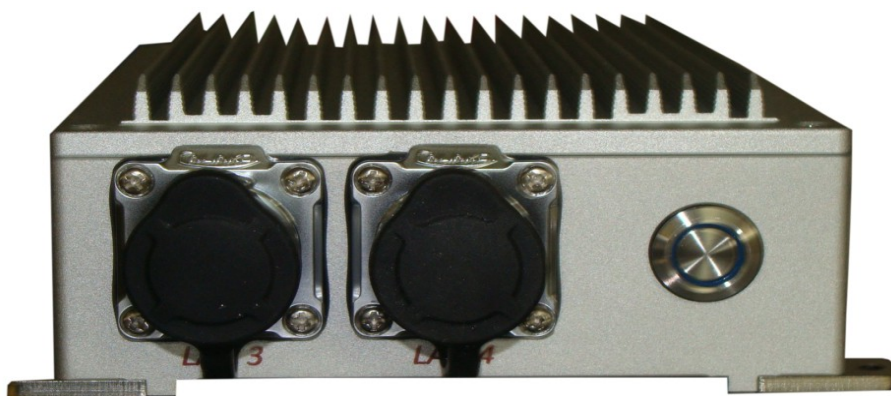


# NCS Industrial Computers

Committed to excellence since 1975

**SMALL and RUGGED IP65 i7-8665 4c for industrial, military and Marine applications. The lightweight **NANO-BOX/i7** is very small stand alone mini SERVER but powerful system, in a IP65 rugged aluminum enclosure with sealed connectors. Multiple mounting options allow for easy integration into confined spaces.**



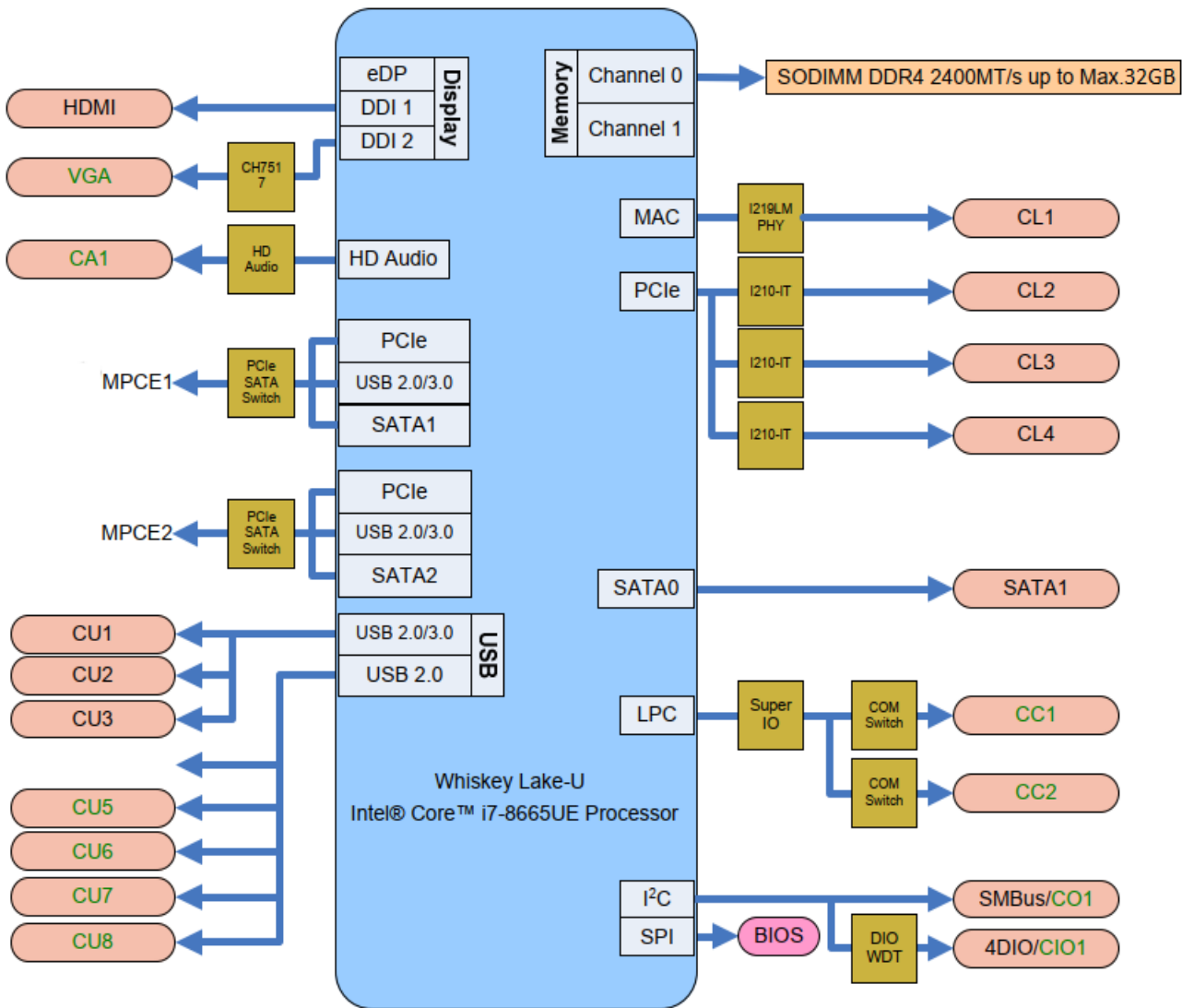
**Rugged Completely Sealed IP65 NEMA4/4X, dust/water resistant protection, wide range operating temperature, **NANO-BOX/i7-8665 4 Cores****

**PS +12 Vdc, Operating Temperature -20°C to +65°C**

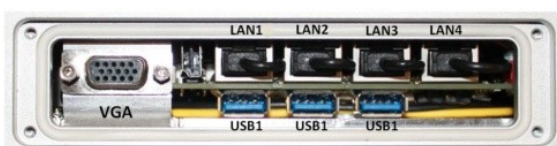
**Small dimensions of box: W=130 (5,11") x H=59 (2,32") x D=180mm (7,08")**

**Your problem is our challenge. When Your mission is critical ....  
Make your life simpler by utilizing NCS' 45 plus years of experience.  
All of our Systems are designed to operate in very hostile environments.**

## Block Diagram



**NANO-BOX i7-8665** side front and rear



**NANO-BOX i7-8665** internal connectors protected from IP65 aluminum door

## Features

	Description	
<b>Model</b>	● <b>Rugged Completely Sealed IP65/NEMA4X mod. NANO-BOX/i7 4c</b>	
<b>System Processor</b>	<b>PROCESSOR</b>	Intel® Whiskey Lake-U i7-8665 1.7GHz (Quad core)
	<b>CHIP SET</b>	Intel® Whiskey Lake-U SoC
	<b>BIOS</b>	Based on AMI Aptio UEFI
<b>Memory</b>	<b>Socket</b>	1 x DDR4 2400 / 2133 MHz SODIMM
	<b>Max. Capacity</b>	16GB up to 32GB
<b>Display (option)</b>	<b>graphic</b>	Intel® UHD Graphics 620, Support DirectX 12 & OpenGL 4.5
	<b>Video memory</b>	16MB DDR SDRAM
	<b>HDMI Resolution</b>	1 x HDMI support max. resolution 4096 x 2304 no used on this box
	<b>VGA Resolution</b>	1 x VGA support max. resolution 1920 x 1080
	<b>cable</b>	DB-15HD
<b>4 LAN Ethernet</b>	3 x 1GbE	3 x I210 IT 1GbE RJ45 LAN 10/100/1000Mbps
	1 x 1GbE	1 x I219LM 1GbE RJ45 LAN 10/100/1000Mbps
<b>Audio</b>	<b>Controller</b>	High Definition Audio Specification, Support Line-out/Mic-in/Line-in
	<b>Max. Data</b>	6 GB/s
<b>SATA III</b>	<b>Port</b>	1 x 2.5"
<b>Expansion Slot</b>	<b>Mini-PCI-e</b>	2 x Half size mini card for PCIe / mSATA / USB 3.0 / USB 2.0
<b>Storage</b>	<b>SSD</b>	Ultra high speed storage 1 x miniPCIe SSD up to 2TB
<b>I/O</b>	<b>USB 3.0</b>	3 x USB 3.0; 4 x USB 2.0
	<b>COM ports</b>	2 x RS232 / 422 / 485 (internal)
	<b>LAN</b>	4 (RJ-45)
	<b>Digital IO</b>	Hardware digital Input & Output, 4 x DI / 4 x DO
<b>Power SBC</b>	<b>Vin connector</b>	+12Vdc Input
<b>Power System</b>	<b>Ext. DC/DC or AC/DC</b>	+12Vdc (Vin option : +24Vdc or -48Vdc)
<b>Watchdog Timer</b>		Hardware Watch Dog Timer, 0~255 sec programmable
	<b>Output</b>	System reset
<b>Environment</b>	<b>Operating Temp</b>	-20°C ~ +65°C
	<b>Storage Temp</b>	-20°C ~ +80°C
	<b>RH</b>	5%~ 95% (+25°C non-condensing)
<b>Certified</b>		EMC/CE, CFR 47 Part 15 Subpart B (FCC), ICES-003 and SAFETY CB
<b>Form Factor</b>	<b>Dimension</b>	W=130 (5,11") x H=59 (2,32") x D=180mm (7,08")

On rear side, IP65 with illuminated push button for shutdown

### Copyright

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**N.C.S. Computer Group** (since 1975) ISO 9001-2015



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**N.C.S. Group** - società italiana, fondata nel 1975. Progetta e produce computers e sistemi per applicazioni industriali, militari (non armi), marine ed avioniche.

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**N.C.S. Group**, was founded in 1975, designs and manufactures computers and systems for Industrial, Military (not weapons), Marine and Avionic automation markets.