



21st November 2011

Mark Neumann
Authorization & Evaluation Division
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Re: Form 731 Confirmation Number: EA213491 with FCC ID: AZ492FT7048

Dear Mr. Neumann;

Motorola Solutions, 8000 West Sunrise Boulevard, Fort Lauderdale, Florida, herein submits its response to the 9th November 2011 for information in Correspondence Number 40558.

However, the application must be complete in its entirety; therefore, please include exhibits providing the following:

Q1. Side by side comparisons of internal photos of the RF boards for each of the devices originally tested and FCCID AZ492FT7048 for the frequency band in question.

R1. Photos provided at the end of this document.

Q2. Side by side comparisons of schematics for each of the devices originally tested and FCCID AZ492FT704.

R2. FT7048_Ex5a_Schematics_20111118.pdf provides the complete schematic for the transmitter that is part of AZ492FT7048 - UHFR1 (100W) and 7/800 MHz (30/35W) dual band radio. Please use this schematic for the filing as it has been modified to remove receiver related details.

FT4897_Ex5a_Schematics.pdf provides the complete schematic for the transmitter that is part of AZ492FT4897 – UHF R1 100W single band radio.

FT5858_Ex5a_Schematics.pdf provides the complete schematic for the transmitter that is part of AZ492FT5858 – 7/800 MHz (30/35W) single band radio.

Q3. An attestation of electrical equivalency between each of the devices originally tested and FCCID AZ492FT704.

R3. This radio (FCC ID: AZ492FT7048) is identical to the previous radios (FCC IDs: AZ492FT4897 & AZ492FT5858) in terms of layout, components, matching

network, all the transmitter performance including but not limited to efficiency, transmitter current for a given output power, except it contains both transmitters in the same housing. The only difference is that this radio (FCC ID: AZ492FT7048) has both bands populated on the printed circuit board.

Operational Description:

Q4. Please include the necessary bandwidth computation for emissions designators 8K10F1D, 8K10F1E, and 8K10F1W.

R4. Please see page 11-12 of 73 in Exhibit 6, Test Report.

Q5. The available antennas for UHF 1 under "Transmitter application" do not match those provided under "Available Accessories." Please explain.

R5. Please refer to the updated antenna accessories list provided in the Operational Description.

RF Test Report:

Q6. For each test performed, please include the FCCID of the device originally tested and the date of the test. Please provide a summary table of the devices tested and the test dates in the report.

R6. FCC ID: AZ492FT7048 is a UHF R1 (100W) and 7/800 MHz (30/35W) dual band radio. The UHF R1 portion of the data included for this filing (AZ492FT7048) was used during the approval of FCC ID: AZ492FT4897 (UHF R1 100W Single band) in November of 2010. The 7/800 portion of the data included in this filing (AZ492FT7048) was used during the approval of FCC ID: AZ492FT5858 (7/800 MHz single band) in July 2009.

MPE Assessment:

Q7. The MPE measurement tables must include the dates of each individual measurement and the FCCID for the device for which the measurements are made.

R7. MPE report part 1 of 2 cover page was revised to include the FCC ID associated with the tested model. All MPE data was taken with the tested model identified on the cover page. The tables were revised to identify measurements taken to satisfy FCC ID AZ492FT4897 (November 2010) along with new measurements taken (2011) to satisfy this filing.

Note – Due to limited space and table format the data was identified by highlighting.

MPE report part 2 of 2 cover page was revised to include the FCC ID associated with the tested model. All MPE data was taken with the tested model identified on the cover page. All the data in part 2 of 2 is from the same original filing (FCC ID AZ492FT5858) therefore tables were not revised.

Q8. MPE Assessment for 380-470 MHz The tested antennas should conform to the list of antennas provided as available accessories in the Operational Description.

R8. Please refer to the updated antenna accessories list provided in the Operational Description.

Q9. Please provide justification for performing MPE measurements with antenna models HAE6010A and HAE6011A, which are not included in the accessories list.

R9. Please refer to the updated antenna accessories list provided in the Operational Description. Also, HAE6010A and HAE6011A have different gains and hence listed and tested separately.

Q10. MPE Assessment for 700/800 MHz:

The tested antennas should conform to the list of antennas provided as available accessories in the Operational Description.

R10. Please refer to the updated antenna accessories list provided in the Operational Description.

Q11. Please provide justification for performing MPE measurements with antenna models RRA4914B and HAF4002A, which are not included in the accessories list.

R11. Please refer to the updated antenna accessories list provided in the Operational Description. Also, RRA4914B and HAF4002A have different gains and hence listed and tested separately.

Q12. Please provide justification for using different distances for external/bystander MPR measurements from the rear edge of the vehicle to the survey probe sensor for the two operating frequency bands of the device: 48 cm for 380-470 MHz, 20 cm for 700/800 MHz.

R12. Distances are defined by output power (refer to RF safety booklet) and customers may choose to use one band over another.

SAR Simulation Report:

Q13. Please provide the SAR Simulation Report.

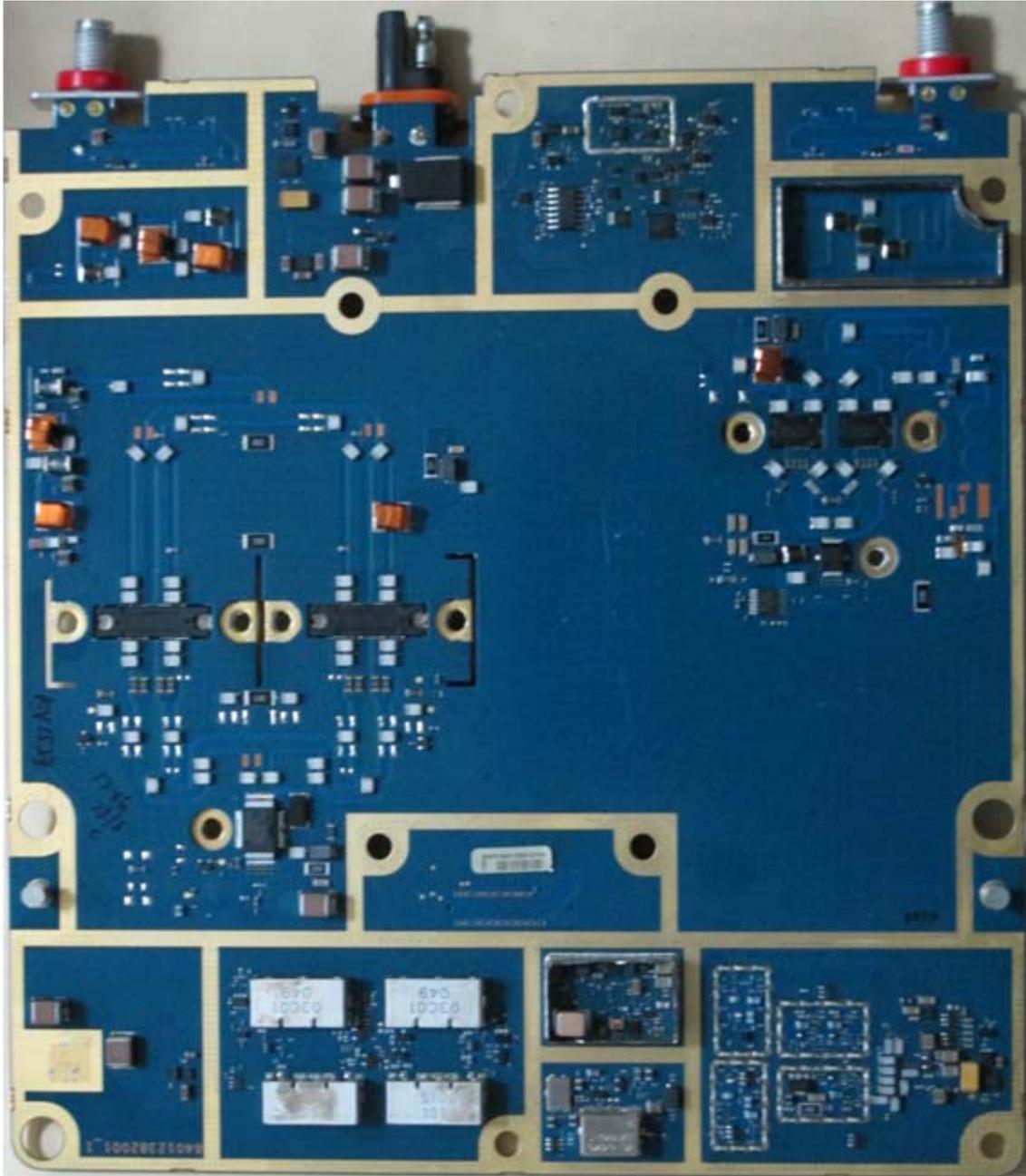
R13. SAR simulation reports were uploaded on November 16, 2011.

Q14. If the simulations were performed on devices other than FCCID AZ492FT7048, please include the FCCID of the device and the date of the original analysis.

R14. Data included in file (SR9341 SAR sim Appx E 2 UHF_120W M30TXS9PW1AN rev O 110928.pdf) was used during the approval of FCC ID AZ492FT4897 in November of 2010.

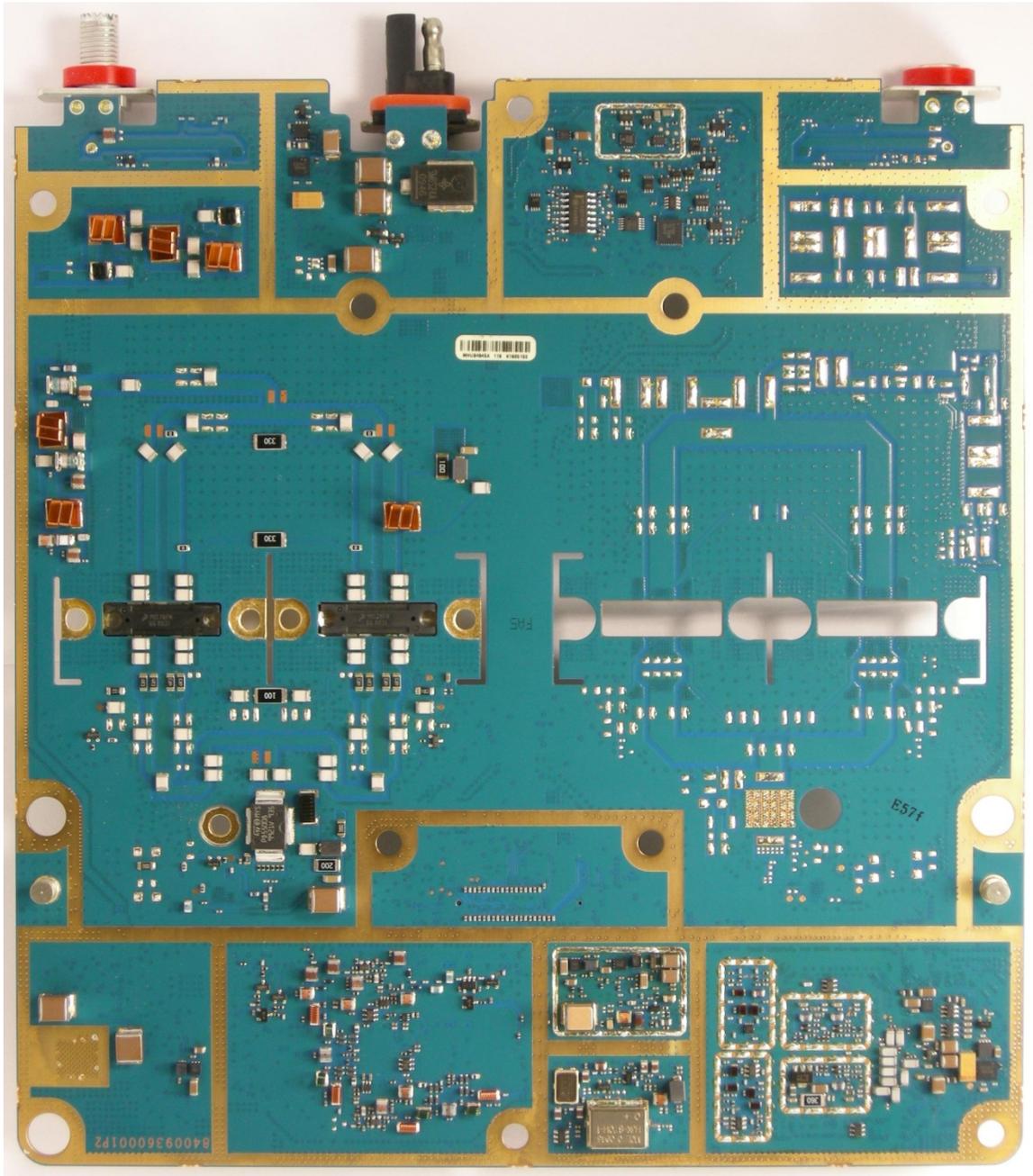
Data included in file (SR9341 SAR sim Appx E 1 UHF_120W M30TXS9PW1AN rev O 110928.pdf) is additional data for this filing.

AZ492FT7048 – RF Board (Top Side without Shields)



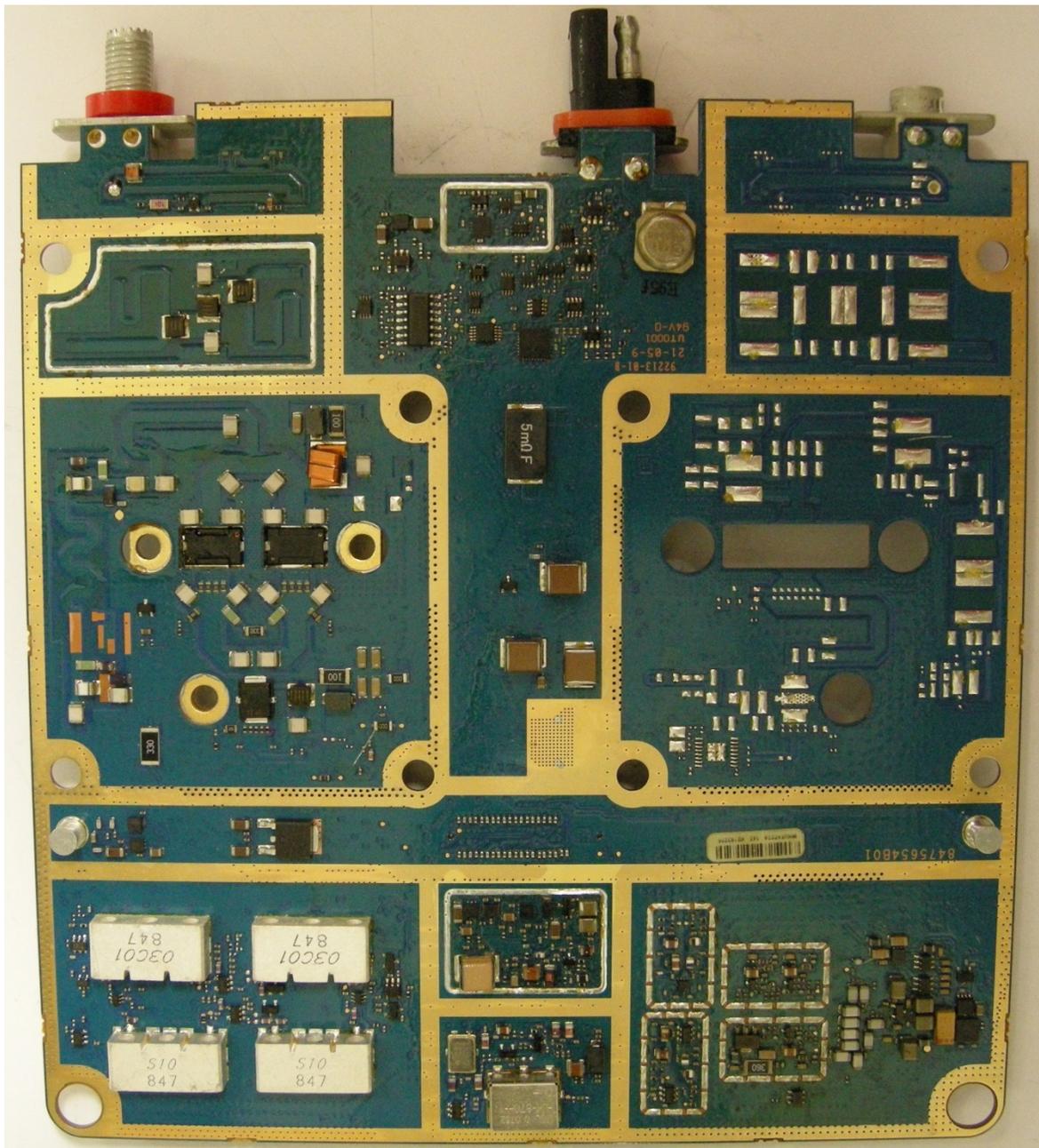
RF BOARD, LESS SHIELD (TOP VIEW)

AZ492FT4897 – RF Board (Top Side without Shields)



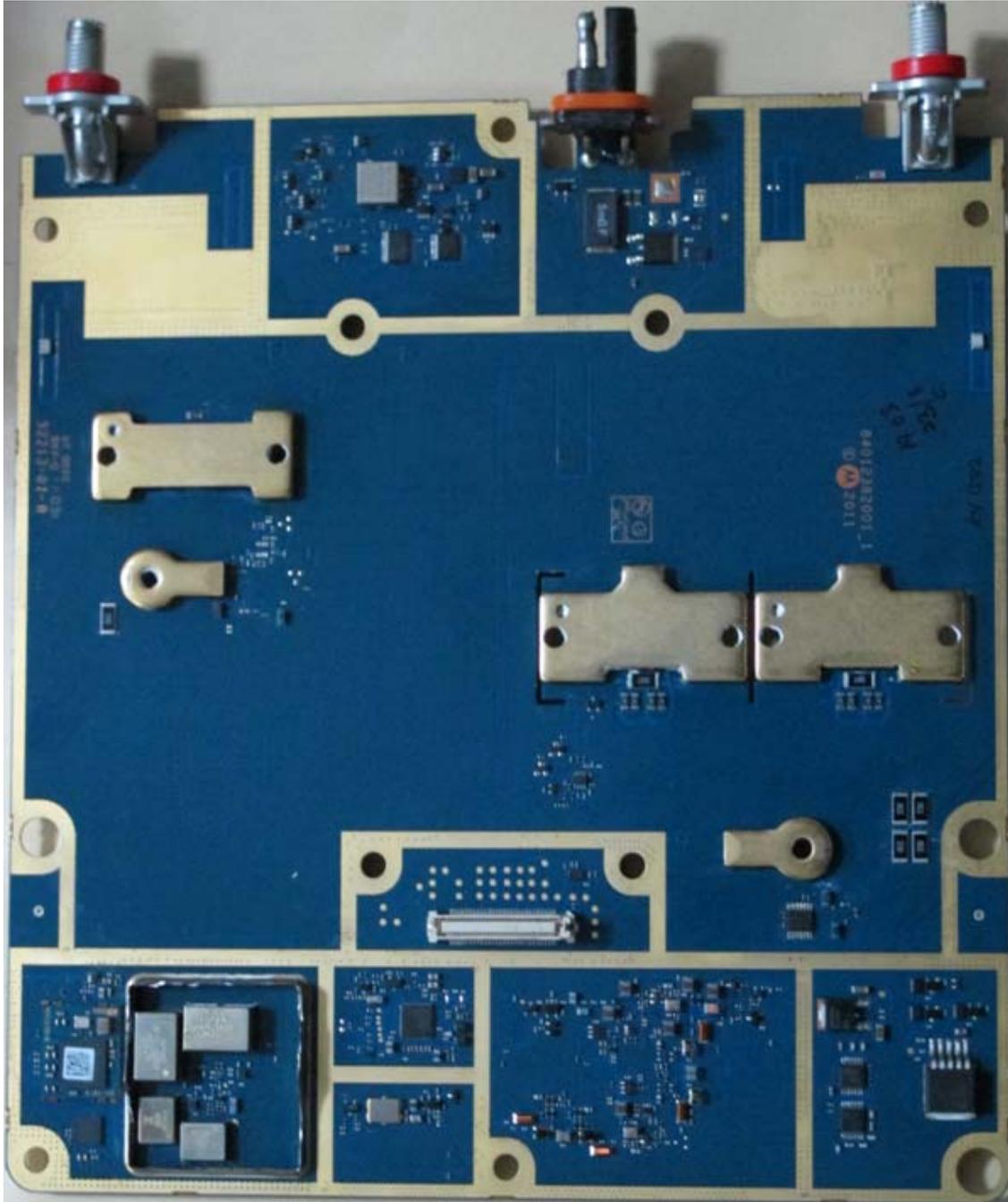
RF BOARD, LESS SHIELD (TOP VIEW)

AZ492FT5858 – RF Board (Top Side without Shields)



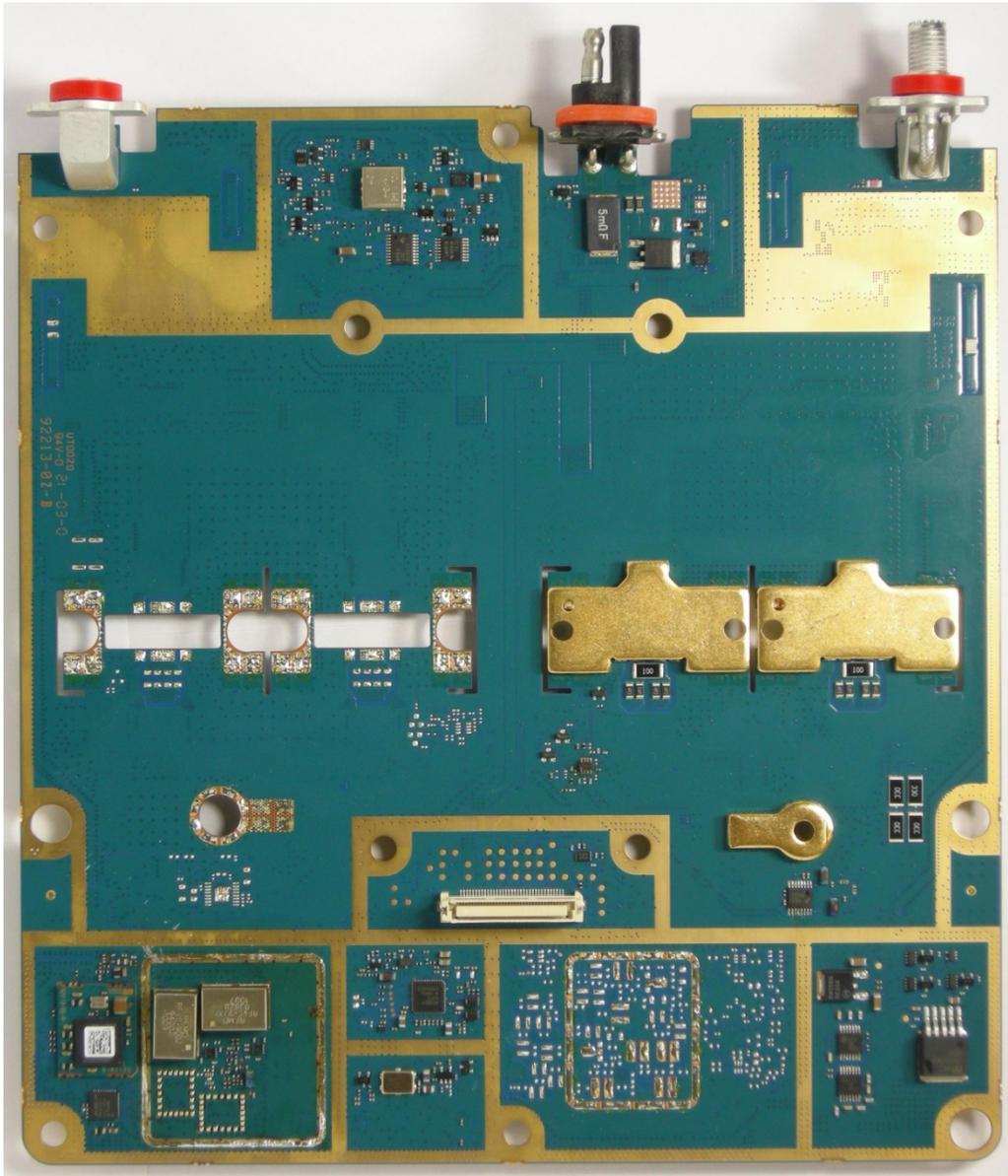
RF BOARD, LESS SHIELD (TOP VIEW)

AZ492FT7048 – RF Board (Bottom Side without Shields)



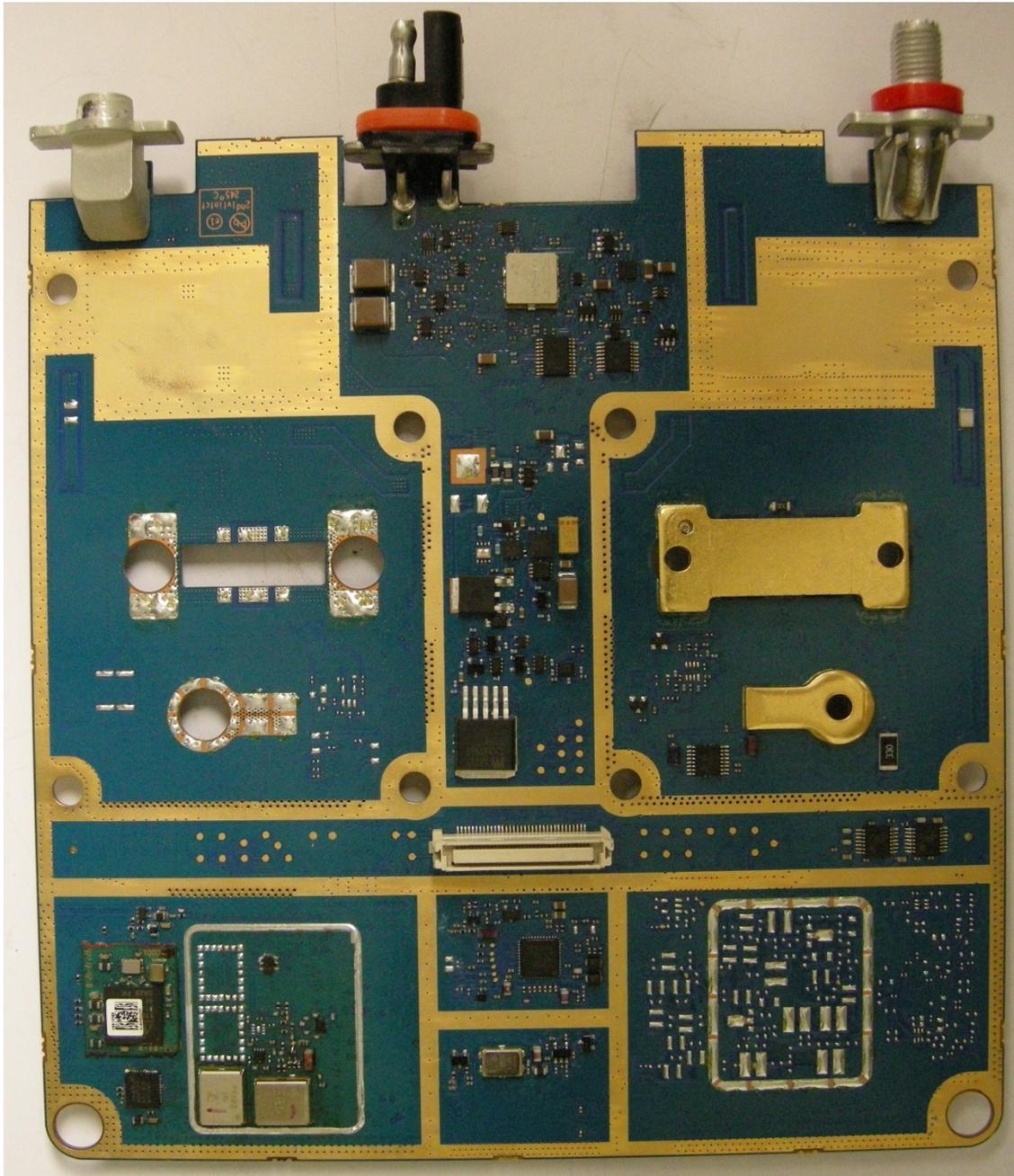
RF BOARD, LESS SHIELD (BOTTOM VIEW)

AZ492FT4897 – RF Board (Bottom Side without Shields)



RF BOARD, LESS SHIELD (BOTTOM VIEW)

AZ492FT5858 – RF Board (Bottom Side without Shields)



RF BOARD, LESS SHIELD (BOTTOM VIEW)

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
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Email: Mike.Ramnath@motorola.com