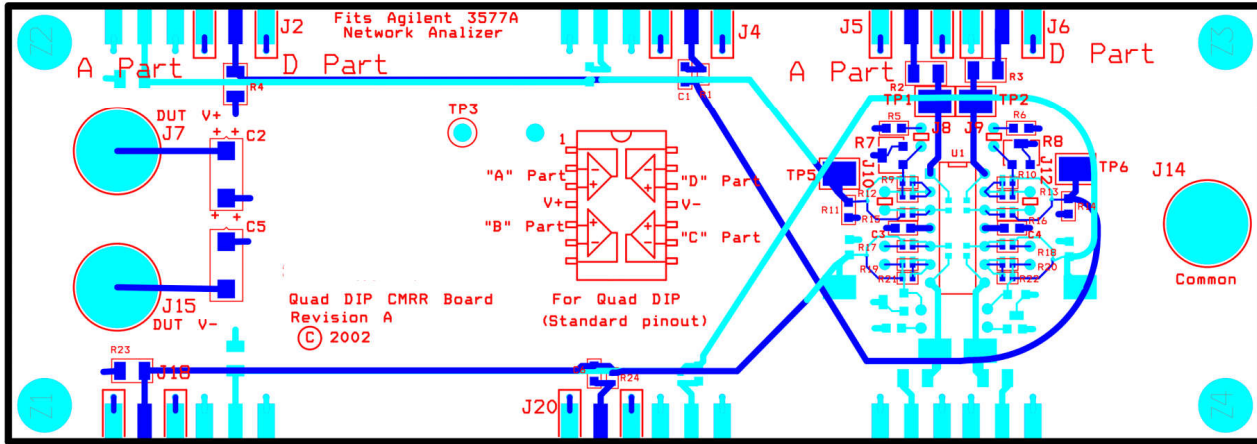




# Quad DIP CMRR board

## Measure the CMRR (common-mode rejection ratio) of a quad-part IC in a DIP package.



OrCAD 9 PCB (printed circuit board). Fab:

This board mounts SMA connectors that screw directly into an HP3577A network analyzer. This removes any effect from cables. The BOM (pdfs in design files).

DRILL CHART					DESCRIPTION				
SYM	DIAM	TOL	QTY	NOTE	ZONE	REV	REVISIONS	DATE	APPROVED
X	0.013		27		-	A	Release	1/19/2002	Rako
+	0.018		24						
⊙	0.038		14						
⊙	0.038		16						
x	0.043		2						
+	0.120		4						
⊕	0.250		3						
TOTAL				90					

NOTES:

- INTERPRET THIS DOCUMENT PER HP DOC# A-3951-076-1
- FABRICATE USING EXTENDED GERBER ARTWORK FILE.  
SILVERDRUM TOP: <((name))>DST  
SILVERDRUM TOP: <((name))>DST  
COPPER: <((name))>TOP  
BOARD PLANE: <((name))>BSP  
POWER PLANE: <((name))>PWR  
SOLDER: <((name))>SOL  
SILVERDRUM BOTTOM: <((name))>SDB  
SILVERDRUM BOTTOM: <((name))>SDB
- MATERIAL: EPOXY GLASS (FR4)  
COPPER: TOP SIDE: 1/2 OZ COPPER PLATED TO 1 OZ.  
INNER LAYER: 1/2 OZ.  
SOLDER: BOTTOM SIDE: 1/2 OZ COPPER PLATED TO 1 OZ.
- ALL HOLES SHALL BE PLATED THROUGH EXCEPT AS NOTED.  
THE WALLS OF THE PLATED THROUGH HOLES AND EXTERNAL CONDUCTIVE PATTERNS SHALL BE DISPERSED WITH FIN LEAD AND REFLOWED FINISH.  
MINIMUM ANNIER RING TO BE 0.003 INCHES.
- MINIMUM TRACE WITH 0.007 INCHES.
- MARK VENDORS ID AND DATE USING NON-CONDUCTIVE PERMANENT INK APPROX WHERE SHOWN.
- ALL HOLE SHALL BE CENTERED TO THE CENTER OF THE PASS WITHIN 0.005 INCHES.
- MARK REF DESIGNATORS USING SILVERSCREEN ARTWORK ON BOTH SIDES WITH WHITE NON-CONDUCTIVE INK.
- FINAL BOARD THICKNESS: 0.42 INCHES.

Summary  
4 layer, 7 mil lines and spaces, 62 mils thick

UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN MILS

Author:	Rev:	Date:	09/02/2002
Client:	Drawn:	Checked:	09/02/2002
Project:	Part:	Part:	09/02/2002
Drawn:	Drawn:	Drawn:	09/02/2002
Drawn:	Drawn:	Drawn:	09/02/2002
Drawn:	Drawn:	Drawn:	09/02/2002

Rako Studios  
Fab Drawing  
Quad DIP CMRR Board  
Sheet: 1 of 1

Item	Qty	Reference	Part	Manufacturer	Part#	Digikey#	Price@100	Footprint
1	4	C1,C6,C7,C8	100PF	BC Components	0805N100J50MNT	BC1286CT-ND	0.03580	SMC_0805
2	2	C2,C5	470PF	Kemet	1491D470K016AS	599-1603-ND	1.02000	SMCT_1943_12
3	2	C4,C3	0.1UF	BC Components	0805B104K500BP	BC1288CT-ND	0.07800	SMC_0805
4	12	J1,J2,J3,J4,J5,J6,J10,J12,J20,J21,J22,J23	SMA End Launch	Johnson	142-0701-801	J302-ND	3.27600	SMA_END
5	3	J7,J14,J15	Banana Header_2	Johnson	108-0748-001	J147-ND	0.79200	BANANA_JUMPER100
6	8	J8,J9,J10,J11,J12,J13,J16,J17	Jumper	3M	92967-08	92967-08-ND	0.15800	SMC_END
7	8	R1,R2,R3,R4,R5,R6,R7,R8,R9	4.53K	Yageo	RC0603JA4531FKHFT	311-4.53KCT-ND	0.02785	SMC_0603
8	4	R1,R24,R25,R32	49.9	Panasonic	ERA-3YEB102V	P1.0NCT-ND	0.11600	SMC_1010
9	8	R2,R3,R4,R5,R6,R8,R9,R50	49.9	Panasonic	ERA4ENF49R5V	P49-9CCT-ND	0.02605	SMC_0805
10	4	R5,R6,R11,R14,R33,R40,R47,R48	500	BC Components	SM49V01	SM49V01-ND	2.93750	SM49V
11	4	R7,R8,R45,R46	976K	Yageo	RC0603JA9763FKHFT	311-4.53KCT-ND	0.02785	SMC_0603
12	4	R9,R10,R43,R44	1K	Panasonic	ERA-3YEB102V	P1.0NCT-ND	0.39900	SMC_0603
13	16	R15,R16,R17,R18,R19,R20,R21,R22,R27,R28,R32,R33,R36,R37,R38,R39,R41,R42	100	Panasonic	ERA-3YEB101V	P100YCT-ND	0.39900	SMC_0603
14	8	R17,R18,R19,R20,R28,R30,R31,R34	Test Point, SM_5016	KeyStone	5016	5016KCT-ND	0.19592	TEST_POINT_5016
15	8	TP1,TP2,TP3,TP5,TP6,TP7,TP8,TP9,TP10	Scope Ground	MIL-Max	3103-2-00-21-0000B0	ED592-ND	0.07140	PAD_0.043_HOLE_DIP_10014W_300L_725
16	2	TP3,TP4	LM324					
17	1	U1						

The assembly drawing. This page has image files of the actual pdf, OrCAD, and Gerber files in the design files.

