

**BOM mino-counter G431 2021-01-06**

Qty	Value	Device	Parts
4		LOETBR	J1, J2, J3, J4
1	connector 0.1" grid	ST_2X1-PS	EX.REF
3	connector 0.1" grid	ST_2X1-STD	BOOT, LED, PWR
1	connector 0.1" grid	ST_3X1-INV	RS232
2	connector 0.1" grid	ST_3X1-PS	F1, F2
1	connector 0.1" grid	ST_6X1-STD	SWD
1	connector 0.1" grid	WANNE10S-SMALL	MODE
1	2x16 -> 4x20	LM16X21	LCD
19	.1u	0603	C1A, C1B, C4, C5, C6, C7, C8, C9, C10, C12, C24, C25, C26, C27, C28, C29, C30, C31, C32
1	0R0	0603	R18
3	1M	0603	R21, R24, R26
5	1n	0603	C11, C13, C15, C16, C17
3	2u2	0603	C2, C3, C18
6	3k3	0603	R6, R8, R9, R11, R12, R13
1	4u7 (or 2 x 2u2)	0603	C1C
1	10R	1206	R10
1	10MHz	VC-TCXO-32x25	VCTCXO
10	10k	0603	R1, R2, R3, R4, R5, R7, R19, R22, R23, R25
1	24C02	ST24C02-S	IC4
1	74AUP1G14GW,125	AUX1G04	IC9
3	74AUP1G74DC,125-NXP	AUX1G74	IC10, IC11, IC12
1	74AUP1G97DCKR	AUX1G97	IC6
3	74AUP1GU04GW,125	AUX1G04	IC5, IC7, IC8
2	100R	0603	R16, R17
1	100k	POTI-20T	TR1
3	330R	0603	R14, R15, R20
1	BAT54S	2XDIO-S	D2
1	BAV99 (BAT54S)	2XDIO-S	D1
1	SP3232EEY	MAX202ECWESO16	IC2
1	STM32G431K	STM32G431KXXTQFP	IC1
1	TS9011	TS9011-SOT23	IC3
1	na	0603	C14

10 MHz VCTCXO: 1XTV10000MDA, [https://lsc.com/product-detail/SMD-Oscillators-XO\\_KDS-Daishinku-KDS-1XTV10000MDA\\_C253701.html](https://lsc.com/product-detail/SMD-Oscillators-XO_KDS-Daishinku-KDS-1XTV10000MDA_C253701.html)

10 MHz TCX0: TXETALSANF-10.000000, <https://www.digikey.de/product-detail/de/taitien/TXETALSANF-10-000000/1664-1262-1-ND/6126575>

74AUP1G74DC,125-NXP: <https://www.digikey.de/product-detail/de/nexperia-usa-inc/74AUP1G74DC-125/1727-6029-1-ND/2753865>

24C02 replacement: MB85RC16PNF-G-JNERE1, [https://lsc.com/product-detail/FRAM\\_FUJITSU-MB85RC16PNF-G-JNERE1\\_C8739.html](https://lsc.com/product-detail/FRAM_FUJITSU-MB85RC16PNF-G-JNERE1_C8739.html)