



# Matrox **Supersight Uno** >>

Expandable mid-range industrial imaging computer



# Overview

## Solid foundation for demanding machine vision applications

Matrox® Supersight Uno is a mid-range imaging computer ideally suited for intensive image capture and processing tasks. It offers considerable expansion capabilities through seven PCIe® expansion slots ready to host multiple Matrox Imaging frame grabbers and third-party boards including high-end graphic cards.

This capable industrial PC (IPC) is the latest iteration of the Matrox Supersight series, delivering desktop-level processing performance and rich expansion capabilities, all packaged in a standard rugged enclosure. Powered by an eighth-generation Intel® Core™ processor, the Matrox Supersight Uno is fit for demanding machine vision applications.

## Ample expansion possibilities

With seven third-generation PCIe expansion slots, the Matrox Supersight Uno accommodates the full range of expansion cards from one all the way to 16 lanes. Its 600 W power supply provides the necessary power to drive multiple frame grabbers and graphics boards.

The Matrox Supersight Uno provides input support for standard video interfaces—Camera Link, CoaXPress, DisplayPort, HDMI, and SDI—through Matrox Imaging frame grabbers.

## Designed for factory use

A rugged steel 4U chassis enables straightforward installation in standard cabinets and exposed racks located in tough settings. Its cooling system ensures steady functioning for consistent maximum performance. Serviceable air filters keep the interior of the unit free of foreign particles. Quick-release, hot-swappable drive bays with RAID support increase system reliability and facilitate maintenance. Moreover, the vision controller shares exact dimensions with the Matrox Supersight Solo, facilitating substitution. A carefully managed lifecycle and long-term availability make the Matrox Supersight Uno a solid platform for delivering tailored high-throughput machine vision systems.

## Reliable long-term availability

Components for the Matrox Supersight Uno have all been intentionally selected to ensure consistent long-term availability. This ensures OEMs can streamline their sustaining efforts, and maximize return on initial investments by avoiding the need to revalidate constantly changing commercial platforms.

### Matrox Supersight Uno at a glance

**Leverage eighth-generation Intel Core processor** to handle demanding imaging applications

**Interface directly** with GigE Vision® and USB3 Vision® cameras

**Support for all major video interfaces**—Camera Link®, CoaXPress®, DisplayPort, HDMI, and SDI—when used in conjunction with Matrox Imaging [frame grabbers](#)

**Maximize I/O capabilities** with seven PCIe slots accepting full-height, full-length cards

# Software Environment

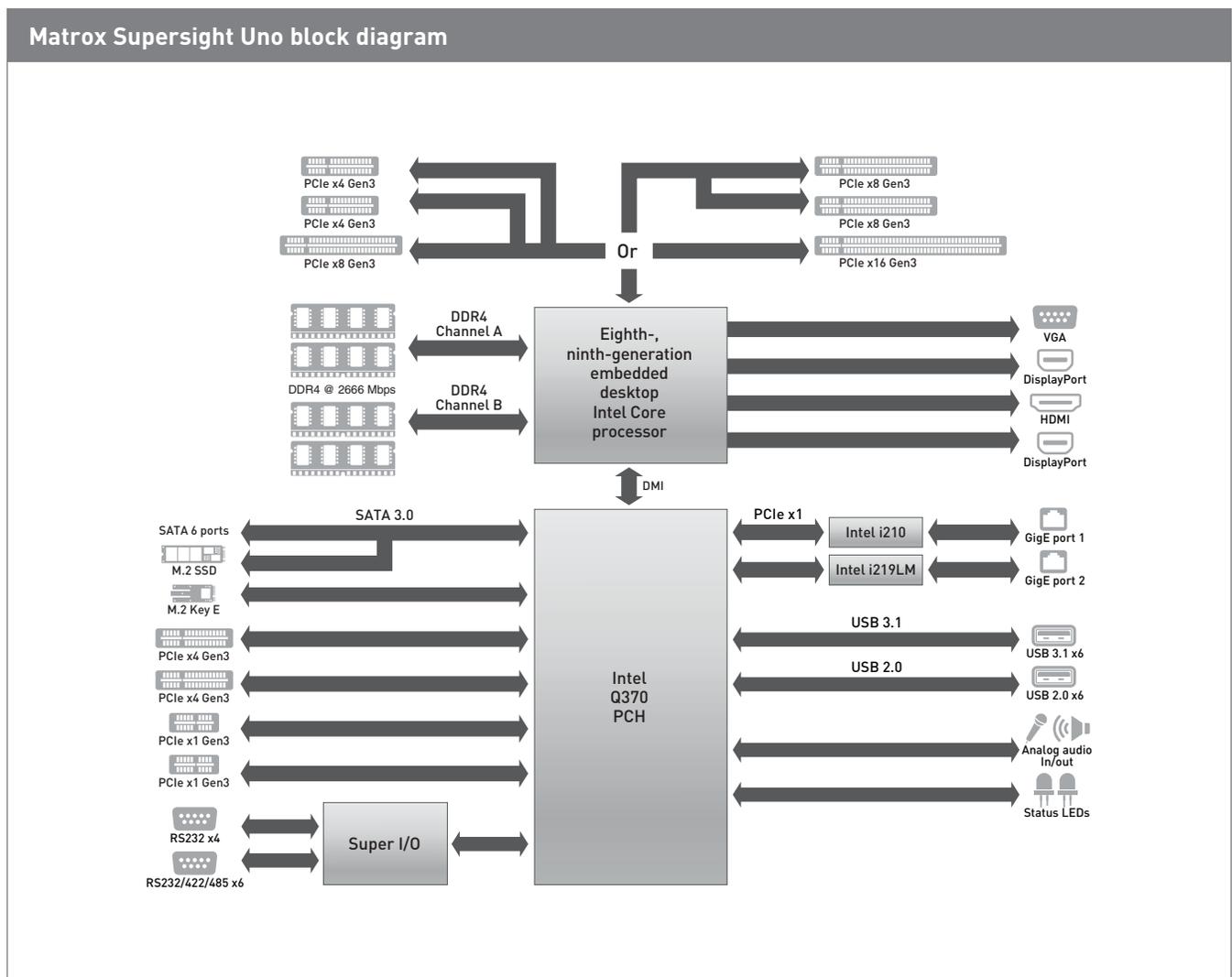
## Microsoft Windows 10 IoT Enterprise

Matrox Supersight Uno comes pre-installed with Microsoft Windows 10 IoT Enterprise 2019 (64-bit), which provides the familiarity, performance, and reliability of Windows 10, including multi-language support.

## Field-proven application development software

Matrox Supersight Uno is supported by [Matrox Imaging Library \(MIL\)](#)<sup>1</sup> software, delivering reliable performance for more than 25 years. Featuring robust vision tools for image capture, processing, analysis, annotation, display, and archiving operations, MIL provides the quality and accuracy necessary for today's challenging machine vision applications. Refer to the [MIL datasheet](#) for more information.

# Connectivity



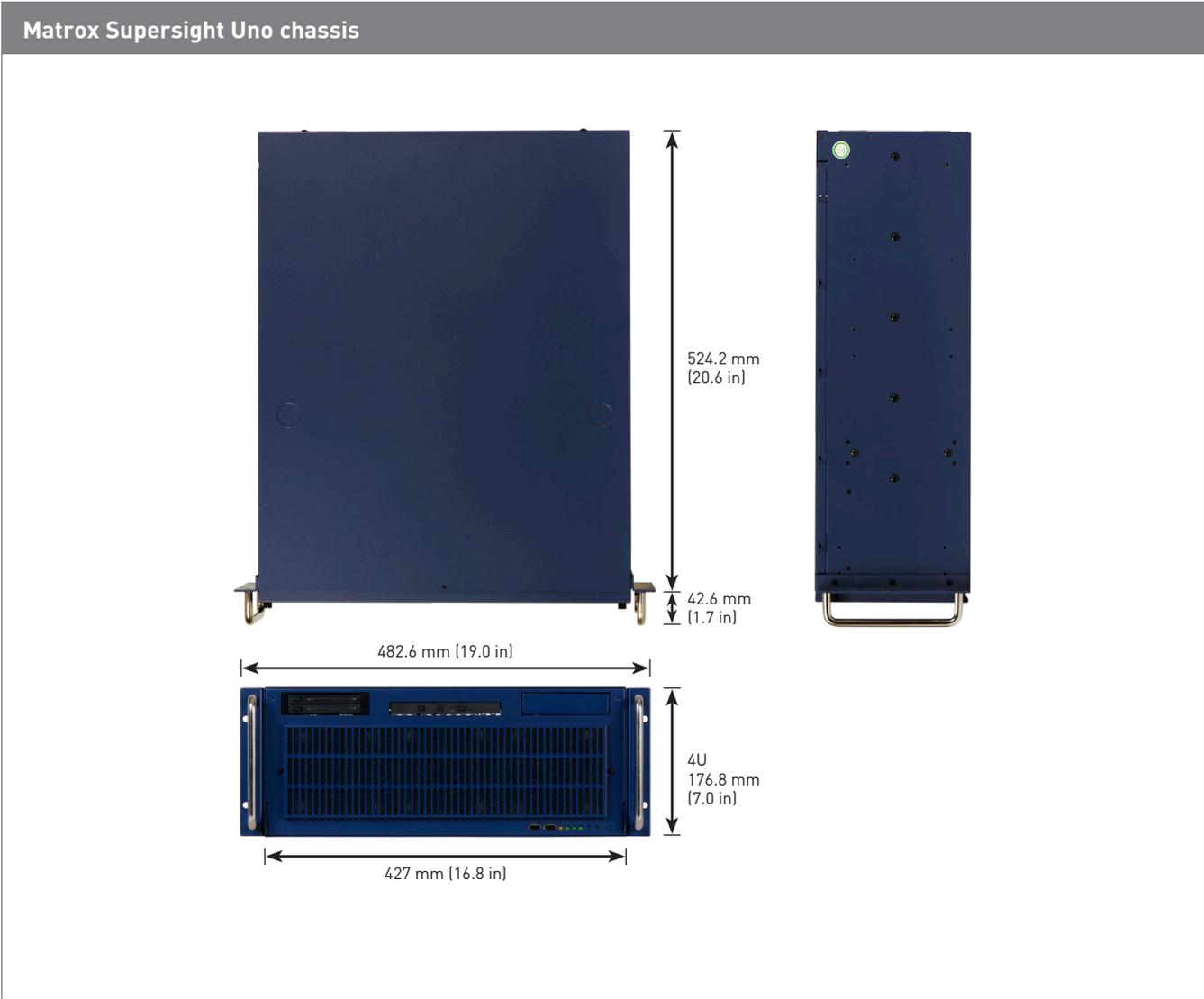
# Connectivity (cont.)

Matrox Supersight Uno front and back views



- |                        |                     |                        |                   |                |
|------------------------|---------------------|------------------------|-------------------|----------------|
| 1. Removable drive bay | 5. Reset switch     | 9. Serial port (COM1)  | 13. VGA port      | 17. Line out   |
| 2. Fan filter cover    | 6. Power switch     | 10. HDMI port          | 14. Network ports | 18. Microphone |
| 3. USB 2.0 ports       | 7. Power input      | 11. PS/2 port          | 15. USB 3.1 ports | 19. PCIe slots |
| 4. Status LEDs         | 8. DisplayPort (x2) | 12. Serial port (COM2) | 16. Line in       |                |

# Connectivity (cont.)



# Specifications

Matrox Supersight Uno					
<b>Motherboard</b>					
ATX form factor (30.5 cm x 24.4 cm or 12 x 9.6 in)					
Intel Q370 Platform Controller Hub (PCH)					
Four (4) 288-pin DDR4 long-DIMM sockets					
Up to 64 GB DDR4-2666 SDRAM					
Triple display					
One (1) VGA output					
Up to 1920x1200 @ 60 Hz					
One (1) HDMI 1.4 output					
Up to 4096x2160 @ 24 Hz					
One (1) DisplayPort 1.2 output					
Up to 4096x2304 @ 60 Hz					
Two (2) Gigabit Ethernet ports (10/100/1,000)					
One (1) Intel Ethernet Connection I210					
One (1) Intel Ethernet Connection I219-LM					
Twelve (12) USB ports					
Four (4) USB 3.1 ports					
Two (2) USB 2.0 ports					
Two (2) USB 3.1 ports (internal)					
Four (4) USB 2.0 ports (internal)					
Six (6) SATA3 ports (one shared with M.2 Key M)					
Support for RAID 0, 1, 5, and 10					
One (1) mini-PCIe (full/half) connector					
One (1) M.2 Key M (2242/2260/2280) connector (used by 128 GB SSD)					
One (1) M.2 Key E (2230) connector					
Stereo line-in					
Stereo line-out					
Mic-in					
Ten (10) serial ports					
Two (2) RS-232/RS-422/RS-485 ports					
Four (4) RS-232/RS-422/RS-485 ports (internal)					
Four (4) RS-232 ports (internal)					
One (1) PS/2 combo connector					
Seven (7) PCIe Gen3 slots					
Slot 1:	x16	or	x8	or	x8
Slot 2:	N/A		N/A		x4
Slot 3:	N/A		x8		x4
Slot 4: PCIe x4					
Slot 5: PCIe x1					
Slot 6: PCIe x4					
Slot 7: PCIe x1					

# Specifications (cont.)

Matrox Supersight Uno	
<b>Memory</b>	
	16 GB DDR4-2666
<b>Storage</b>	
	128 GB M.2 2280 SATA3 SSD
<b>Chassis</b>	
	Dimensions (L x W x H): 52.4 x 48.2 x 17.8 cm (20.6 x 19.0 x 7.0 in)
	Hinged front panel
	Recessed reset button
	Push-button power switch
	Power and HDD notification LEDs
<b>Mounting</b>	
	Horizontal or vertical
	4U (19 in) rack
	Removable rack ears
	Removable rack handles
<b>Drive Bays</b>	
	Front-accessible
	Two (2) 2.5 in, hot-swappable drive bays
<b>Power Supply</b>	
	Integrated 600 W power supply
	AC input
	100–240 VAC
	47–63 Hz
	10 A/5 A at any low/high range input voltage
	80 Plus Silver rated
	Power-factor corrected
	DC input
	+3.3 VDC @ 25 A
	+5 VDC @ 25 A
	+12 VDC @ 45 A
	-12 VDC @ 0.8 A
	+5 VSB @ 3.5 A
	Supplemental power connectors
	Six (6) 4-pin peripheral (12 VDC & 5 VDC)
	One (1) 8-pin EPS CPU
	Four (4) 6-pin PCIe power (12 VDC) or 8-pin PCIe power (12 VDC)
<b>Certifications</b>	
	FCC class A
	CE class A
	RoHS-compliant

# Specifications (cont.)

Matrox Supersight Uno	
<b>Environmental</b>	
Operating temperature: 10°C to 35°C (50°F to 95°F)	
Storage temperature: -40°C to 85°C (-40°F to 185°F)	
Relative humidity: Up to 90% (non-condensing)	
<b>Software</b>	
Pre-loaded with Microsoft Windows 10 IoT Enterprise 2019 (64-bit)	
Pre-loaded with MIL 10 (run-time)	

# Ordering Information

Part number	Description
<b>Hardware</b>	
SU-MTRX-01	Matrox Supersight Uno integrated unit with Intel Core i5-8500, 16 GB DDR4 RAM, 128 GB M.2 MLC SSD, Microsoft Windows 10 IoT Enterprise 2019. Note: The use of this product is governed by <a href="#">Microsoft Software License Terms</a> , among others.
<b>Software</b>	
Refer to <a href="#">MIL datasheet</a> . Note: MIL sold separately.	

Endnotes:

1. The software may be protected by one or more patents; see [www.matrox.com/patents](http://www.matrox.com/patents) for more information.

## The Matrox Imaging advantage



### Assured quality & longevity

We adhere to industry best practices in all hardware manufacturing and software development; product designs pay careful attention to component selection to secure consistent long-term availability. Matrox Imaging is able to meet Copy Exact and Revision Change Control procurement requirements in particular circumstances, backed by our dedicated team of QA specialists.



### Trusted industry standards

Matrox Imaging champions industry standards in our design and production. We leverage these standards to deliver quality compatible products, protecting our customers' best interests by ensuring our hardware and software components work with as many third-party products as possible.



### Comprehensive customer support

Our devoted front-line support and applications teams are on call to offer timely product installation, usage, and integration assistance. Matrox Professional Services delivers deep technical assistance to help customers develop their particular applications in a timely fashion. Services include personalized training and device interfacing as well as application feasibility, prototyping, troubleshooting, and debugging.



### Tailored customer training

Matrox Vision Academy comprises online and on-premises training for Matrox Imaging vision software tools. On-premises intensive training courses are regularly held at Matrox headquarters, and can also be customized for onsite delivery. Matrox Vision Academy online training platform hosts a comprehensive set of on-demand videos available when and where needed.



### Long-standing global network

Matrox Imaging customers benefit from a global network of distributors who offer complementary products and support, and integrators who build customized vision systems. These relationships are built on years of mutual trust and span the globe, ensuring customer access to only the best assistance in the industry.



### About Matrox Imaging

Founded in 1976, Matrox is a privately held company based in Montreal, Canada. Imaging, Graphics, and Video divisions provide leading component-level solutions, leveraging the others' expertise and industry relations to provide innovative, timely products.

Matrox Imaging is an established and trusted supplier to top OEMs and integrators involved in machine vision, image analysis, and medical imaging industries. The components consist of smart cameras, vision controllers, I/O cards, and frame grabbers, all designed to provide optimum price-performance within a common software environment.

### Contact Matrox

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