



Helios and Prometheus Product Comparison

The Helios PC/104 single board computer family is the migration path from Prometheus single board computers. The following table provides a feature comparison of the two single board computers.

Feature	Prometheus	Helios
Processor	486-DX2 at 100MHz	Vortex86SX/DX at 300MHz or 800MHz
Memory	16MB or 32MB RAM on-board	128MB or 256MB RAM on-board
Serial Ports	(4) RS-232	(2) RS-232; (2) RS-232/422/485
USB Ports	(2) USB 1.1	(4) USB 2.0
Networking	10/100Base-T Ethernet	10/100Base-T Ethernet
Mass Storage	IDE port; Flashdisk interface; On-board 2MB flash	IDE UDMA-100 port; Flashdisk interface; On-board 2MB flash with FreeDOS pre-loaded
Parallel Port	Yes	No
Floppy Port	Yes	No
Display	No	VGA CRT and LVDS LCD
Analog Inputs	(16) 16-bit	(16) 16-bit
Sample Rate	100KHz	250KHz
A/D Calibration	Manual calibration	Autocalibration
On-board FIFO	48 samples	2,048 samples
Analog Outputs	(4) 12-bit	(4) 12-bit
Digital I/O	24 lines	16 lines on DV models 40 lines on AV models
Counters/Timers	(1) 24-bit; (1) 16-bit	(1) 24-bit; (1) 16-bit
Power	2W to 5W model dependent	3.5W to 5W model dependent
Operating Temp	-40°C to +85°C	-40°C to +85°C
RoHS	No	Yes

Helios uses a different set of I/O connectors and cables (Cable Kit number: C-HLV-KIT) than Prometheus. Helios works with the Pandora PC/104 enclosure providing a cable-free compact solution, although with a different panel I/O board (PNL-HLV-01) than Prometheus.

Product Migration

Users of Prometheus Product Number . . .	Should Order Helios Product Number:
PR-Z32-EA-ST Prometheus 100MHz, 32MB RAM, with DAQ	HLV800-256AV Helios 800MHz, 256MB RAM, DAQ and video
PR-Z32-E-ST Prometheus 100MHz, 32MB RAM, no DAQ	HLV800-256DV Helios 800MHz, 256MB RAM, digital I/O and video
PR-Z16-LC-ST Prometheus 100MHz, 16MB RAM, no DAQ	HLV300-128DV Helios 300MHz, 128MB RAM, digital I/O and video

More Information

Detailed information about Helios, including a data sheet, user manual and ordering information, may be found at www.diamondsystems.com/products/helios.