

Lab 4:

$C_1 = 470 \text{ pF}$

$C_3 = \text{N.C.}$

2.3 Scope - ① / 1

1 : TCP

2 : OSC-OP

Scope 2: Max freq

Scope 3: Min freq

2.4 Scope 4: 1: Pulse 0
2: OSC-OP

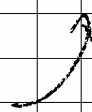
Scope 5: 1: pulse 1
2: OSC-OP

Scope 6: 1: pulse 1
2: pulse 0

2.5 $U^+ = 0 \text{ V}$

Scope 7: 1: Feedback Y_p
2: op-amp Y_u

$U^+ = 1.5 \text{ V}$

Scope 8: 1: 

2.5

Scope - 9: 1: opamp o/p
 Scope - 10: 2: V_{DS} Mon
 Gain min = 1

Scope - 11: 1:
 Gain Max

Scope - 12: 2V input
 Feedback.

2.6. Scope - 13: 1: opamp o/p
 2: TP 3
 Pot 100%.

Scope - 14:
 pot 0%.

Vref
 correct
 unknown

Scope - 15: 1: V_{ref} opamp o/p = 4.6V
 (U3 A) pin 3
 $V^+ = V^- = GND$
 $V_o \approx 70 mV$

2.7 scope_16: 1: TP3
V_{ref} = -5V 2: TP2

Increase V_{ref}
scope_17/100

2.8 scope_19: 1: TP2
2: TP1
Tran. resonance

3.2 3.176 V
with 1/1000

Make it clean (CLK)

3.222 V (scope_20)

3.3 R6 ref V_{ref}

$\frac{1}{1000} V_0 = 3.759 V$ scope 21

$\frac{1}{1000} V_{low} = 157.7 mV$