Parts list

C1	10nF
C2	4u7
C3	100n
C4	100n
C5	10n
C6	10n
C7	10n
C8	100n
C9	4u7
C10	4u7
R1 – 13	220R
R14	3K9
R15	3K9
R16	100R
R17-22	220R
R23	10K
SK1	8_WAY_HEADER
SK2	6_WAY_HEADER
SK3	6_WAY_HEADER
SK4	6_WAY_HEADER
SW1	BP_TH_NO
SW2	BP_TH_NO
SW3	BP_TH_NO
SW4	PUSH_BUTTON_NO_SM
U$1	ATTINY861
U$2	ATTINY861
U$3	DISPLAY
U$4	DISPLAY

All resistors and capacitors are size 1206

Switches are

SW1-3 Apem PHAP3362A Tactile Short-travel Push button Switch Through Hole
Available from Rapid Electronics under part number 51-0711.

SW4 Apem PHAP3361A Tactile Short-travel Push button Switch Surface Mounting
Available from Rapid Electronics under part number 51-0709

Displays are

Kingbright CA56-12SYKWA or CC56-12SURKWA
CA is common anode and CC common cathode
56 specifies a 12 pin device
12 a floating point display
56-12 is the important part of the part number.
Note:
The letters at the end often change
56-21 specifies a clock display

PCB assembly instructions

Recommendations for the assembly of the display pcb are similar to those given for pcb_A of the project “PCB_111000_UNO_part_2 published here on July 02 2020. In particular:

Solder all surface mount resistors and capacitors.
Plug the headers into the UNO. Place the board over the headers component side down.
Trim the headers that would otherwise interfere with the displays.
Solder the PCB to the headers
Solder on all switches.
Unplug the pcb from the UNO.
Add the devices (use of plug in IC sockets is recommended).
Trim the pins of the IC socket to avoid them clashing with the display
Add the displays (see photo for orientation)

The IC loaded with TWI_master_V1 is placed on the underside of the PCB
The IC loaded with TWI_slave_V1 is placed on the top of the PCB

Both IC’s face in the same direction
See UNO_floating_point_display_User_guide for a photograph