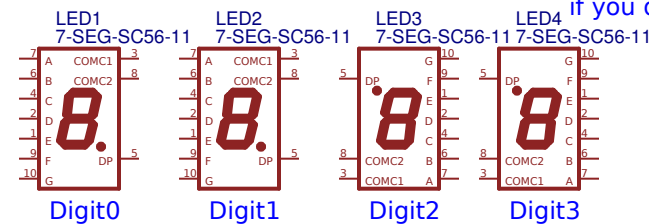


Digit 2 and 3 is upside down. It looks better on a clock. Connect as following diagram if you do so.

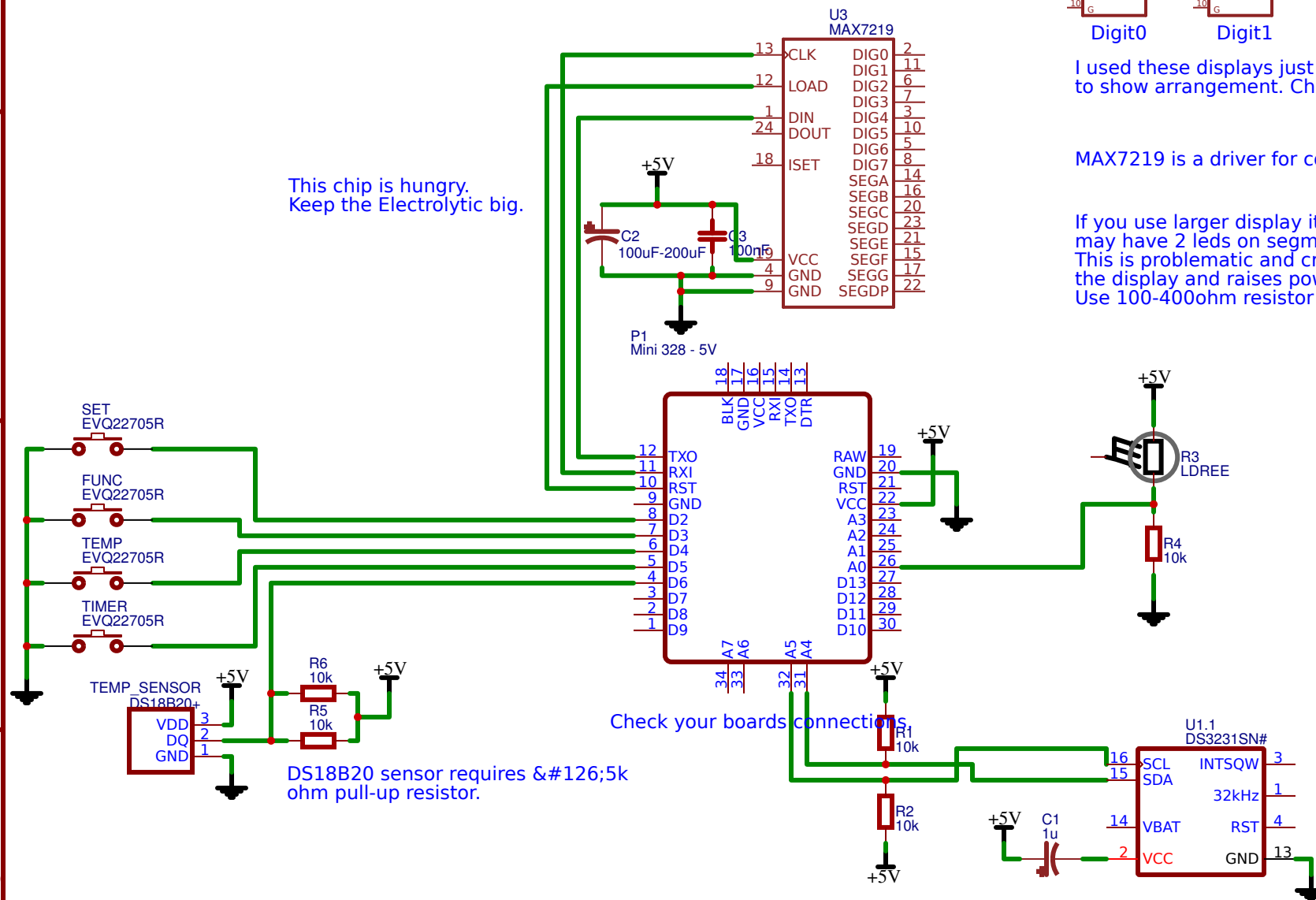


I used these displays just to show arrangement. Check your displays pinout.

MAX7219 is a driver for common cathode leds.

If you use larger display it may have 2 leds on segments and 1 on dots. This is problematic and creates a flickering effect on the display and raises power consumption. Use 100-400ohm resistor on the dot anode

This chip is hungry. Keep the Electrolytic big.



DS3231 based modules with battery or battery holder can be found cheaply. Just connect your device I2C connections and 1uF cap its okay.

TITLE: Sheet_1		REV: 1.0
Company: Your Company		Sheet: 1/1
Date: 2019-02-15	Drawn By: abdullahcanakci	