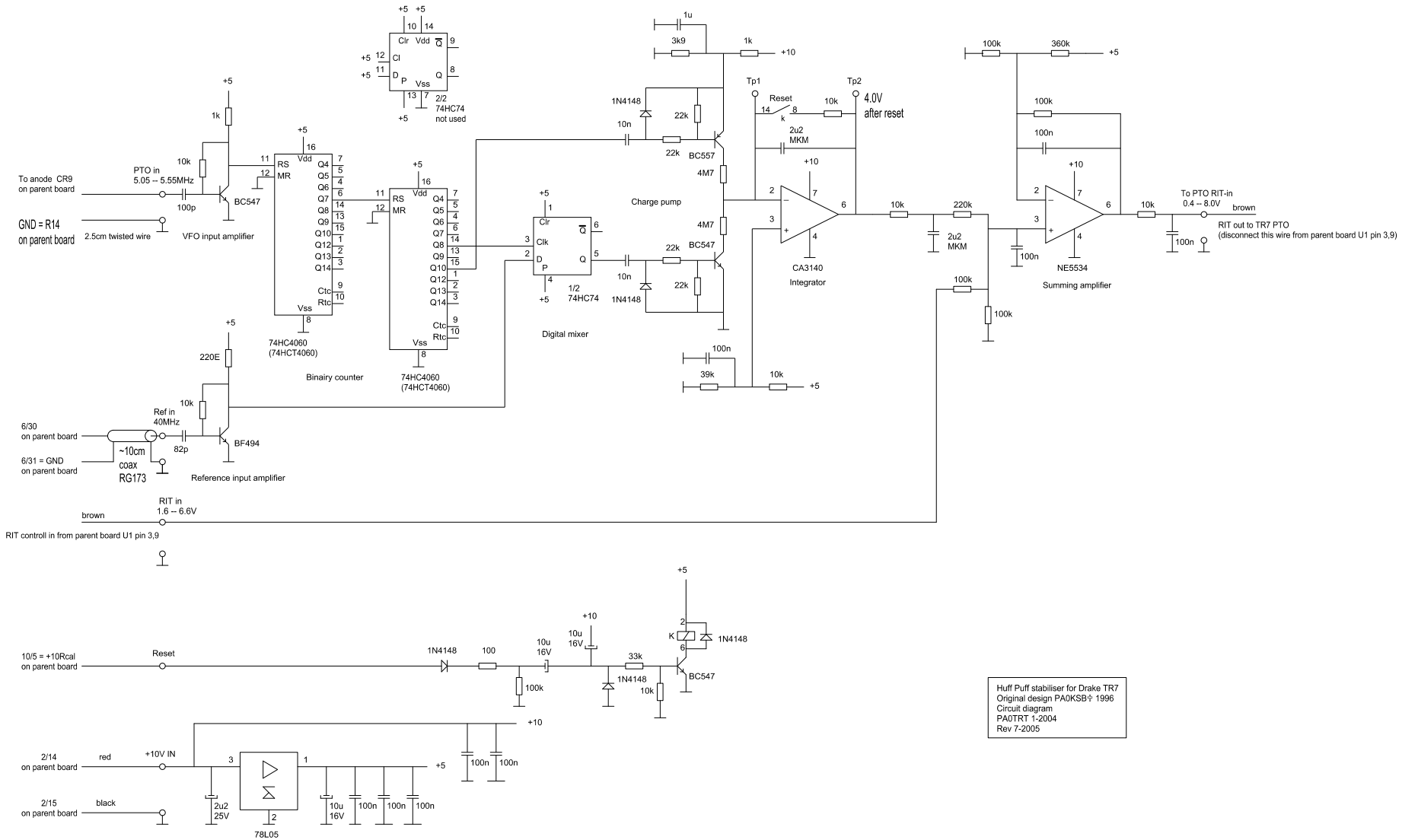
+5 +5
10 14
Clr Vdd Q
+5 12 Cl
+5 11 D P Vss
13 7
2/2
74HC74
not used
+5
1k
10k
PTO in
5.05 -- 5.55MHz
100p
BC547
VFO input amplifier
To anode CR9
on parent board
GND = R14
on parent board
2.5cm twisted wire
+5
16
11 RS Vdd
12 MR
Q4 7
Q5 5
Q6 4
Q7 6
Q8 14
Q9 13
Q10 15
Q12 1
Q13 2
Q14 3
Ctc 9
Rtc 10
Vss 8
74HC4060
(74HCT4060)
Binairy counter
74HC4060
(74HCT4060)
1u
3k9
1k
+10
1N4148
10n
22k
22k
BC557
4M7
Charge pump
4M7
22k
BC547
10n
22k
1N4148
+5
1
Clr
3 Clk
2 D P
Q 6
Q 5
4
1/2
74HC74
Digital mixer
Tp1
Reset
14 k 8
10k
Tp2
4.0V
after reset
2u2
MKM
+10
2
3
7
6
4
CA3140
Integrator
100n
39k
10k
+5
10k
220k
2u2
MKM
100k
100k
100k
360k
+5
100k
100n
+10
2
3
7
6
4
NE5534
Summing amplifier
10k
To PTO RIT-in
0.4 -- 8.0V
brown
RIT out to TR7 PTO
(disconnect this wire from parent board U1 pin 3,9)
100n
+5
220E
10k
Ref in
40MHz
82p
BF494
6/30
on parent board
6/31 = GND
on parent board
~10cm
coax
RG173
Reference input amplifier
RIT in
1.6 -- 6.6V
brown
RIT controll in from parent board U1 pin 3,9
10/5 = +10Rcal
on parent board
Reset
1N4148
100
10u
16V
100k
+10
10u
16V
33k
1N4148
10k
+5
K
2
6
1N4148
BC547
+10
2/14
on parent board
red
+10V IN
3
1
+5
2u2
25V
2
78L05
10u
16V
100n
100n
100n
100n
100n
100n
2/15
on parent board
black
Huff Puff stabiliser for Drake TR7
Original design PA0KSB© 1996
Circuit diagram
PA0TRT 1-2004
Rev 7-2005