



## EMS-SKLU-Marine

6th Gen Intel®Core™ Processor i7/i5/i3/Celeron,  
Marine Fanless Rugged Embedded System with 4  
COM Isolations



- > Onboard 6th Gen Intel® Core™ SoC i7/i5/i3/Celeron BGA Processor
- > One 260-pin SODIMM Socket Up to 16GB DDR4 2133MHz SDRAM
- > 4 COM port support 2.5KV Isolation Protection
- > Expansion Slot Supports 1 Mini PCIe Slot, 1 M.2, 1 IET Interface
- > Fanless Operating from -20 ~ 60°C, Support IP50
- > Power Input :Typical 12/24Vdc ( +9 ~ +36V )
- > Supports Intel® iAMT 11.0, TPM2.0, Turbo Boost Technology, vPro, Wake on LAN, RAID 0/1
- > Service Window, Easy to Install M.2, Memory and Mini PCIe Module
- > IEC EN60945 Certified

### + Spec

| System Information               |  |
|----------------------------------|--|
| <b>Processor</b>                 | 6th Gen Intel® Core™ i7-6600U, 2-Core, 2.6GHz processor<br>6th Gen Intel® Core™ i5-6300U, 2-Core, 2.4GHz processor<br>6th Gen Intel® Core™ i3-6100U, 2-Core, 2.3GHz processor<br>6th Gen Intel® Celeron® 3955U, 2-Core, 2.0GHz processor |
| <b>System Memory</b>             | 1 x 260-Pin DDR4 2133MHz SO-DIMM up to 16 GB   |
| <b>Watchdog Timer</b>            | H/W Reset, 1sec. ~ 65535sec.   |
| <b>H/W Status Monitor</b>        | Monitoring CPU & System Temperature and Voltage  |
| <b>SBC</b>                       | EBM-SKLUS + AUX-M07 + EBM-CDVS DB-B  |
| Expansion                        |  |
| <b>Expansion</b>                 | 1 x Avalue 80-Pin IET Interface<br>1 x Mini PCIe<br>1 x M.2 (2242/3042) B-Key  |
| Storage                          |  |
| <b>Storage</b>                   | 1 x 2.5" Drive Bay<br>1 x M.2 (SATA)   |
| I/O                              |  |
| <b>USB Port</b>                  | 4 x USB 3.0<br>2 x USB 2.0   |
| <b>COM Port</b>                  | 2 x RS-232/422/485 (Jumper)<br>4 x RS232/422/485 (BIOS) supports 2.5KV Isolation Protection  |
| <b>GPIO</b>                      | 1 x 12bit GPIO   |
| <b>Other</b>                     | 2 x SIM Card Slot<br>1 x SMBus<br>2 x PS2/ KB & MS<br>2 x Knockouts for Antenna Mounting   |
| Display                          |  |
| <b>Graphic Chipset</b>           | Intel® Skylake SoC integrated Graphics   |
| <b>Spec. &amp; Resolution</b>    | DP: Max. resolution 4096x2304 @ 60Hz   |
| Audio                            |  |
| <b>Audio Codec</b>               | Realtek ALC888S<br>supports 2.1-CH   |
| <b>Audio Interface</b>           | Mic-In, Line-In and Line-Out   |
| Certifications                   |  |
| <b>Certification Information</b> | CE / FCC Class A   |
| Ethernet                         |  |
| <b>LAN Chipset</b>               | 1 x Intel® I211AT<br>1 x Intel® I219LM   |
| <b>Ethernet Interface</b>        | 10/100/1000 Base-Tx GbE compatible   |
| <b>LAN Port</b>                  | 2 x RJ-45  |
| Power Requirement                |  |
| <b>DC Input</b>                  | Power Input: Typical 12/24Vdc (+9V ~ +36V )  |
| <b>DC Input Connector</b>        | 3-Pin Terminal Block   |
| <b>ACPI</b>                      | Single Power ATX Support S0, S3, S4, S5<br>ACPI 5.0 Compliant  |
| <b>Power Mode</b>                | AT/ATX (ATX is default setting)  |
| <b>Adapter</b>                   | Optional AC-DC Adapter   |
| Mechanical & Environmental       |  |
| <b>Operating Temperature</b>     | (w/SSD), ambient w/ air flow<br>-20°C ~ 60°C (-4°F ~ 140°F)<br>(w/HDD), ambient w/ air flow<br>0°C ~ 40°C (32°F ~ 104°F)   |



|                              |  |
|------------------------------|--|
| <b>Storage Temperature</b>   | -30°C ~ 70°C (-22°F ~ 158°F)   |
| <b>Operating Humidity</b>    | 40°C @ 95% Relative Humidity, Non-condensing   |
| <b>Dimension (W x L x H)</b> | 9.45" x 5.96" x 2.95" (240mm x 151.5mm x 75mm)   |
| <b>Vibration Test</b>        | IEC60945, Clause 8.7<br>IEC60068-2-6   |
| <b>Shock Test</b>            | With SSD : 10Grms, IEC 60068-2-27, Half Sine, 11ms   |
| <b>Mounting Kit</b>          | Wall Mount kit (Standard)  |
| <b>Construction</b>          | Aluminum + Metal   |
| <b>Software Support</b>      |  |
| <b>OS Information</b>        | Win 10 / Win 8.1 / Win 7 / Linux   |
| <b>Ordering Information</b>  |  |
| <b>Ordering Information</b>  | <p>EMS-SKLU-66-B1-9R<br/>6th Gen Intel®Core™ Processor i7, Marine Fanless Rugged Embedded System with 4 COM Isolations</p> <p>EMS-SKLU-63-B1-9R<br/>6th Gen Intel®Core™ Processor i5, Marine Fanless Rugged Embedded System with 4 COM Isolations</p> <p>EMS-SKLU-61-B1-9R<br/>6th Gen Intel®Core™ Processor i3, Marine Fanless Rugged Embedded System with 4 COM Isolations</p> <p>EMS-SKLU-39-B1-9R<br/>6th Gen Intel®Core™ Processor Celeron, Marine Fanless Rugged Embedded System with 4 COM Isolations</p> |