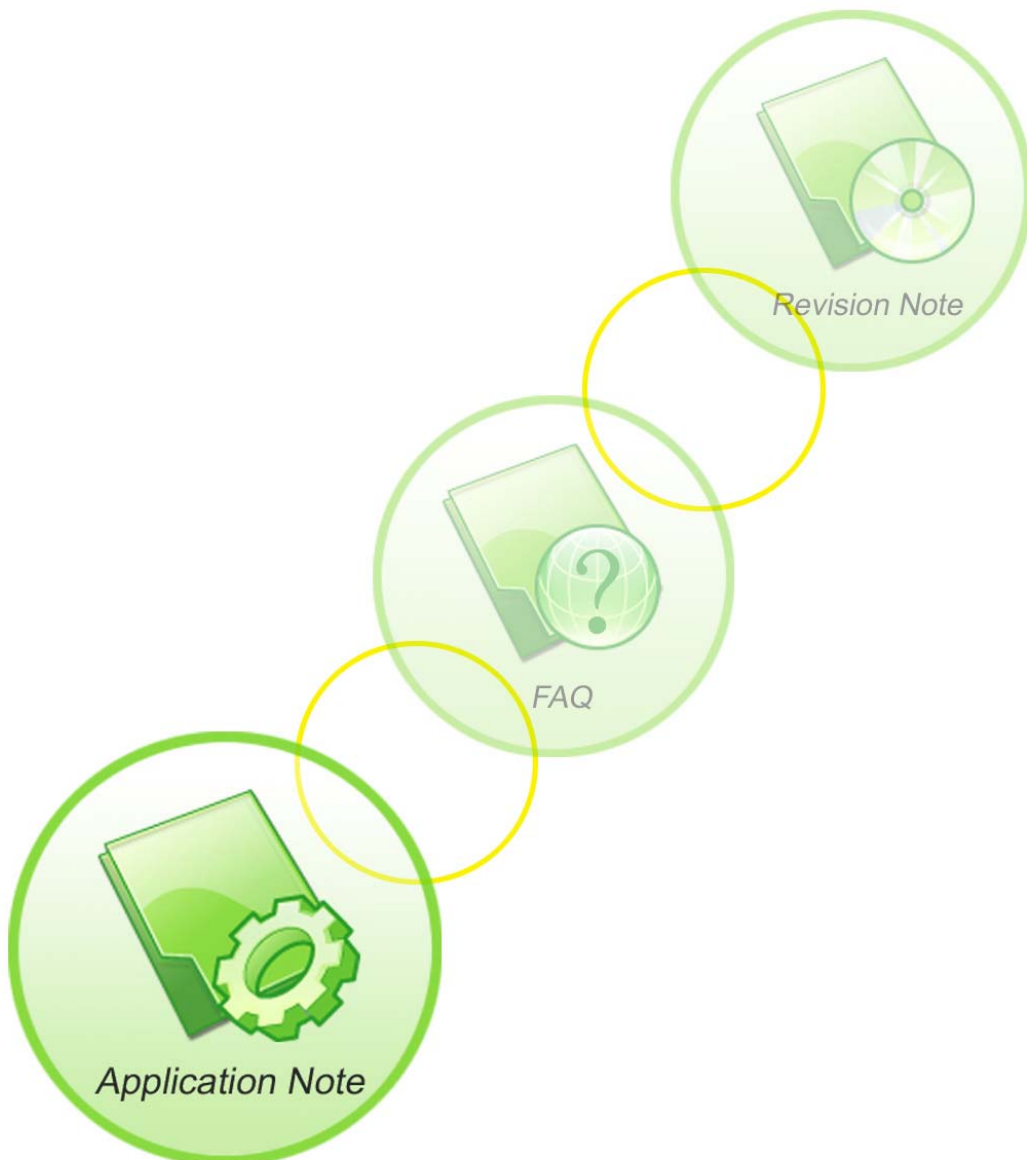




SIM900D-TE_PCB Layout & Schematic for Reference_Application Note_V1.00



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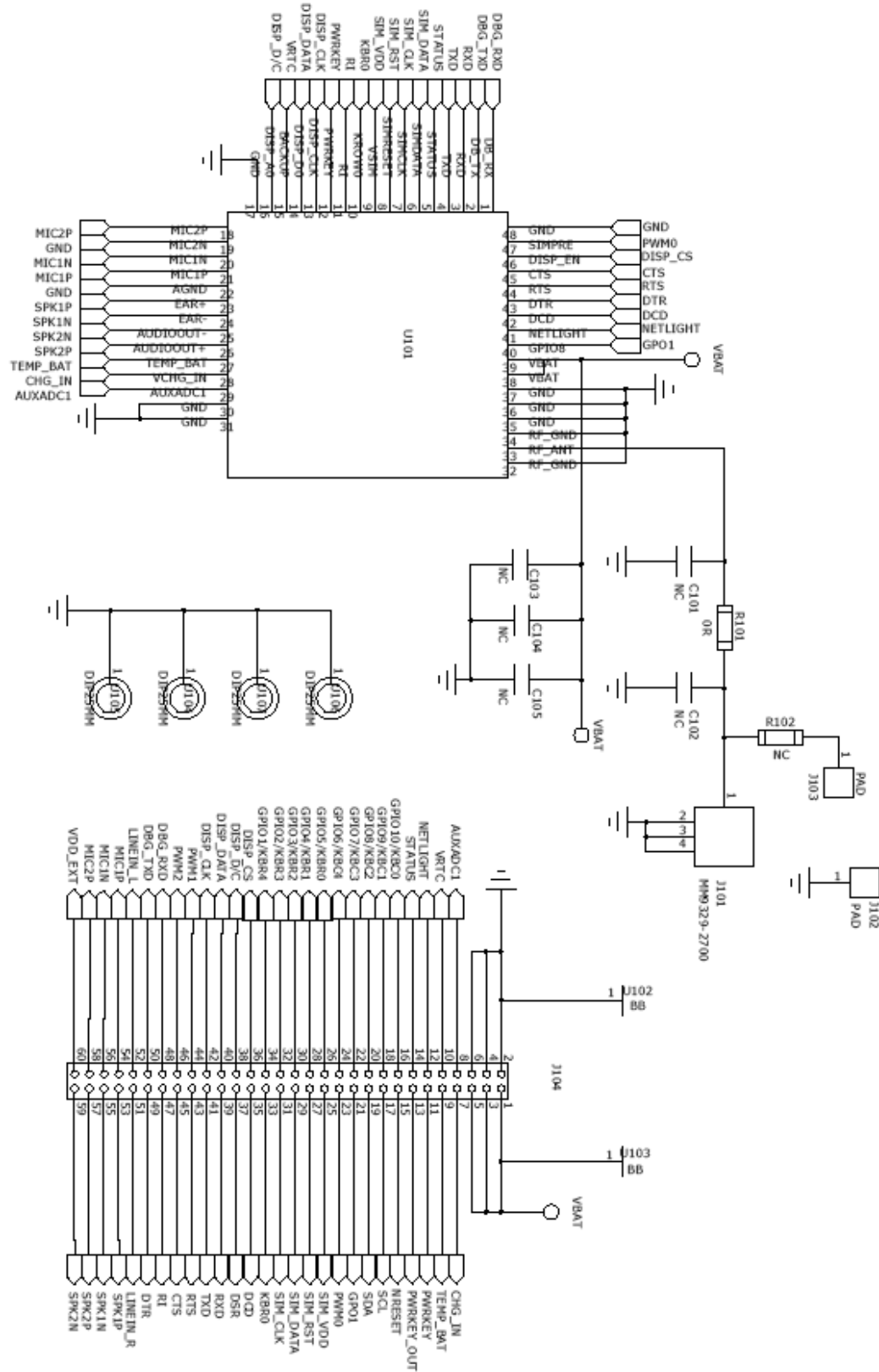
Version History

Data	Version	Description of change	Author
2010-8-27	V1.00	Origin	liya Wang Guoqiang

1 Introduction

This document shows the detailed information about SIM900D-TE PCB Layout and Schematic. It is only an illustration for customer. Users should modify the PCB layout based on different cases.

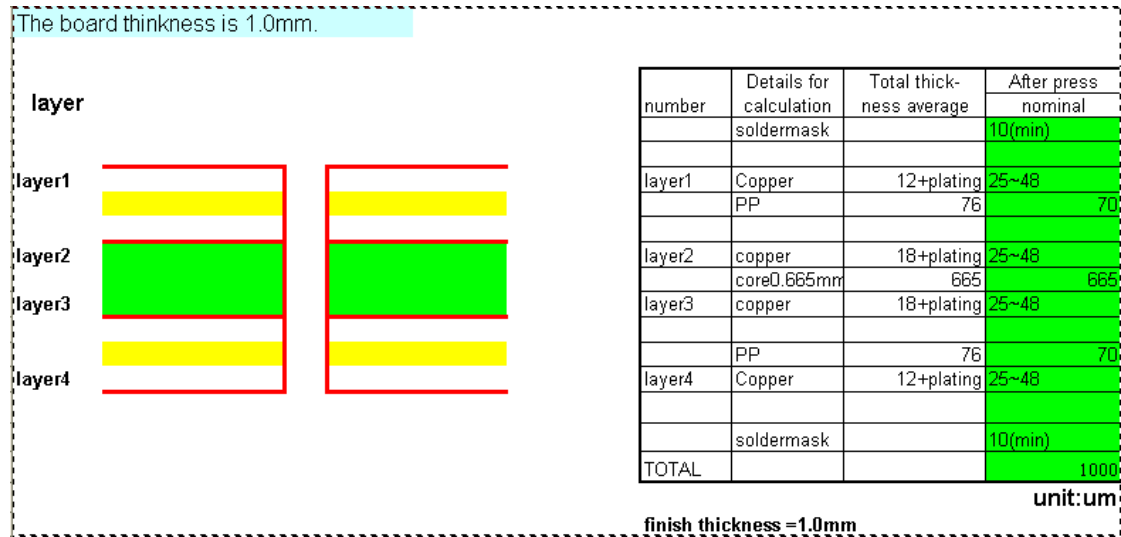
2 Schematic



Note: In this schematic, the resistor R102 is an option for choosing either a GSC type coaxial RF cable (MXTK series, vended by Murata) or a soldered coaxial RF cable. The R102 is mounted with a 0ohm resistor, a soldered coaxial RF cable can be chosen for antenna connection, and if the R102 is not mounted, the antenna should be connected via a GSC type coaxial RF cable.

3 PCB Layout

3.1 The SIM900D-TE PCB’s stack up



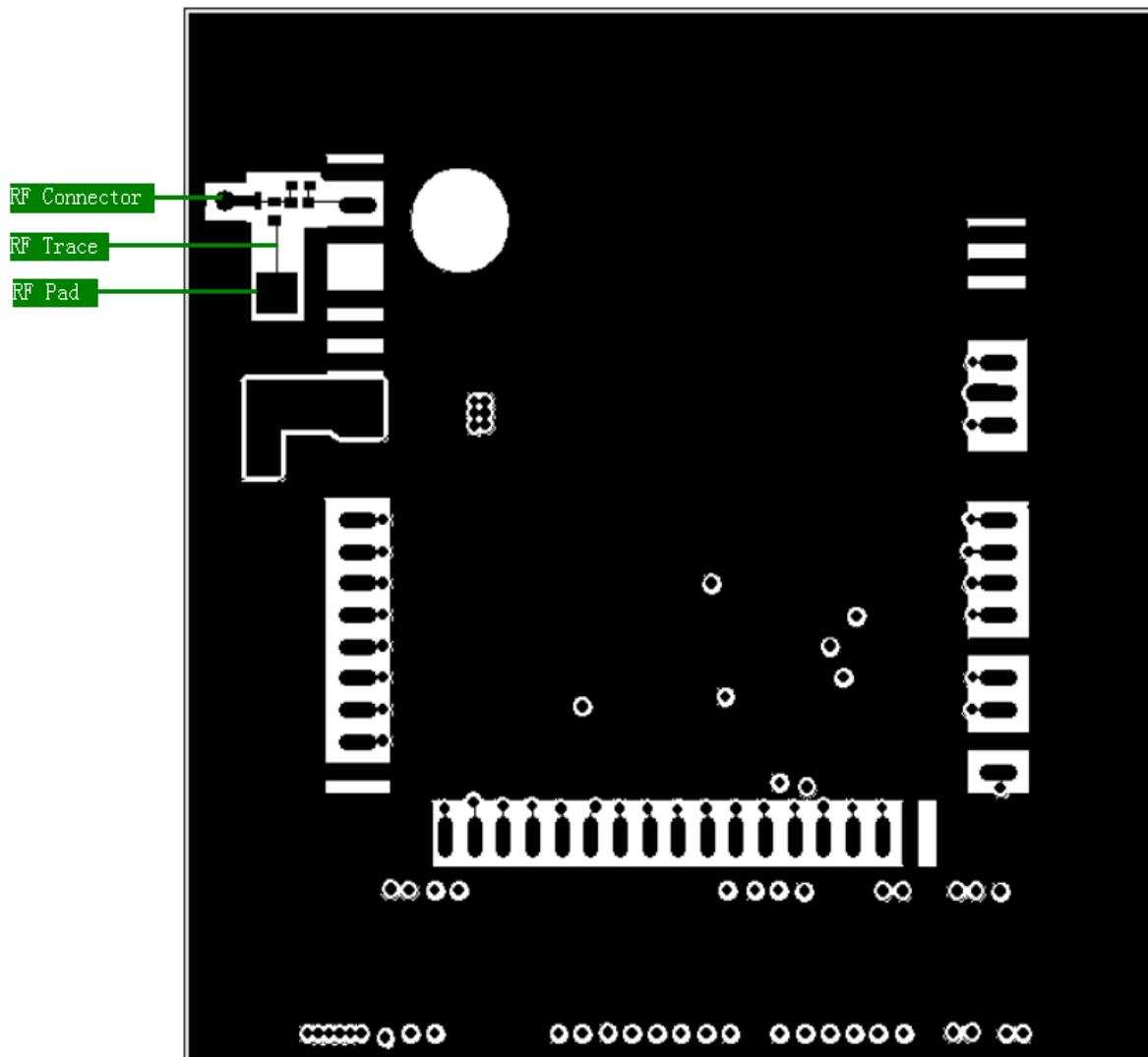
The SIM900D-TE is a four layer PCB, the PCB’s total thickness is 1.0mm, the clearance between the first layer and the second layer is 0.076mm, the clearance between the second layer and the third layer is 0.665mm.

The RF trace is routed on the top layer, and the second layer is the reference ground layer, For the Thickness between the top layer and the second layer is only 0.076mm, so the width of the RF trace on the top layer is 0.11mm.

3.2 The SIM900D-TE’s PCB layout

The following pictures are the detailed PCB layout of SIM900D-TE.

Top Layer



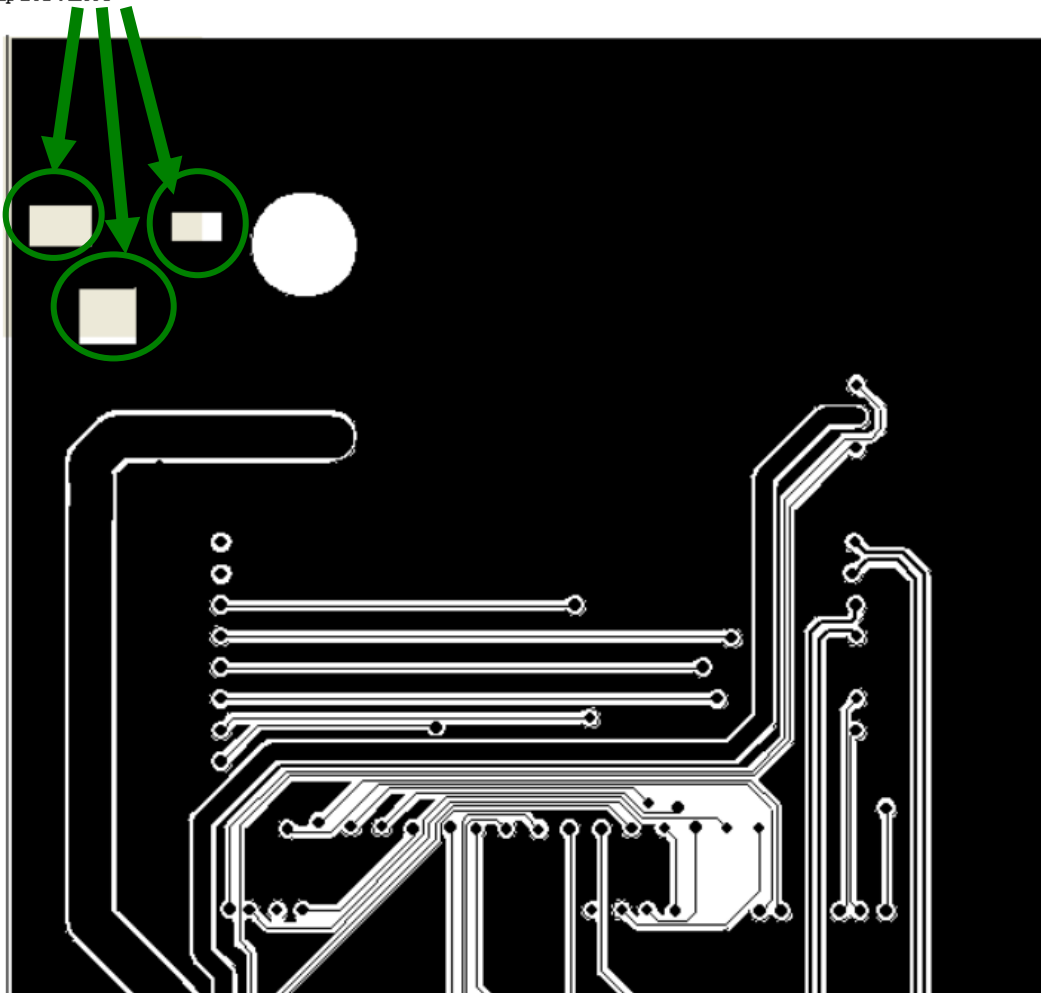
1 the RF traces are 50ohm impedance controlled.

RF connector is matched the GSC coaxial cable assembly, the RF cable should be 50ohm impedance controlled coaxial cable.

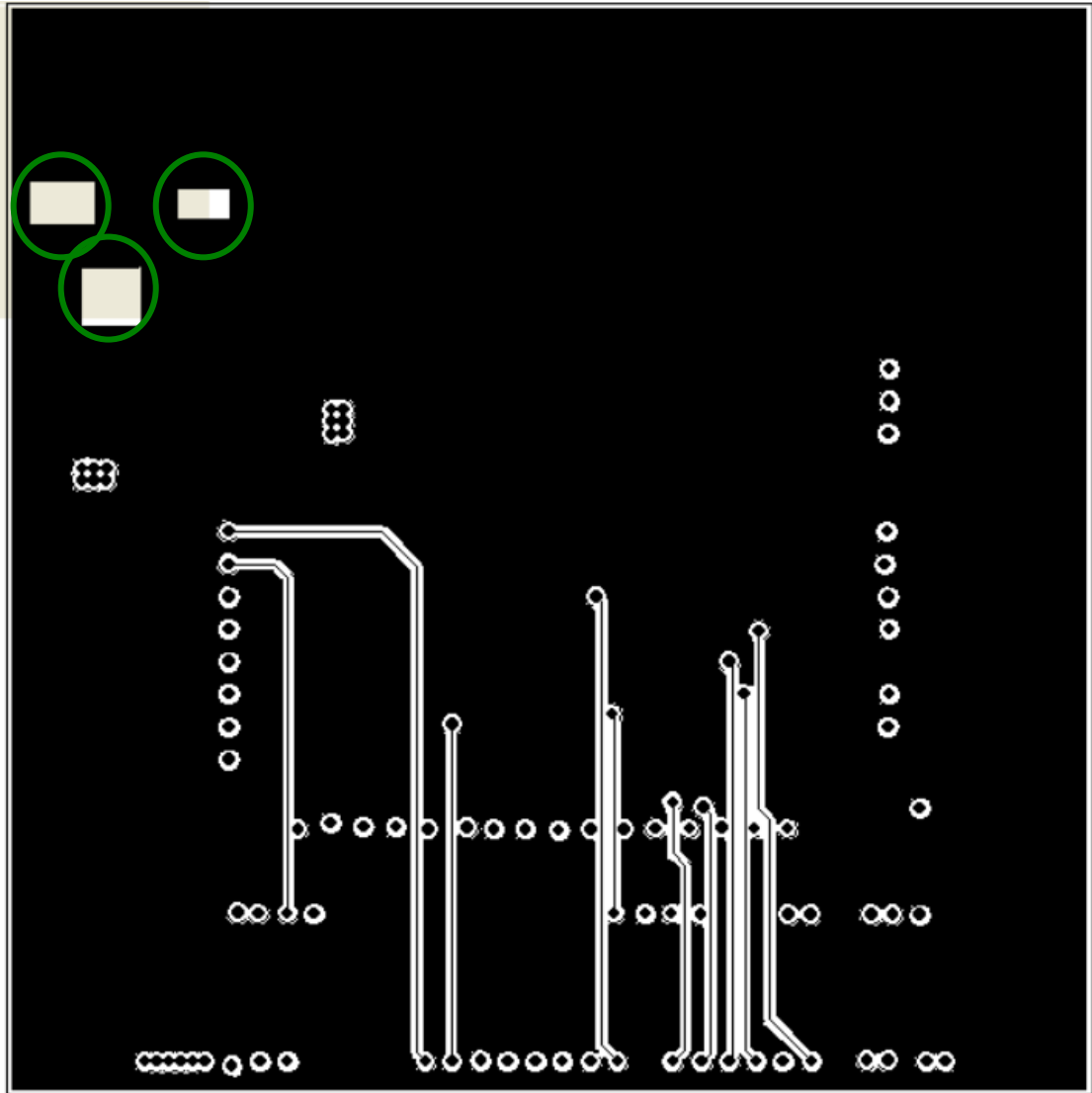
RF PAD is used for connect with solderable RF coaxial cable assembly, the RF cable is also should be 50ohm impedance controlled.

Layer 2

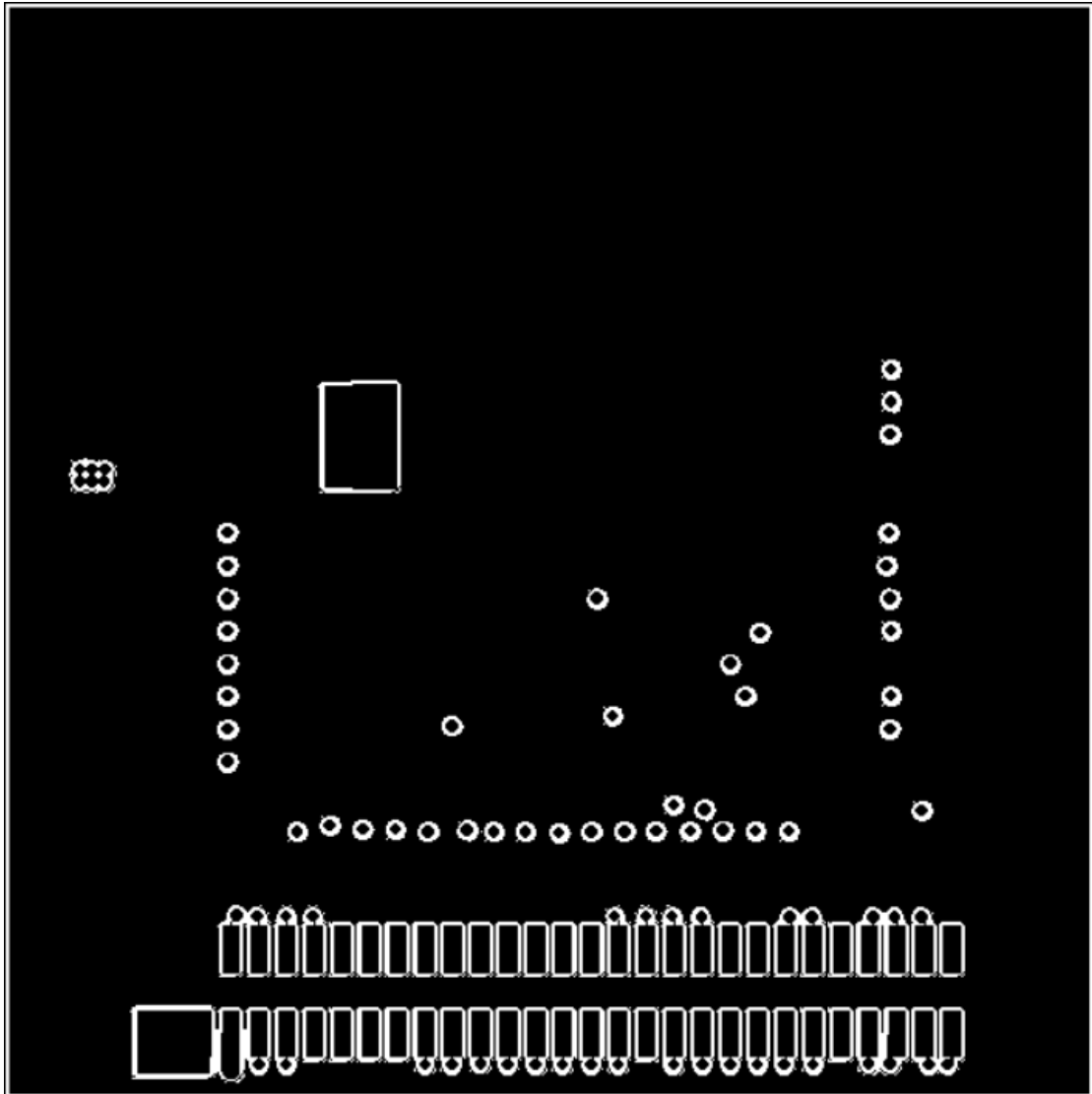
Copper in these area
should be keep out to
reduce the parasitic
capacitance



Layer 3

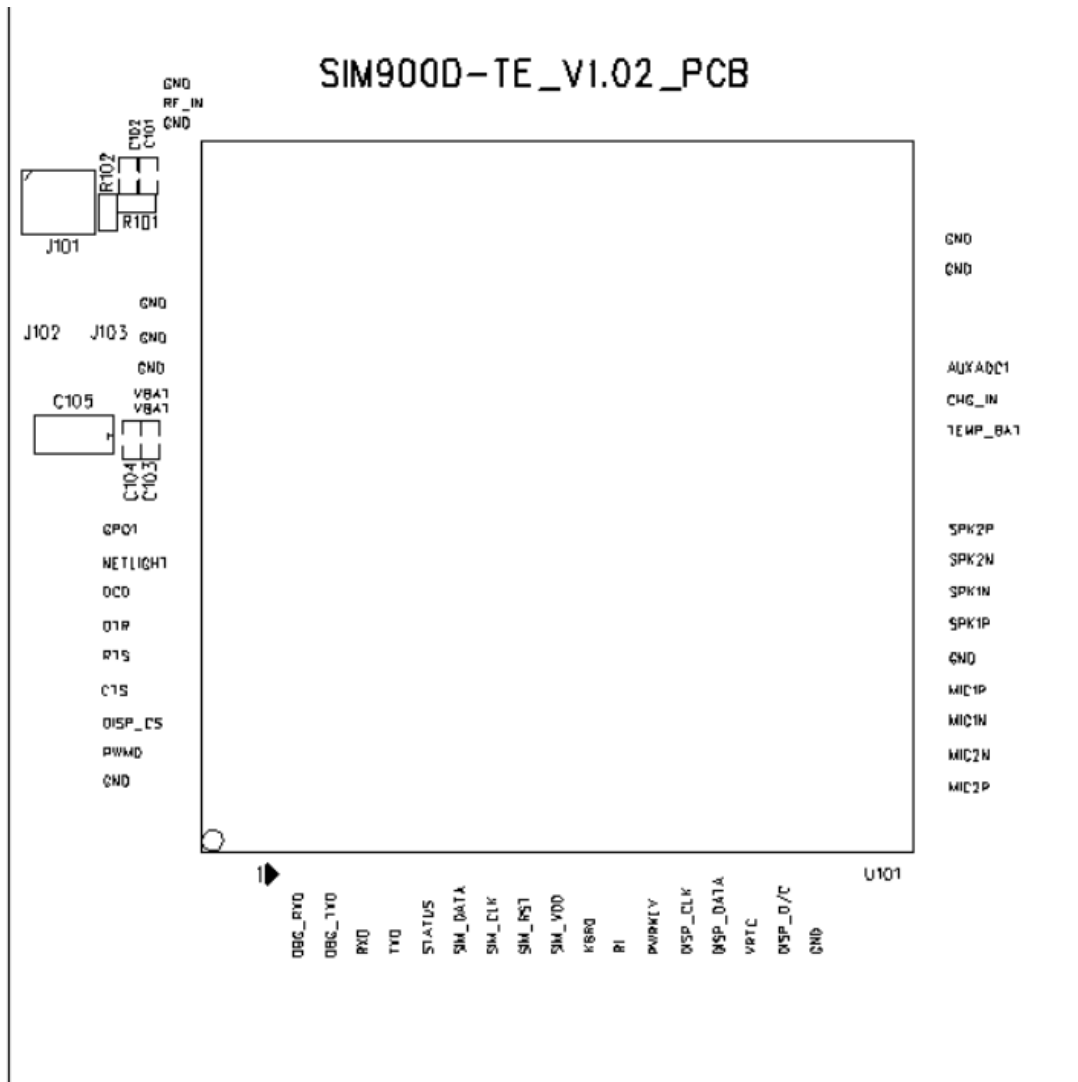


Bottom layer

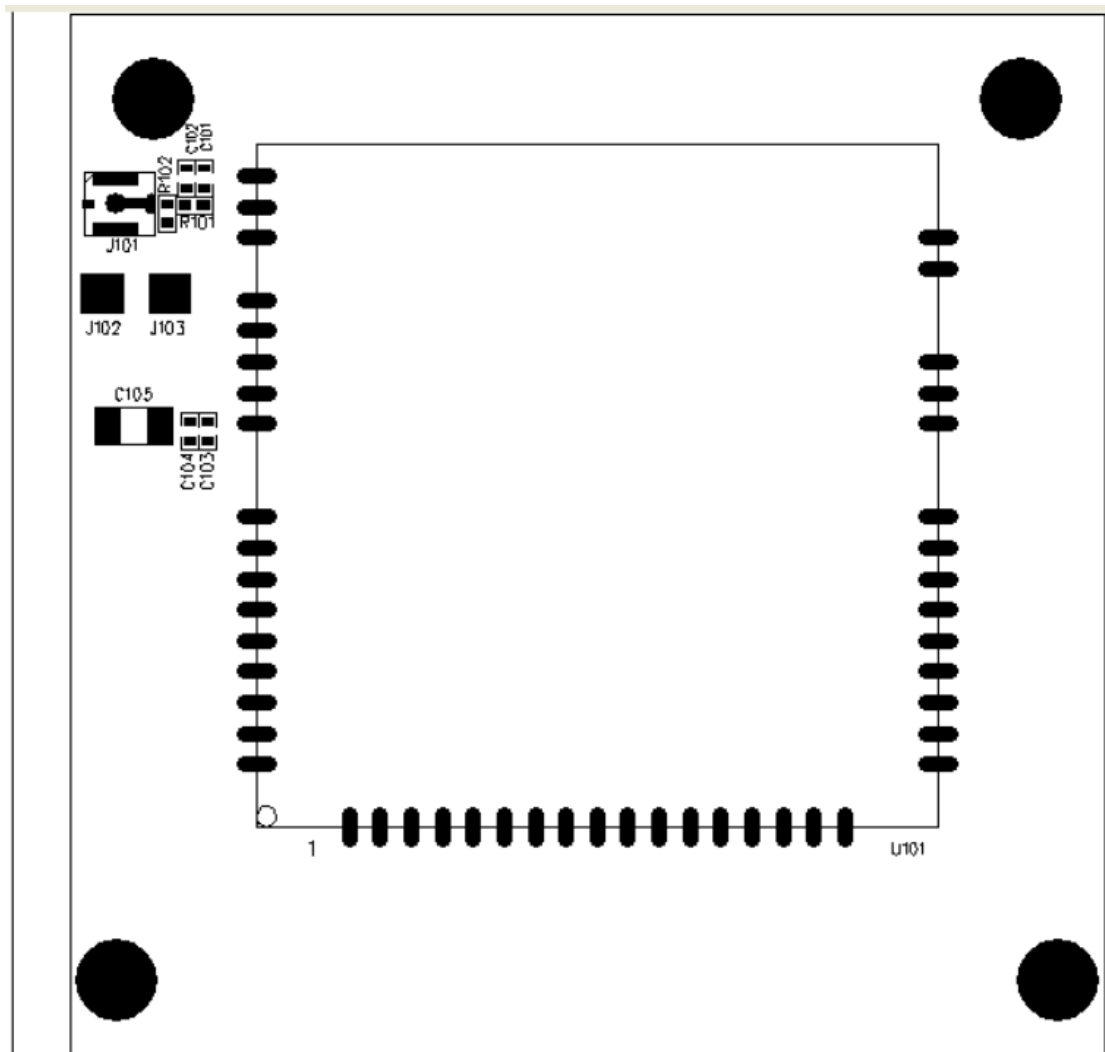


SIM900D-TE PCB Layout for Reference

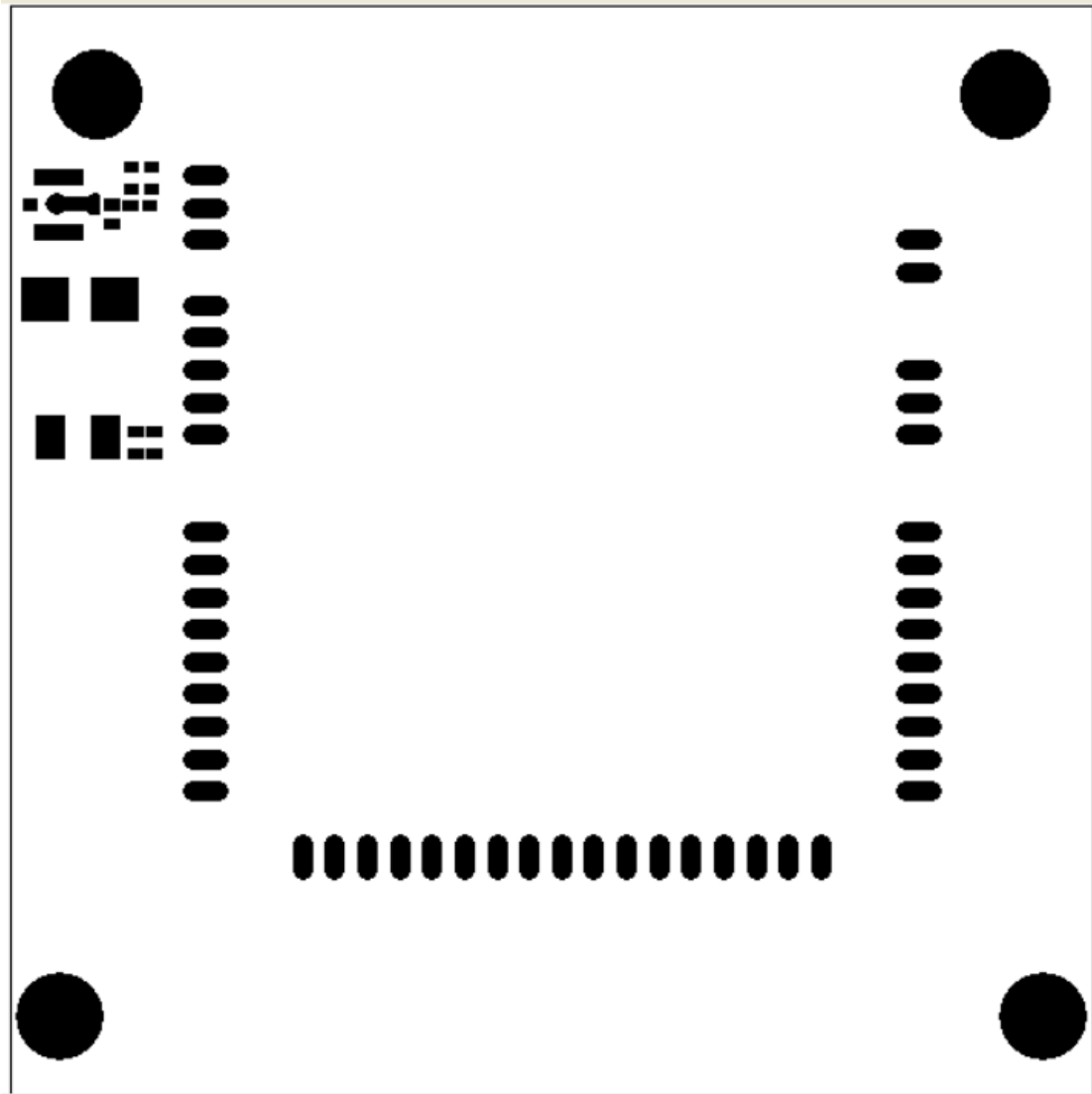
Silkscreen Top



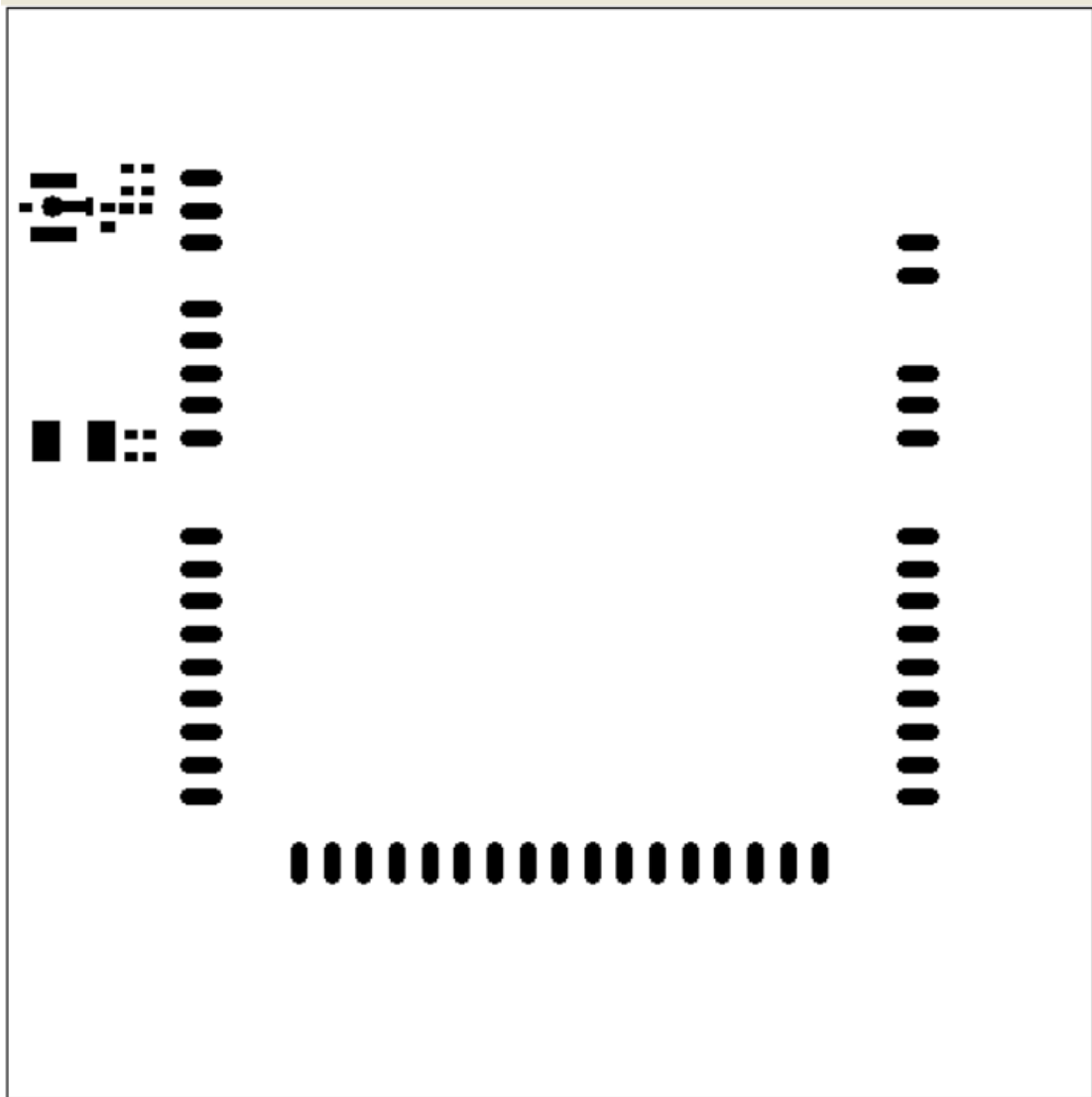
Reference designator Top



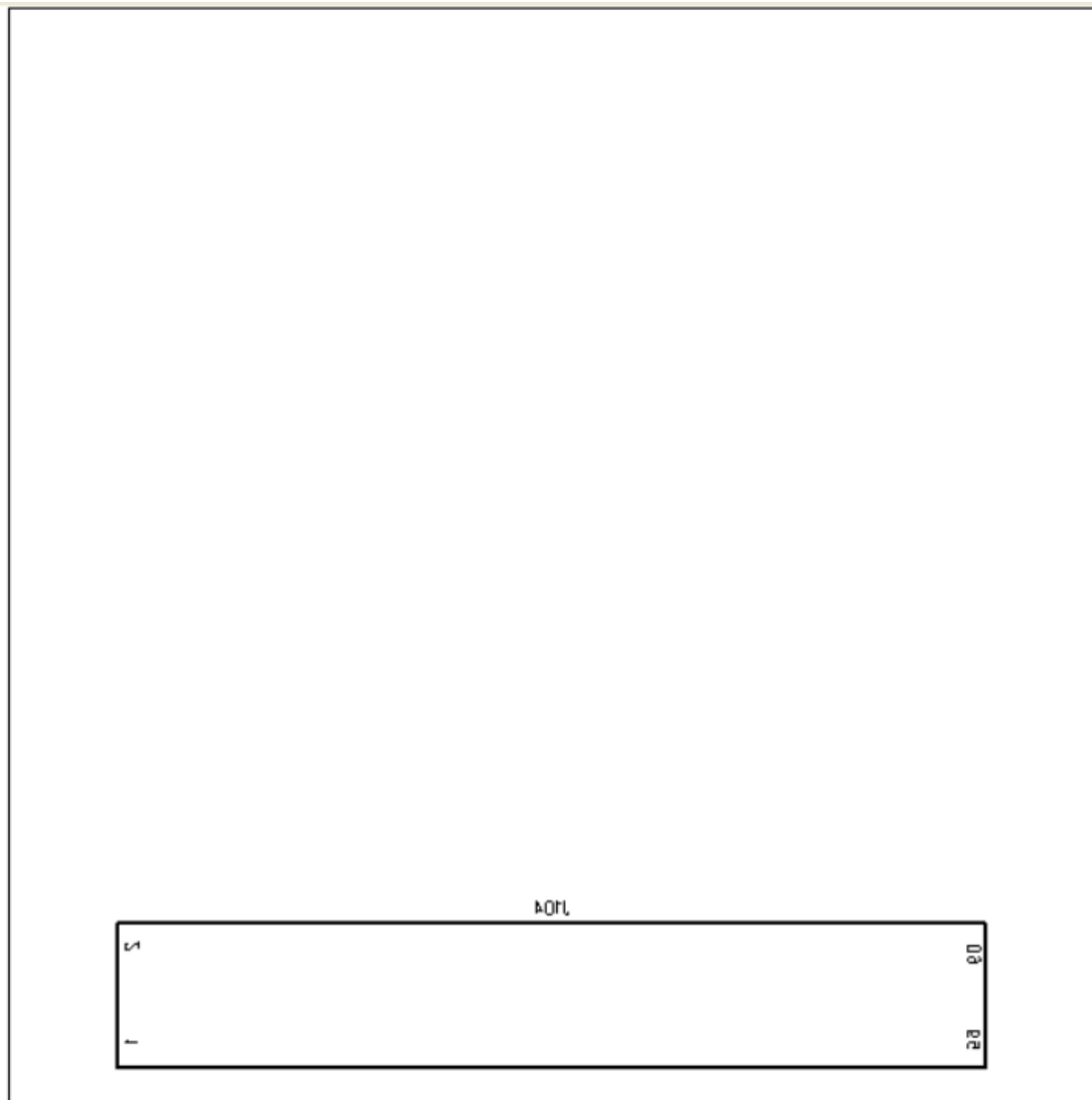
Solder mask Top



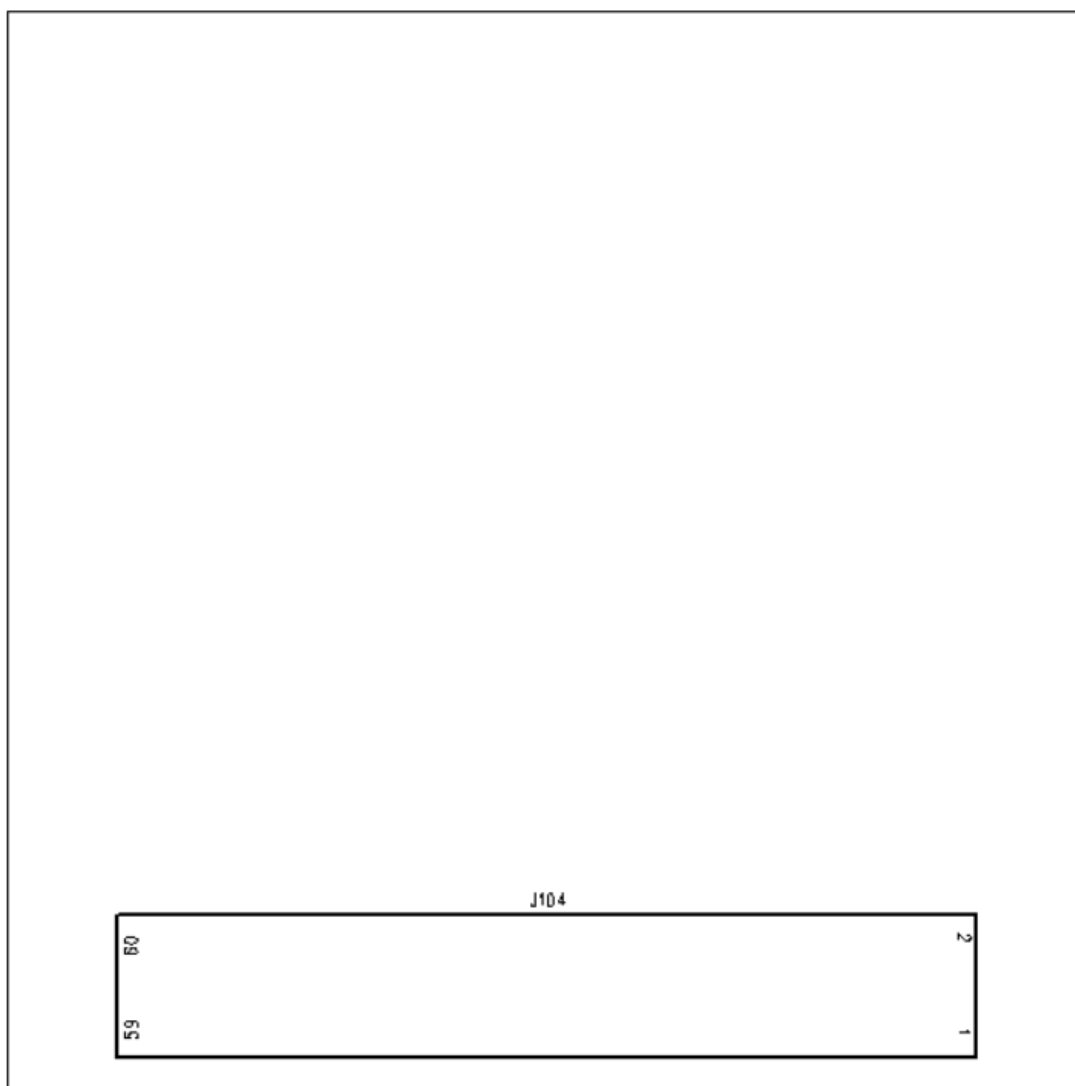
Paste mask Top



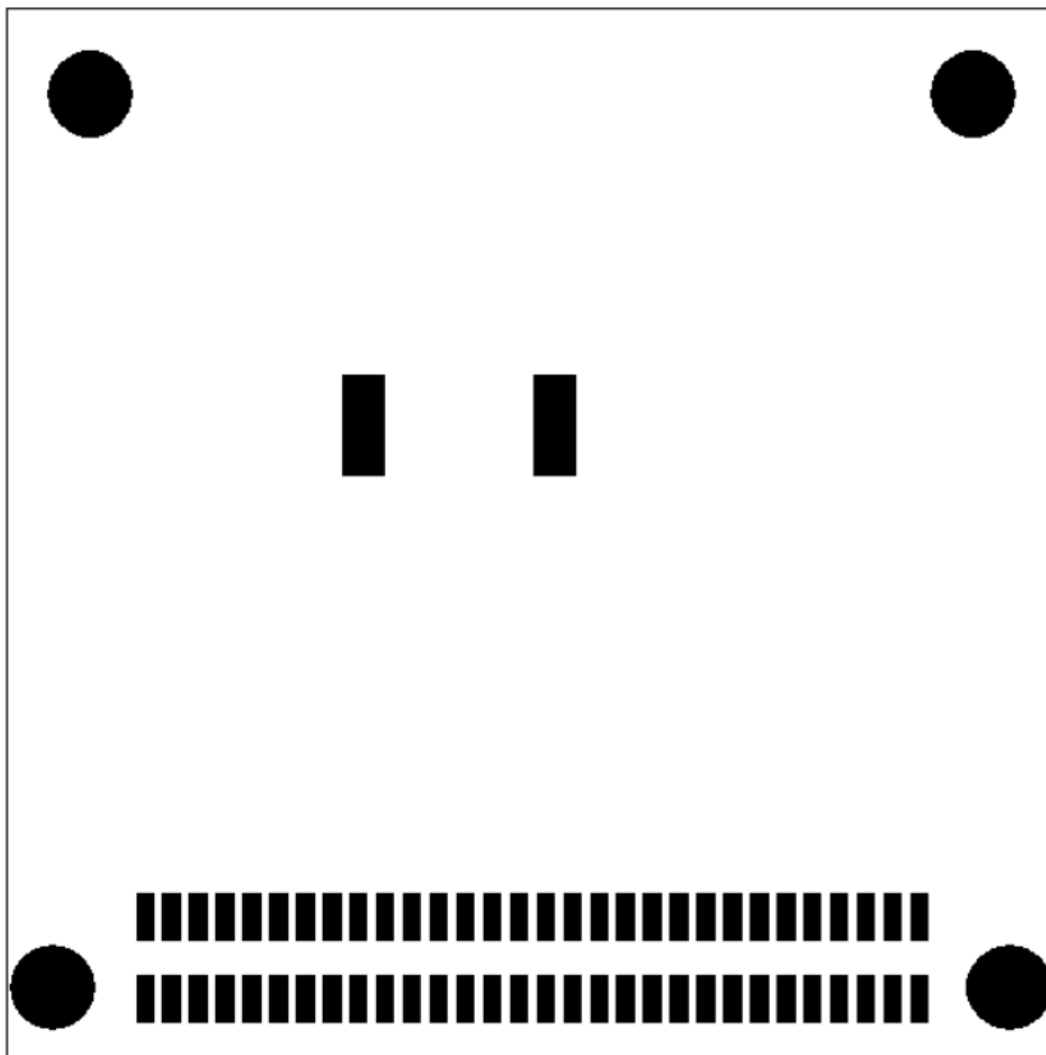
Silkscreen Bottom



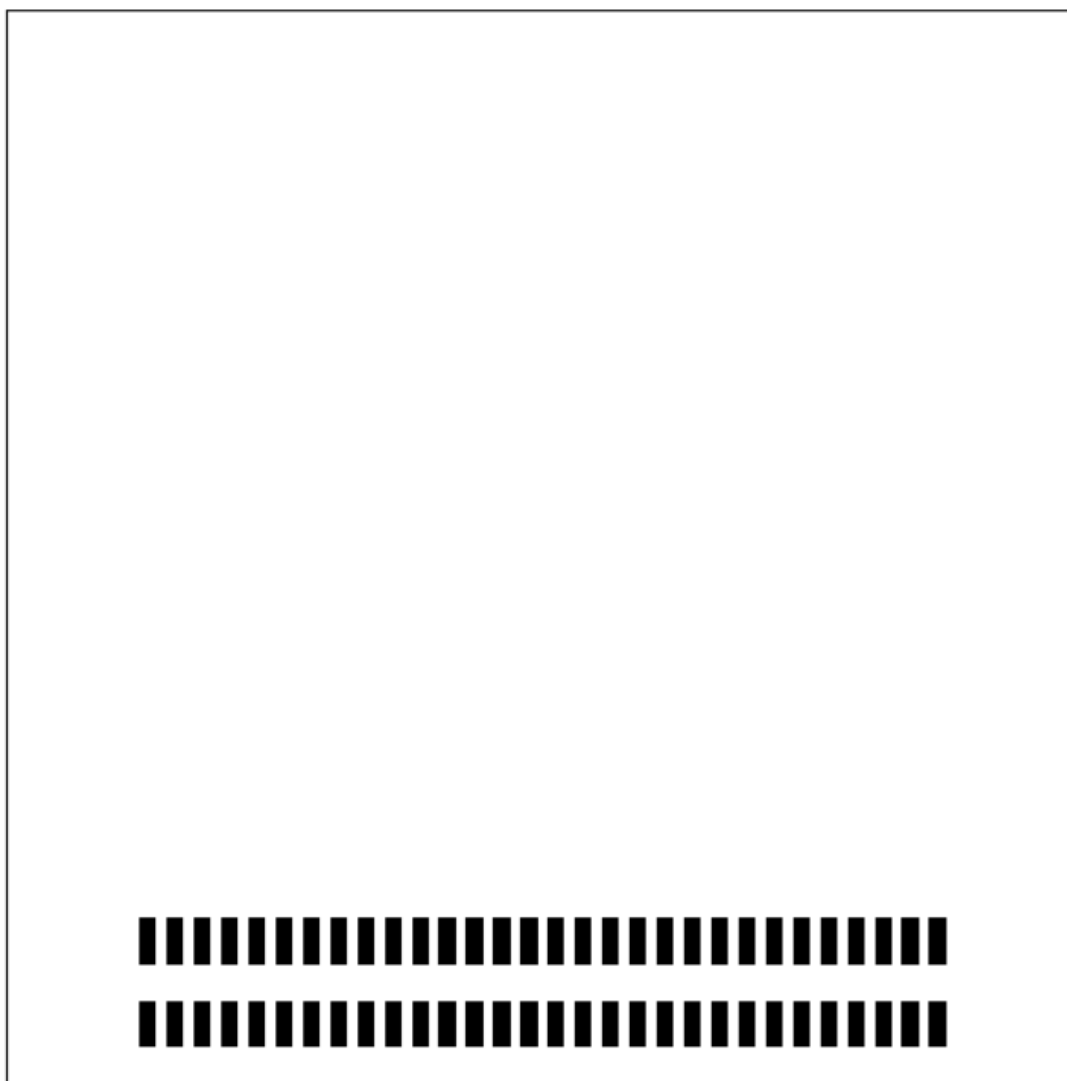
Reference designator Bottom



Solder mask Bottom



Paste mask Bottom



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