

PC3x Bill of Materials

PCB Custom

C1	10u	electrolytic capacitor
C2	10u	electrolytic capacitor
C3	100n	Ceramic cap
C4	100n	Ceramic cap
C5	100n	Ceramic cap
C6	100n	Ceramic cap
C7	100n	Ceramic cap
C8	100n	Ceramic cap
C9	22u T	tantalum capaxitor
C10	100n	1206 SMD capacitor
C11	10u	electrolytic capacitor
C12	100n	Ceramic cap

D1	1N5818	1A Schottky diode
D2	1N5818	1A Schottky diode
D3	BAT41	Schottky signal diode
D4	LED	3mm red LED
D5	LED	3mm red LED
D6	LED	3mm red LED

FS1 0.25A RXE025

H1-H4	2x8	0.1in female socket header
H5	4-way	0.1in male pin header
H6	6-way	0.1in male pin header
H7	4-way	0.1in male pin header
H8	6-way	0.1in male pin header
H9	2x15	right angle 0.1in male pin header
H10	1x4	2mm header
H11	1x4	2mm header
H12	1x4	2mm header
H13	1x4	2mm header
H14	1x4	2mm header

I prefer to use the 2mm snap-off gold plated turned pin headers and sockets for H1-H4 and H10-H14, although the insertion force for H1-H4 is high.

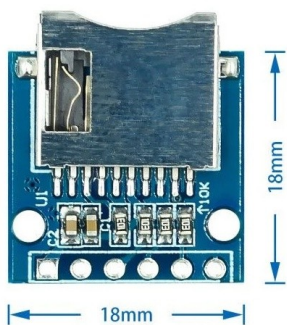
JP1 3-way 0.1in male pin header with jumper

R1	2R2	resistor
R2	1K8	resistor
R3	1K	resistor
R4	1K	resistor
R5	6K8	resistor
R6	6K8	resistor
R7	470R	1206 SMD resistor
R8	10K	1206 SMD resistor

S1	PS22F03	button with A03 cap
S2	B3F-315n	Horizontal 6x6 tactile switch c/w B32cap
S3	BOOT	3nn x 6mm SMD tactile switch
S4	USB HUB	MSS22D18 SMD slide switch – AE
SK1	micro USB	breakout module
SK2	USB-A	FCI 73725-0110BLF (RS 771-0048)
SK3	USB-A	FCI 73725-0110BLF (RS 771-0048)
SK4	USB-A	FCI 73725-0110BLF (RS 771-0048)
SK5	USB-A	FCI 73725-0110BLF (RS 771-0048)
SK6	SYSTEM I2C	vertical QWIIC connector
U1	CP2102	USB-C to TTL converter - 3V3
U2	HDMI	Adafruit DVI breakout module
U3	PGA2350B	Pimoroni module
U4	micro SD	Micro SD card module inc. filter
U5	RM2	Raspberry Pi wifi module
U6	RTC	RTC module with battery and RAM
U7	FE1.1SX4	USB hub module
U8	AMS1117-3V3	voltage regulator

When fitting the RTC straighten the pins on the connector and solder a 4-pin header strip into the other end on the same side. It can now be plugged in with the battery holder on top.

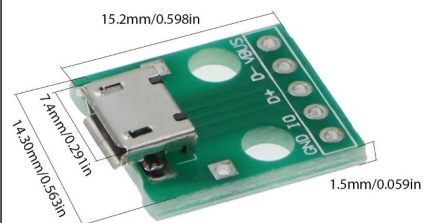
U1, U4 and SK1 and (preferably U2) should be mounted flat down onto the PCB.



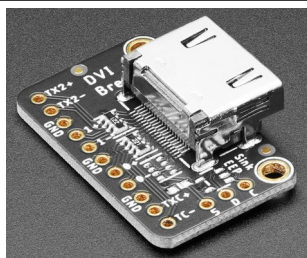
U4



U1



SK1



U2



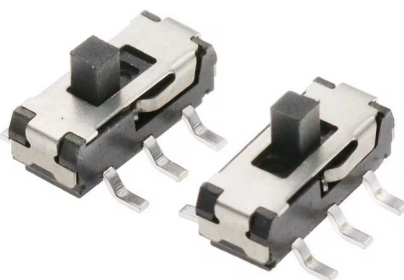
H9 (typical)



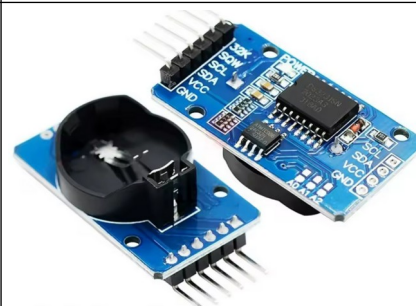
U7



S1



S4



U6

