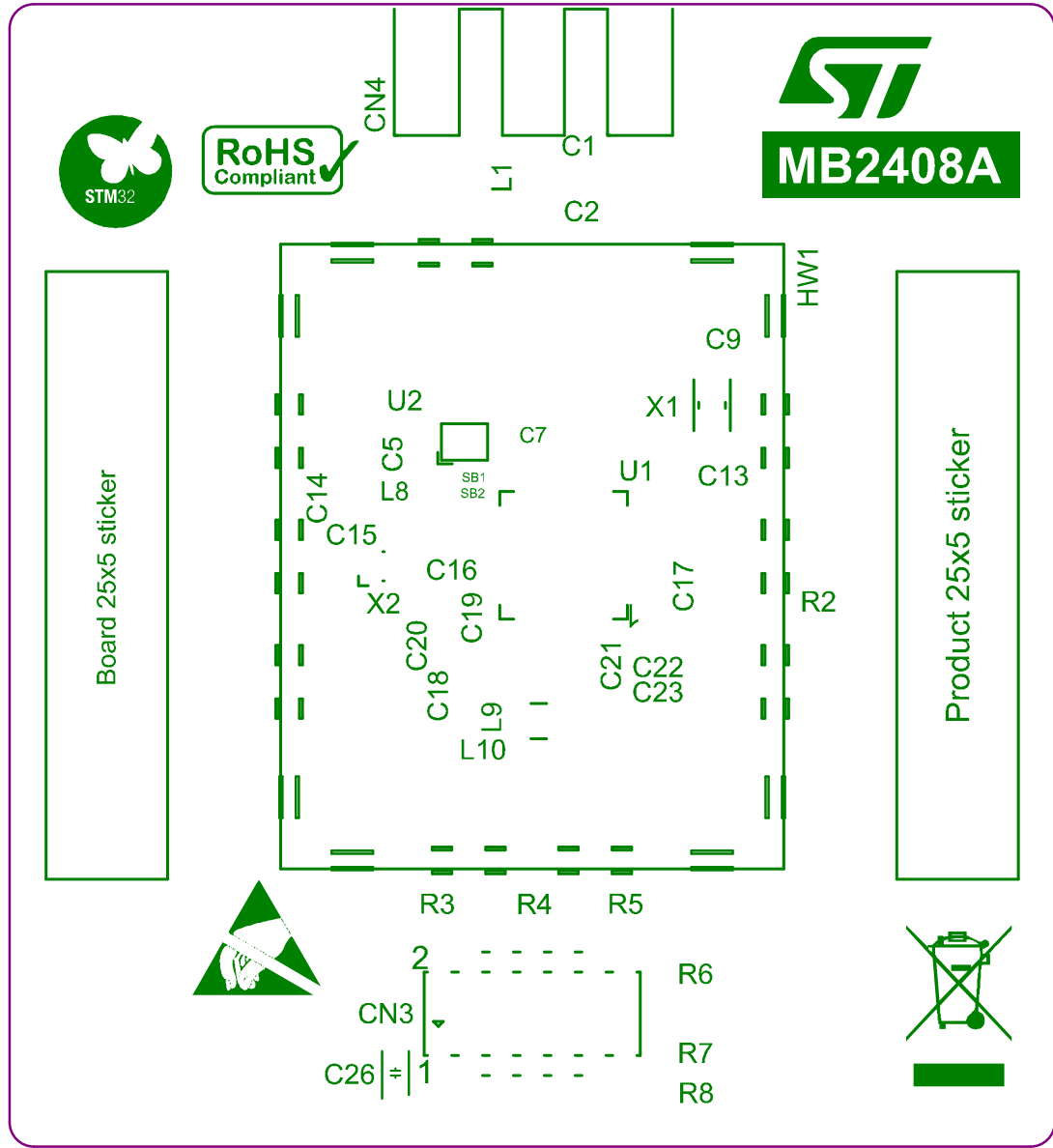
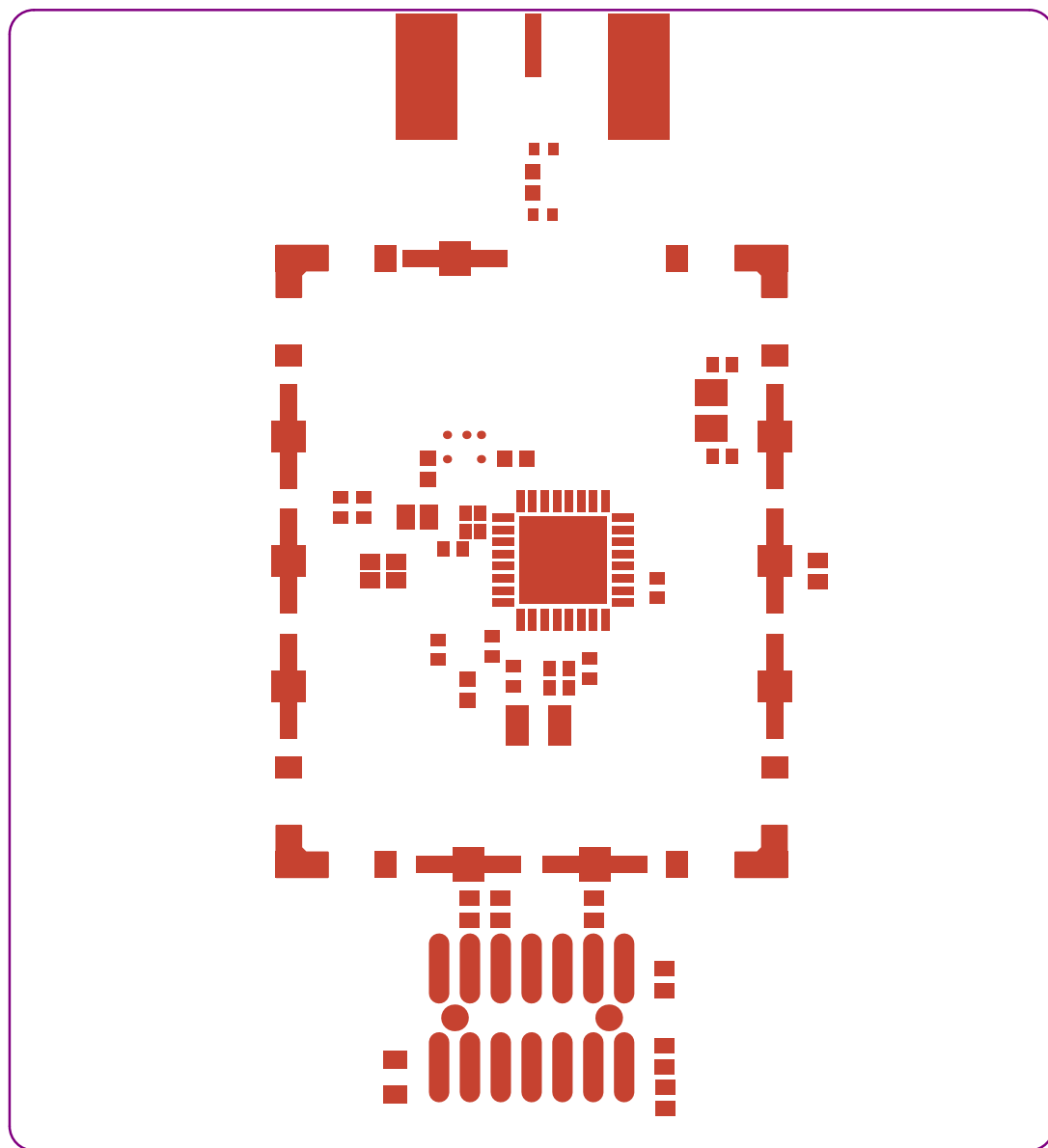
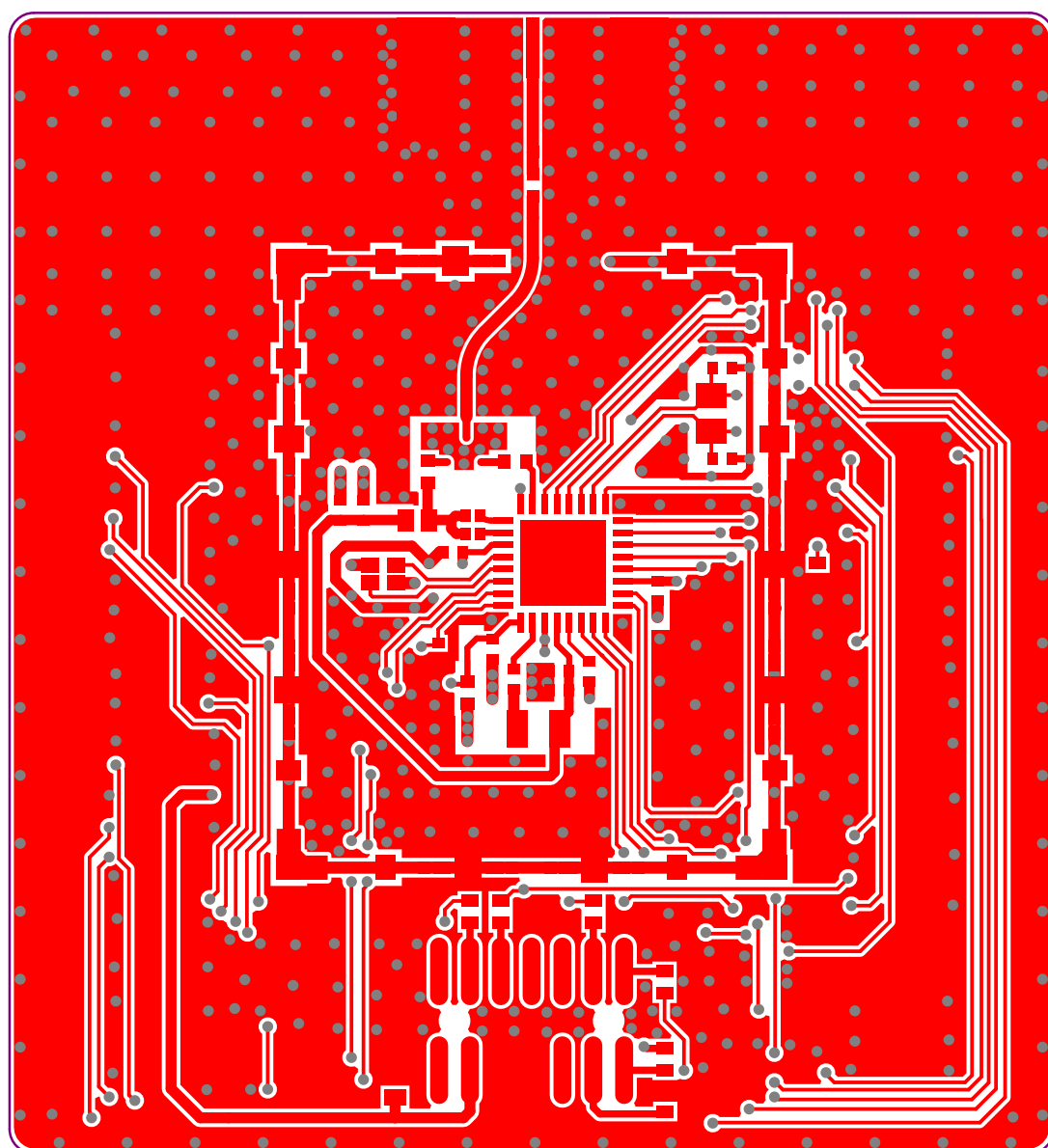




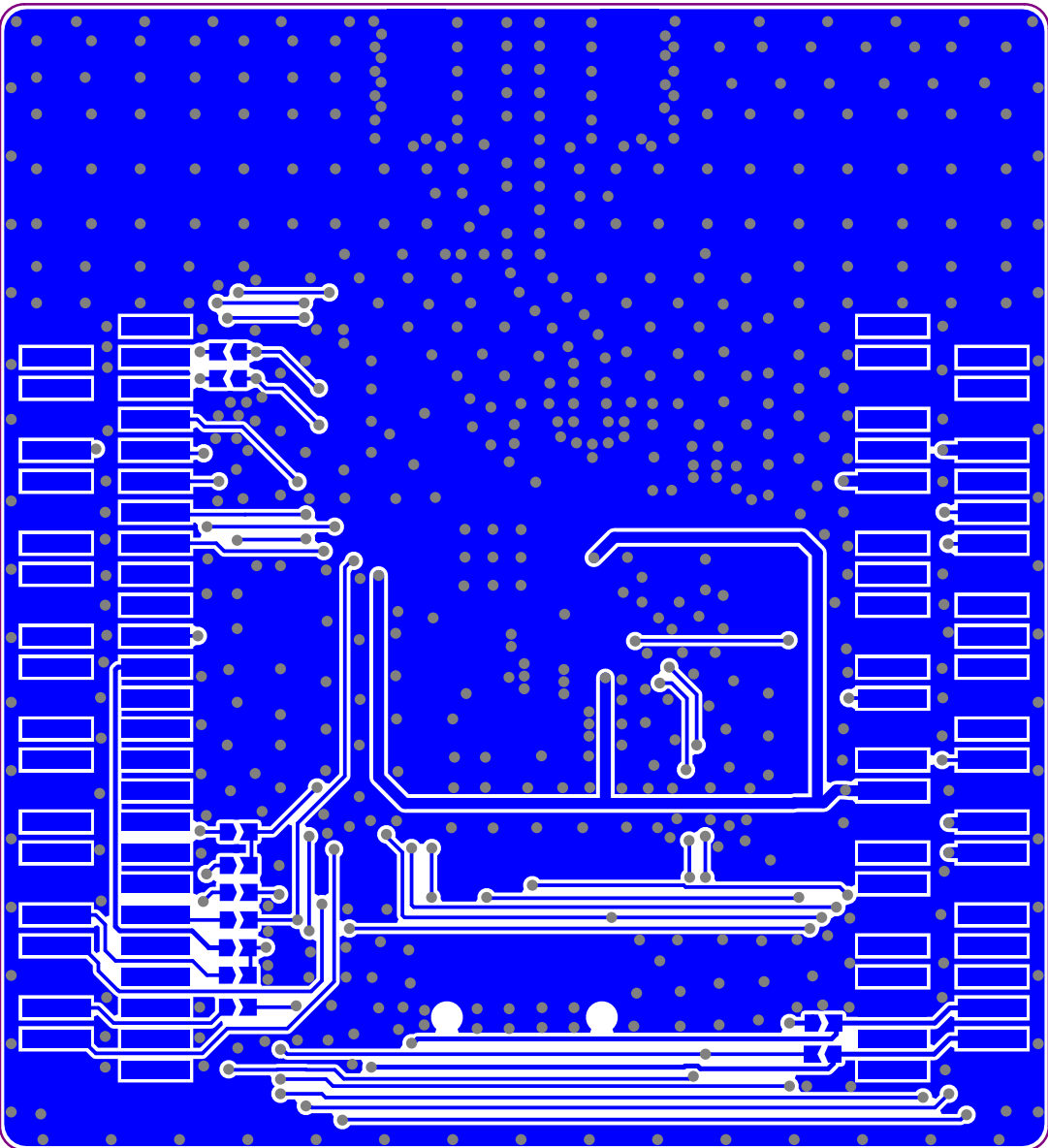
|                                                              |                     |                                                                                       |
|--------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |                     |  |
| Layer: <b>Top Overlay</b>                                    | Gerber: <b>.GTO</b> |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408         |                                                                                       |
| Date: 19/02/2025                                             | Rev: A              |                                                                                       |



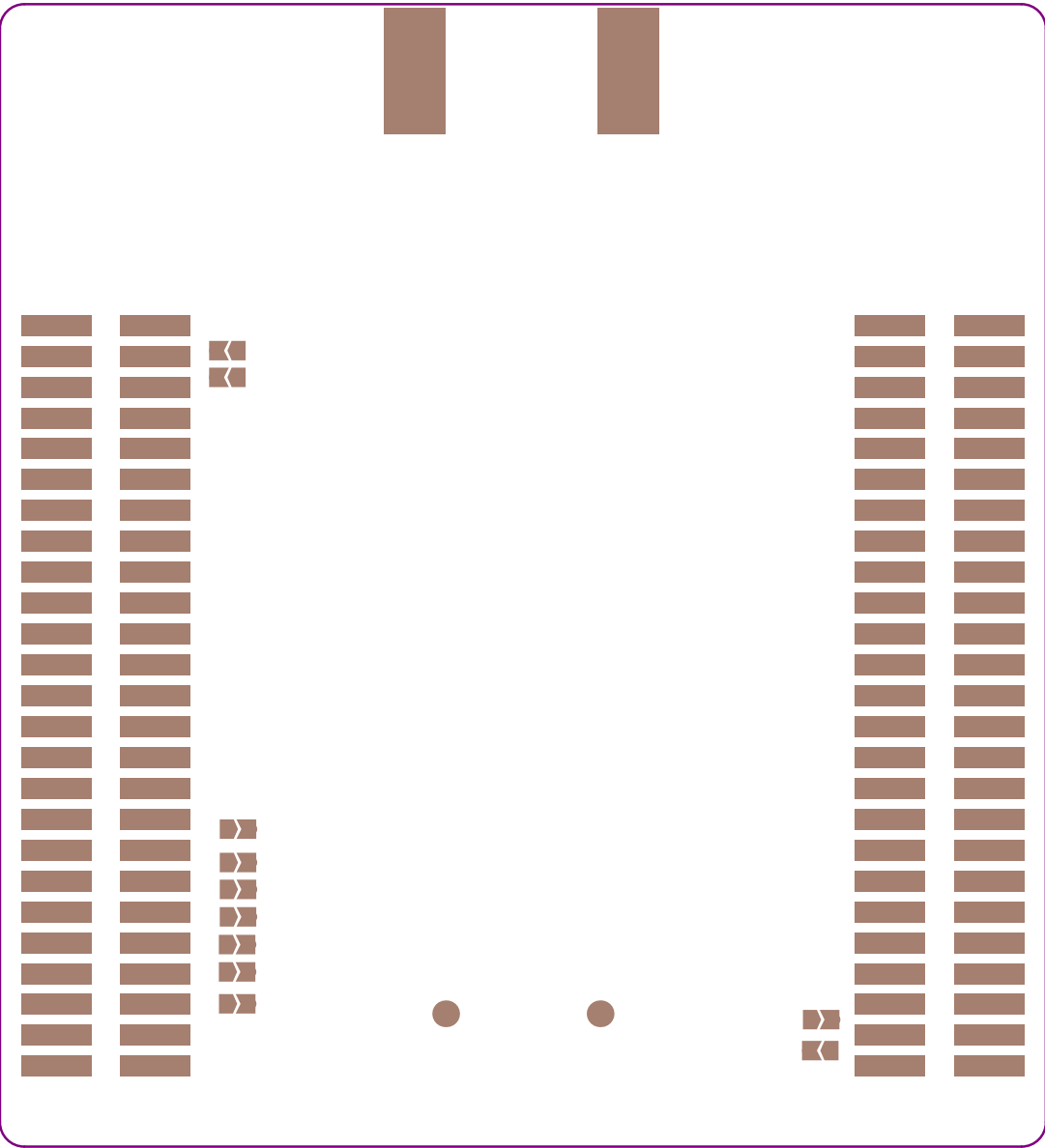
|                                                              |                     |                                                                                       |
|--------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |                     |  |
| Layer: <b>Top Solder</b>                                     | Gerber: <b>.GTS</b> |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408         |                                                                                       |
| Date: 19/02/2025                                             | Rev: A              |                                                                                       |



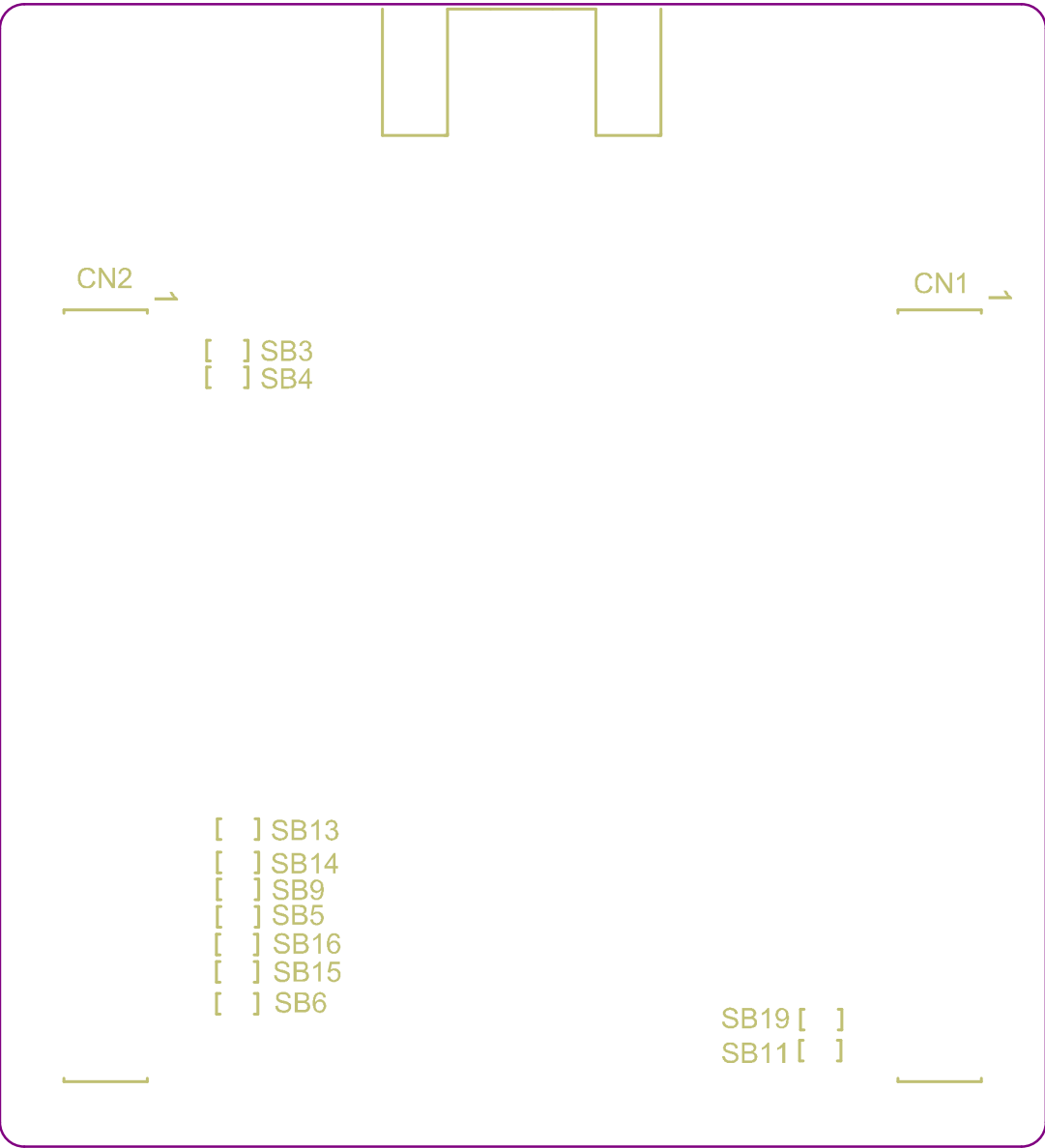
|                                                              |                     |                                                                                       |
|--------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |                     |  |
| Layer: <b>Top Layer</b>                                      | Gerber: <b>.GTL</b> |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408         |                                                                                       |
| Date: 19/02/2025                                             | Rev: A              |                                                                                       |



|                                                              |             |                                                                                       |
|--------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |             |  |
| Layer: Bottom Layer                                          | Gerber:.GBL |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408 |                                                                                       |
| Date: 19/02/2025                                             | Rev: A      |                                                                                       |



|                                                              |             |                                                                                       |
|--------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |             |  |
| Layer: Bottom Solder                                         | Gerber:.GBS |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408 |                                                                                       |
| Date: 19/02/2025                                             | Rev: A      |                                                                                       |



|                                                              |              |                                                                                       |
|--------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |              |  |
| Layer: Bottom Overlay                                        | Gerber: .GBO |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408  |                                                                                       |
| Date: 19/02/2025                                             | Rev: A       |                                                                                       |

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

VT-47

☐ GREEN

☒ WHITE

☒ ENIG

☐ HASL

☐ NO

☐ TG-170

☐ TG-150

☒ TG-140

☒ BLUE

☐ YELLOW

☐ IMMERSION SILVER

☐ HASL (PB-FREE)

☒ YES

☐ RED

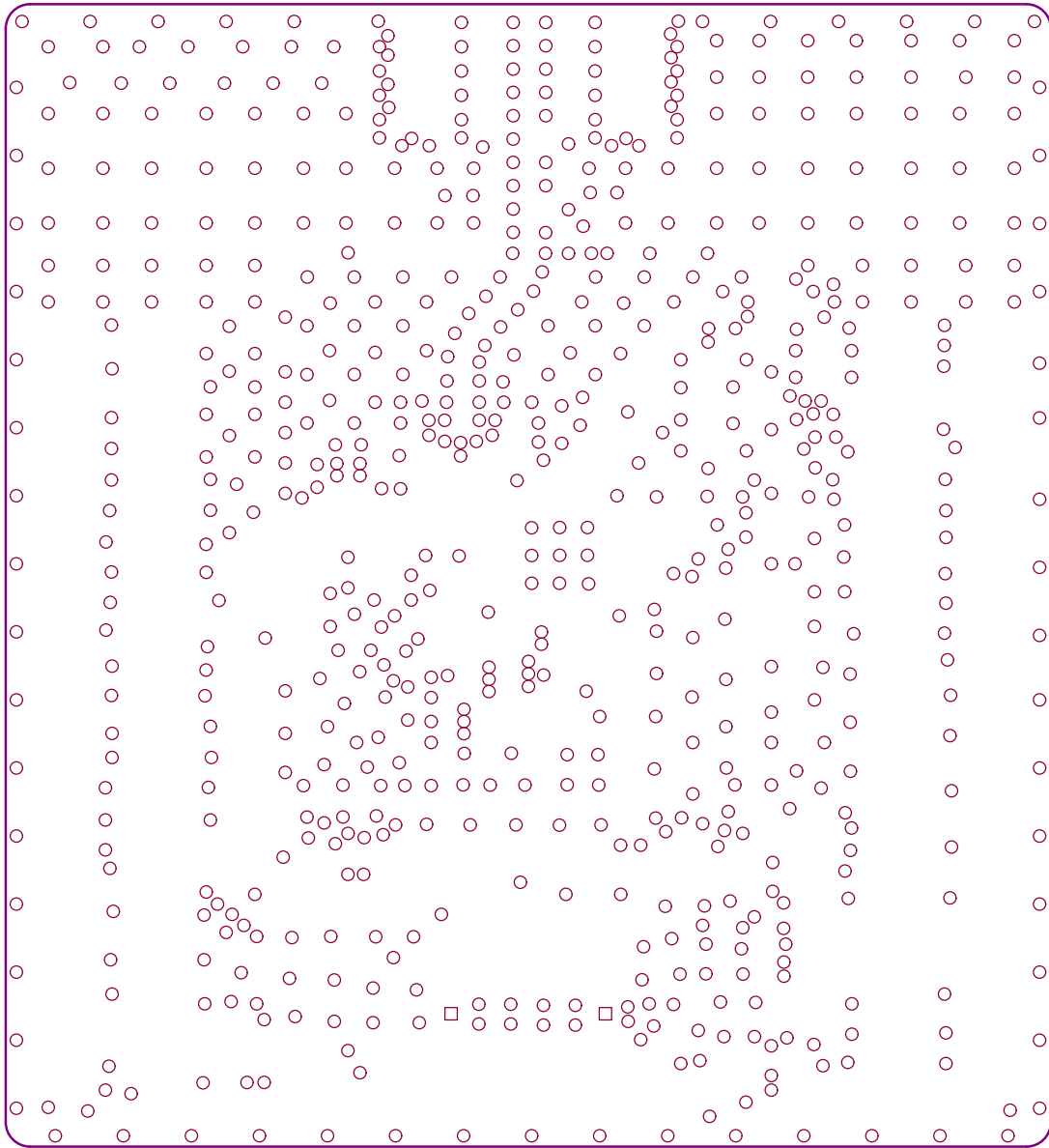
☐ BLACK

☐ IMMERSION TIN

☐ GOLDEN FINGER

PLUG THE VIAS WHICH ARE COVERED WITH SOLDERMASK ONE OR TWO SIDE.  
PLUG MATERIAL : ☒ SOLDERMASK ☐ NON-CONDUCTIVE EPOXY.

SEE LAYER STACK-UP SEQUENCE FOR OVERALL THICKNESS.



| Layer | Name           | Material      | Thickness | Constant |
|-------|----------------|---------------|-----------|----------|
|       | Top Overlay    |               |           |          |
|       | Top Solder     | Solder Resist | 0,010mm   | 3.5      |
| 1     | Top Layer      | Copper        | 0,041mm   |          |
|       | Dielectric 2   | FR4           | 0,914mm   | 4.3      |
| 2     | Bottom Layer   | Copper        | 0,041mm   |          |
|       | Bottom Solder  | Solder Resist | 0,010mm   | 3.5      |
|       | Bottom Overlay |               |           |          |

| Symbol                                                                                | Count     | Hole Size         | Plated | Hole Type | Drill Layer Pair         | Via/Pad | Hole Length |
|---------------------------------------------------------------------------------------|-----------|-------------------|--------|-----------|--------------------------|---------|-------------|
|  | 690       | 0.20mm (7.87mil)  | PTH    | Round     | Top Layer - Bottom Layer | Via     | -           |
|  | 2         | 1.00mm (39.37mil) | NPTH   | Round     | Top Layer - Bottom Layer | Pad     | -           |
|                                                                                       | 692 Total |                   |        |           |                          |         |             |

PCB : TYPE 3

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

MINIMUN PARAMETERS

DEFAULT  
TRACKS : 0.150mm  
GAPS : 0.150mm

|                                                              |              |                                                                                       |
|--------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|
| Project: Reference Design STM32WL3R - QFN32 - 2-Layers - IPD |              |  |
| Layer: Drill Drawing                                         | Gerber: .DRL |                                                                                       |
| Variant: [No Variations]                                     | Ref: MB2408  |                                                                                       |
| Date: 19/02/2025                                             | Rev: A       |                                                                                       |