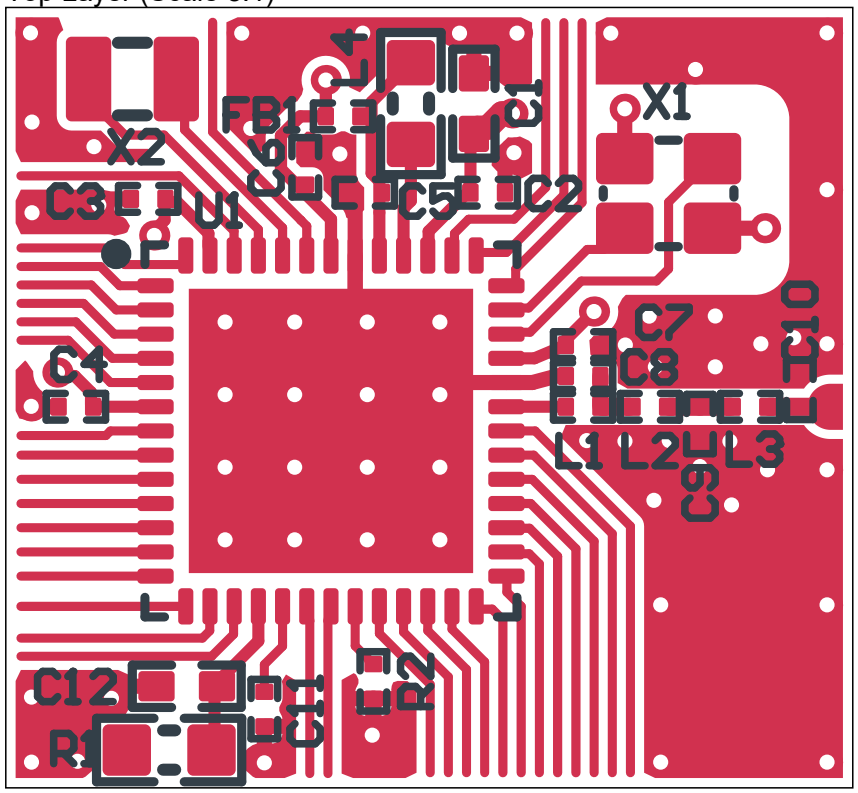
Reference layout revisions earlier than 1.0 can be changed without prior notice.
Always refer to Nordic Semiconductor documentation for the latest information
on recommended reference layout files before starting your design.

Top Layer (Scale 8:1)



NOTE:
- Place matching network components as close to the U1's ANT pin as possible.
- Grounding of C8 capacitor must ONLY be connected to Pin 35 (VSS_PA) in top layer.
- Pin 35 must ONLY be connected to Pin 53 (VSS center pad) underneath the IC package
- Prepreg thickness between Top Layer and Mid-Layer 1 shall be ≤ 100 µm.

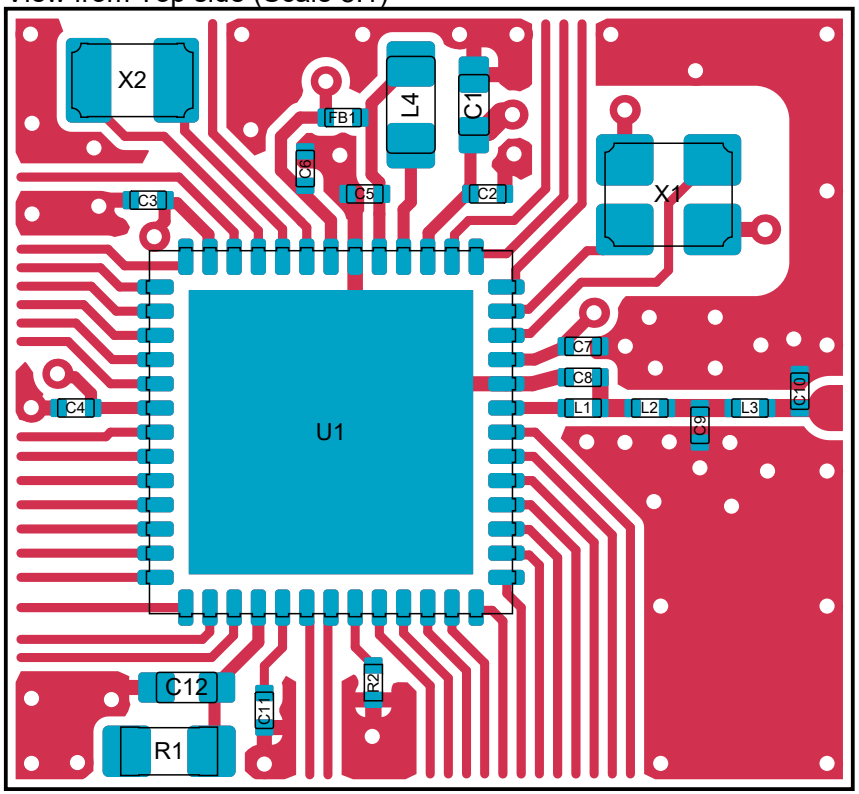
Nordic Semiconductor does not warrant the accuracy or completeness of this documentation or any included information. Nordic Semiconductor makes no assurances that this design will meet specification, be appropriate for your application, or fit for any particular purpose, or that it will function in an implementation. Nordic Semiconductor also does not claim that the design is ready for production. It is your responsibility to thoroughly validate and test your design implementation to confirm the functionality of your application.
© Nordic Semiconductor — All rights reserved.

Title: nRF54LM20B-QGAA Reference Layout, 4 layer PCB

Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0
Date: 2026-11-12			Sheet 1 of 10
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf			
Classification: Public			

NORDIC SEMICONDUCTOR

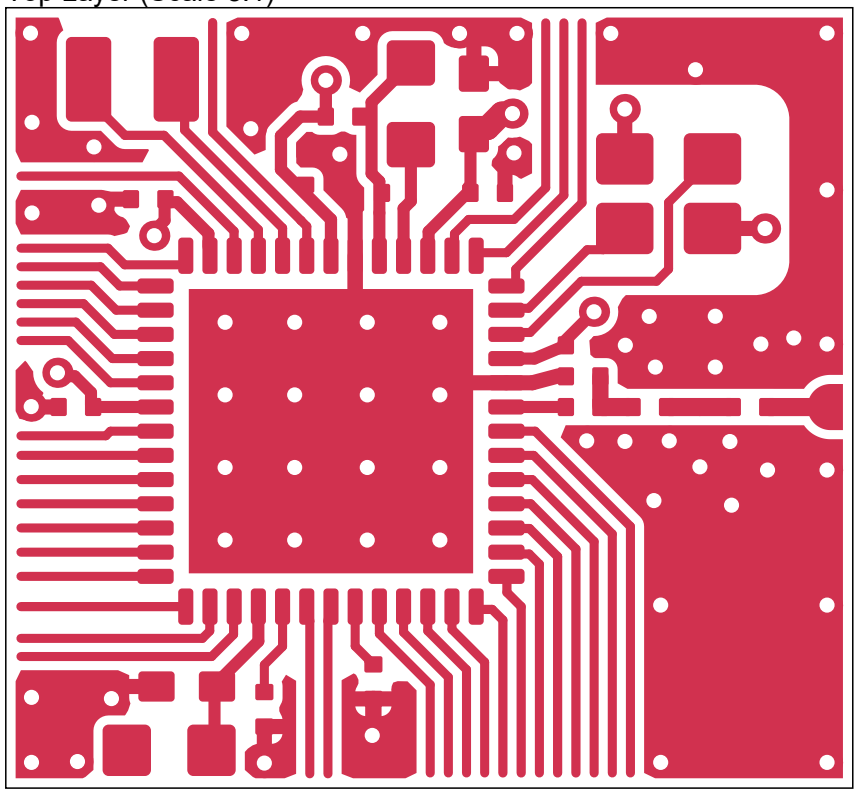
View from Top side (Scale 8:1)



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 2 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

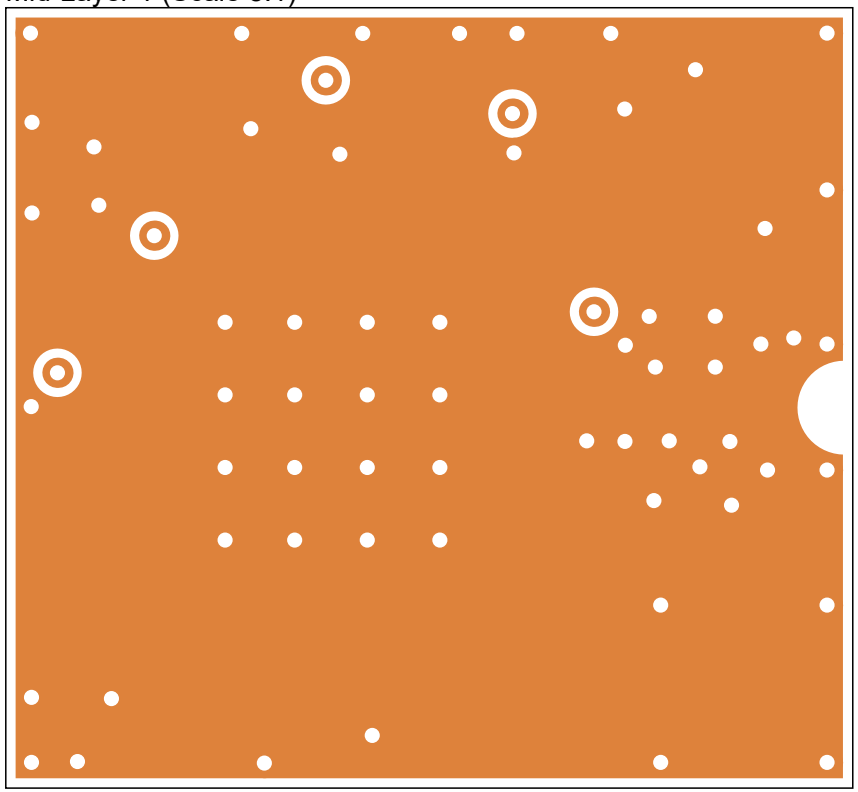
Top Layer (Scale 8:1)



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 3 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

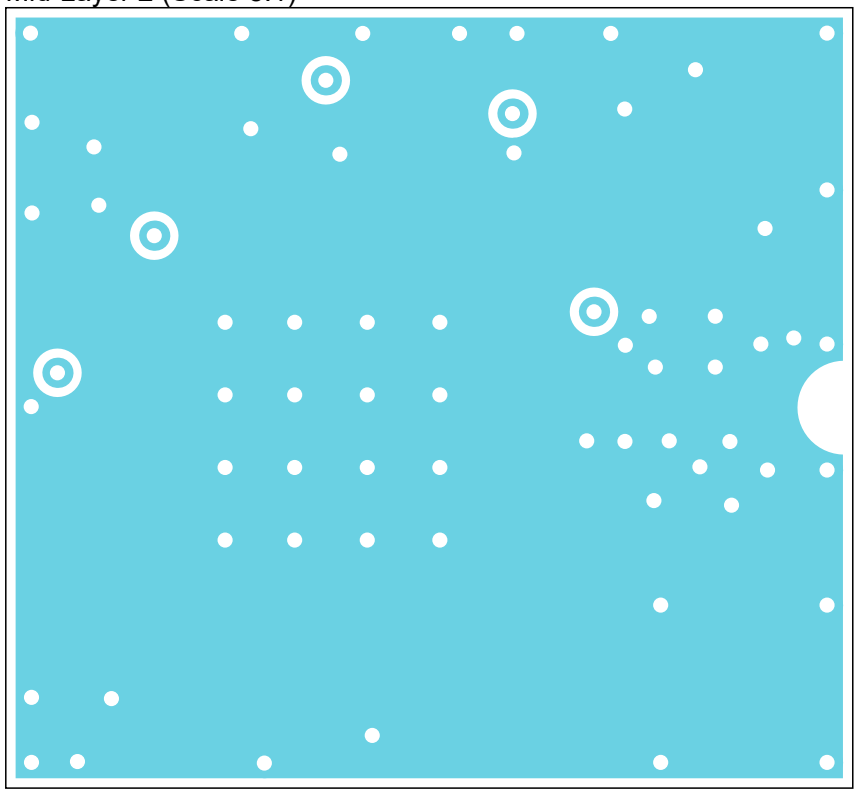
Mid-Layer 1 (Scale 8:1)



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 4 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

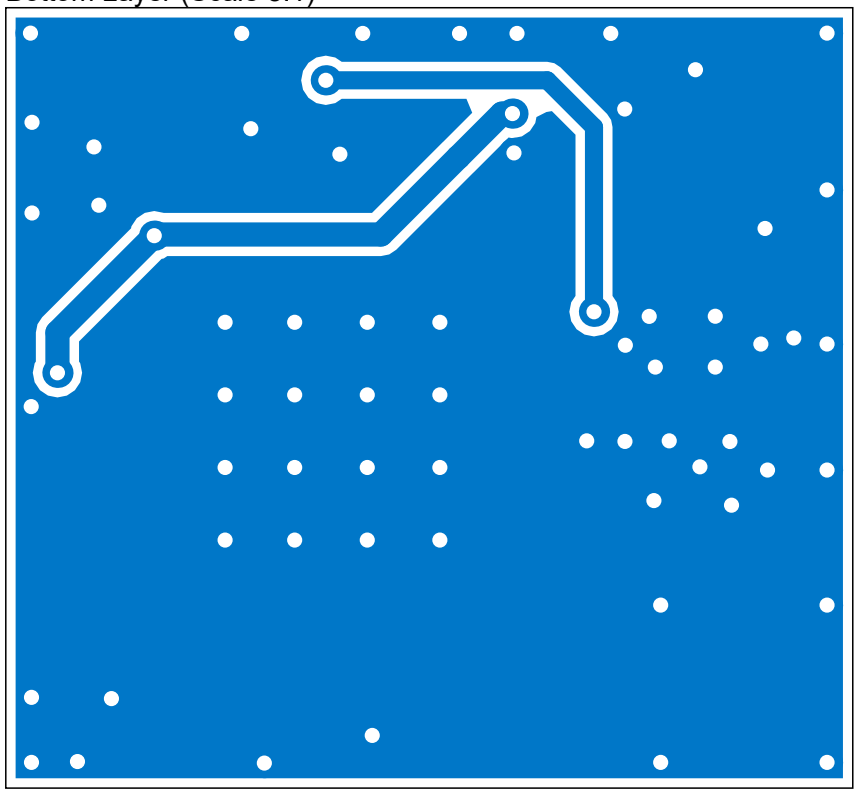
Mid-Layer 2 (Scale 8:1)



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 5 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

Bottom Layer (Scale 8:1)



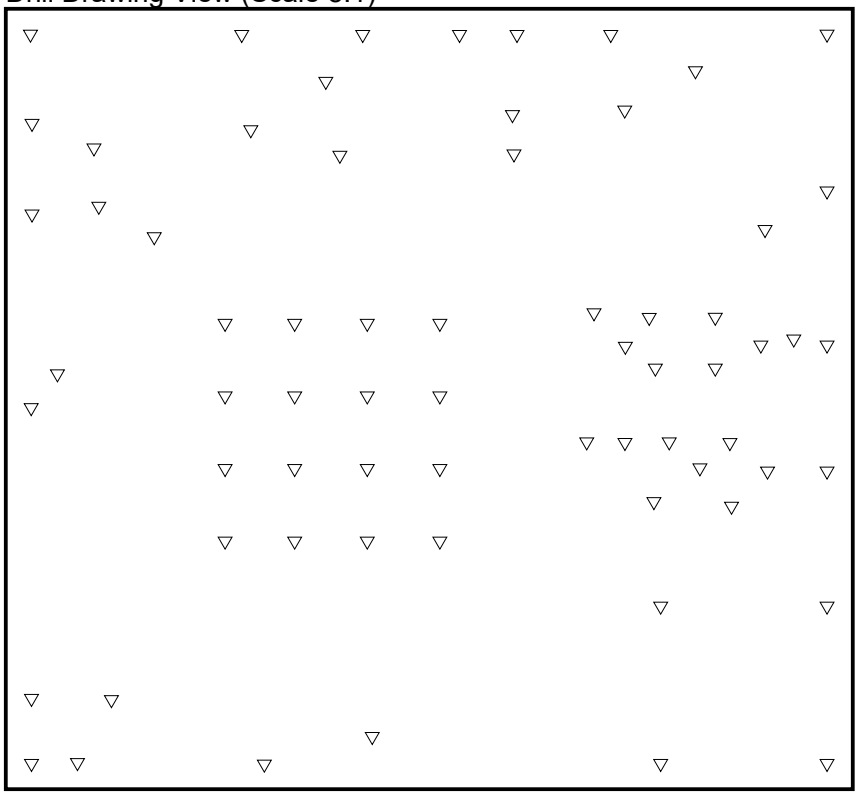
Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 6 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

Drill Table

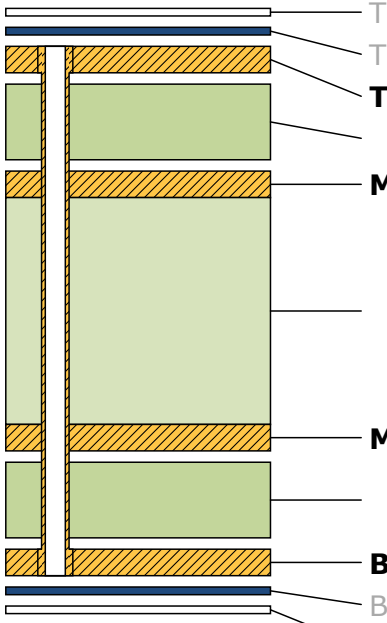
Symbol	Count	Hole Size	Plated	Drill Layer Pair
▽	67	0.25mm	Plated	Top Layer - Bottom Layer
	67 Total			

Drill Drawing View (Scale 8:1)



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 7 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

Layer Stack Legend

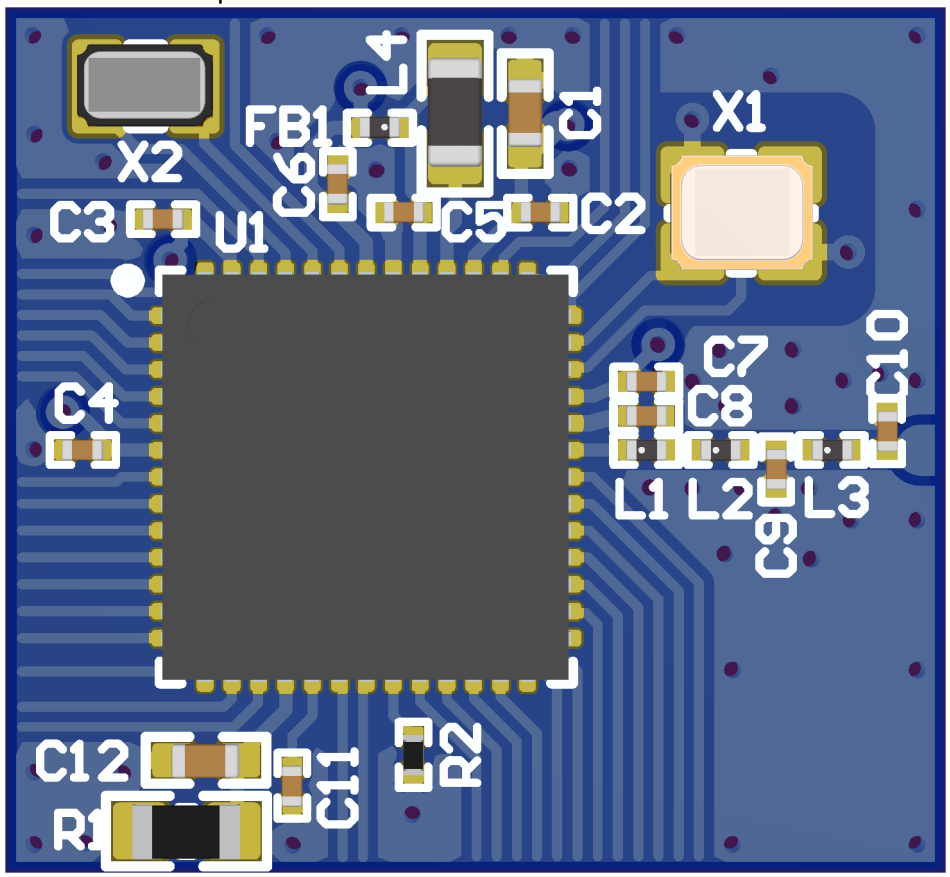


Layer	Thickness	Type	Gerber
Top Overlay		Legend	GTO
Top Solder	0.010mm	Solder Mask	GTS
Top Layer	**0.035mm**	**Signal**	**GTL**
	0.100mm	*Dielectric*	
Mid-Layer 1	**0.035mm**	**Signal**	**G1**
	1.240mm	*Dielectric*	
Mid-Layer 2	**0.035mm**	**Signal**	**G2**
	0.100mm	*Dielectric*	
Bottom Layer	**0.035mm**	**Signal**	**GBL**
Bottom Solder	0.010mm	Solder Mask	GBS
Bottom Overlay		Legend	GBO

Total thickness: 1.600mm

Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB		
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0
Date: 2026-11-12			Sheet 8 of 10
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf			
Classification: Public			

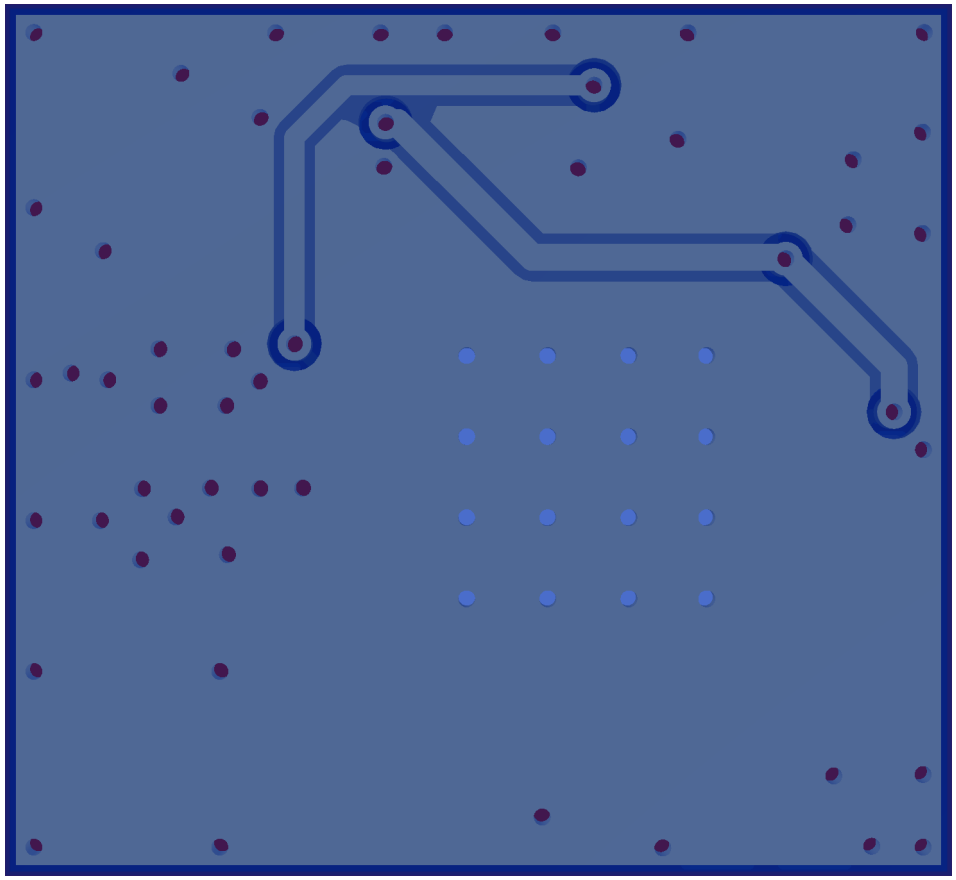
Realistic View Top Side



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 9 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR

Realistic View Bottom Side



Title	nRF54LM20B-QGAA Reference Layout, 4 layer PCB			
Size: A4	Config. No.: 1	Device: nRF54LM20B-QGAA	Revision: 1.0	
Date: 2026-11-12			Sheet 10 of 10	
File: nRF54LM20B-QGAA_Reference_Layout_4L_config1.PCBDwf				
Classification: Public				

NORDIC SEMICONDUCTOR