



Will need new calibration when CPU Speed changes

Need at least 2 hours at constant temp to
in sealed container to obtain reasonable
calibration readings. All Readings at 25C

Silica gel 0% - bake first to remove all water

Lithium Chloride LiCl - 11.30%

Magnesium Chloride - 32.78%

Magnesium Nitrate - 52.89

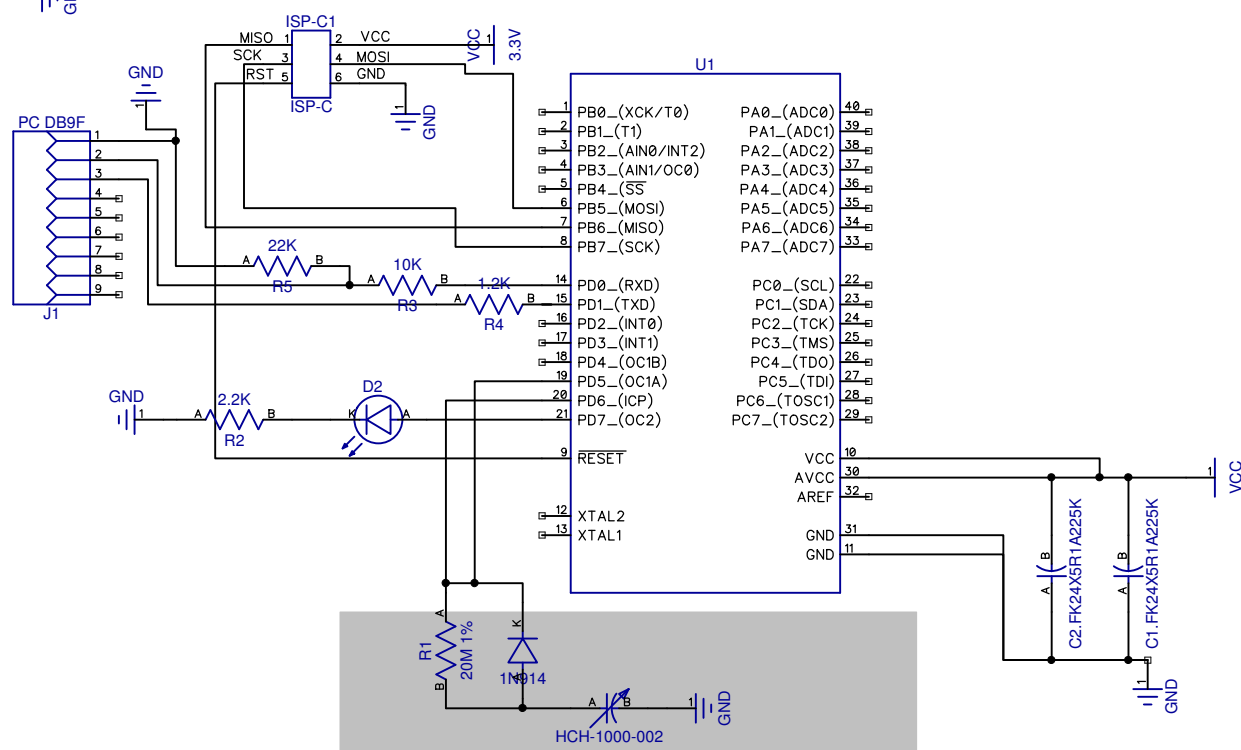
Sodium Chloride (table salt) will yield 75.3%

Potassium Nitrate - 93.58%

Distilled water - 100%

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m168-test-capacitor-rc-timing-direct.bas



Var Capacitor Timing Circuit

Sense PD.5 until reads 0, give few ms to finish drain.

Turn PD.6 on and inc counter in tight loop until PD.5 reads as On

Calibrate by reading counts at 33%, 76%, 100%

Acts like AC wave because PD.6 only remains on long enough
PD.5 to read on. Change value of charge resistor for differnt sensors.

Diod discharges sensor fast when PD.6 drops. Use low forward Volt drop

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Free Use for everyone
No warranty
Retain my name
and contact

Measure capacitive humidity sensor directly from micro controller using 1 resistor, 1 diode and two IO lines. No ADC needed.
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Tested on Mega 16 but should
fit easily into most 4K CPU
including AVR tiny

206-601-2985	SIZE	FSCM NO.	DWG NO.	REV
	SCALE		Sheet 1	