AQS3224 2.5G Ethernet Switch
24x 2.5GT + 2x SFP+ Switch
Cost Effectiveness 2.5G L3 Management Switch

With the development of access technologies, as well as the need for applications, a various 2.5G equipment like home motherboards and enterprise PCs are using 2.5G network cards, Gigabit switches are not enough to cope but 10 Gigabit switches are costly. A 2.5G switch is actually an inevitable choice for many users.

The small scale 2.5G switch market for household application has emerged like our AQS0108, a 8-port 2.5G unmanaged switch while our AQS3224, a 24-port 2.5G L3 managed Ethernet switch, is a cost effective solution for industrial and SME.

Application scenes like the convergence of broadband access networks, such as XGPON, Wi-Fi 6, 5G base stations and some application scenarios of local area networks include the network of NAS servers and 2.5G networking.
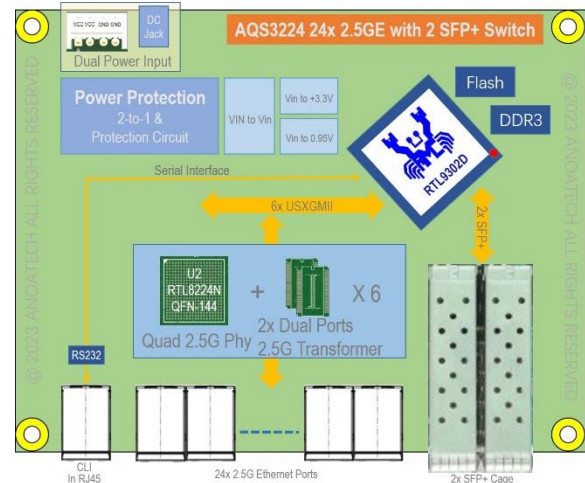

Figure 1. AQS3224, Block Diagram

- 24x 2.5G ports, backward compatible with 1000Mbps
- 2x 10G optical uplink ports
- efficient forwarding, high speed and traffic stabilization
- Support L3 network management functions
- Support uplink convergence
- IEEE 1588 PTP Compliance
- Low power consumption and small in size
- Cost effective

Product Highlights

Port Capacity

Our AQS3224 switch is designed with a non-Euro-American switching chip with a specific 2.5G PHY, allowing it to provide 24 2.5Gbps Ethernet ports and 2 10G optical ports upstream.

Cost-Effective Chipset Solution

The switching chipsets used in our AQS3224 switch provide a cost-effective and powerful solution. The switch chip is embedded MIPS CPU for which it is highly integrated Layer 3 switch and can provide 160Gbps switch capacity, so that all ports can achieve 2.5Gbps in high speed transmission. It is low power consumption, small packaging, multiple interfaces, covering a variety of application needs. Our AQS3224 switch provides 24 2.5G platform speed performance suitable for small and medium-sized enterprises and operators access or edge applications, providing a cost-effective solution, is the best choice for 2.5G Ethernet switch.

Plug-and-Play

The 2.5G ports of our AQS3224 switch are using adaptive mode, backward compatible with 10M/100M/1000Mbps standard RJ45 port.   It is simply plug and play with the original Cat 5e cable to upgrade to 2.5G fast speed network.

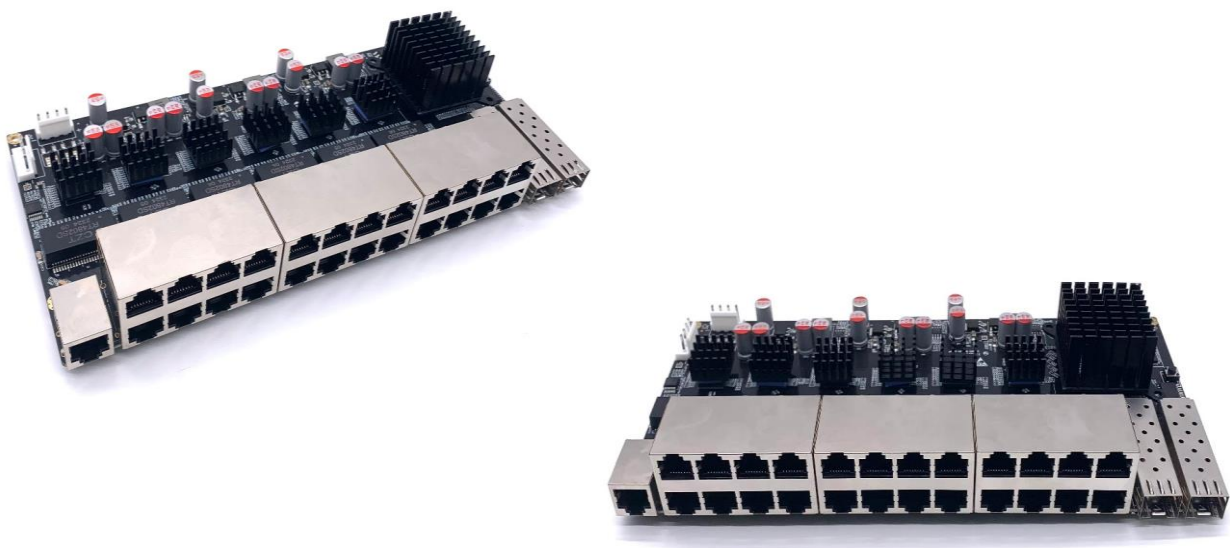**L3 Management and Diversified Management Features**

In addition to the common L3 layer management, our AQS3224 switch can enhance to support some diversified management features like stack management, DHCP Server, uplink convergence, cloud management, network time synchronization, etc.   We can also base on your software feature requirement to develop your specific switch for your own use.

Support IEEE1588 PTP

Our AQS3224 switch adopt to use the latest RTL8224N which support IEEE 1588 PTP. PTP stands for Precision Time Protocol, that synchronize the time of day or a standard time across a network system.   The PTP protocol is typically used in Audio Video Bridging (AVB) applications, industrial and factory automation applications, or test and measurement systems.   By combining the PTP functions, our AQS3224 switch provides complete and accurate support for applications in a time-synchronous system.

Customization Service

Our company has the technical and engineering abilities to develop a new switching product in both hardware and software aspect.   We can also base on customer requirements, specific industries or application scenarios, to design the unique specifications and requirements of our customers' own products.

PCBA of our AQS3224 24x 2.5GT Switch

Hardware Specifications

Item (AQS3224)	Details
Ethernet Port	24x 10M/100M/1G/2.5G Base-T RJ45
Optical Port	2x 10G SFP+
Control Port	1x RJ45-R232 Serial Interface (115200,8,N,1)
Power	1x AC 100~240V 50/60Hz 2x DC 12V and 36~60V
Power Consumption	30W
Standard	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3Z, IEEE802.3X, IEEE802.1Q, IEEE802.1p, IEEE802.3ab, IEEE802.1D, IEEE802.1X
Switching Capacity	160Gbps
Switching Mode	Store-and-Forward
Packet Buffer	16Mbit
MAC Address Table	32K-entry
Jumbo Framei	12KB
Storage Conditions	Storage Temperature : -10 ~ 85℃
Operating Conditions	Operating Temperature : 0 ~ 70℃

Software Specifications

Status	Feature List
☑	IP, MAC, Port, VLAN Binding Combinations
☑	802.1p priority
☑	VLAN
☑	IGMP Snooping
☑	MLD Snooping
☑	Multicast VLAN Registration (MVR)
☑	QoS
☑	ACL
☑	IPV4 Static Route Setup
☑	IPV4 Static Route Setup
☑	DHCL Server, Client, Relay, DHCP Snooping