Sample TA210715A46 in Speedy 3-10-15 cooldown

Thomas Aref

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1 Summary

This is an attempt at reducing the coupling by changing the spacing of the fingers pairs on the qubit IDT, pushing them to a higher frequency. The coupling appears reduced by an order of magnitude and the qubit seems to be operating as a qubit. Unfortunately, the qubit frequency is below the IDT listening/talking frequency so it is never directly on resonance (this could be easily fixed by having less resistive junctions). Speedy was also experiencing quite a bit of trouble with blockages so the temperature was often in the 50-80 mK range.

this is the second entry

1.1 Qubit values

Qubit	
Finger type	double finger
Number of finger pairs, N_{pq}	9
Overlap length, W	25 μm
finger width, a_q	80 nm
DC Junction Resistances	8.93 kΩ, 9.35kΩ
Metallization ratio	50%

stuff/test˙data/source˙test/test˙colormap˙plot.png

Figure 1: Analysis: `/TA_software/taref/tex/tex.py`