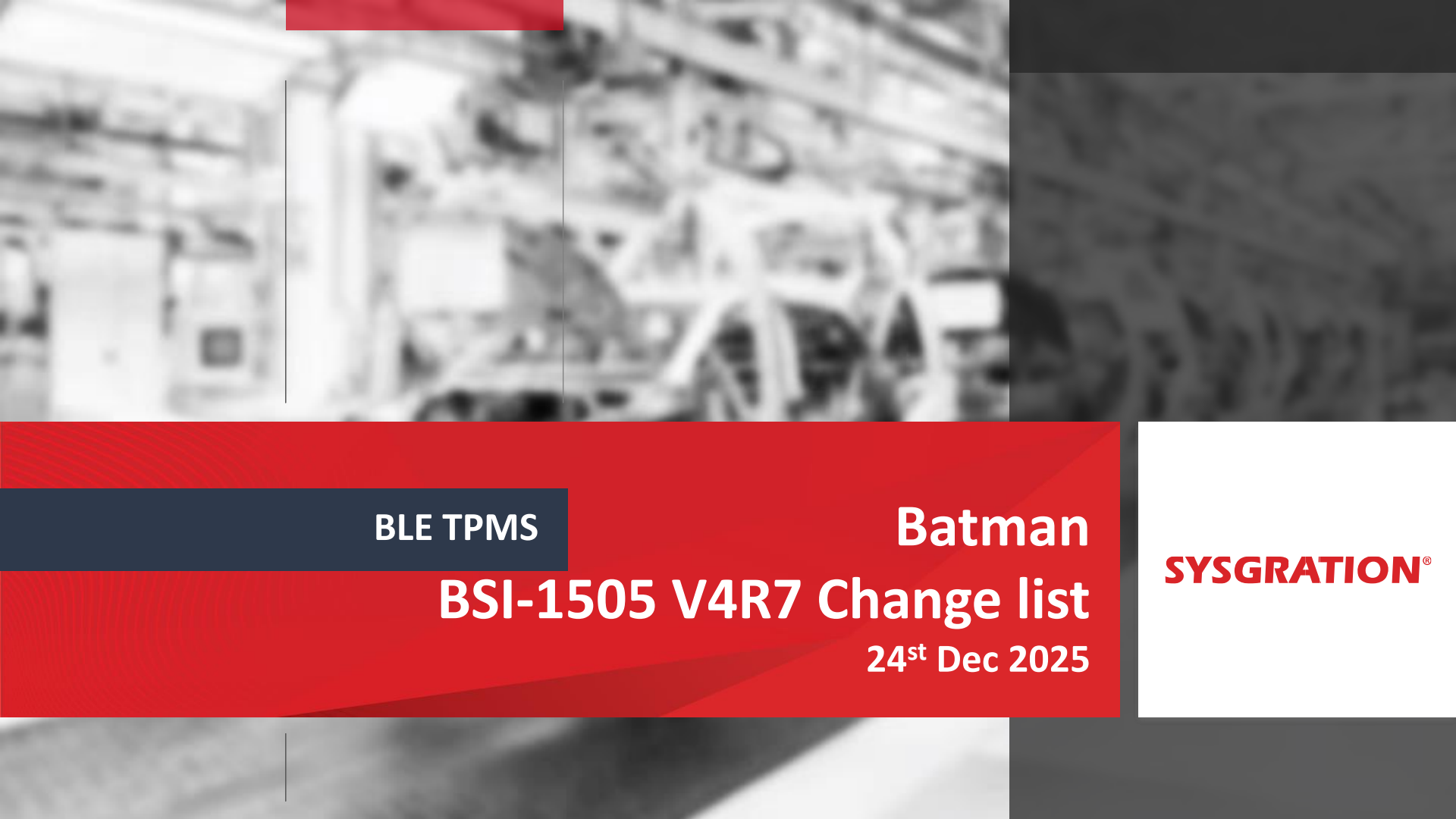




BLE TPMS

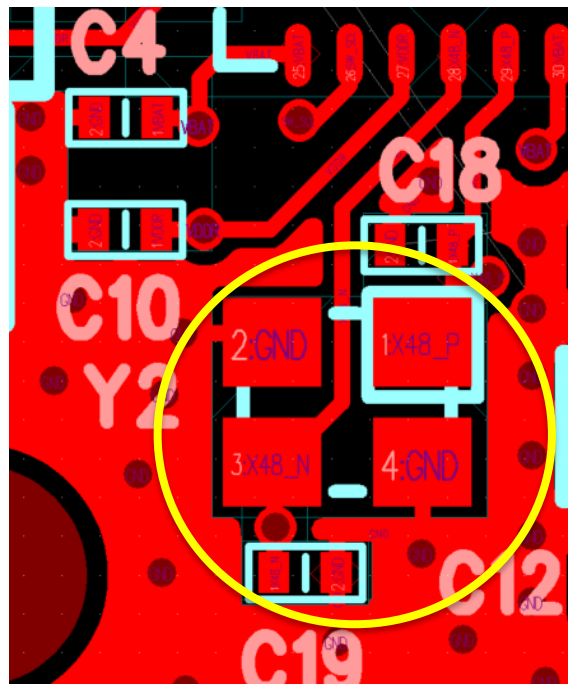
Batman BSI-1505 V4R7 Change list

24st Dec 2025

SYSGRATION®

Layout around the External HF crystal modified as circled below

V4R4 Old board



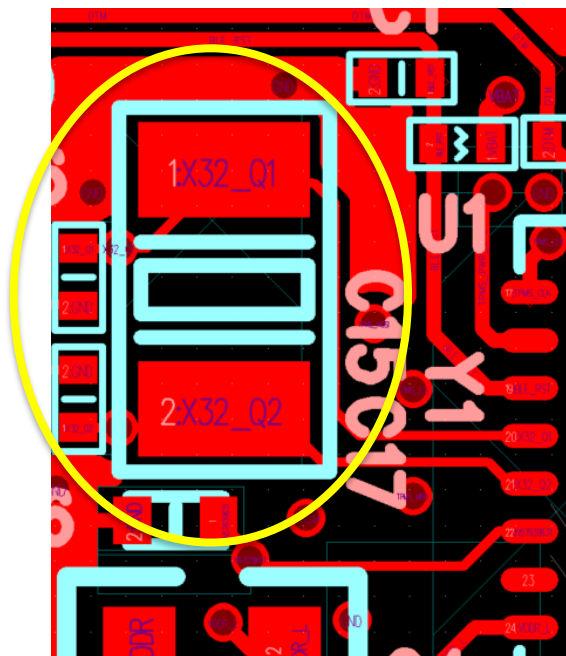
V4R7 New board



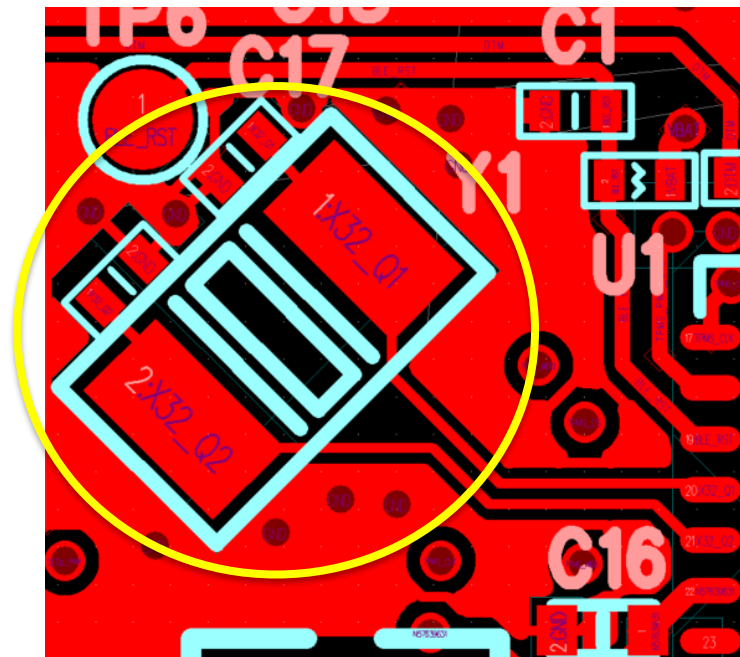
This is only the crystal layout change. It shouldn't have any effect on the RF/antenna test results.

Layout around the External LF crystal modified as circled below

V4R4 Old board



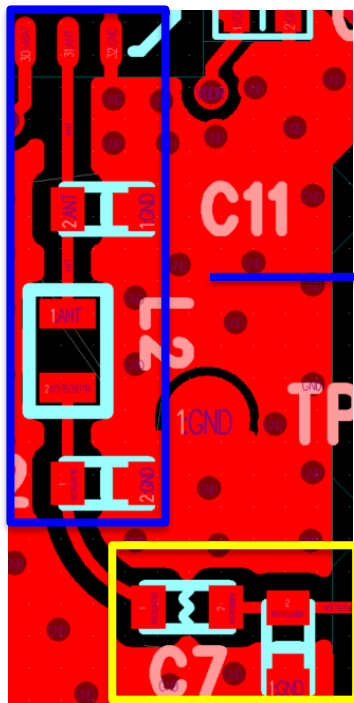
V4R7 New board



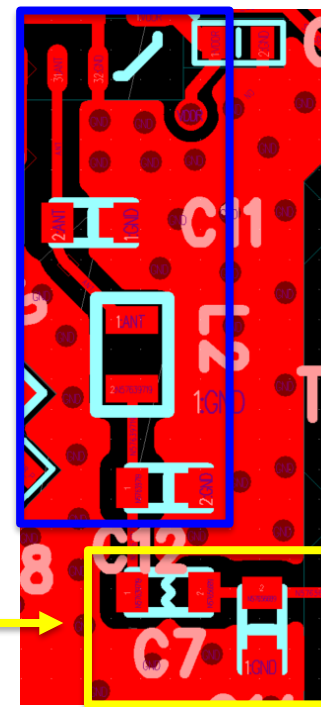
This is only the crystal layout change. It shouldn't have any effect on the RF/antenna test results.

RF section: Slight Layout Modification

V4R4 Old board



V4R7 New board



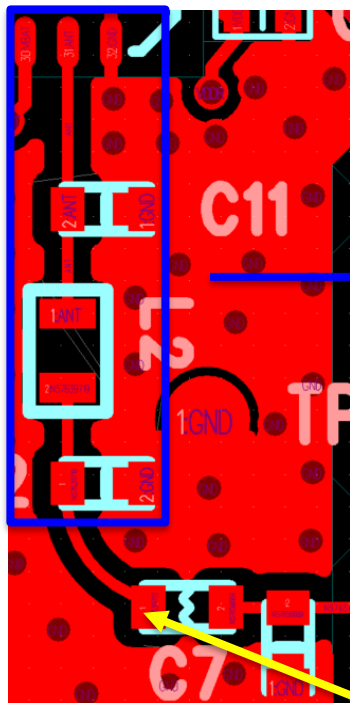
RF Trace slightly
modified

Antenna Trace no change

NO BOM Change Between the Two boards.

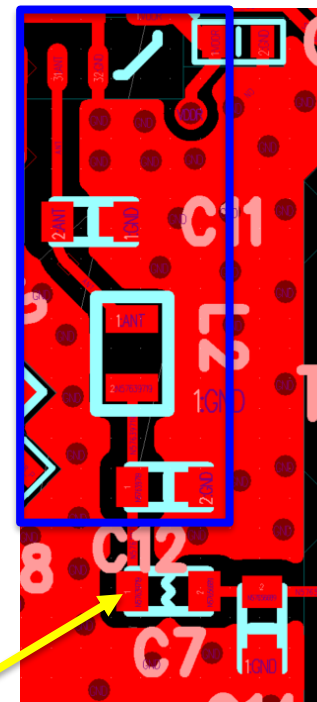
RF section: Conductive RF power comparison

V4R4 Old board



RF Trace slightly
modified

V4R7 New board



Pig tail location for
RF measurements

V4R4 Old board

Output Power

Average Power
Max Power
Min Power
Peak to Average

2402MHz

Low

7.43 dBm
7.44 dBm
7.40 dBm
0.12 dB

2426MHz

Medium

7.09 dBm
7.09 dBm
7.09 dBm
0.13 dB

2480MHz

High

6.90 dBm
6.90 dBm
6.90 dBm
0.13 dB

V4R7 New board

Output Power

Average Power
Max Power
Min Power
Peak to Average

2402MHz

Low

7.29 dBm
7.30 dBm
7.29 dBm
0.09 dB

2426MHz

Medium

7.30 dBm
7.32 dBm
7.30 dBm
0.09 dB

2480MHz

High

7.25 dBm
7.26 dBm
7.24 dBm
0.09 dB

-0.14 dB

+0.21 dB

-0.36 dB

- The BLE Tx power is very comparable between the two boards. The conducted power from the new board is slightly lower than that from the previous one.

- ◆ HF and LF crystal layout modified, but they shouldn't effect the RF measurement test results.
- ◆ Slight RF trace modifications and conducted RF power measurements show negligible measurement changes.