

ARDUINO 2-DIGIT 0.5" COMMON CATHODE 7 SEGMENT DISPLAY BOARD

This is an Arduino compatible board for creating 2 Digit Display projects. The circuit operates with 5V DC, Connector CN1 is provided for bootloader programming and Arduino firmware upload. A new Atmega328 chip requires a bootloader and Arduino firmware programming, Connector CN1 helps you with both functions. Follow the link below to learn more about programming using Arduino. Arduino code is available as a download to test the board.

<https://www.arduino.cc/en/Tutorial/BuiltInExamples/ArduinoToBreadboard>

Arduino Compatible Hardware Contains

- Atmega328 Micro-controller
- 2 Digit 0.5 Inch 7 Segment Display, Common Cathode
- 2 X BC847 Transistors to drive Display Common Cathode for Multiplexing
- CN1: Arduino Programming and Boot-Loader Connector
- U2: 3 Pin Connector to Connect LM35 Temperature Sensor or Analog Input
- Current Limiting Resistors for 7 segment display and other components

Application

- 2 Digit Counter
- 2 Digit Timer
- 2 Digit Thermometer
- Voltmeter
- Current Meter
- Sensor Value Display
- 2 Digit Score
- Dice

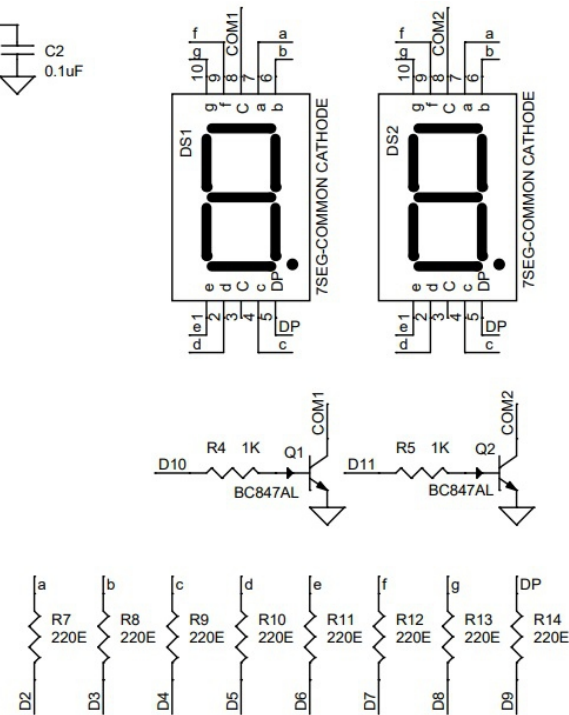
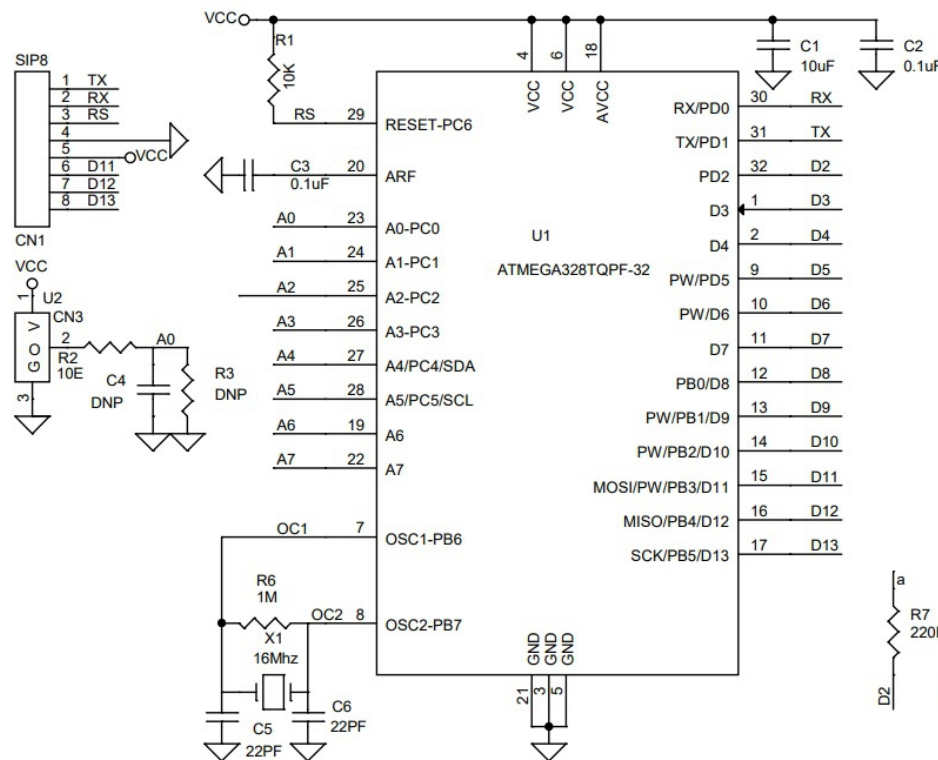
Arduino Pins

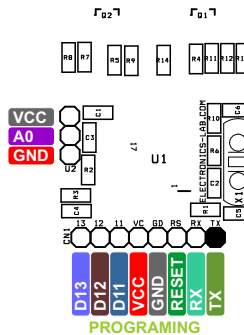
- Digital Pin D10 Display 1 Common Cathode
- Digital Pin D11 Display 2 Common Cathode
- Digital Pin D2 Display Segment A
- Digital Pin D3 Display Segment B
- Digital Pin D4 Display Segment C
- Digital Pin D5 Display Segment D
- Digital Pin D6 Display Segment E
- Digital Pin D7 Display Segment F
- Digital Pin D8 Display Segment G
- Digital Pin D9 Display Segment DP
- DIGITAL INPUTS D13, D12, D11, TX, RX
- ANALOG PIN A0 LM35 TEMPERETOR SENSOR OR ANALOG INPUT
- PROGRAMING D13, D12, D11, TX, RX, RESET

Features

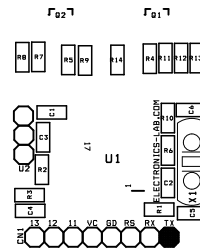
- Supply 5V DC, can be optimized for 3.3V Operations
- LM35 Temperature Sensor, Analog Input A0
- Compact Hardware
- PCB Dimensions 37.78MM X 26.04MM



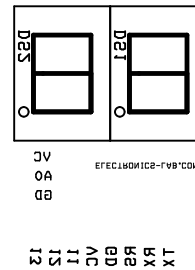




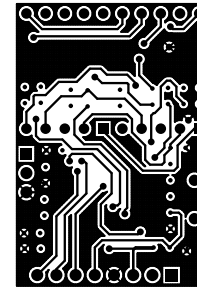
BOM						
NO	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	8 PIN MALE HEADER PITCH 2.54MM	WURTH		732-5321-ND
2	1	C1	10uF/10V SMD SIZE 0805	MURATA/YAGEO		
3	2	C2,C3	0.1uF/50V SMD SIZE 0805	MURATA/YAGEO		
4	2	R3,C4	DNP			
5	2	C5,C6	22PF/50V SMD SIZE 0805	MURATA/YAGEO		
6	1	DS1	7SEG-COMMON CATHODE 0.5INCH	SUNLED		3267-XDMR14C-1-ND
7	1	DS2	7SEG-COMMON CATHODE 0.5INCH	SUNLED		3267-XDMR14C-1-ND
8	2	Q1,Q2	BC847AL	NEXPERIA		1727-2924-2-ND
9	1	R1	10K 5% SMD SIZE 0805	MURATA/YAGEO		
10	1	R2	10E 5% SMD SIZE 0805	MURATA/YAGEO		
11	2	R4,R5	1K 5% SMD SIZE 0805	MURATA/YAGEO		
12	1	R6	1M 5% SMD SIZE 0805	MURATA/YAGEO		
13	8	R7 - R14	220E 5% SMD SIZE 0805	MURATA/YAGEO		
14	1	U1	ATMEGA328TQPF-32	MICROCHIP		ATMEGA328PB-AURCT-ND
15	1	U2	3 PIN MALE OR FEMALE HEADER PITCH 2.54MM			DNP
16	1	X1	16Mhz	ECS INC		X1103-ND



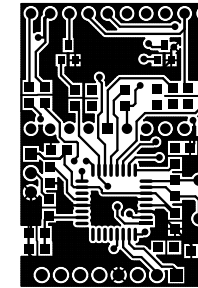
SILK SCREEN TOP



SILK SCREEN BOTTOM



BOTTOM LAYER



TOP LAYER

PCB DIMENSIONS 37.78MM X 26.04MM



