

## 2.3 Functional Description

The Controller Board contain the following main functional blocks:

Microprocessor with  
32 k bytes external EPROM.  
192 bytes internal RAM.  
8 k bytes external RAM.  
256 bytes serial EEPROM.  
Internal UART.  
Internal Timer system.

Serial communication port system with the following main functions:  
Bi-directional PARTY bus.  
Galvanically insulated CURRENT LOOP input.  
CURRENT LOOP Output.  
Polarity selectors for CURRENT LOOP/NMEA formats.

Digital to Analog converters.  
Analogue output for resultant speed.  
Optional analog output for Longitudinal and Transversal speeds.  
Contrast and Backlight Control.

Real Time Clock with battery back-up.