

Study: Prototype of CW decoder using ARDUINO UNO

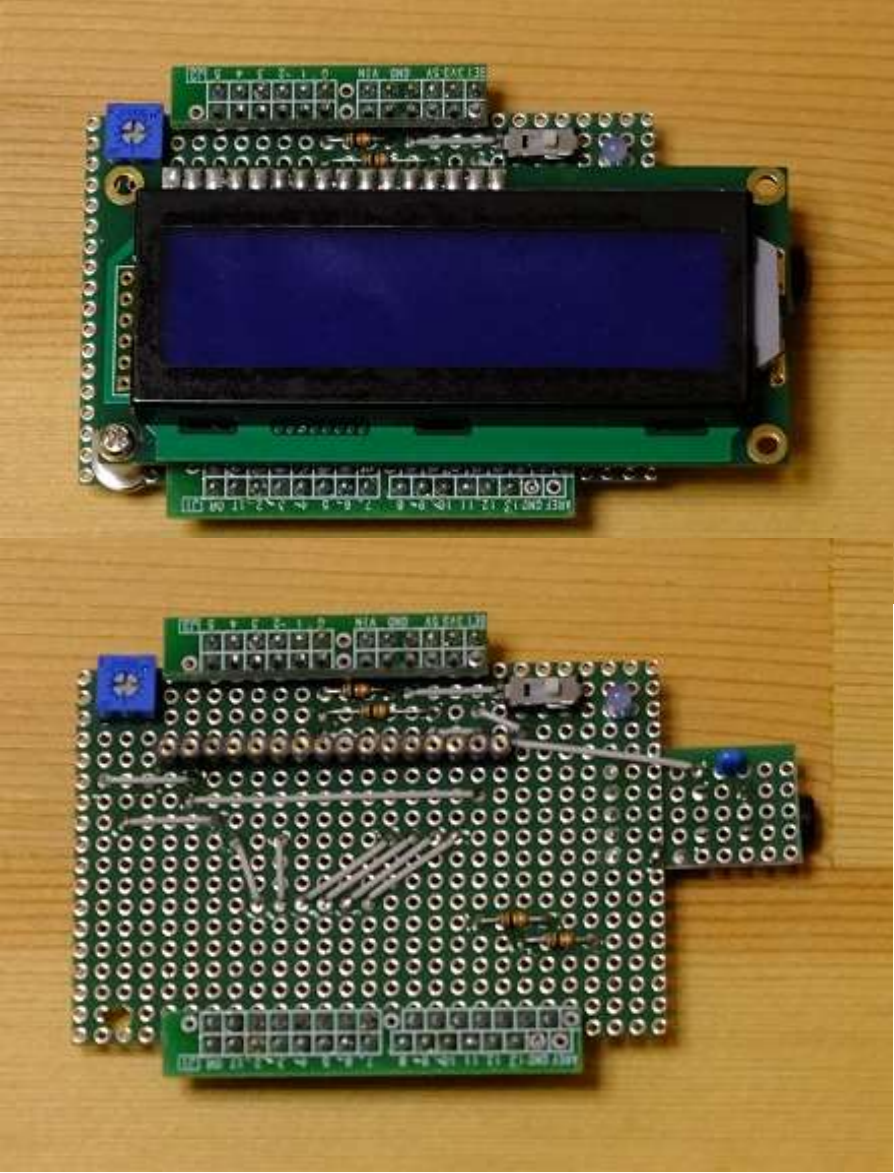


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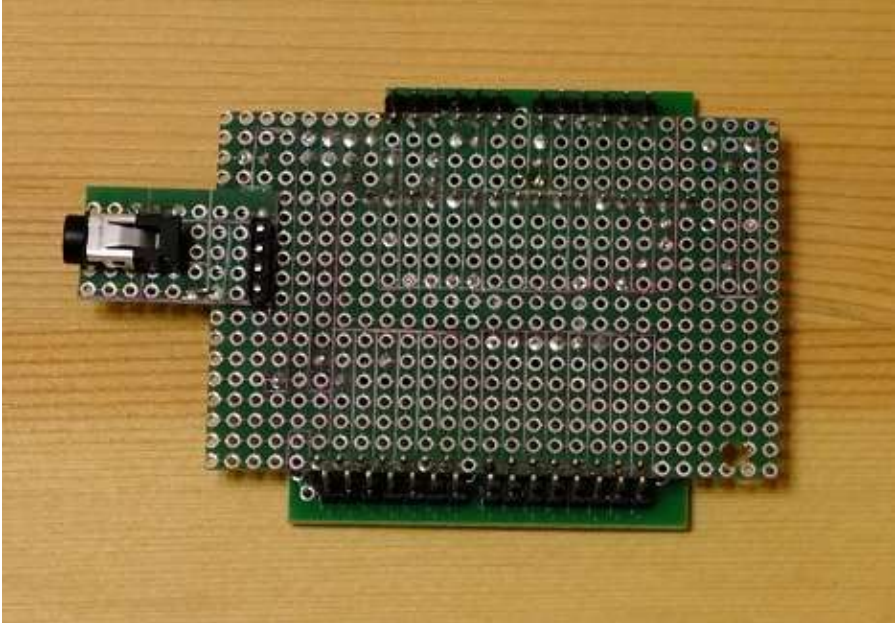
【Basic functions/features, etc.】

- This is a study that a board computer beginner learned and prototyped during the "new corona nesting period"!
- English / Japanese CW decoder using an ARDUINO UNO
- For program writing / rewriting, upload the executable file from a computer (S / W: Arduino IDE: free) via USB I / F (thus, no initial investment such as purchasing writing equipment is required).
- Use the slide switch to switch between English and Japanese.
- For H / W and S / W design, I referred to the HP of OZ1JHM.
TNX OZ1JHM Hjalmar OM!
- The Japanese decoding part was added in my own way.
- Easy to assemble with cross wiring universal board + C side jumper wiring (no etching work required)
- Most of the parts can be purchased at Akizuki Denshi Tsusho

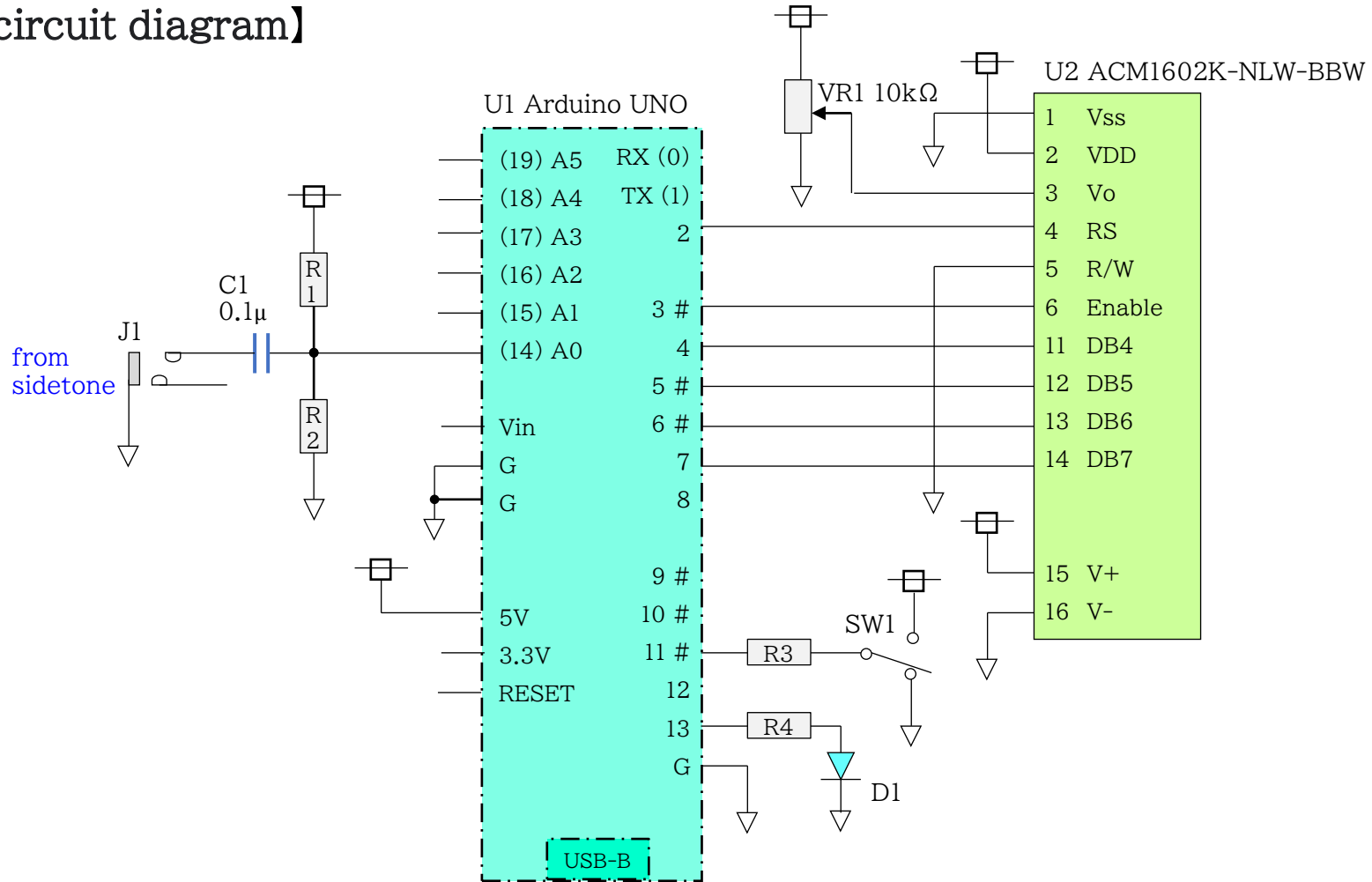
【C-side】



【S-side】



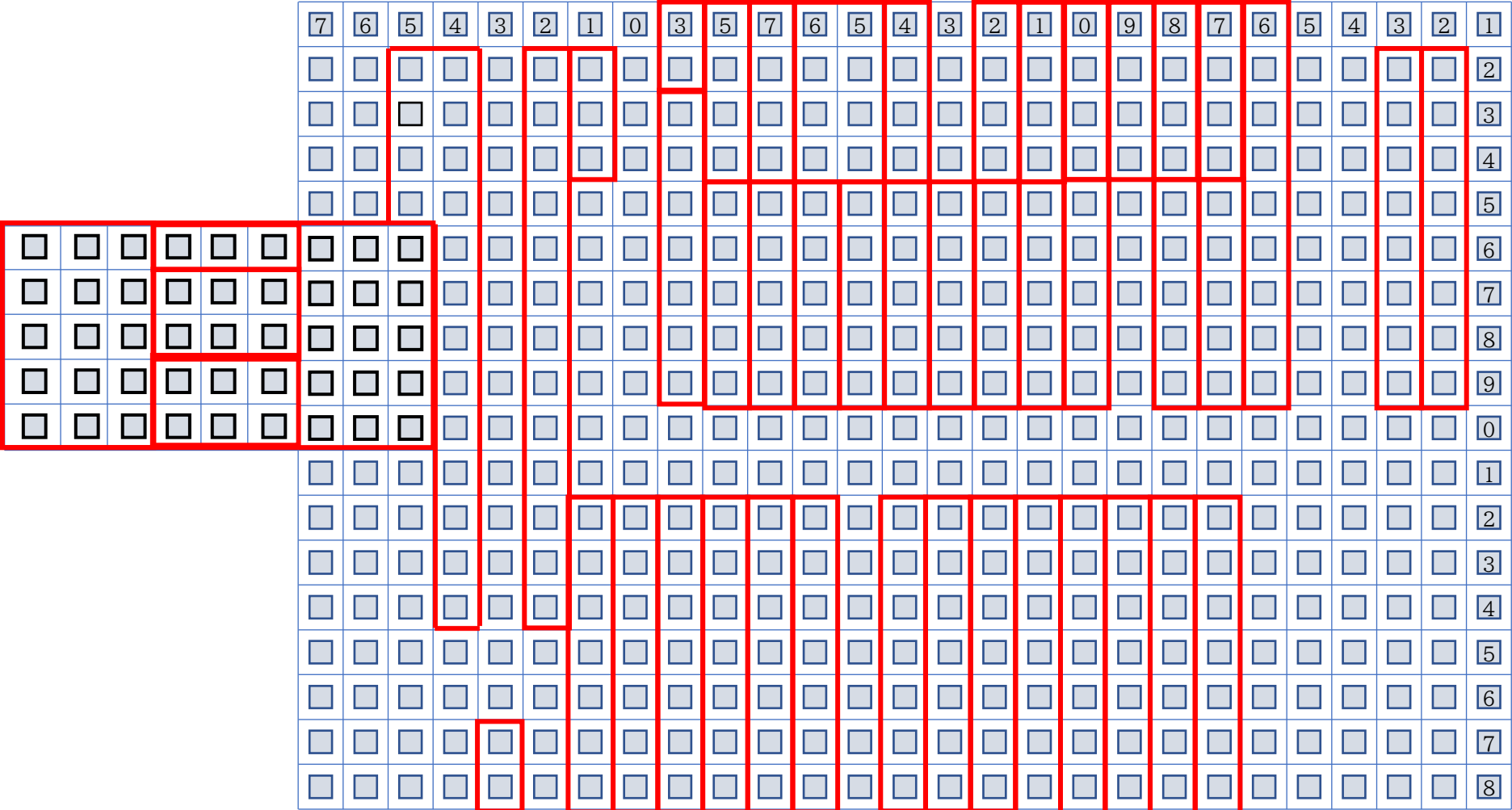
【circuit diagram】



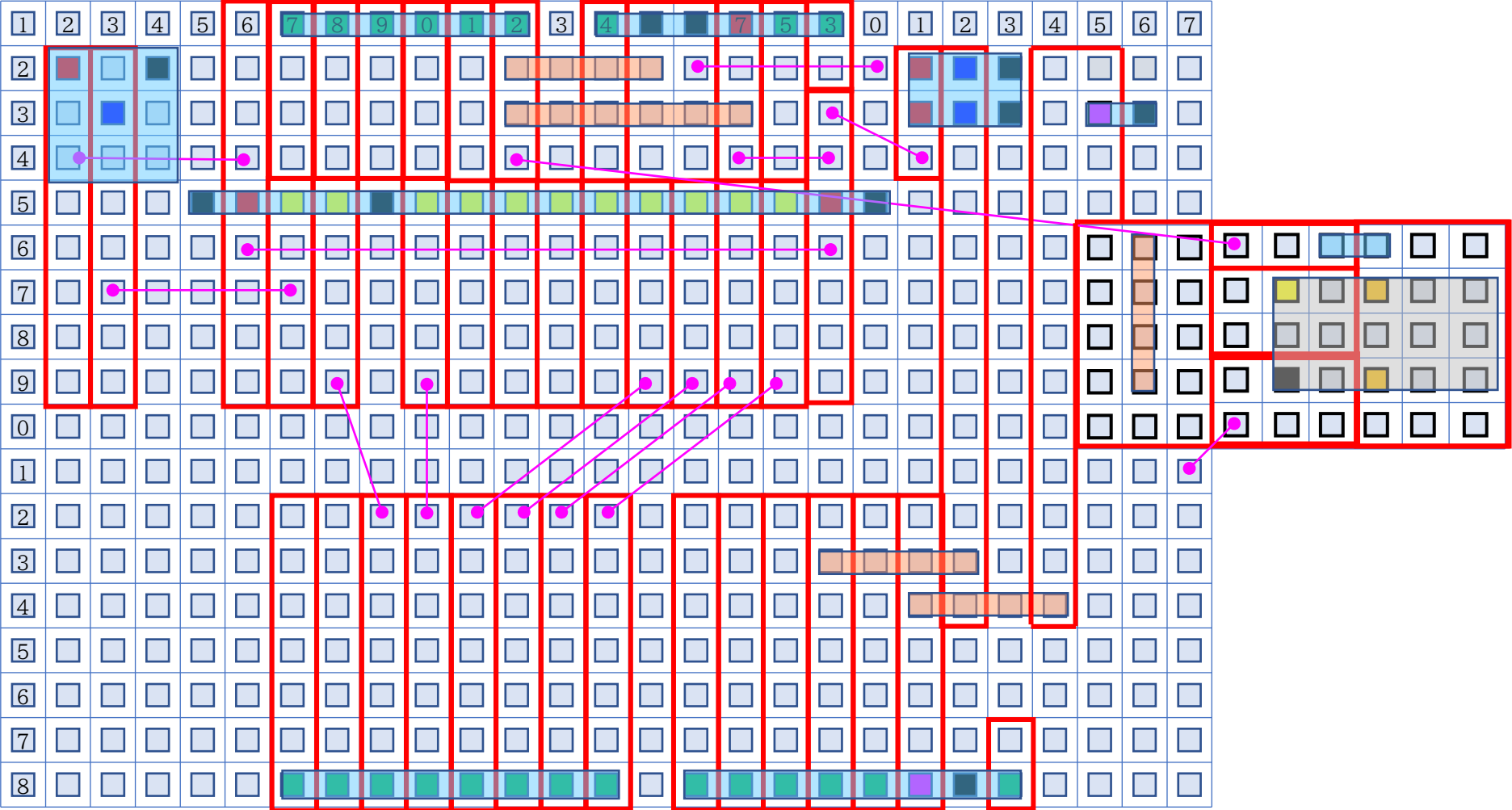
【parts list】

No.	Parts name	Model name, etc.	unit	Unit No.	Akiduki-code	Unit price
1	computer	Arduino UNO Rev3	1	U1	M-07385	2,940
2	White character display module 16×2 with backlight	ACM1602K-NLW-BBW	1	U2	P-10185	400
3	LED	3mm blue 470nm OSB5DL 3E34B	1	D1	I-12689	140/10
4	Switch	slide 2-circuits 2-contacts IS-2235	1	SW1	P-02627	100/4
5	Stereo mini jack	3.5mm For board mounting MJ-8435	1	J1	C-09060	50
6	Semi-valuable resistor	10kΩ 3362P	1	VR1	P-03277	40
7	resistor	Carbon coating 10kΩ (1/6W)	4	R1-4	R-16472	100/100
8	capacitor	Laminated ceramic 0.1μF(50V)	1	C1	P-00090	100/10
9	IC socket	Round pin (single 40P)	1		P-01591	150
10	Pin header	1 × 40	1		C-00167	35
11	Pin header fine	1 × 40 Assorted pack (10 pieces)	1		C-06641	350
12	Universal board	For Arduino glass comp.	1		P-06877	180
13	Universal board	Cross pattern wiring B-type(95x72mm) glass comp.	1		P-09794	200
14	Clear plastic case		1			990
15	3.5mm stereo mini plug cable	0.5m	1		P-13082	120

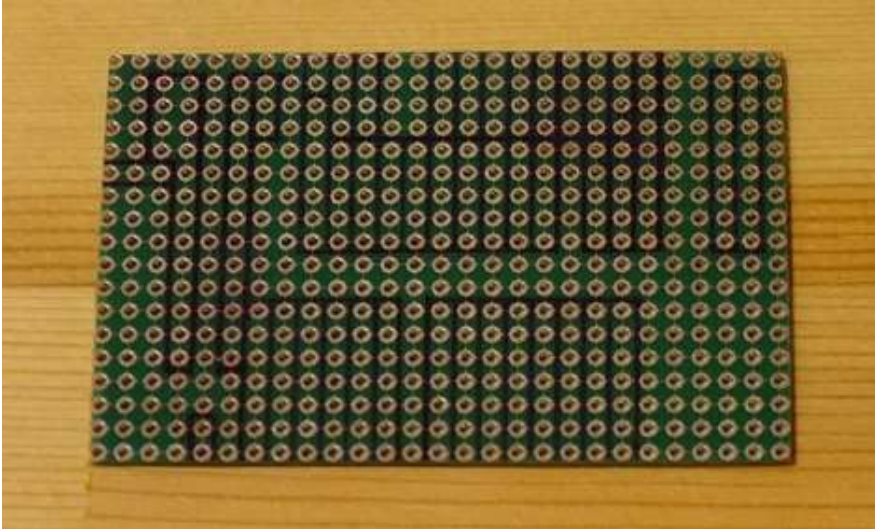
【Board pattern cut diagram】



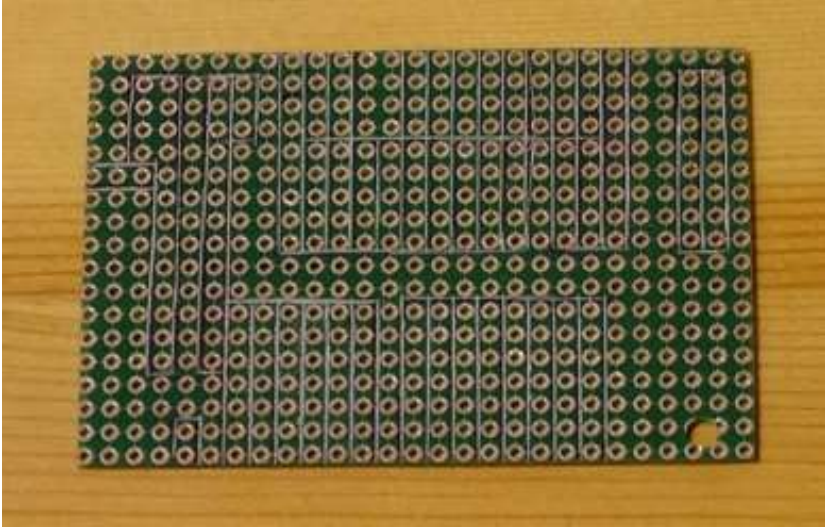
【Parts layout, wiring diagram】



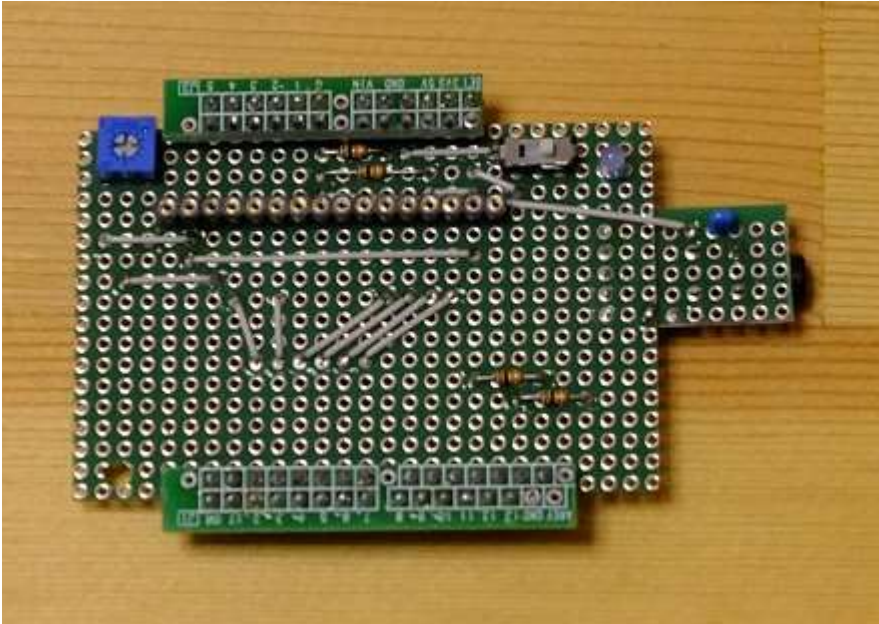
【Board pattern cut draft】



【Board pattern cut】



【Jumper wiring (C-side)】



【Pin header mounting (S-side)】

