



Place close to IPS pins

Place close to IPS pins

Place close to Header pins

Place next to Header pins

ESD protection diodes are recommended for voltage levels over 20kV. E.g. using 150pF / 3300ohm ESD gun for test

DNP\_VDD: Populate R15 = 0E to short VDD\_U1 + VDD\_U2

C\_ADJ = To be adjusted according to coil inductivity. Calculate C\_TX with the given formula.  
 $C\_ADJ = 2 \times C\_TX$  when separate transmitters are in use  
 Calculate C\_ADJ individually for each TX  
 It's recommended to use COG or NPO ceramic capacitors

Use dielectric strength Vr >= 50V capacitors for C7 + (C10 .. C22) and C31 + (C34 .. C46)

**LEGEND**  
 Component Size 0603  
 Component Size 0402  
 Net Name  
 Component Placement Suggestion  
 Optional Component

$$f_{TX} = \frac{1}{2\pi\sqrt{L_{TX}C_{TX}}} \rightarrow C_{TX} = \frac{1}{(2\pi f_{TX})^2 L_{TX}}$$

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