



Application Hint 2

MIC8030/8031 Application Hints

MIC8030/MIC8031 Application Hints on Compatibility with Display Drivers Produced by AMI and HOLT

The MIC8030/MIC8031 can be made compatible with all bonding options of the Gould-AMI S4520 as well as all bonding options of the HOLT HI-8010. However, the high voltage supply must be positive with respect to ground for the MIC8030/MIC8031. Both AMI and HOLT use a negative High Voltage. See MIC8010/11/12/13 family for drop in replacements in existing sockets.

High Voltage Supply

Device	Vmin	Vmax	Absolute Max
MIC8031	20V	100V	110V
MIC8030	20V	50V	75V
HI-8010	Vlogic-35V	+0.3V	Vlogic-35V
S4520	Vlogic-32V	+0.3V	Vlogic-32V

Logic Power Supply

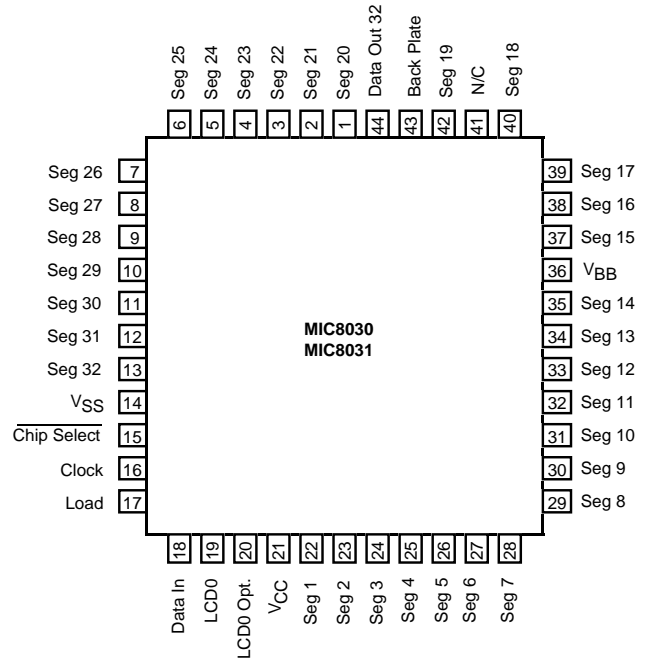
Device	Vmin	Vmax	Absolute Max
MIC8031	4.5V	16.5V	18V
MIC8030	4.5V	5.5V	18V
HI-8010	3.0V	18.0V	18V
S4520	3.0V	16.0V	17V

As can be seen above, the MIC8030/MIC8031 are superior to both AMI and HOLT in the voltage that can be applied to a Dichroic LCD display. Using the MIC8030/MIC8031 allows for a derating of 50%/70% if operated at 35V; the HI-8010 allows for no derating at 35V and the S4520 allows for no derating at 32V.

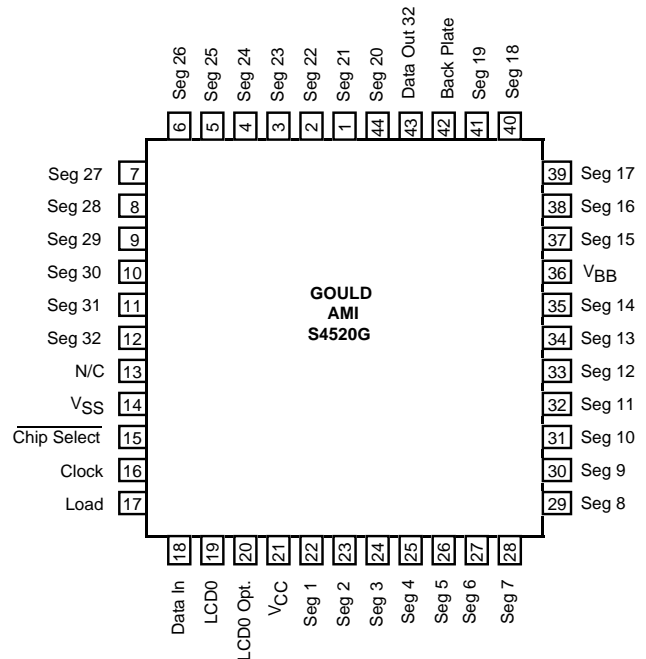
When placing the MIC8030/MIC8031 in a pin compatible configuration on a board which previously used a HOLT or AMI device, care must be taken before changing the polarity of the High Voltage Supply, to reverse the direction of any polarized filter capacitor on the High Voltage line, as well check any other circuit (like a zener diode, etc) which contacts the High Voltage line.

The pin out drawings match the MIC8030/MIC8031 to the S4520. By moving the No-Connect, from pin 41 to pin 13 and shifting the displaced signals clockwise, the pin out can be matched.

Other pin outs that can be matched are the S4520A, S4520B, S4520C, S4520S, S4520F, S4520G, HI-8010L5, HI-8010L6, HI-8010L7, HI-8010C5, HI-8010C6, and the HI-8010C7. Other packaging options are available, all options must use a positive V_{BB}.



**MIC8030/MIC8031
Standard 44 Pin Quad Package**



**S4520G
AMI 44 Pin Quad Package**