# Minimalist Europe Card Bus (MECB)

## Standardised Board - Mechanical Specifications

### **Design Parameters**

- Satisfy the 100mm square maximum board size, for low-cost prototype PCB manufacturing.
- Utilise the lower cost 64-pin (Row A&C) DIN 41612 type C connectors, for cost saving.
- Ensure the DIN 41612 connector(s) can be easily centred across the board width, grid aligned.
- Provide two standardised corner holes, on the edge opposing the right-angle DIN connector, to allow for attachment of card handles (to ease board insertion & extraction), or for board mounting refer next point.
- Provide an additional two standardised corner mounting holes on the edge with the right-angle DIN connector, to provide a full set of four corner holes (to allow for stand-alone board mounting).
- Standardise PCB corner rounding, for sharp corner removal consistency across all boards & visual tidiness.

#### **Design Notes**

- 1. PCB layout is designed utilising 0.127mm (5.0 mils) grid setting.
- 2. Board size is 99.822mm, which represents the greatest even multiple of 0.127mm (i.e. multiple of 0.254mm 10.0 mils), that will fit within the desired maximum 100mm board dimension.
- 3. Standard M3 sized mounting holes were chosen. An additional two mid-edge located mounting holes are specified for the Backplane board only (to provide additional mechanical support).
- 4. For reference, DIN 41612 connectors can utilise standard M2.5 mounting bolts (8mm length for the straight connectors, 10mm length for right angle connectors).
- 5. Implemented as a KiCAD Template, to assist with simplifying the creation of each new MECB board design.

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