

4.5.14 M797 Register Selection Module

The M797 is a single-height module used to decode one of eight possible register addresses in conjunction with the M105 module (see Table 4-1 for M105 reference). In addition, control signals are used to select a Read, Write low byte, or Write high byte.

4.5.14.1 Theory of Operation – The M797 contains three BCD/DEC decoders of which outputs 0 through 7 are used to select a register. Outputs 8 and 9 are used to create a gating strobe. The module is enabled by the input at V1 (DEV SELD) at which time the control signals at A1 and D1 select the correct decoder(s) for the operation specified. Once a decoder or decoders has been selected, its 8 and 9 outputs are driven high, asserting STRT XTIM output at H1. One of the 0 through 7 outputs of the decoders is selected by the inputs at B2, B1, and C1. These inputs are inverted before reaching the decoders so that if they are all high the 0 output of the decoder will be selected. The input at V2 can be used to prevent the selection of the two decoders used to write into a register when it is asserted H (i.e., BUSY H). The exception to this is when the three address inputs are high (i.e., selection of a control register). In the RK11, this feature is not used and V2 is grounded.

4.5.15 H734 Power Supply

The H734 Power Supply supplies the dc for the disk drives of the RK11 System. Each H734 supplies power to two drives. The H734 has overvoltage protection with the crowbar at ± 16.5 Vdc. The H734 also contains an undervoltage detection of ± 13.7 Vdc and low input voltage detection at approximately 100V. Both positive and negative voltages in the H734 are regulated by two switching mode voltage regulators. These two circuits operate