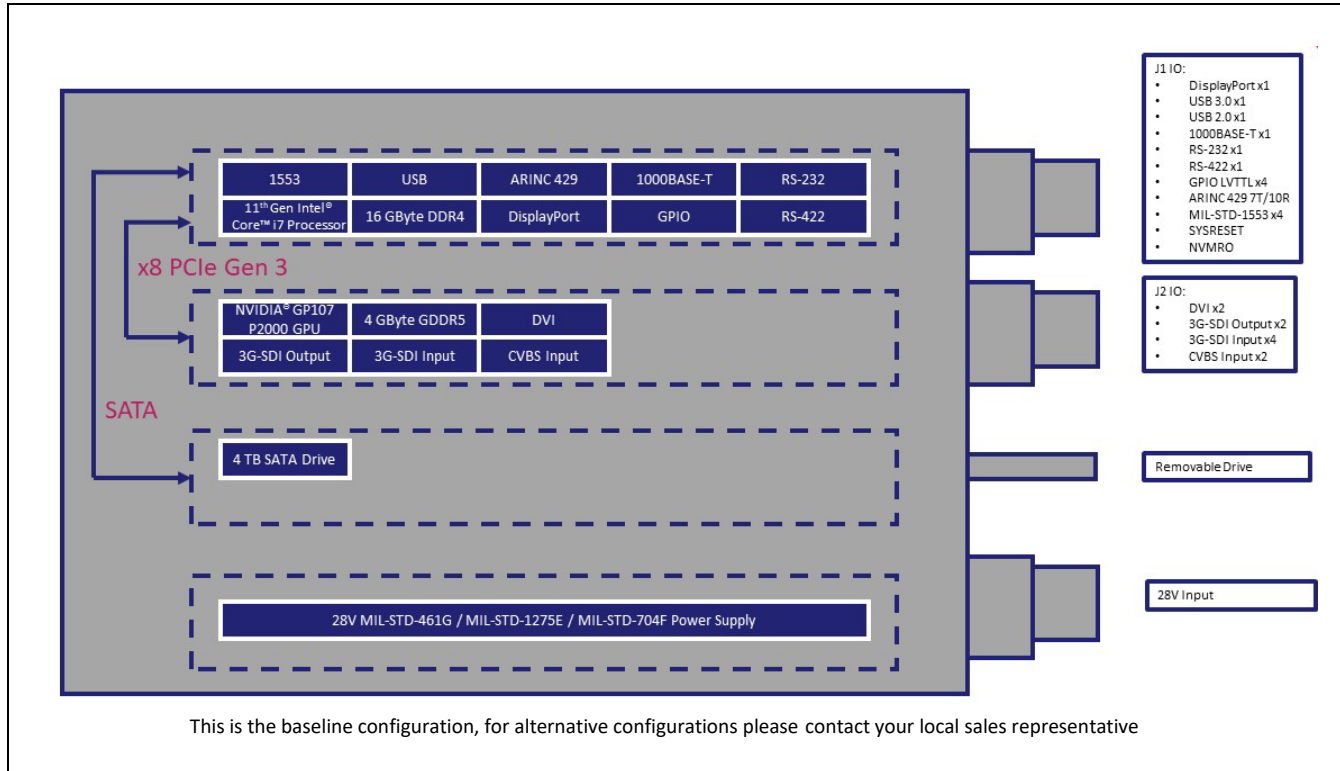


## Rugged Vision Computer System

### Key Features

Helios is a rugged Commercial Off the Shelf (COTS) Vision computer system optimized for Size, Weight, Power and Cost (SWaP-C) designed to operate in harsh environments. The system is based on an Intel® Core™ i7 processor complemented with outstanding graphics input and output capabilities. Options are available for a rich set of I/O and high-capacity removable storage.

- 11<sup>th</sup> Generation Intel® Core™ i7 Processor
- 16 Gbytes DDR4 RAM
- NVIDIA® P2000 GPU
- 3G-SDI Input and Output
- Optional ARINC 429 or MIL-STD-1553
- Optional 4 TB Removable Storage
- Operating Temperature -40°C to 55°C
- IP67 Dust/Waterproof Aluminium Chassis



## Processing Engine

- Intel® Core™ i7-1185GRE 1.8 GHz (15 W)
- 16 GBytes DDR4 DRAM
- UEFI Bootloader
- Secure Boot, Boot Guard and TPM 2.0
- Linux® and Windows® operating systems
- PBIT, IBIT and CBIT (Linux Only)

## Graphical Processing Engine

- NVIDIA® Pascal™ GP107 (P2000)
- 4 GBytes GDDR5
- 768 CUDA® Cores
- 2.3 TFLOPs
- DirectX 12, OpenGL 4.6, and OpenCL 1.2
- CUDA 10 (compute capability 6.1)
- H.265 / H.254 Encode / Decode

## Optional Storage Capabilities

- supports 1 removable SATA based storage module
- capacity of 4 TBytes

## I/O Capabilities

- 1x DisplayPort Output from CPU (4K60)
- 2x DVI Output from GPU (4K60)
- 2x 3G-SDI Output
- 4x 3G-SDI Input
- 2x CVBS Input
- 1x USB 3.0
- 1x USB 2.0
- 1x 1000BASE-T
- 1x RS-232
- 1x RS-422
- 4x GPIO LVTTTL
- optional ARINC 429 7T/10R
- optional 4x MIL-STD-1553
- SYSRESET
- NVMRO

## Power

- power consumption approximately 100 W

## Mechanical Specification

- dimensions 5.8" / 147 mm (W) x 9.5" / 241 mm (L) x 4" / 102 mm (H)
- mass 12 lbs / 5.5 kg
- cooling method is baseplate conduction cooled
- system is painted in MIL-C-85285 , DESERT TAN, MATTE FINISH (IAW FED-STD-595 COLOR NO. 33446)
  - alternative color options are available