

REV	Description	Date

Specifications:

All units are in mils unless otherwise specified.

1. Materials

Beginning foil thickness 1/2oz min. but shall meet the minimum requirements below:

Layer 1 - Top Layer, 1 oz copper, 1.4

Dielectric - Rogers 4003, 16 +/- 0.6

Layer 2 - Ground Plane, 1 oz copper, 1.4

Dielectric - Fr4, (adjust this layer to meet thickness target)

Layer 3 - Ground Plane, 1 oz copper, 1.4

Dielectric - Rogers 4003, 16 +/- 0.6

Layer 4 - Bottom Layer, 1 oz copper, 1.4

Total Board Thickness = 62 +/- 5 including top and bottom soldermask.

2. Hole Plating

Copper plate 1.0/1.5 thick in Thru Hole Vias (Approx. 1.5 on surface).

3. Finish

ENIG

Thickness 3-8 micro inches.

Solder Mask

Liquid Photo Imagable (LPI) Solder Mask Over Bare Copper (SMOBC) on Both Sides of PCB.

Color: Red or Approved Equal.

Silkscreen: White Non-Conductive Epoxy Ink.

Supplier ID and Date Code shall be noted on bottom silkscreen.

4. Tolerances

Overall board dimension tolerance +/- 010.

Hole Diameter >= 100 +/- 5.

Hole Diameter < 100 +/- 3.

Layer to layer registration should be +/- 3.

All holes shall be located within hole to pad tangency.

5. Traces

Conductors indicated as Note A shall be 30 +/- 1 wide and have a coplanar ground spacing of 20 +/- 1 Manufacturer shall test for lines indicated to be 50 Ohm +/- 5% and may adjust the width as needed.

Minimum conductor width is 6 +/- 1.

Minimum conductor to conductor spacing is 6.

TDR coupon required to be delivered with boards.

The controlled impedance on layer 1 shall be 50 Ohms +/- 5%.

6. RF Connections

Areas indicated as Note B shall have metal extending to the board edge and exposed when viewed from the side.

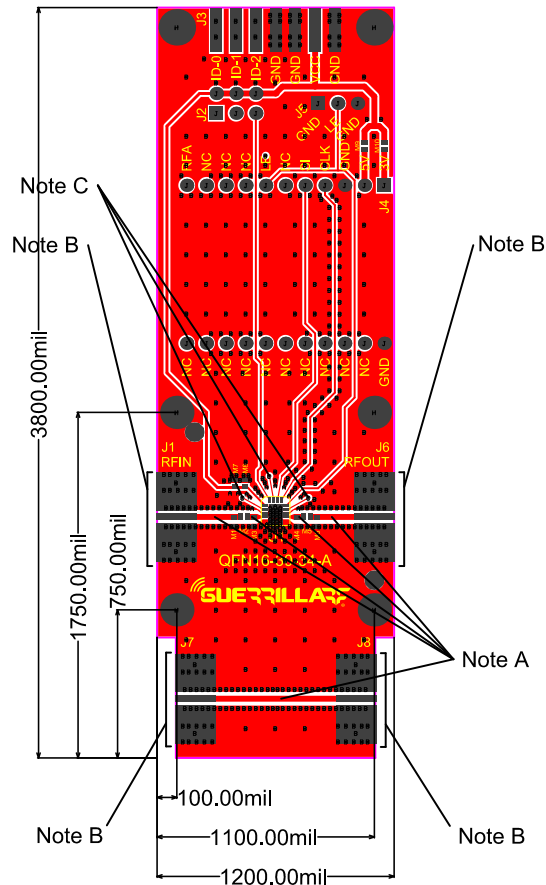
This note will apply to all layers in the indicated area.

Metal in these areas may be extended to facilitate routing to the board edge.

Burrs and potential shorts will be accepted.

7. Back Drilled Vias

Vias indicated as Note C will require Back Drilling



Top Overlay (Silk Screen)

Top Solder (Mask)

Top Layer (Metal)

Drill Drawing

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair
A	41	8.00mil (0.203mm)	PTH	Round	Top Layer - Bottom Layer
B	531	10.00mil (0.254mm)	PTH	Round	Top Layer - Bottom Layer
C	3	10.01mil (0.254mm)	PTH	Round	Top Layer - Bottom Layer
J	31	45.00mil (1.143mm)	PTH	Round	Top Layer - Bottom Layer
H	6	125.00mil (3.175mm)	PTH	Round	Top Layer - Bottom Layer
	612 Total				

Guerrilla RF				
Dimensions are in inches unless otherwise specified.	SIZE	DOCUMENT NO. QFN16-30-34-A	REV A	
Drawn By: R. Williamson	SCALE NONE	Date: 1/10/2022	Sheet 1 of 1	