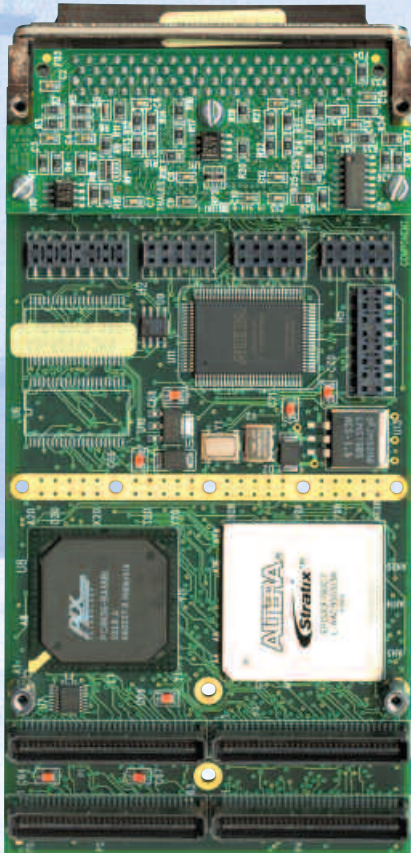


# **PMC-FPDP**

## **Front Panel Data Port PCI Mezzanine Card (PMC)**



- **Single wide PCI Mezzanine Card (PMC)**
- **Front Panel Data Port Interface in compliance with ANSI/VITA-17 1998**
- **EIA-422 version available**
- **40 MHz PSTROBE maximum frequency**
- **20 MHz STROBE maximum frequency**
- **Built-in 64 KB programmable FIFO**
- **16/32 bit data packing management**
- **PCI 64-66 MHz 3.3V signaling, 5V tolerant**
- **Customizable FPGA**
- **Rugged version available**
- **Support for LynxOS with VI/DDLink**

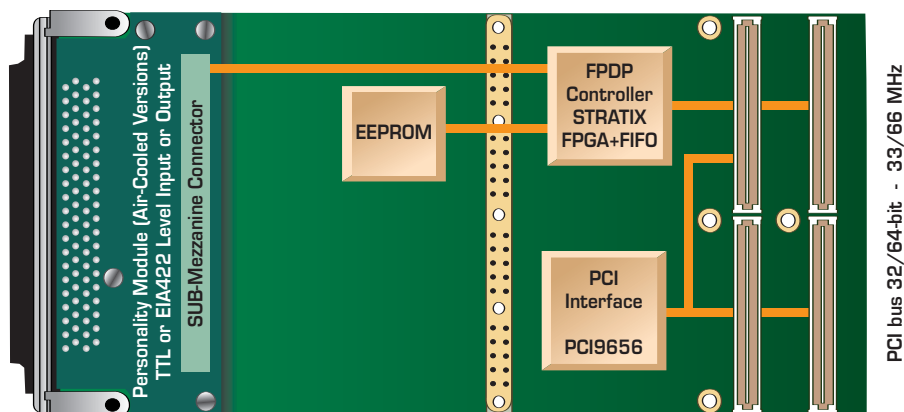
## **Product Overview**

The **PMC-FPDP** complements Thales Computers' extensive choice of **COTS** and standard **PCI Mezzanine Cards (PMC)** for **VME** or **CompactPCI Single Board Computers** for use in commercial or harsh environments by offering a **Front Panel Data Port** interface.

The **PMC-FPDP** is a **PCI Mezzanine Card (PMC)** designed for high-speed data acquisition and generation. In one end the **PLX PCI 9656** interface chip provides **32/64-bit 33/66 MHz PCI** bus master/slave interface with a linked list **DMA** engine which allows data throughputs greater than **100 MB/s**. In the other end the parallel interface is available through the front panel connector. The logical interface is based on the **FPDP** standard. The electrical interface can be **TTL (FPDP-compliant)**, **EIA-422**, depending on what version of the product is used. **Un-Framed Data**, **Single Frame Data** and **Fixed Size Repeating Frame Data** are supported in hardware and software.

The **PMC-FPDP** is equipped with a customizable **FPGA**, integrating a built-in **64 KB** programmable **FIFO**.

# PMC-FPDP Front Panel Data Port PCI Mezzanine Card (PMC)



General Architecture of the PMC-FPDP

Overall Dimensions			
Single PMC 149 x 74 mm - One slot			
PCI bus Interface			
32/64-bit 33/66 MHz Revision 2.1 compliant 3.3V signaling, 5V tolerant			
Power Requirements			
+3.3V, ±5%      +5V, ±5%			
Power Dissipation			
Typical: <3W			
Environmental Specifications			
	SA	RA	RC
<b>Temperature range</b>			
Airflow	1.2 m/s	1.5 m/s	NA
Operating	0° to +55°C	-40° to +75°C	-40° to +85°C
Storage	-45° to +85°C	-45° to +100°C	-45° to +100°C
<b>Conformal Coating</b>	Opt.	Standard	Standard
<b>Relative Humidity</b> (non-condensing)	90%	95% 10 cycles	240 hours
<b>Mechanical</b>			
Vibration Sine	5-200 Hz - 2g Peak	5-2,000 Hz - 2.5g Peak	5-2,000 Hz - 5g Peak
Vibration Random	0.01 g <sup>2</sup> /Hz 10-40 Hz 0.0007 g <sup>2</sup> /Hz 100-200 Hz	0.04 g <sup>2</sup> /Hz with a flat response to 1,000 Hz 6 dB/Oct roll-off from 1 KHz-2 KHz	0.1 g <sup>2</sup> /Hz
Shock	10g Peak 16 ms Half Sine Pulse	40g Peak 20 ms Half Sine Pulse	
Bumps		40g Peak 6 ms, Half Sine Pulse 3 bumps/sec and 1,000 bumps/direction	
<b>Altitude</b>	-1,000 to 10,000 ft	-1,000 to 33,000 ft	



## PMC-FPDP Order Code

PMC-FPDP- 00

	SA	RA	RC	Code
Environment Class : Standard (Air)	X			SA
Rugged Convection-Cooled (Air)		X		RA
Rugged Conduction-Cooled			*	RC
Protocol				
VITA-17-FPDP-1 sampling scheme	X	X	X	1
Physical Interface				
Differential EIA-422 TTL front panel input	X	X		DI
Differential EIA-422 TTL front panel output	X	X		DO
TTL front panel input	X	X		FI
TTL front panel output	X	X		FO
Low voltage TTL on rear Pn4 connector			X	LV
				OO
Coating	X	Default	Default	V

\* Contact Thales Computers

Add code V  
only when not default

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