



Fact Sheet

# VPX3-685 Secure FireBlade 14/17/20-Port Secure Ethernet Router

- ◆ 3U VPX form factor, complies with OpenVPX™/VITA 65 standards
- ◆ Fully managed, full function router
- ◆ Flexible port configurations to rear VPX
  - 12x 10/100/1000Base-T ports plus either:
    - 2x 10 GbE (XAUI) ports
    - 1x 10 GbE + 4x GbE SerDes ports
    - 8x GbE SerDes ports
- ◆ High-performance Layer 2/3+ features
  - Wire-speed non-blocking IPv4/v6
  - Extensive IETF RFCs support
  - Switching, VLANs, Routing, Multicasting, Tunneling
  - Port Mirroring, Flow Control, QoS and Traffic Shaping using CoS
  - SSH, SSL
- ◆ Flexible Management Features
  - Serial, in-band, and dedicated maintenance ports
- ◆ Fast boot configurations
- ◆ Enhanced Security Processor with extensive secure software support
  - Statefull Firewall (ICSA certified)
  - Network Address Translation (NAT)
  - Access Control List (ACL) filtering
  - Encryption/Decryption/Authentication
  - VPN with secure tunneling support (IPSec/I2TP)
  - Intrusion detection and content filtering
- ◆ Declassification capability for secure erasure
- ◆ Extensive Built-in Test (BIT) features
- ◆ Full IPMI support
- ◆ Field upgradeable software
- ◆ Air-cooled and conduction-cooled versions



The VPX3-685 is a fully-featured L2/L3 managed Ethernet router with a highly integrated security sub-system.

Enabling the vision of Network Centric connectivity, Curtiss-Wright Controls Embedded Computing's VPX3-685 Secure FireBlade switch/router provides an accelerated path to secure network-ready architectures that can interoperate seamlessly within the Global Information Grid (GIG). The VPX3-685 provides the strongest perimeter defense available for your data, in a small 3U VPX form factor.

The VPX3-685 provides up to 20x GbE interfaces, and scales to meet small to large platform requirements through flexible software and port configuration capability. Unused GbE ports can be disabled for lower power consumption. Up to two 10GbE ports are available depending on board options, enabling switch-to-switch expansion, dual-redundant networks (fail-over), or for architecting high-performance 10Gb/s network backbones. Embedded backplane routing can be achieved with standard Base-T or SerDes GbE and 10GbE XAUI interfaces. A Rear Transition Module (RTM) is available for lab and development use, providing separate connections for all interfaces.

The VPX3-685 follows in the footsteps of our popular 68x series switch/routers, with extensive Layer 2 and Layer 3 switching and routing features, supporting a comprehensive set of industry standard RFCs. The VPX3-685 also supports a familiar industry standard CLI for setup and configuration, as well as SNMP and Web management interfaces, accelerating development time to market and simplifying maintenance support. In addition, special features like Declass (secure memory erase) and Fast Boot make the VPX3-685 ideal for building transformational Network Centric systems.

Learn More

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

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

**ABOVE & BEYOND**

**CURTISS  
WRIGHT** **Controls**  
Embedded Computing  
[cwembedded.com](http://cwembedded.com)



# VPX3-685

Addressing the growing need for secure network communications, the VPX3-685 is an ideal solution to prevent unauthorized access to critical information for applications deployed in air, land, and sea platforms. Securing possible entries of attack, the VPX3-685 can be used to secure a data storage network, or protect mission critical applications from viruses, IP Spoofing, Denial of Service (DoS), Trojans, and other forms of hostile attack.

The VPX3-685 incorporates Enhanced Security Software and a high-performance hardware-based security engine. This all-in-one Unified Threat Management (UTM) system provides VLANs and VPN (IPSec/PPTP/L2TP) to protect dedicated networks, an ICSA certified statefull firewall to protect against multiple evasive attacks, Network Address Translation (NAT) routing for IPv4 masquerading, port and protocol-based Access Control Lists (ACL), Broadcast Storm Control, IPv6 with IPSec tunneling for secure communications channels, and advanced standards-based cryptographic functions such as encryption, decryption, authentication, and key generation.

Built to Curtiss-Wright tough environmental standards, the VPX3-685 is durable in the harshest environments with standards-based 2 Level Maintenance (2LM) support that drastically reduces long term maintenance costs.

Table 1: Ordering Information

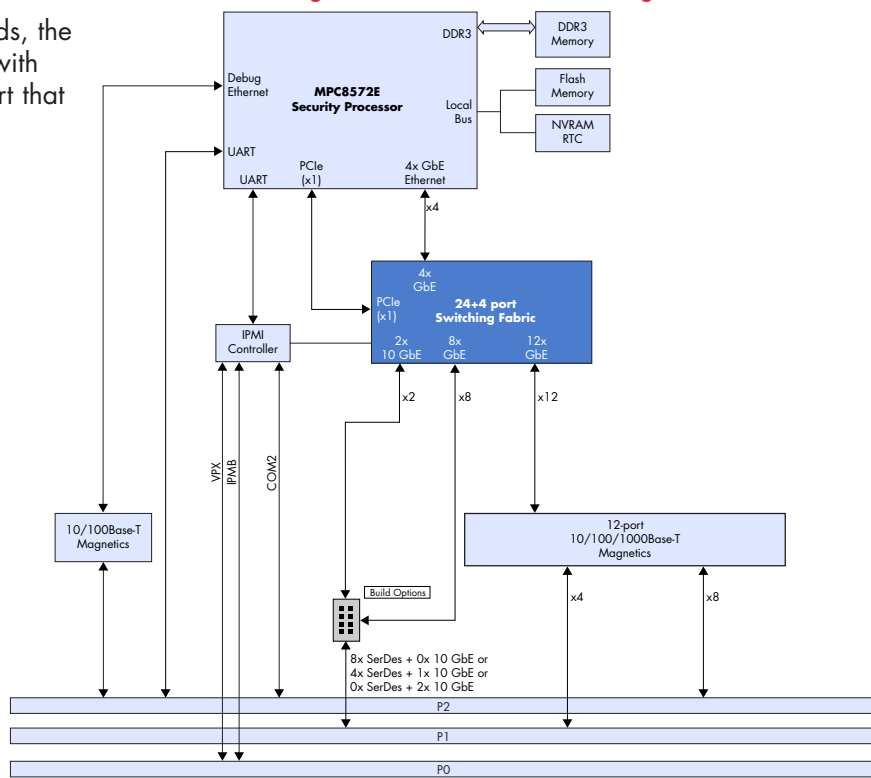
Part Numbering: VPX3-685-uvwxxy-zzz		
u	A	Air-cooled
	C	Conduction-cooled
v	0	0 to 50°C
	1	-40 to +71°C
	0	-40 to +85°C
w	1	0.8" pitch
	3	0.85" pitch + 2LM covers
x	0	(reserved)
yy	Total number of Ethernet ports (14-20)	
zzz	S#	Managed with security variant #

Table 2: Recommended Parts

VPX3-685-A03014-S0	12x GbE Base-T + 2x 10 GbE to rear VPX, Managed Layer 2/3, IPv4/v6, Enhanced Security, 2LM Security Covers, Air-cooled, L0, 0.85" pitch
VPX3-685-A03017-S0	12x GbE Base-T + 4x GbE SerDes + 1x 10 GbE to rear VPX, Managed Layer 2/3, IPv4/v6, Enhanced Security, 2LM Security Covers, Air-cooled, L0, 0.85" pitch
VPX3-685-A03020-S0	12x GbE Base-T + 8x GbE SerDes to rear VPX, Managed Layer 2/3, IPv4/v6, Enhanced Security, 2LM Security Covers, Air-cooled, L0, 0.85" pitch
VPX3-685-C23014-S0	12x GbE Base-T + 2x 10 GbE to rear VPX, Managed Layer 2/3, IPv4/v6, Enhanced Security, 2LM Security Covers, Conduction-cooled, L200, 0.85" pitch

Other product variations are available. Contact Curtiss-Wright for options.

Figure 1: VPX3-685 Block Diagram



© Copyright 2010, Curtiss-Wright Controls  
All Rights Reserved. MKTFS-EC-VPX3-685-090910v4

## 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 www.unitronix.com.au