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Find the *Curtiss-Wright / Parvus PRV-1059-21* at our website: ***Click HERE***

PRV-1059

DATASHEET

5-Port PC/104 10/100 Fast Ethernet Switch

FEATURES

Ports:
5 Auto-Crossover Ethernet/ Fast Ethernet Ports

VLAN:
Port-Based Field-Programmable VLAN (select models only). Settings stored in local onboard memory.

Simple Network Installation:
Auto-MDI/MDIX, Auto-Negotiation and Speed Auto-Sensing

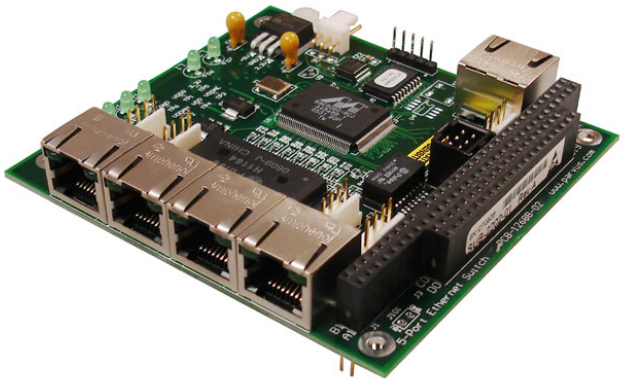
Local/Remote Ethernet:
Choice of onboard RJ-45 jacks or 4-pin locking Molex headers for Ethernet connections

Standalone Capable:
Can be used as a standalone network switch or in combination with an embedded system supporting a PC/104 bus.

Bus or External Powering:
16-bit PC/104 Bus or 2-Pin Molex Power Header for External Power Connections

Switching:
Pause Frame-Based Switch Fabric Delivers True Non-Blocking Switching; Store-and-Forward Switching Mode

Activity Indication:
LED Activity Indicators for Each Channel



DESCRIPTION

PRV-1059 is a rugged VLAN-capable 5-port PC/104 Fast Ethernet switch featuring very low power consumption (1.5 watts typical) and highly reliable extended-temperature operation up to +85°C (185°F). Supporting auto-MDI-MDIX network installation, the board is designed for simple plug-and-play operation, enabling up to five embedded computing devices to be networked together using 10BaseT or 100BaseTX Local Area Network (LAN) connections.

Field programmable, port-based VLAN functionality is supported on select models. This powerful feature enables any combination of ports to be connected together in subnets for use in a small secure or non-secure network. Fully IEEE 802.3 and IEEE 802.3u compliant, its five transceiver ports are flexibly designed so that any port can serve as an uplink. The module can either be used as a standalone network switch (no processor board required) or in combination with embedded systems that support a PC/104 (ISA) bus.

The card integrates fully independent media access controllers (MACs), an embedded frame buffer memory, and a high-speed address look-up engine, along with support for auto-crossover, auto-polarity, auto-negotiation, and bridge loop prevention.

Qualified to MIL-STD-810 environmental standards, the compact PRV-1059 switch is ideally suited to space-constrained, high reliability aviation, industrial, military, and transportation applications where extreme temperature and high shock/vibration exist. The unit is only 3.550” x 3.775” (90x96 mm) in size. All versions include mounting holes to facilitate simple installation, as well as support for local or remote monitoring of LED activity for data RX/TX and connectivity.

Ethernet connections are made through either onboard RJ-45 jacks or right-angle, locking Molex connectors. The 4-pin Molex headers enable embedded systems to optionally mount RJ-45 jacks in a faceplate, endcap or enclosure using a Parvus cable set (sold separately), which includes five female Molex to RJ-45 adapters. Power connections can be made through either the PC/104 (ISA) bus or externally through a 2-pin Molex connector.

Parvus

Parvus Corporation
3222 S Washington Street
Salt Lake City, UT 84115

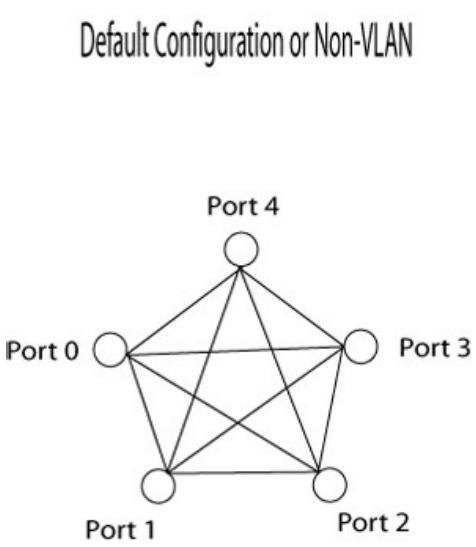
Web: www.parvus.com
Email: sales@parvus.com
Phone: 1.801.483.1533
Fax: 1.801.483.1523

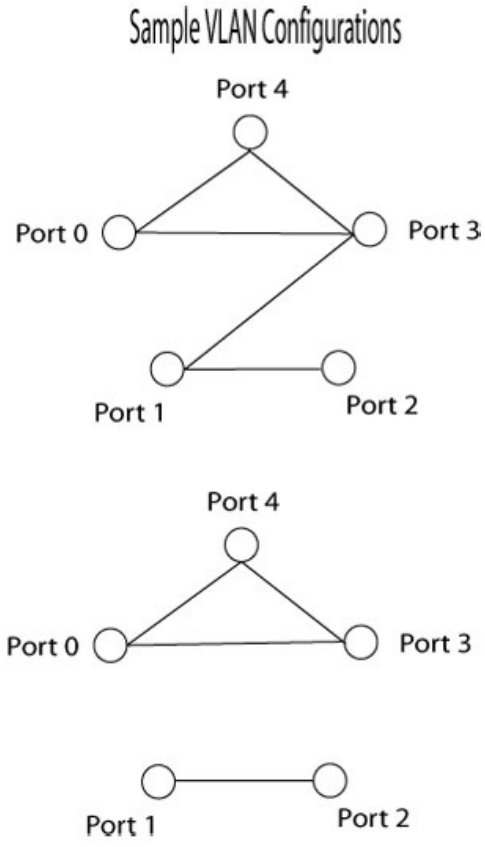
SPECIFICATIONS

Dimensions:
3.550" x 3.775" (90x96 mm)
MTBF:
Calculated per MIL-HDBK-217F @ 40°C:
1,503,217 Hours (Ground Benign, Controlled GB, GC)
157,971 Hours (Airborne Inhabit Fighter, AIF)
60,164 Hours (Airborne Rotary Winged, ARW)
100BaseTX / 10BaseT:
IEEE 802.3u, IEEE 802.3 Compliant
Data transfer rate:
10 Mbits/sec or 100 Mbits/sec, Full Duplex or Half Duplex Mode
Bus:
16-bit PC/104 (ISA), select models only
Molex Connectors:
Ethernet (4-pin right angle) P/N: 22-12-2044 (mating P/N: 10-11-2043)
LED's (4-pin straight) P/N: 22-11-2042 (mating P/N: 10-11-2043)
Power (2-pin right angle) P/N: 22-12-2024 (mating P/N: 10-11-2023)

Power Consumption:
1.5W (+5VDC @ 0.3A typical)
Chipset:
Marvell 88E6060
Operating Temperature:
-40°C to +85°C (-40°F to +185°F)
per MIL-STD-810F Method 501.4, 502
Storage Temperature:
-55ºC to +100ºC (-67°F to +212°F)
Shock
Operational acceleration 20Gs, duration 11ms, 3-axis per MIL-STD-810F, Method 516.5 (Jet & Helicopter Test Profiles)
Vibration:
Operational Vibration per MIL-STD-810F, method 514.5 (Jet & Helicopter Test Profiles)
Weight:
86 grams (0.190 lbs)
Options:
Conformal Coating

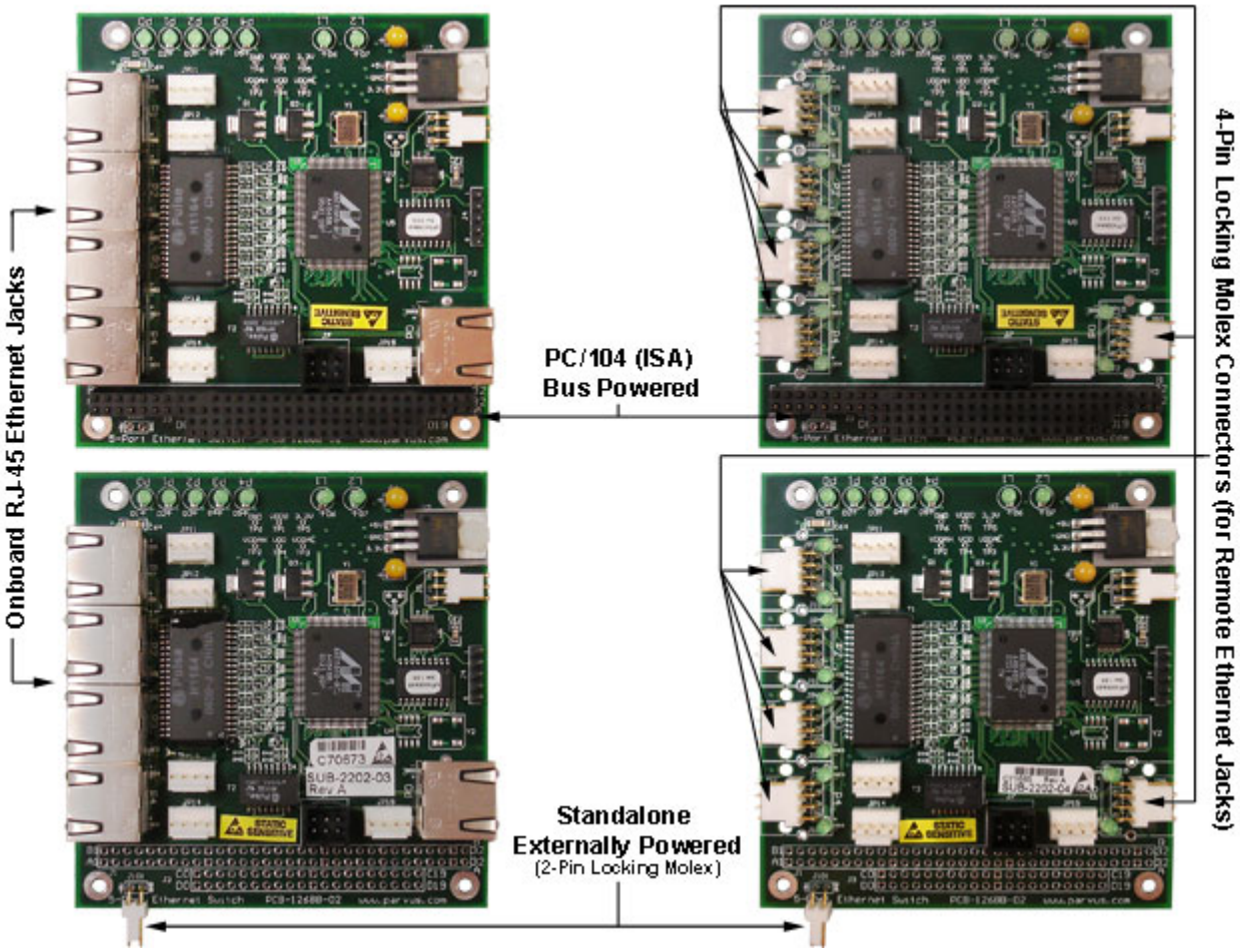
VLAN DIAGRAM





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RELATED IMAGES / ADAPTERS



Ethernet and Power Connection Options

ORDERING INFORMATION

The following table outlines possible configurations and part numbers for the PRV-1059

PRV-1059-XX:

PRV-1059...	Non-RoHS		RoHS		
	Non-VLAN	VLAN	Non-VLAN	VLAN	
RJ-45	-01	-11	-21	-31	PC104 Bus Powered
Molex	-02	-12	-22	-32	
RJ-45	-03	-13	-23	-33	Externally Powered
Molex	-04	-14	-24	-34	

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