

Custom Metal Box

NIST



QED·C

MEMSDuino

Lafe Spietz

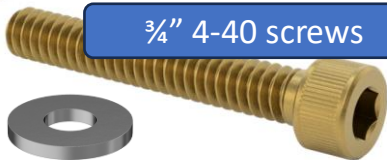
NIST

2024



X2

7/32" 4-40 standoff



3/4" 4-40 screws

#40 washers

X4

Bud AN-1304-A
Diecast Aluminum
Box

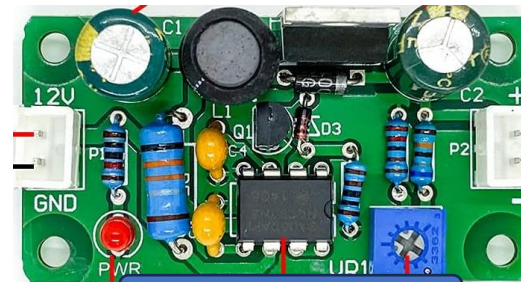


HV-DCDC-bracket

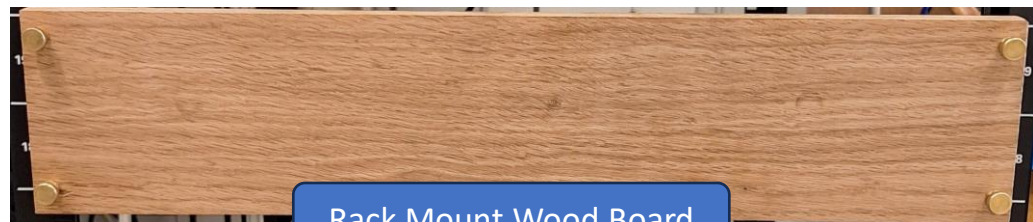


X6

1/4" 4-40 screws



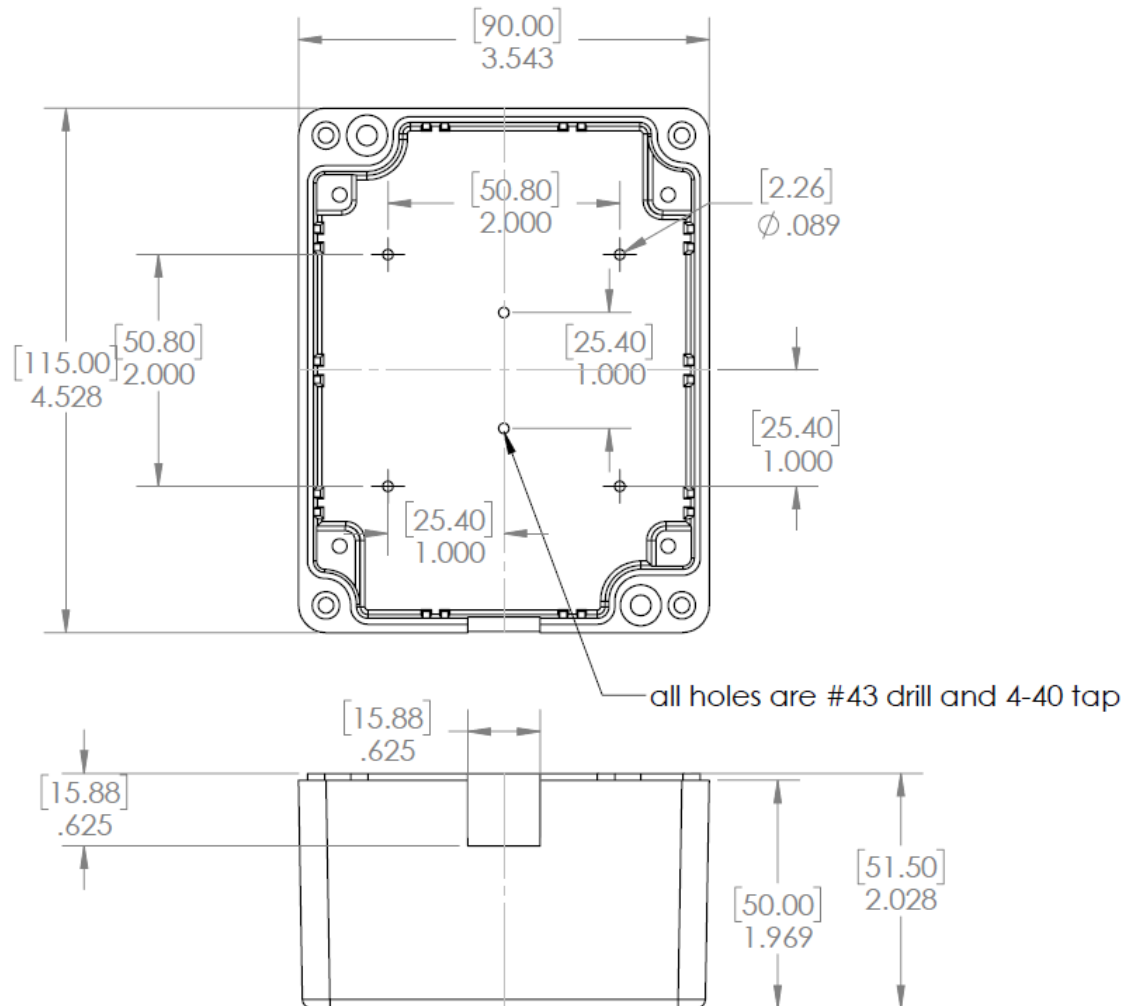
12V to 90 V Boost



Rack Mount Wood Board

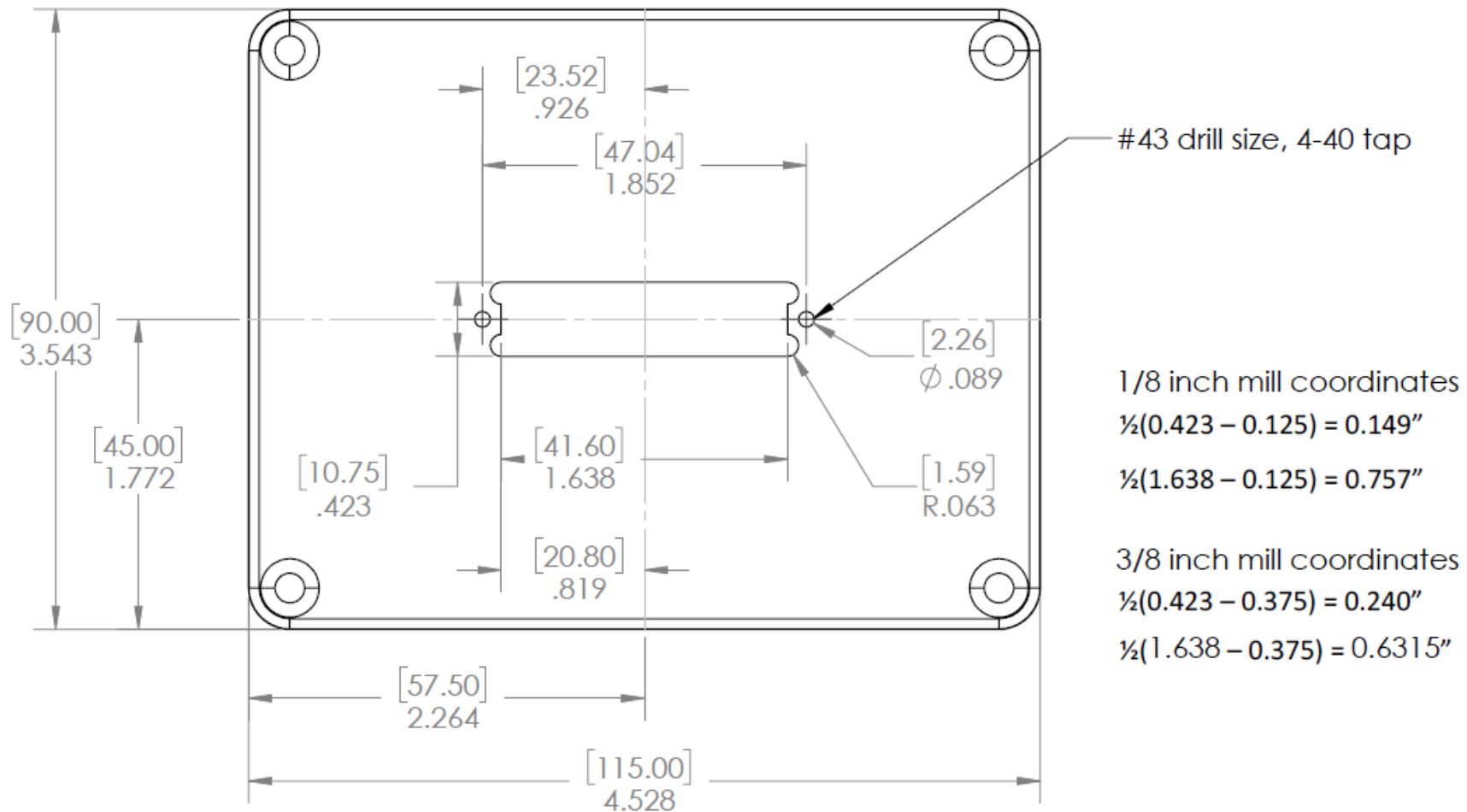
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Modify or buy already-modified AN-1304-A box as follows:



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Modify or buy already-modified AN-1304-A lid as follows:



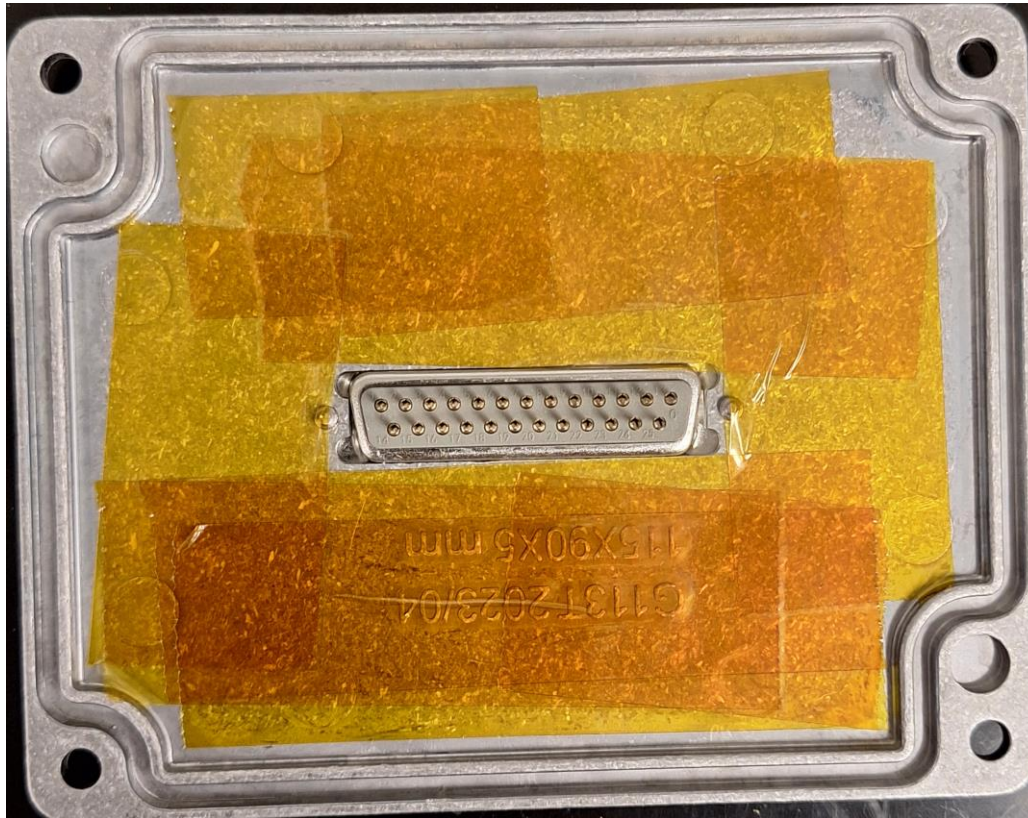
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Screw DB25 Connector to lid using 7/32" 4-40
standoffs:



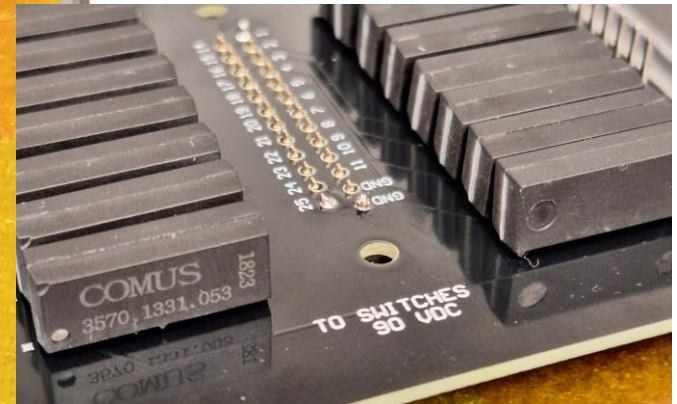
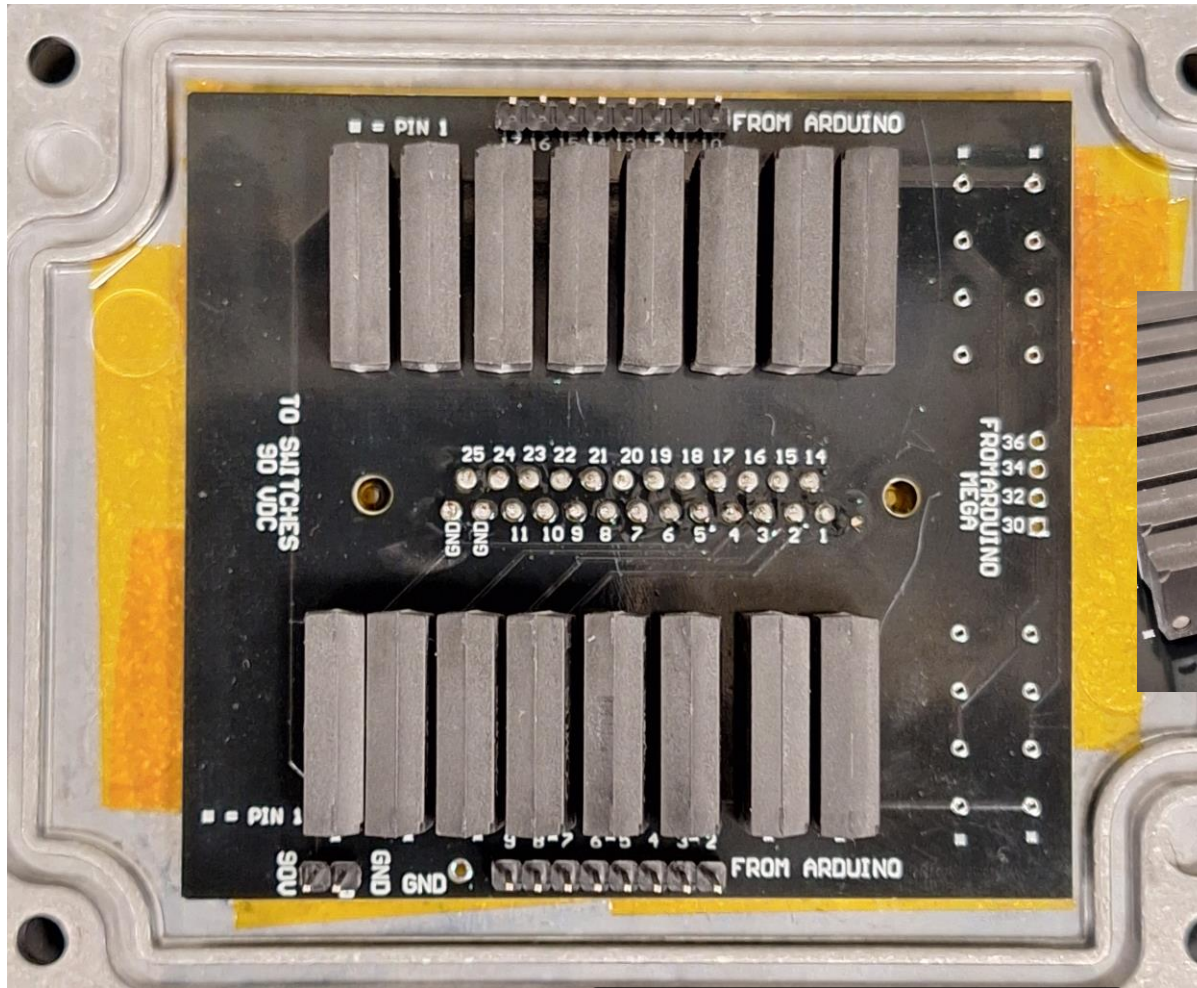
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Add polyimide tape to lid to prevent possible shorts



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Solder already-assembled DB25 relay circuit board to DB25 connector, adding some space deliberately along the pins



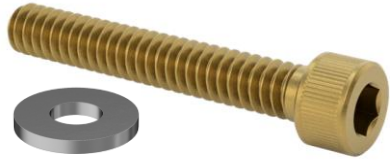
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Use 4-40 screws to assemble the DCDC HV mounting bracket to the box, and the high voltage boost board to the bracket

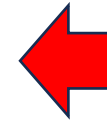
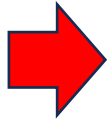


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Use $\frac{3}{4}$ " 4-40 screws to attach the main box to the wood board, with washers for each screw:

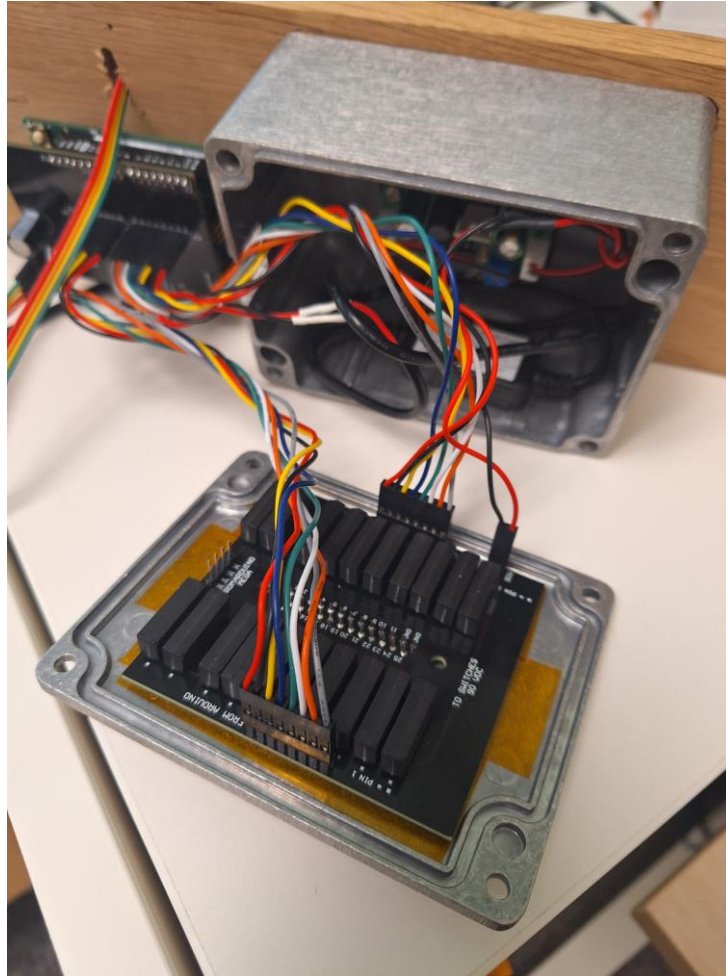


X4



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Assemble cables, matching red wire to lowest pin number on both ends, being careful to keep track of which 8 pin cable is which.



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