$$1.10 = 12.0 \times \left(\frac{R_{81}}{R_{80} + R_{81}} \right)$$

$$\frac{R_{81}}{R_{80} + R_{81}} = .09167$$

let $R_{80} = 133K$ (as is)

$$R_{81} = .09167\,(133K) + .09167\,(R81)$$

$$R_{81} - .09167\,R_{81} = 12191.7$$

$$R_{81}\,(1 - .09167) = 12191.7$$

$$R_{81} = \frac{12191.7}{1 - .09167} = 13.422\ K\Omega$$

(0603)

✓ Verify w/ std SMD 13.5K $V_{SNS} = 1.11$

✓ check parallel resistance 12K > 500Ω

R_{81} to be replaced by 13.3K (SMD 0603)

Ramp - up

V_{INS}	
0.973	Boost unlock + on @ 7.44 V
1.23	Boost off @ 9.49 V

Ramp Down

1.04	Boost on @ 7.92 V

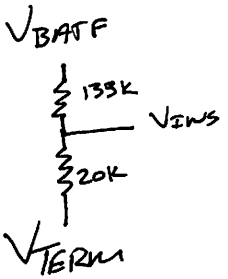
So, R_S for 12 V_{BAT} to unlock + turn on boost

$V_{INS} = 1.1\,V$

$V = IR \quad I = V/R$

$R80 = 133\ K\Omega$

$R81 = 20\ K\Omega$



$V_{INS} = V_{BATF} \cdot \frac{20}{133}$

$= 5 \cdot \frac{133}{20}$

$=$

$$V_{INS} = V_{BATF} \cdot \frac{20}{133 + 20}$$

$$= 12 \cdot {}^{20}/_{(133+20)} = 1.56$$

$$= 5 \cdot {}^{20}/_{(133+20)} = 0.65$$

$$= 9 \cdot {}^{20}/_{(133+20)} = 1.17$$

MAX16930
AR/V 410
BTA KQAE

INS Active

3x 1.5 x 2"

~~heatsink~~

~~3A fuse~~

	TYP
Unlock	1.05 → 1.1
OSS	1.25
or	1.15

1.2

$1.1 \leq V_{INS} \leq 1.15$

or rly 1.1

V_{INS} = exactly 1.W