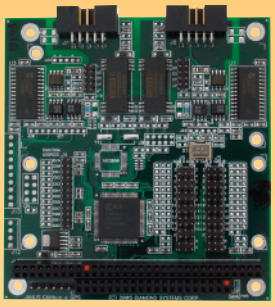
JANUS-MM

DUAL CAN PORTS, CARRIER FOR WIRELESS AND GPS MODULES



- 2-in-1 CAN + Wireless/GPS board
- Dual CAN 2.0B interfaces
- Philips SJA1000T controllers
- Channel to channel and channel to system isolation
- Linux CAN driver included; Windows CE.NET CAN driver available
- Socket for GSM/GPRS and CDMA wireless communications modules
- Socket for Lassen SKII and IQ GPS receiver modules providing location tracking and timing data
- PC/104 form factor

2 in 1 JANUS-MM combines dual CAN interfaces with sockets for wireless communications and GPS to create a complete I/O subsystem for automotive and vehicle tracking applications. The dual CAN ports use the Philips SJA1000T CAN controller and 82C251 transceiver, for full CAN2.0B functionality. Each port is independently isolated from the system to eliminate sensitivity to noise and ground shifts in the network. Jumper options include slew rate control, transceiver power source (on-board or loop power), address, and interrupt settings. Both memory and I/O addressing are supported.

JANUS-MM includes sockets and support circuitry for GSM/GPRS and CDMA wireless communication modules from MultiTech, as well as 8-channel and 12-channel GPS receivers from Trimble Navigation. A built-in dual UART circuit provides the necessary interface to the modules. The add-on modules are available separately based on your desired configuration. See below for information on available modules.

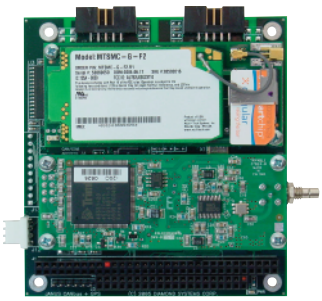
SPECIFICATIONS

CAN CIRCUIT	
CAN channels	2, 2.0B
Controller	Philips SJA1000T
Transceiver	Philips 82C251
Isolation	500V channel to channel
Transceiver power	5V, on-board or loop
Clock rate	16MHz
Data rate	1Mbps
Bus interface	Memory or I/O
WIRELESS MODULES	
Manufacturer	MultiTech SocketModem
Types	GSM/GPRS or CDMA
GPS MODULE	
Manufacturer	Trimble Navigation
Models	Lassen SKII 8-channel Lassen IQ 12-channel
GENERAL	
Dimensions	3.55" x 3.775", PC/104 form factor
PC/104 bus	16-bit stackthrough ISA bus
Power supply	77mA @ 5V = 385mW (without modules)
Operating temp	-40 to +85°C
Weight	2.1oz.

ORDERING GUIDE

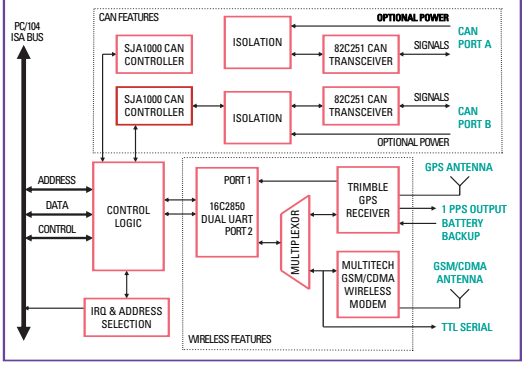
JNMM-COMBO-XT
Dual CAN + Carrier PC/104 Module

GSM/GPRS, CDMA, and GPS modules:
Contact factory for more information or visit these websites:
www.multitech.com
www.trimble.com



Janus-MM with GSM and GPS modules installed

JANUS-MM BLOCK DIAGRAM



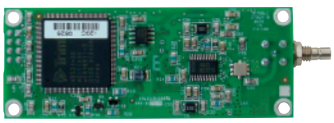
Wireless / GPS Add-on Modules

SocketModem CDMA Features

- 800/1900MHz operation
- Packet data up to 153.6kbps
- Circuit-switched data up to 14,400bps
- Class 2 group 3 fax
- SMS capability
- MMCX antenna connector and SIM socket
- -30 to +70°C operation

SocketModem GSM/GPRS Features

- 850/1900 or 900/1800MHz operation
- Packet data up to 85.6kbps
- Circuit-switched data up to 9600bps
- GSM class 1 and class 2 group 3 fax
- SMS capability
- MMCX antenna connector and SIM socket
- -30 to +70°C operation



Lassen SKII GPS Features

- L1 frequency, 8 channel receiver
- TSIP, NMEA, and TAIP protocols
- 1Hz location update rate
- 1 pulse per sec precision output
- Battery backup option for faster warm start capability
- SMB antenna connector
- -40 to +85°C operation

Lassen iQ GPS Features

- L1 frequency, 12 channel receiver
- TSIP, NMEA, and TAIP protocols
- 1Hz location update rate
- 1 pulse per sec precision output
- Battery backup option for faster warm start capability
- H.FL-R-SMT low-profile antenna connector
- -40 to +85°C operation