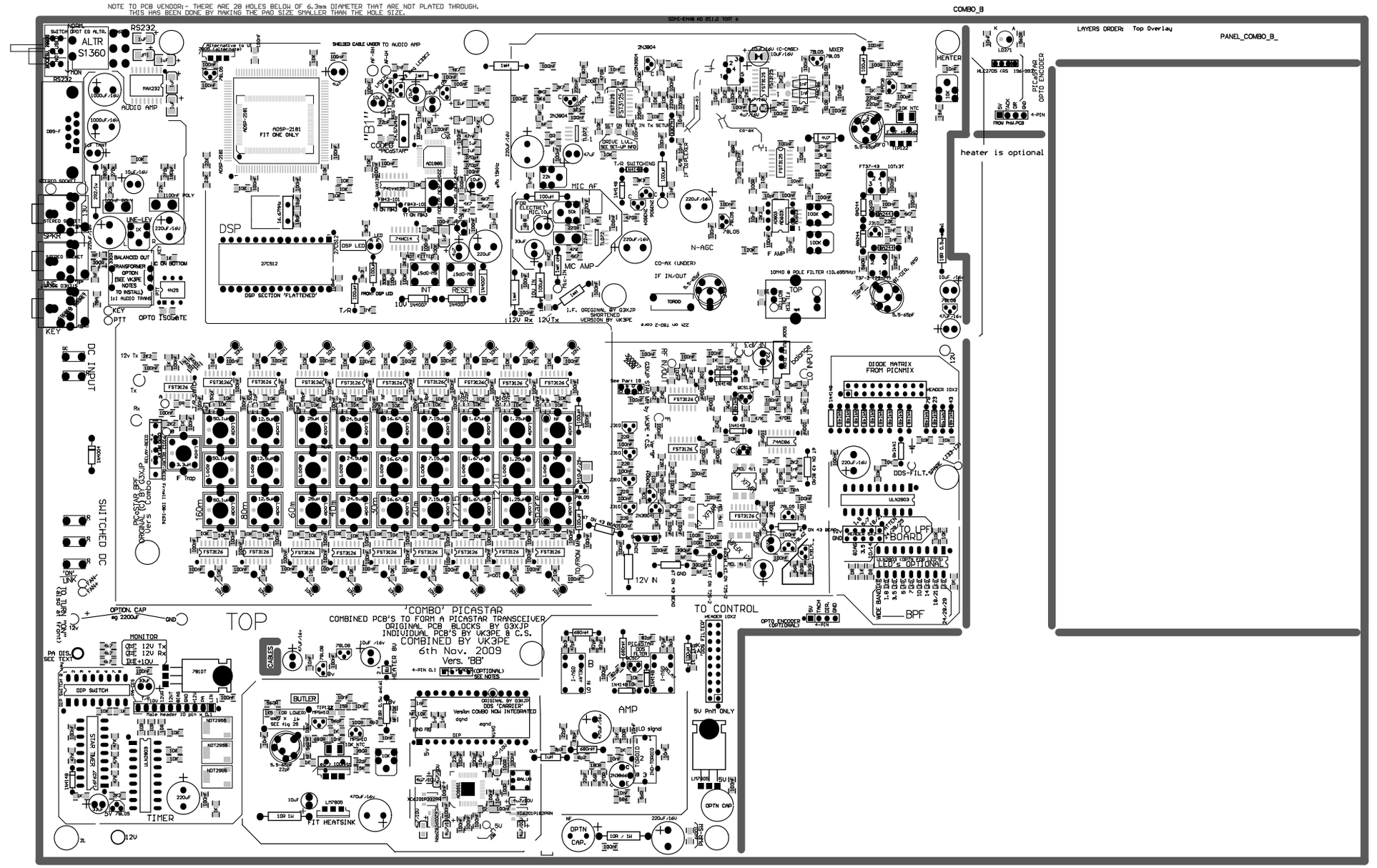
NOTE TO PCB VENDOR:- THERE ARE 28 HOLES BELOW OF 6.3mm DIAMETER THAT ARE NOT PLATED THROUGH.
THIS HAS BEEN DONE BY MAKING THE PAD SIZE SMALLER THAN THE HOLE SIZE.
COMBO_B
LAYERS ORDER: Top Overlay
PANEL_COMBO_B_
heater is optional
TOP
'COMBO' PICASTAR
COMBINED PCB'S TO FORM A PICASTAR TRANSCEIVER
ORIGINAL PCB BLOCKS BY G3XJP
INDIVIDUAL PCB'S BY VK3PE & C.S.
COMBINED BY VK3PE
6th Nov. 2009
Vers. 'BB'
DSP
AUDIO AMP
MIC AMP
AMP
TIMER
DIP SWITCH
MONITOR
DC INPUT
SWITCHED DC
TO CONTROL
TO LPF BOARD
BPF
DIODE MATRIX FROM PICNMIX
DDS-FILT.
PICASTAR OPTO ENCODER
ORIGINAL PCB BLOCKS BY G3XJP
ORIGINAL VERSION BY G3XJP
SHORTENED VERSION BY VK3PE
DSP SECTION 'FLATTENED'
SHIELDED CABLE UNDER TO AUDIO AMP
OPTO ISOLATE
BALANCED OUT TRANSFORMER OPTION (SEE WCPE NOTES TO INSTALL) 1:1 AUDIO TRANS
IC ON BOTTOM
OPTION CAP eg 2200uF
OPTO ENCODER (OPTIONAL)
LEDS OPTIONAL
5V PnM ONLY
PA DIS. SEE TEXT
PIT HEATSINK
BUTLER
N-AGC
F AMP
MIXER
IF IN/OUT
CO-AX (UNDER)
10MHz 8 POLE FILTER (10.695MHz)
T/R SWITCHING
SET ON TEST IN Tx SETUP
DRIVE LVL ADJ SET-UP INFO
I.F. ORIGINAL BY G3XJP SHORTENED VERSION BY VK3PE
12V Rx 12V Tx
12V IN
DDS 'CASSIEX'
Version COMBO NOW INTEGRATED
4-PIN CONN (OPTIONAL) SEE NOTES
HEADER 10X2
HEATER
PICASTAR OPTO ENCODER
FROM PnM.PCB
4-PIN
ALTR S1360
RS232
MAX232
DSP
27C512
ADSP-2181 FIT ONE ONLY
CODECS 'ADSTAR'
AD1885
74HC14
DSP LED
INT
RESET
KEY
PTT
OPTO ISOLATE
LINE-LEV
SPKR
STEREO SOCKET
DB9-F
SWITCH MODE
ALTR OPT ES ALTR.
PCB-VK3PE ORIGINAL VERSION
PCB-VK3PE COMBO VERSION
RELAY-REED
F Trap
160m
80m
60m
40m
30m
20m
17m
15m
12m
10m
FST3126
FST3125
2N3904
2N3906
2N7000
74AC86
ULN2803
78L05
78L08
78L10
LM7805
LM7905
5V REG
5V PnM ONLY
OPTN CAP.
MONITOR
TIMER
DIP SWITCH
BPF
TO LPF BOARD
DDS-FILT.
DIODE MATRIX FROM PICNMIX
TO CONTROL
TO/FROM MIX
TO/FROM DSP
TO/FROM PA
TO/FROM PWR
TO/FROM DDS
TO/FROM TX
TO/FROM RX
TO/FROM ANT
TO/FROM KEY
TO/FROM PTT
TO/FROM SPKR
TO/FROM MIC
TO/FROM LINE
TO/FROM DC
TO/FROM GND
TO/FROM 5V
TO/FROM 12V
TO/FROM 15V
TO/FROM -15V
TO/FROM -5V
TO/FROM 3.3V
TO/FROM 2.5V
TO/FROM 1.8V
TO/FROM 1.5V
TO/FROM 1.2V
TO/FROM 1.0V
TO/FROM 0.9V
TO/FROM 0.8V
TO/FROM 0.7V
TO/FROM 0.6V
TO/FROM 0.5V
TO/FROM 0.4V
TO/FROM 0.3V
TO/FROM 0.2V
TO/FROM 0.1V
TO/FROM 0.0V

NOTE TO PCB VENDOR- THESE ARE 28 HOLES BELOW OF 4.3mm DIAMETER THAT ARE NOT PLATED THROUGH.
THIS HAS BEEN DONE BY MAKING THE PAD SIZE SMALLER THAN THE HOLE SIZE.

Bottom Overlay

REFER TO: WWW.CARNUT.INFO FOR DETAILS

TWN SHLD-AUDIO CABLE
(CAN RUN VIA FRONT PANEL VOLUME POT. IF REQUIRED)

SHLD GND

SHIELDED WIRE

CO-AX CABLE

SHLD GND

CO-AX CABLE

SHLD GND

MIC IN

SHIELDED CABLE TO MIC SOCKET

CAN FIT FILTER ON BOTTOM

Possible PLT FILTER ITT (10.7MHz)

FIT CONNECTOR TOP OR BOTTOM, AS REQUIRED

HEADER 10X2

SHLD GND

CO-AX CABLE

CO-AX CABLE

HEADER 10X2

FIT CONNECTOR TOP OR BOTTOM AS REQUIRED

LO GND

LO OUT

SHLD GND

CO-AX CABLE

TRS GND

5V

OUT F J4 PnM

USED.

CO-AX CAP

FIT ONE REGULATOR!

LM1940TS or LM1950TS

SHIELD CABLE!

DISP DATA

DATA FROM PnM

DATA TO PnM

GND

INT. SPKR

L

R

GND

R-IN

L-IN

SHLD GND

GND

4N26

WIRE TO MIC SOCKET

KEY IN "DOT"

PTT IN "DASH"

TX

RX

CONN-SMA

TO PA

FROM C20 RELAY

C1016 FITS ACROSS POINTS 'A' TO 'B' ON TOP

IF TRAP

DC INPUT

1N4004

RELAY_SPST

SWITCHED DC

GND

PWR-SW

FAN (optn)

NOM.12V

select as needed

PH DISABLE

REFER TO WEB

Spare

12/10

17/15

20

30

40

60

80

160

BOTTOM