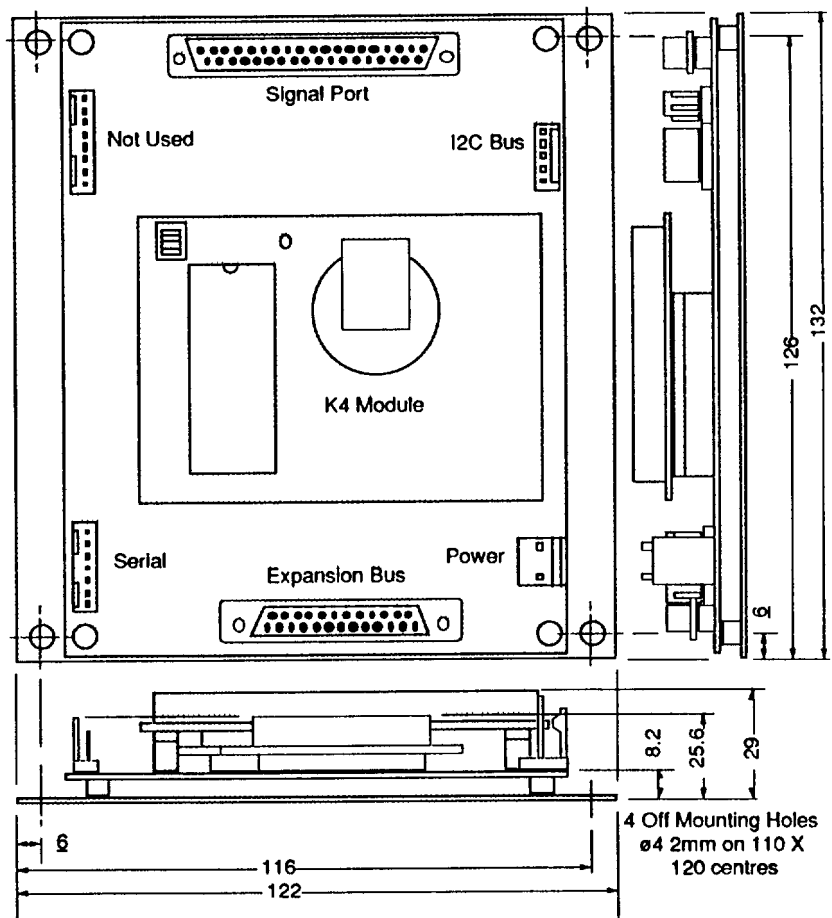


## 5503 DEVELOPMENT BOARD

The 5503 development board allows the K4 to be used in low volume applications and during evaluation without the need to lay out a printed circuit board. It provides a serial port, an I2C port, voltage regulator, expansion port and a signal port on a chassis mounting is designed to be used to evaluate the Scorpion K4.

A pulse processor is included providing channels 32-47 which provides numerous digital processing facilities, including pulse counting, frequency measurement, shaft encoder inputs, 10 bit analogue inputs. For further information about channels 32-47 please refer to the K4 data sheet.



**Signal port** The signal port gives access to channels 5,6,7,8,9,10,11,16,17,20 and 21 which are direct connections to the K4, and also digital channels 32-47 which are or the pulse processor and channels 64-73 which are 10 bit analogue inputs. Connector type: 37 way D type socket on the PCB.

**Serial** Used to connect a K4 development board to a host computer. The signal levels are  $\pm 9$  volts and the pinout is the same as for the original Scorpion controller, note however that an RS232 level shifter is not required. With suitable software the unit can be used in multi-drop applications. Connector type: 7 way 0.1" Molex 6410 header. Suitable socket provided.

**I2C Bus** The I2C bus can be used to provide access to channels 128-191 (digital) and 256-295 (analogue) using I2C Scorpion modules or PCF8574 and PCF8591 integrated circuits. Connector type: 5 way 0.1" Molex 6410 header.

**Expansion Bus** The expansion bus is a software controlled eight bit bus used to link to a graphics LCD, a keypad as well as a number of other add-ons which are currently under development. Suitable for use over a distance of 1 to 2 metres. Connector type: 25 way D type socket on the PCB.

**Power** The K4 development board requires a DC unregulated power input of between 7 and 24 volts. It is recommended that, at least initially, the Scorpion power supply is used. Connector type: 2 way 0.156" Molex header.