



Introduction

Hello again,

Latest news: NI's FP-2000: Now embed LabVIEW in a controller, not a PC and we are confirmed as the NZ ADI distributor for MAC Lab and PowerLab products.

The Front Page Focus is tightly on our new products from **TexMate**, a Programmable Meter Controllers and Sheldon Instruments DSP, come and see them by visiting our stand at EMEX coming up in May in Auckland.

If you haven't seen the TexMate range, get ready to fall over, just a little to tantalise below. **This product competes head on with so many traditional products and wins easily.**

Training courses of course, two last month, two this month, if you want to enroll send an email to MasTec Ltd.

MasTec Highlite this month on Page 2

A look at our OPTO 22 Solid State Relay line up.

Features

Web Info: MasTec Ltd Marketing Button
Texmate: Texmate Tiger 320
Sheldon: LabVIEW Real Time DSP and DAQ
SSRs: OPTO 22 Solid State Relays by the bucketful

MasTec Ltd Marketing Button

Have a look at the www.mastec.co.nz side bar button set and click Marketing. The announcements in this newsletter and many more are to be found there.

TexMate Tiger 320 Series Programmable Meter Controllers

As I said "you will fall over" when you see the specs and ranges.

They are:

- Easier to program than a PLC
 - Faster than a process controller
 - Smarter than remote or modular I/O
 - Better reliability than micros and SBCs
 - Outperforms most recorders and data loggers
 - Eliminates most external Counters, Timers, and Tachometers
 - More comms options than dedicated Field Bus Devices
 - Greater integration than racks of signal conditioners & transmitters, over 100 different signal interface types.
 - Delivers all of the above with faster implementation and for a lower cost.
- At Emex we will show how to program and use these Tigers.

Sheldon Real Time DSP and DAQ

Life after the demise of the TI 320 family

If you need this, you will know, if not skip to SSRs

* SI-C6xDSP Accelerator for PCI bus *

The SI-C6xDSP-PCI from Sheldon Instruments is a powerful Digital Signal Processor (DSP) card for your PC equipped with a 32/64 bit PCI bus. It is based on Texas Instruments' new 100-150Mhz TMS320C6711/6211, 32 bit DSP, and can transform your PC into an ultra high performance development system and DSP accelerator. A full line of software development tools are available from Sheldon Instruments and TI, which include compilers, assemblers, linkers, and debuggers.

Key features include:

- * 900 MFLOP peak performance, 150Mhz peak clock, 32 bit floating/fixd point precision.
- * Up to 256MB SDRAM, using conventional DIMM format standard with all PCs.
- * Full 32/64 bit bi-directional PCI initiated bus mastering, with 132MB/sec peak transfer rate.
- * Memory mapped host communications port.
- * Software development tools from Sheldon Instruments and TI, including QuVIEW.
- * Win9x/NT/2000/XP and Linux drivers and sample application support.
- * Expansion connectors for prototyping, analog & digital I/O daughtercards.
- * JTAG port for in system development and debugging.
- * Host PCI bus to DSP Link *

Blah Blah Blah.

Software:

- * Win9x/NT/2000/XP and Linux support for QuVIEW, an accelerator library for LabVIEW.
- * Extensive QuVIEW DSP-resident libraries for LabVIEW, includg examples for real time acquisition, control and analysis.
- * Sample code for COFF loaders, PC to DSP communications source code and SI-DDK.
- * TI debuggers, C/C++ compilers, assemblers and linkers.

Physical Dimensions & Electrical Requirements:

- * Half size PCI-bus card measuring 6.4"(L) x 3.9"(H).
- * 7 watts typical with 128Kx32 words SRAM

Just a wee bit more, I don't like technical articles either.

Sheldon make a system where you can build Real Time DAQ and DSP using this and other Sheldon products. The closed loop control can run at 750KHZ in some circumstances, may be faster with this new DSP product.

If you are doing real time control, and use LabVIEW, here is the product for you.

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Visit our Web Site at

Call MasTec Limited for information on these exciting new products

Solid State - Contact Relays

MasTec Ltd stock a large quantity of **OPTO 22 SSR** relays either AC or DC switching, with either AC or DC control. Each module has a rating of 4000VAC Isolation between control side & the AC or DC switch side.

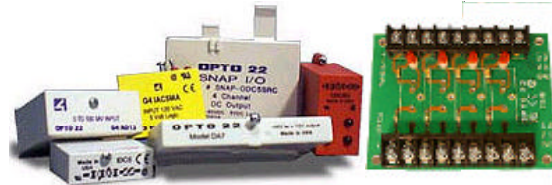
There are various models of SSRs. Hockey Puck high power chassis mount, Lower Power PCB mount and Versatile Mix and Match Backplane mount.



However you may just want to protect the inputs and outputs of your expensive PLC, Controller or your PC DAQ card. **Then just use SSR modules and backplanes.**

OPTO 22 also make a large range of accessory products for linking their modules to PCs, PLCs etc using radio, RS-232/485, fiber, parallel, profibus, devicenet and ethernet.

The next chart has the Backplane SSR & input modules. The backplane families are Classc, G4, Quad & SNAP



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Model	Switch Voltage	Current Cont/Surge	Control Voltage
Hockey Puck Style AC Series (Screw Terminal)			
120D3	12-140VAC	3/85	3-32VDC
120D10	12-140VAC	10/110	3-32VDC
120D25	12-140VAC	25/250	3-32VDC
120D45	12-140VAC	45/650	3-32VDC
240D3	24-280VAC	3/85	3-32VDC
240D10	24-280VAC	10/110	3-32VDC
240D25	24-280VAC	25/250	3-32VDC
240D45	24-280VAC	45/650	3-32VDC
380D25	36-420VAC	25/250	3-32VDC
480D10	100-530VAC	10/110	3-32VDC
480D15	100-530VAC	15/150	3-32VDC
480D25	100-530VAC	25/250	3-32VDC
480D45	100-530VAC	45/650	3-32VDC
575D15	100-600VAC	15/150	3-32VDC
575D45	100-600VAC	45/650	3-32VDC
120A10	12-140VAC	10/110	10-240VAC
120A25	12-140VAC	25/250	10-240VAC
240A10	24-280VAC	10/110	10-240VAC
240A25	24-280VAC	25/250	10-240VAC
240A45	24-280VAC	45/650	10-240VAC
Hockey Puck Style AC and DC Series (Spade Terminal)			
Z120D10	12-140VAC	10/110	3-32VDC
Z240D10	24-280VAC	10/110	3-32VDC
DC60S-3	5-60VDC	3/5	3-32VDC
DC60S-5	5-60VDC	5/10	3-32VDC
PCB Mount Style AC Series (Vertical MP Horizontal P)			
MP120D2	12-140VAC	2/20	3-32VDC
MP120D4	12-140VAC	4/85	3-32VDC
MP240D2	24-280VAC	2/20	3-32VDC
MP240D4	24-280VAC	4/85	3-32VDC
MP380D4	36-420VAC	4/85	3-32VDC
PCB Mount Style DC Series (Vertical MP Horizontal P)			
DC60P	5-60VDC	3/5	3-32VDC
DC200P	5-200VDC	1/2	3-32VDC

System Building:

Complete distributed I/O systems consist of a network controller + the I/O backplane + I/O modules.

The I/O modules may be SSR, AC/DC input isolating/ level shifting, RS-232/422/485 Comms & Analog I/O.

An OPTO 22 network controller, a softlogic PC or a PLC can act as the controller for the backplanes.



Model	Switch Voltage	Current Cont/Surge	Logic Voltage
Backplanes Modules (Prefix G4, Q or SNAP for family)			
AC SSR modules, Colour Black			
OAC5	12-140VAC	3/80	5 VDC
OAC5A	24-280VAC	3/80	5 VDC
OAC5A5	24-280VAC	3/80	5 VDC (NC)
OAC15	12-140VAC	3/80	15 VDC
OAC15A	24-280VAC	3/80	15 VDC
OAC24	12-140VAC	3/80	24 VDC
OAC24A	24-280VAC	3/80	24 VDC
DC SSR modules, Colour Red			
ODC5	5-60 VDC	3/5	5 VDC
ODC5R	100DC/130AC	3/5	5 VDC (Relay)
ODC5A	5-200 VDC	1/5	5 VDC
ODC15	5-60 VDC	3/5	15 VDC
ODC15A	5-200 VDC	1/5	15 VDC
ODC24	5-60 VDC	3/5	24 VDC
ODC24A	5-200 VDC	1/5	24 VDC
DC Input Modules, Colour White (Note also AC Inputs)			
IDC5	10-32 VDC/AC	Level Shift to	5 VDC
IDC5B	4-16 VDC/AC	Level Shift to	5 VDC (Fast)
IDC5D	2.5-28 VDC/AC	Level Shift to	5 VDC
IDC5G	35-60 VDC/AC	Level Shift to	5 VDC
IDC15	10-32 VDC/AC	Level Shift to	15 VDC
IDC24	10-32 VDC/AC	Level Shift to	24 VDC
AC Input Modules, Colour Yellow			
IAC5	90-140 VAC	Level Shift to	5 VDC
IAC5A	180-280 VAC	Level Shift to	5 VDC
IAC15	90-140 VAC	Level Shift to	15 VDC
IAC15A	180-280 VAC	Level Shift to	15 VDC
IAC24	90-140 VAC	Level Shift to	24 VDC
IAC24A	180-280 VAC	Level Shift to	24 VDC

MasTec also has **power semiconductors**, diodes, bridges, rectifiers, resistors. For larger power projects our relays, contactors and SSR are available as single, bi or three phase units, up to 675 VAC and 100 + amps.



Visit our Web Site at