

DLAP-4000 Series

Embedded System supporting FHFL dual-width PEG slot with 8th/9th Generation Intel® Core™ i7/i5/i3 in LGA1151 Socket

Features

- NVIDIA® Quadro® PEG card support
- 8th/9th Gen Intel® Core™ i7/i5/i3 processor
- Dual SODIMMs for up to 32GB DDR4 non-ECC memory (dependent on CPU)
- 1x DVI, 1x HDMI, 1x DP (from CPU), additional display outputs from PEG cards
- 1x Mini PCIe slot for Wi-Fi/Bluetooth or LTE module, 1x M.2 M key supporting 2280 SATA SSD module, 1x PCIe x16 slot for PEG card
- 300W/500W Flex ATX PSU



Software Support

- Windows 10 IoT Enterprise CBB 64-bit
- Ubuntu 16.04 LTS

Optional Accessories

- 3.5" SATA HDD, 2.5" SATA SSD/HDD, M.2 2280 SATA SSD
- Wireless Module
Wi-Fi/Bluetooth or 4G LTE wireless kit (w/ antenna)

Ordering Information

Model	CPU	Memory
DLAP-4001/M8G/[PEG]	Intel® Core™ i7-9700E	8GB non-ECC DDR4
DLAP-4002/M8G/[PEG]	Intel® Core™ i5-9500E	8GB non-ECC DDR4
DLAP-4003/M8G/[PEG]	Intel® Core™ i3-9100E	8GB non-ECC DDR4
DLAP-4004/M8G/[PEG]	Intel® Core™ i7-9700TE	8GB non-ECC DDR4
DLAP-4005/M8G/[PEG]	Intel® Core™ i5-9500TE	8GB non-ECC DDR4
DLAP-4006/M8G/[PEG]	Intel® Core™ i3-9100TE	8GB non-ECC DDR4
DLAP-4007/M8G/[PEG]	Intel® Core™ i7-8700	8GB non-ECC DDR4
DLAP-4008/M8G/[PEG]	Intel® Core™ i5-8500	8GB non-ECC DDR4
DLAP-4009/M8G/[PEG]	Intel® Core™ i3-8100	8GB non-ECC DDR4
DLAP-400A/M8G/[PEG]	Intel® Core™ i7-8700T	8GB non-ECC DDR4
DLAP-400B/M8G/[PEG]	Intel® Core™ i5-8500T	8GB non-ECC DDR4
DLAP-400C/M8G/[PEG]	Intel® Core™ i3-8100T	8GB non-ECC DDR4

PEG Card Options

PEG	Model	Power	CUDA® Cores	Graphics Memory
P2200	NVIDIA® Quadro® P2200	75W	1280	GDDR5 5GB
RTX4000	NVIDIA® Quadro® RTX 4000	160W	2304	GDDR6 8GB
RTX5000	NVIDIA® Quadro® RTX 5000	265W	3072	GDDR6 16GB
RTX6000	NVIDIA® Quadro® RTX 6000	295W	4608	GDDR6 24GB
RTX8000	NVIDIA® Quadro® RTX 8000	295W	4608	GDDR6 48 GB

Specifications

Model	DLAP-4000				
Processor	Intel® Core™ i7-9700E, 2.6GHz, 12M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (8C/8T) Intel® Core™ i5-9500E, 3.0GHz, 9M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-9100E, 3.1GHz, 6M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (4C/4T) Intel® Core™ i7-9700TE, 1.8GHz, 12M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (8C/8T) Intel® Core™ i5-9500TE, 2.2GHz, 9M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-9100TE, 2.2GHz, 6M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (4C/4T) Intel® Core™ i7-8700, 3.2GHz, 12M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/12T) Intel® Core™ i5-8500, 3.0GHz, 9M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-8100, 3.6GHz, 6M Cache, 65W TDP, LGA1151, DDR4 2400MHz support (4C/4T) Intel® Core™ i7-8700T, 2.4GHz 12M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/12T) Intel® Core™ i5-8500T, 2.1GHz, 9M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-8100T, 3.1GHz, 6M Cache, 35W TDP, LGA1151, DDR4 2400MHz support (4C/4T)				
Chipset	Intel® H310 Chipset				
Memory	Non-ECC DDR4 2666/2400MHz, 2x SO-DIMM, up to 32GB (dependent on CPU) system memory				
PEG Card Support	NVIDIA® Quadro® P2200	NVIDIA® Quadro® RTX 4000	NVIDIA® Quadro® RTX 5000	NVIDIA® Quadro® RTX 6000	NVIDIA® Quadro® RTX 8000
I/O Interfaces					
Display	1x DVI-D connector (rear), resolution up to 1920 x 1200 @ 60 Hz 1x DP connector (rear), resolution up to 4096 x 2304 @ 60 Hz 1x HDMI connector (rear) resolution up to 4096 x 2160 @ 30 Hz Additional display output from PEG cards				
Ethernet	2x GbE (Realtek RTL8111G)				
Serial Ports	1x RS-232/422/485, 4x RS-232				
USB	4x USB 3.1 Gen1 ports, 2x USB 2.0 ports				
DIO	1x 8-bit GPIO				
Mini PCIe	1x Mini PCIe slot (USB 2.0 and PCIe x1)				
M.2	1x M.2 M key (SATA 6Gb/s)				
Expansion Slot	1x PCIe x16 slot				
Audio	Mic-in, Line-out, Line-in				
TPM 2.0	Optional				
Storage					
2.5" SATA	2x 2.5" SATA 6Gb/s internal drive bays				
Mechanical					
Dimensions	220 x 300 x 150 mm (W x D x H)				
Power Supply					
AC Input	100 to 240 VAC				
Output Rating	300W	500W	500W	500W	500W
Environmental					
Operating Temperature	0°C to 50°C	0°C to 50°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
Storage Temperature	-20°C to 60°C				
Humidity	5% to 90%, non-condensing				
Vibration	Operating: 1Grms, 5-500Hz, 3 axes (with 2.5" SSD and PEG card) Non-operating: 2Grms, 5-500Hz, 3 axes				
Shock	Operating: 20G, 11ms duration, half sine Non-operating: 30G, 11ms duration, half sine				
EMC	EN55032/35, EN61000-6-2/-4, CE, FCC Part 15B Class B				
Safety	UL/cUL, CB				