SPECIFICATION FOR APPROVAL

Customer: _____

Model Name: 8 Port 1000M Switch

Model number: TXE099

Date: _____

SIGNATURE:

SALES	ENG	MFG	QUALITY
APPROVED BY	CHECKED BY	CHECKED BY	TESTED BY

CUSTOMER APPROVAL:

CUSTOMER APPROVAL BY	
DATE	

1、 Design highlights：

- Support DC 5~20V input range;.
- Build-in loop-back switch;（VLAN）.
- Innovative design, customized case and front face without screw hole, and visual LED indication; LED.

2、 Product Photo

Top:

Bottom:

3、Product specification

Model number	TXE099
Chipset	RTL8370N
Port number	8 port 10/100M/1000M Auto MDI-MDIX RJ45
Standard	IEEE 802.3、IEEE 802.3u、IEEE 802.3x、IEEE 802.3az
Network media	10Base-T,cat3 or above UTP,10Base-Tx,cat5 UTP
Data rate	10/100M/1000M
Forwarding rate	10 Mbps / 14,880 pps ,100 Mbps / 148,800 pps, 1000Mbps/1488000pps
LED Indicator	10/100M/1000Mbps(Link/Act),Power, VLAN Indicator
Dimension	160*72*24mm
Power Input	DC5V/1000mA
Power Consumption	Max4.5W
Environment	Operating Temperature: 0 ℃-50 ℃
	Relative Humidity: 10%-90%(non-condensing)
	Storage Temperature: -40℃-70℃
	Relative Humidity: 5%-90%(non-condensing)
Other function	VLAN switch

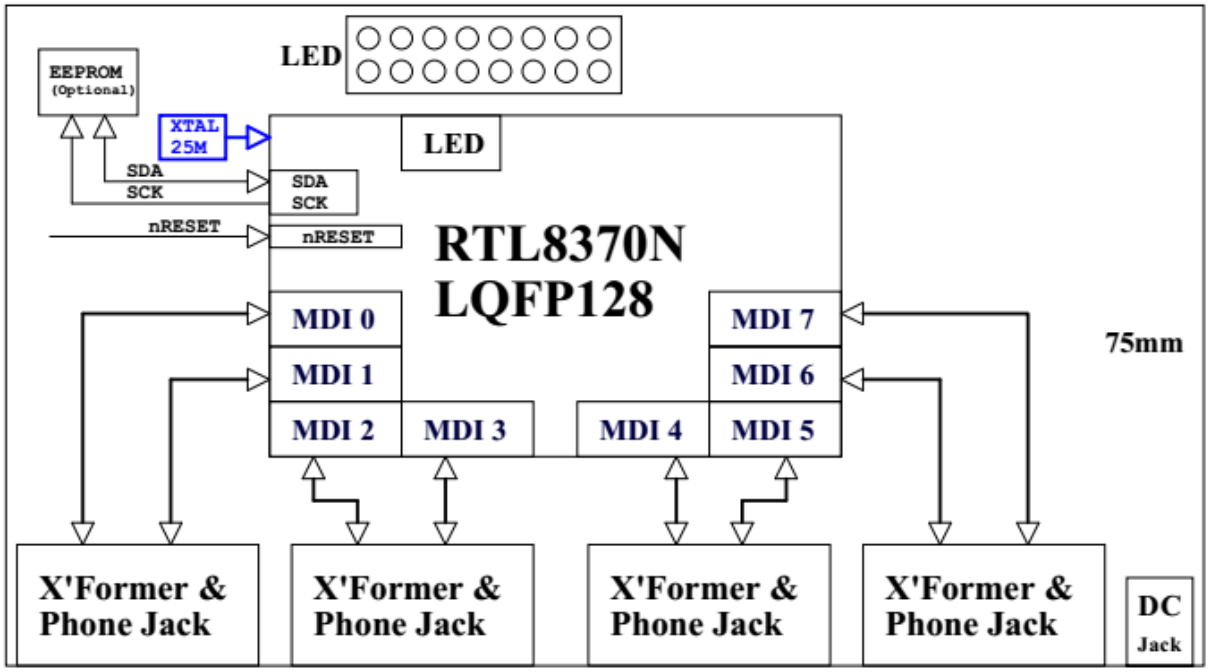
3.1Chipset Feature :

- Single-chip 8-port gigabit non-blocking switch architecture
- Embedded 8-port 10/100/1000Base-T PHY
- Each port supports full duplex 10/100/1000M connectivity (half duplex only supported in 10/100M mode)
- Full-duplex and half-duplex operation with IEEE 802.3x flow control and backpressure
- Supports 9216-byte jumbo packet length forwarding at wire speed
- Supports Realtek Cable Test (RTCT) function
- Supports 64-entry ACL Rules
- Search keys support physical port, Layer2, Layer3, and Layer4 information
- Actions support mirror, redirect, dropping, priority adjustment, traffic policing, CVLAN decision, and SVLAN assignment
- Supports 5 types of user defined ACL rule format for 64 ACL rules
- Optional per-port enable/disable of ACL function
- Optional setting of per-port action to take when ACL mismatch
- Supports IEEE 802.1Q VLAN
- Supports 4K VLANs and 32 Extra Enhanced VLANs
- Supports Un-tag definition in each VLAN
- Supports VLAN policing and VLAN forwarding decision
- Supports Port-based, Tag-based, and Protocol-based VLAN
- Up to 4 Protocol-based VLAN entries

- Supports per-port and per-VLAN egress VLAN tagging and un-tagging
- Supports IVL, SVL, and IVL/SVL
- Supports 8K-entry MAC address table with 4-way hash algorithm
- Up to 8K L2/L3 Filtering Database
- Supports Spanning Tree port behavior configuration
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree with up to 16 Spanning Tree instances
- Supports IEEE 802.1x Access Control Protocol
- Port-Based Access Control
- MAC-Based Access Control
- Guest VLAN
- Supports Quality of Service (QoS)
- Supports per port Input Bandwidth Control
- Traffic classification based on IEEE 802.1p/Q priority definition, physical Port, IP DSCP field, ACL definition, VLAN based priority, MAC based priority, and SVLAN based priority
- Eight Priority Queues per port
- Per queue flow control
- Min-Max Scheduling
- Strict Priority and Weighted Fair Queue (WFQ) to provide minimum bandwidth
- One leaky bucket to constrain the average packet rate of each queue
- Supports rate limiting (64 shared meters, with 8kpbs granulation)
- Supports RFC MIB Counter
- MIB-II (RFC 1213)
- Ethernet-Like MIB (RFC 3635)
- Interface Group MIB (RFC 2863)
- RMON (RFC 2819)
- Bridge MIB (RFC 1493)
- Bridge MIB Extension (RFC 2674)
- Supports Stacking VLAN and Port Isolation with 8 Enhanced Filtering Databases
- Supports IEEE 802.1ad Stacking VLAN
- Supports 64 SVLANs
- Supports 32 L2/IPv4 Multicast mappings to SVLAN
- Supports 4 IEEE 802.3ad Link aggregation port groups
- Supports OAM and EEE LLDP (Energy Efficient Ethernet Link Layer Discovery Protocol
- Supports Loop Detection
- Security Filtering
- Disable learning for each port
- Disable learning-table aging for each port
- Drop unknown DA for each port
- Broadcast/Multicast/Unknown DA storm control protects system from attack by hackers
- Supports Realtek Green Ethernet features
- Link-On Cable Length Power Saving
- Link-Down Power Saving
- Each port supports 3 parallel LED or scan LED outputs
- Supports EEPROM SMI Slave interface to access configuration register
- Supports 16K-byte EEPROM space for configuration
- Integrated 8051 microprocessor

- Supports Flash Interface
- 25MHz crystal or 3.3V OSC input
- LQFP 128-pin E-PAD package

3.2 Block Diagram



4、LED State

LED	Color	10M	100M	1G
LINK	Green	ON	ON	ON
Action	Green	Twinkle	Twinkle	Twinkle

5、Test Equipment

Test tool: