

GENERAL MICRO SYSTEMS, INC.

ADVANCED NETWORK

ONE COMPANY FOR ALL YOUR NETCOM NEEDS



RUGGED NETWORK



INDUSTRIAL NETWORK



COMMERCIAL NETWORK



ALL GENERAL MICRO SYSTEMS, INC. PRODUCTS ARE PROUDLY DESIGNED AND MANUFACTURED AND ASSEMBLED IN THE U.S.A

GMS

GENERAL MICRO SYSTEMS, INC.
TRUSTED AND DEPLOYED SINCE 1979

(800) 307-4863 / GMS4SBC.COM

RUGGED INTELLIGENT SWITCHES

Fully Rugged, Sealed, Conduction Cooled with MIL Connectors



S422 RACKMOUNT MULTI-DOMAIN SWITCH

Fully Sealed, Conduction Cooled, Ultra-Low Latency, Multi Domain, 1U Rackmount Intelligent Switch with Universal Power

Each Domain with:

- 2x 100/40 GigE, 2x 40 GigE (Fiber)
- 28x 10 GigE (Copper) (POE+ optional)
- Intel® Atom™ (Quad Core) up to 1.9GHz
- USB/COM/GigE/VGA Management Port
- Universal Power 110/220 VAC (60/400Hz) or 28V DC

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)



S422 RUGGED SINGLE SWITCH

Fully Sealed, Conduction Cooled, High Performance, Ultra-Low Latency, 30 Port Intelligent Switch with Universal Power

- 2x 100/40 GigE, 2x 40 GigE (Fiber)
- 28x 10 GigE (Copper) (POE+ optional)
- Intel® Atom™ (Quad Core) up to 1.9GHz
- USB/COM/GigE/VGA Management Port
- Universal Power 110/220 VAC (60/400Hz) or 28V DC

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)



S402_SW SWITCH

Fully Sealed, Conduction Cooled, Ultra-Low Latency, 26 Port Intelligent Switch with Universal Power

- 2x 10 GigE (Copper)
- 24x 1 GigE (Copper)
- 416 MHz MIPS Processor
- COM Management Port
- Universal Power 110/220 VAC (60/400Hz) or 28V DC

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)



S2002-SW SWITCH

Fully Sealed, Conduction Cooled Rugged Ultra-Low Latency, 14 Port Intelligent Switch with Universal Power

- 2x 10 GigE (Copper)
- 8x 1 GigE (Copper)
- 4x 1 GigE w/ POE+ (Copper)
- 416 MHz MIPS Processor
- COM Management Port
- Universal Power 110/220 VAC (60/400Hz) or 28V DC

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)

RUGGED AND COMMERCIAL INTELLIGENT SWITCHES/ROUTERS

Ruggedized Packaging with Commercial Connectors, Fully Sealed, Rugged Intelligent Routers



S422 RACKMOUNT MULTI-DOMAIN SWITCH

High Performance, Ultra-Low Latency, Multi Domain, 1U Rackmount Intelligent Switch with Universal Power

Each Domain with:

- 2x 100/40 GigE, 2x 40 GigE (Fiber)
- 28x 10 GigE (Copper)
- Intel® Atom™ (Quad Core) up to 1.9GHz
- USB/COM/GigE/VGA Management Port
- Universal Power 110/220 VAC (60/400Hz) or 28V DC

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP54

Temperature: 0° C to +55° C (Optional -20° C to +75° C)



S422-RT/SW INTELLIGENT SWITCH/ ROUTER

Ultra-Low Latency, 30 Port Intelligent Switch with Universal Power

- Intel® Xeon® E5 up to 22 cores
- 512GB DDR4 ECC DRAM
- 30 Port (28x 10 GigE, 2x 40 GigE) (POE+ optional)
- 2x 40 GigE, 4x 1 GigE, 1x Fast Enet (Mgmt)
- Cisco Embedded Services Router (ESR) or
- Cisco 1000V™ Series Cloud Services Router (CSR)

Size: 7.75" x 11.75" x 3.5" (318 cu.inch)

Weight: As low as 20 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)



S402-RT/SW/GPU INTELLIGENT SWITCH/ROUTER

Ultra-Low Latency, 20 Port Intelligent Switch with Universal Power

- Intel® Xeon® E5 up to 22 cores
- 128GB DDR4 ECC DRAM
- 14 Port (2x 10 GigE, 12x 1 GigE)
- 2x 10 GigE, 1x GigE
- 1x GPGPU (MXM) or 1x XMC Site
- Cisco Embedded Services Router (ESR) or
- Cisco 1000V™ Series Cloud Services Router (CSR)

Size: 11.75" x 7.75" x 2" (327 cu.inch)

Weight: As low as 10 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)



BLACKHAWK S2002-RT/SW

Fully Sealed, Conduction Cooled Rugged Micro-Server with Built-in 18 Port Switch and Removable Storage

- Intel® Xeon® D up to 16 cores
- 64GB DDR4 ECC DRAM
- 18 Port, Low latency Intelligent Switch (2x 10 GigE, 16x 1 GigE)
- Cisco Embedded Services Router (ESR) or
- Cisco 1000V™ Series Cloud Services Router (CSR)

Size: 5.4" x 6.5" x 3.5" (123 cu.inch)

Weight: As low as 7 lbs.

MIL-STD: 810G, 1275D, 461E, MIL-S-901D, DO-160D, IP67

Temperature: -20° C to +65° C (Optional -40° C to +85° C)

CYBER SECURITY: SYSTEMS AND PROCESS

GMS cyber security features primarily fall into three categories: System hardening, Data hardening and Supply chain control.

To prevent an attacker from physically gaining access into a system, system hardening features include mechanical anti-tamper switches and “defeat evident” labels. Hidden anti-tamper switches send an interrupt or can be programmed to work with GMS SecureDNA™ for system sanitization. Access to systems via other means—such as via LAN ports, maliciously installed viruses and rootkits—is mitigated by closing known exploit doors such as the Intel Management Engine, AMT and VPro™, and by restricting out-of-band remote ports such as a Baseboard Management Controller (BMC) and intelligent controllers.

GMS closely monitors cyber databases and routinely updates GMS-designed BIOS and other firmware. GMS licenses AMI® source code to create our own SourceSafe™ BIOS which not only adds performance features but shuts down exploits to minimize attack surfaces. Since we control the SourceSafe™ BIOS, future exploits can be mitigated as they arise.

Data hardening features in GMS systems use Opal, FIPS-140, and CSfC SSDs with our SecureDNA™. Data-at-rest security primarily relies on media selection (HDD, SSD, M.2) and GMS works closely with industry suppliers to implement COTS, DoD and specialty drive features such as Hardware Write Protect (WP) and NSA-approved Secure Erase (SE). GMS defines a standard drive pinout for keying and to assure specialty cyber features such as custom erasure algorithms, temperature or endurance.

The GMS SecureDNA™ sanitization suite relies on either a button press, digital signal (such as from an anti-tamper switch), or OS initiation. SecureDNA™ requires user authentication of intention, and then first erases all onboard media according to the chosen erasure algorithm. A second phase of SecureDNA™ erases all intelligent peripherals’ local storage buffers (such as TPM, Ethernet controller, BMC and so on). Finally, the system’s BIOS will erase itself using a GMS-copyrighted procedure entirely unique in the industry. Upon completion, the system is completely “bricked” and useless to an attacker.

Finally, cyber security also involves how the system is made starting with the entire supply chain. GMS is a US-based, AS9100 ITAR supplier that buys materials exclusively from authorized suppliers. Certificates of Conformance (C of C) and full traceability are standard, as is in-house logistics control of suppliers. GMS builds small prototype and quick-turn quantities in-house using 55,000 sq. ft. of modern facilities. For volume production, GMS-authorized manufacturers are DoD approved and GMS audited and accept contractual flow-down requirements. For DPAS and security-rated orders, GMS can segregate and/or bond our own, GFE or CFE inventory with full traceability.

SERVICES, SYSTEMS AND SUPPORT

GMS is a DoD prime contractor with the industry’s most extensive board-level and system-level design expertise. We work closely with customers to ensure that our rugged products are optimized for the system, the program, and the entire lifecycle. Our rich, long-term relationship with Intel gives us unparalleled early access to new technology, so we can create customer-specific architectures that meet the most challenging program requirements.

ADVANTAGES:

- Prime contractor status allows direct buying from GMS, via GSA schedule, or via the PEO C3T CHS catalog (through a GMS partner)
- Complete system management includes kitting, tactical cables, chassis, software, and cooling solutions
- Customer pre-installed system software image is added prior to shipment
- Program-specific chassis coatings and OEM/customer labeling are available
- Value-engineering optimizes cost and performance for volume programs
- Sales, VARs, and technical support are available in North America, Europe, Asia, and Southeast Asia



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REG.#10002091 ASH09-1



ISO 9001:2008
AS9100C:2009



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