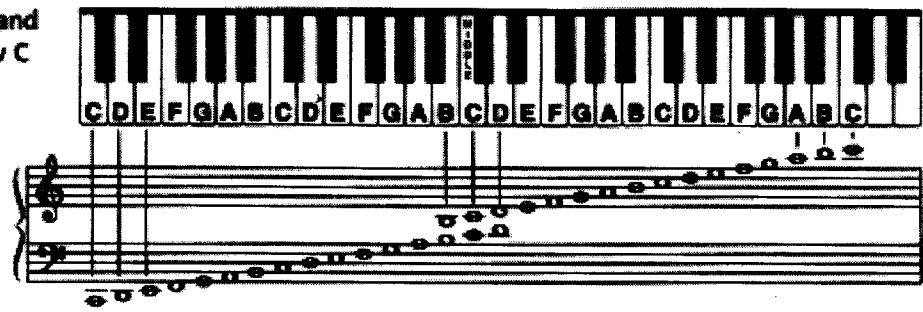
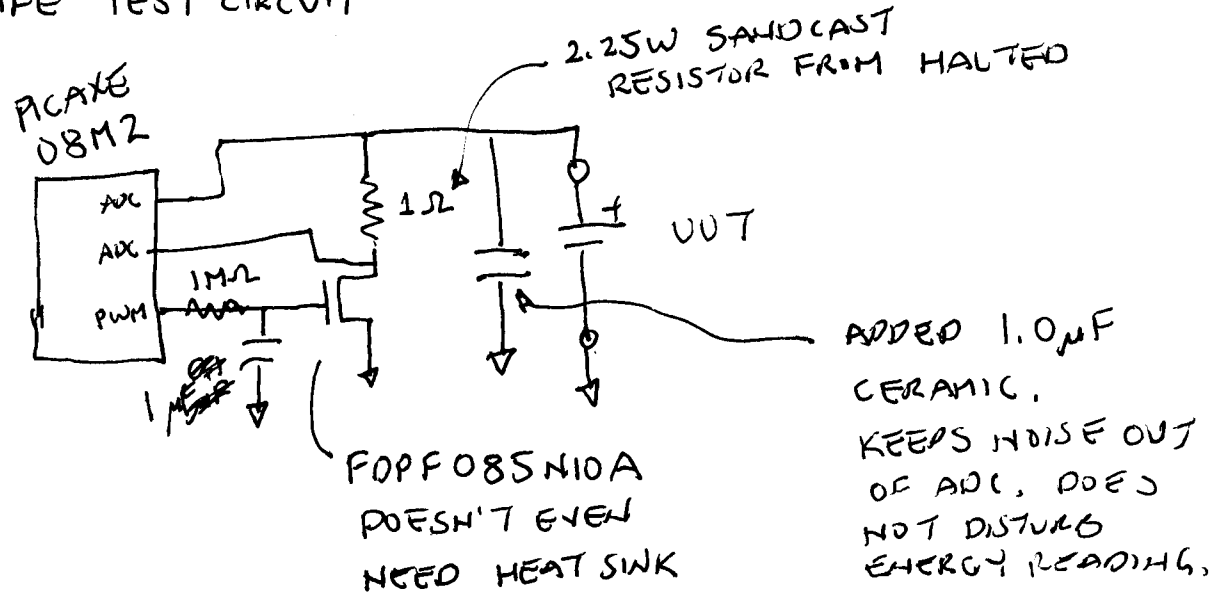


Ø 7 FEB 14
Roderick.

All the notes on the grand staff from bass clef Low C to treble clef High C:



BATTERY LIFE TEST CIRCUIT



PWM IS 4KHZ @ 4MHZ CLOCK, WITH ~~255~~ AS PERIOD.
 DUTY CYCLE VARIABLE FROM 0-1023.
 CAN'T USE ON-CHIP DAC, NOT ENOUGH PRECISION.
 RC FILTER HAS $\tau = 100$ MS. ADJUST DUTY CYCLE 1x/SEC.
 PICAXE ADJUSTS DUTY CYCLE TO ~~MAINTAIN~~ (SAY) 100mV
 ACROSS SENSE RESISTOR, EQUIVALENT TO 100mA DRAW.

RARE SITUATION WHERE I USE MOSFET IN LINEAR REGION.
 PERIODICALLY REPORT ~~FR~~ THRU RS232, LOG W/ TERMINAL
 gtkterm

RC FILTER MUST HAVE $\ll 1$ ADC UNIT DEVIATION
 PER CYCLE, BUT MUST SETTLE IN 1 SECOND (4096 CYCLES)

$$5 e^{-\frac{.25 \times 10^{-3} \text{ SEC}}{106 \Omega \cdot 10^{-6} \mu\text{F}}} = 5 e^{-.00025} \Rightarrow .0012 \text{ VOLT RIPPLE MAX}$$
 X GAIN OF AMP