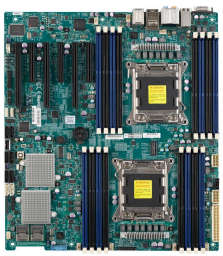
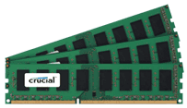
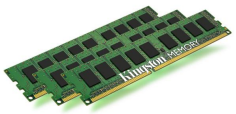
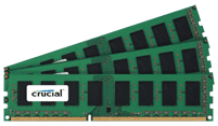
Workstation

Motherboard		
Model	Info	Price
	Supermicro - X9DA7 Form Factor: E-ATX CPU: Dual Intel® Xeon® processor E5-2600 family Memory: 16 x DIMM, Max. 512GB, DDR3 (128GB unBuff.) USB 3.0 ports: 4 (2 back, 2 internal) Audio: Realtek® ALC898 7.1 HD Audio with S/PDIF BIOS: UEFI	£370
RAM - DDR3		
Model	Info	Price
	24GB (Total) 4 x 4GB 2Rx8 PC3 - 10600E 4 x 2GB 2Rx8 PC3 - 10600E	free
CPU		
Model	Info	Price
	Intel® Xeon® Processor E5-2630 (E5-2600 family) Cores: 6 Threads: 12 Clock Speed: 2.30 GHz Cache: 15M Max Memory Size: 750 GB Socket Supported: FCLGA2011	£491
Graphics Card		
Model	Info	Price
	PNY GeForce® GTX 560 Ti 1GB CUDA Cores: 383 // Core clock: 822 MHz Memory: 1 GB OpenGL: 4.1 and OpenCL support Multi monitor: 2 displays Max Digital Res: 2560x1600 // Max VGA Res: 2048x1536	free
CPU Heatsink		

Model	Info	Price
	Noctua - NH-U12P SE2 Socket Support: Intel LGA …,1366,...,2011 on request Fan Specification: 120 mm Warranty Length : 6 years	£51
PSU		
Model	Info	Price
	Corsair HX1050 Watt 80 Plus Gold Quiet operation at low loads Modular cable pack Warranty Length : 7 years	£160
	Enermax EPM850EWT Modular cable pack Warranty Length : 5 years	£160
HD		
Model	Info	Price
	Crucial 128GB m4 2.5" SSD w/ 3.5" Adapter Bracket Read: Up to 500 MB/s Write: Up to 175 MB/s Warranty Length : 3 years	£80
Case		
Model	Info	Price
	Corsair - Obsidian Series® 800D Full Tower Case Dimension: 609mm X 609mm X 229 mm MB Support: ATX, EATX, mATX Slots: 7 Fans: 3+4 Warranty Length : 2 years	£213

Monitor		
Model	Info	Price
	24” NEC MultiSync EA243WM (1920 × 1200) 16:10 ratio TN Panel and ED-Backlit Integrated Speakers DisplayPort, HDMI, DVI-D and VGA inputs Warranty Length : 3 years	£244
	24" Dell UltraSharp U2412M (1920 × 1200) 16:10 ratio IPS Panel and LED backlight Integrated Speakers VGA, DVI-D 24 pin (with HDCP), DisplayPort (with HDCP) 5 USB 2.0 Warranty Length : ?	£219
OS		
Model	Info	Price
ubuntu®	Ubuntu Linux - 64bit	free
	Phobya LED Flexlight High Density 30cm Blue	£8
	SUM	from £1,340 to £1,592

Update

RAM - DDR3			
Model	Info	Price	Links
	Kingston - ValueRAM - 24GB (8GB 2Rx8 1G x 64-Bit x 3 pcs.) PC3-10600 CL9 240-Pin DIMM Kit Warranty Length : lifetime	£79x2	http://www.kingston.com/dataSheets/KVR13N9K3_24.pdf
	Crucial - 24GB kit (8GBx3), 240-pin DIMM, DDR3 PC3-10600 memory module	£85.19x2	http://www.crucial.com/uk/store/partspecs.aspx?IMODULE=CT3KIT102464BA1339
	Kingston - HyperX Predator - 32GB Kit (4x8GB) - DDR3 1600MHz CL9 DIMM Warranty Length : lifetime	£217	http://www.kingston.com/en/memory/hyperx/predator
	Kingston - Genesis - 32GB Kit (4x8GB) DDR3 1600MHz CL9 DIMM Warranty Length : lifetime	£181	http://www.kingston.com/en/memory/hyperx/genesis
CPU			
Model	Info	Price	Links
	Intel® Xeon® Processor E5-2630 (E5-2600 family) Cores: 6 Threads: 12 Clock Speed: 2.30 GHz Cache: 15M Max Memory Size: 750 GB Socket Supported: FCLGA2011	£452	http://ark.intel.com/products/64593/Intel-Xeon-Processor-E5-2630-15M-Cache-2_30-GHz-7_20-GTs-Intel-QPI
Graphics Card			
Model	Info	Price	Links

	nVidia GeForce GTX TITAN CUDA Cores: 2688 // Core clock: 837 MHz Memory: 6 GB OpenGL: 4.3 and OpenCL support Multi monitor: 4 displays Max Digital Res: 4096x2160 // Max VGA Res: 2048x1536 Warranty Length : 3 years	£799	http://www.geforce.com/hardware/desktop-gpus/geforce-gtx-titan/specifications
	Gainward GeForce® GTX 690 4GB CUDA Cores: 3072 // Core clock: 915 MHz Memory: 4 GB OpenGL: 4.2 and OpenCL support Multi monitor: 4 displays Max Digital Res: 2560x1600 // Max VGA Res: 2048x1536 Warranty Length : ?	£760	http://www.gainward.com/main/vgapro.php?id=883&lang=en
	Gainward GeForce® GTX 680 Phantom 4GB CUDA Cores: 1536 // Core clock: 1006 MHz Memory: 4 GB OpenGL: 4.2 and OpenCL support Multi monitor: 4 displays Max Digital Res: 2560x1600 // Max VGA Res: 2048x1536 Warranty Length : ?	£480	http://www.gainward.com/main/vgapro.php?id=868&lang=en
	nVidia Quadro 4000 CUDA Cores: 256 Memory: 2 GB OpenGL: 4.3 Multi monitor: 2 displays Max Digital Res: 2560x1600 Warranty Length : 3 years	£674	http://www.nvidia.co.uk/object/product-quadro-4000-uk.html
	nVidia Quadro 6000 CUDA Cores: 448 Memory: 6 GB OpenGL: 4.3 Multi monitor: 2 displays Max Digital Res: 2560x1600 Warranty Length : 3 years	£3,254	http://www.nvidia.co.uk/object/product-quadro-6000-uk.html

	nVidia Tesla C2075 CUDA Cores: 448 // Core clock: 1015 MHz Memory: 6 GB OpenGL: 4.1 Multi monitor: 1 display Max Res: 1600x1200 Warranty Length : 3 years	£1,809	http://www.nvidia.com/object/workstation-solutions-tesla.html
HD			
Model	Info	Price	Links
	Kingston 120GB HyperX 3K 2.5" SSD Read: Up to 540 MB/s Write: Up to 450 MB/s Warranty Length : 3 years	£130.80	http://www.kingston.com/en/ssd/hyperx#sh103s3
	WD 600GB VelocitorRaptor 3.5" Warranty Length : 5 years	£125	http://www.wdc.com/en/products/products.aspx?id=20
Monitor			
Model	Info	Price	Links
	23" FlexScan EV2335W (1920 × 1080) IPS Panel and LED backlight Integrated Speakers D-Sub mini 15 pin, DVI-D 24 pin (with HDCP), DisplayPort (with HDCP) Warranty Length : 5 years	£265	http://www.eizo.com/global/products/flexscan/ev2335w/index.html
	SUM	from £1,245 to £1,878 to £ +++	

Update build

Motherboard: Supermicro - X9DA7 (sell the Asus from **budget build**)
RAM: Kingston - ValueRAM - 24GB x 2
CPU: Intel® Xeon® Processor E5-2630 (start with one and later add one more)
Graphics Card: nVidia Tesla C2075 for OpenCL (keep Gainward GTX 680 from **budget build** for openGL and monitor-s)
CPU Heatsink: Noctua - NH-U12P SE2 (keep it from **budget build** and add one more later with the second cpu)
PSU: Corsair HX1050 Watt 80 Plus Gold (keep it from **budget build**)
SSD: Crucial 128GB m4 2.5" SSD (keep it from **budget build**)
Case: Corsair - Obsidian Series® 800D (keep it from **budget build**)
Monitor: 24” NEC MultiSync EA243WM (keep it from **budget build** and add one more later)

Notes

CPU Heatsinks:
I asked a few system builders and they all replied Noctua make the best thermal heatsinks. But theres a but bigger heat sinks require more room and with 2 Xeons its going to be an issue because the heatsink coverage on cpu one will cover over the first pcie 16 slot on most boards . But because I have a second pcie 16 slot having one covered makes for no issue. This just ticked a big box for my motherboard. That way I get the quality Noctua heatsink over the stock standard and noisy intel one.

(motherboard should be compatible with CPU and its heatsink, also check CPU and RAM)

Graphics Card:
This was a difficult decision / game card or quadro. I opted for the leadtek quadro 4000. Athough very expensive Houdini is developed using professional cards ad it was more as an investment in my tools, couple with the fact its power consumption was far less than a gaming card. meaning I could scale back the PSU power.

PSU:
I must admit this very problem caught me out. I bought a 850 watt PSU that had leads far shorter and therefore could not reach the connectors for the cpu and graphics card. Luck would have t though after a brief search on ebay I found some nice extension cables to purchase in all I needed 4 2x 8 pin , 1 x 24 pin , 1x 4 pin .

Linux	OSX	Windows
Houdini	Photoshop	Real Flow
Maya	ZBrush	Boujou
Nuke		Autopano
Mari		Massive
PFTrack		SpeedTree
Katana		