclusion