Williams AV - FM T55 Internal Photos-01.docx

FM T55 Internal Photos (Part 1)

The following internal photos are for the individual boards that are used in the FM T55.
The FM Radio section is highlighted with text and circled sections within the main system board.
Photo Enlargements of the critical RF radio sections are included for purposes of readability.

To comply with 6 MB file size limits, this set of photos is broken into three sections, with the following file names:
FM T55 Internal Photos-01.docx
FM T55 Internal Photos-02.docx
FM T55 Internal Photos-03.docx

The functional circuit description for each element is described in the "FM T55 Theory of Operation and Circuit Description", RF Radio Circuits, pages 8-10.
Associated Schematics for the RF Radio section referenced in the photos, are included in the file for SCH 294, the FM T55 motherboard.

Photo1: Internal Top view of system main board (PCA 294) installed in chassis, and showing location of key RF radio sections.

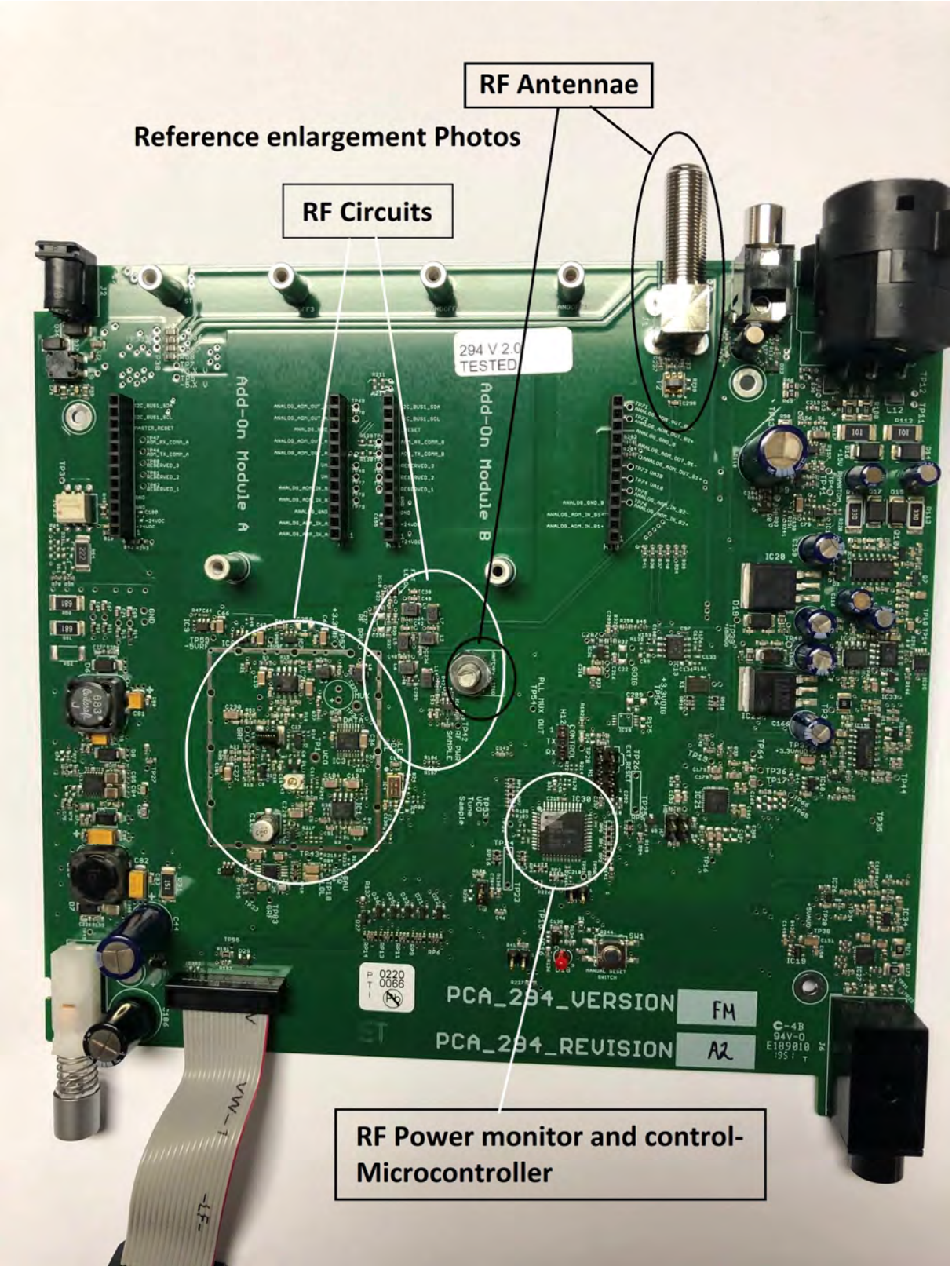

Photo 2: PCA 294 board removed from chassis, and shield cover removed from RF radio section. (Next Photos 3,4 are enlargements of the two RF circuits circled above in white.)

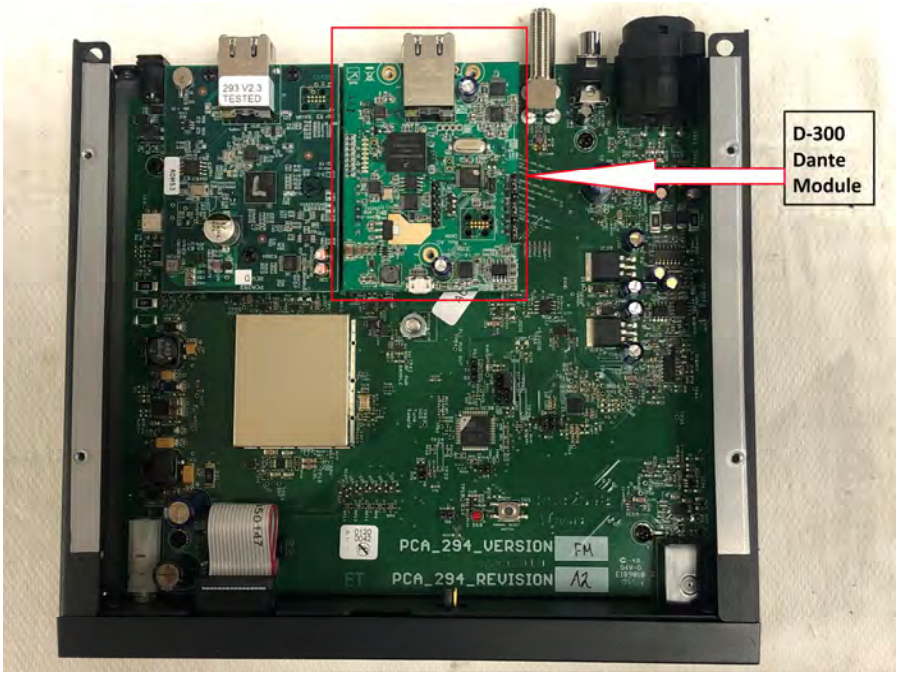

Photo 10: FM T55D (Dante) model option, showing added Dante module.
(Note: Dante Module is an externally sourced digital audio input module)

Photo 11: PCA D-300, top view (Dante Module)

Photo 12: PCA D-300, bottom view (Dante Module)

Williams AV - FM T55 Internal Photos-03B.docx

FM T55 Internal Photos (Part 03B)

The following internal photos are for the individual boards that are used in the FM T55.
The FM Radio section is highlighted with text and circled sections within the main system board.
Photo Enlargements of the critical RF radio sections are included for purposes of readability.

Photo 8: Top Side, PCA 293, Ethernet interface and system microcontroller

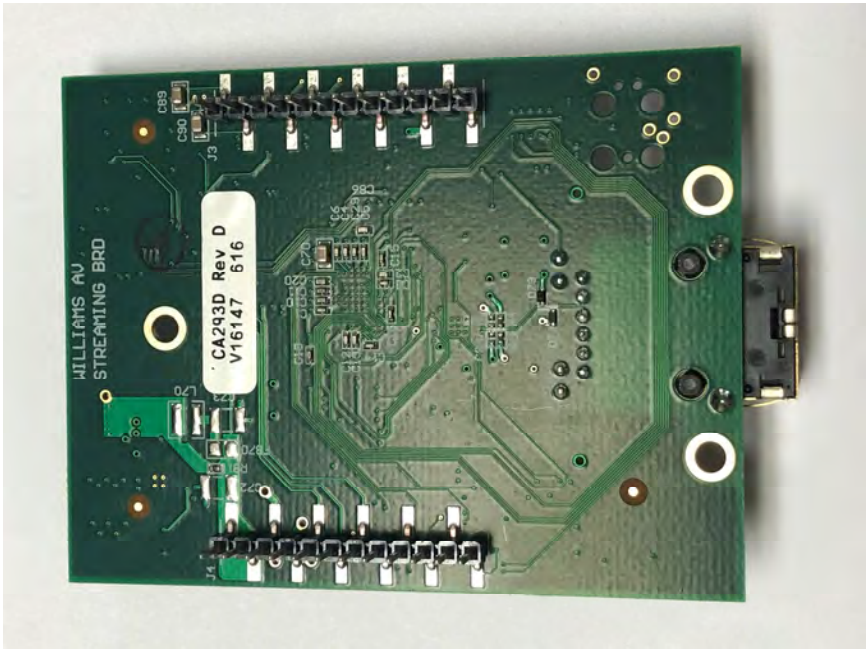

Photo 9: Bottom Side, PCA 293, Ethernet interface and system microcontroller.

Williams AV - FM T55 Internal Photos-03A.docx

FM T55 Internal Photos (Part 03A)

The following internal photos are for the individual boards that are used in the FM T55.
The FM Radio section is highlighted with text and circled sections within the main system board.
Photo Enlargements of the critical RF radio sections are included for purposes of readability.

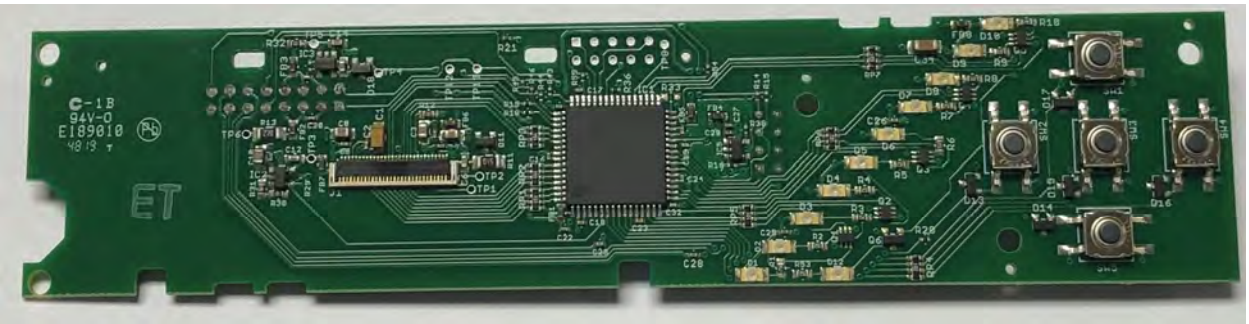

Photo 6: Top Side, PCA 295 (Front control panel (bezel)).

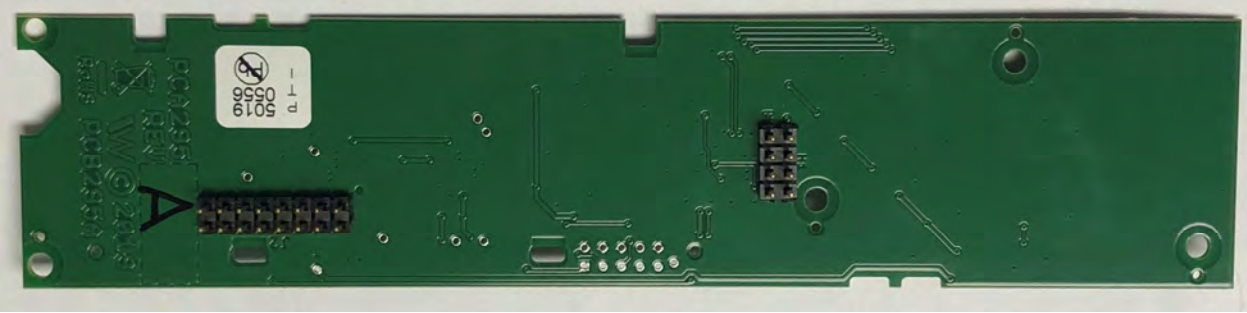

Photo 7: Bottom Side, PCA 295 (Front control panel (bezel)).

Williams AV - FM T55 Internal Photos-02.docx

FM T55 Internal Photos (Part 2)

The following internal photos are for the individual boards that are used in the FM T55.
The FM Radio section is highlighted with text and circled sections within the main system board.
Photo Enlargements of the critical RF radio sections are included for purposes of readability.

The functional circuit description for each element is described in the "FM T55 Theory of Operation and Circuit Description", RF Radio Circuits, pages 8-10.
Associated Schematics for the RF Radio section referenced in the photos, are included in the file for SCH 294, the FM T55 motherboard.

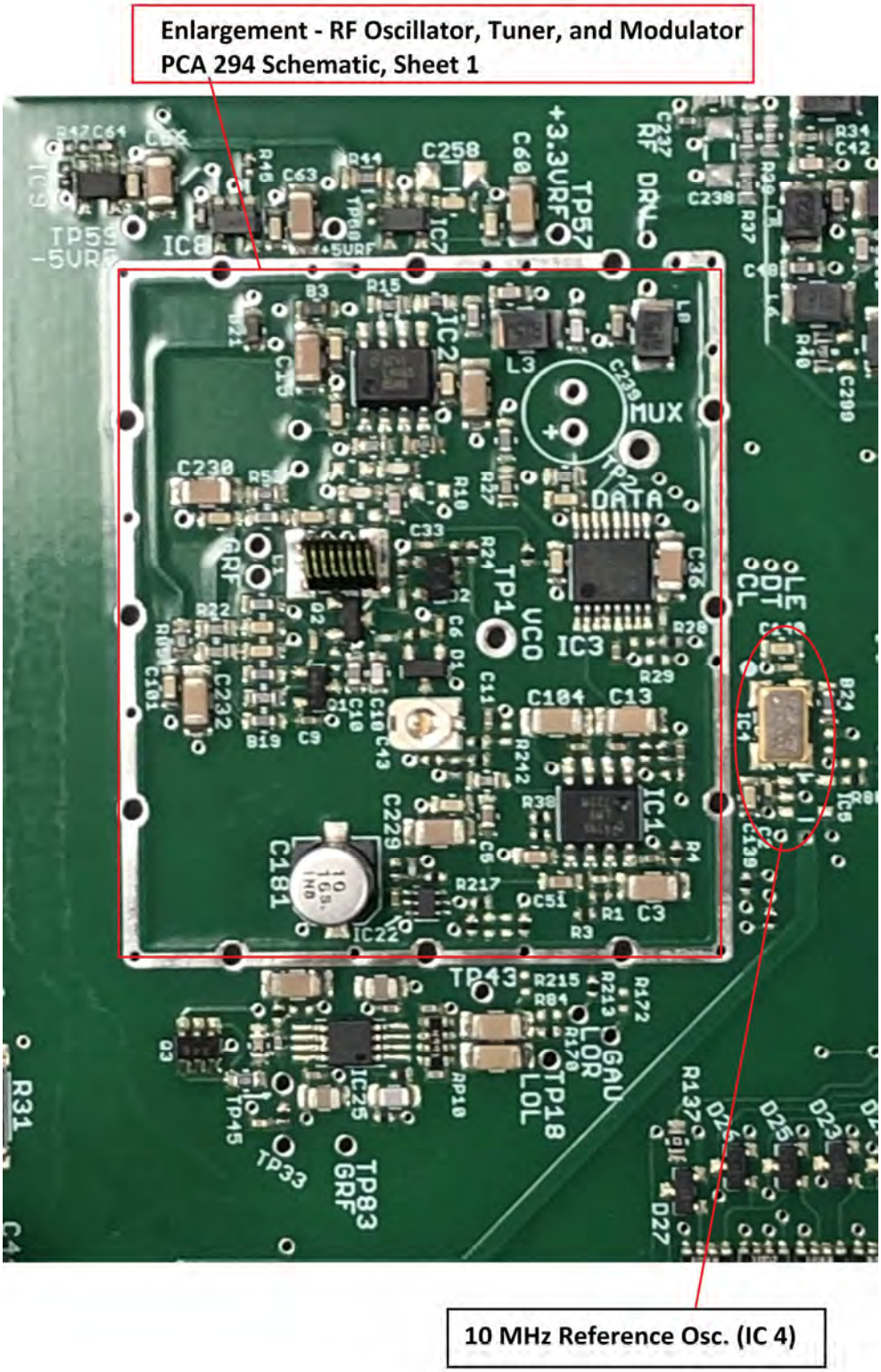

Photo 3: Enlargement of main RF radio section, including reference oscillator, PLL, tuner and modulator sections. Associated schematic components are located on Schematic SCH 294 Sheet 1.

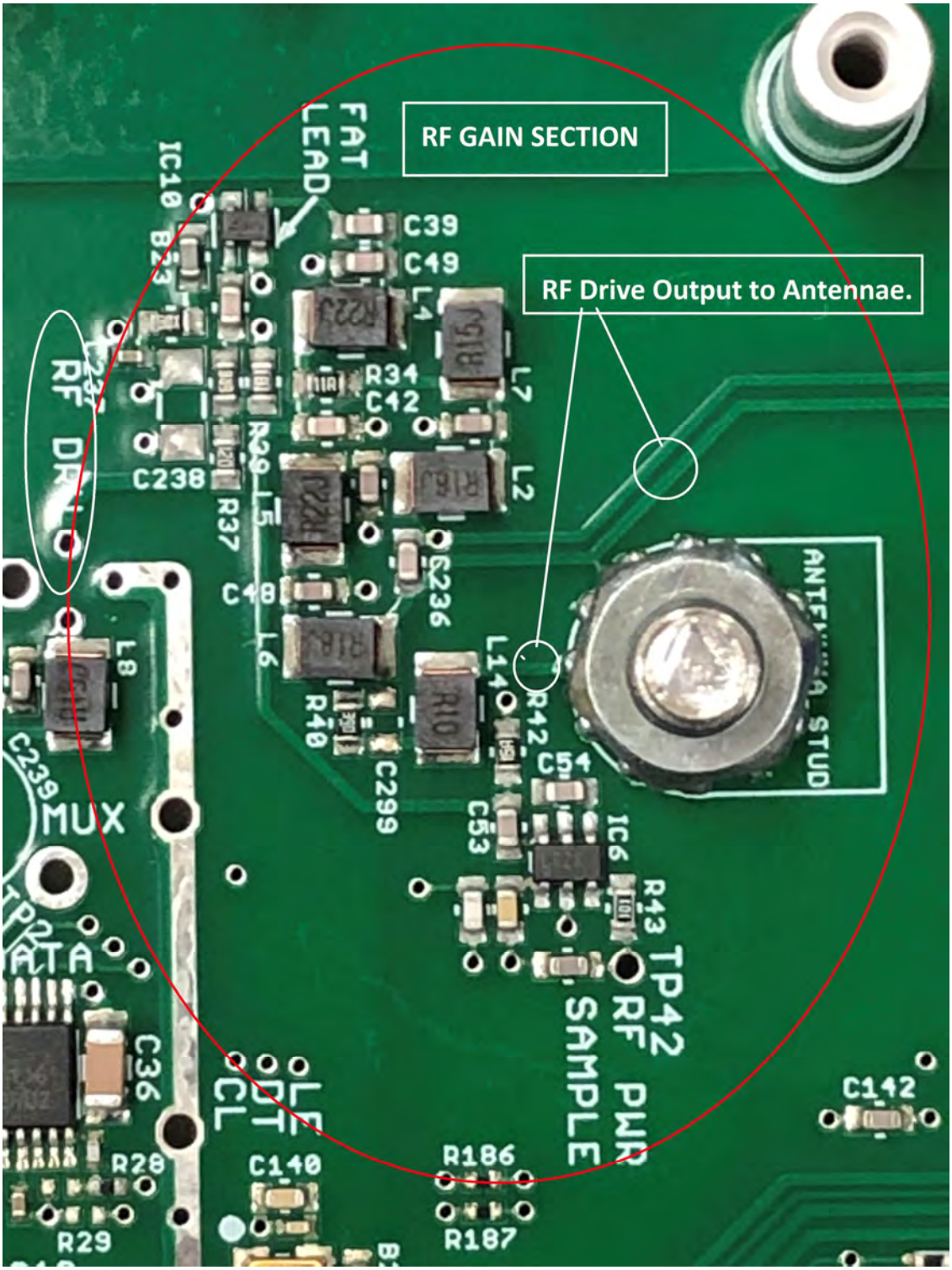

Photo 4: Enlargement of RF Gain section, including filters and drive circuit for antennae. Associated Schematic components are located on Schematic SCH 294, Sheet 2. Component IC6, Pin 3 is the RF Power monitor output that feeds microcontroller IC30, pin 7, on schematic Sheet 6.

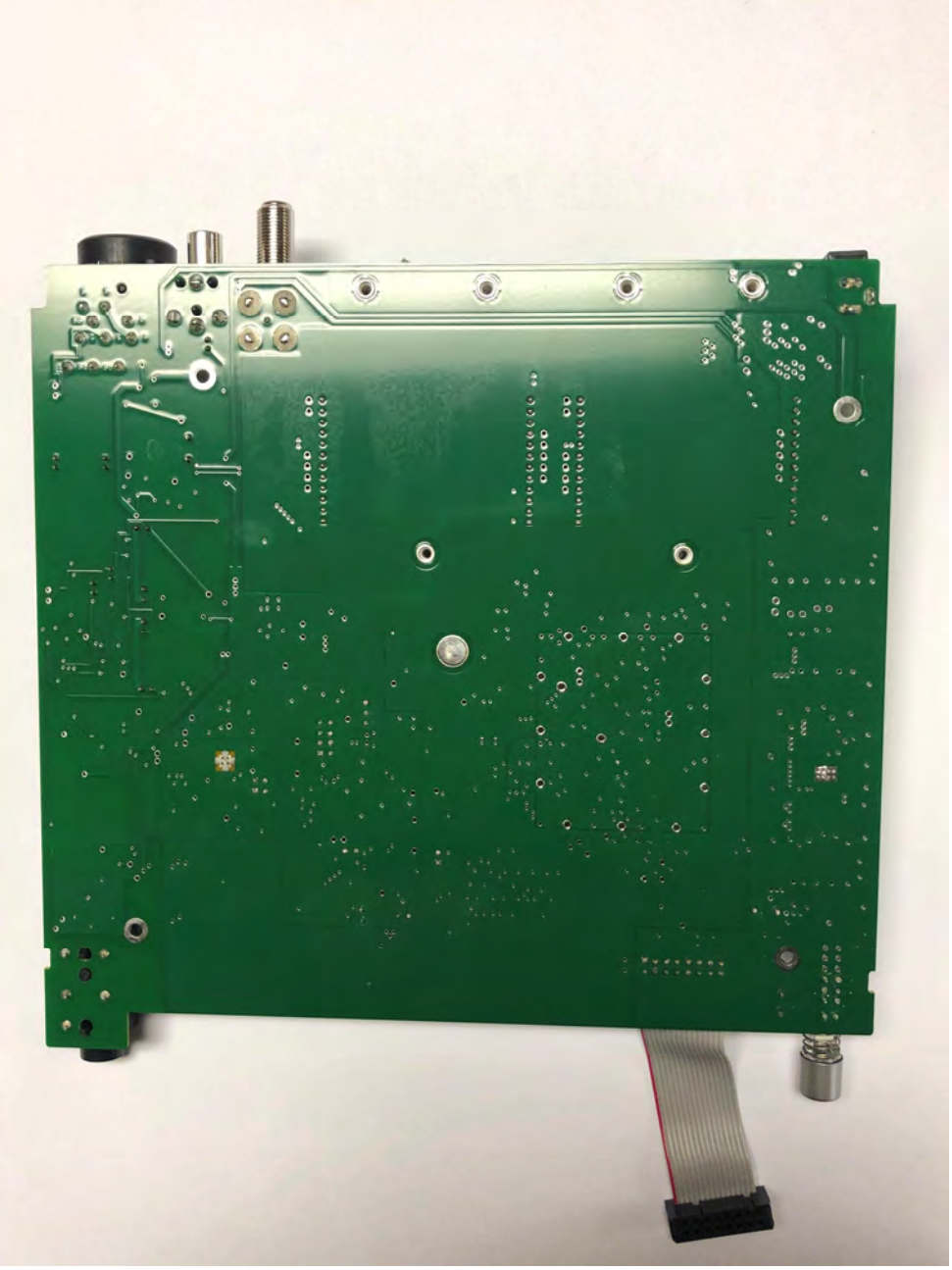

Photo 5: Bottom side, PCA 294.