



# SCP/DCP-681

## Compact SwitchBlade

Enabling the vision of inter-networked heterogeneous military and aerospace systems in the Global Information Grid (GIG), Curtiss-Wright's SCP/DCP-681 Compact SwitchBlade provides Systems Integrators with a fast, secure and unified approach to interconnect subsystems, chassis, cards, and compute nodes within any given platform using 1 Gigabit Ethernet (GbE) links. Providing up to 10 wire speed 10/100/1000 MB/s interfaces in a single 3U CPCI slot, the SCP/DCP-681 is ideal for architecting system-wide Intra-Platform Networks (IPNs). The SCP/DCP-681 comes with a powerful set of management interfaces and complete layer 2/3 software with dual IPv4/v6 support for building secure, high performance networks.

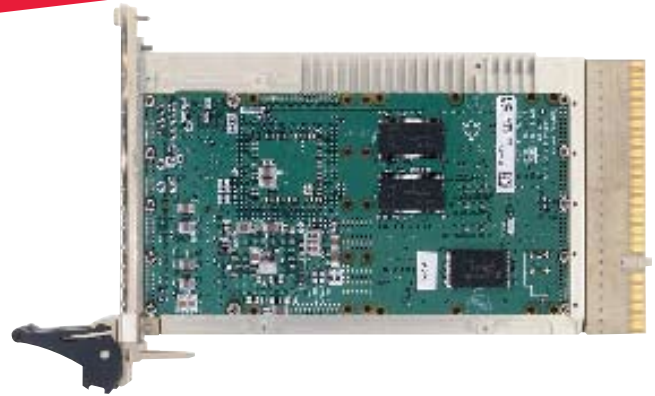


Table 1: Specifications

Specification	Description
Format	3U cPCI (J1 and J2 connectors)
Size	SCP: 3U 100mm by 160mm (basecard) + per IEEE 1386.1 (prPMC)
	DCP: VITA 30.1-199x (basecard) + per IEEE 1386.1 (prPMC)
Weight	SCP: <400g
	DCP: <455g
Power	Under 30 Watts (typ), 37 Watts (peak)
Switching Solution	Single Broadcom BCM5695
Management/Control Processor	Freescale Power Architecture™ MPC8245
Memory	64MB SDRAM with parity 4MB boot Flash 32MB configuration flash
Ethernet ports	10 x 10/100/1000BaseT auto-negotiating copper interfaces with transient protection
Serial ports	1 serial out of band management port
Debug port	10/100 Ethernet port, 1 JTAG port
Software	PBIT, IBIT, CBIT, Secure Memory Erase Management (CLI, Telnet, Web, SNMP) Layer 2 Layer 3 (IPv4/v6) Multicasting QoS, Security

Learn More

Sales Info: [sales.cwembedded.com](mailto:sales.cwembedded.com)

Sales Email: [sales@cwembedded.com](mailto:sales@cwembedded.com)

**CURTISS  
WRIGHT** Controls  
Embedded Computing

Innovation In Motion.  
[cwembedded.com](http://cwembedded.com)

# SCP/DCP-681

## Features

- Fully managed, intelligent multi-layer (layer2/3) GbE switch in a 3U cPCI form factor
- Complete range of convection- and conduction-cooled formats (IEEE 1101.1 and IEEE 1102.1) with shock and vibration support
- 10 x 1GbE (10/100/1000 MB/s) auto-negotiating copper interfaces
- Wire-speed performance for all packet sizes at layer 2 or layer 3 including jumbo packets
- EIA232 out of band serial management and 10/100 debug port
- Ideal for architecting IPv4, IPv4/v6, or pure IPv6 transformational network architecture with support for tunneling and intelligent routing
- Flexible network management, monitoring, and configuration capability via CLI, Telnet, Web, and SNMP interfaces
- Supports latest switching/routing features for layer 2 switching; layer 2 multicasting; VLANs; Spanning Tree (Rapid and Multiple); link aggregation; port mirroring; CoS/QoS features; layer 3 IPv4/v6 routing; tunneling; IP Multicasting
- Ubiquitous security including Secure Memory Erase; user authentication; port based security; protocol-based security; broadcast storm control; secure sockets layer (SSL); secure shell (SSH); stateless firewall capability; flexible Access Control Lists (ACLs)
- Extensive Built in Test (BIT) capability including Power-up BIT, Initiated BIT and Continuous BIT

Figure 1: SCP/DCP-681 Hardware Block Diagram

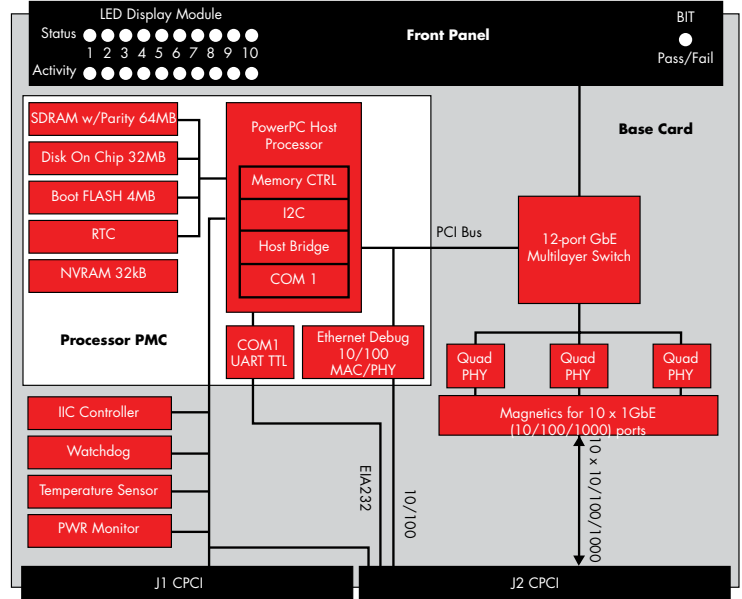


Figure 2: SCP/DCP-681 Software Block Diagram

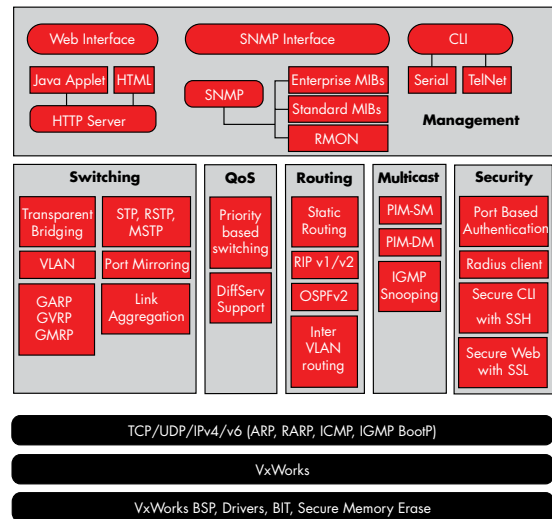


Table 2: Ordering Information

Part Numbers (air-cooled and conduction-cooled)	
SCP-681-0010	3U cPCI managed 10-port multi-layer GbE switch, air-cooled L0
SCP-681-1010	3U cPCI managed 10-port multi-layer GbE switch, air-cooled L100
DCP-681-1010	3U cPCI managed 10-port multi-layer GbE switch, conduction-cooled L100
DCP-681-2010	3U cPCI managed 10-port multi-layer GbE switch, conduction-cooled L200
Lab Accessories	
RTM-681-0010	3U cPCI Rear Transition Module
LED-681-0010	10-port LEDS front plate plug-in for DCP versions
Software Maintenance	
MNT-681-0000	Yearly software maintenance subscription

To find your appropriate sales representative, please visit [www.cwcembedded.com/sales](http://www.cwcembedded.com/sales) or email [sales@cwcembedded.com](mailto:sales@cwcembedded.com).

**UNITRONIX Pty Ltd**  
 PO Box 486, Morisset NSW 2264  
**NSW:** Tel: 61 2 4977 3511 Fax: 61 2 4977 3522  
**WA:** Tel: 61 8 9455 2424 Fax: 61 8 9455 2458  
[unitsyd@unitronix.com.au](mailto:unitsyd@unitronix.com.au) [www.unitronix.com.au](http://www.unitronix.com.au)