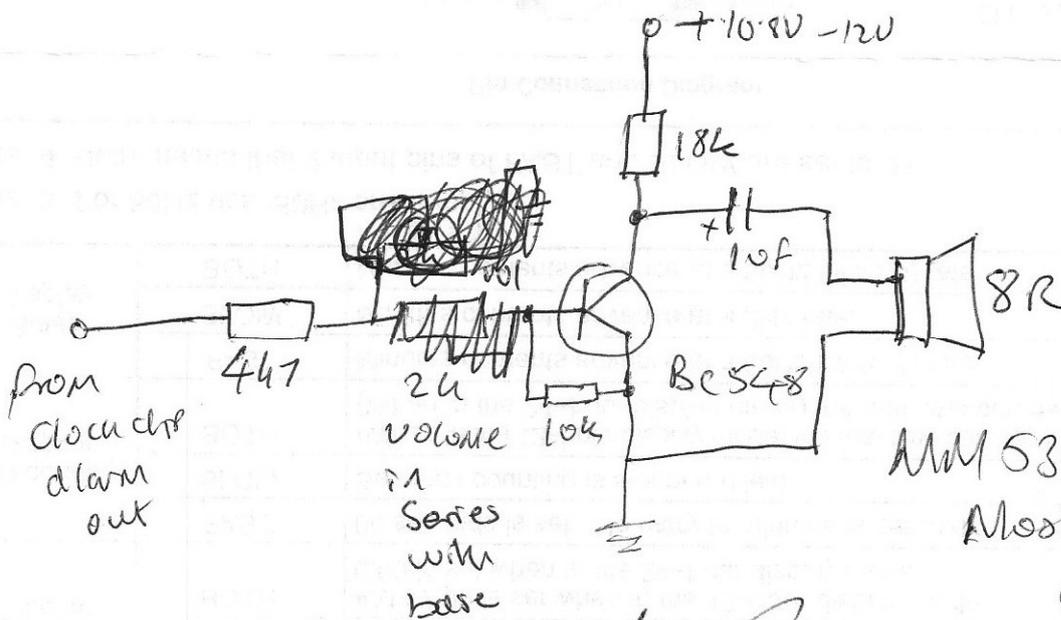


BC548 equivalent
 2N3904
 BC108 - Best
 2N2222

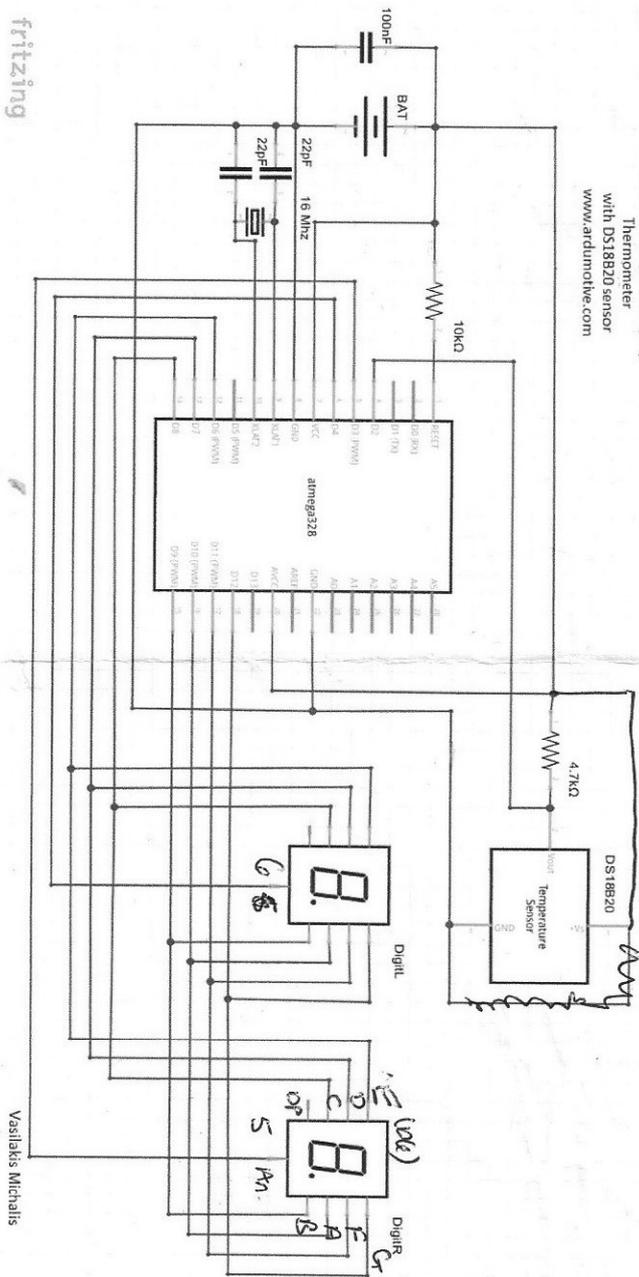


MM5387 Deke sheet
 Most probably
 correct

CM 8361
 4.7k = 2.2k
 10k = 4.7k
 18k = 27k
 18V supply voltage

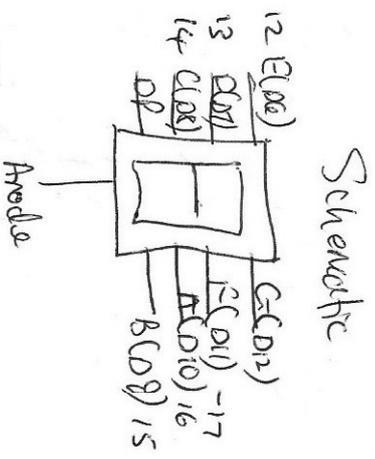
~~CM 8361~~
 18k = 4.7k
 4.7k = 2.2k
 10k = ~~10k~~
 27k to ground
 for emitter

Arduino 7 Segment Display
Thermometer
with DS18B20 sensor
www.arduinomh.com



fritzing

Vasilakis Michalis



Display Pinout

- E = D6 DP = NC A = D10
- D = D7 G = D12 B = D9
- C = D8 F = D11

Same for both

CP 21

PM 13 - orange
PM 1 - Blue

1 MMSD 7 colon 13 - (END (common)) ^{orange}

2 MMS E 8 HRS E

9 HRS C

3 10M C

10 HRS BD

4 10M E

11 HRS G

5 10M A + D

AM

6 10M G 12

Green cap
3.5 digit
2.05V - 18mA
2.10V - 23mA
2.00V - 14mA

CP 22

MMS B +
10M AC

1 MMS AC 6 MMS F 11 HRS F

2 NC 7 10M B 12 10M H'

3 MMS B 8 10M F 13 PM

4 MMS D 9 HRS B

5 MMS G 10 HRS A

Ribbon

1 Anode 1

2 Anode 2

3 A

4 B

5 C

6 D

7 E

8 F

9 G

10 DF

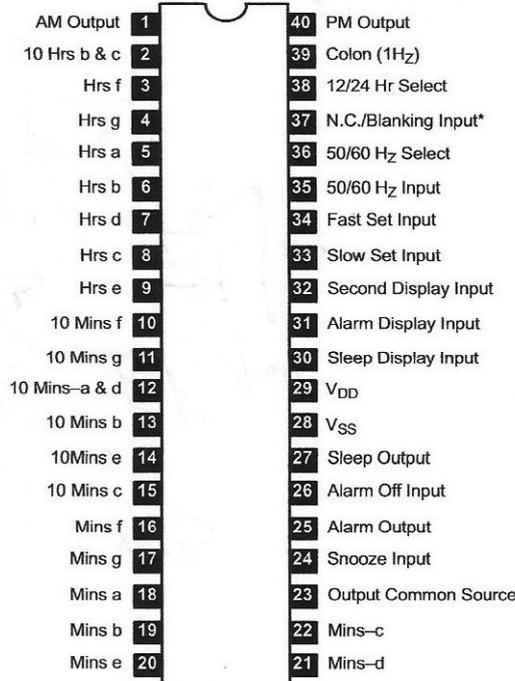
Function Table B:

Display Mode	Time Setting Input Pin	Function
Real Time Display	FAST	Minutes contents advance at a 60Hz (Note 3) rate.
	SLOW	Minutes contents advance at a 2Hz rate.
	BOTH	Minutes contents advance at a 60Hz (Note 3) rate.
Alarm Display	FAST	Minutes contents advance at a 60Hz (Note 3) rate.
	SLOW	Minutes contents advance at a 2Hz rate.
	BOTH	AM 12:00 is set when in the 12-hour display mode. 0:00 is set when in the 24-hour display mode.
Seconds Display	FAST	00 seconds is set. No carry to minutes is generated.
	SLOW	Seconds counting is stopped (Held).
	BOTH	(When in the 12-hour display mode) the real time counter is set to AM 12:00. (When in the 24-hour display mode) the real time counter is set to 0:00.
Sleep Display	FAST	Minutes contents advance at a 60Hz (Note 3) rate.
	SLOW	Minutes contents advance at a 2Hz rate.
	BOTH	Minutes contents advance at a 60Hz (Note 3) rate.

Note 3. For 50Hz use, 50Hz shall apply.

Note 4. Both means that 2 input pins of FAST and SLOW are set to "H".

Pin Connection Diagram



Alarm off input
high - off
Low/nc - on

output goes high
when alarm goes
off,
with 100hz
tone

alarm on-off
high - off
nc - on
Pin 2 alarm
display
Pin 1 - alarm
on/off

Pin 1 ribbon
alarm display
Pin 2 alarm
on-off
(high = on)
Pin 3 alarm out.

Note: N.C. pin must not be used for external connection such as a relay point.
Pin 37 is Blanking Input on the NTE2061

Juino 7 Segment Display
Thermometer
with DS18B20 sensor
www.ardumotive.com

