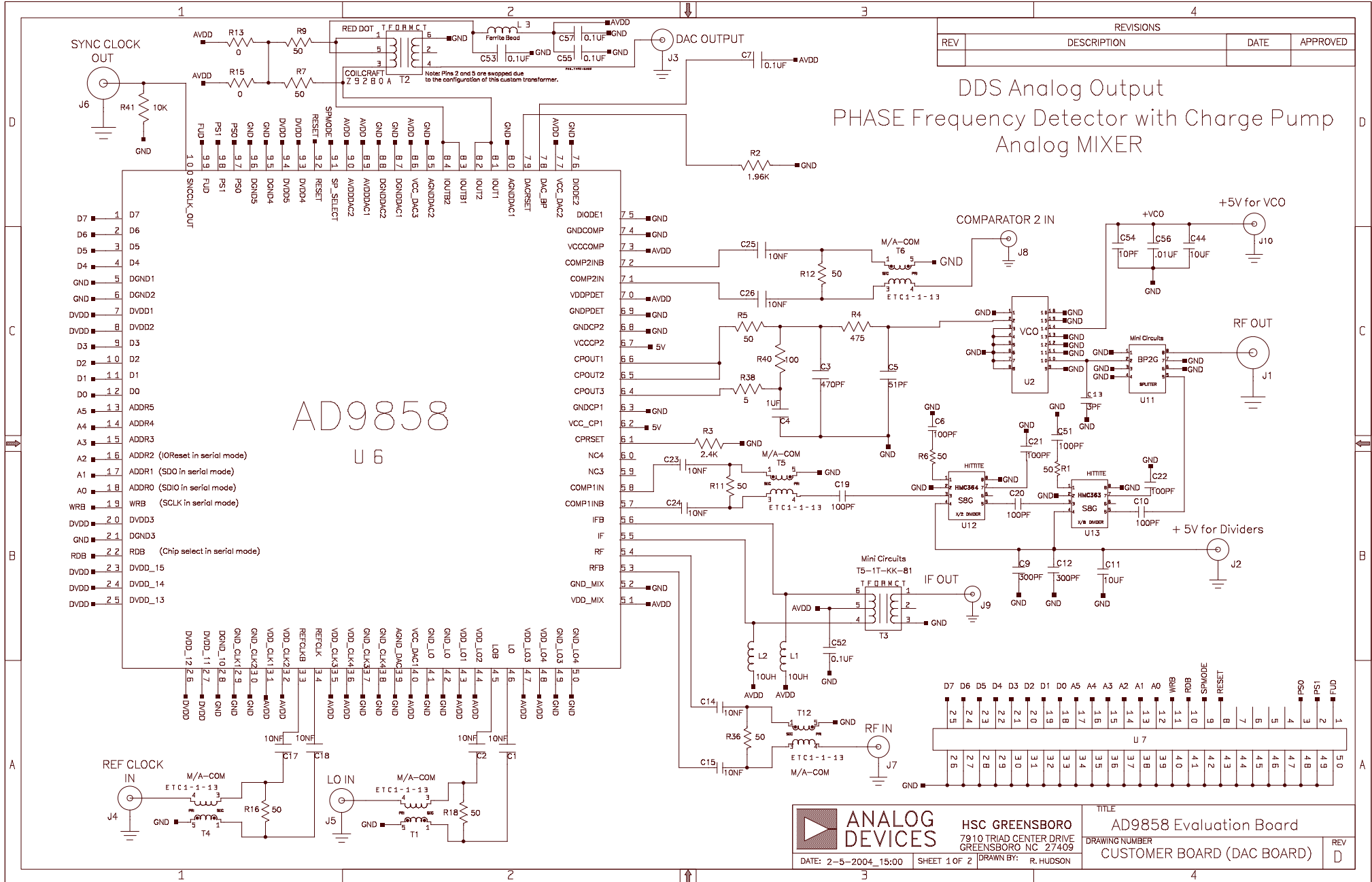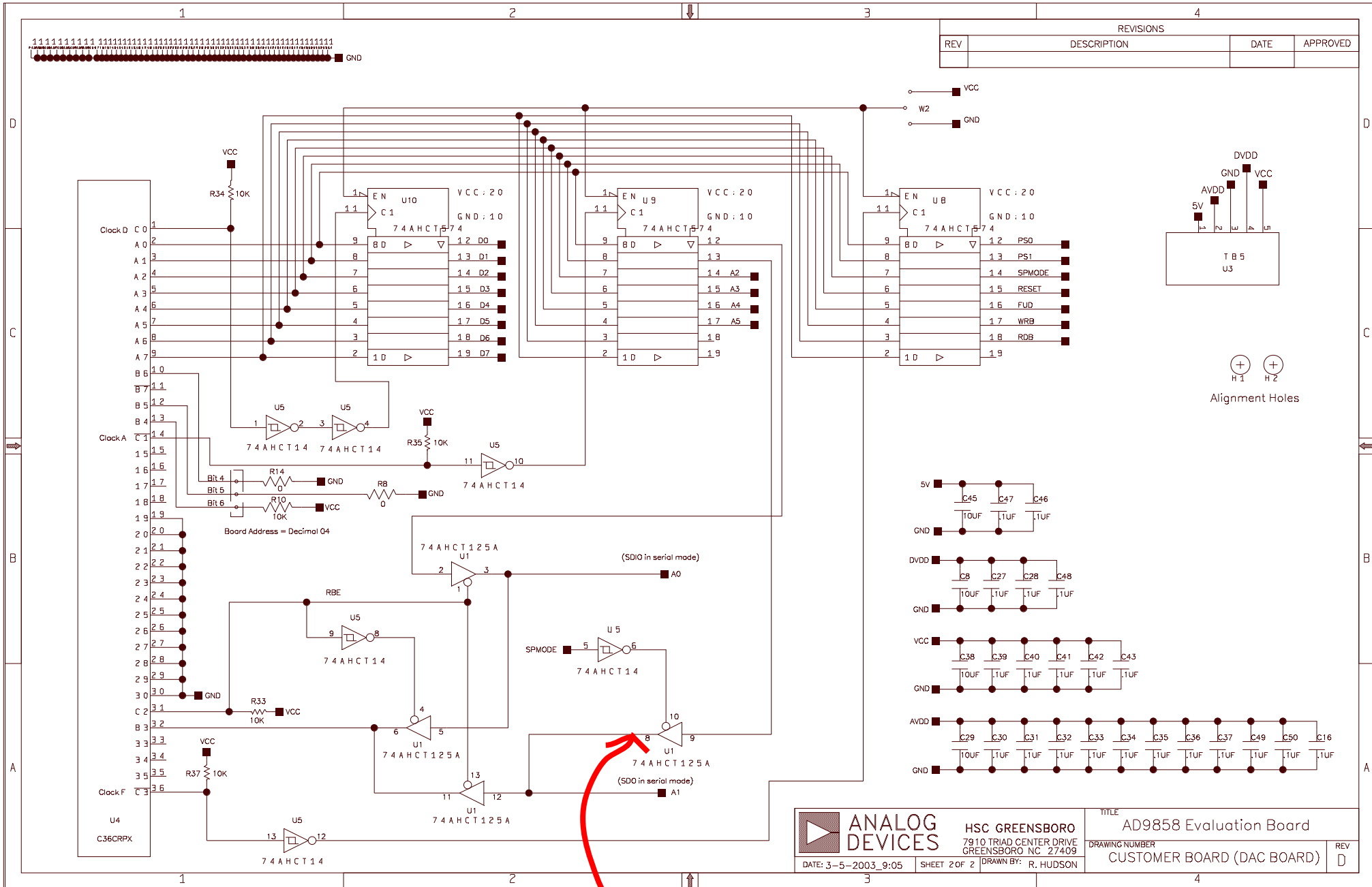Read the comments on page 2 about the net contention on the A1 line when used in parallel mode through the 40-pin header.

DDS Analog Output
PHASE Frequency Detector with Charge Pump
Analog MIXER

SYNC CLOCK OUT

AVDD R13 0 R9 50 RED DOT TFORMCT L3 Ferrite Bead AVDD GND C57 0.1UF GND DAC OUTPUT
AVDD R15 0 R7 50 COILCRAFT Z9280A T2 C53 0.1UF GND C55 0.1UF GND J3
Note: Pins 2 and 5 are swapped due to the configuration of this custom transformer.

C7 0.1UF AVDD

J6 R41 10K GND

R2 1.96K GND

AD9858 U6

Pin	Signal
1	D7
2	D6
3	D5
4	D4
5	DGND1
6	DGND2
7	DVDD1
8	DVDD2
9	D3
10	D2
11	D1
12	D0
13	ADDR5
14	ADDR4
15	ADDR3
16	ADDR2 (IOReset in serial mode)
17	ADDR1 (SDO in serial mode)
18	ADDR0 (SDIO in serial mode)
19	WRB (SCLK in serial mode)
20	DVDD3
21	DGND3
22	RDB (Chip select in serial mode)
23	DVDD_15
24	DVDD_14
25	DVDD_13

D7, D6, D5, D4, GND, GND, DVDD, DVDD, D3, D2, D1, D0, A5, A4, A3, A2, A1, A0, WRB, DVDD, GND, RDB, DVDD, DVDD, DVDD

DIODE1 75 GND
GNDCOMP 74 GND
VCCCOMP 73 AVDD
COMP2INB 72
COMP2IN 71
VDDPDET 70 AVDD
GNDPDET 69 GND
GNDCP2 68 GND
VCCCP2 67 5V
CPOUT1 66
CPOUT2 65
CPOUT3 64
GNDCP1 63 GND
VCC_CP1 62 5V
CPRSET 61
NC4 60
NC3 59
COMP1IN 58
COMP1INB 57
IFB 56
IF 55
RF 54
RFB 53
GND_MIX 52 GND
VDD_MIX 51 AVDD

C25 10NF M/A-COM T6 COMPARATOR 2 IN J8
C26 10NF R12 50 ETC1-1-13 GND

+VCO +5V for VCO C54 10PF C56 .01UF C44 10UF J10 GND

R5 50 R4 475 VCO U2 RF OUT
R40 100 C3 470PF C5 51PF Mini Circuits BP2G SPLITTER U11 J1
R38 5 C4 1UF GND C13 3PF

R3 2.4K GND C23 10NF M/A-COM T5 GND
R11 50 ETC1-1-13 C19 100PF HITTITE HMC364 S8G U12 X/2 DIVIDER
C24 10NF R6 50 GND C20 100PF HITTITE HMC363 S8G U13 X/B DIVIDER

C6 100PF C21 100PF C51 100PF C22 100PF C10 100PF
R1 50 + 5V for Dividers J2

Mini Circuits T5-1T-KK-81 TFORMCT T3 IF OUT J9
AVDD C52 0.1UF GND

L2 10UH L1 10UH AVDD AVDD
C14 10NF T12 GND RF IN
R36 50 ETC1-1-13 J7
C15 10NF M/A-COM

C9 300PF C12 300PF C11 10UF GND GND GND

REF CLOCK IN M/A-COM ETC1-1-13 J4 R16 50 GND T4

LO IN M/A-COM ETC1-1-13 J5 R18 50 GND T1

C17 10NF C18 10NF C2 10NF C1 10NF

DVDD_12 26, DVDD_11 27, GND_CLK1 28, GND_CLK2 29, VDD_CLK1 30, VDD_CLK2 31, REFCLKB 32, REFCLK 33, VDD_CLK3 34, GND_CLK3 35, GND_CLK4 36, VDD_CLK4 37, AGND_DAC1 38, VCC_DAC1 39, GND_LO 40, GND_LO1 41, VDD_LO1 42, VDD_LO2 43, VDD_LO3 44, LOB 45, LO 46, VDD_LO4 47, GND_LO3 48, GND_LO4 49, GND_LO4 50

FUD 99, PS1 98, PS0 97, GND 96, GND 95, DVDD 94, DVDD5 93, DVDD4 92, RESET 91, SP_SELECT 90, AVDD 89, AVDD 88, GND 87, AVDDDAC2 86, AVDDDAC1 85, DGNDDAC2 84, DGNDDAC1 83, VCC_DAC3 82, AGNDDAC2 81, IOUTB2 80, IOUTB1 79, IOUT2 78, IOUT1 77, AGNDDAC1 76, DACRSET, VCC_DAC2, DAC_BP, DIODE2

1.0.0 SNCCLK_OUT

U7: D7 25, D6 24, D5 23, D4 22, D3 21, D2 20, D1 19, D0 18, A5 17, A4 16, A3 15, A2 14, A1 13, A0 12, WRB 11, RDB 10, SPMODE 9, RESET 8, ... PS0 4, PS1 3, FUD 2, 1

BUG! Lift U1.8 and insert 1K in series. This allows use of the U4 pin header as a parallel input, such as the Rabbit RCM3200 module.