mPCIe slot Expansion

General Description

The FINE is designed to expand MPL PIP Family with up to 4 additional Mini PCI Express sockets. So many different IO interfaces can be supported with only one FINE adapter card. Also Mini-SIM modules are supported for any mPCIe WAN device.

Each mPCIe socket resides on its own PCIe link. So the maximum interface speed available from the host board is used, but on the other hand no other PCIe/104 card can be stacked.

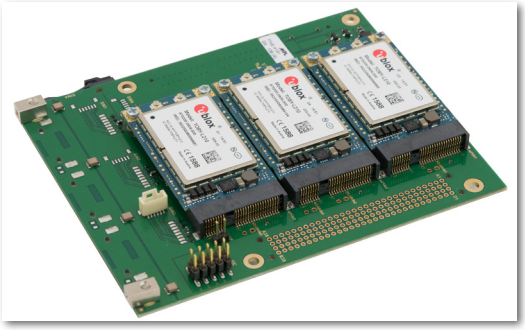
Key features are:

- Up to 4 Full-Mini Card PCI Express sockets
- All mPCIe sockets with USB2.0 support
- Up to 4 Mini-SIM modules supported
- 1.5V mPCIe sockets supply voltage
- Environment temperature -40°C up to +85°C

The FINE has been designed to withstand harsh environments and extreme temperature conditions. The special rugged design, combined with the best industrial-grade components, offer high reliability and long-term performance.

MPL products are 100% designed and manufactured in Switzerland. All products are fanless, shock and vibration proof, low power, rugged, and long-term* available. The perfect solution for a system to be used in rugged environments.

** Typically 10 years or more, 20+ years repair-ability*



PIP Solution with four mPCIe expansions

PIP Solution with five mPCIe expansions

Technical Features

Board Key Data	
mPCIe Socket	Full-Mini Card Size mini PCI Express socket, USB 2.0 support According to PCI Express Mini Card Electromechanical Specification Rev. 2.0 PCIe Wake Events, SMBus and LEDs are not supported
Module (SIM) Slot	Either directly at a Mini-SIM slot or at a 6 pin Molex Pico Clasp connector
Power	
Input Voltage	+3.3 V and +5 V_SB over PCIe/104 connector
Power Dissipation	Depends on the plugged in mPCIe modules
Environment	
Storage Temperature	-45°C to +85°C (-49°F to +185°F)
Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Relative Humidity	5% to 95% non condensing
Standard Compliance	
The FINE is designed to meet or exceed the most common standards. Particular references are:	
EMC	EN 55022, EN 55024, EN 61000, MIL-STD-461E
Shock & Vibration	EN 60068
Environmental & Safety	EN 50155, MIL-STD-810-F, EN 60601, EN 60950
Approval List	CE, IEC 60945, IACS E10

Mechanical

Version	length	width	heights	weight
FINE-41S	125.7mm	101.8mm	18.3mm	73g (without mPCIe modules)

other configurations on request

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