



## **DS-1400 Series – Rugged Embedded Fanless Expandable System with Intel 12th and 13th Generation Processor Support**

The DS-1400 Series are powerful fanless rugged systems equipped with the Intel® R680E chipset for 13th and 12th generation processors. With optional CMI I/O expansion as well as PCIe slot options, the flexibility allows for the systems to be tailored to specific industrial needs. The DS-1400 Series is a robust and reliable solution for many market sectors.

### SPECIFICATIONS

<b>CPU</b>	Intel® 12th and 13th Generation processors up to 65W TDP
<b>CPU Socket</b>	LGA1700
<b>Memory Type</b>	262-pin DDR5 4800MHz SO-DIMM (un-buffered, ECC and non-ECC Supported)
<b>Memory Slots</b>	2
<b>Maximum Memory Supported</b>	64GB
<b>Chipset</b>	Intel® R680E
<b>Integrated Graphics</b>	Intel® UHD Graphics
<b>Watchdog Timer</b>	Software Programmable Supports 256 Levels System Reset
<b>Video</b>	1 x VGA, 1 X HDMI 4k @ 30Hz, 2 x DisplayPort 4k @ 60Hz
<b>LAN Ports</b>	1 x Intel® I210 GbE LAN, 1 x Intel® I219 GbE LAN
<b>Serial ATA (SATA)</b>	2 x SATA III for 2.5" SATA SSD, 3 x mSATA Sockets (shared with Mini-PCIe)
<b>RAID</b>	Supports RAID 0/1/5/10

<b>Extended Interface</b>	3 x Full-size Mini-PCIe Sockets, 2 x SIM Sockets, 2 x High Speed CMI, 2 x Low Speed CMI, 1 x CFM for optional Ignition Module, DS-1401: 1 x PCI/PCIe slot, DS-1402: 2 x PCI/PCIe slots
<b>Rear I/O</b>	1 x VGA, 1 x DP, 1 x PS/2, 2 x LAN, 2 x RS-232/422/485, 2 x USB 2.0, 4 x USB 3.2 Gen 1x1, 1 x Mic-In, 1 x Line-Out, 1 x Power Switch 2-pin, 1 x Power LED 2-pin, 1 x Fan 4-pin
<b>Front I/O</b>	2 x USB 3.2 Gen 2x1, 1 x HDMI, 1 x DP
<b>Audio</b>	Realtek ALC888 HD Audio
<b>Power Requirement</b>	9 ~ 48V DC Input 3-Pin Terminal Block
<b>Dimensions</b>	DS-1400: 8.94" x 10.28" x 3.46" (227mm x 261mm x 88mm), DS-1401: 8.94" x 10.28" x 4.25" (227mm x 261mm x 108mm), DS-1402: 8.94" x 10.28" x 5.04" (227mm x 261mm x 128mm)
<b>Operating Temperature</b>	35W Processor: -40 ~ 70°C (-40 ~ 158°F), 65W Processor with External Fan Kit: -40 ~ 50°C (-40 ~ 122°F)
<b>Storage Temperature</b>	-40 ~ 80 °C (-40 ~ 176 °F)
<b>Relative Humidity</b>	95% @ 70°C, non-condensing
<b>Shock</b>	MIL-STD-810G
<b>Vibration</b>	MIL-STD-810G
<b>OS Software Supported</b>	Windows 11, Windows 10, Ubuntu 22.04
<b>Global P/N / SKU</b>	1708604

## Ordering Options

DS-1400-R10 (SKU# 1708604A): 13th/12th Gen High Performance Rugged Expandable Embedded System  
DS-1401-R10 (SKU# 1708604B): 13th/12th Gen High Performance Rugged Expandable Embedded System with 1 x PCI/PCIe Slot  
DS-1402-R10 (SKU# 1708604C): 13th/12th Gen High Performance Rugged Expandable Embedded System with 2 x PCI/PCIe Slots [CMI Module List \(https://globalamericaninc.com/wp-content/uploads/2024/12/CMI-Module-List.pdf\)](https://globalamericaninc.com/wp-content/uploads/2024/12/CMI-Module-List.pdf)