256 K RAMCARD

The 256 K RAMCARD is designed, manufactured, copyrighted and is a trademark of Crystal Computer Products, also called "CCP". The CCP mailing address is: Crystal Computer Products, 5224 Kisor Drive, The Colony, Texas, 75056.

The 256 K RAMCARD is compatible with most software designed for the Rampower 128 by Axlon, Inc., but has twice the memory, is computer designed to be electronically quiet and is more reliable because it runs cooler with its open-air design. It is lower priced than the Ramcharger 256 K by Magna Systems and the Rampower 128 . It is easier to install and remove with it's slotguides, which are also convenient handles. CCP has also included a five pin connector (J1) for adding options.

The 256 K RAMCARD benefits from over five years of CCP experience in research, development and manufacture of quality computer products. Every CCP 256 K RAMCARD is subjected to a series of quality control checks to ensure it meets CCP's high performance standards.

********** INSTALLATION INSTRUCTIONS **********

A. Inspect J1 (a five pin socket connector) on the 256 K RAMCARD. Pins 1 and 2 are jumped together for 256 K. If 16 K is preferred, remove this jumper and install it between pins 2 and 3. Pins 4 and 5 must normally be jumped, except when the CDY Patch is installed. If pins 4 and 5 are jumped with the CDY Patch installed, lockups will occur.

B. If this unit was shipped without ramchips, obtain eight # 50256 or # 41256 ramchips, and install them with their notch in the same direction as the factory installed chips.

C. Open the cartridge door. If the top cover is held in place with two thumb latches, press them to the side. If the top cover is held in place by two screws, remove them. Lift the top panel up about a half inch and pull it towards the keyboard.

D. With the top cover removed, up to four slotcards will be visible. The slot nearest the keyboard is slot one, called a 10 K ROM. Slots two, three and four usually have 16 K RAM installed in each slot. Insert the 256 K RAMCARD into slot three with the components facing away from the keyboard.

E. Replace the top panel in the reverse order it was removed. Be sure the tangs on the back of the top cover fit into slots in the aluminum. Power the system up and run it! Happy Computing.

********** OPTIONS ARE NICE, BUT NOT REQUIRED! **********

Do not be hasty to add options. Use the ramcard and know what it will do for you before adding the extras. Make sure the 24 hour "burn-in" is done BEFORE adding these options.

1. The "Convertible Option" allows the 256 K RAMCARD to be 16 K or 256 K. Install a switch (Radio Shack 275-407) under the cartridge hatch. Consult the enclosed drawing. The switch must be connected with eleven inch long, single conductor, solid wires to J1, pins 1, 2, and 3. Pin 1 is closest to the J1 label. Pin 5 is closest to the gold edge connector. The wire must be pressed into the first three J1 pin sockets WITHOUT BEING SOLDERED. Be sure to use the proper wire gauge that will stay inserted into J1. Pin 2 must be connected to the center pole of the switch.

Bend the three lugs on the switch so they touch the other three, then solder the lugs together when the wires are soldered to the switch. Extra wire is $ 1 from CCP.

The switch installation: disassemble case from computer; use a pencil and 6" scale (ruler) with 1/100 per inch markings for laying out drill and cutting areas; drill smallest holes first, change to 5/32 bit to drill aluminum casting (measure and mark it first); using the same bit, drill two holes within rectangular cutout area, and finish out rectangular hole with a sharp Exacto knife; using same knife or a dremel tool a little clearance cutting will be necessary on the backside of the panel.

2. The "CDY PATCH" is recommended by CDY Consulting to improve software compatibility. It eliminates the $ FC0-FFF bank switching address range and increases the $ CFC0-CFFF bank switching address range to $ CF80-CFFF. This option does NOT have to be removed if standard memory is reinstalled.

The CDY PATCH requires removal of the J1 jumper between pins 4 and 5, and it requires adding a jumper to the bottom of the Atari 800 main circuit board. Consult the drawing.

3. The "COLD START" option is a true reset. Sometimes the regular reset button is not enough to get out of a lock up, but this option will do it!

Remove case and drill a quarter inch hole to the right of the cartridge door hatch. Install a pushbutton switch (Radio Shack 275-1547) in the drilled hole.

Remove the plastic pop rivots and the aluminum casting from the main circuit board (MCB). The rivots will unpop without being cut, and they can be re-used. Beneath the area of the casting that is tapered and located below the keyboard is a C198 capacitor that has an extra set of solder pads connected to it, probably hidden under the cap. Solder two (twelve inches long) wires to the extra set of pads.

Re-assemble the aluminum shielding with the wires routed out a corner opening in the shield. File the opening to open it up and to get rid of sharp edges. Solder the two wires to the

pushbutton switch. Be careful to NOT pinch the wires.

********** PROBLEMS ? **********

The 256 K RAMCARD can be tested if cartridges are removed, J1 is configured for 256 K, and the instructions of the diagnostic disk are followed.

If the 256 K RAMCARD does not properly function, clean the gold edge connections with a soft eraser and check for debris that may have fallen into the computer card slot. Test it again and contact CCP if it fails. A phone fix may be possible, so try to be near the system. The CCP evening phone is 214-370-8210. Ask for "John".

********** How to "Burn-In" a CCP Product **********

This test stresses the 256 K RAMCARD, so failure is more likely during the test, instead of after the warranty.

Make sure the product works properly, run 24 hour diagnostics, then check that the product works properly again. Read "WARRANTY STATEMENT", if it fails. ONLY if it passes should any options be considered.

********** WARRANTY STATEMENT **********

All warranty repairs must be performed by Crystal Computer Products. A completed warranty application must be mailed to CCP within TEN days of purchase to make the warranty effective.

If the 256 K RAMCARD fails to function as designed due to manufacturing defects within ninety days of purchase, the unit will be repaired and returned to the customer without charge. The defective unit must be returned to CCP at the customer's expense. + 5.00 FOR SHIPPING and HANDLING.

If the 256 K RAMCARD fails due to abuse, the customer will pay shipping, parts and labor necessary for repair. CCP is not liable for any damages, direct or incidental, arising from the use or misuse of this product. No other liabilities are implied or expressed.

********** NOTES **********

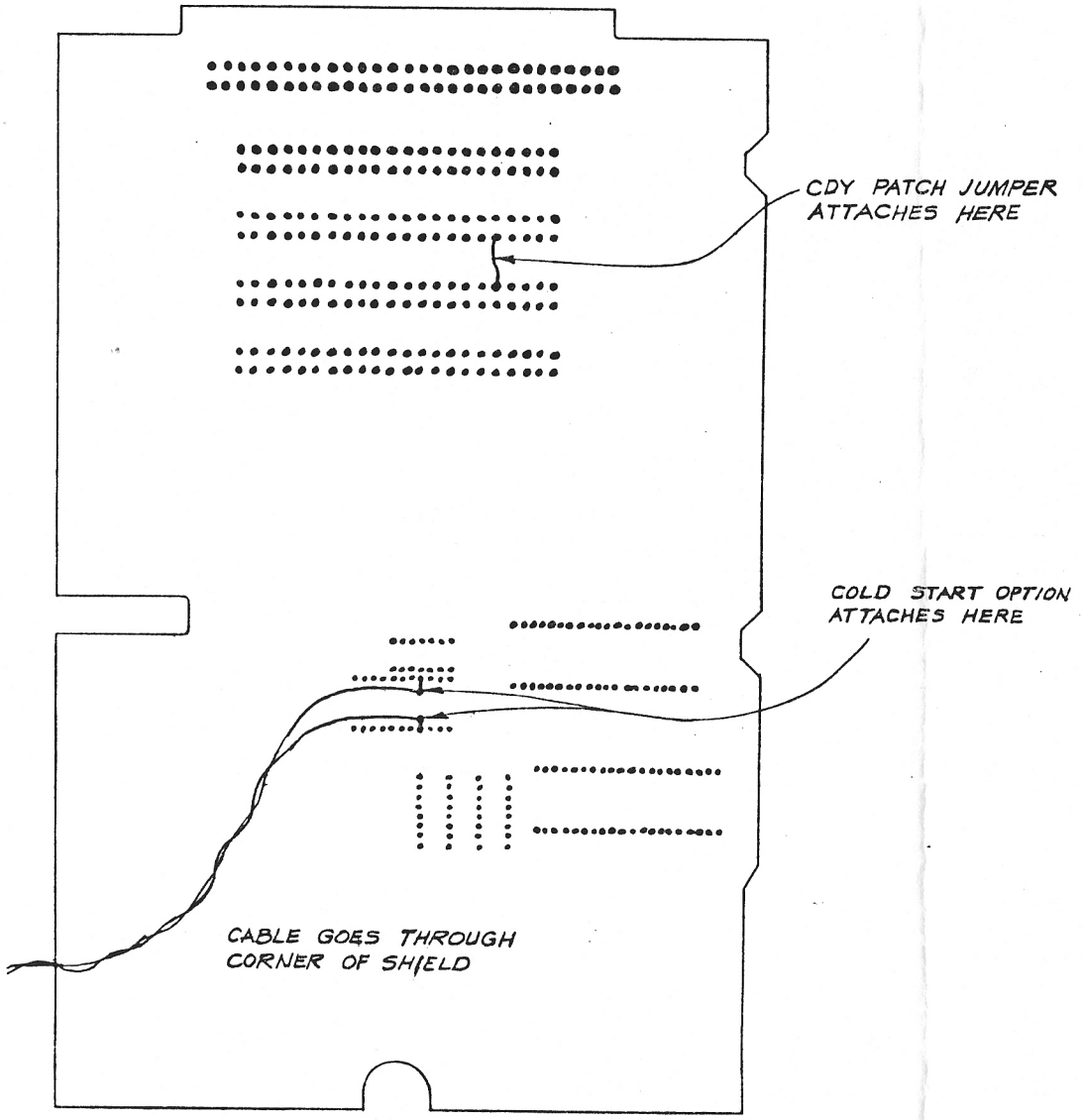
SYNFILE 1.01 works well with this product.

BIT-3 and 32 K boards do not like this product.

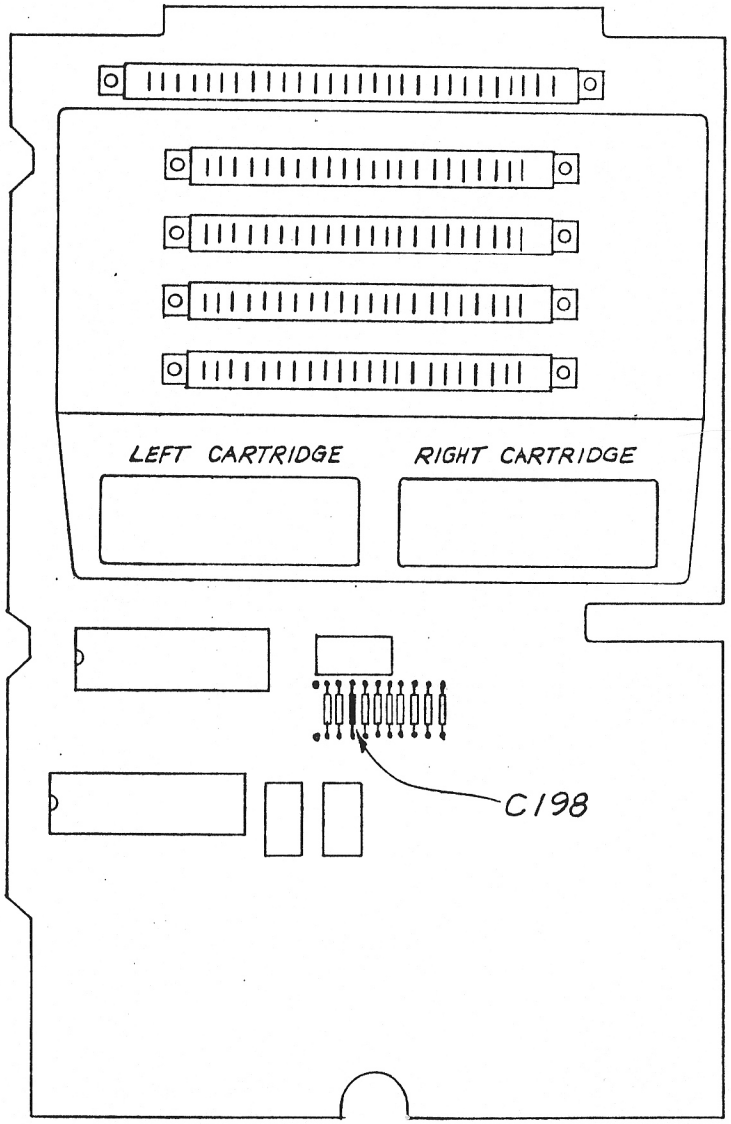
The FREE software is without warranty. MYDOS doc is $ 5 from CCP.

The Atariwriter cartridge menu may flip. Simply press the preferred function key when the menu is clearly shown.

ATARI 800 MAIN CIRCUIT BOARD



BOTTOM VIEW



TOP VIEW

NOTES

FOR FURTHER INFORMATION CONTACT JOHN BLASCHKA AT (214) 270-8210

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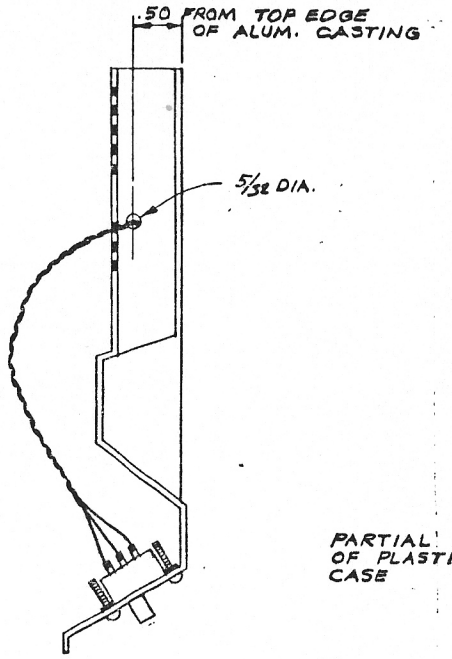
CRYSTAL COMPUTER PRODUCTS

DRAWING OF

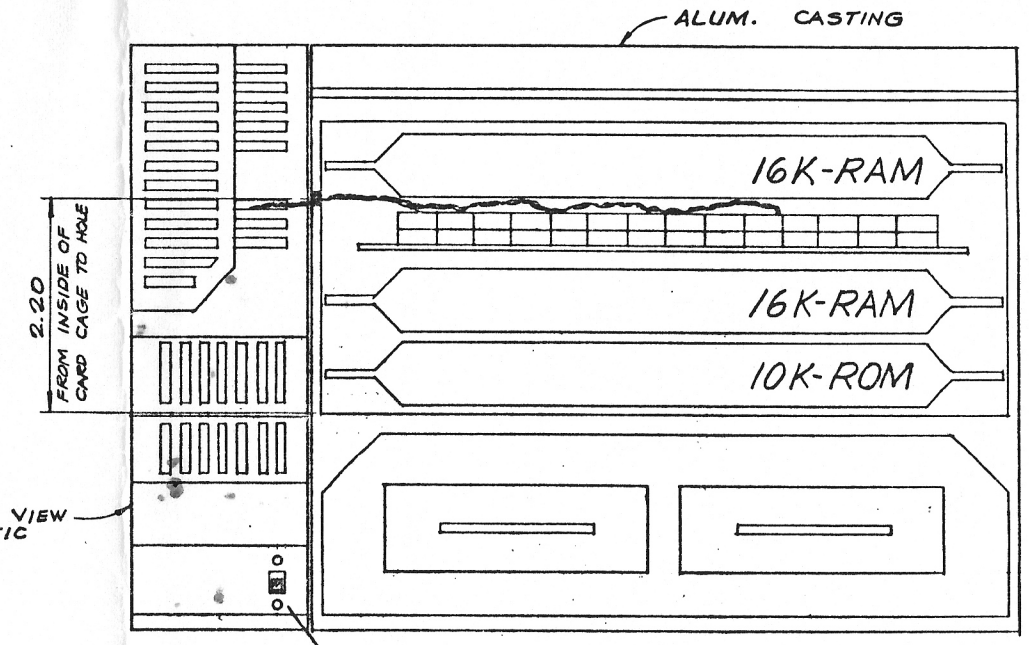
256 K RAMCARD OPTIONS

DESIGN BY	DRAWN BY	CHECKED BY
J. BLASHKA	W. BOYKIN	J. BLASHKA

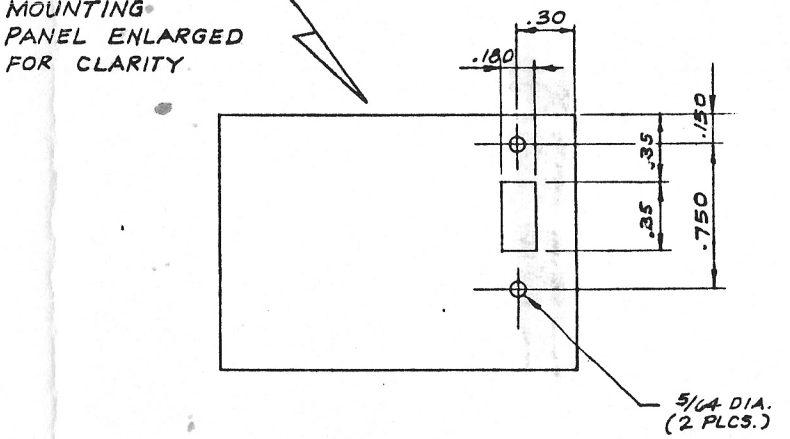
SCALE	DATE	REVISION NUMBER	REVISION DATE
1" = 1"	12/1/84	1	3/6/87



SIDE VIEW



TOP VIEW



FRONT VIEW

NOTES

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DRAWING OF: 256K RAMCARD CONVERTIBLE OPTION

DRAWING # RC-101

DESIGN BY	DRAWN BY	CHECKED BY
J. BLASHKA	W. BOYKIN	J. BLASHKA

SCALE	DATE	REVISION NUMBER	REVISION DATE
	4/14/86	1	12/17/86