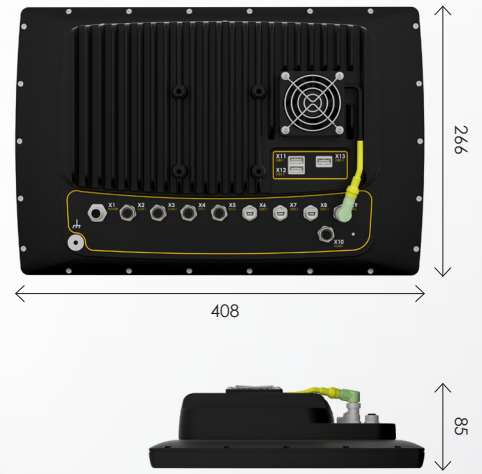




(mm) **PRELIMINARY**



# CCpilot X1400 POWERFUL DESKTOP PC PERFORMANCE FOR INDUSTRIAL VEHICLES

The **CCpilot X1400** is designed to meet the toughest requirements and excel even in the most demanding applications. It is based on an Intel i5-8400H quad core CPU which features a very powerful GPU for smooth rendering. It has the performance to be a truly multipurpose on-board computer for advanced HMI and business logics functionality.

With its optically bonded 14.1" widescreen display it provides plenty of GUI real estate, enabling running multiple applications concurrently side-by-side.

The x86 architecture and Windows 10 operating system means that system developers can utilise all the powerful toolchains, software components and 3rd party applications available in the Windows domain.

The CCpilot X1400 fully supports a wide variety of modern and next generation graphics APIs and frameworks, making it possible to realize advanced systems without the limitations or restrictions you get with leaner hardware.

It utilises two accessible CFAST storage slots for in-field expandability, video recording, encryption and storage upgrades. It can also integrate 3rd party peripherals over USB 3.1, like high resolution cameras and other advanced peripherals that require high bandwidth.

With its vast software capabilities and state-of-the art hardware, the CCpilot X1400 brings the power and flexibility of a complete desktop framework to the cab of your mobile machine. **Turn for technical specifications »**

The content herein is preliminary and may be subject to change without further notice.

# CCpilot X1400 PRODUCT SPECIFICATIONS

COMPUTING CORE	
OVERVIEW	Intel i5-8400H quad core Coffee Lake CPU, with powerful integrated GPU
CPU	4 cores x 2.50 GHz (boost to 4.20 GHz), 8 threads
GPU	Intel UHD Graphics 630 high performance graphics processing unit for hardware acceleration, 3D, 2D & vector graphics. 230 GFLOPS at Base, Boost to 844 GFLOPS
STORAGE	64GB pseudo-SLC CFast
RAM	8GB DDR4 RAM

DISPLAY	
TYPE	IPS with >88 degree viewing angle from all directions
COVER LENS	Chemically hardened glass
OPTICAL BONDING	Yes, IPS screen, cover lens and touch screen optically bonded to achieve sunlight readability.
SIZE AND RESOLUTION	14.1" 16:10 WVGA, 1280 x 800 pixels
COLOR DEPTH	24 bit
CONTRAST RATIO*	1000:1
BRIGHTNESS*	800 cd/m <sup>2</sup>
DIMMING	Yes, in steps, 1-100%
AMBIENT LIGHT SENSOR	Yes

HMI	
TOUCH SCREEN	Projective Capacitive with multi-touch. Calibrated to support interaction with gloves and is in-sensitive to water drops.
STATUS LED	RGB LED
SOUND	Speaker with configurable tone and volume.
SOFT KEYS	3 configurable buttons on the front of the display. Default function On/Off and Brightness Up/Down

INTERFACES	
CAN	2 x CAN-FD ports, physical layer ISO 11898 2.0B, SAE J2284-1 to SAE J2284-5, Configurable bit rate.
USB	3 x USB 3.1 3 x USB 2.0 high speed
ETHERNET	2 x Ethernet. 10/100 Base-T
AUDIO	1 x Stereo Line Out
POWER SUPPLY	12 or 24 VDC Nominal Voltage. Voltage range 10-34 VDC. CPU and communication operational down to 6 VDC
KEY SWITCH	1 input, for start-up/suspend/resume/ shutdown

MECHANICAL	
HOUSING MATERIAL	Aluminium
INSTALLATION	Vesa 75 bracket
CONNECTORS	1 x 5 pin male M12 for power 2 x 4 pin DIN M12 for Ethernet 2 x 5 pin DIN M12 for CAN Ports 3 x M12 for Micro USB 3 x M12 for USB Type C 1 x Stereo Line out
DIMENSIONS (mm)	W 408 x H 266 x D 85
WEIGHT (g)	5500

ENVIRONMENTAL SPECIFICATIONS	
IP CLASS	IP54
EMC CONFORMITY	2014/30/EU, ISO 14982:2009
VIBRATIONS	IEC 60068-2-6 Sinusoidal, IEC 60068-2-64 Random
SHOCK	IEC 60068-2-27. 30g/6ms
TEMPERATURE RANGE (°C)	Operating: -30 to +70, Storage: -40 to +80

OPERATING SYSTEM	
SYSTEM	Windows 10 IoT
BSP	Available to create a custom image
COMPUTING AND GRAPHICS APIS	Support for advanced UX and computing tasks: OpenGL 4.5, Vulkan, OpenCL 1.2, OpenVG 1.1

SOFTWARE FRAMEWORKS & TOOLS	
DEVELOPMENT ENVIRONMENT	Virtual machine or Windows.
PROGRAMMING	Supported languages include C++, C, QML, JavaScript, Python, HTML5, IEC61131-3.
GCC COMPILER	GCC C++17 or newer
UI FRAMEWORKS	Qt 5.12+ Open Source. Will support Qt 6, expected in Q4 2020. Support for Web frameworks. Qt Commercial is optional, enables closing access to the system.

INHERENT PLATFORM SUPPORT	
Customizations offered on request for large programs.	
BIGGER STORAGE	Up to 128GB
BIGGER RAM	Up to 16GB DDR4

\* Typical values

## crosscontrol

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