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CCU/485 -IO Install Instructions Part #: CCU485-IO

This equipment is designed to be installed and serviced by fully qualified field engineers.
No user serviceable or installation parts inside.

Supplied:

1	x	CCU485-IO board
1	x	Mounting Bracket
1	x	Power connector for CCU485-IO
1	x	Supervision relay connector for CCU485-IO
4	x	Network connectors for CCU485-IO

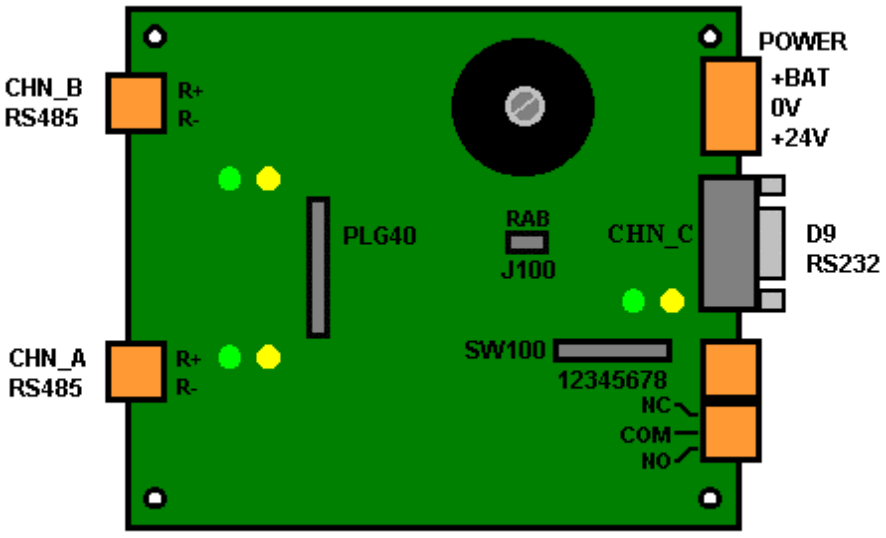
You will need:

1	x	cable from 24V DC power source to CCU/IO. Connector supplied.

Power Requirements:

Typical:	200mA at 24VDC
Voltage Input:	20-30 VDC

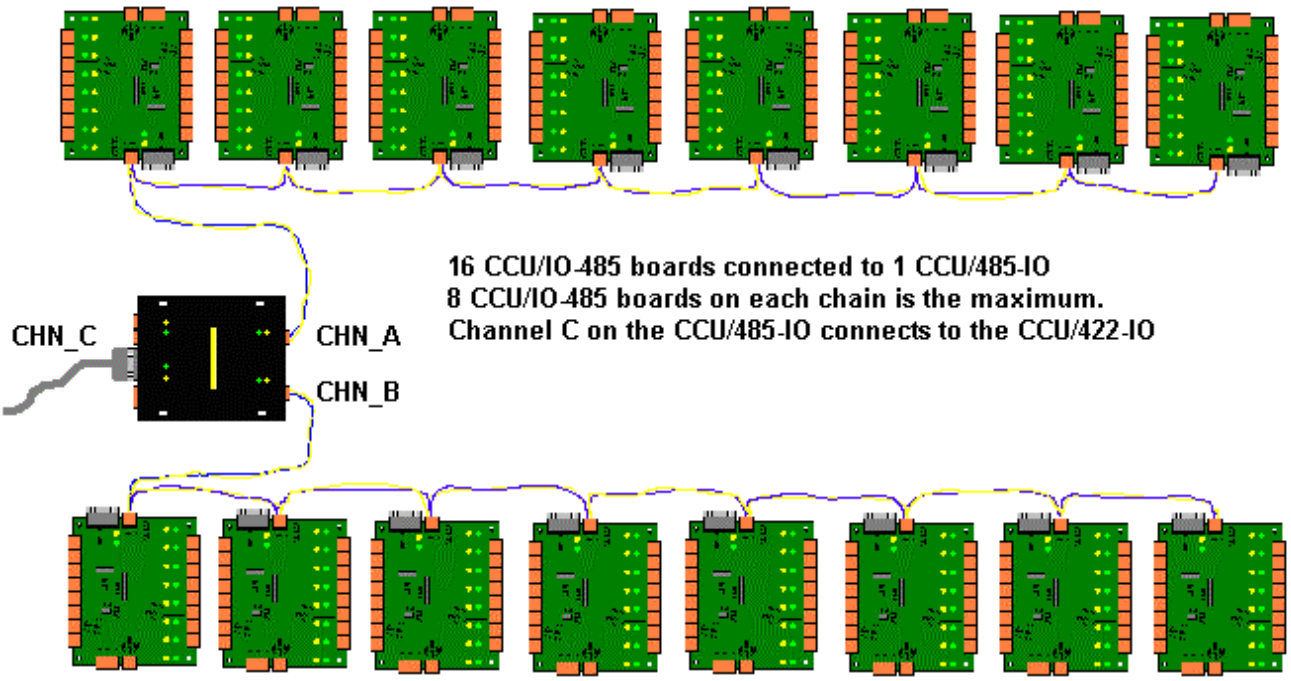
Board Layout:



Installation of CCU/485-IO:

The CCU/485-IO is used for connecting between a CCU/422-HUB, CCU/232-HUB, CCU/FIBRE-HUB (or any other RS232 CCUNET port on a CCU board) and CCU/IO-485s.

- To connect the CCU/485-IO to a chain of CCU/IO-485s connect the RS485 (SKT33) port of the CCU/IO-485 to port A or B of the CCU/485-IO using the following connection diagram. Up to eight CCU/IO-485 boards can be chained off one channel of the CCU/485-IO, giving up to 16 CCU/IO-485 boards connected to one CCU/485-IO. Appendix A contains information on wiring for this configuration. Check the CCU/IO-485 documentation for jumper settings for this configuration.



CCU/IO-485 RS485 (SKT33)	CCU/485-IO Channel A or B
+	R+
-	R-
middle pin	middle pin

- Connect the RS232 port (CHN_C) to a CCU/422-HUB, CCU/232-HUB, CCU/FIBRE-HUB (or any other RS232 CCUNET port on a CCU board) using the following connection diagram.

CCU/422-HUB CHN_C RS232 9PIN (DCE)	CCU/485-IO CHN_C RS232 9PIN (DCE)
2	3
3	2
5	5

- For normal operation no jumpers should be in place on JP100.

- The relay output is unused in the CCU/485-IO and is reserved for future use. Connect the 24V DC power source to the supplied connector. The power connector is next to the CHN_C port. Pin connections are:
  PWR (+24VDC) RETURN/COM(0V) BATTERY(24V)

These connections are written on the board. If the 24V power source is Uninterruptible, then there is no need to connect the BATtery connection.

Pin number	Function
1	24V
2	COM
3	BAT

Operation of LEDs:

- Each port has a Green and a Yellow LED. When the Green light flashes the port is transmitting. The Yellow led glows when the port is not communicating with the adjoining device or there has been supervision failure on this port.

Configuration of CCU/485-IO:

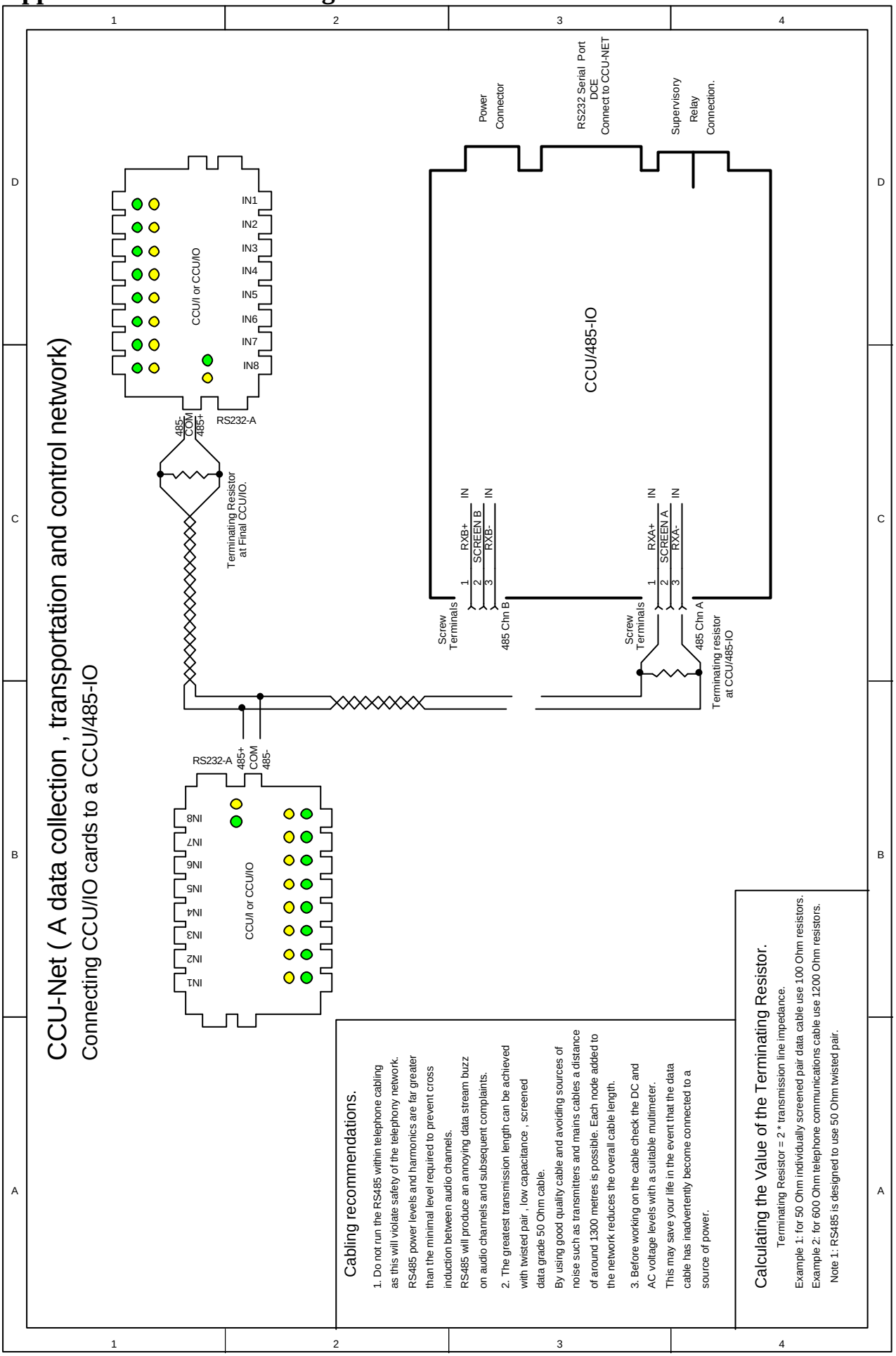
- If your network has less than 254 CCU nodes, you can use the jumpers (IN1 to IN8) on the CCU/485-IO (labelled SW100) to configure the CCU Network address. Each CCU Node must have a unique address. **Address 0 and 255 CANNOT BE USED**. The jumpers represent a BINARY address. Note that the address of the board can be configured in software, in which case the address jumpers are ignored. See Appendix B for a complete list of address numbers and corresponding jumper positions.

- If you want to configure the address in software you can use any address from 1 to 65534 **(except 255)** (The CCU Network does not support more than 65534 nodes). You will need to use a laptop to program the network address. Software configuration requires that a laptop be connected to port CHN-C using a straight through RS232 cable. A terminal program (such as Procom/Telix or Windows Terminal using VT100 emulation) can be used with communication parameters set to 19200,N,8,1. Power up the CCU. After approximately 3 seconds, all LEDS on the CCU will glow. While all of the leds are glowing you can type **MENU,** allowing programming of the CCU/485-IO.

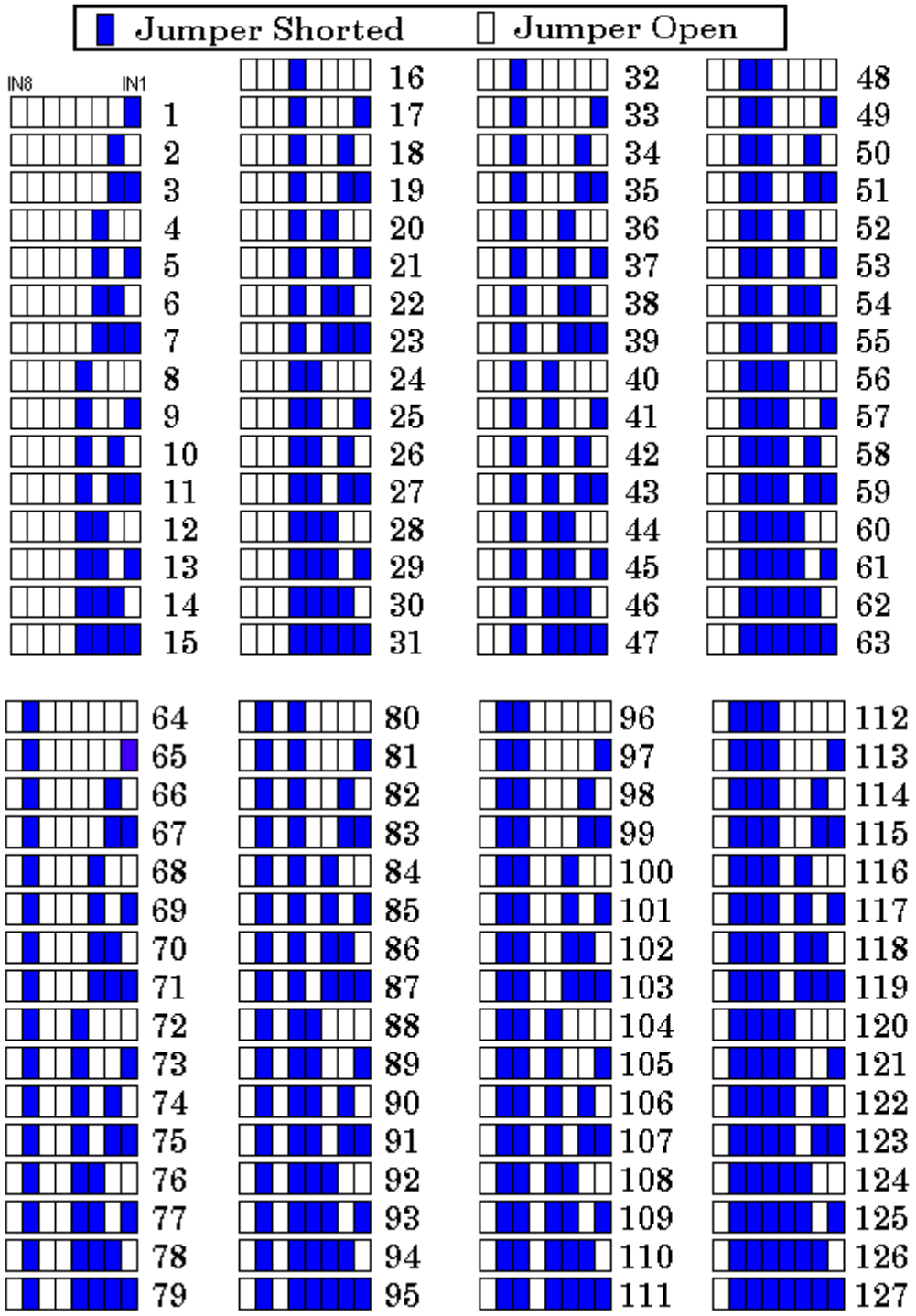
CCU/485-IO CHN_C 9PIN (DCE)	**PC/LAPTOP 25PIN**	**PC/LAPTOP 9PIN**
2	3	2
3	2	3
5	7	5

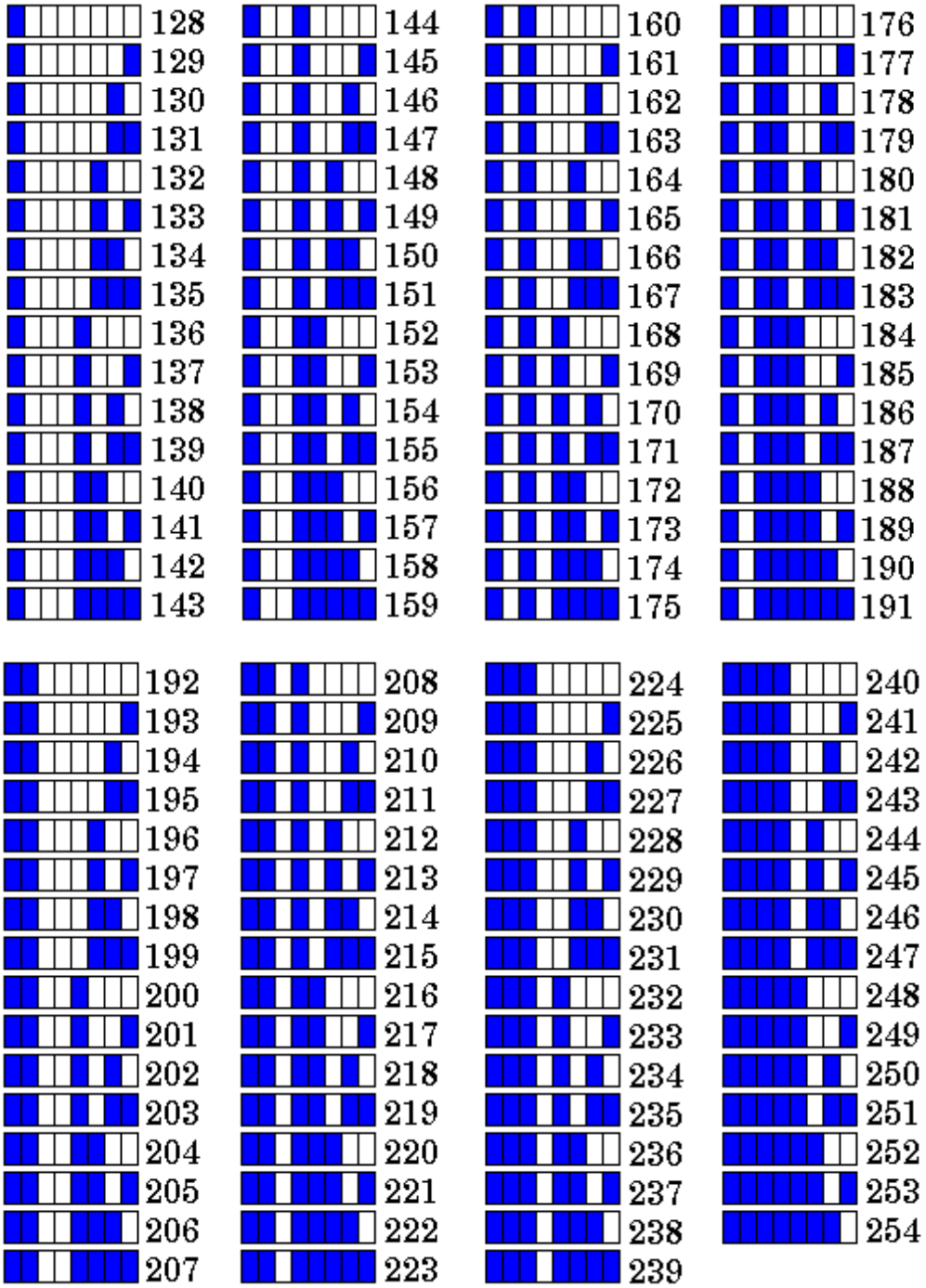
- The menu gives an option to set a software address and an option to use the software address or the jumper address.

Appendix A: Connection diagram



Appendix B: Address jumpers

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