SB1002 SERIES PRODUCT CONFIGURATION



"CHRONOS" PB100X

Ultra-Small, High Performance, Intel® Quad Core™ i7 SBC

- Drop-in replacement for PC80x (Penryn) and PC90x (Dual/Quad Core i7) SBC Up to 2.4GHz Intel® Quad Core™ i7 Haswell processor with 6MB of L2 Cache
- Up to 32GB of 1600MHz DDR3 memory with ECC
- Three Gigabit Ethernet ports with TCP/IP Offloading Engine Four USB 3.0 and ten USB 2.0 ports
- Three Display Port and one VGA port
- Six SATA 6Gb/sec ports and full HD-Audio support
- Six x1 PCI Express lanes and three x4 PCI Express lanes
- Dual 8MB BIOS boot devices with write-protect Support for Active Management Technology (AMT) for remote KVM functions
- Supports Intel Virtualization Technology (VT-x/VT-d2) for best performance
- Full power-management control for sleep/hibernate operation
- CPU temperature and voltage monitoring for safe operation - Extensive Built-In-Test (BIT) and Extended BIT (EBIT) for diagnostics
- Support for Windows®, Linux® and VxWorks®
- Ultra-low power requirements as low as 25W total
- Ultra-small footprint only 4.5" x 4.5"
- Operates at standard temp 0°C to +55°C or extended temp -40°C to +85°C (Optional)
- Available in ruggedization levels R1-R5



"GOLDEN-EYES" SB1002-MD

Rugged, Small, Dual, Fully Isolated Systems with Removable Drives

- Fully supports Multi-Domain, NSA-secure architecture - Two fully independent systems (Red/Black) Each with:
- Up to 1TB of sealed removable nDrive[™] SSD drives
- Up to 1TB of fixed SSD for OS boot
- Seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)
- Six USB 2.0 ports and two Serial ports with RS-232/422/485 options - Dual DVI/HDMI ports and one RGB video port
- Eight buffered General Purpose I/O lines
- Two SAM™ sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.)
- Tamper-proof hardware with optional secure-erase
- Ultra-low SWaP only 5.4" x 6.5" x 2.75" @ 6 lbs. and as low as 60W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, DO-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional) - Available in ruggedization levels R3-R5



"GOLDEN-EYE" SB1002-SVM

Rugged, Small, Secure Virtual Machine System with Removable Drive(s)

- Supports up to three "Secure Virtual Machine" (SVM™) I/O architecture
- Each I/O site is fully isolated from other sites for secure safe operation
- Up to two removable fully sealed drives (nDrive™), up to 1TB each - Up to 1TB of fixed SSD for OS boot
- Eight USB 3.0 and six USB 2.0 ports with power
- Dual DVI/HDMI ports and one RGB video port
- Nine Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE) - Support for dual redundant SDI (SMTPE-259/292/424/425) video outputs (Optional, lose one DVI/HDMI)
- Five Serial ports with RS-232/422/485 options and Eight buffered GPI/O lines
- Two SAM[™] sites for custom I/O (Mil-STD-1553, Wi-Fi/BT, GPS, etc.)
- Tamper-proof hardware with optional secure-erase
- Ultra-low SWaP only 5.4" x 6.5" x 2.0", @ 5 lbs. and as low as 50W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, DO-160D, MIL-STD 461E and IP66 - Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional)
- Available in ruggedization levels R3-R5



"RAVEN" SB1002-RT

Rugged, Small, 12-Port Intelligent Router System with Removable Drive(s)

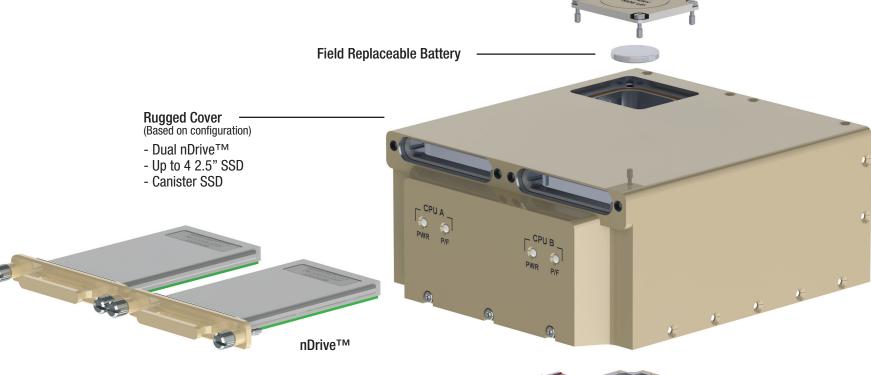
- Two 10Gigabit Ethernet Ports with TCP/IP Offloading Engine (TOE) - Ten Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)
- One Gigabit Ethernet port for router configuration
- Supports Layer III software routing functions with customizable rules
- Ethernet ports connect to 12 individual or one large Mil circular connectors - Up to two removable fully sealed drives (nDrive™) up to 1TB each
- Up to 1TB of fixed SSD for OS boot
- Two SAM[™] sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.)
- Support for six USB 2.0 ports with power and two Serial ports with RS-232/422/485 options
- Support for dual redundant SDI (SMTPE-259/292/424/425) video outputs (Optional, lose one DVI/HDMI) - Ultra-low SWaP at 5.4" x 6.5" x 2.75", @ 5 lbs. and as low as 50W
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, DO-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C and extended temp -40°C to +85°C (Optional) - Available in ruggedization levels R3-R5

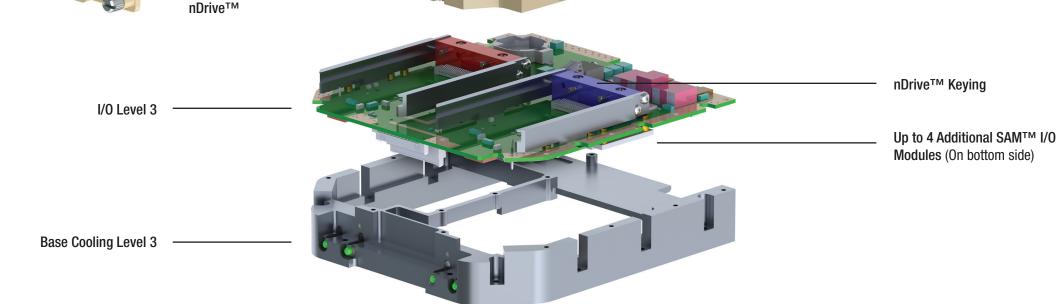


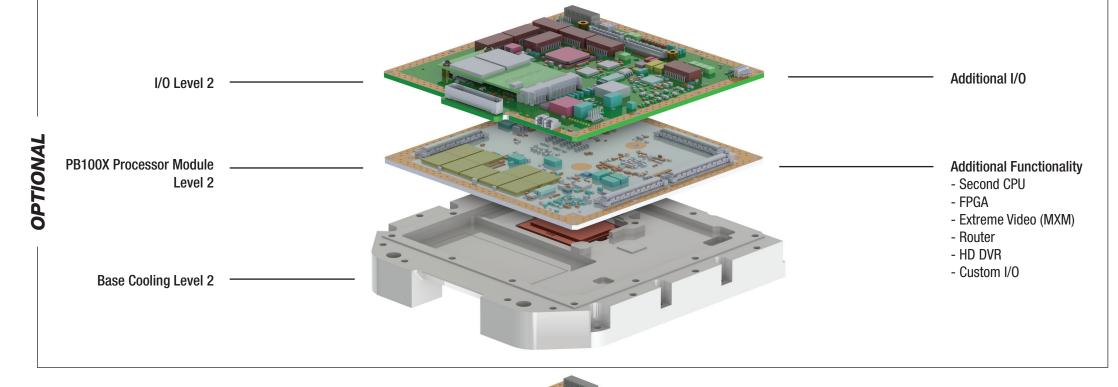
"PEACOCK" SB1002-XV

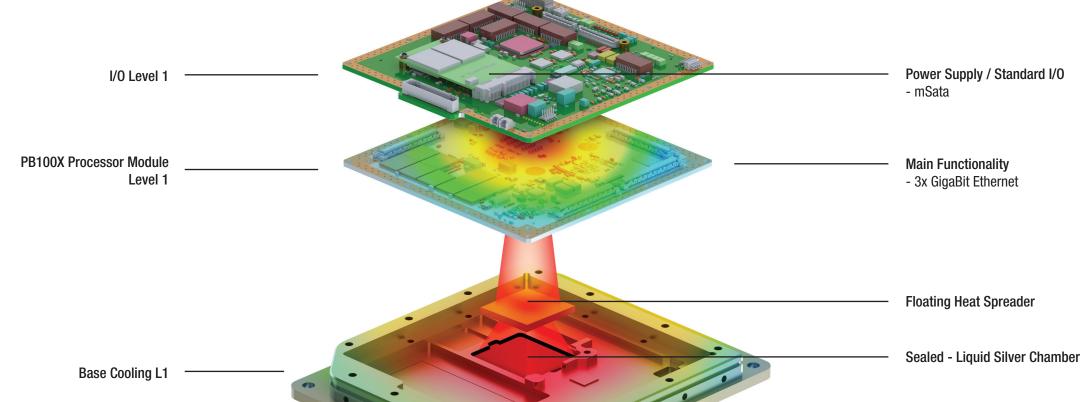
Rugged, Small, Extreme Video System with Removable Drive(s)

- Supports Nvidia® Cuda™ GPU with 2GB GDDR5 SDRAM
- Supports up to 64X FSAA and 30-bit color fidelity (10-bits per color) - Up to five video ports
- Support for dual redundant SDI (SMTPE-259/292/424/425) video outputs (Optional, lose one DVI/HDMI) - Up to two removable fully sealed drives (nDrive™) up to 1TB each
- Up to 1TB of fixed SSD for OS boot
- Two USB 3.0 and six USB 2.0 ports with power
- Up to seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)
- Two Serial ports with RS-232/422/485 options and eight GPI/O lines
- Two SAM[™] sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.) - Ultra-low SWaP only 5.4" x 6.5" x 2.75", @ 5 lbs. and as low as 60W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional)
- Available in ruggedization levels R3-R5











Rear Panel Connectors

(Based on configuration)

"OSPREY" SB1002-HS

Rugged, Small, High-Speed I/O System with Removable Drive(s) - High-Speed I/O interconnect with USB 3.0, SATA 6Gb/s and Display Port

- Up to two removable fully sealed drives (nDrive™) up to 1TB each
- Up to 1TB of fixed SSD for OS boot - Four USB 3.0 and six USB 2.0 ports with power
- Seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE) - Dual DVI/HDMI ports and one RGB video port or dual redundant SDI (SMTPE-292)
- Two Serial ports with RS-232/422/485 options and eight GPI/O lines
- Two SAM™ sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.)
- Ultra-low SWaP only 5.4" x 6.5" x 2.0", @ 5 lbs. and as low as 40W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional) - Available in ruggedization levels R3-R5



"CONDOR" SB1002-R4

Rugged, Small, High-Speed I/O System with Removable Drive(s)

- Up to 8TB of removable SSDs as four individual drives or as single canister (Optional)
- High-Speed I/O interconnect with USB 3.0, SATA 6Gb/s and Display Port
- Up to two removable fully sealed drives (nDrive™) up to 1TB each - Up to 1TB of fixed SSD for OS boot
- Four USB 3.0 and six USB 2.0 ports with power
- Seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE) - Dual DVI/HDMI ports and one RGB video port or dual redundant SDI (SMTPE-292)
- Two Serial ports with RS-232/422/485 options and eight GPI/O lines
- Two SAM[™] sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.)
- Ultra-low SWaP only 5.4" x 6.5" x 4.0", @ 5 lbs. and as low as 40W total - Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, DO-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional)
- Available in ruggedization levels R3-R5



- Up to 1TB of fixed SSD for OS boot
- Two USB 3.0 and six USB 2.0 ports with power - Seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)

- Up to two removable fully sealed drives (nDrive™) up to 1TB each

- Dual DVI/HDMI ports and one RGB video port or dual redundant SDI (SMTPE-292)
- Two Serial ports with RS-232/422/485 options and eight GPI/O lines
- Two SAM™ sites for custom I/O (Mil-STD-1553, Wi-Fi/BT, GPS, etc.) - Ultra-low SWaP only 5.4" x 6.5" x 2.75", @ 4.25 lbs. and as low as 40W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to +75°C or extended temp -40°C to +85°C (Optional) - Available in ruggedization levels R3-R5



"CROW" SB1002-LC

Rugged, Low-Cost, Small, Lightweight, High-Performance System

- Rugged system optimized for the lowest cost and weight in a fully sealed system - Up to 1TB of fixed SSD and/or one optional removable 2.5" SSD up to 2TB
- Three Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)
- Six USB 2.0 ports with power - Dual DVI/HDMI ports and one RGB video port
- Two Serial ports with RS-232/422/485 options
- Eight buffered General Purpose I/O lines - Support for dual redundant SDI (SMTPE-259/292/424/425) video outputs (Optional)
- Two SAM™ sites for custom I/O (Mil-STD-1553, Wi-Fi/BT, GPS, etc.)
- Power Conditioning Module (PCM) for "dirty power" regulation from 16-36VDC (Optional)
- Ultra-low SWaP only 5.4" x 6.5" x 2.75", @ 4.0 lbs. and as low as 40W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66 - Operates at standard temp 0° C to $+55^{\circ}$ C or extended temp -40° C to $+85^{\circ}$ C (Optional) - Available in ruggedization levels R1-R4



"HUMMINGBIRD" SB1002-LP

Rugged, Small, Low Profile, High-Speed I/O System with Removable Drive

- Low Profile, High-Speed I/O system with DZUS™ rail mounts High-Speed I/O interconnect with four USB 3.0 ports and one Display Port (Optional)
- Up to 1TB of fixed SSD for OS boot and one removable 2.5" SSD drive up to 2TB - Six USB 2.0 ports with power
- Three Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)
 Dual DVI/HDMI ports and one RGB video port or dual redundant SDI (SMTPE-292)
 Two Serial ports with RS-232/422/485 options and eight GPI/O lines
- Two SAM[™] sites for custom I/O (MiI-STD-1553, Wi-Fi/BT, GPS, etc.) - Ultra-low SWaP only 5.4" x 6.0" x 2.0", @ 5 lbs. and as low as 40W total
- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66
- Operates at standard temp -20°C to $+75^{\circ}$ C or extended temp -40°C to $+85^{\circ}$ C (Optional Contents of the - Available in ruggedization levels R3-R5

"EAGLE" SB1002-HDVR

Rugged, 4-Channel HD-DVR Recorder with Removable Drive(s) Records up to four HD video ports simultaneously at 1080p/30 Hz with audio

Simultaneous Record and Monitor/Playback over LAN Supports H.264 compression on both channels

Up to 8TB of removable SSDs as four individual drives or as single canister (Optional)

- Up to 1TB of fixed SSD for OS boot

Two USB 3.0 and six USB 2.0 ports with power - Seven Gigabit Ethernet ports with TCP/IP Offloading Engine (TOE)

- Dual DVI/HDMI ports and one RGB video port or dual redundant SDI (SMTPE-292)

- Two Serial ports with RS-232/422/485 options and eight GPI/O lines - Two SAM[™] sites for custom I/O (Mil-STD-1553, Wi-Fi/BT, GPS, etc.)

- Ultra-low SWaP only 5.4" x 6.5" x 2.75" @ 5 lbs. and as low as 40W total

- Compliant to MIL-STD 810G, MIL-STD 1275D, MIL-S-901D, D0-160D, MIL-STD 461E and IP66 Operates at standard temp -20° C to $+75^{\circ}$ C or extended temp -40° C to $+85^{\circ}$ C (Optional)





- Available in ruggedization levels R3-R5

