## **SQUID Tuning Summary**

HWMap Name: PB2 HWM

HWMap

 $/home/polarbear/hardware\_maps/polarbear/PB2b/commissioning/202305\_crate\_test/crate\_hwm\_202310\_shift\_disable\_bad\_sq\_v2.yas and the polarbear/hardware\_maps/polarbear/PB2b/commissioning/202305\_crate\_test/crate\_hwm\_202310\_shift\_disable\_bad\_sq\_v2.yas and the polarbear/hardware\_maps/polarbear/PB2b/commissioning/202305\_crate\_test/crate\_hwm\_202310\_shift\_disable\_bad\_sq\_v2.yas and the polarbear/hardware\_maps/polarbear/PB2b/commissioning/202305\_crate\_test/crate\_hwm\_202310\_shift\_disable\_bad\_sq\_v2.yas and the polarbear/hardware\_maps/polarb$ 

Date: Fri Jun 21 02:23:26 2024

118 squids successfully tuned, 22 squids failed to tune

## Successful Tunings

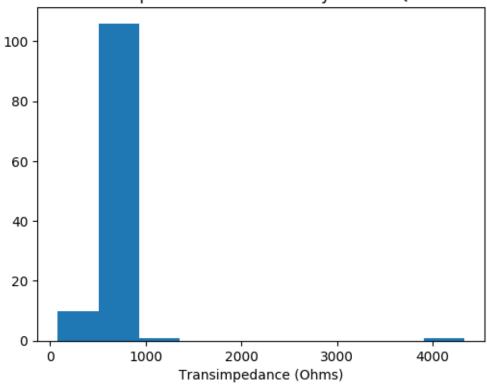
SqID	Current Bias (V_DAC)	Current Bias (uA)	Achieved Vpp (V_DAC)	Vpp (mV)	Measured Z_sq (Ohms)
Correct.1	0.88	42.66	0.37	4.96	734
Correct.2	0.87	42.43	0.37	4.91	740
Correct.3	0.88	42.94	0.36	4.79	749
Correct.4	0.87	42.24	0.35	4.57	718
Correct.5	0.92	45.94	0.34	4.47	657
Correct.6	0.88	43.12	0.35	4.58	739
Correct.7	0.87	42.52	0.33	4.37	720
Correct.8	0.89	43.43	0.34	4.49	753
Correct.2	0.86	41.44	0.35	4.68	748
Correct.3	0.89	44.02	0.36	4.80	753
Correct.4	0.88	43.10	0.37	4.95	805
Correct.1	0.91	45.57	0.34	4.50	81
Correct.2	0.92	45.96	0.34	4.47	630
Correct.3	0.92	46.52	0.36	4.76	4330
Correct.4	0.91	45.70	0.34	4.49	647
Correct.5	0.88	43.32	0.34	4.47	693
Correct.6	0.91	45.07	0.34	4.53	640
Correct.7	0.92	46.01	0.33	4.41	657
Correct.8	0.88	42.99	0.33	4.37	719
Correct.1	0.87	41.97	0.34	4.51	673
Correct.2	0.87	42.55	0.40	5.27	807
Correct.3	0.89	43.85	0.36	4.78	717
Correct.4	0.92	45.82	0.34	4.54	651
Correct.5	0.92	46.11	0.35	4.60	656
Correct.6	0.92	46.29	0.35	4.62	679
Correct.7	0.92	46.06	0.35	4.58	661

Correct.8	0.92	46.07	0.34	4.54	658
Correct.1	0.87	42.31	0.36	4.71	779
Correct.2	0.89	43.59	0.36	4.79	767
Correct.4	0.88	42.96	0.37	4.84	804
Correct.1	0.87	42.04	0.37	4.93	748
Correct.2	0.88	42.66	0.39	5.15	796
Correct.3	0.87	42.04	0.38	5.04	757
Correct.4	0.86	41.74	0.36	4.82	750
Correct.5	0.87	42.41	0.36	4.81	787
Correct.6	0.87	42.39	0.37	4.85	762
Correct.7	0.88	42.93	0.37	4.91	797
Correct.2	0.92	46.55	0.37	4.84	736
Correct.3	0.91	45.69	0.34	4.51	649
Correct.4	0.92	45.86	0.34	4.45	603
Correct.5	0.90	44.88	0.34	4.50	640
Correct.6	0.91	45.58	0.34	4.54	625
Correct.7	0.87	42.34	0.34	4.57	730
Correct.8	0.89	43.70	0.34	4.50	710
Correct.5	0.87	42.45	0.37	4.89	779
Correct.6	0.82	38.28	0.37	4.94	779
Correct.7	0.87	42.01	0.35	4.65	750
Correct.8	0.83	38.87	0.35	4.68	758
Correct.1	0.88	42.68	0.33	4.40	749
Correct.2	0.87	42.10	0.32	4.24	663
Correct.3	0.90	44.84	0.34	4.47	661
Correct.4	0.87	42.51	0.34	4.49	751
Correct.5	0.91	45.42	0.36	4.79	684
Correct.6	0.87	42.42	0.38	5.06	772
Correct.7	0.89	43.80	0.36	4.81	753
Correct.8	0.89	43.95	0.35	4.66	719
Correct.1	0.91	45.51	0.34	4.52	699
Correct.2	0.91	45.59	0.35	4.59	668
Correct.3	0.76	33.03	0.01	0.07	297
Correct.4	0.91	44.99	0.33	4.42	278
Correct.5	0.91	45.36	0.36	4.74	864
Correct.6	0.90	44.76	0.32	4.22	277
Correct.7	0.91	45.44	0.35	4.62	620
Correct.8	0.89	43.39	0.34	4.45	695
Correct.1	0.86	41.07	0.36	4.71	682

Correct.2	0.88	42.66	0.40	5.27	864
Correct.3	0.90	44.56	0.38	5.01	759
Correct.4	0.90	44.18	0.37	4.87	776
Correct.5	0.76	33.62	0.01	0.12	181
Correct.6	0.89	43.46	0.38	4.97	798
Correct.7	0.87	42.24	0.35	4.60	721
Correct.8	0.88	42.97	0.36	4.76	803
Correct.1	0.91	45.22	0.34	4.50	636
Correct.2	0.91	45.59	0.34	4.45	625
Correct.3	0.88	42.65	0.01	0.08	424
Correct.4	0.92	45.87	0.34	4.49	668
Correct.5	0.91	45.66	0.34	4.44	669
Correct.6	0.90	44.96	0.34	4.47	625
Correct.8	0.90	44.85	0.33	4.43	663
Correct.1	0.88	43.05	0.38	4.99	801
Correct.2	0.87	42.21	0.36	4.72	736
Correct.3	0.86	41.56	0.35	4.62	742
Correct.4	0.87	42.19	0.36	4.72	717
Correct.1	0.81	37.26	0.02	0.24	282
Correct.2	0.88	42.59	0.29	3.79	672
Correct.3	0.77	33.78	0.03	0.40	194
Correct.4	0.90	44.87	0.28	3.66	628
Correct.5	0.87	42.55	0.26	3.41	1040
Correct.6	0.88	43.01	0.25	3.26	639
Correct.7	0.86	41.72	0.19	2.46	528
Correct.8	0.90	44.28	0.24	3.17	511
Correct.1	0.88	43.26	0.33	4.40	744
Correct.2	0.87	42.27	0.32	4.23	667
Correct.3	0.71	29.40	0.02	0.23	257
Correct.1	0.92	46.12	0.37	4.89	742
Correct.2	0.89	43.76	0.37	4.93	746
Correct.3	0.88	42.76	0.37	4.96	792
Correct.4	0.91	45.61	0.36	4.75	748
Correct.5	0.88	43.15	0.37	4.89	830
Correct.6	0.87	42.48	0.36	4.78	800
Correct.7	0.87	42.02	0.35	4.64	812
Correct.8	0.88	42.70	0.35	4.67	744
Correct.1	0.87	42.37	0.37	4.84	791
Correct.2	0.90	44.77	0.35	4.64	660

Correct.3	0.86	41.67	0.33	4.39	678
Correct.4	0.87	42.34	0.35	4.62	722
Correct.5	0.82	38.51	0.26	3.40	715
Correct.6	0.87	41.86	0.23	3.03	527
Correct.7	0.83	38.94	0.27	3.55	396
Correct.8	0.82	38.04	0.35	4.59	853
Correct.1	0.87	42.13	0.35	4.64	713
Correct.2	0.87	41.87	0.34	4.52	673
Correct.3	0.86	41.50	0.35	4.58	680
Correct.4	0.90	44.64	0.35	4.69	658
Correct.5	0.89	43.71	0.36	4.80	731
Correct.6	0.92	46.11	0.36	4.73	735
Correct.7	0.83	38.93	0.38	5.09	771
Correct.8	0.88	43.16	0.37	4.94	806

## Transimpedance of successfully tuned SQUIDs



## Failed Tunings

SqID	Failure reason
Correct.1	The max peak to peak was less than 0.005. Squid may have trapped flux or not be functioning properly.

Correct.5	The temperature reading was invalid - is the squid controller plugged in?
Correct.6	The temperature reading was invalid - is the squid controller plugged in?
Correct.7	The temperature reading was invalid - is the squid controller plugged in?
Correct.8	The temperature reading was invalid - is the squid controller plugged in?
Correct.3	The max peak to peak was less than 0.005. Squid may have trapped flux or not be functioning properly.
Correct.8	The max peak to peak was less than 0.005. Squid may have trapped flux or not be functioning properly.
Correct.1	The max peak to peak was less than 0.005. Squid may have trapped flux or not be functioning properly.
Correct.1	The temperature reading was invalid - is the squid controller plugged in?
Correct.2	The temperature reading was invalid - is the squid controller plugged in?
Correct.3	The temperature reading was invalid - is the squid controller plugged in?
Correct.4	The temperature reading was invalid - is the squid controller plugged in?
Correct.7	The max peak to peak was less than 0.005. Squid may have trapped flux or not be functioning properly.
Correct.5	The temperature reading was invalid - is the squid controller plugged in?
Correct.6	The temperature reading was invalid - is the squid controller plugged in?
Correct.7	The temperature reading was invalid - is the squid controller plugged in?
Correct.8	The temperature reading was invalid - is the squid controller plugged in?
Correct.4	index 1 is out of bounds for axis 0 with size 1
Correct.5	The temperature reading was invalid - is the squid controller plugged in?
Correct.6	The temperature reading was invalid - is the squid controller plugged in?
Correct.7	The temperature reading was invalid - is the squid controller plugged in?
Correct.8	The temperature reading was invalid - is the squid controller plugged in?