DIAMOND SYSTEMS
C O R P O R A T I O N

Hercules to Hercules II Migration Guide

The Hercules II single board computer product family is upward compatible from the original Hercules family. Moreover, there are a number of important changes to Hercules II which make it a superior single board computer for most applications. These changes are as follows:

Feature	Hercules	Hercules II
Processor	Via Eden at 550MHz or 750MHz	Via Mark CoreFusion CPU at 800MHz
Chipset		Via Mark (VT8606 integrated) + 82C686B
Memory	128MB or 256MB RAM on-board	512MB RAM on-board
Display	CRT and/or LVDS LCD	CRT and/or LVDS LCD
Serial Ports	(2) RS-232; (2) RS-232/485	(2) RS-232; (2) RS-232/422/485
USB Ports	(4) USB 1.1	(4) USB 2.0; (4) USB 1.1
Networking	10/100Base-T Ethernet	10/100Base-T Ethernet
Mass Storage	(2) IDE ports	(2) IDE UDMA 100; Flashdisk; CompactFlash interfaces
Analog Inputs	(32) 16-bit	(32) 16-bit
Sample Rate	250KHz	250KHz
On-board FIFO	2,048 samples	2,048 samples
A/D Calibration	Autocalibration	Autocalibration
Analog Outputs	(4) 12-bit	(4) 12-bit
Digital I/O	40 lines	40 lines
Counters/Timers	24 bit; (1) 16-bit	24 bit; (1) 16-bit
Operating Temp	-40°C to +85°C	-20°C to +70°C or -40°C to +85°C
RoHS	No	Yes

The Hercules II footprint and mounting holes are unchanged from Hercules. No software, cabling or jumper changes are required to switch from Hercules to Hercules II. The connectors are of the same types and have identical pinouts. Some connector locations have shifted slightly, but remain in the same general area.

Product Number Transition

Users of original Hercules Product Number . . .	Should Order Hercules II Product Number:

HRC550-5A128
    Hercules 550MHz, 128MB RAM, DAQ
OR
HRC750-5A256
    Hercules 750MHz, 256MB RAM, DAQ
	HRC800-5A512 (Operating temp -40°C to +85°C)
	    Hercules 800MHz, 512MB RAM, DAQ
	OR
	HRC800-5A512E (Operating temp -20°C to +70°C)
	    Hercules 800MHz, 512MB RAM, DAQ

HRC550-5N128
    Hercules 550MHz, 128MB RAM, no DAQ
OR
HRC750-5N256
    Hercules 750MHz, 256MB RAM, no DAQ
	HRC800-5N512 (Operating temp -40°C to +85°C)
	    Hercules 800MHz, 512MB RAM, no DAQ
	OR
	HRC800-5N512E (Operating temp -20°C to +70°C)
	    Hercules 800MHz, 512MB RAM, no DAQ

More Information
Detailed information about Hercules II, including a data sheet, user manual and ordering information, may be found at www.diamondsystems.com/products/herculesebx.