

TCM 515 – ENOCEAN TRANSCEIVER GATEWAY MODULE

10.2.3 Chip antenna (Supplier: Mitsubishi Material, Type AM11DP-ST01T)

TCM 515 has been certified for use with the chip antenna AM11DP-ST01T from Mitsubishi Material provided that the following layout guidelines are met:

- Dimensions may not be shortened
- Matching circuit is part of the limited modular approval and may not be changed
- Matching circuits values: $L2 = 33 \text{ nH}$; $L3 = 3,9 \text{ nH}$, $L4 = 12 \text{ nH}$
- Use High Q wire wound inductors, e.g. 0603 Murata LQW18A series
- Minimum top and bottom side ground plane required as shown below
- Connect ground planes using multiple via as shown in Figure 13
- Connect matching circuit to RF_50 pin

Figure 13 below shows the reference layout that has to be used.

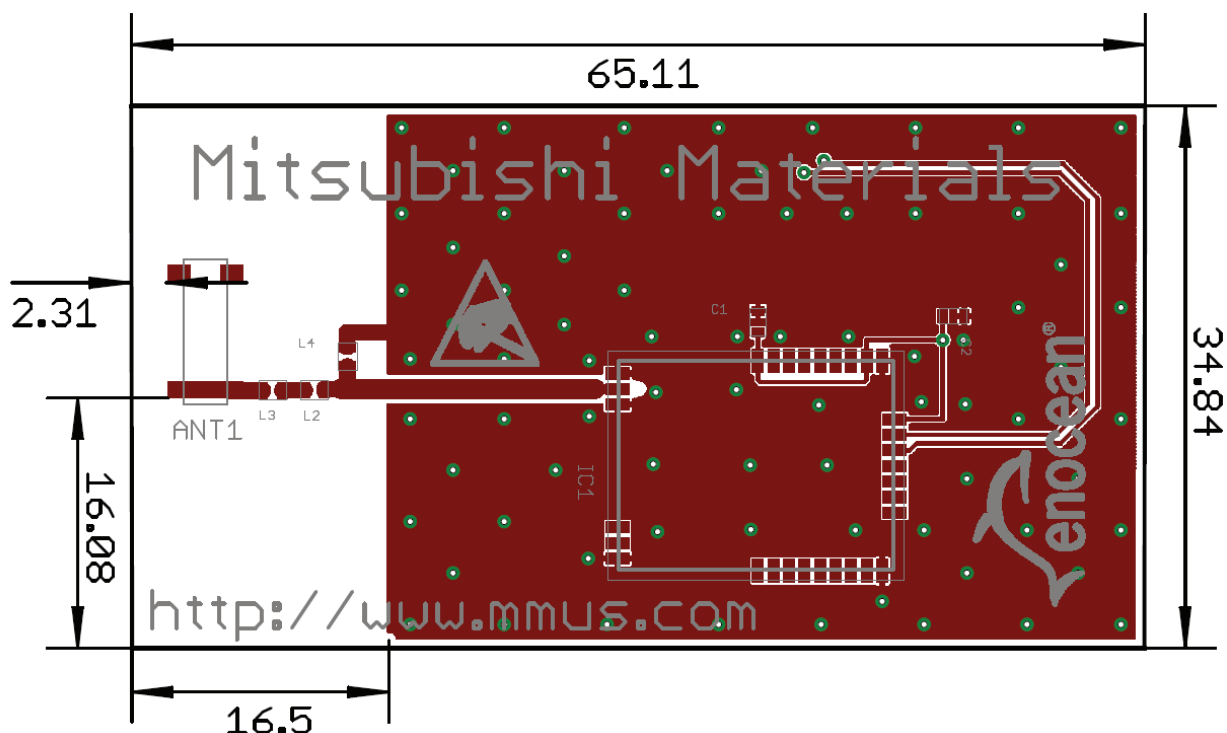


Figure 13 – Required layout for AM11DG-ST01

For any further questions or chip antenna quotes, please refer to Mitsubishi Materials website at www.mmea.com or email to electroniccomponents@mmus.com.