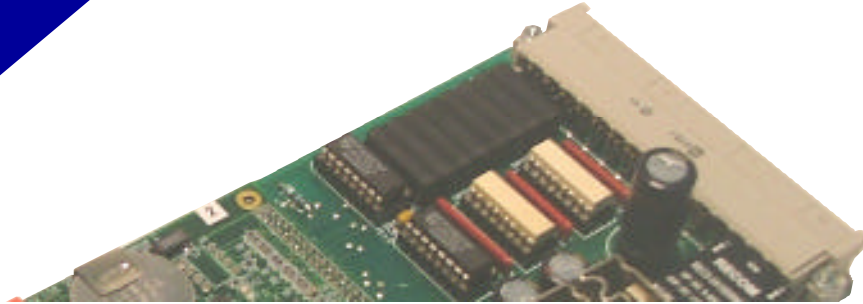




RIGEL-TCP

S1027



Rigel-TCP

The Sorion **Rigel-TCP** (Total Control Processor) is a single board microprocessor that is specifically designed for the real time control and data acquisition environment. It can operate as a standalone unit, or as a peripheral to a PC/PLC based system.

The wide operating voltage range and the low power requirements make the **Rigel-TCP** ideal for small portable battery powered applications. The **Rigel-TCP** is designed to be powered from the vehicle or sub-assembly under test and typically consumes less than 150mA.

As well as having a good compliment of inputs and outputs aimed squarely at the test and control arena, the **Rigel-TCP** has an Ethernet port that offers TCP/IP communications and an integrated web server allowing control and monitoring to be performed remotely using a standard web browser.

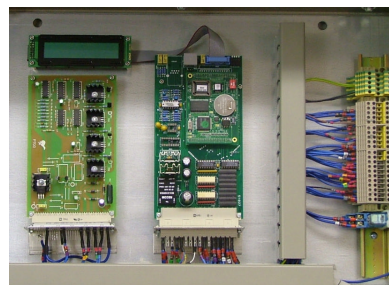
The **Rigel-TCP** is a member of the Sorion **Rigel** family which is based on a 16 bit processor. It has an embedded real time operating system (RTOS) and an inbuilt multitasking high level control language environment.

The **Rigel-TCP** is ideal for the control of stepper motors with feedback from encoders and load cells, control of analogue control loops and communication with external control units. Sorion has developed a number of standard procedures that make the writing of simple applications in a matter of hours.

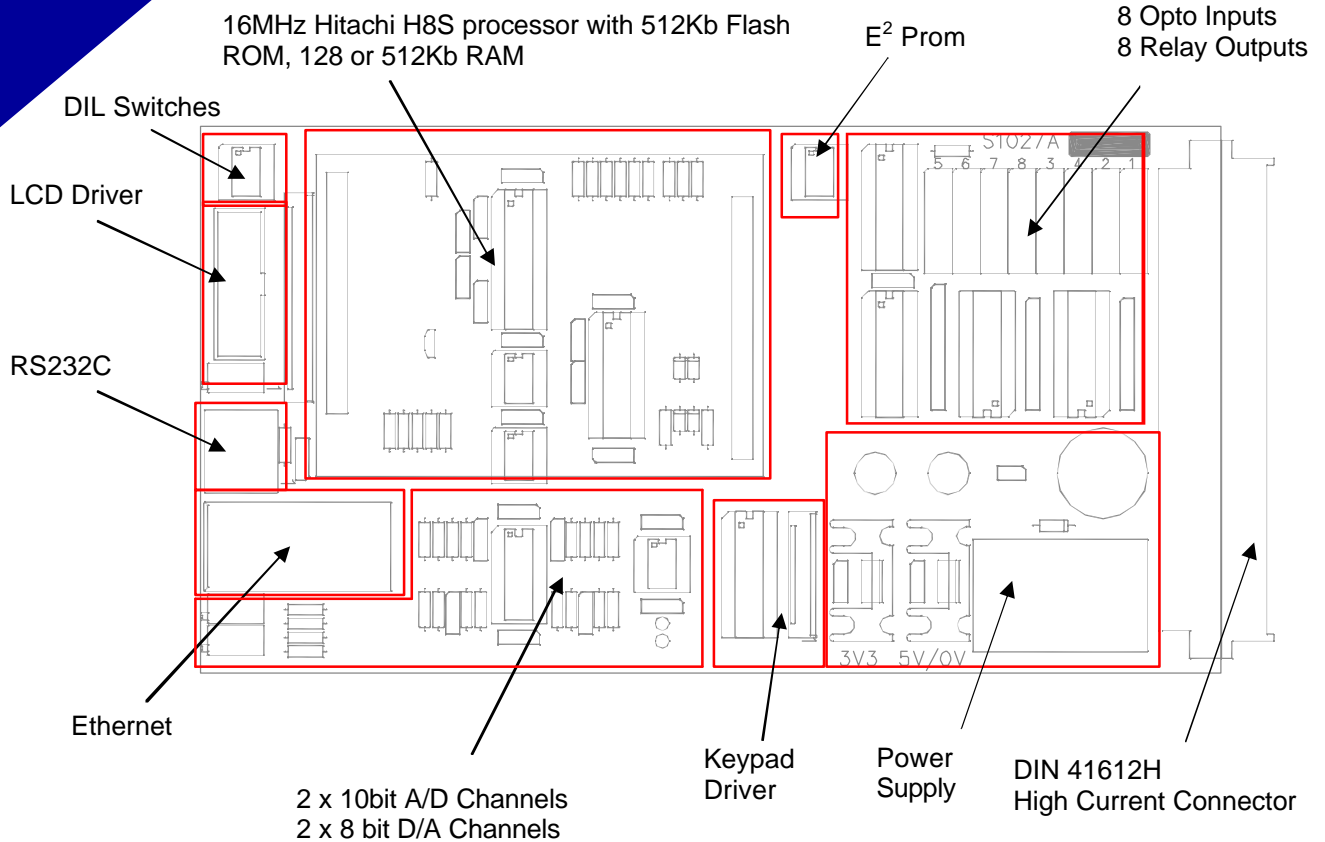
The flexibility of the **Rigel** environment allows for significant local real time processing and storage of data thereby simplifying control applications at a higher level.

Sorion can supply **Rigel-TCP** cards to customer specific build level, thus allowing the most cost effective integration possibilities.

Rigel-TCPs are currently deployed in a number of automotive assembly and test projects with some of the world's leading luxury vehicle manufacturers and Tier 1 suppliers.



A typical Installation with Servo drive and 2 x 20 Character LCD



All **Rigel** systems are programmed in a high level control language that has been developed for real time applications.

Key features of the programming language are:-

- High Level - many built in device objects
- Multi-tasking
- Block structured
- Simple Syntax
- Floating-point arithmetic
- Arrays, Macros, Pointers
- Filing System
- Applications downloaded to Flash in situ
- Low cost PC development environment

For further information see the datasheet on the **Rigel** Programming Language.

Parameter	Specification
Processor	Hitachi H8S 16MHz
Memory	512KB Flash 128/512KB Battery RAM Up to 8KB EEPROM
Real Time Clock	Option
Serial Ports	2 RS232C & 1 RS232
Ethernet	100/10 TCP/IP
External Control Bus	I ² C
Digital Inputs (opto)	8 off - 12v or 24v dc
Digital Outputs (Relay)	8 off - 1Amp < 50v dc
Analogue Inputs (10bit)	2 off Differential
Analogue Outputs (8bit)	2 off 0 - 5v
LCD Interface	Alpha up to 4 x 40 Chars
Keypad Interface	Support for 4 x 4 Matrix
I/O Connector	DIN-41612 F Type
Power Supply	8-30 v dc @ 150mA (typ)
Size	185mm x 100mm

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