

RRFB REN BISTEN BISTM RAOFF SLEW
SERDESUR-43USB DS90UR124 RX
ASSY DS90UR124 RX USB DEMO REV
S/N



C3



C4



C5



C6

- C7
- C8
- C9
- C10
- C11
- C12
- C13
- C14
- C15
- C16
- C17
- C18
- C19
- C20
- C21
- C22
- C23
- C24
- C25
- C26
- C27
- C28
- C29
- C30
- C31

VSS VDD



R5

R6

R7

R8



R12



R9



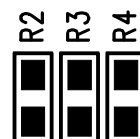
C34



C32



C33



R2

R3

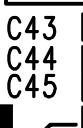
R4



R10



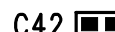
R11



C43

C44

C45



C42



C46

C50



C36



C37

C48



C38

C39



C40



C41



R14



C57



R15



R16

R17

R18

R19

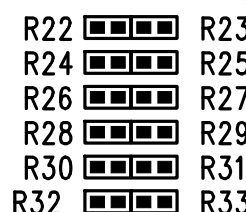
R20



C54

C55

C56



R22

R24

R26

R28

R30

R32

R23

R25

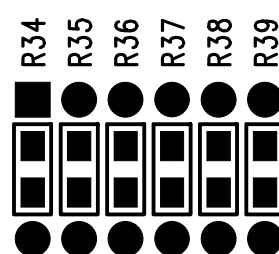
R27

R29

R31

R33

VSS VDD



R34

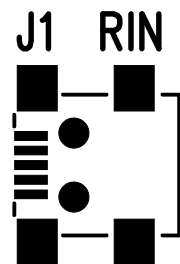
R35

R36

R37

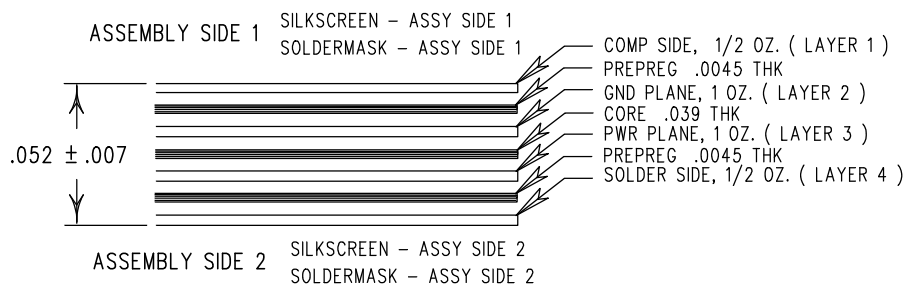
R38

R39

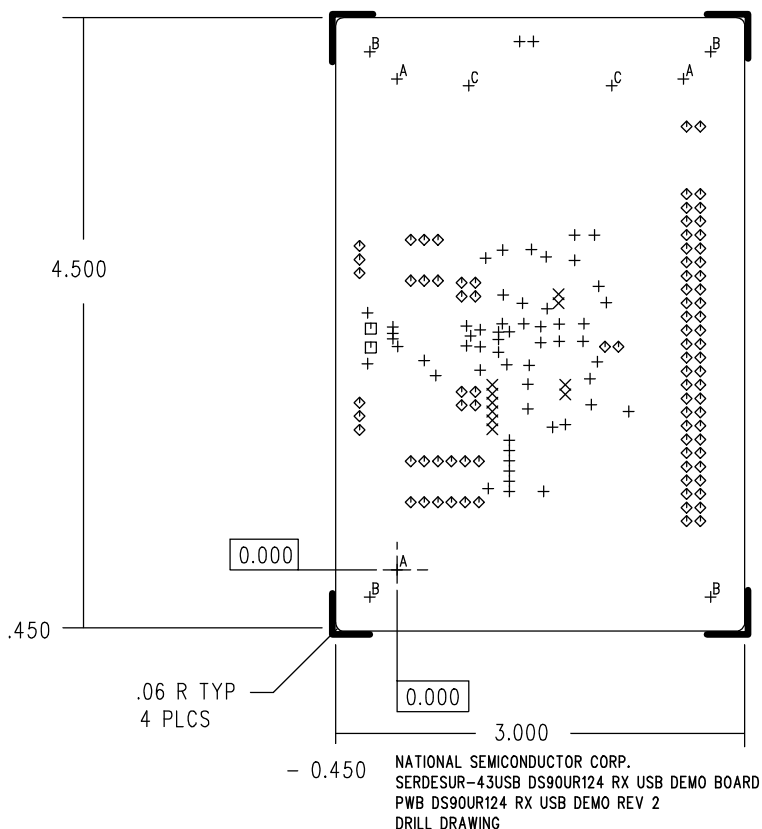


J1

RIN

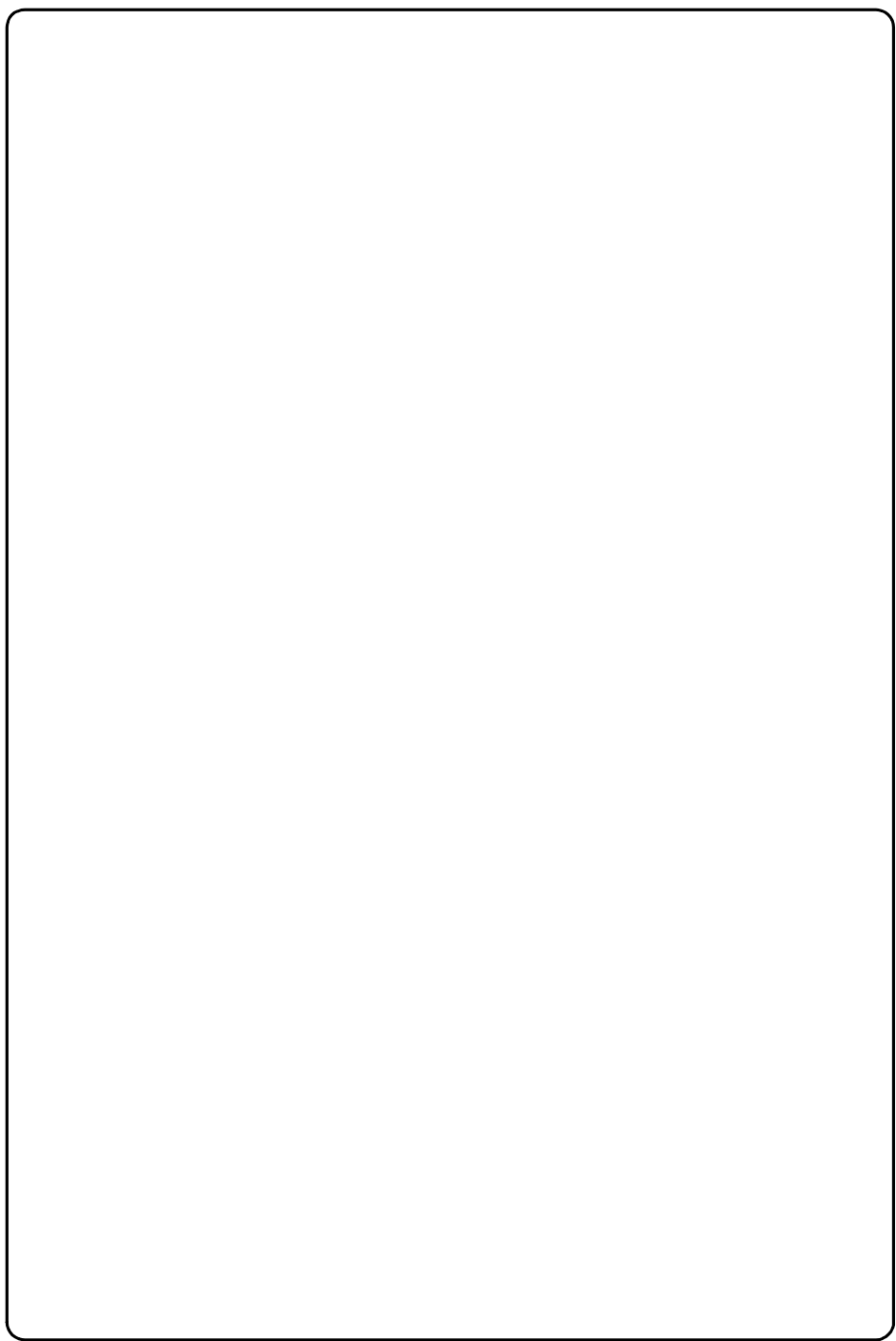


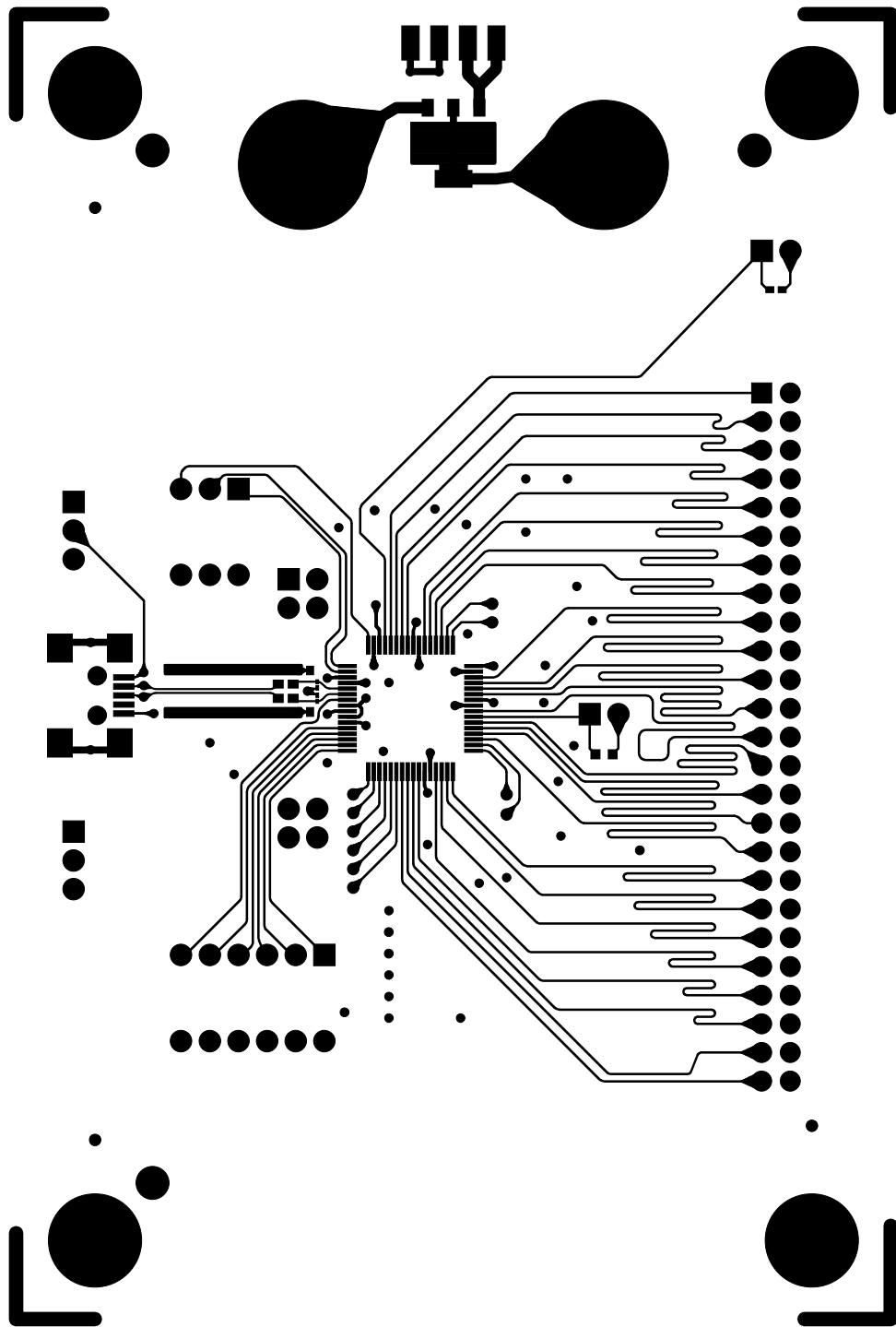
HOLE CHART				
CODE	SIZE	QTY	PLATED	TOL
+	0.011	58	YES	± .003
×	0.016	10	YES	± .003
□	0.035	2	YES	± .003
◇	0.043	86	YES	± .003
A	0.125	3	NO	+ .003 - .000
B	0.156	4	YES	± .005
C	0.265	2	YES	± .005



NOTES: UNLESS OTHERWISE SPECIFIED

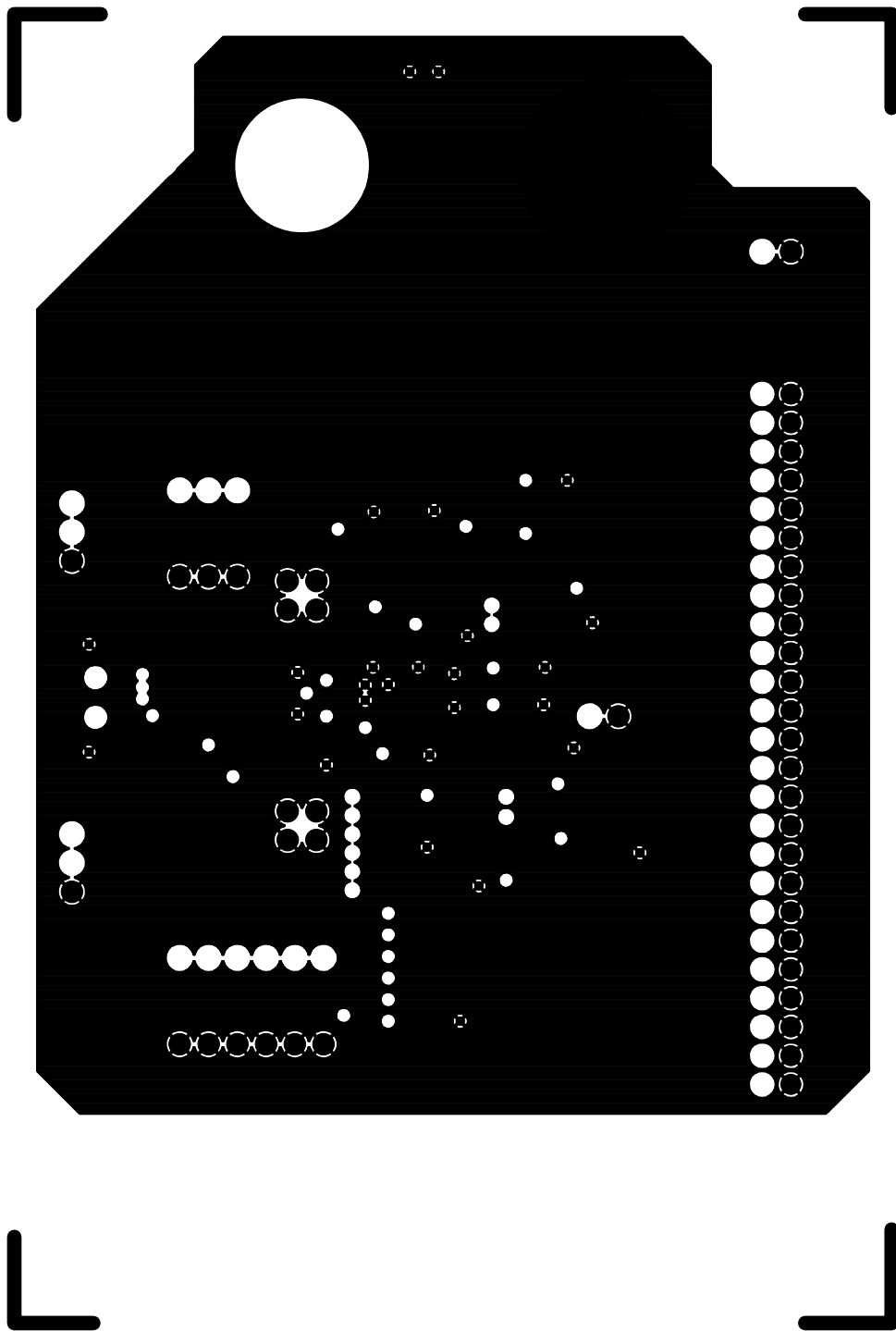
1. PRIMARY COMPONENT SIDE IS SHOWN.
2. HOLES MARKED " A " ARE TOOLING HOLES, UNPLATED, AND SHALL BE "ONCE" DRILLED.
3. FABRICATE USING MASTER FILM DS90UR124 RX USB DEMO REV 2. USE BOARD OUTLINE FILE B472BOA.PHO FOR BOARD ROUTE.
4. ACCEPTABILITY SHALL BE BASED ON IPC-A-600, CLASS 2
5. MATERIAL: BASE MATERIAL IS NEMAL-1 GRADE FR-406, COLOR GREEN, 0.052 INCH NOM. THICKNESS. COPPER CLADDING SHALL BE 1/2 OZ. OUTSIDE LAYERS AND 1 OZ INSIDE LAYERS.
6. PLATING: ALL HOLES AND CONDUCTIVE SURFACES SHALL BE PLATED WITH A MIN OF .001 INCH CU. SURFACE FINISH: GOLD FLASH, .000005 MIN.
7. FABRICATION TOLERANCES:
END PRODUCT CONDUCTOR WIDTHS AND LAND DIAMETERS SHALL NOT VARY MORE THAN .003 INCH FROM THE 1:1 DIMENSIONS OF THE MASTER PATTERN. THE CONDUCTIVE PATTERN SHALL BE POSITIONED SO THAT THE LOCATION OF ANY LAND SHALL BE WITHIN .010 INCH DIAMETER TO THE TRUE POSITION OF THE HOLE IT CIRCUMSCRIBES THE MINIMUM ANNULAR RING SHALL BE .002 INCH. BOW AND TWIST SHALL NOT EXCEED .010 INCH PER INCH.
8. SOLDERMASK BOTH SIDES PER IPC-SM-840, TYPE A, CLASS B. COLOR-GREEN. THERE SHALL BE NO SOLDERMASK ON ANY LAND.
9. SILKSCREEN THE LEGEND ON BOTH SIDES USING NON CONDUCTIVE EPOXY INK, COLOR-WHITE. THERE SHALL BE NO INK ON ANY LAND.
10. THE .008 (LAYER 1) TRACES TO BE 50 OHM SINGLE ENDED IMPEDANCE AND THE .007 TRACES (LAYER 1) TO BE 100 OHM DIFFERENTIAL IMPEDANCE AND THE DIELECTRIC REFERENCED IN BOARD STACK DETAIL IS SUGGESTED. HOWEVER, TRACE WIDTHS AND OR DIELECTRIC THICKNESS MAY BE MICRO-MODIFIED IN ORDER TO FABRICATE BOARDS TO THE REQUIRED IMPEDANCE NOMINALS TO A TOLERANCE OF +/- 5%.
11. BOARD TO BE FABRICATED IN COMPLIANCY TO ROHS REQUIREMENTS.
12. PCB MUST BE MADE OF US RECOGNIZED MATERIAL AND TRACEABLE FOR 94V-0 MINIMUM FLAMMABILITY RATING AND MANUFACTURED BY A UL RECOGNIZED PRINTED CIRCUIT BOARD SUPPLIER. PCB MUST BE PERMANENTLY MARKED WITH UL RECOGNIZED MANUFACTURER'S LOGO AND TYPE CODE AS DESIGNATED IN THE UL RECOGNIZED DIRECTORY.



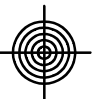


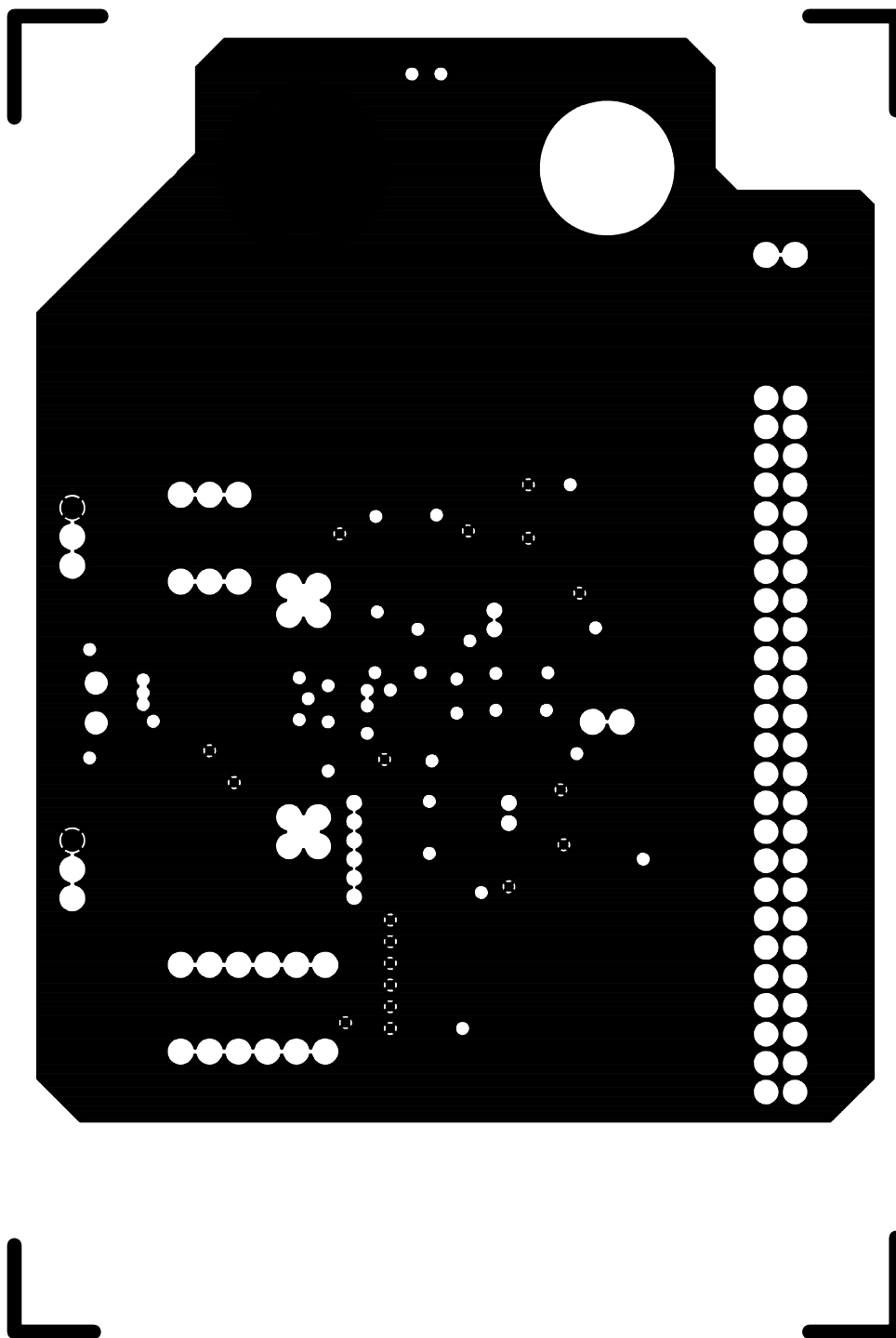
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
PRIMARY COMPONENT SIDE - LAYER 1





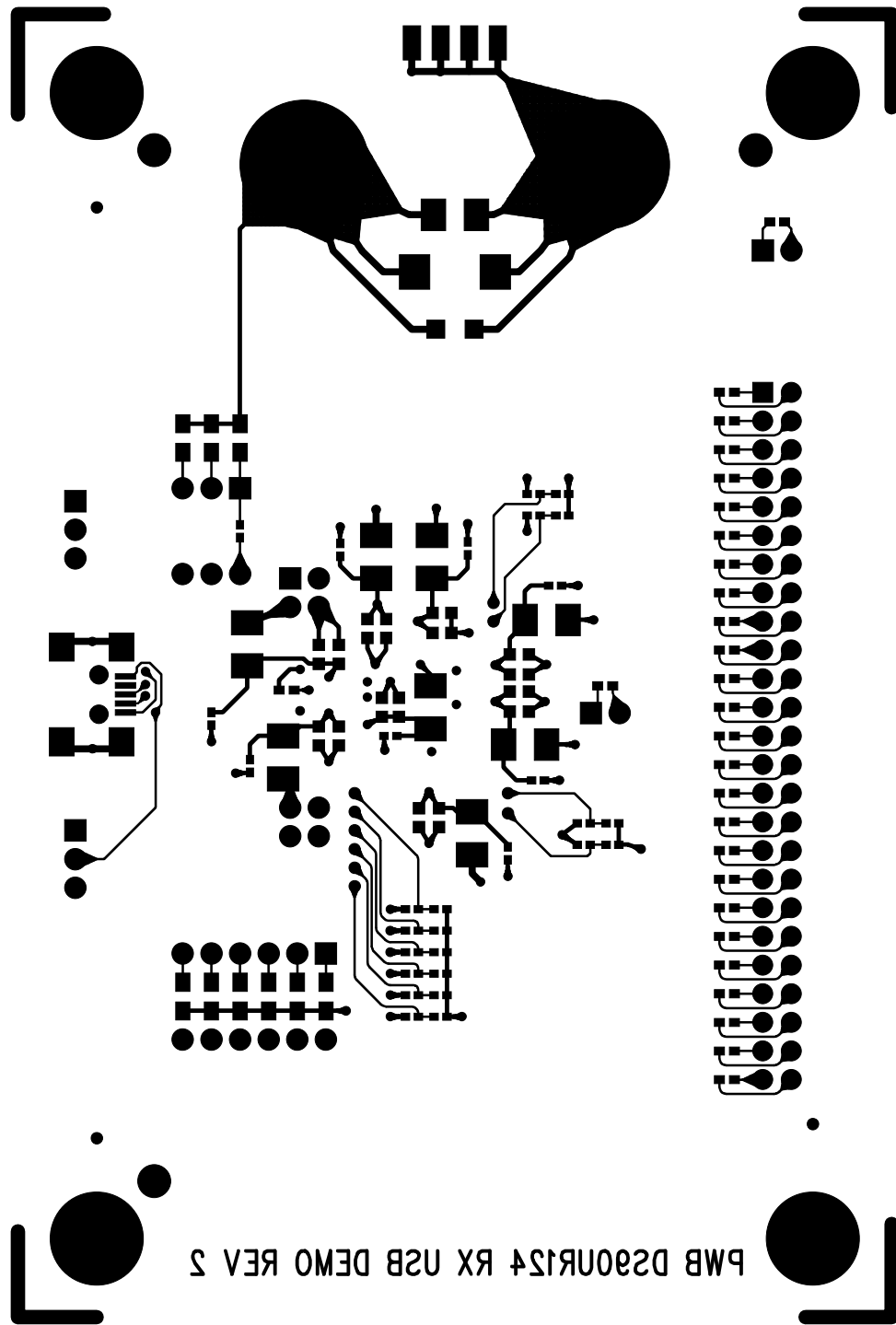
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
GROUND PLANE – LAYER 2





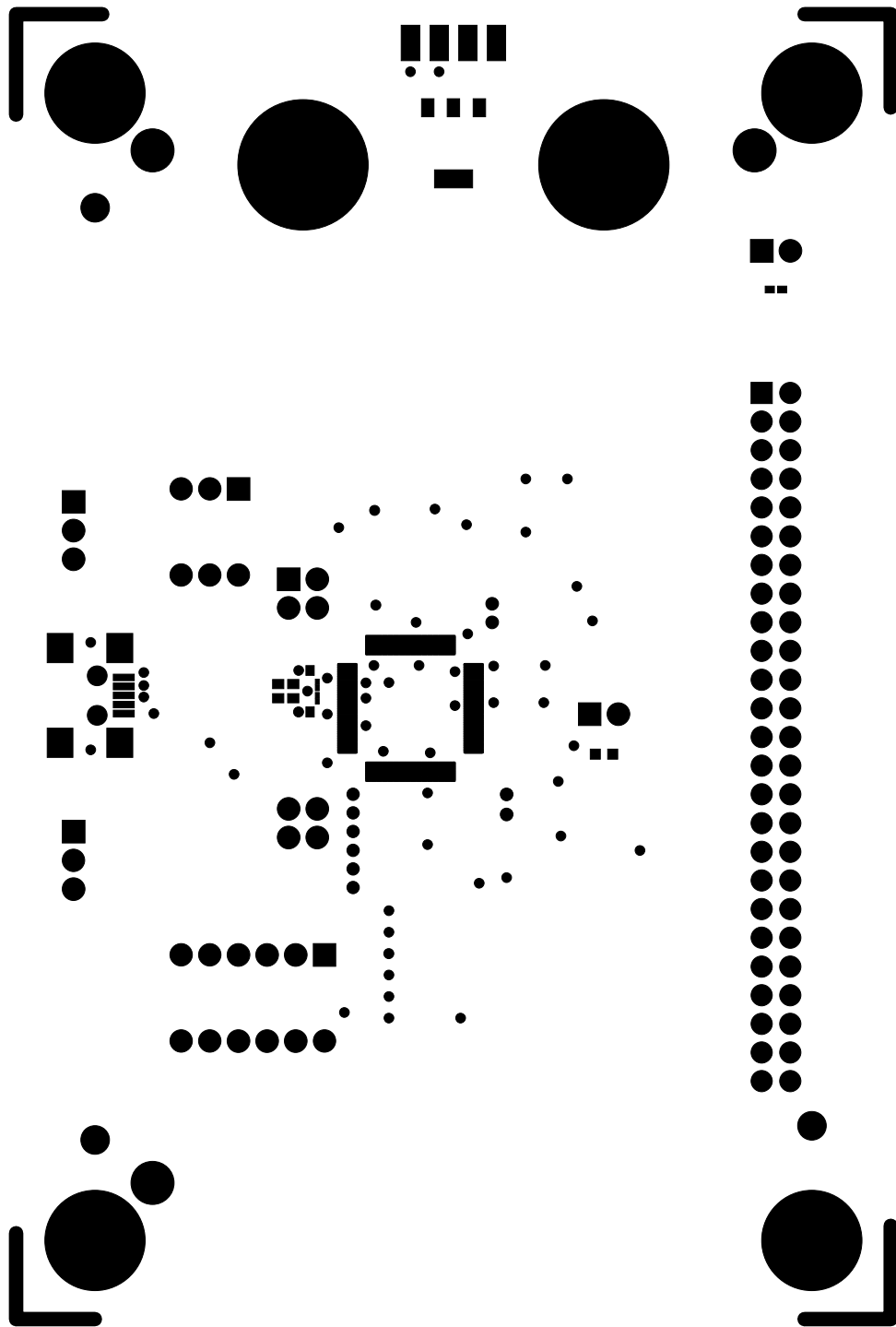
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
POWER PLANE - LAYER 3



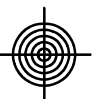


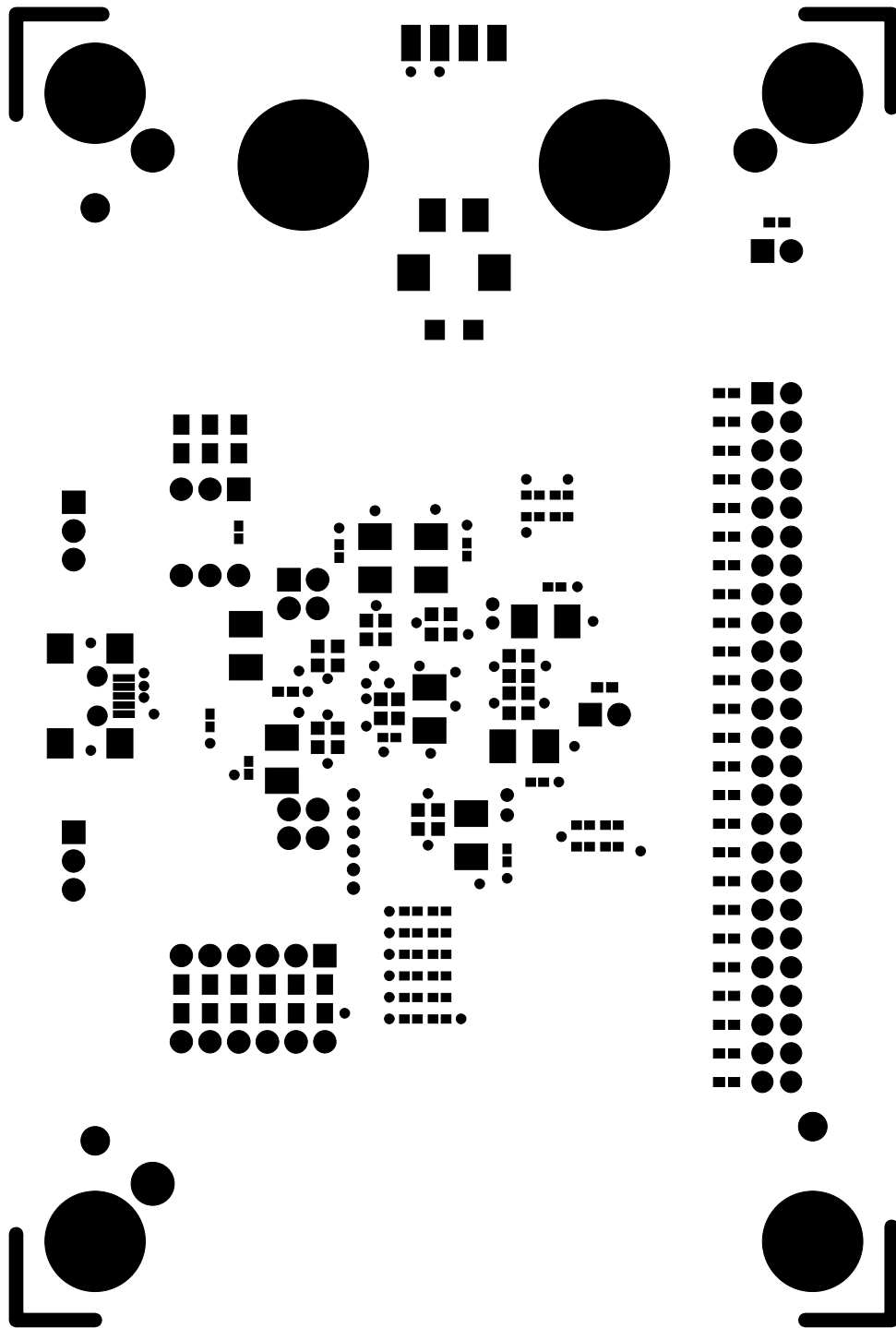
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
SECONDARY COMPONENT SIDE - LAYER 4



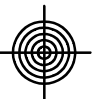


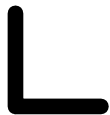
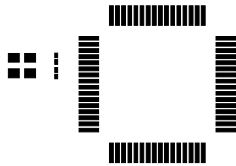
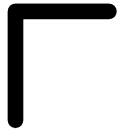
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
SOLDER MASK – PRIMARY COMPONENT SIDE



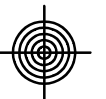


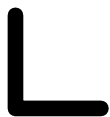
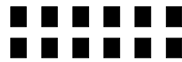
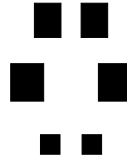
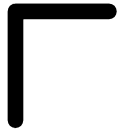
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
SOLDER MASK – SECONDARY COMPONENT SIDE





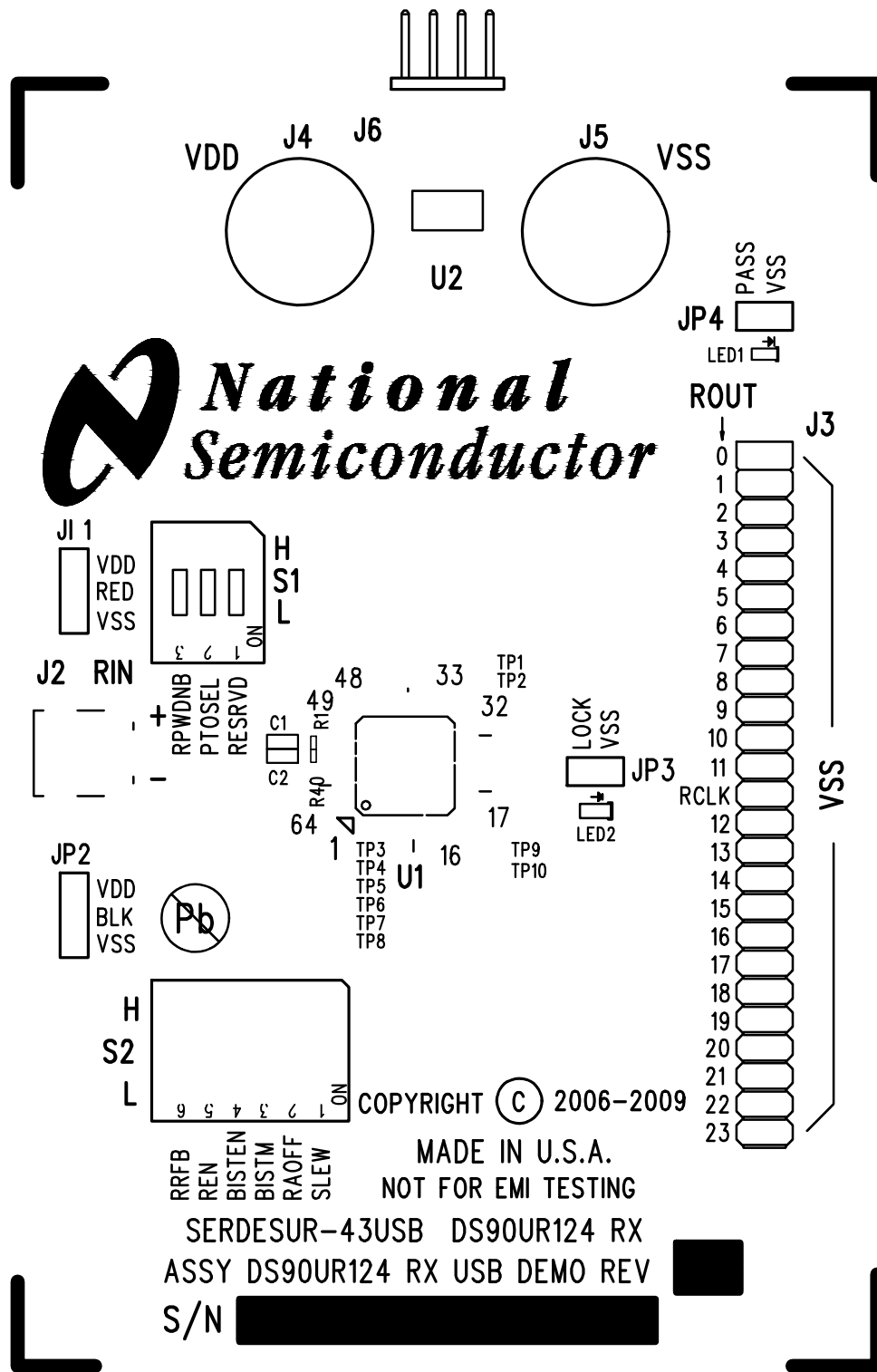
NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
PASTE MASK - PRIMARY COMPONENT SIDE





NATIONAL SEMICONDUCTOR CORP.
SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
PWB DS90UR124 RX USB DEMO REV 2
PASTE MASK - SECONDARY COMPONENT SIDE





NATIONAL SEMICONDUCTOR CORP.
 SERDESUR-43USB DS90UR124 RX USB DEMO BOARD
 PWB DS90UR124 RX USB DEMO REV 2
 SILKSCREEN - PRIMARY COMPONENT SIDE



