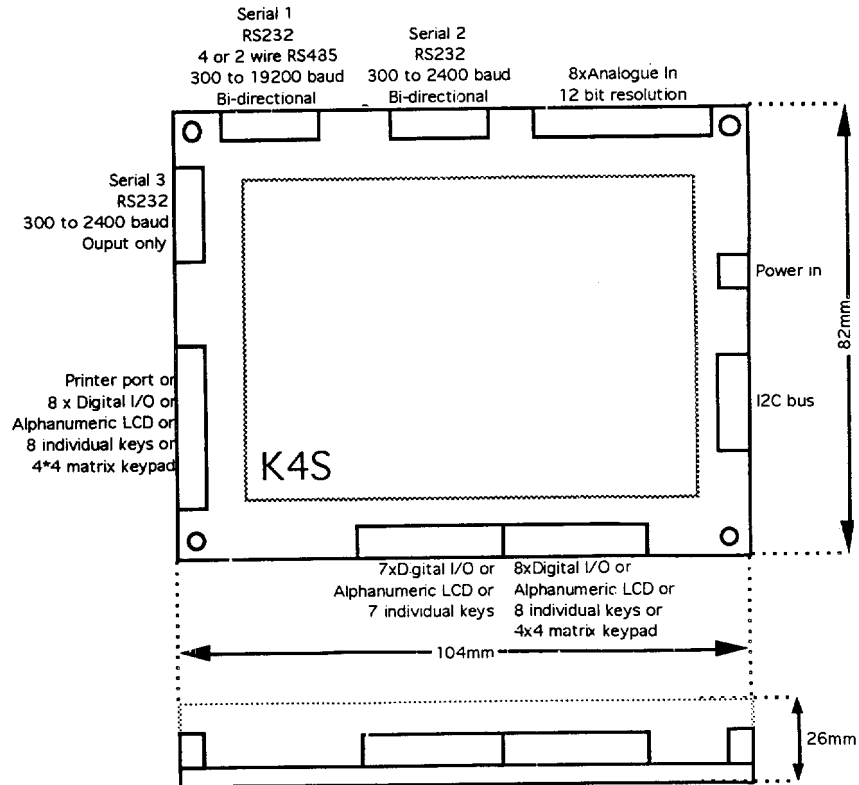


Scorpion K4 Application Board I

5522 and 5523 Scorpion K4 Application Board



Overview

Application Boards 5522 and 5523 provide K4 controllers with a complete range of commonly-required interfaces on a small board. They are intended to serve both as a development board during evaluation of K4 controllers and as an application board for low volume OEM applications.

Communications

The 552x serial interface has one bi-directional serial channel at up to 19,200 baud (this channel also has multi-drop capability and can operate at RS485 levels), and two further serial outputs and one serial input at up to 2400 baud. All serial channels have hardware and software handshaking.

User Interface

Several types of alphanumeric LCD modules, up to 40 characters by 2 lines, may be connected directly to the 552x, as may matrix keypads of up to 4 rows by 4 columns.

12-bit Analogue Input

The 5523 uses an LTC1290 to provide 8 channels of analogue input at 12 bit resolution over a 0-5 volt range. The 5522 does not have this feature.

Parallel Printer Port

All connections needed to connect to a parallel printer are provided. The data

lines can be used as 8 extra digital I/O channels if preferred.

Other Digital I/O

K4 channels 19, 168-175, 184-189 are available. See the K4S data sheet and manual for details on these channels.

I/O Expansion Modules

An I²C bus allows the 552x to control any I²C compatible slave device. A range of modules can be connected via the I²C bus with up to 104 opto-isolated digital input/outputs, up to 104 relay outputs, up to 32 analogue inputs (8-bit 0-10 volts), and up to 8 analogue outputs (8-bit 0-10 volts).

Power Requirements

The 552x requires 5V DC at up to 300mA, depending on accessories connected.

Connectors

All connectors are MOLEX 6410 series.