The RocketLinx ES9528-XT is a Layer 2 managed Industrial Ethernet switch, equipped with 24 10/100BASE-TX ports and four Gigabit Ethernet RJ45/SFP combo ports. The four gigabit combo port design allows 10/100/1000 triple speed, and the SFP ports accept all types of Gigabit SFP transceivers, including SX, LX, LHX, ZX and XD for a variety of connections and distances. It is specially designed for control rooms and applications where high-port density and performance are required.

The ES9528-XT is typically mounted within a 19-inch rack, along with other 19-inch public servers or other network devices. When lower industrial switches are aggregated to the ES9528-XT, the 24-port plus 4G design allows the connection of up to twelve 100M rings plus two Gigabit rings. Each having its own ring redundancy protection.

The RocketLinx ES9528-XT is a fan-less rack mount switch with low power consumption and supports a wide operating temperature. It supports Jumbo Frame featuring up to 9,216 bytes packet size for large file transmissions.

The embedded software supports full Layer 2 management features, multi-form ring redundancy, network control, monitoring, security and notification. The RocketLinx ES9528-XT provides the perfect foundation for building your industrial Ethernet infrastructure.
ROCKETLINX SPECIFICATIONS:

**HARDWARE**

Interface Specification
10/100/100BASE-TX
1000BASE-SX/LX/HX/2X Gigabit Fiber
Connector Type
24 - RJ45
4 - RJ45/SFP Combo
Enclosure
Black Finished Steel
Installation Method
19-inch, 1U Rack Mount

**ETHERNET SPECIFICATIONS**

Number of Ports
28 Total: 24 - RJ45 and 4 - Combo (RJ45/SFP)
RJ45
10/100/100BASE-TX, Auto MDI/MDX, auto-negotiation (Speed/Duplex Mode)
SFP (Optional)
1000BASE-SX/LX/HX/2X, Auto MDI/MDX, auto-negotiation (Speed/Duplex Mode)
Cable Types
Cat 3, Cat 4, Cat 5, Cat 5e, Cat 6 (UTP or STP)
Link Distance
SFP: (Depends on model: Single-Mode: 30KM, Multi-Mode: 2KM)
Transfer Packet Size
64 bytes to 1536 bytes
Jumbo Frame Enabled
Up to 9216 bytes
Specifications are subject to change without notice. LT1592C

**NETWORK PERFORMANCE**

Access Control List
Permit/Deny access control lists
Back-Pressure
IEEE 802.3u: 1000Mbps Half-Duplex Only
Class of Service (CoS)
IEEE 802.1p: 4 priority queues/port
Flow Control Pause Frame
IEEE 802.3x: 10/100/1000Mbps Full-Duplex
GMRP
GMRP multicast registration protocol authentication
IGMP Snooping
V1/V2/V3 for multicast filtering and IGMP query V1/V2; supports IPv4 multiscoping Processes Forwarding Policies: Drop, Flooding and Forward to Router Port
IP Security
Assign authorized IP addresses to specific port, filter rule (ACL) supports up to 250 rules
LLDP
Provides Link Layer Discovery Protocol, advertizes system and port identity capability on the local network
Modbus TCP/IP
CJ support for Modbus TCP communications with Function Code 4 (factory automation). Operates as slave/server device, while a typical (universal) device is a host computer running appropriate through Ethernet. The Modbus TCP/IP master can read or write to the Modbus registers provided by the Modbus TCP/IP slave/server device.
Packet Buffer Memory
2MBits
Port-Based Network Access Control
Port Link Speed, Link Mode, Port Status, Enable/Disable
Port Mirroring
Online Traffic Monitoring on Multiple Selected Ports
Port Security
Assign authorized MAC addresses to specific port, filter rule (ACL) supports up to 250 rules
Port Trunk
IEEE 803.3ad: 8 ports and maximum 8 trunk groups including gigabit Ethernet ports
Private VLAN
Direct client ports in isolated/community VLAN to promiscuous port in Primary VLAN
RADIUS
Login with RADIUS account/password, key for RADIUS server authentication
Rate Control
Ingress filtering for broadcast, multicast, unknown DA or all packets, egress filtering for all packet types
Switch Technology
IEEE 802.1Q in Q-in-Q mode, IEEE 802.1Q in Q-in-Q mode, IEEE 802.1Q in Q-in-Q mode
System On -40° to 85°C

**MANAGEMENT FEATURES**

Configuration and Monitoring
CUI-Based Management: Console Port with Command Line Interface (CLI) - Similar to Cisco CLI, In-Band Management: Web Interface (HTTP/HTTPS) or a telnet/SSH console with CLI
Embedded Watchdog
Embedded hardware watchdog timer automatically resets system if switch system failure occurs
System Upgrade/Backup
Provides TFTP/Web Interface for firmware upgrade and configuration backup/restore
SNMP
V1, V2c, V3 with SNMP Trap Function, Up to Four Trap Stations
System Configuration
SNMP MIB
MIB II, Bridge MIB, VLAN MIB, GMRP MIB, Ethernet-like MIB, Remote Private MIB, and RMON
System Logs
Email Warning
Automatic warning, up to four accounts by pre-defined events
Alarm
Email warning by pre-defined events
System Log.
Supports both local mode and server mode
DHCP
DHCP client, DHCP server with IP and MAC address binding, port-based DHCP server configuration and DHCP relay agent (Option 82)

**NETWORK RECONUENCY**

Fast Ring Spanning Tree Protocol (RSTP)
IEEE 802.1D-2004 Fast Ring Spanning Tree Protocol (RSTP) Compatible with Legacy STP and IEEE 802.1w
Multiple Spanning Tree Protocol
IEEE 802.1s MSTP; each MSTP instance can include one or more VLANs
Redundant Ring Technology
Failure Recovery within 0-100ms

**TELECOMMUNICATION SPECIFICATIONS**

Device
AC Input Voltage
90-264VAC
Power Consumption (maximum)
20W
Power Connector Type
IEC320-C14 connector

**REGULATORY APPROVALS**

EMC
European Standard EN50022
European Standard EN50028-4-6
Class A limit

**RECOMMENDED PRODUCTS**

1200559 SFP, Multi-Mode, 550M 1000BASE-GX
(Extended Temperature)
1200660 SFP, Single-Mode, 10KM 1000BASE-GX
(Extended Temperature)

**CONTACT INFORMATION**

Sales Support
1.763.957.6000
sales@comtrol.com
Technical Support
1.763.957.6000
www.comtrol.com/support
Email, FTP, and Web Support
info@comtrol.com
ftp.comtrol.com
www.comtrol.com

**PRODUCT WARRANTY**

Warranty Information
Control offers a 30-day satisfaction guarantee and 5-year limited warranty.

© 2013 by Comtrol Corporation. All Rights Reserved. Printed in the U.S.A. All trademarks used herein are the property of their respective trademark holders. Specifications are subject to change without notice. LT1592C