

# PIS-5520

## High Performance Graphics Processing Fanless PC with Intel® Core™ i7 Processor and NVIDIA GPU

### Features

- 6th/7th Gen Intel® Core™ i7 Processor, up to 32GB
- 8x M12 GbE (4x support PoE), 4x RS-422, 4x USB 3.0, 1x DVI-I, 4x DisplayPort with lockable connectors
- Supports MXM 3.1 Type A/B module on PCI Express x16
- Rich Storage Options: 2x 2.5" SATA 6.0 Gb/s drive bays, 1x M.2 2280 slot, 1x CFAST socket
- GNSS/3G/4G/WLAN support via 2x mPCIe slots and 2x USIM slots
- +12VDC power input



### Specifications

#### System

##### Processor

6th/7th Gen Intel® Core™ i7 processors (formerly Skylake and Kaby Lake)  
 Intel® Core™ i7-6820EQ CPU, 2.80GHz  
 Intel® Core™ i7-7820EQ CPU, 3.0GHz

##### Memory

Dual channel DDR4-2133 SDRAM with dual SODIMM sockets, up to 32GB

##### BIOS

AMI UEFI

#### Storage

2x 2.5" SATA drive bays  
 1x CFAST slot, externally accessible  
 1x M.2 2280 (SATA)

#### Graphics

2x DisplayPort from Intel processor  
 4x DisplayPort with lockable design from GPU MXM (SKU dependent)  
 1x DVI-I from Intel processor

#### Connectivity

##### Ethernet

2x RJ-45 1000BASE-T Ethernet ports  
 4x M12 X-coded 1000BASE-T Ethernet ports with PoE Class 2 (7W), 1.5kV isolation  
 4x M12 A-coded 1000BASE-T Ethernet ports, 1.5kV isolation

##### USB

4x USB 3.0 Type A ports

##### Serial Port

4x DB-9 RS-232/422/485 ports (RS-422 by default)  
 2kVrms isolation

#### Audio

Mic-in/ Line-out ports

#### Wireless

2x Mini PCIe card slots are available for cellular modem or WLAN modules  
 Compliant to Mini PCIe card spec v1.2 (PCIe and USB 2.0)  
 Each Mini PCIe slot supports one micro-SIM  
 4x RP-SMA antenna connector cutouts

#### In-system Expansion I/O

2x full size Mini PCI Express slots  
 2x USIM slots  
 1x Type A/B MXM slot on PCI Express x16 (MXM P1000, P3000, P5000)  
 1x USB 2.0 wafer connector

#### External I/O

4x M12 GbE with PoE ports  
 4x M12 GbE ports  
 2x RJ-45 GbE ports  
 6x DisplayPorts  
 1x DVI-I port  
 4x USB 3.0 Type A ports  
 1x Mic-in port  
 1x Line-out port  
 Four antenna cutouts reserved  
 Reset button  
 Power button

## Specifications

### • Miscellaneous

#### LEDs

1x diagnostics, 1x storage, 1x WDT, 3x user defined

#### Battery

Coin cell CR2032

#### Board Management

ADLINK SEMA 3.0:

- Watch Dog
- Hardware monitor
- Runtime statistics
- Failsafe dual BIOS

#### Power Supply

One 4-pin A-coded M12 connector  
+12VDC nominal power input

#### Power Consumption

177W on PIS-5520/6820/32G/P5000 at

1. +12VDC in
2. CPU 100% loading
3. P5000 100% loading

### • Mechanical

#### Dimension (WxDxH)

360mm x 225.1mm x 88.8mm

#### Weight

6.3 kg

#### Mounting

Wall mount

### • Environmental

#### Operating Temperature

Convection cooled

-25°C to 70°C with P1000 MXM module

0°C to 55°C with P3000/P5000 MXM module

#### Storage Temperature

-40°C to +85°C

#### Humidity

EN 50125-1, compliance EN 60068-2-78: 2012 Edition 2.0, Clause 4.2 at 40°C

#### Vibration

1 m/s<sup>2</sup> @5 Hz – 150 Hz operating, according to EN61373

#### Shock

EN50155 standard, method EN61373: 2010, Category 1 Class A & Class B

#### Safety

EN 50153

UL 94V-0

#### Fire Protection

EN 45545-2:2013+A1:2015

#### EMC

EN 50121-3-2, EN50155

### • Operating System

Windows 8, Windows 10

Ubuntu 16.04

## Ordering Information

- **PIS-5520/7820/32G/P5000**  
Fanless computer with Intel® Core™ i7-7820EQ and 32GB DDR4 with P5000 MXM module and two SATA bays (external cables and power adapter are excluded)
- **PIS-5520/6820/16G/P3000**  
Fanless computer with Intel® Core™ i7-6820EQ and 16GB DDR4 with P3000 MXM module and two SATA bays (external cables and power adapter are excluded)

## Optional Accessories

- **Factory-installed industrial grade SSD, single or dual 256GB options**
- **Starter cable kit for PIS-5520**  
4x PoE M12(X) to RJ45 cable, 4x Ethernet M12 A(M) to RJ-45(F) cable, 1x PS/2 KB/MS Y cable and 1x M12(S) to DC power cable

## Dimensions

(Units: mm)

