# Fulla (FR 352/6vv)



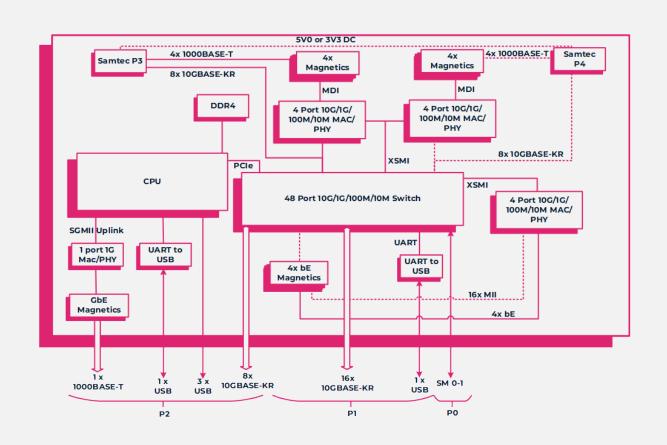
# Air-Cooled/Rugged Conduction-Cooled SOSA™ Aligned 3U VPX 10G Ethernet Switch

# **Key Features**

Fulla is a 3U VPX<sup>TM</sup> layer 2/3 SOSA<sup>TM</sup> aligned Ethernet switch that supports flexible connectivity with 10G Ethernet ports, configurable as 10G-Base-T or 10G-Base-KR. It offers up to 480 Gbps non-blocking throughput and features a low-latency design. The management software includes various configuration options and supports features like virtualisation and quality of service.

- Up to 48 channels of 10 GbE interfaces on a single card. Many of the ports are configurable between 10G-Base-T and 10G-Base-KR. While the ports are all 10G capable, they also work in 100M and 1G modes.
- Line rate forwarding up to 480 Gbps
- Configurable for multiple backplane pinouts and profiles
- Highly managed multi-layer switching services to include multicast, QoS, and security features
- Precision time protocol (IEEE 1588v1/v2) support
- Available in air and conduction-cooled variants





# **Specification**

# **VPX Fabric Switch Board**

- Layer 3 managed 3U VPX fabric switch board:
- Default variant:
  - 24 x 10GBASE-KR backplane connections
  - 4 x 1000BASE-T connections
- Configurable for multiple backplane pinouts and profiles
- Highly managed multi-layer switching services to include multicast, QoS, and security features
- Precision time protocol (IEEE 1588v1/v2) support

# **Layer 2 Switching**

- 802.1Q-compliant bridging
- Large forwarding database for MAC entries, IGMPv3/
- MLDv2 IP multicast, FCoE entries, and router host entries
- Learning and forwarding based on virtual ports (ePorts) and virtual bridge domains
- L2 ECMP and link aggregation groups

## **Layer 3 Routing**

- Longest prefix match for IPV4/6 and IP Multicast
- Policy based routing
- VRF, VRF-Lite, BGP/MPLS IP VPNs
- Multicast routing supporting PIM-SM/DM and PIMbidirectional routing protocols
- ECMP routing for load balancing traffic
- Network address translation (NAT 44,66)

# System Management Interface

- System Management interface:
  - implements SM0-3 hardware
- supports VITA 46.11 management:
  - Tier 1 IPMC

#### Safety

 PCB (PWB) manufactured with flammability rating of UL94V-0

#### **Electrical Specification**

- typical current figures:
  - +5V @ 5.3A, voltage +5% / -2.5%
- +3.3V @ 2.8A, voltage +5% / -2%

#### **Environmental Specification**

- Air-cooled (VITA 48.1)
  - Operating temperature
    VITA 47 Class AC1, 0°C to
    +55°C (N-Series)
  - -25°C to +70°C (E-Series)
  - non-operating temperature VITA 47 Class C1, -40°C to +85°C
  - operating altitude 0 to 15,000 feet (0 to 4,572 meters)
  - relative humidity 5% to 95%, non-condensing
- Conduction-cooled (VITA 48.2)
  - operating temperature at card edge VITA 47 Class CC4, -40°C to +85°C
  - non-operating temperature VITA 47 Class C4, -55°C to +105°C
  - operating altitude -1,000 to 50,000 feet (-305 to 15,240 meters)
  - 5% to 95% Relative
    Humidity, non-condensing

### **Mechanical Specification**

- 3U VPX form-factor (VITA 46.0, VITA 48.0):
   3.9 inches x 6.3 inches (100mm x 160mm)
- slot widths (VITA 48.0):
  - 1.0 inch VPX-REDI Type 1, RCS-Series, Type 1 Two Level Maintenance (VITA 48.2)
- connectors to VITA 46.0 for P0, P1 and P2
- operating mechanical:
  - shock VITA 47 Class OS2, 40g
  - random vibration VITA 47
    Class V3, 0.1g²/Hz

## Top I/O

- 8 x 10GBASE-KR or 2 x 40GBASE-KR4
- 4 x 10GBASE-T
- By using 2 Samtec HQDP-020 headers for right angle installs of Samtec ribbon cables (with screw down option)

#### **Concurrent Technologies Support**

- Fulla operates with a range of Concurrent's VPX processor Plug-In-Cards
- contact your local sales office for further details