

WRITE PROTECT circuit that monitors the DC voltage of the Module. Optionally, a rechargeable lithium battery and nonvolatile controller chip convert all SRAM to Nonvolatile RAM with power fail protection.

DC/DC CONVERTER

Power to the Module is supplied from a DC/DC converter that supplies +5 vdc from +12 vdc with a conversion efficiency of 81%. As a result very little heat is generated by the unit.

STANDBY POWER

If neither the Nonvolatile RAM nor the on board battery option is selected, then a 0.1 farad Super Capacitor may be used and is kept charged to +5 vdc during normal operation. At power failure this capacitor provides power to each RAM chip so jumpered and also to the Write Protect circuit. Under test the full RAM compliment was powered in excess of thirty hours without data corruption. The optional rechargeable lithium battery with nonvolatile controller chip protects the integrity of all module RAM contents against any power fail condition. A battery charge circuit is included on the module.

SPECIFICATIONS

Memory	EPROM: 2764,27128,27256 @ 200 nsec.; SRAM: 6264,62256 @ 200 nsec., 2 microamp @ 2vdc battery mode; NOVRAM: Dallas 1225Y,1230Y @ 200 nsec. or rechargeable lithium battery w/nonvolatile controller chip w/62256 RAM; EEPROM: 2816 @ 350 nsec.
DC/DC Converter	Type: Motorola MC34063P1; Current: 1.5 amp max. w/current limit; Input: 2.5 to 40 vdc; Efficiency: 81% at an output of 5 vdc, 1 amp.
Standby Source	0.1 farad, 5.5 vdc Super Capacitor. Approximately 830 microamp-hr capacity. Rechargeable lithium battery with charge circuit. Single charge provides over five years operation.
Circuit Board	5" x 10.375" x 0.063" thick, NEMA F-4 glass cloth, soldermask both sides, component silkscreen, gold plated edge connector contacts, and humidity resistant conformal coating.
Front Panel	1.5" x 5.0" x 0.125" thick, clear anodized aluminum, handle, and anti-insertion device.
Miscellaneous	Weight: 10 oz.; Operating Temperature: -37 to +74 degrees C; Power Requirements: 95 ma max. @ +5 vdc, 160 ma max. @ +12 vdc