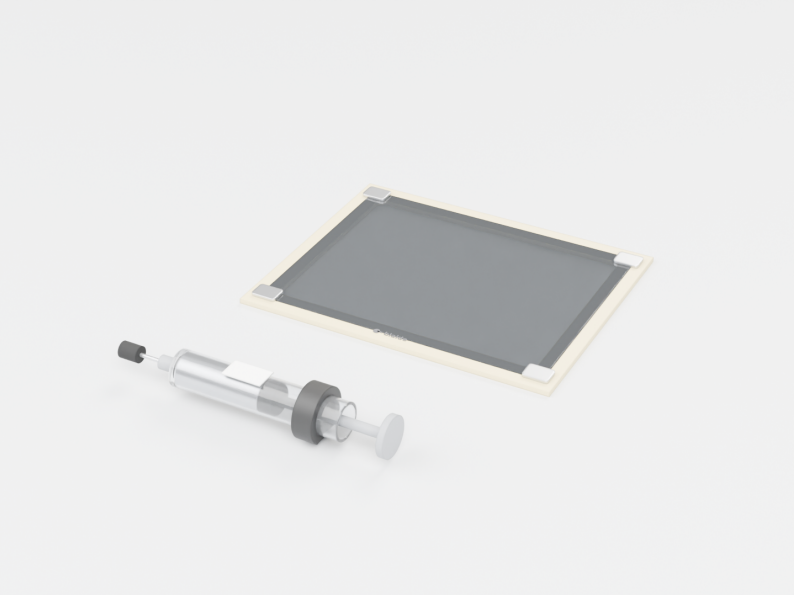
Antenna and flex pack: User Guide

ANT | Blaide product line | 17 November 2026 | Design only: nothing built or tested | Draft



Using it

- **1.** Enter the chip's capacitance and the coil size in the app; it shows the turn count and estimates.
- **2.** Clip a film sheet in the carrier and load it.
- **3.** Print: coil, cure, dielectric patch, UV cure, bridge, cure.
- **4.** Measure inductance and resistance on the ZA-1.
- **5.** If inductance is high, remove a turn in the app and reprint; if low, add one.
- **6.** Fit the chip with conductive adhesive or low-temperature paste.

Safety

Hazard	Protection	What you must do
Ink contact	Sealed cartridges	Gloves; follow the ink safety sheets
Hot bed	Light line amber	Film softens: wait for white before lifting

Specification

Parameter	Target
Example coil	45 x 45 mm, 0.5 mm line, 0.4 mm gap
Turns chosen	6 for a 50 pF chip at 13.56 MHz
Estimated inductance	3.049 uH (target 2.755 uH)
Estimated resistance	23.33 ohm in printed silver
Estimated quality factor	11.1
Tuning capacitance for the estimate	45.2 pF
Layers	silver coil, dielectric patch, silver bridge