
TECHNICAL NOTE TN-1028

Tait Orca PCB Improvements

16 June 2005

Applicability

This Technical Note applies to the main PCB as utilised in all Tait Orca frequency bands.

1. Introduction

What is in this Technical Note?

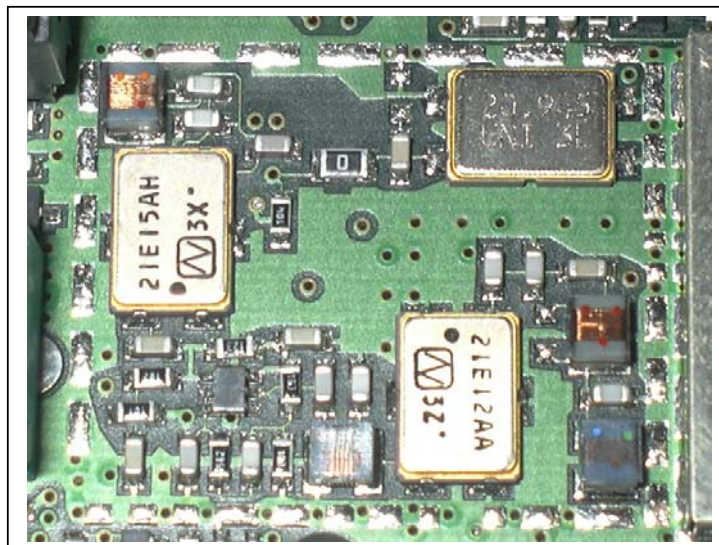
A new release of Tait Orca PCB is being introduced throughout all frequency bands. This Technical Note details the improvements made to the PCB's.

2. Changes

Changes to the PCB

The following changes have been made to the PCB:

- Enhanced wide-band performance through the introduction of a new switching IC and a change to one of the ceramic filters.
- Pad size for XL501 (Microprocessor Crystal) has been increased to 2mm in width to assist solderability.
- Internal bypass vias have been added to RV1 (Volume Potentiometer).
- One +7V5-Batt internal layer track has had its isolation improved.
- All "cans" are now stitched. Whereby the track the can (RF shield) is seated on, is now a "dotted" track rather than one continuous track. This is done to improve the solderability of the cans to PCB. Technicians can still use standard methods of removal when removing these stitched cans. **An example of a stitched shield track is shown below.**



3. Introduction Date

The table below details the introduction dates for the new PCB revision. Expected introduction dates are unavailable due to existing PCB stocks being run out before the new PCB revision utilised.

Band	New PCB IPN	Introduction Date	First Serial Number
A (66 – 88MHz)	TBA	TBA	TBA
B (136 – 174MHz)	220-01654-07	26 May 2005	14284871
C (174 – 225MHz)			
G (336 – 400MHz)	TBA	TBA	TBA
H (400 – 470MHz)	220-01603-12	22 February 2005	14273369
I (450 – 520MHz)	TBA	TBA	TBA
J (806 – 870MHz)	TBA	TBA	TBA
K (896 – 941MHz)			

Note: This Technical Note will be updated as new PCB revisions are introduced.

Compliance Issues None

CSO Instruction Please advise all technical staff of these changes.

4. Issuing Authority

Name and Position of Issuing Officer Tim Lummis
Technical Support Engineer

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