

OPALE V2 Compact

SWAp-C, trusted and flexible



► Ready for OEM with Modified COTS services

As processing performance continues to improve, ECRIN Systems is dedicated to minimize the SWAp-C envelope of OPALE V2 series. High-end computing performance in a 2U chassis with a depth under 20" (492mm), OPALE V2 Compact fits most any 19" rack mount space. It will be particularly useful when foot print, performance, reliability and longevity are not optional: military shelter base station, rugged servers for harsh environments, simulator, telemetry, telecom, medical imaging, infotainment, control/command station, test bench system, Internet appliance...

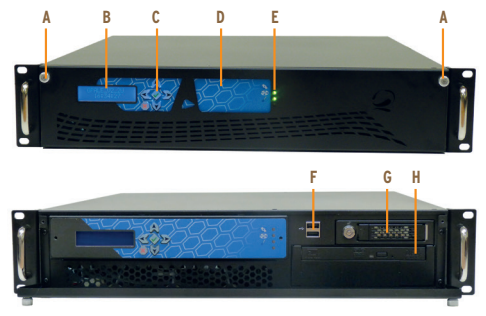
Distinctively customized oriented thanks to our in-house design center, ECRIN Systems will help to personalize your computer and give you competitive advantage in the industrial world.

To precisely meet your requirements, even for small quantities, ECRIN takes full system development responsibility and guarantee long term availability to allow you to concentrate on your added value. From mechanical parts to industrial design, with front and remote user interfaces, user LED's and I/O's, easy customized front and rear connectors, specific face-plate color and design, Lexan polycarbonate sheet with your logo and brand name, we will offer you a unique look that will shape your image and promote your sales.

Drop shipping is available to facilitate a rapid, more convenient deployment directly to your end customers.

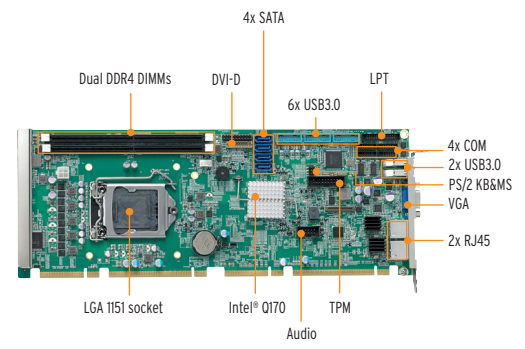
- > Modified COTS with easy brand naming, configuration and customization for competition advantage
- > Security with trusted boot
- > Local and remote active management to detect errors before they occur
 - > Enhanced asset protection for continuous operation:
 - Durable connectors: 15 microinch Gold/Metal plated connectors assure long term reliability
 - Enhanced USB compatibility: USB power supply ensures stability (5V +/-5%)
 - Rugged EMI construction: EN55032 Class B Radiation test, -10dB than competition Class A
- > MIL-STD tests passed (for T°C, shocks & vibrations, humidity, noise)
- > Efficient thermal concept to get higher MTBF
- > Reduced TCO with reporting log file and downtime in harsh environments
- > Energy efficient design / Low noise
- > Long life management: up to 10 years with revision control
 - > Advanced Multi-Core "Skylake" boosted computing performance with DDR4 speeds and timings
- > Expandability with 4 full-height and full-length I/O cards into PICMG 1.3 butterfly backplane

Rack specifications	
Construction	Anti-corrosion and long term heavy-duty steel
Dimensions (W x H x D)	19" / 2U with 19.4 inch depth (483x88x492mm)
Weight	12.5 kg (standard configuration)
Color	Black
Cooling	Three 80mm ball bearing low noise fans with monitoring Top access for easy maintenance, cover removed
Power supply	2U form factor, compliant with Mini Redundant PSU
Drive bays	One 5.25" front accessible drive bay or Slim CD + 3.5" drive bay One 3.5" front accessible drive bay
Backplane configuration	5 slots, 2U butterfly form factor backplane. Full length board on every slot
Front panel	Front door for drive bays and USB access Embedded MMI, 4 LEDs with I/O capabilities Lexan for easy customization
Cards lock	Retaining bracket for cards Rugged front holding parts for full length boards (SHB & I/O cards)
Packaging (W x H x D)	580x260x680mm

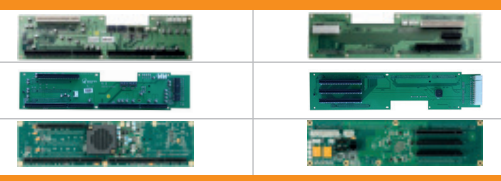


- A: Single door with 2x Thumbscrews
- B: LCD 2x16 characters
- C: Keyboard (Power & Reset)
- D: Lexan for easy customization
- E: 4x tri-color LEDs
- F: 2x USB
- G: 3.5" drive bay
- H: 5.25" drive bay

SHB specifications	
Form factor	PICMG 1.3 - Graphic Class / Server Class - PCI Express Gen 3
Processor	LGA1151 socket - 6 th Gen Intel® Core™ processor (codename Skylake)
Chipset	Intel® Q170 Express chipset supporting PCI Express 3.0
Memory	Dual-channel DDR4-2133 up to 32 GB (2* DIMM)
Video	Integrated Intel® HD Graphics (VGA and DVI-D internal)
BIOS	AMI® UEFI BIOS; 128 Mbit SPI Flash Memory
Ethernet	2 x GbE (Intel® I219LM + Intel® I211-AT) Intel® AMT and Wake On LAN support
Disk	4x SATA 6Gb/s ports Intel® Rapid Storage Technology, supports RAID 0/1/5/10
Audio Codec	High definition audio interface with DB-Audio2 (option)
USB	8x USB 3.0, 4x USB 2.0 (on backplane)
Watchdog timer	24~65535 sec software programmable, can generate system reset
Hardware monitor	CPU & System temperature, fan speed and onboard DC voltages
Manageability	SEMA support with BMC, SEMA cloud
SSI Trusted boot	1x box header for TPM module (optional) - Atmel AT97SC3204 TIS 1.2
I/O peripherals	Serial port : 2x RS-232, 2x RS-232/422/485 Parallel port : 1x LPT port via onboard box header KB/MS : 1x internal pin header for PS/2 keyboard/mouse



Backplane specifications	
EBP-D5E2	1xSHB / 1xPCIe x16 Gen3 / 1xPCIe x4 Gen3 / 2xPCI 4x USB 2.0
CI00192-A	1x SHB / 2xPCIe x8 Gen3 / 1xPCIe x4 - 2x SATA, 2x USB 2.0
CI00192-B	1x SHB / 1xPCIe x8 Gen3 / 3xPCIe x4 - 2x SATA, 2x USB 2.0
BPC8219	1xSHB / 3xPCIe x16 Gen3 / 1xPCIe x4 Gen3 4x USB 2.0



Environmental specifications	
Temperature	Operating: 0~50°C (MIL STD 810 G, method 502.5 / 501.5) - Storage: -20~80°C
Humidity	Operating: 5% to 90% non condensing
Altitude	0-3000m (0-10,000ft) operating
Shock & vibration	Operating: 15G, 11ms 6 axis (MIL STD 810 G, method. 516.6) - 5~100 Hz 0.8G (MIL STD 810 G, method. 514.5)
Noise	34.9 dBA (lddle), 35.9 dBA (50%), 42 dBA (80%) - MIL-STD-740-1
CE certification	EMC: 2014/30/UE ; EN 61000-6-2, EN55032, EN 55024 - SAFETY: 2014/35/UE ; EN60950-1 : 2006 2 nd edition A11 : 2009 + A1 : 2010 + A12 : 2011 + A2 : 2014

System Monitoring and Management	
<ul style="list-style-type: none"> > Intel® AMT for remote management > Local control with embedded MMI (Windows & Linux services) <ul style="list-style-type: none"> - FAN control & monitoring - System & network information - Watchdog & elapsed time counter - Redundant P/S default - Alarm (fan, temperature, redondant P/S), Log file - User script launch form menu entry - Easy configuration with .TXT file 	

OEM services	
<ul style="list-style-type: none"> > Branding user's Lexan - Costless, NRE fees only > Modified COTS customization: <ul style="list-style-type: none"> - Front panel design - Specific I/O on front panel / special connectors on rear panel - Specific H/W configurations - Specific S/W functionality <p style="text-align: right;">Call us for more information ...</p>	

Standard configuration	
Power Supply Unit	ATX 12V - 400W - High Efficiency 80+ 90 ~ 240 VAC full range / 47~63 Hz 5V@22A, 12V@32A, -12V@0.8A, 3.3V@22A, 5Vstb@3.5A Option for 2x 420W mini-Redundant 2U P/S High Efficiency (80+), 90-240VAC auto range /47-63Hz
Back plane	EBP-D5E2 in standard configuration
Drives	1 x Slim DVDRW 1 x 2.5" SATA Removable Drive 1 x 3.5" front accessible drive bay free
Front I/O (behind door)	2 x USB 2.0
Rear I/O	VGA + 2xGbE + 4xUSB 3.0 + 2xCOM

Options	
Processor	<ul style="list-style-type: none"> - Intel® Core™ i7-6700 (4C/8T, 3.4 GHz, 8M Cache, 14nm, 65W TDP) - Intel® Core™ i7-6700TE (4C/8T, 2.4 GHz 8M Cache, 14nm, 35W TDP) - Intel® Core™ i5-6500 (4C/4T, 3.2 GHz, 6M Cache, 14nm, 65W TDP) - Intel® Core™ i5-6500TE (4C/4T, 2.3 GHz, 6M Cache, 14nm, 35W TDP) - Intel® Core™ i3-6100 (2C/4T, 3.7 GHz, 3M Cache, 14nm, 51W TDP) - Intel® Core™ i3-6100TE (2C/4T, 2.7 GHz, 4M Cache, 14nm, 35W TDP)
Memory	DDR4-2133 : 4Go / 8Go / 16Go / 32Go
Disk	<ul style="list-style-type: none"> - 2.5" 7200 RPM Hard Drive (500Go ~ 1To) - SLC and/or MLC Solid State Drive (32 Go ~ 2To) - Up to 4x hot swap 2.5" HD/SSD with optional 4in1 drive bay
OS	Microsoft® Windows® 7 32/64-bit, Windows 8.1 & 10 64-bit - Linux 32/64-bit

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