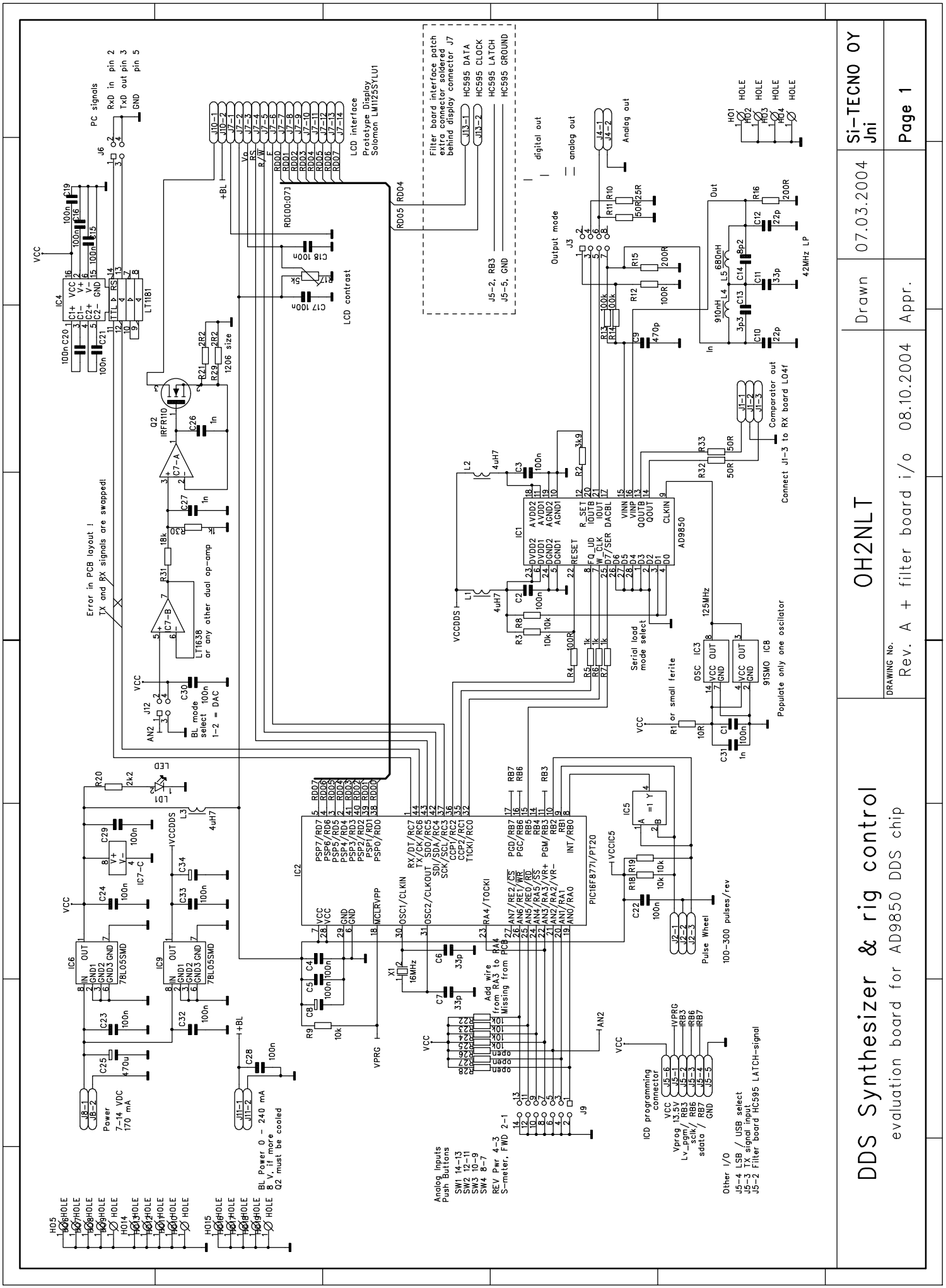
DDS Synthesizer & rig control
evaluation board for AD9850 DDS chip
OH2NLT
Si-TECNO OY
Jni
Drawn
07.03.2004
Page 1
Appr.
08.10.2004
DRAWING No.
Rev. A + filter board i/o
IC1 AD9850
IC2 PIC16F877/PT2O
IC4 LT1181
IC5
IC6 78L05SMD
IC7-A
IC7-B LT1638
IC7-C
IC9 78L05SMD
Q2 IRFR110
X1 16MHz
DSC IC3 91SMO ICB 125MHz
LCD interface
Prototype Display
Solomon LM1125SYLU1
LCD contrast
Filter board interface patch
extra connector soldered
behind display connector J7
HC595 DATA
HC595 CLOCK
HC595 LATCH
HC595 GROUND
J5-2, RB3
J5-5, GND
digital out
analog out
Output mode
Analog out
Out
In
42MHz LP
Comparator out
Connect J1-3 to RX board LO4f
Serial load
mode select
Pulse Wheel
100-300 pulses/rev
PC signals
RxD in pin 2
TxD out pin 3
GND pin 5
Power
7-14 VDC
170 mA
BL Power 0 - 240 mA
8 V, if more
Q2 must be cooled
BL mode
select 100n
1-2 = DAC
Error in PCB layout !
TX and RX signals are swapped!
LT1638
or any other dual op-amp
1206 size
Add wire
from RA3 to RA4
Missing from PCB
ICD programming
connector
Analog Inputs
Push Buttons
SW1 14-13
SW2 12-11
SW3 10-9
SW4 8-7
REV Pwr 4-3
S-meter, FWD 2-1
Other I/O
J5-4 LSB / USB select
J5-3 TX signal input
J5-2 Filter board HC595 LATCH-signal
91SMO ICB
Populate only one oscillator
or small ferite
Rev. A + filter board i/o 08.10.2004