



Delta Open Networking Platform AGC7648A

Designed for deep buffered Data Center and granular traffic management Carrier applications, AGC7648A bare-metal switch provides high-density low latency 10GbE SFP+ connectivity for downlinks while also providing 6x100GbE QSFP28 uplinks all in a resilient package making it ideal for Service Provider (CORD, Provider Edge, Mobile Backhaul) and Data Center TOR/Spine/DCI deployment.

The AGC7648A is configured with 48 x 10GbE SFP+ ports and 6 high bandwidth 100GbE QSFP28 Uplinks. The device is pre-loaded with ONIE (Open Network Install Environment) ready to support the customer's choice of modular extensible Network Operating Systems (NOS) benefiting users to achieve future proof SDN/NFV capable solutions, network scalability, flexibility, and cost-effectiveness. It delivers 800Gbps of switching fabric with integrated deep buffers and provides 1+1 resilient power in a very compact 1RU chassis.

High Bandwidth

As bandwidth-intensive applications such as Web 2.0, virtualization, High-Performance Computing (HPC), and Network Attached Storage (NAS) continue to proliferate within data centers, 100GbE provides a cost-effective way to increase throughput and seamlessly deliver customer service level agreements.

High Availability

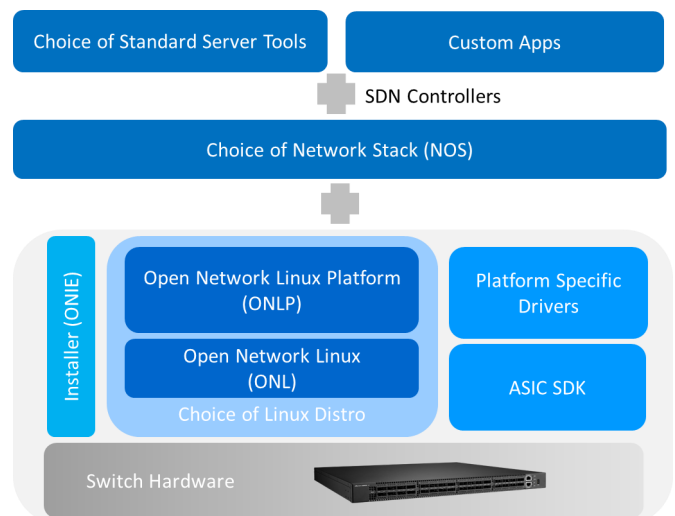
The AGC7648A has two slots for hot-swappable PSUs (Power Supply Units) and 4 fan trays. QSFP28 Transceiver modules can be easily removed and replaced with no interruption to the network. These hot-swappable modules guarantee the continued delivery of essential services.

Rich Feature Set

To fulfill the requirement of telecom networks, AGC7648A offers large internal table size, deep packet buffer and option of external T-CAM memory enabling future-proof new features or protocols.

Key Features

- 1RU high-density 48x10GE + 6x40/100GE.
- Up to 800Gb/s of switching I/O bandwidth with deep buffers to support lossless network applications.
- Support for open automated configuration and zero-touch provisioning capabilities simplify the management of network environments.



Applications

- Data Center ToR(Top-of-Rack) and EoR(End-of-Row)
- Carrier Access/Aggregation, Packet Transport,

Product Specifications

Views



Front View



Rear View

Features

Ports

48 x 10GbE SFP+ ports
6x40/100GbE QSFP28 ports
1 x RJ45 Console port
1 x RJ45 100/1000BASE-T OOB Management port
1 x USB port

Key Parts

Switching Chip: BCM88375 Qumran
CPU Board:
Intel Rangeley C2538
8GB x1 DDR3
32GB m.2 SSD
16MB SPI-Flash (Boot)

Packet Buffer:
4GB GDDR5
T-CAM: NL88659 (AGC7648S V1)

Power Supplies & Fans

2 slots for Hot-swappable PSUs and
1+1 redundancy support
4 slots for Hot-swappable FANs and
3+1 redundancy support

Applicable worldwide ranging PSU
AC to DC: 100 ~ 240 VAC 50/60 Hz
DC to DC: -48 ~ -60 VDC nominal

Airflow
Front-to-Back

Physical and Environmental

Dimension (WxDxH): 438.5x460x43mm
Weight: 8.28kg

Operating Temperature: 0 to 45°C
Operating Relative Humidity:
10 to 90% RH noncondensing
Storage Temperature: -20 to 70°C
Storage Humidity: 5 to 95% RH
Operating altitude: 0 to 3000m

Open Software Environment

ONIE preloaded
Diagnostics software preloaded
Compatible with ONL

Performance (Subject to NOS)

Packet Buffer: 4GB GDDR5
External TCAM - 2M records
Switch Fabric: 800Gb/s full-duplex
Processing Rate: 720 Mp/s
Support Jumbo frames up to 9K
MAC Addresses: 750 K
VLAN IDs: 4K
Forwarding Table Sizes: Subject to NOS
Network Virtualization: Subject to NOS

Regulatory Compliance

Safety: EN 60950-1, UL 60950-1,
CAN/CSA C22.2 No. 60950-1-07,
IEC 60950-1

Emissions: AS/NZS CISPR 22:
Class A, ICES-003, Issue Class A,
EN55032: Class A, VCCI Class A,
FCC CFR 47 Part 15, Subpart B
Class A

Immunity: EN55024, EN 61000-3-2,
EN 61000-3-3, EN 61000-4-2, EN
61000-4-3, EN 61000-4-4, EN
61000-4-5, EN 61000-4-6, EN61000
-4-8, EN61000-4-11

EU RoHS Compliant

Supported Optics & Cables

Interface Type SFP+ ports

10GBASE-SR, 300m
10GBASE-LRM, 220m
10GBASE-LR4, 2km
10GBASE AOC, 3m
10GBASE DAC, 1m, 3m

Interface Type QSFP28 ports

100GBASE-SR4, 100m
100GBASE-LR4, 2km, 10km
100GBASE-PSM4
100GBASE AOC, 3m
100GBASE DAC, 3m, 5m
100G to 4x25G AOC, 5m
100G to 4x25G DAC, 1m, 3m
40GBASE-SR, 150m, 300m
40GBASE-LR4, 2km, 10km
40GBASE-PSM4 Lite
40GBASE AOC, 3m, 5m
40GBASE DAC, 1m, 3m, 5m, 7m
40G to 4x10G AOC, 5m
40G to 4x10G DAC, 3m, 5m

Ordering Information

AGC7648A (AC, F2B, Single
PSU)
AGC7648A-DC (DC, F2B)

Warranty

agma.deltaww.com
for the warranty terms and
condition



About Delta

Delta, founded in 1971, is a global leader in power and thermal management solutions and a major player in several product segments such as industrial automation, displays, and networking. Its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and innovative research and development, Delta's business domains include Power Electronics, Automation, and Infrastructure. Delta serves customers through its sales offices, R&D centers and manufacturing facilities spread over close to 200 locations across 5 continents.

Throughout its history, Delta is a frequent recipient of international awards and related recognition for innovation, design, and corporate social responsibility. Since 2011, Delta has been selected each year for the prestigious Dow Jones Sustainability™ World Index (DJSI World). In 2019, we were also included in the DJSI Emerging Markets Index for the 7th consecutive year. Delta was ranked by CDP (formerly the Climate Disclosure Project) at the Climate Change Leadership Level.

©2020 All Rights Reserved. Information in this document is subject to change without notice.

Delta Electronics, Inc. assumes no responsibility for any errors that may appear in this document.

More product information, please visit agma.deltaww.com or mail to AgemaSales@deltaww.com

To learn more about Delta, please visit www.deltaww.com