
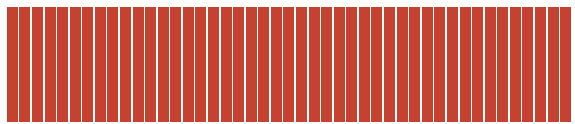
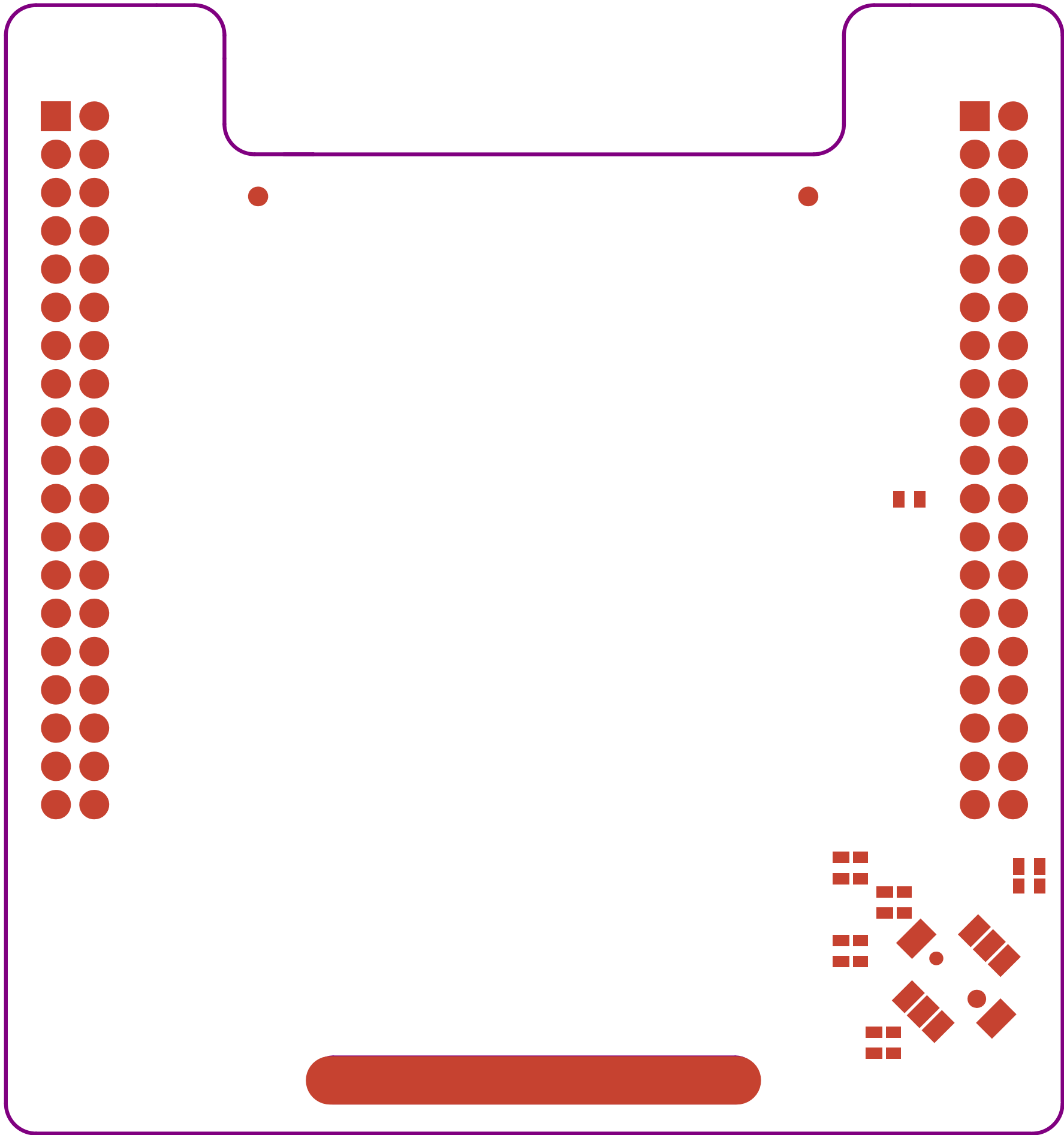

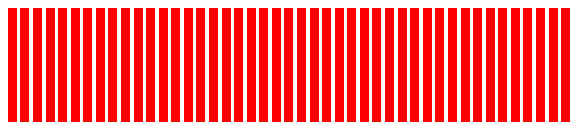
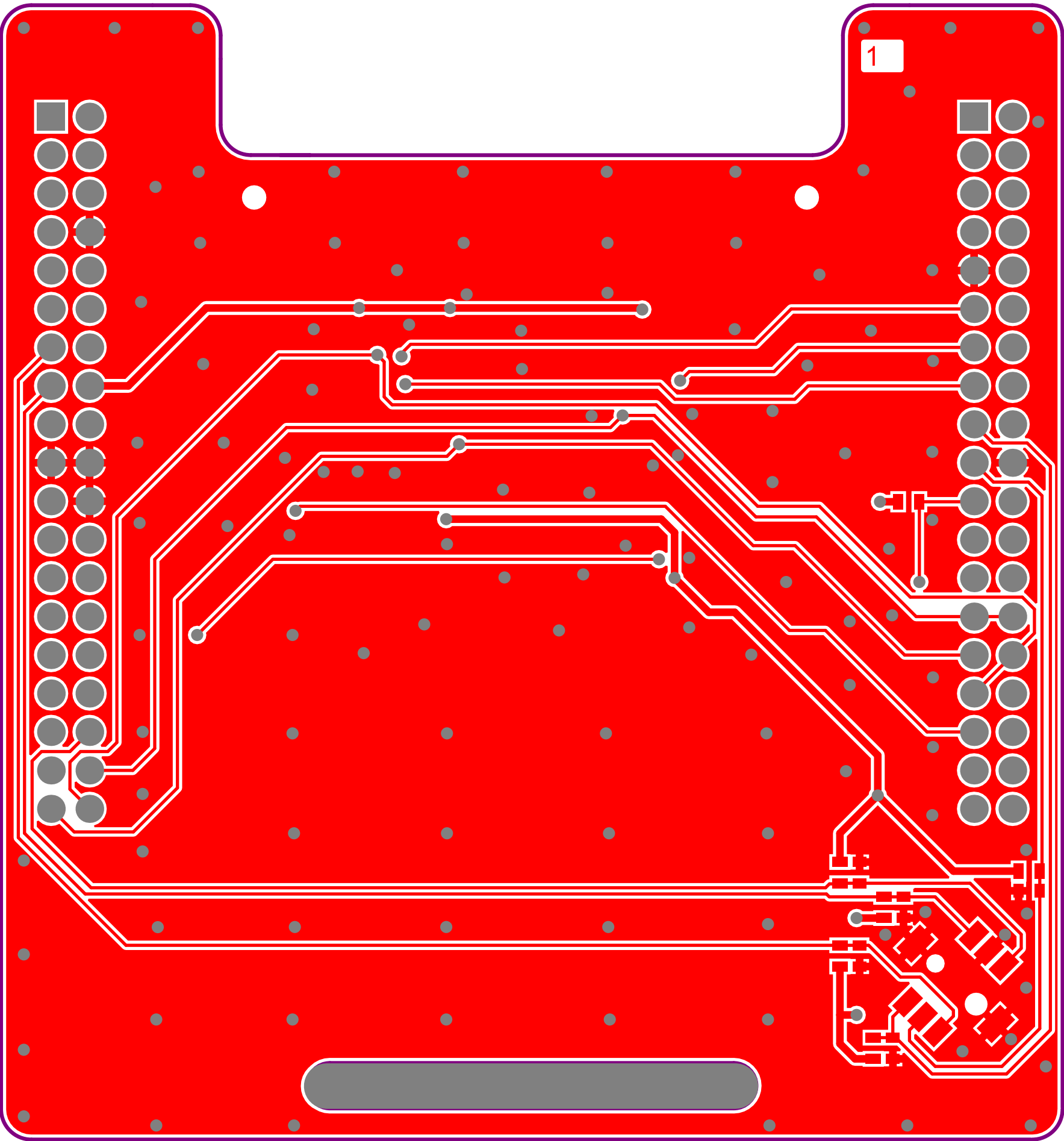



| | | |
|--|---------------------------|---|
| Project: Nucleo-64 Display Expansion Board | |  |
| Layer: Top Overlay | Gerber: .GTO | |
| Variant: [No Variations] | Ref: MB1642 | |
| Date: 21-MAY-21 | Rev: C | |



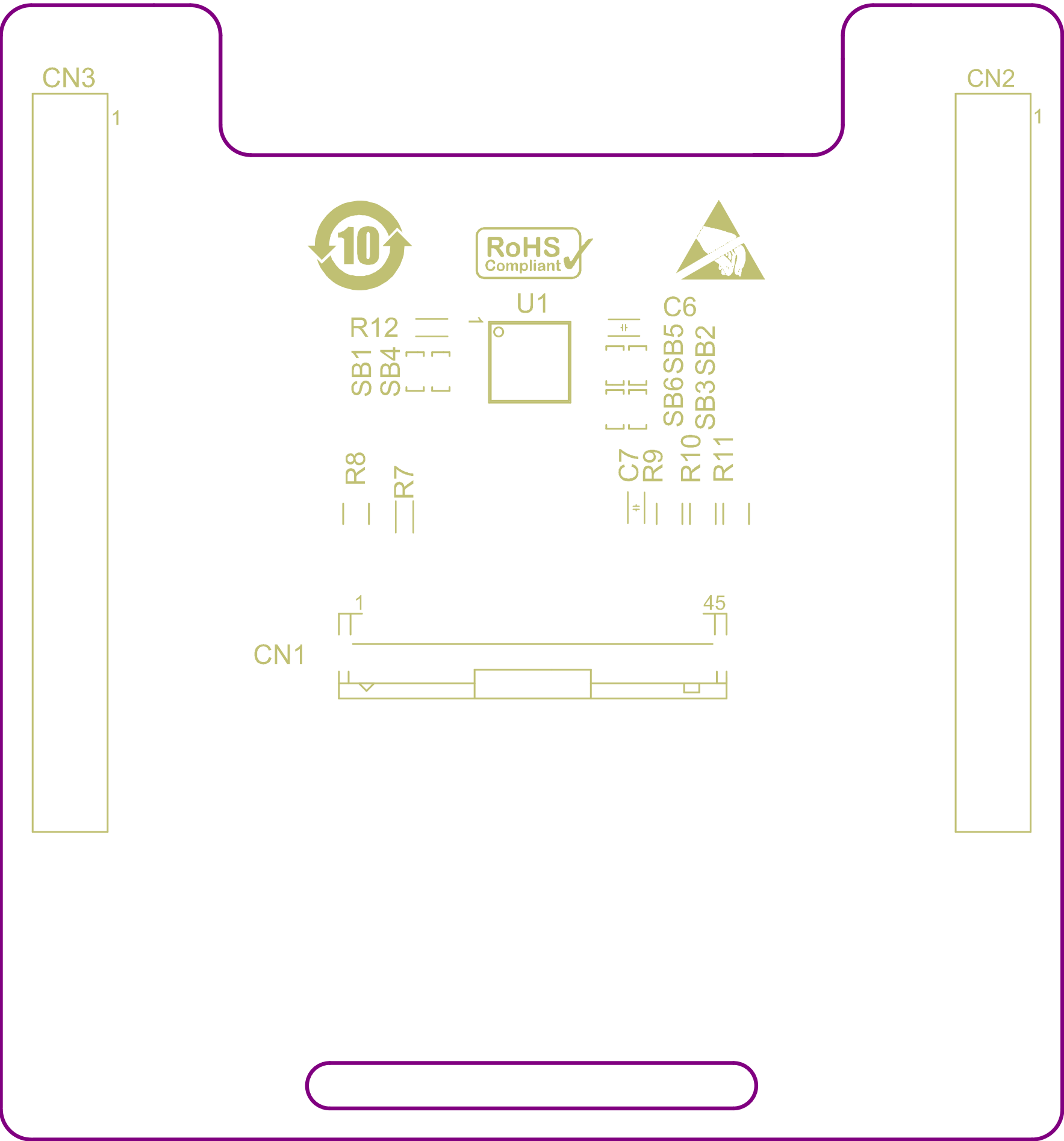
| | | |
|--|---------------------|---|
| Project: Nucleo-64 Display Expansion Board | |  |
| Layer: Top Solder | Gerber: .GTS | |
| Variant: [No Variations] | Ref: MB1642 | |
| Date: 21-MAY-21 | Rev: C | |




| | | |
|--|---------------------|---|
| Project: Nucleo-64 Display Expansion Board | |  |
| Layer: Top Layer | Gerber: .GTL | |
| Variant: [No Variations] | Ref: MB1642 | |
| Date: 21-MAY-21 | Rev: C | |







| | | |
|--|--------------|---|
| Project: Nucleo-64 Display Expansion Board | |  |
| Layer: Bottom Overlay | Gerber: .GBO | |
| Variant: [No Variations] | Ref: MB1642 | |
| Date: 21-MAY-21 | Rev: C | |

PCB SPECIFICATIONS :

A. MATERIAL :

B. MATERIAL FAMILY :

C. SOLDERMASK COLOR :

D. SILKSCREEN COLOR :

E. SURFACE FINISH :

F. IMPEDANCE CONTROL :

G. THROUGH VIA :

H. STACK-UP :

FR-4

N/A

☐ GREEN

☐ WHITE

☒ ENIG

☐ HASL

☒ NO

☒ YES (SEE IMPEDANCE TABLE FOR DETAIL INFORMATION)

☐ TG-170

☒ TG-150

☐ TG-140

☐ RED

☐ BLACK

☒ Blue ink PANTONE 2955

☐ YELLOW

☐ BLACK

☐ Blue ink PANTONE 2955

☐ IMMERSION SILVER

☐ IMMERSION TIN

☐ GOLDEN FINGER

☐ HASL (PB-FREE)

☐ NON-CONDUCTIVE EPOXY.

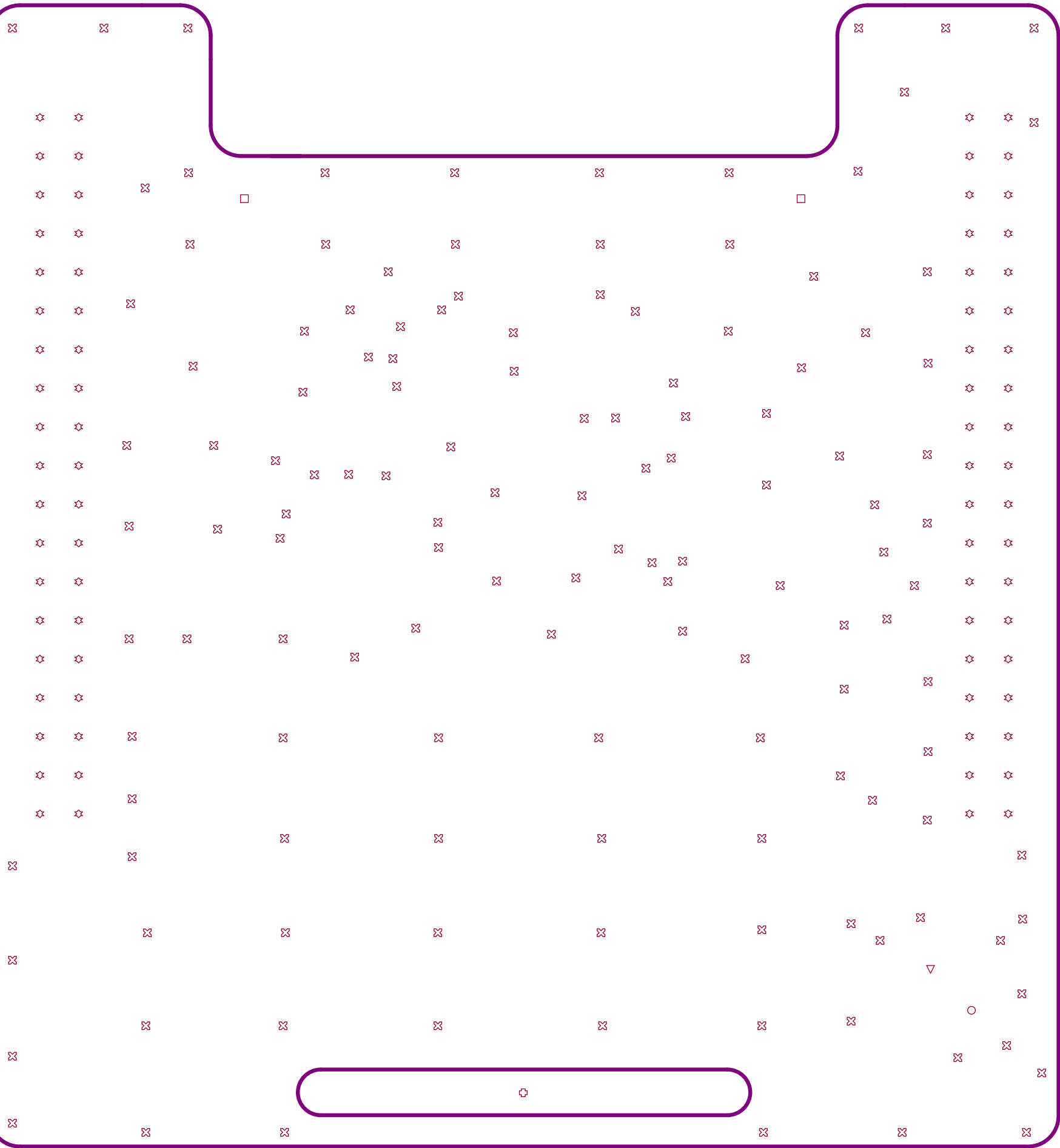
SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.

PCB : TYPE 3

ASPECT-RATIO, AXE Z :
6:1 to 8:1
LEVEL "B"

MINIMUM PARAMETERS

DEFAULT
TRACKS : 0.21mm
GAPS : 0.21mm



| Layer | Name | Material | Thickness | Constant | Board Layer Stack |
|-------|----------------|---------------|-----------|----------|-------------------|
| 1 | Top Overlay | | | | |
| 2 | Top Solder | Solder Resist | 0.015mm | 3.5 | |
| 3 | Top Layer | Copper | 0.035mm | | |
| 4 | Dielectric 1 | FR-4 | 1.500mm | 4.2 | |
| 5 | Bottom Layer | Copper | 0.035mm | | |
| 6 | Bottom Solder | Solder Resist | 0.015mm | 3.5 | |
| 7 | Bottom Overlay | | | | |

| Symbol | Count | Hole Size | Plated | Hole Type | Drill Layer Pair | Via/Pad | Pad Shape | Template | Description | Hole Tolerance (+) | Hole Tolerance (-) |
|--------|-----------|---------------------|--------|-----------|--------------------------|---------|-----------|-------------------------|-------------|--------------------|--------------------|
| ▽ | 1 | 31.50mil <0.800mm> | NPTH | Round | Top Layer - Bottom Layer | Pad | Rounded | c0hn80m85p1000 | | | |
| ○ | 1 | 43.31mil <1.100mm> | NPTH | Round | Top Layer - Bottom Layer | Pad | Rounded | c0hn110m115p1000 | | | |
| ⊕ | 1 | 118.11mil <3.000mm> | NPTH | Slot | Top Layer - Bottom Layer | Pad | Rounded | r3000_300hn300_3000r100 | | | |
| □ | 2 | 47.24mil <1.200mm> | NPTH | Round | Top Layer - Bottom Layer | Pad | Rounded | c0hn120m125 | | | |
| ☆ | 76 | 43.31mil <1.100mm> | PTH | Round | Top Layer - Bottom Layer | Pad | Rounded | <Mixed> | | | |
| ⊗ | 135 | 15.75mil <0.400mm> | PTH | Round | Top Layer - Bottom Layer | Via | Rounded | v80h40m0mx0 | | | |
| | 216 Total | | | | | | | | | | |

Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.
Hole Length = Routed Path Length + Tool Size = Slot length as defined in the PCB layout